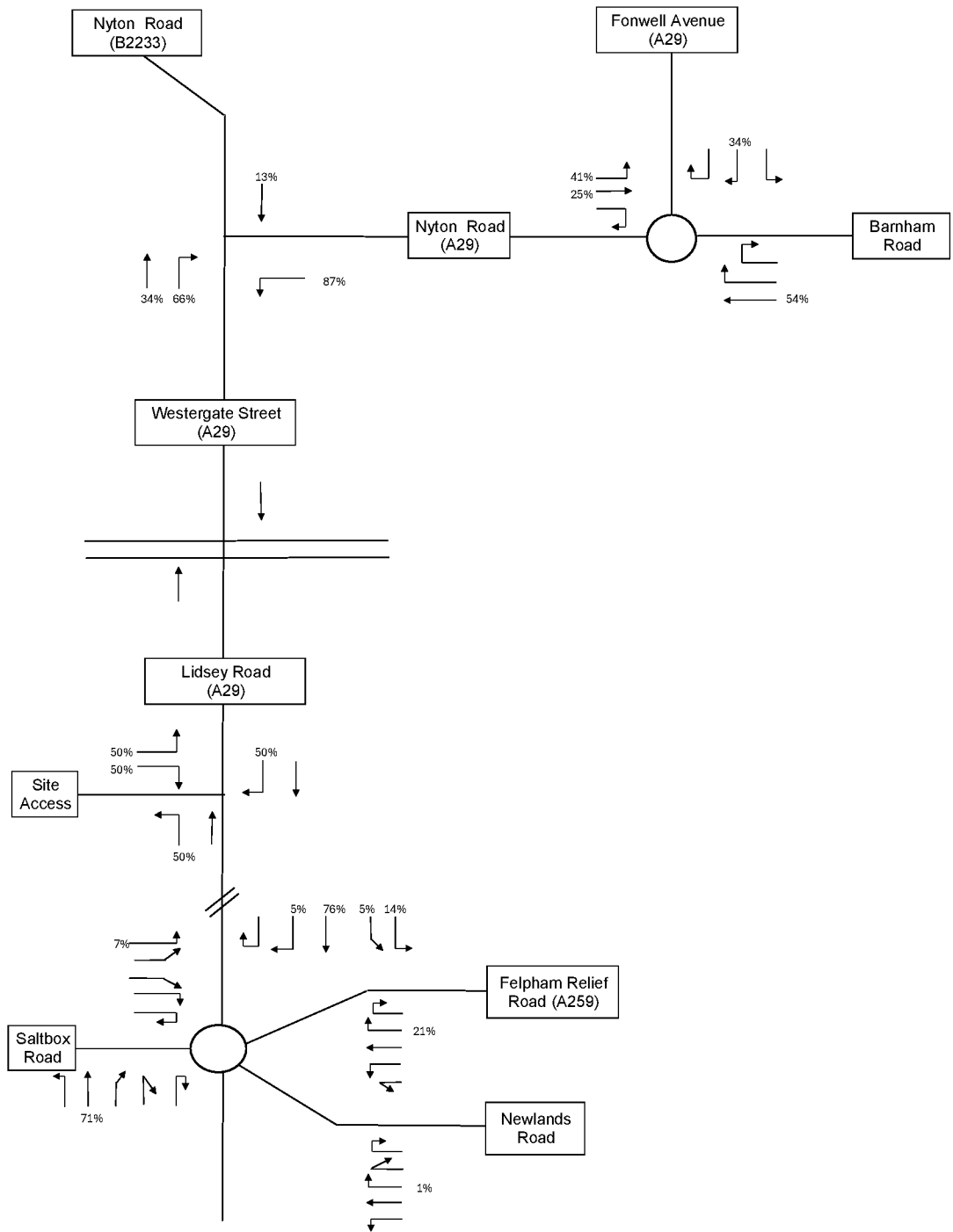
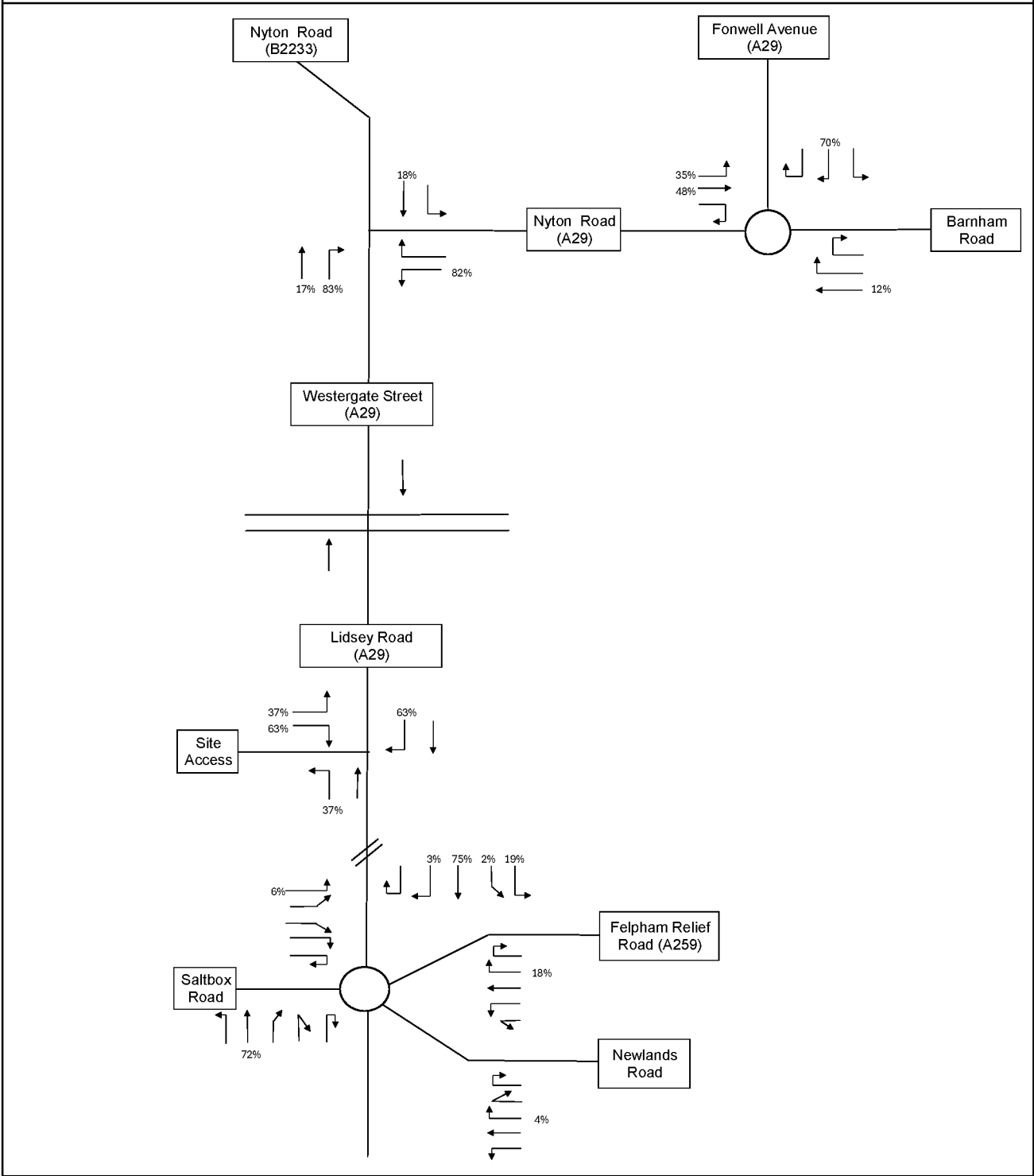
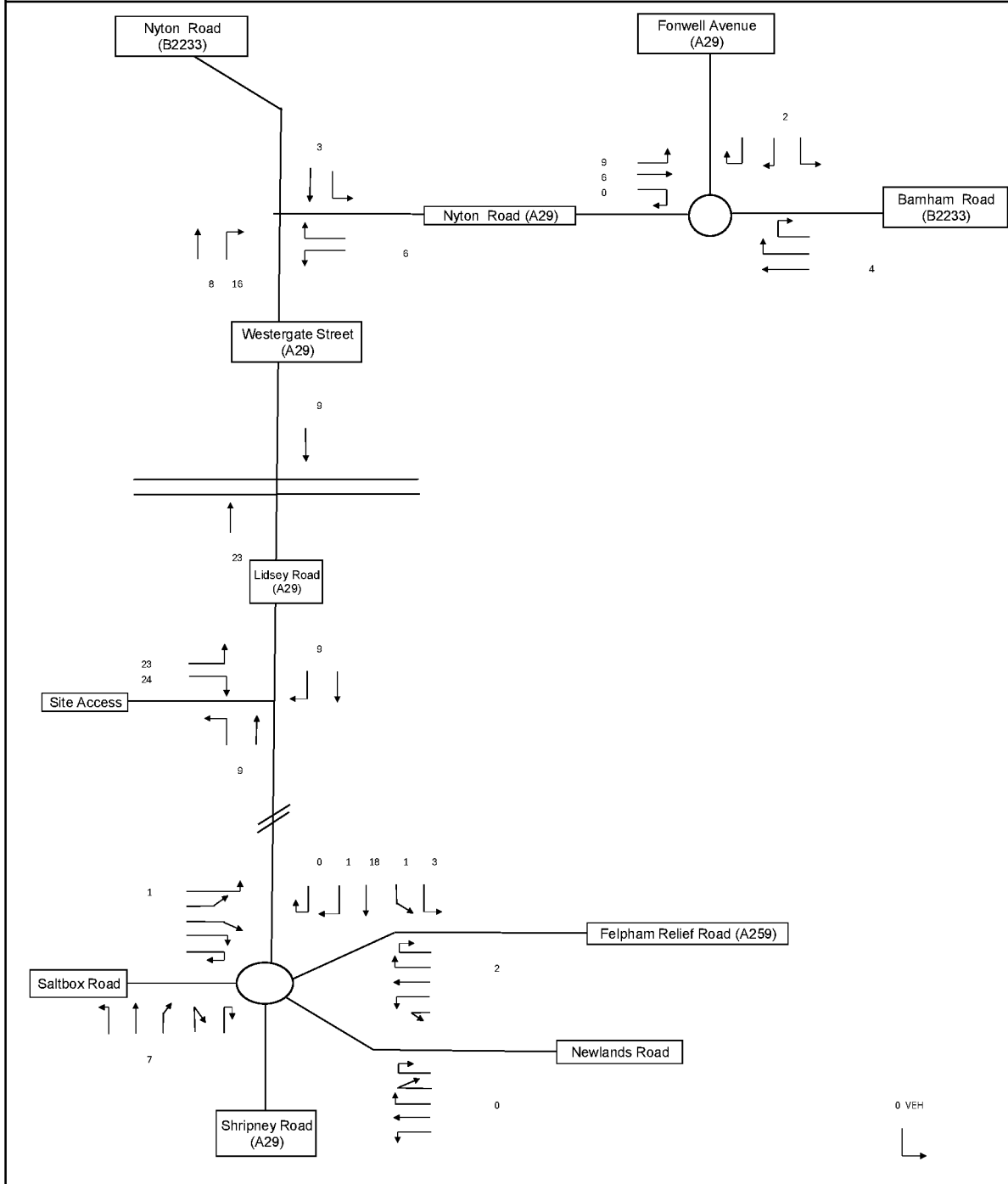


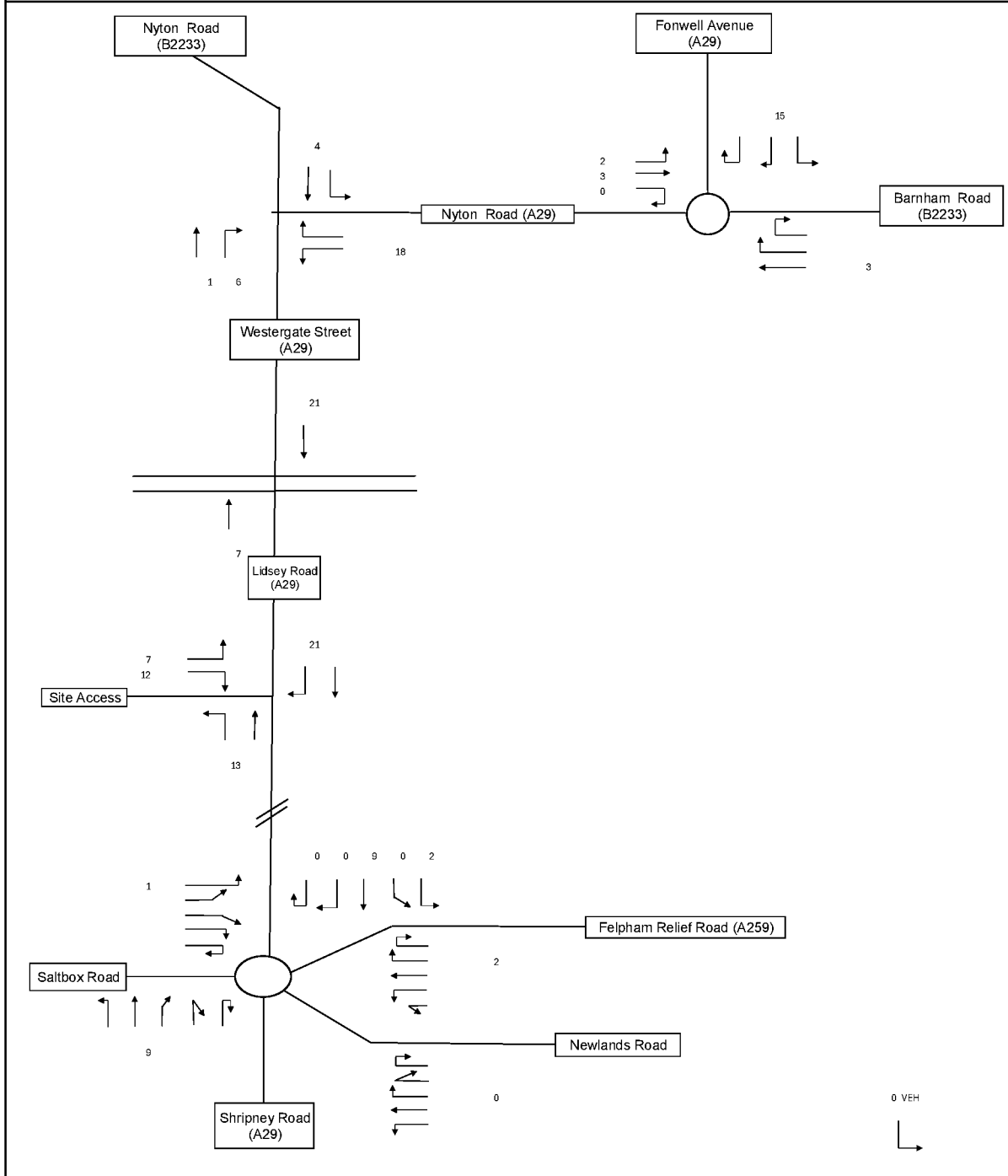
AM Distribution

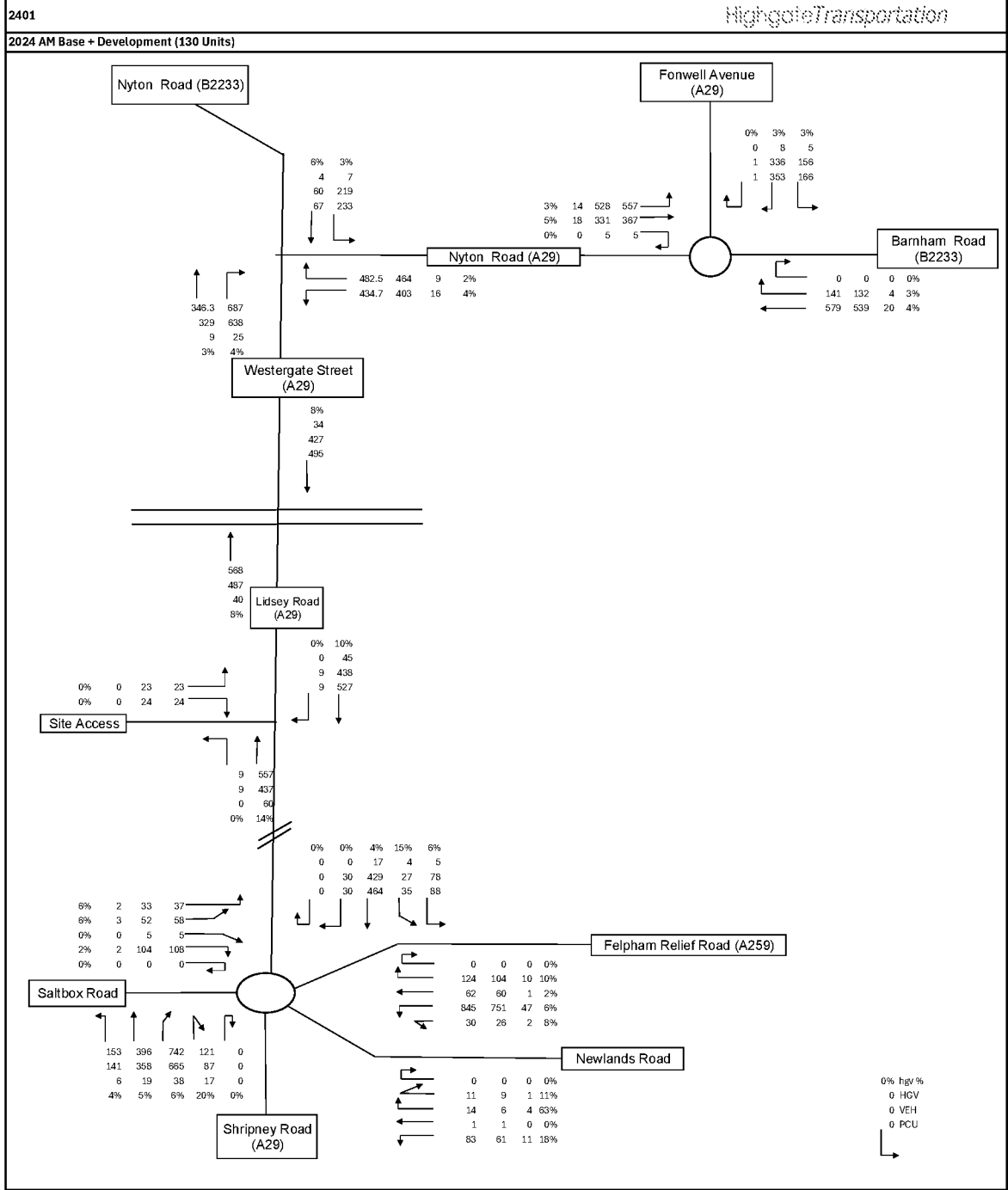


PM Distribution

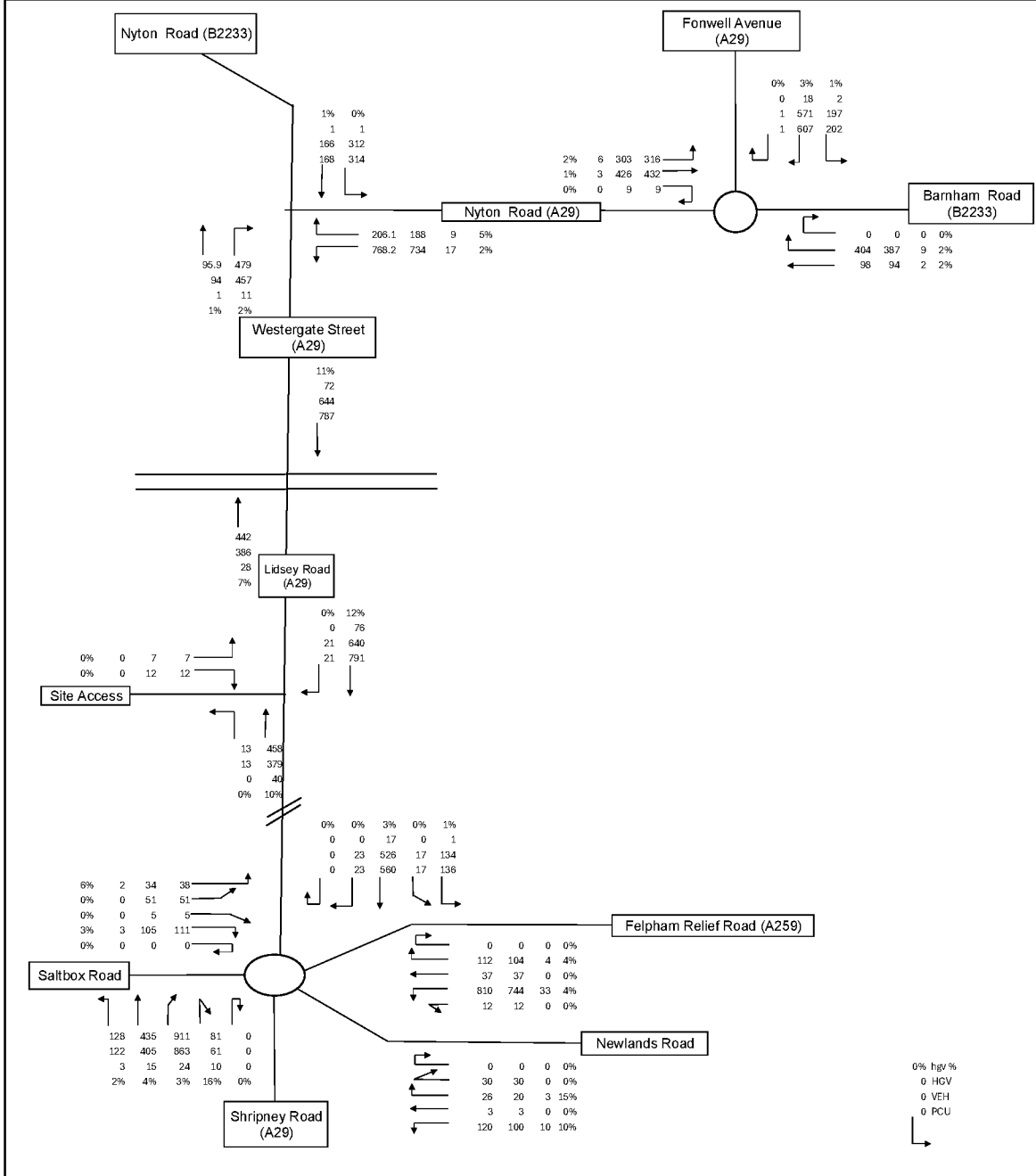




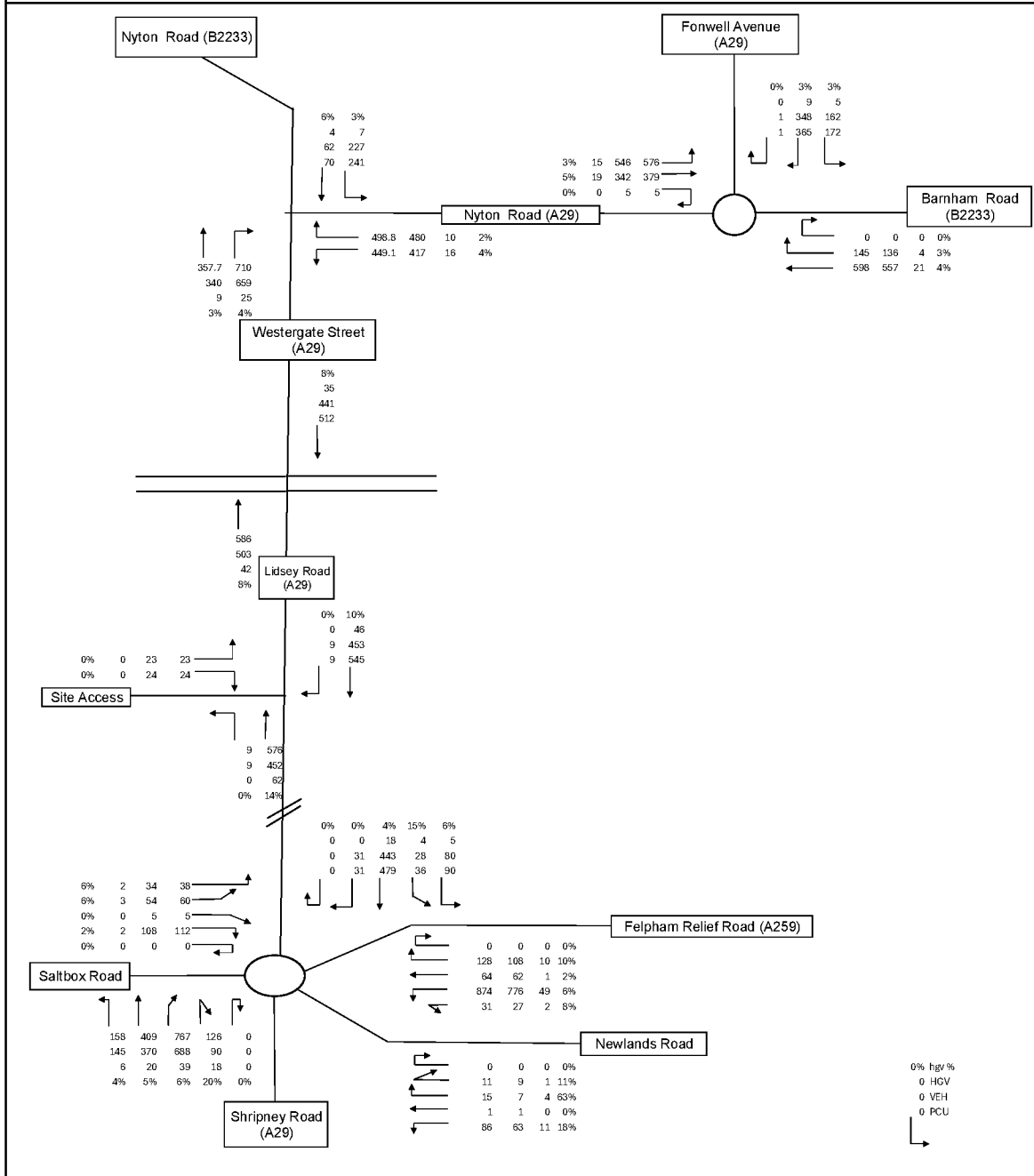




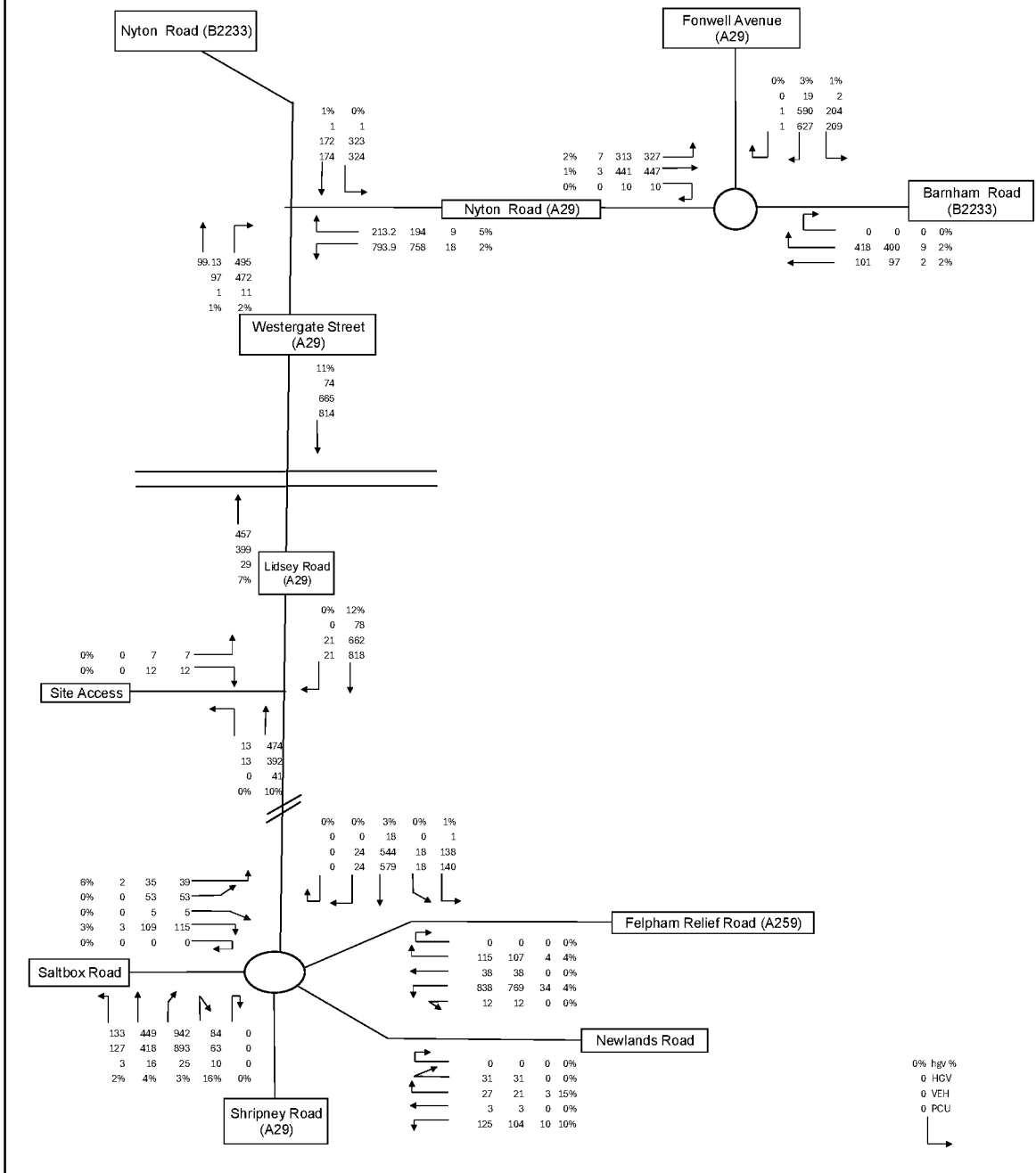
2024 PM Base + Development (130 Units)

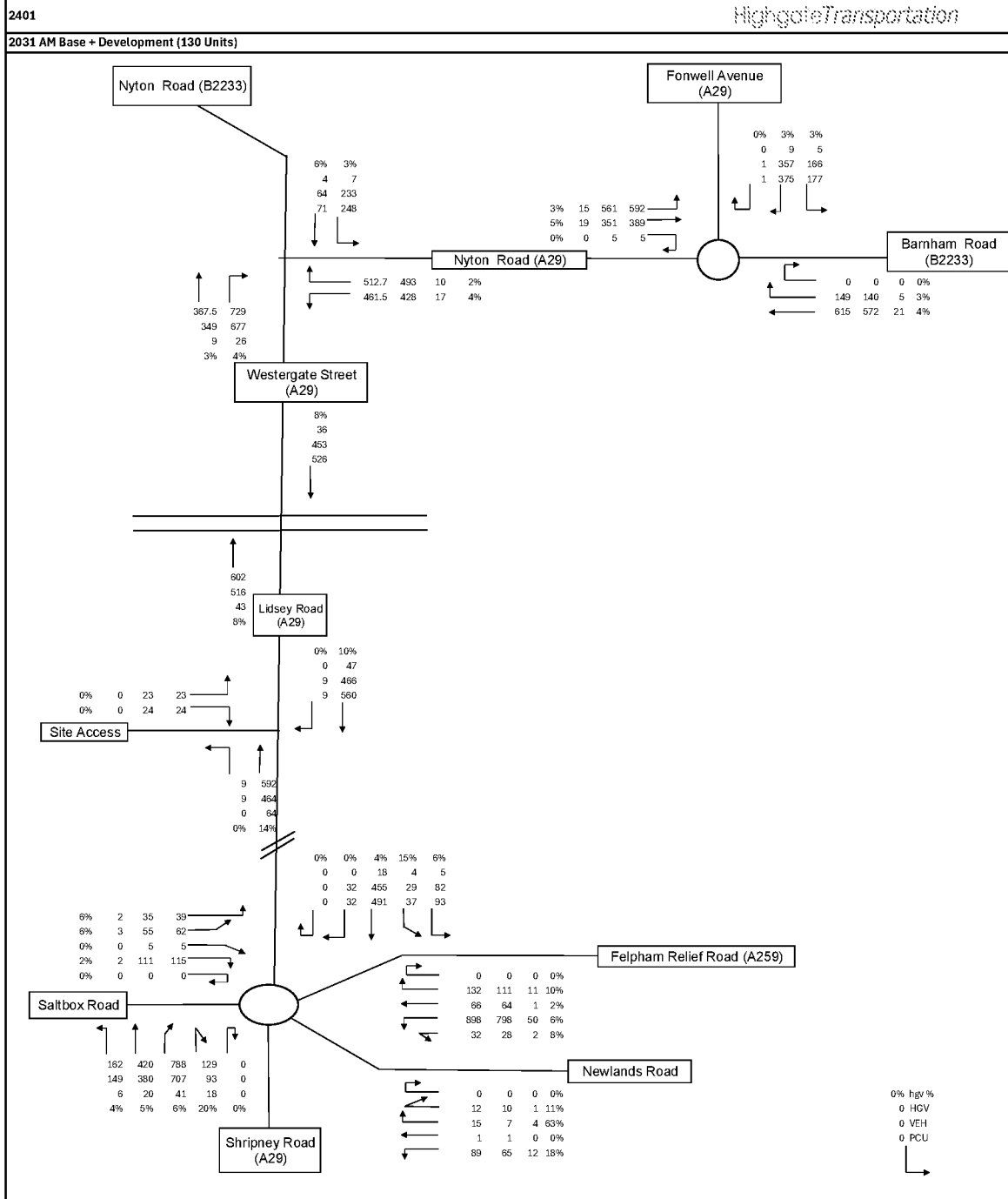


2028 AM Base + Development (130 Units)

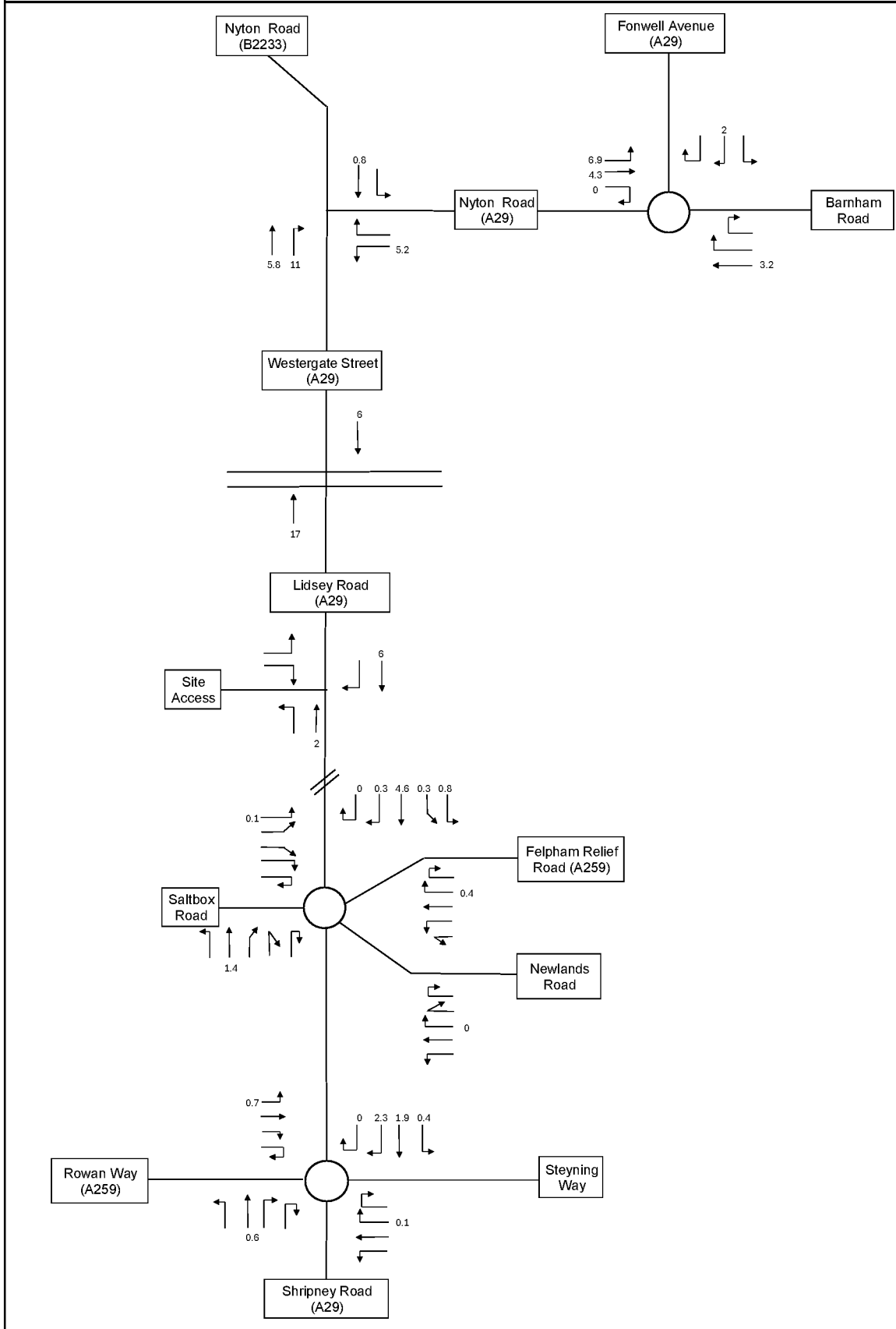


2028 PM Base + Development (130 Units)

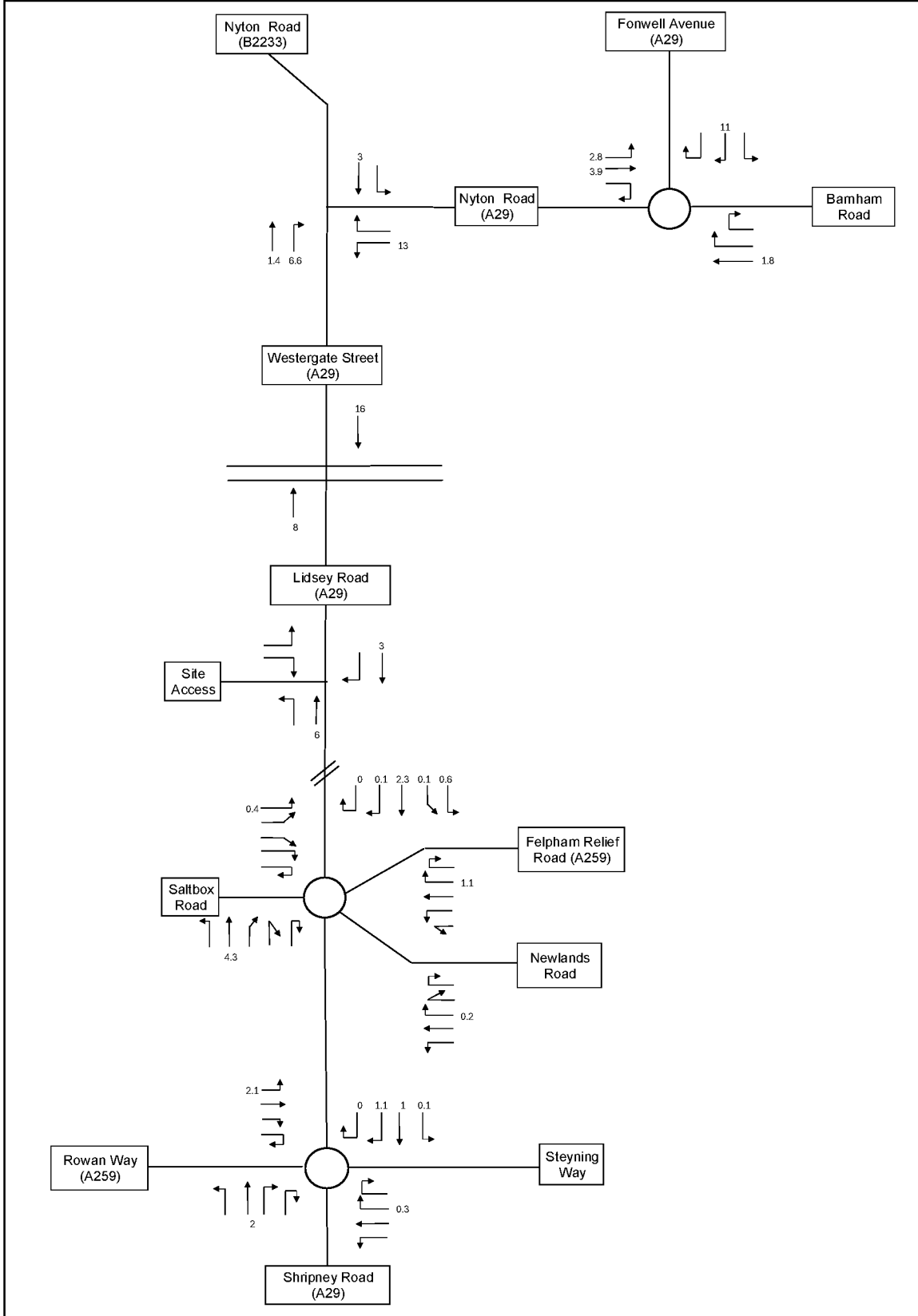




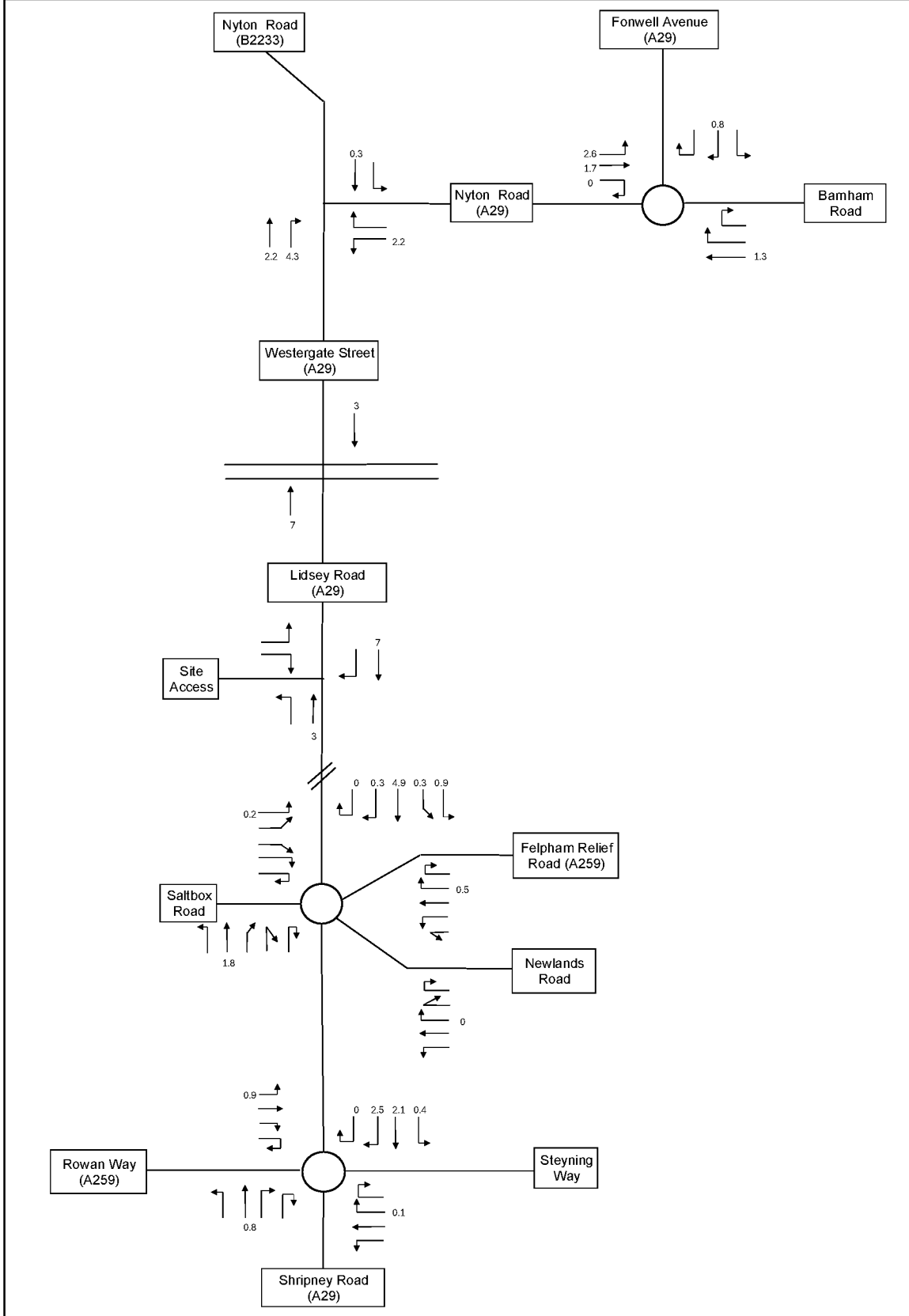
Committed Development 1 - Wings Nursery, Lidsey Road AM (AL/20/21/PL)



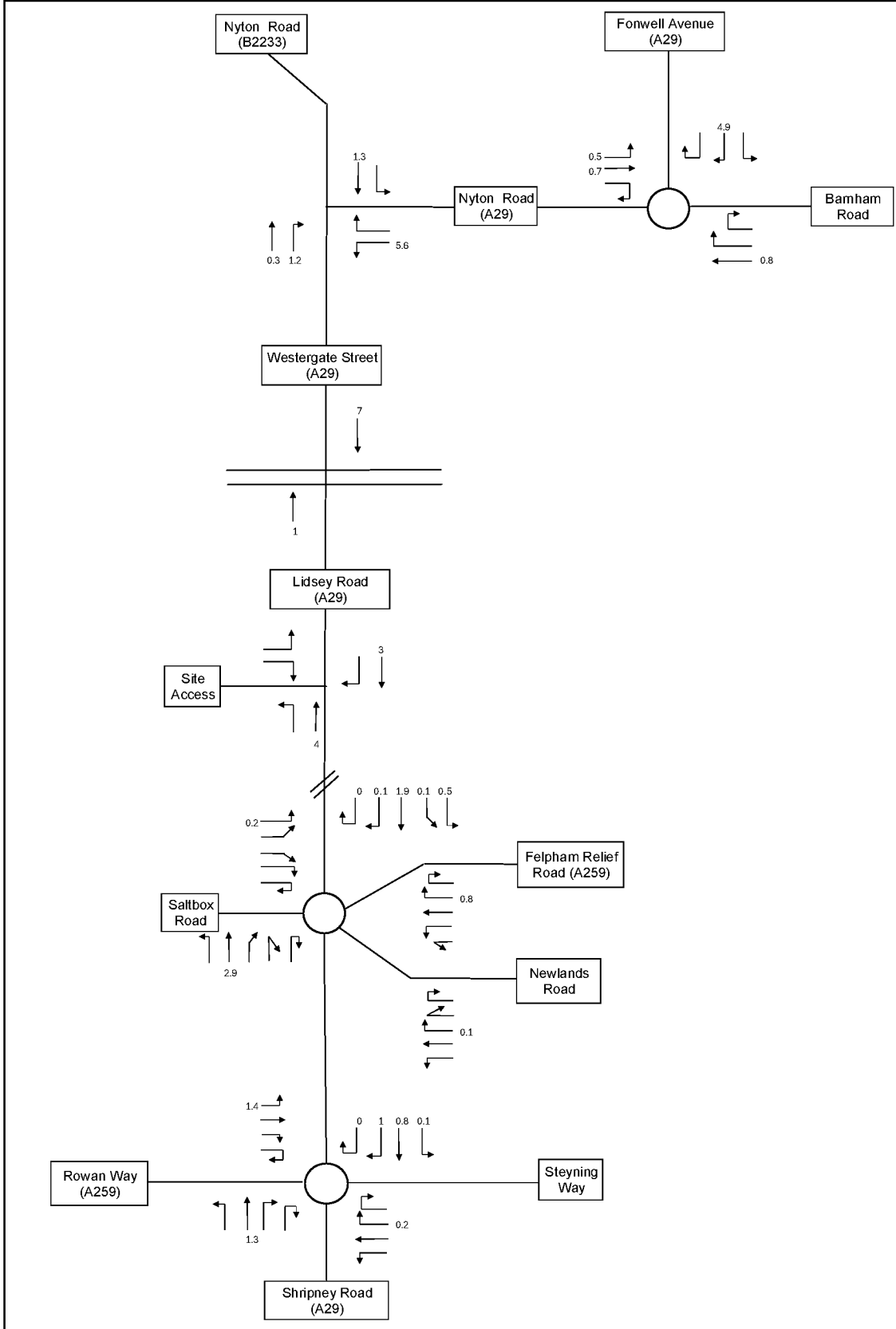
Committed Development 1 - Wings Nursery, Lidsey Road PM (AL/20/21/PL)



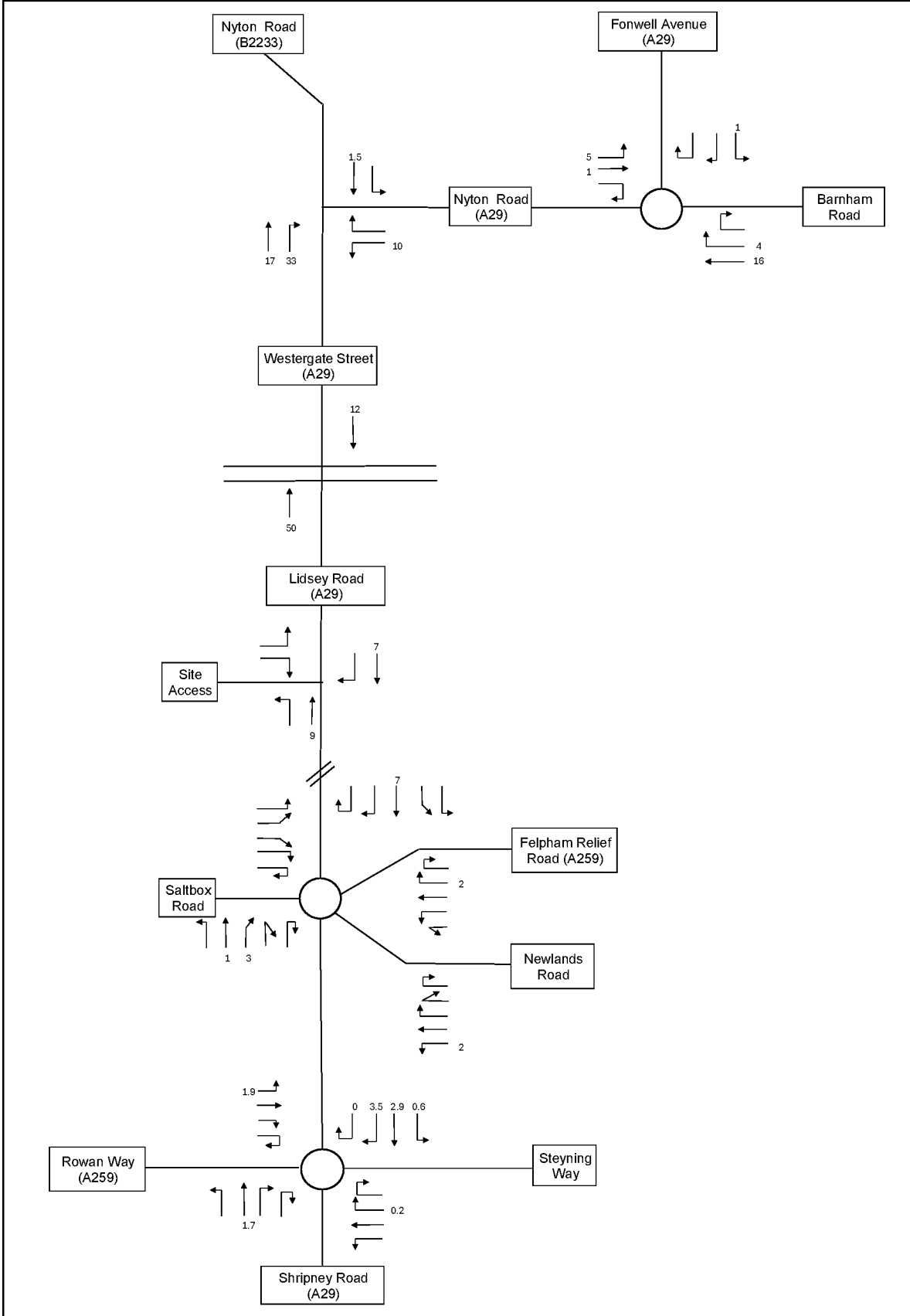
Committed Development 2 - Lee's Yard, Lidsey Road AM (AL/21/20/OUT)



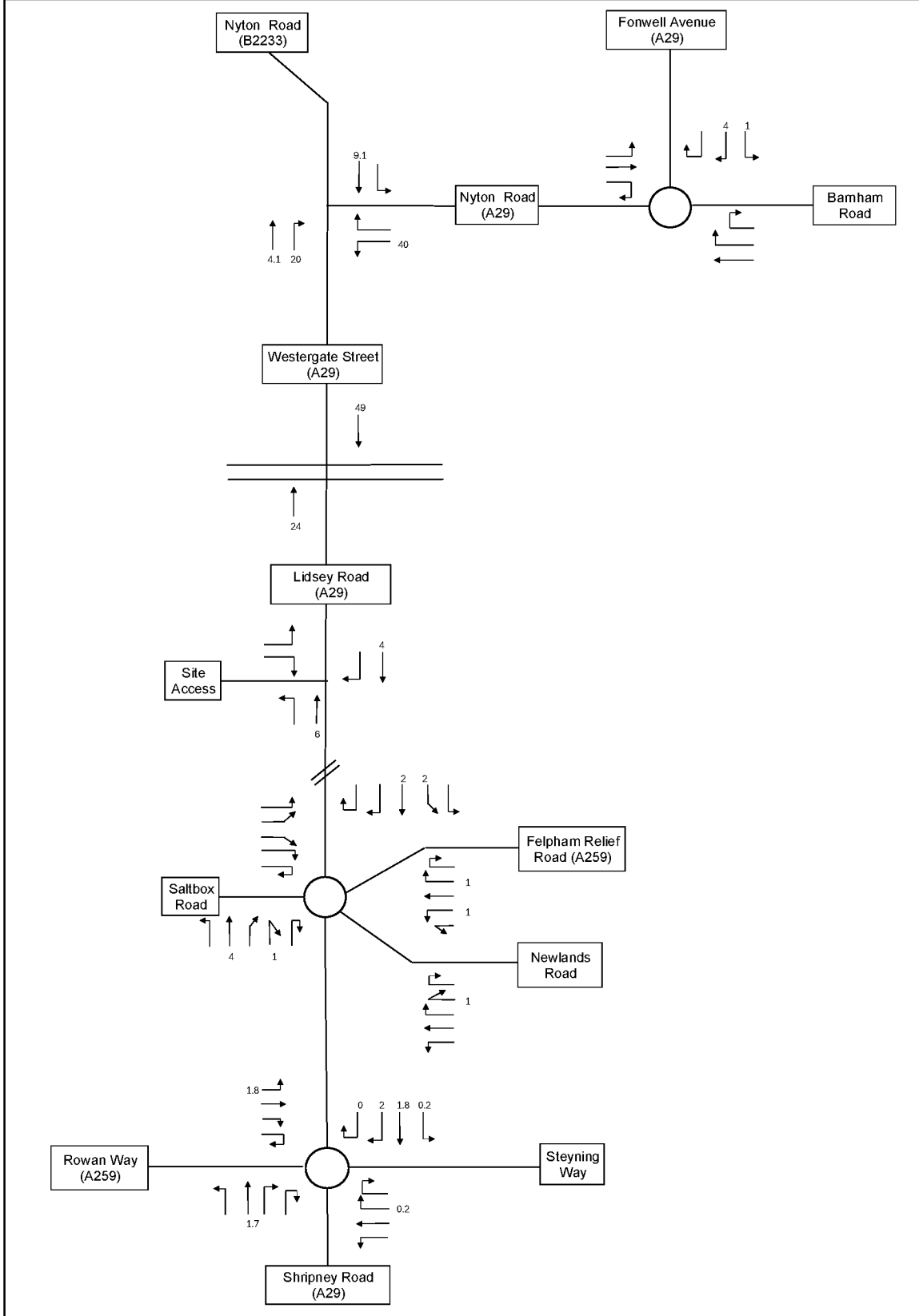
Committed Development 2 - Lee's Yard, Lidsey Road PM (AL/21/20/OUT)



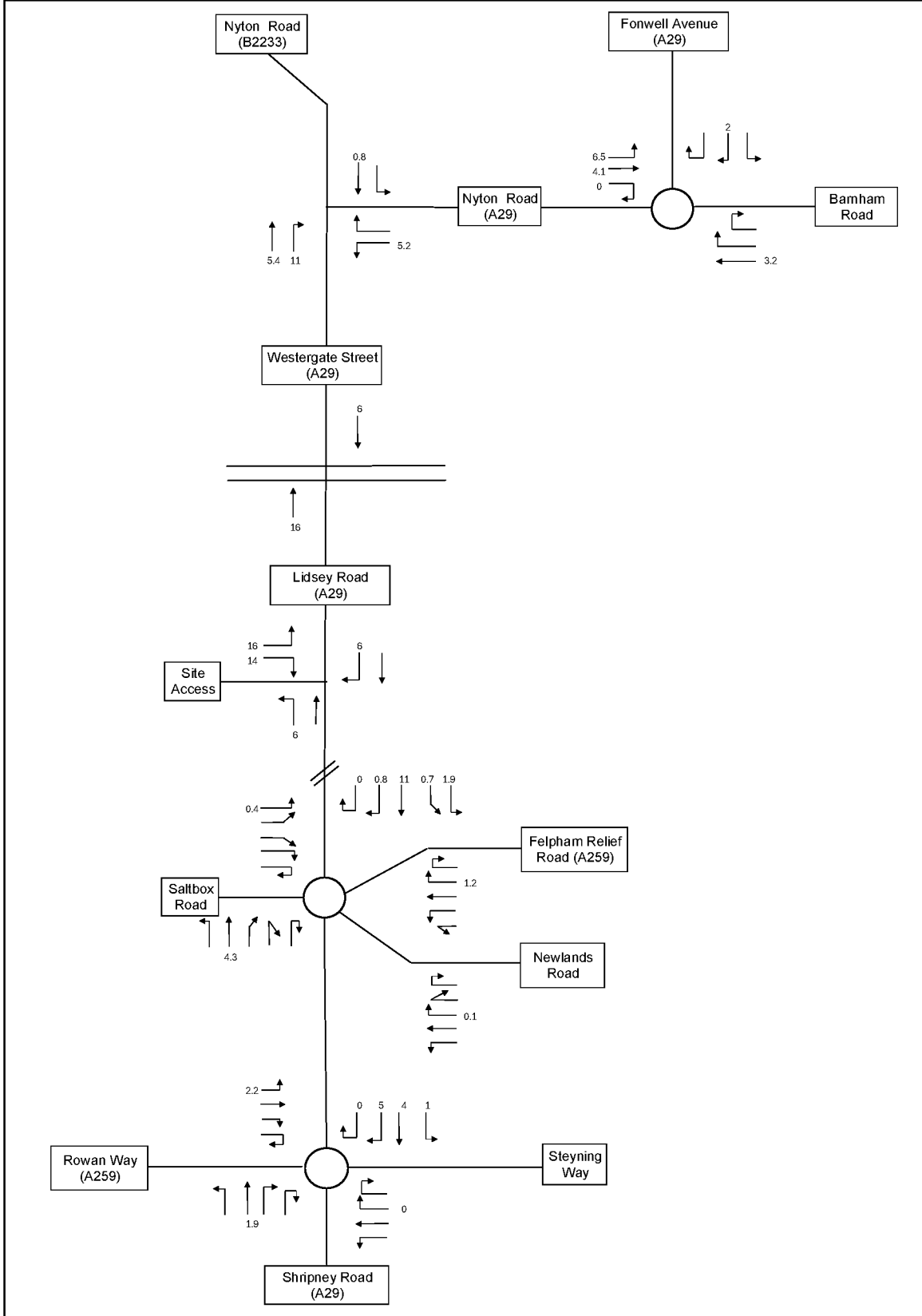
Committed Development 3 - Woodgate Centre AM (AL/107/21/PL)

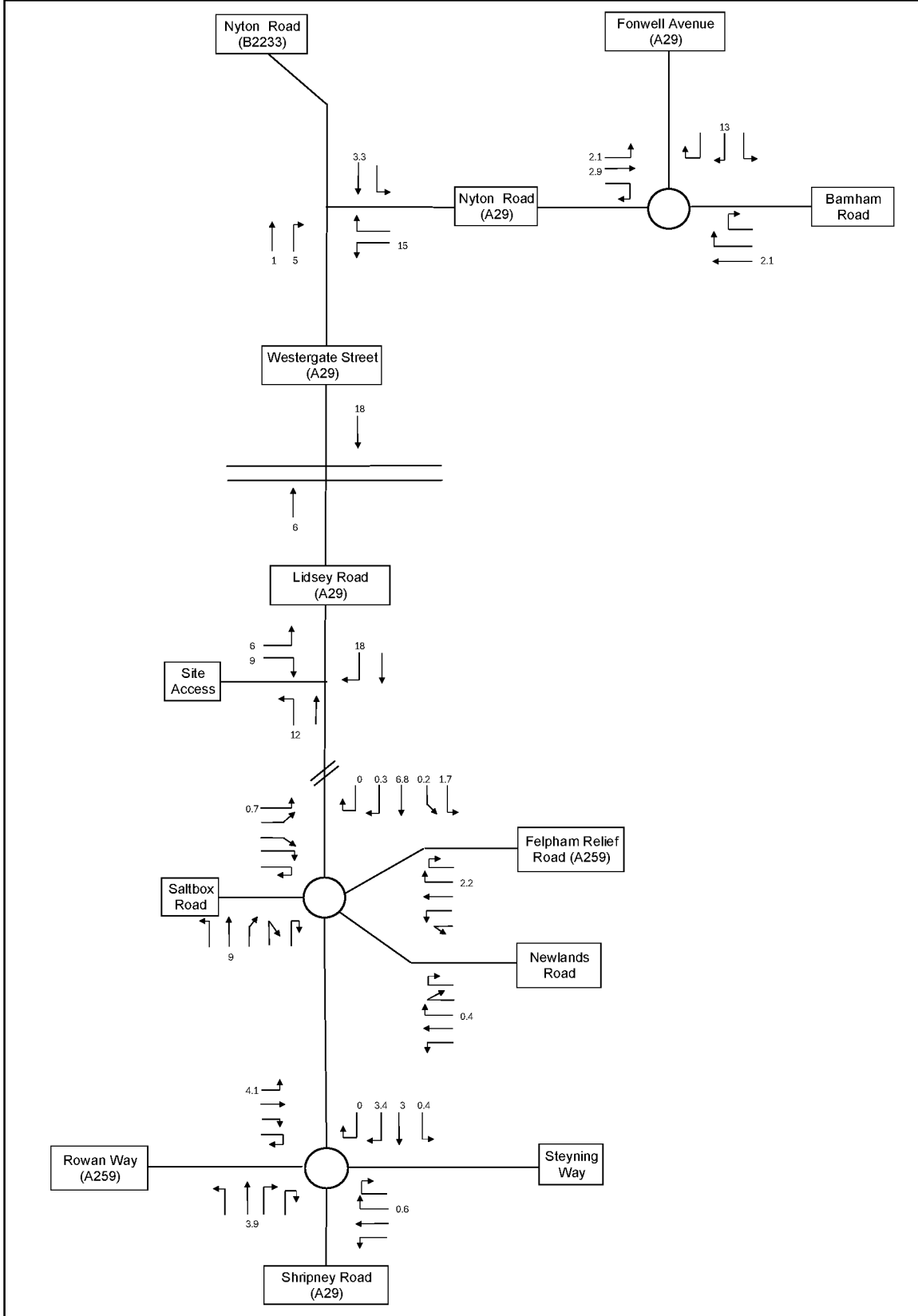


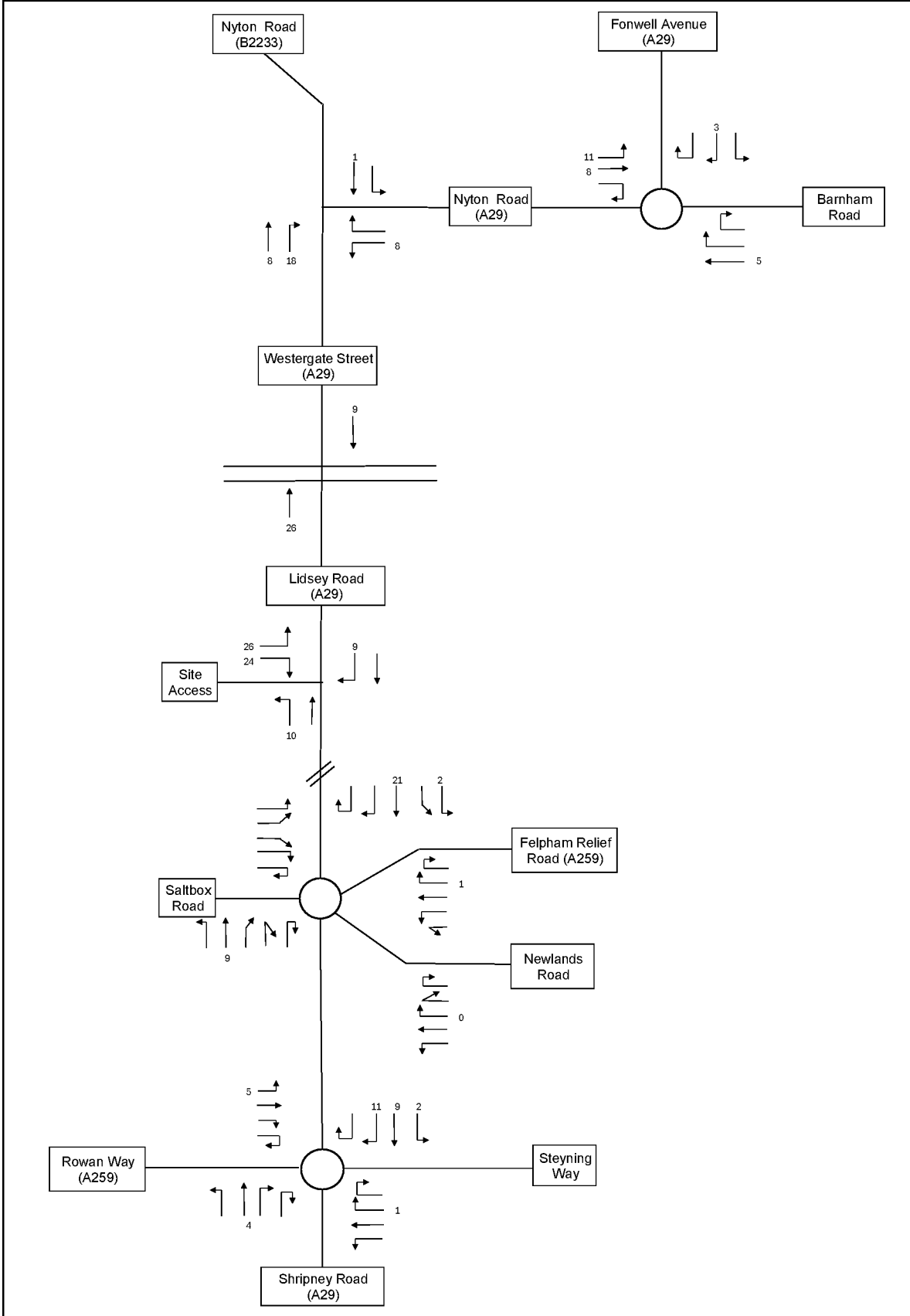
Committed Development 3 - Woodgate Centre PM (AL/107/21/PL)

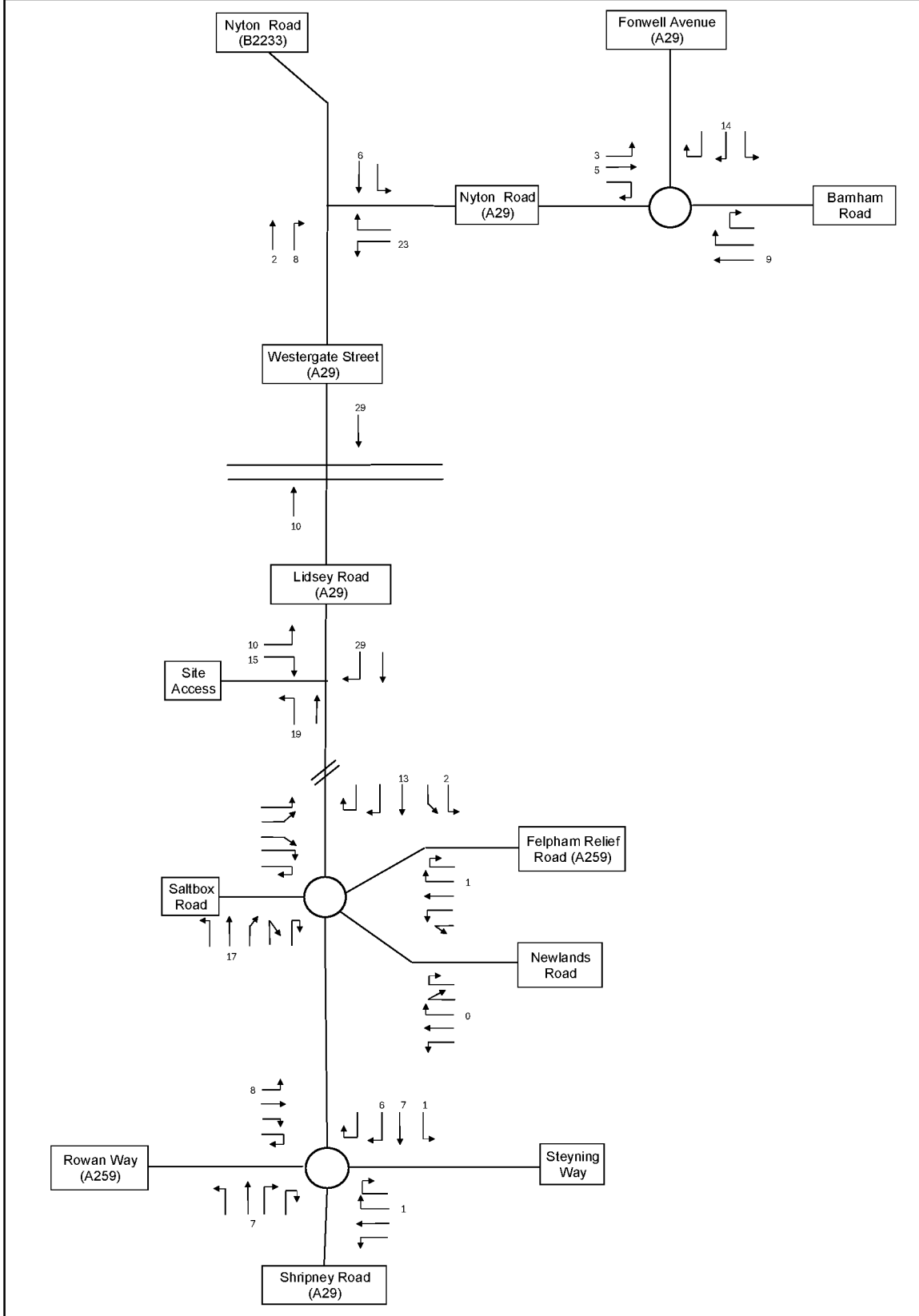


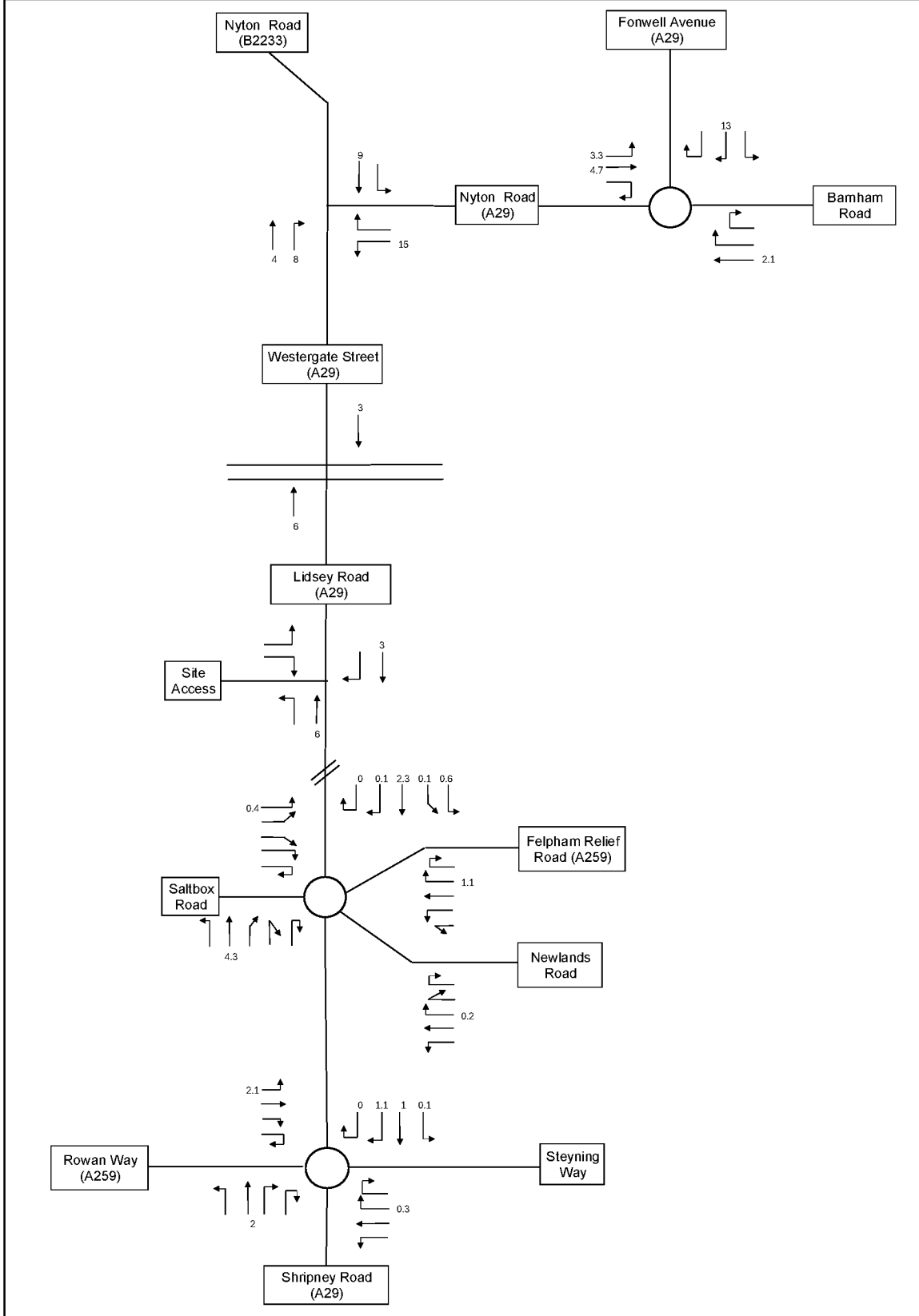
Committed Development 4 - Land Adjacent to Woodgate Nurseries (95 Dwellings) AM (AL/129/21/OUT)



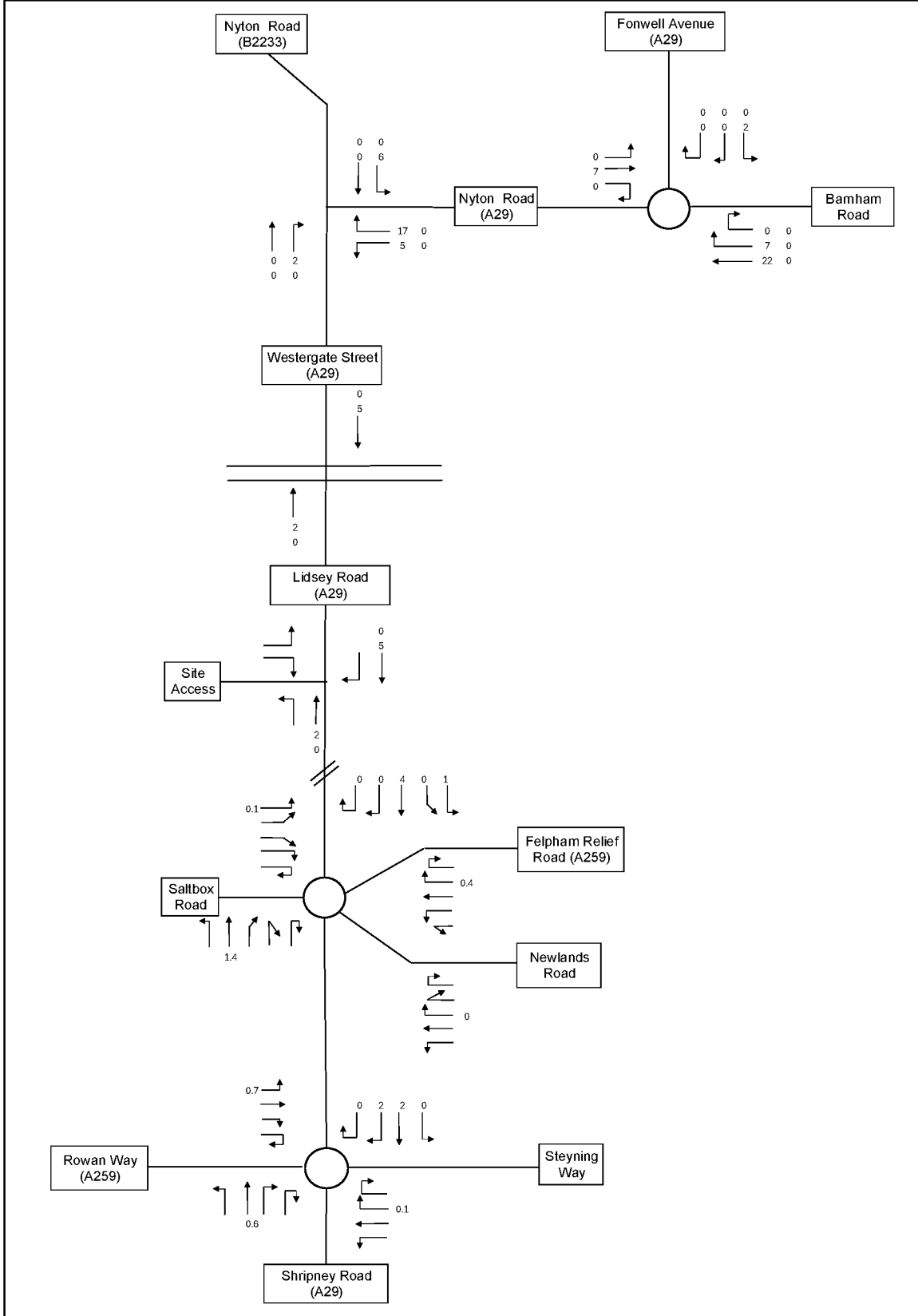




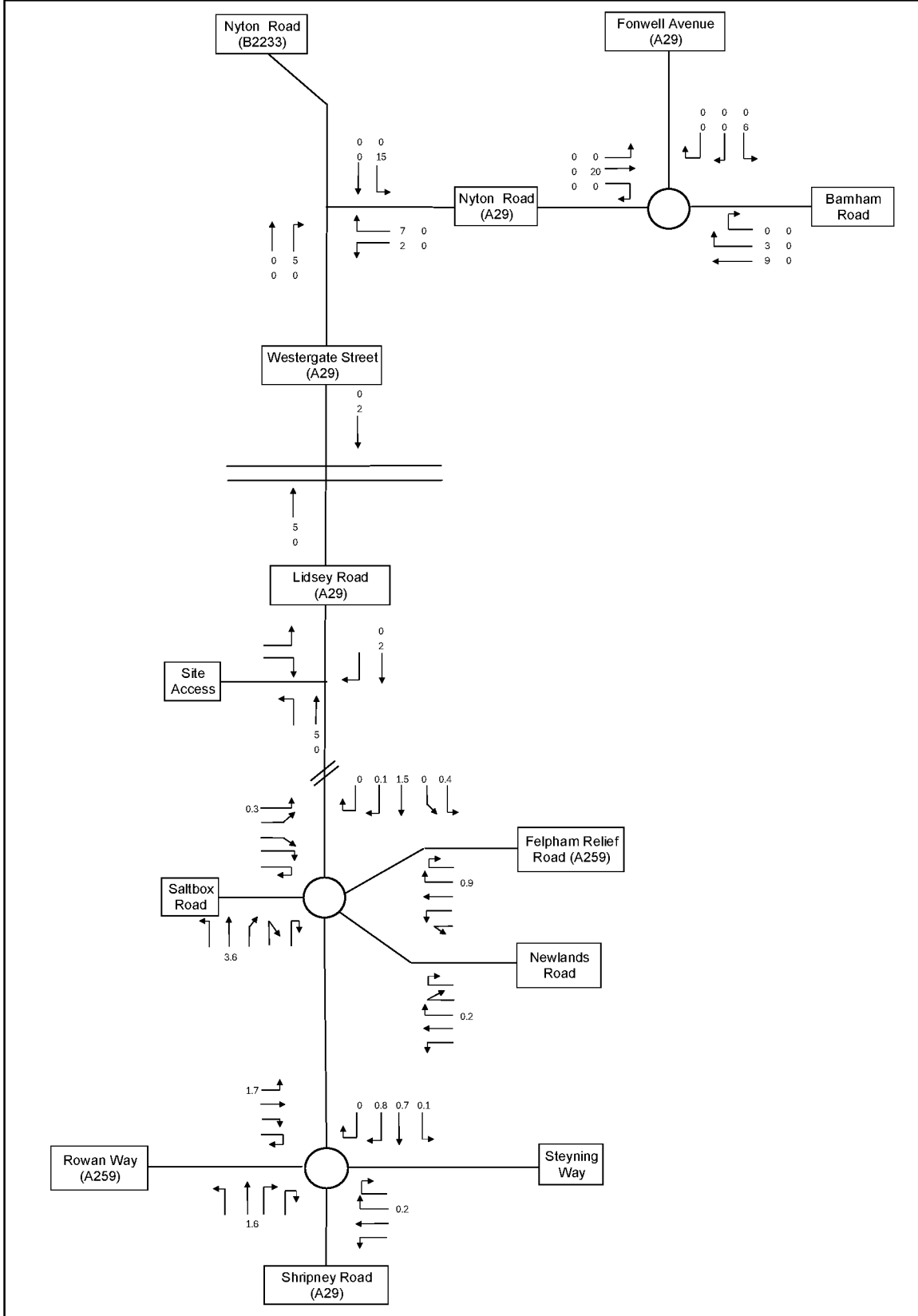




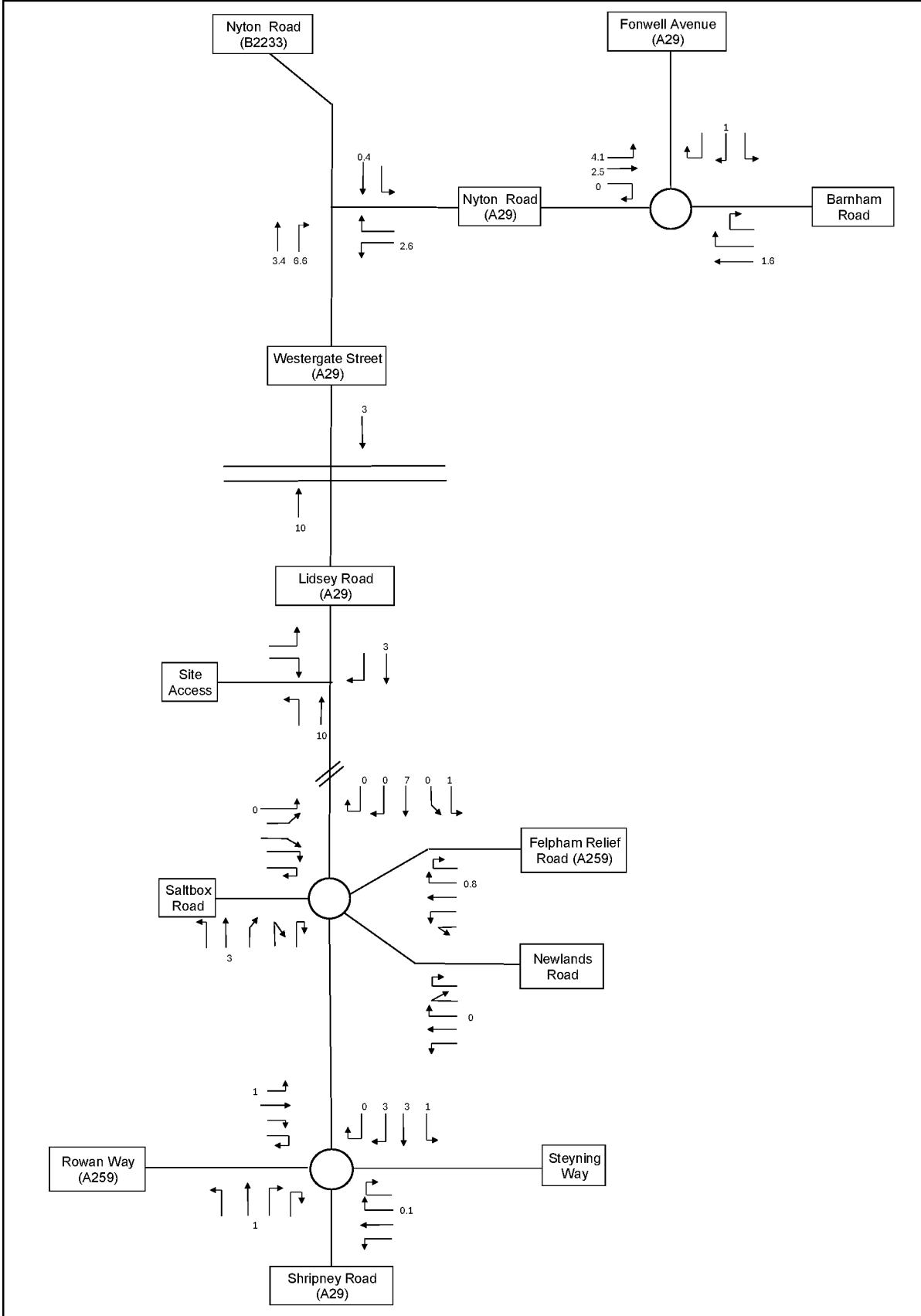
Committed Development 7 - Church Lane, Barnham AM (BN/147/22/RES)

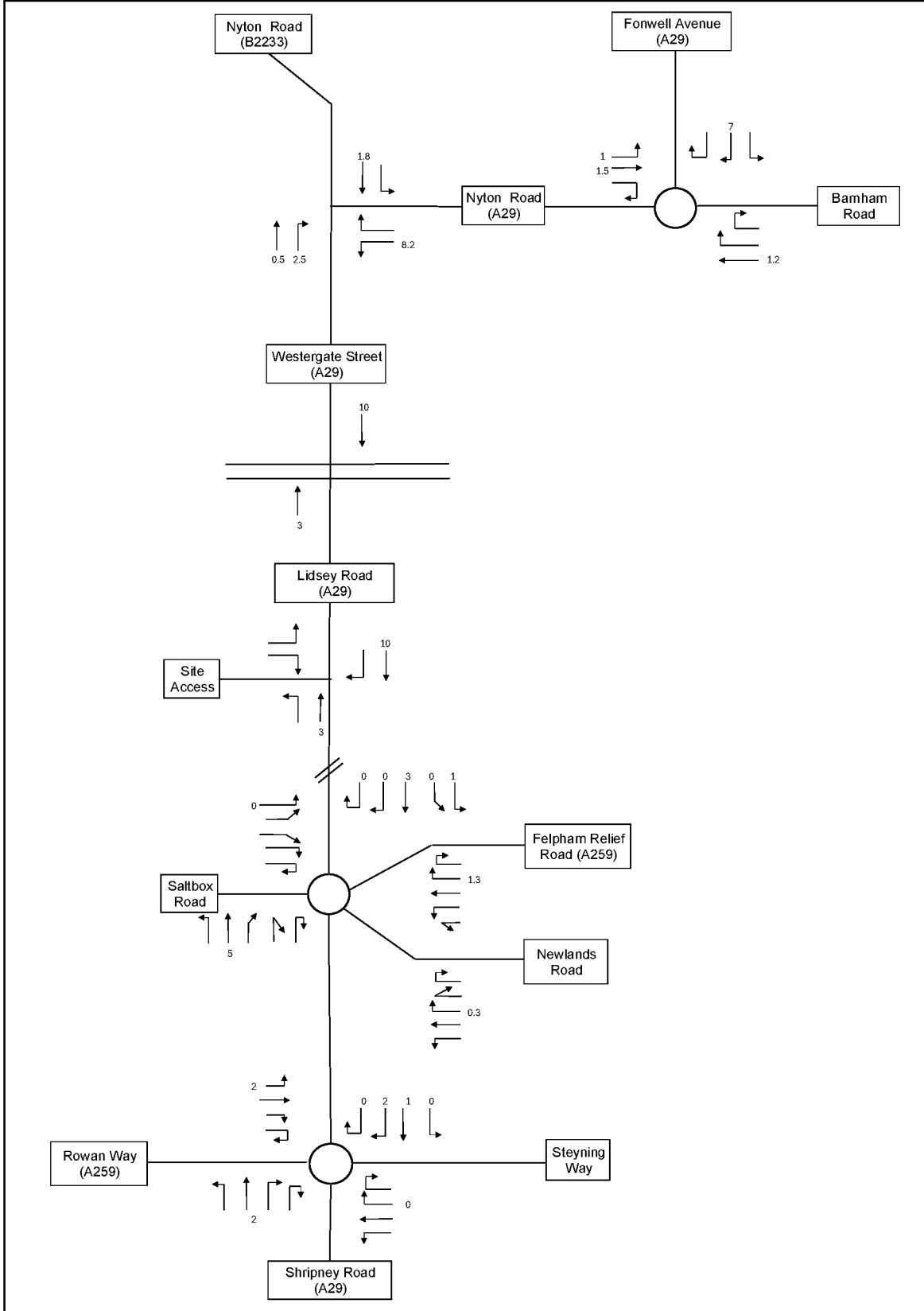


Committed Development 7 - Church Lane, Barnham PM (BN/147/22/RES)

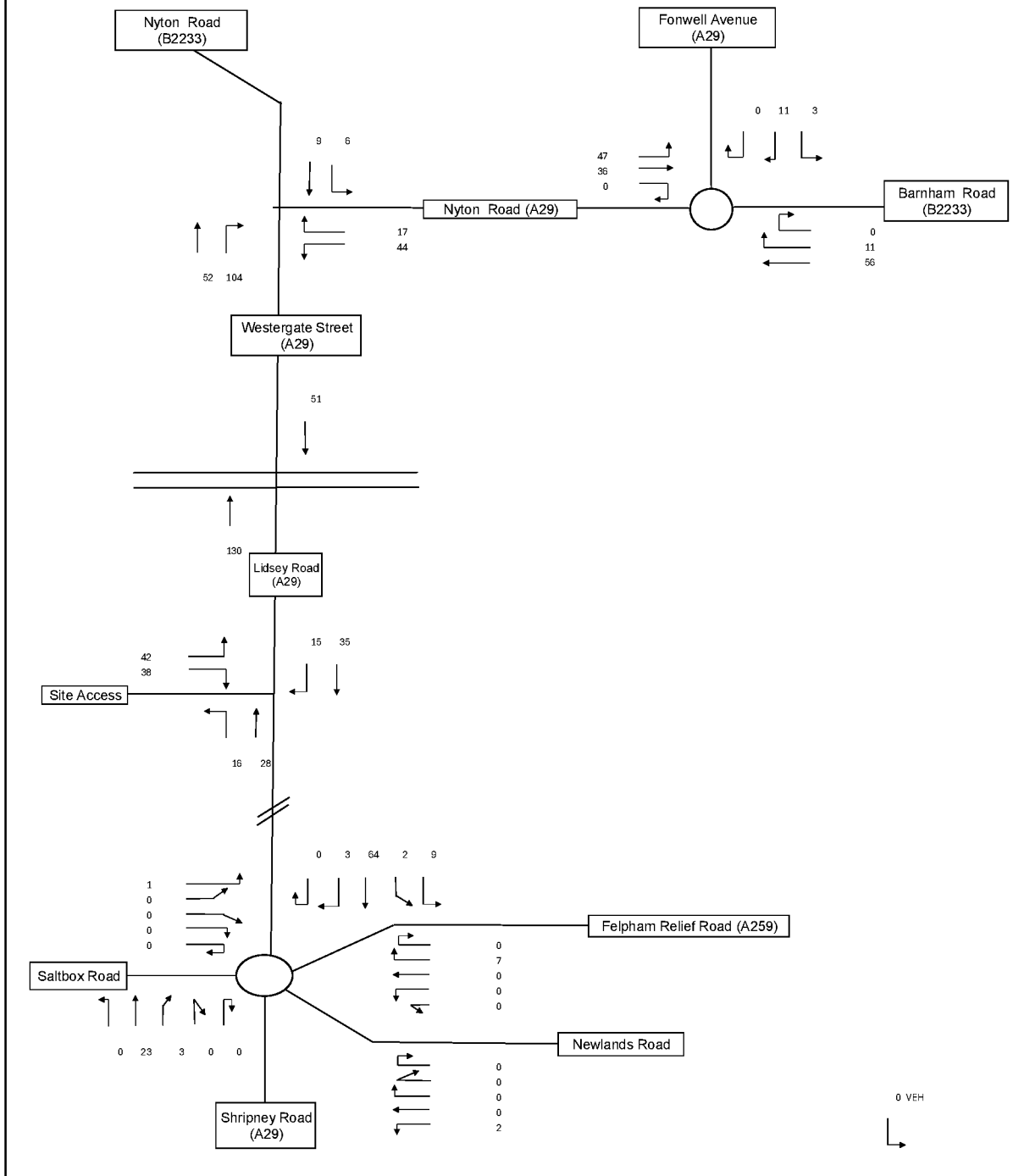


Committed Development 8 - Land East of Shripney Road, AM (BE/61/23/RES)

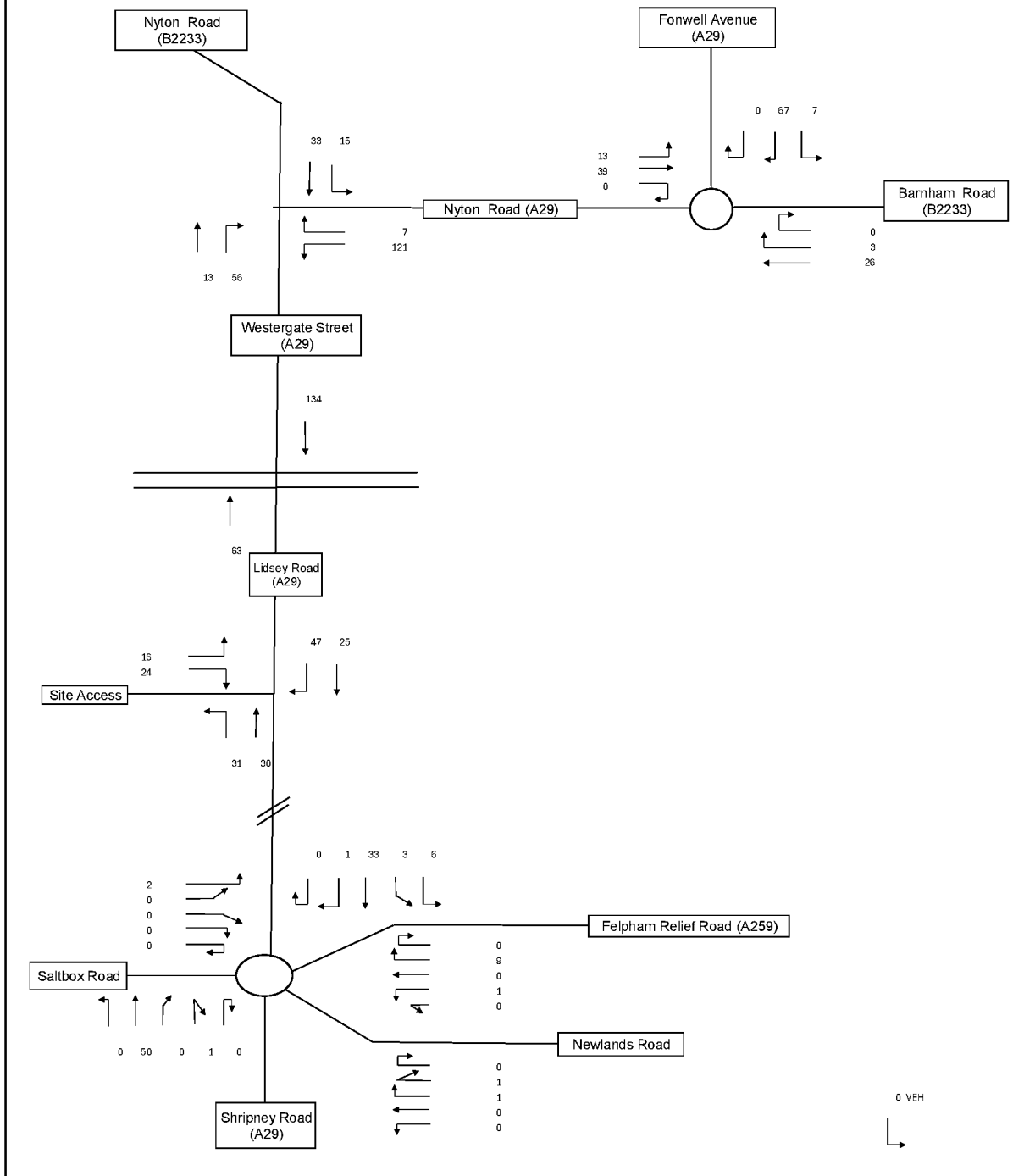




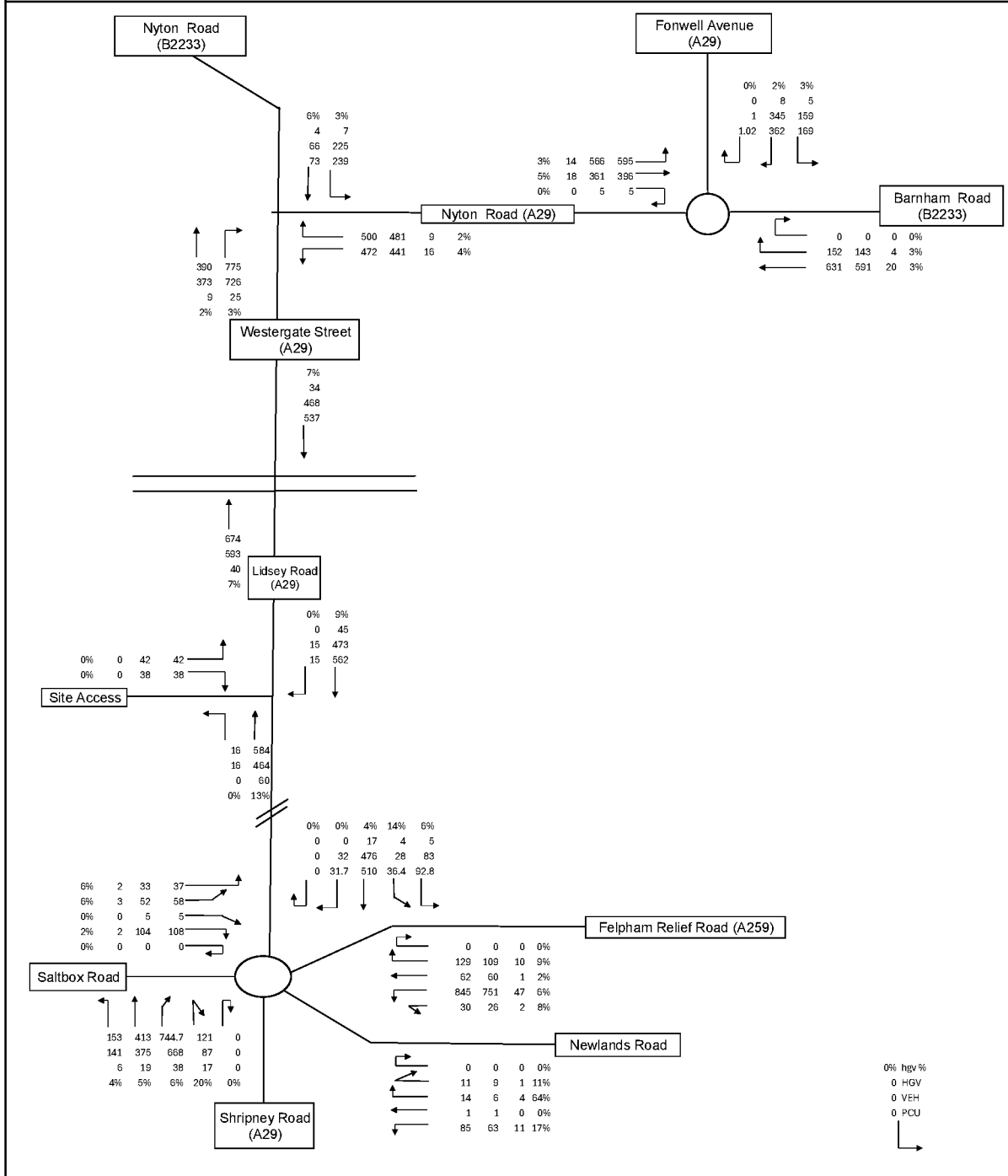
Committed Development Total AM



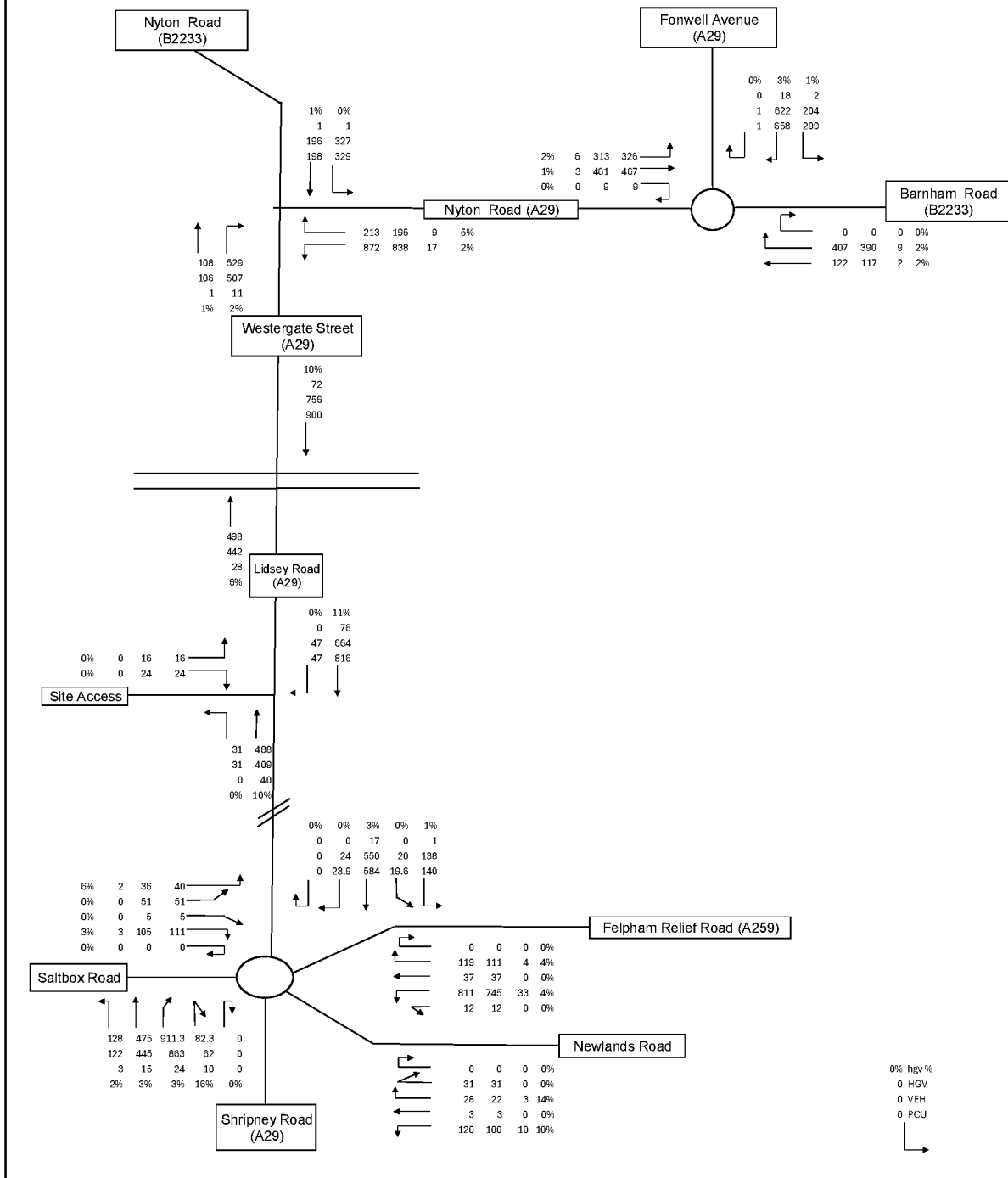
Committed Development Total PM



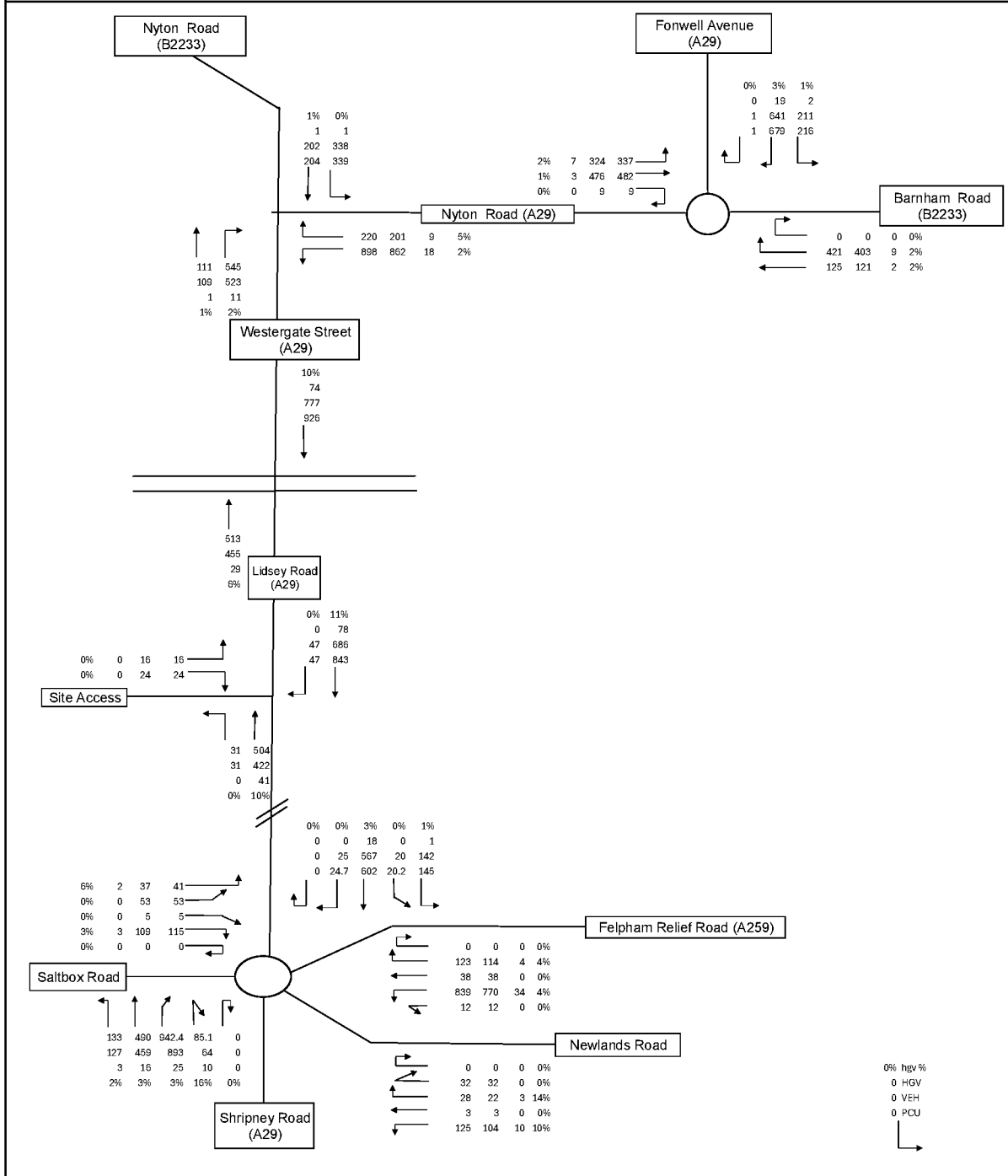
2024 AM BASE + COMMITTED DEVELOPMENT



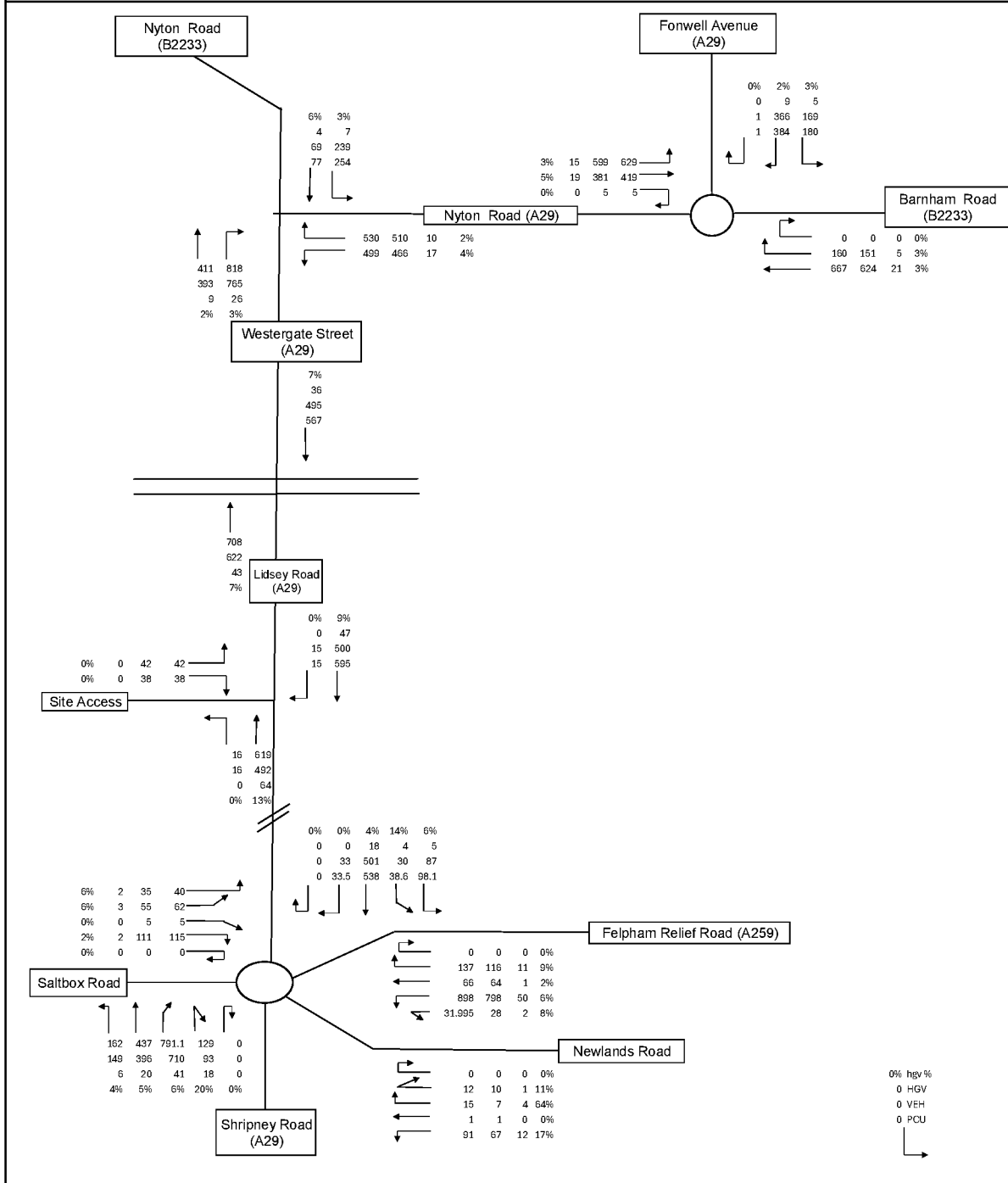
2024 PM BASE + COMMITTED DEVELOPMENT



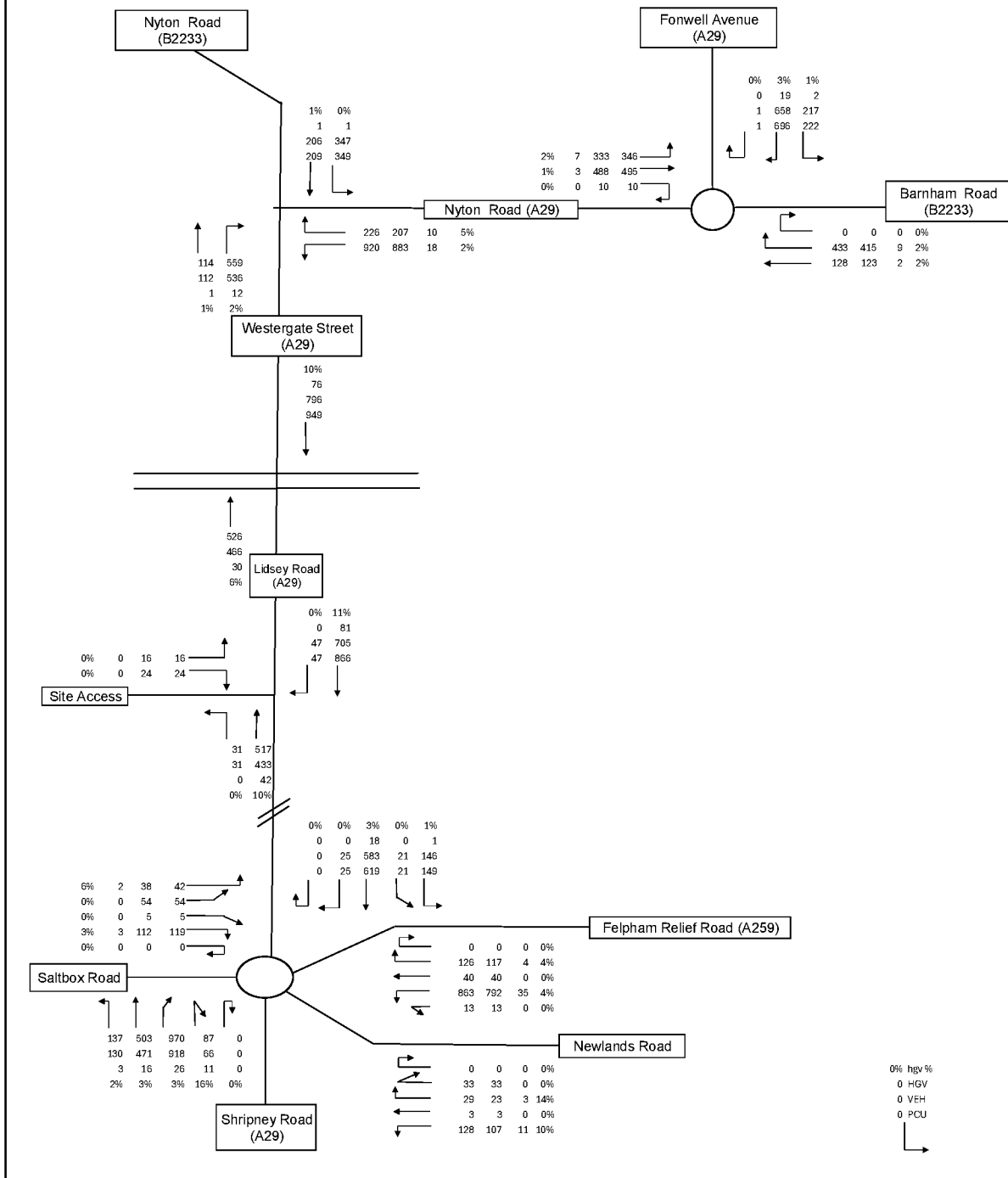
2028 PM BASE + COMMITTED DEVELOPMENT



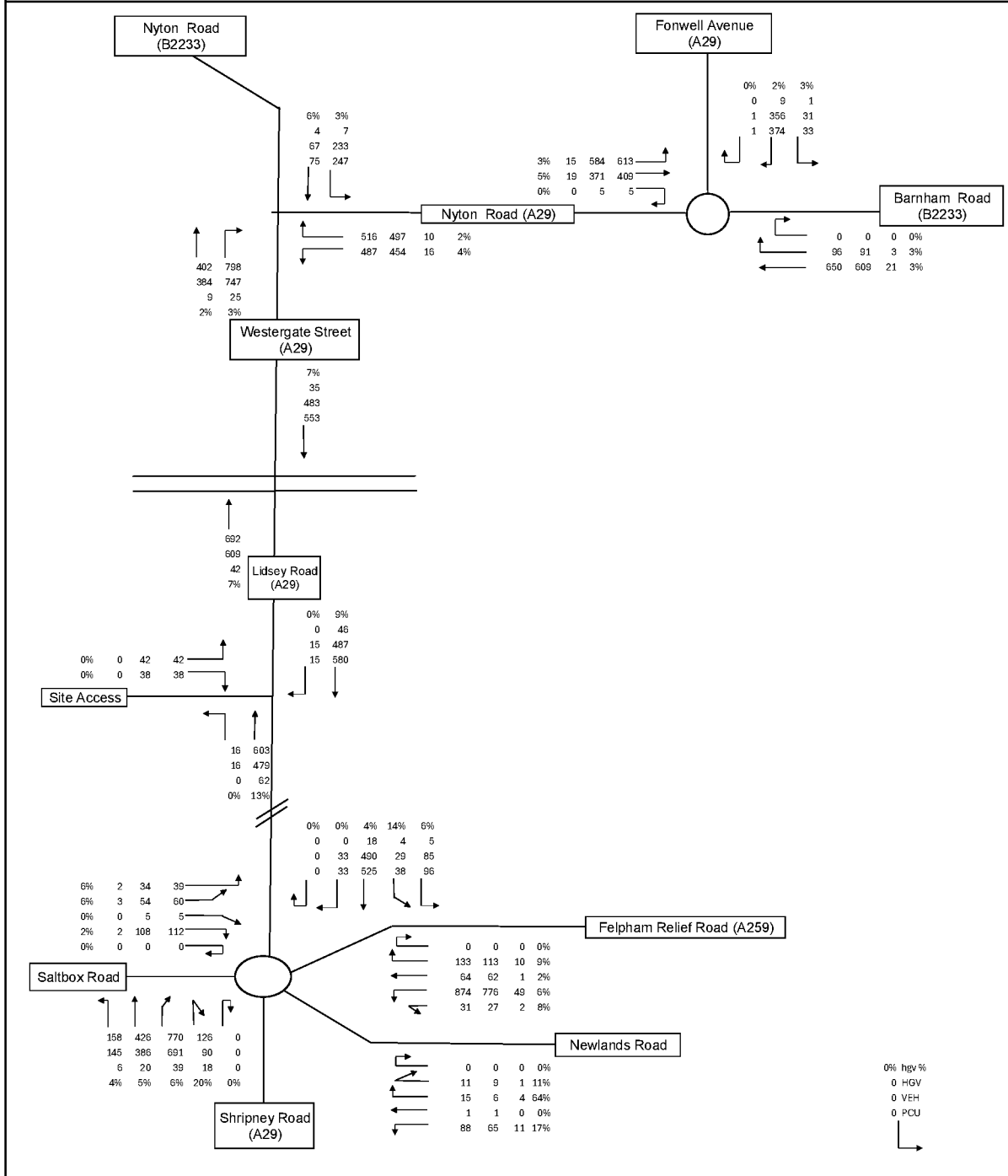
2031 AM BASE + COMMITTED DEVELOPMENT



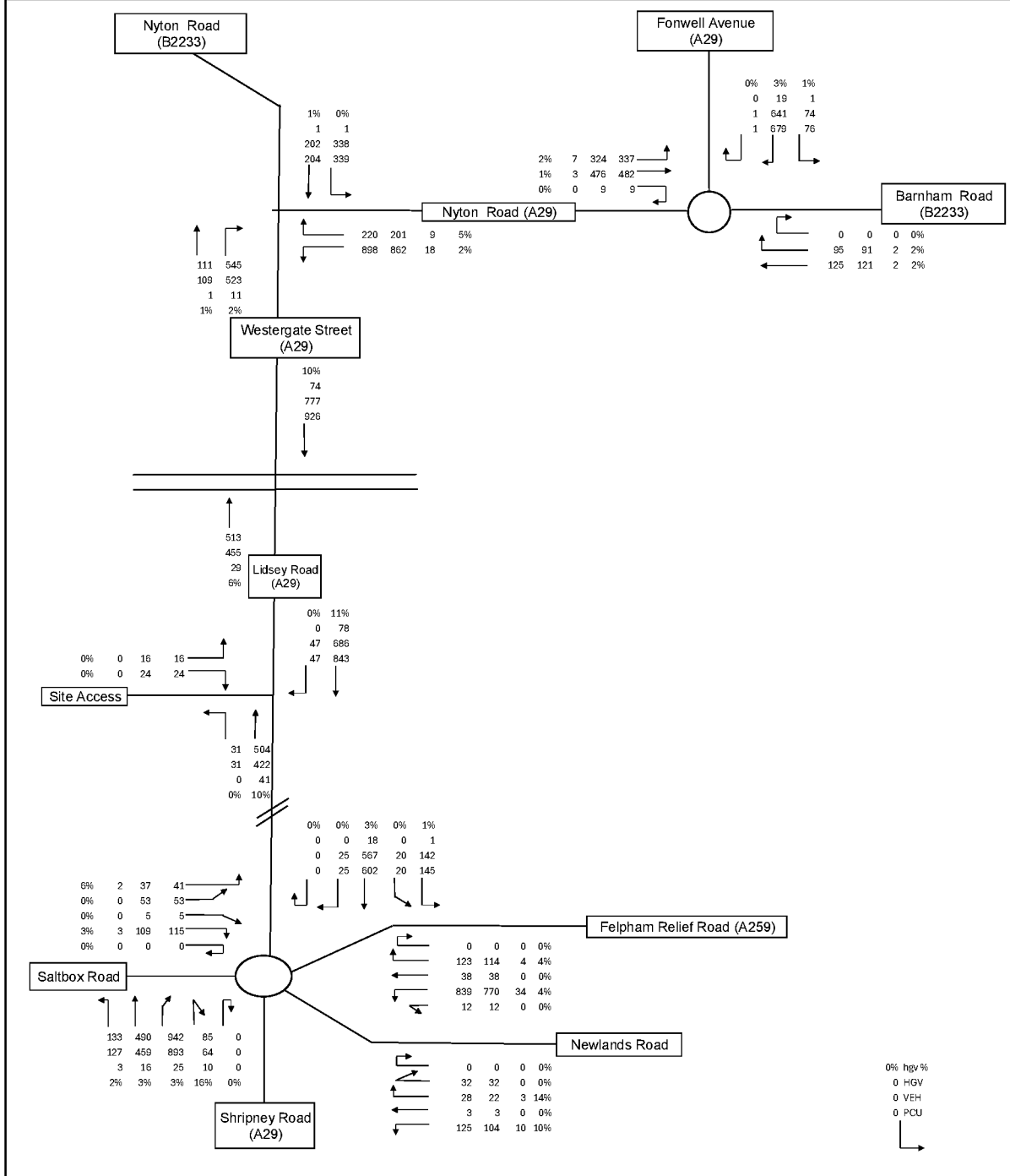
2031 PM BASE + COMMITTED DEVELOPMENT



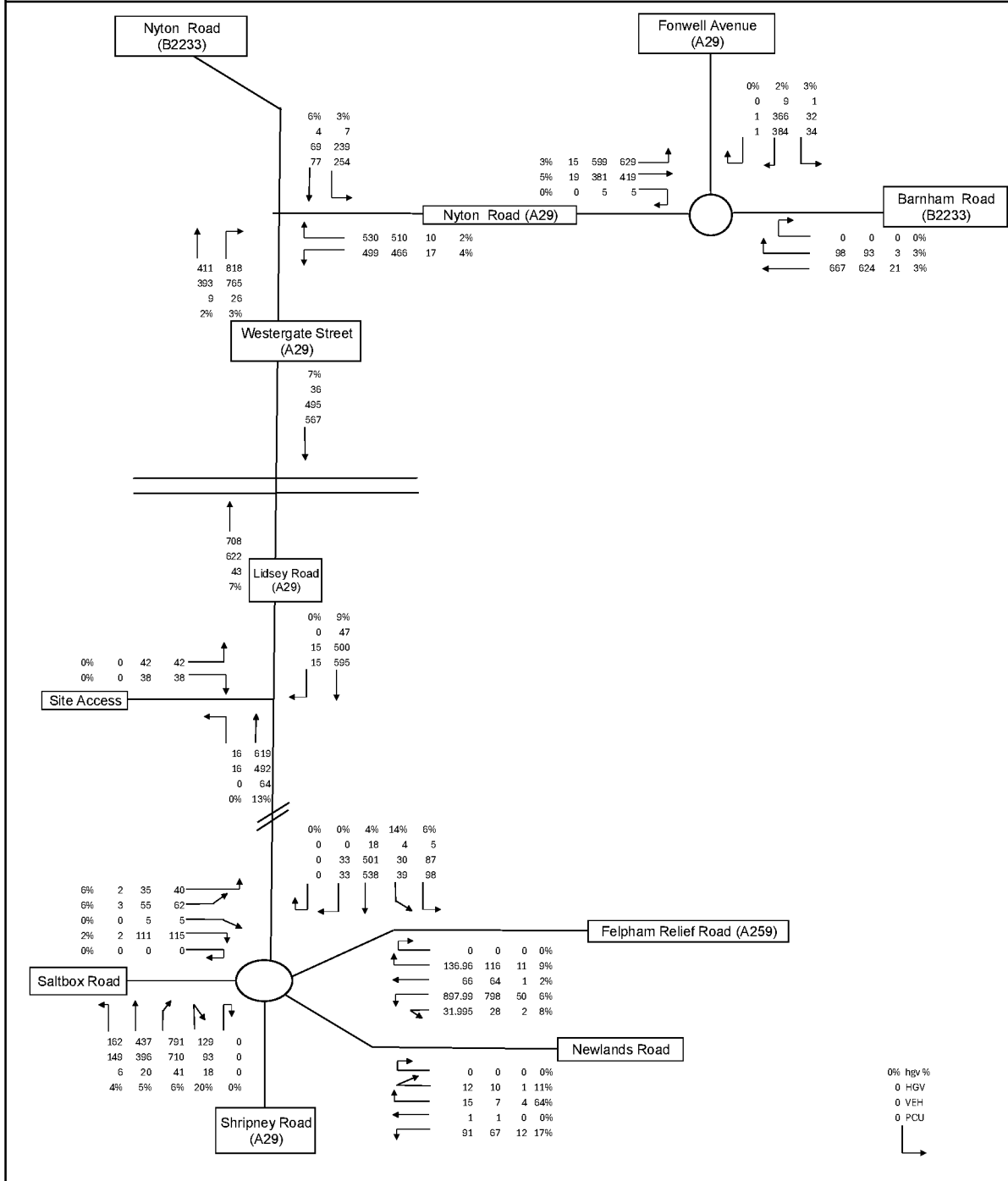
2028 AM BASE + COMMITTED DEVELOPMENT + A29 Phase 1 Mitigation



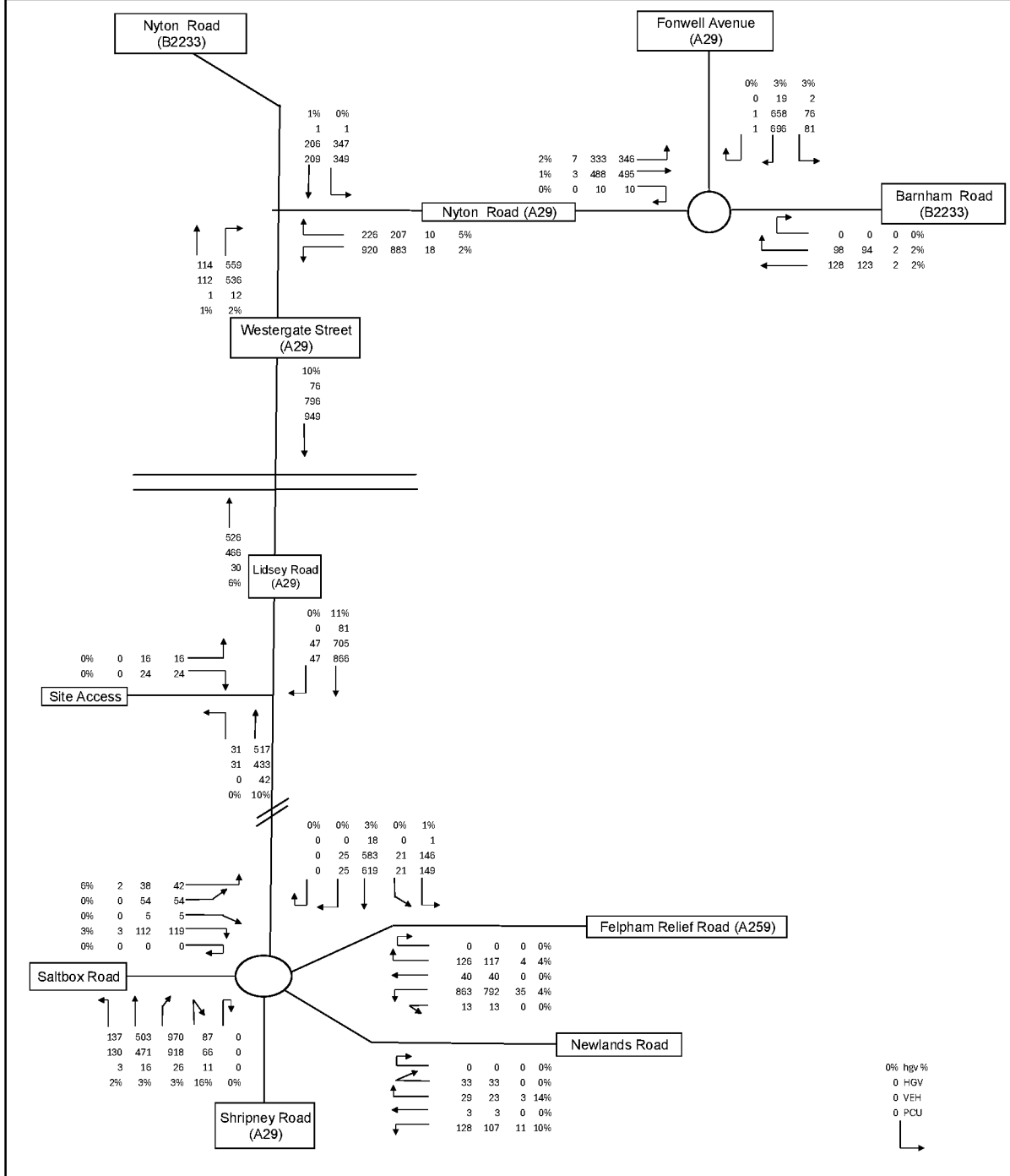
2028 PM BASE + COMMITTED DEVELOPMENT + A29 Phase 1 Mitigation



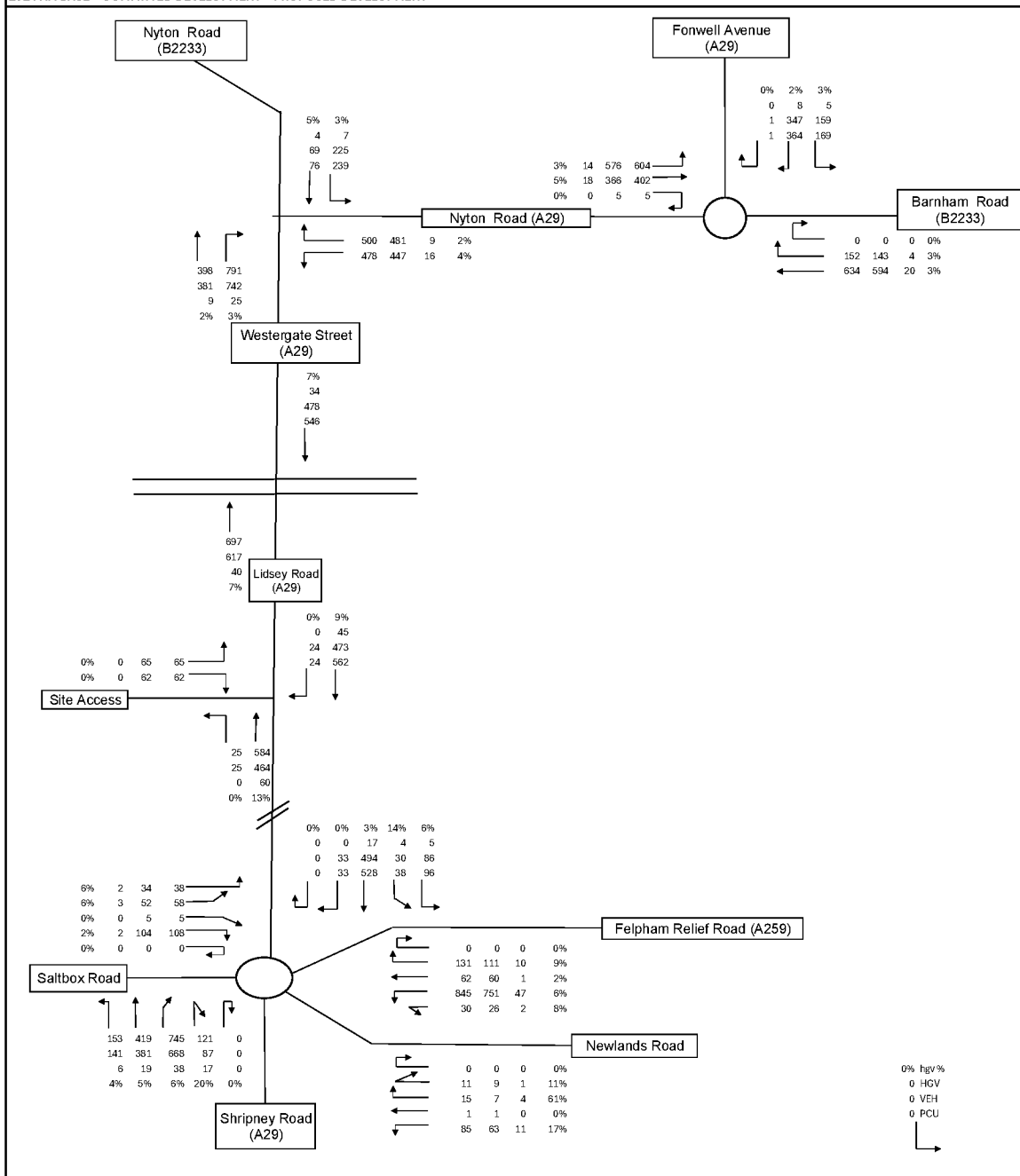
2031 AM BASE + COMMITTED DEVELOPMENT + A29 Phase 1 Mitigation



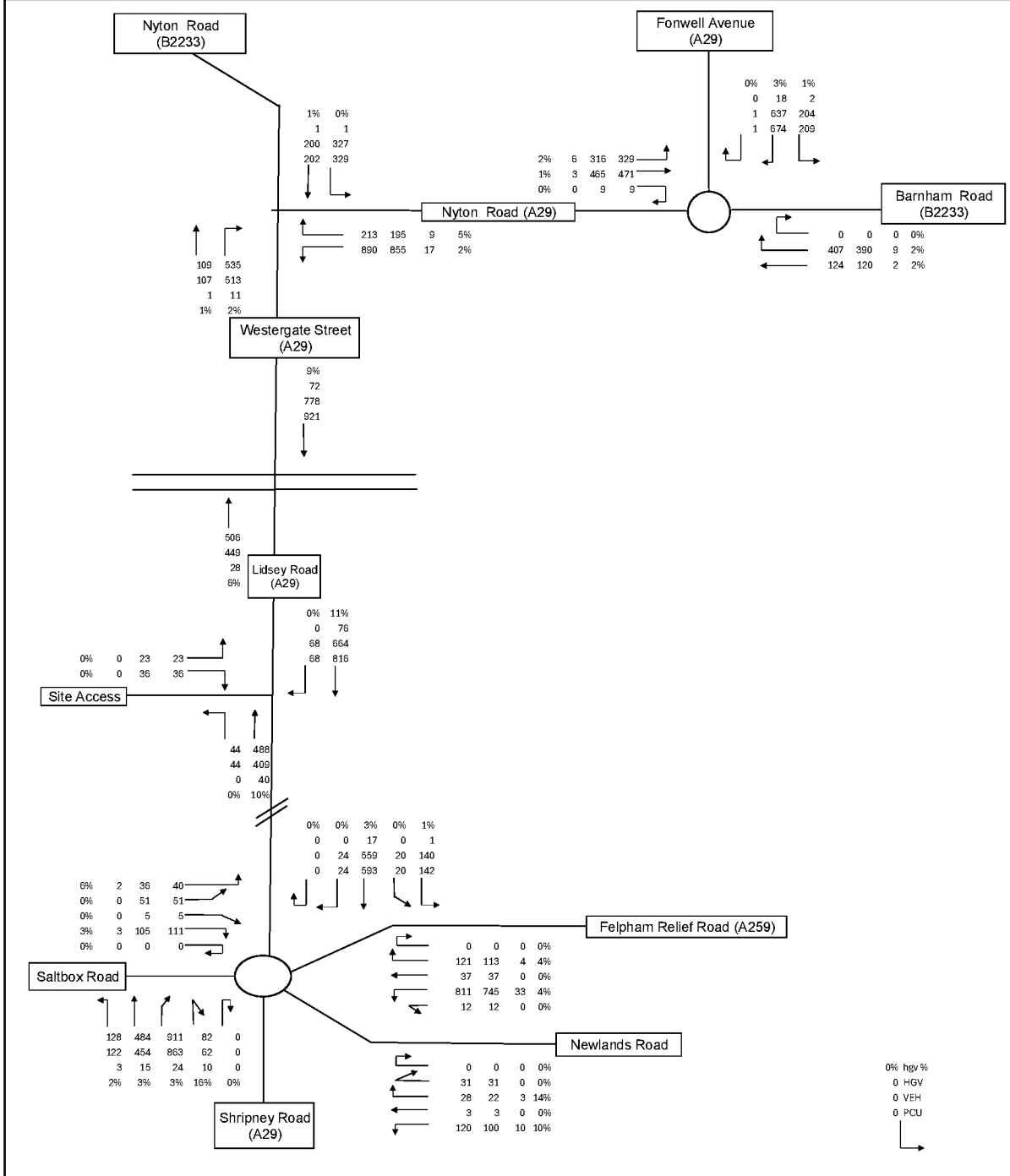
2031 PM BASE + COMMITTED DEVELOPMENT + A29 Phase 1 Mitigation



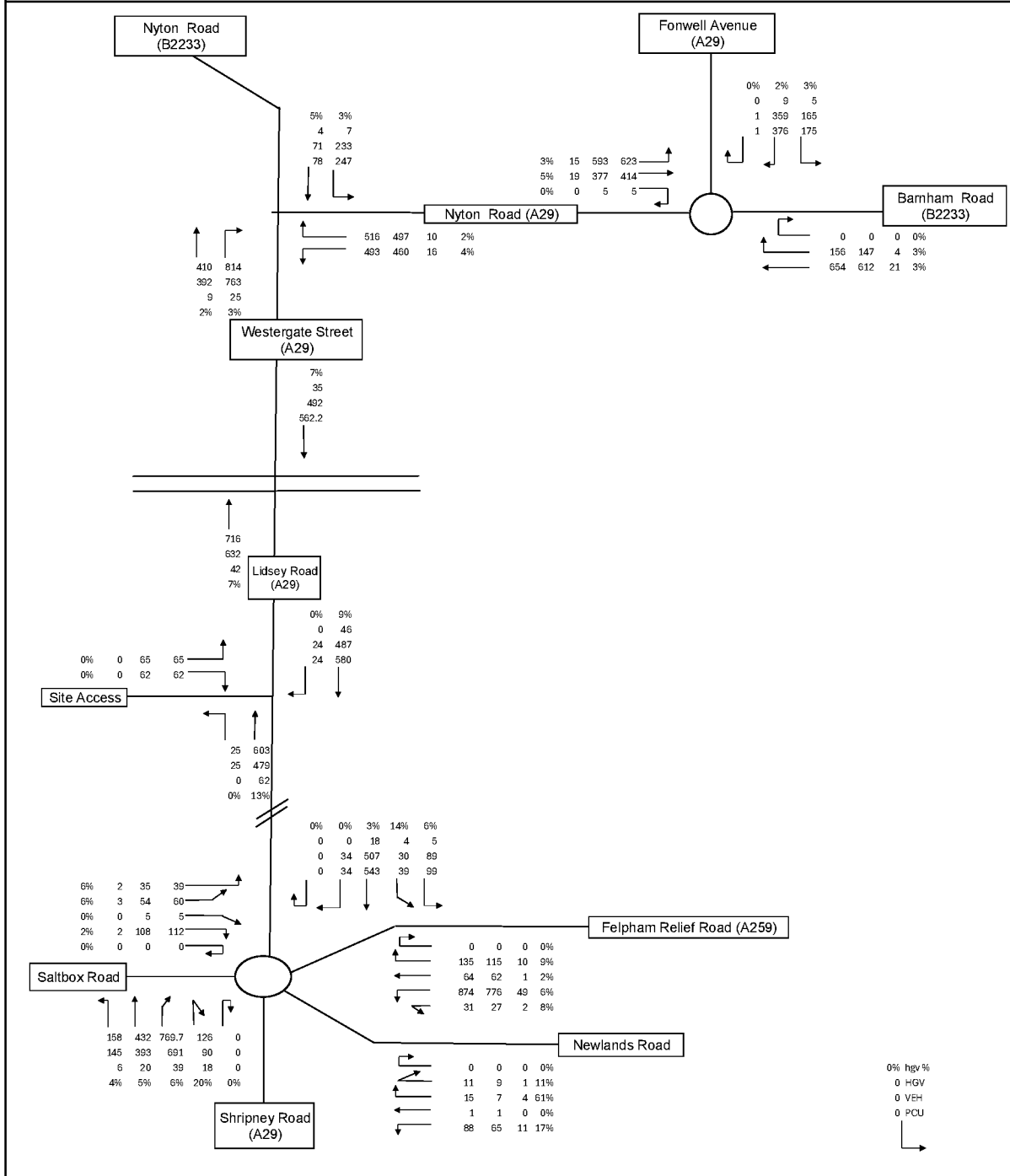
2024 AM BASE + COMMITTED DEVELOPMENT + PROPOSED DEVELOPMENT



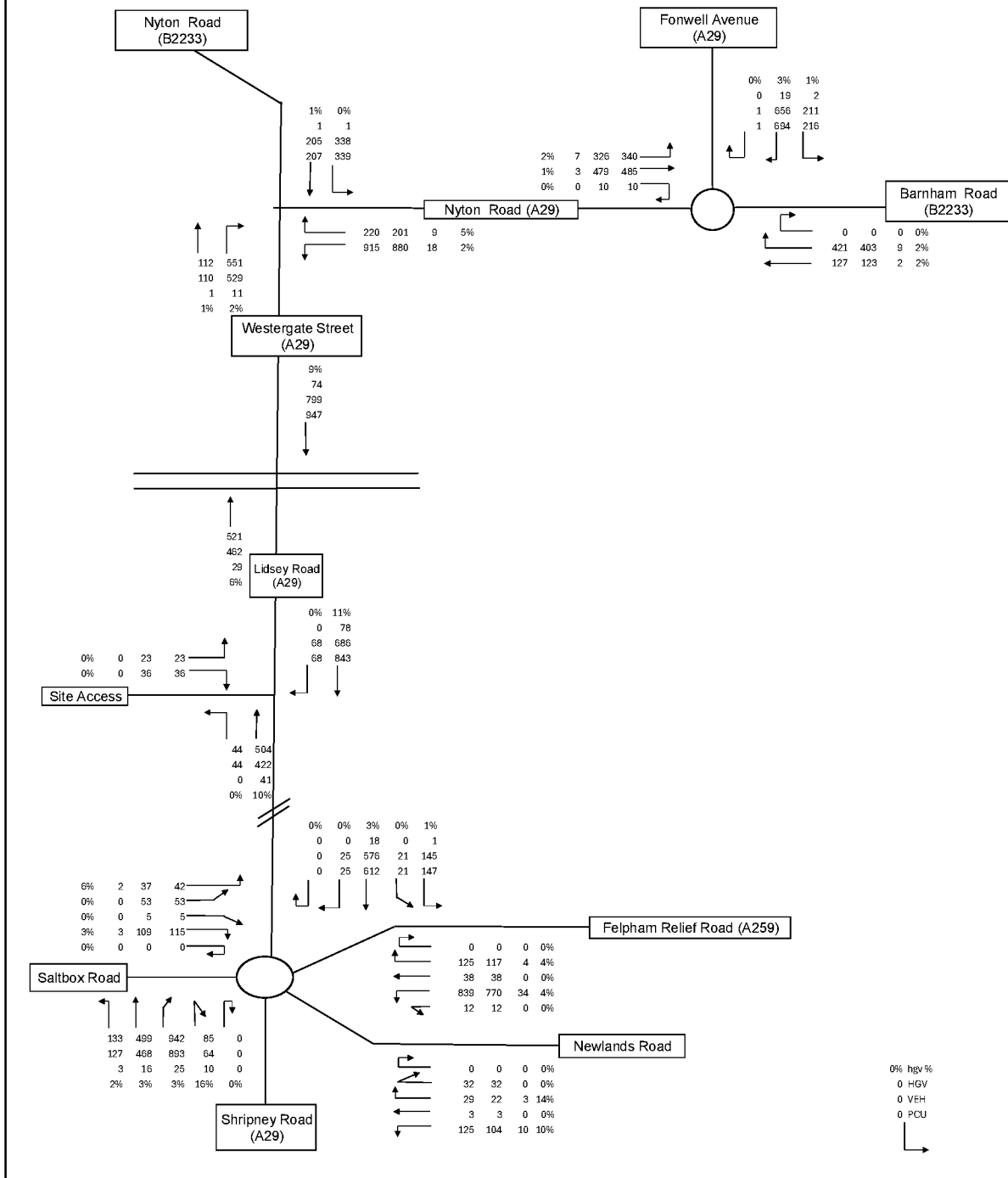
2024 PM BASE + COMMITTED DEVELOPMENT + PROPOSED DEVELOPMENT



2028 AM BASE + COMMITTED DEVELOPMENT + PROPOSED DEVELOPMENT

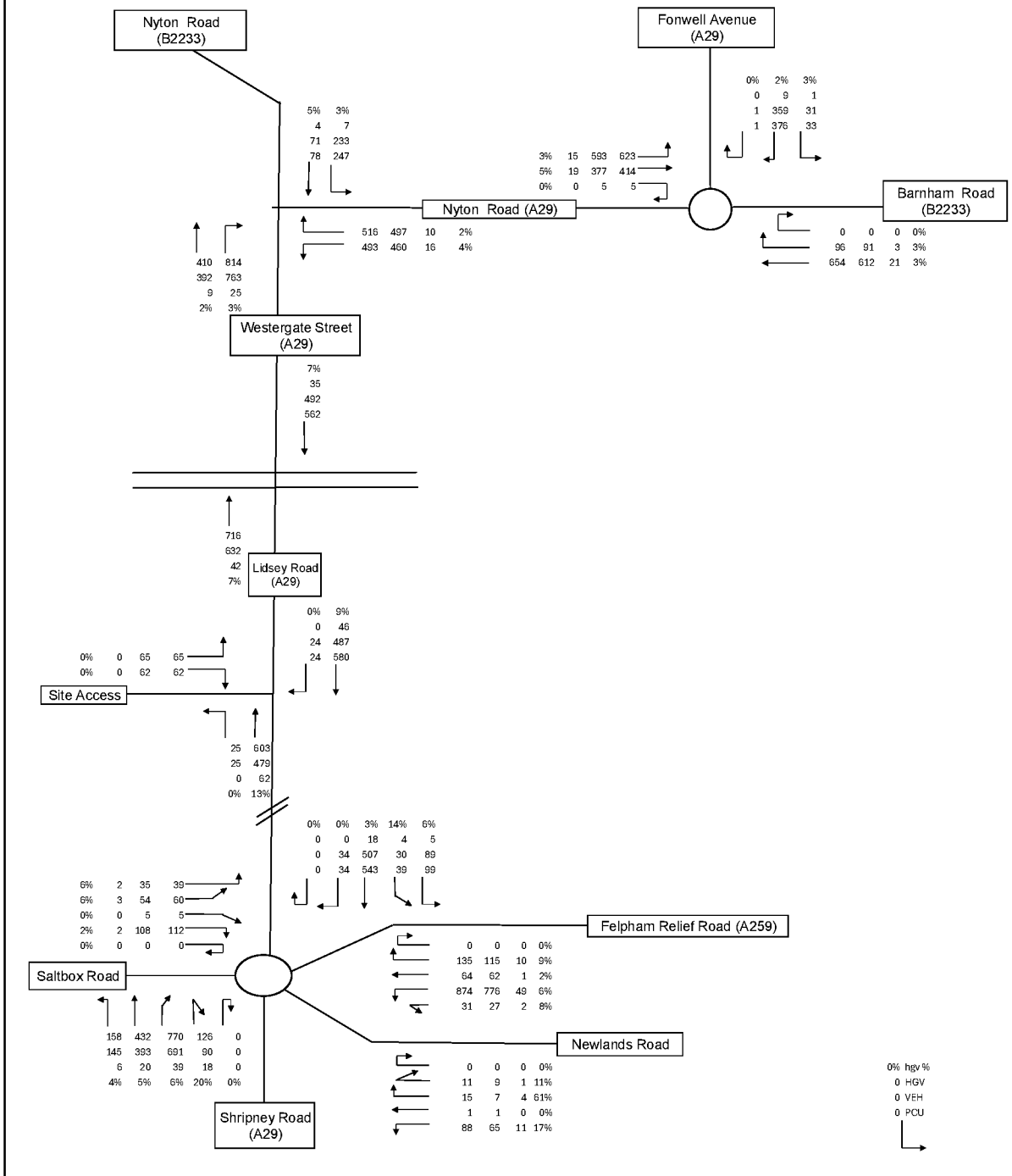


2028 PM BASE + COMMITTED DEVELOPMENT + PROPOSED DEVELOPMENT

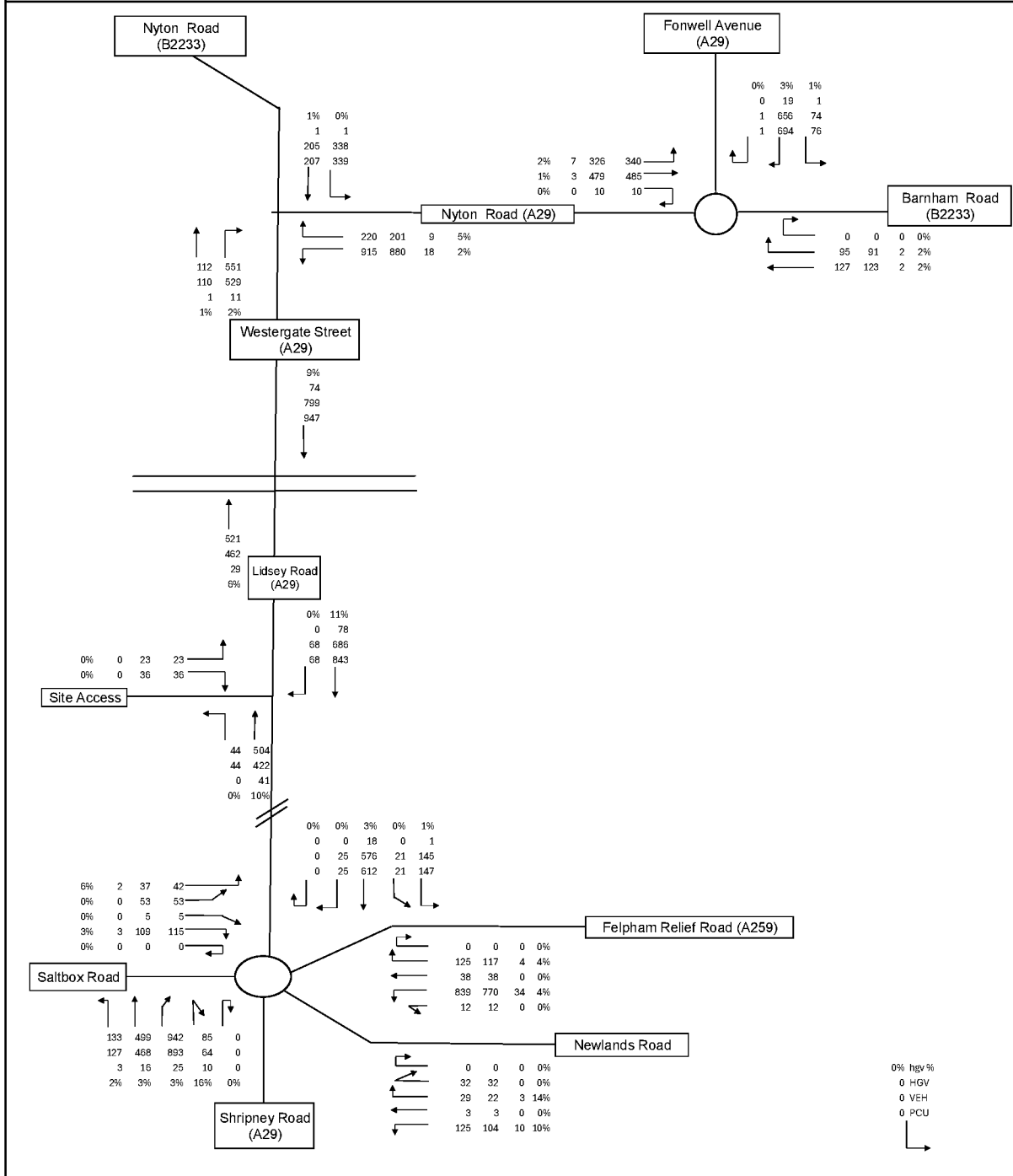




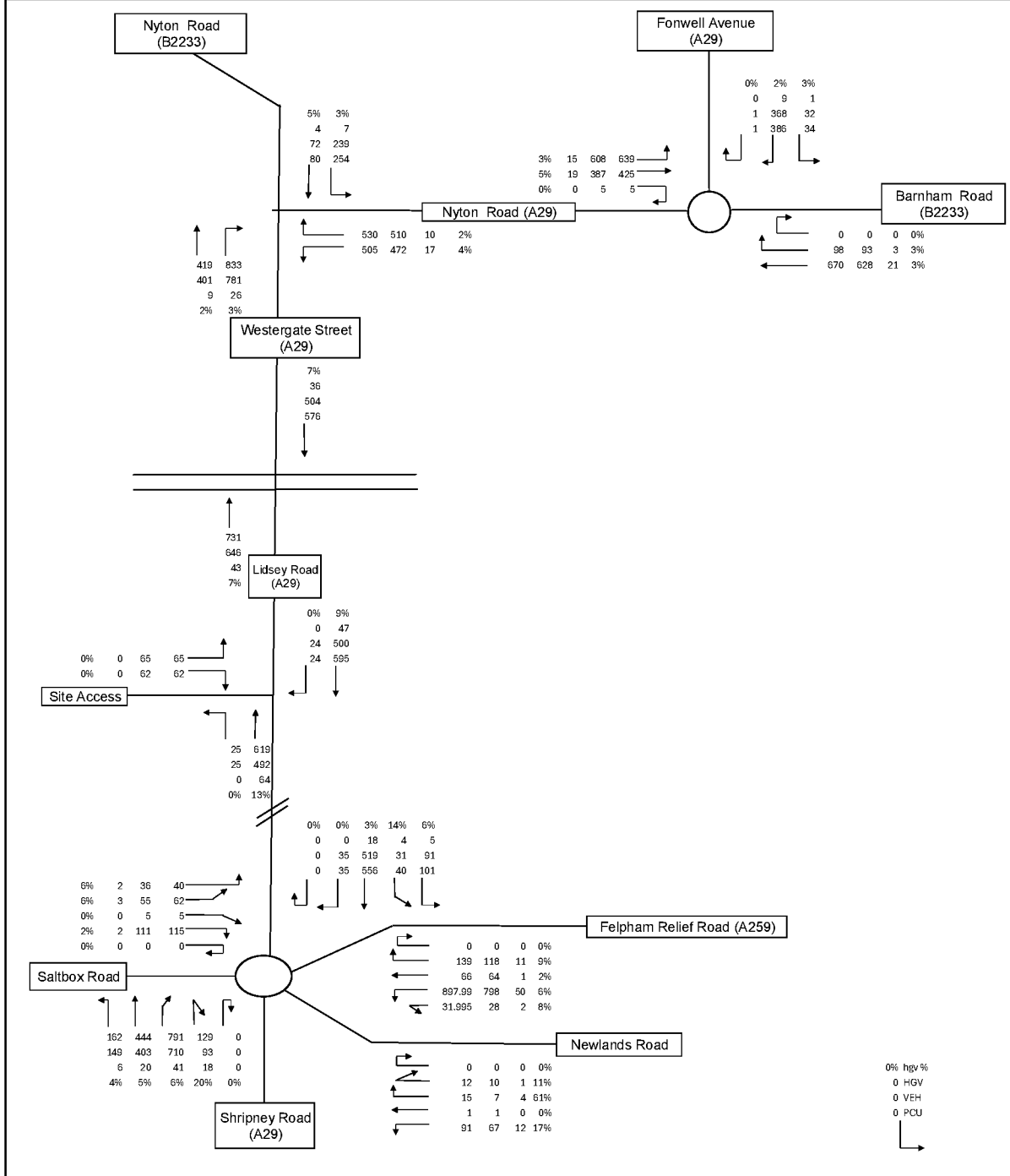
2028 AM BASE + COMMITTED DEVELOPMENT + PROPOSED DEVELOPMENT + A29 Phase 1 Mitigation



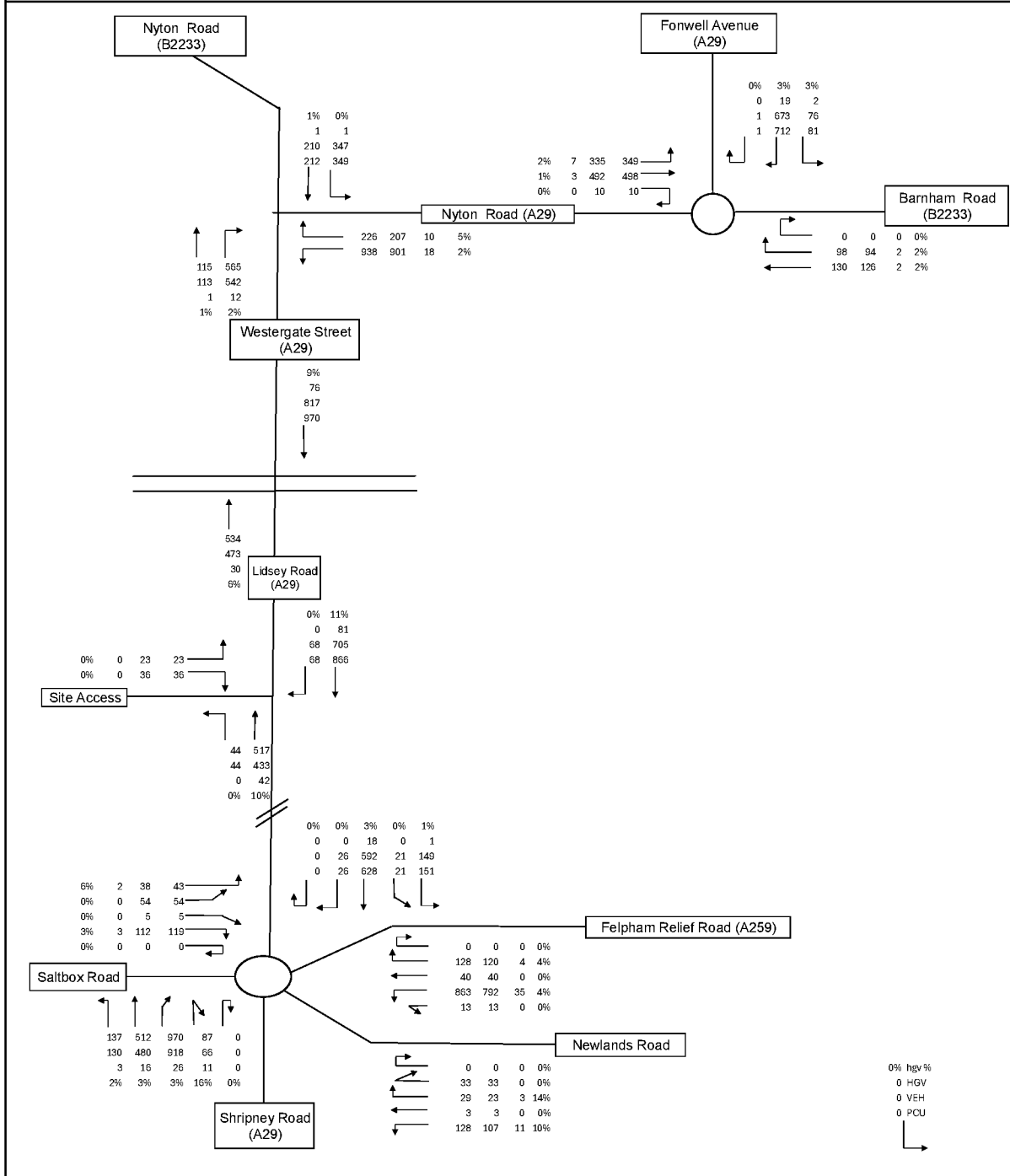
2028 PM BASE + COMMITTED DEVELOPMENT + PROPOSED DEVELOPMENT + A29 Phase 1 Mitigation



2031 AM BASE + COMMITTED DEVELOPMENT + PROPOSED DEVELOPMENT + A29 Phase 1 Mitigation



2031 PM BASE + COMMITTED DEVELOPMENT + PROPOSED DEVELOPMENT + A29 Phase 1 Mitigation



Appendix 14

TRICS Output

Calculation Reference: AUDIT-355901-240403-0413

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	2 days
	EX ESSEX	1 days
	HC HAMPSHIRE	3 days
	HF HERTFORDSHIRE	1 days
	KC KENT	2 days
	WB WEST BERKSHIRE	1 days
	WS WEST SUSSEX	4 days
04	EAST ANGLIA	
	NF NORFOLK	3 days
	SF SUFFOLK	2 days
11	SCOTLAND	
	AS ABERDEENSHIRE	1 days

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

Highgate Transportation Ltd Park Street Bristol

Licence No: 355901

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: 106 to 197 (units:)
Range Selected by User: 100 to 200 (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 07/11/23

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	3 days
Tuesday	5 days
Wednesday	6 days
Thursday	4 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)	2
Edge of Town	18

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:

Residential Zone	19
Village	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	4 days - Selected
Servicing vehicles Excluded	18 days - Selected

Secondary Filtering selection:**Use Class:**

C3	20 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

Secondary Filtering selection (Cont.):

Population within 1 mile:

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

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

Population within 5 miles:

5,001 to 25,000	3 days
25,001 to 50,000	1 days
50,001 to 75,000	2 days
75,001 to 100,000	2 days
100,001 to 125,000	1 days
125,001 to 250,000	10 days
250,001 to 500,000	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	4 days
1.1 to 1.5	13 days
1.6 to 2.0	3 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	16 days
No	4 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	20 days
-----------------	---------

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

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions
-----------------------	-----	--

Highgate Transportation Ltd Park Street Bristol

Licence No: 355901

LIST OF SITES relevant to selection parameters

1	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
2	ES-03-A-08	MIXED HOUSES & FLATS	EAST SUSSEX
	WRESTWOOD ROAD		
	BEXHILL		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	110	
	Survey date: WEDNESDAY	12/10/22	Survey Type: MANUAL
3	ES-03-A-10	MIXED HOUSES & FLATS	EAST SUSSEX
	WATERGATE		
	BEXHILL-ON-SEA		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	139	
	Survey date: THURSDAY	28/09/23	Survey Type: MANUAL
4	EX-03-A-03	MIXED HOUSES	ESSEX
	KESTREL GROVE		
	RAYLEIGH		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	123	
	Survey date: MONDAY	27/09/21	Survey Type: MANUAL
5	HC-03-A-28	MIXED HOUSES & FLATS	HAMPSHIRE
	EAGLE AVENUE		
	WATERLOOVILLE		
	LOVEDEAN		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	125	
	Survey date: MONDAY	08/11/21	Survey Type: MANUAL
6	HC-03-A-33	MIXED HOUSES & FLATS	HAMPSHIRE
	CROW LANE		
	RINGWOOD		
	CROW		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	195	
	Survey date: TUESDAY	04/07/23	Survey Type: MANUAL
7	HC-03-A-36	MIXED HOUSES & FLATS	HAMPSHIRE
	HAVANT ROAD		
	EMSWORTH		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	145	
	Survey date: TUESDAY	12/09/23	Survey Type: MANUAL

Highgate Transportation Ltd Park Street Bristol

Licence No: 355901

LIST OF SITES relevant to selection parameters (Cont.)

8	HF-03-A-03	MIXED HOUSES	HERTFORDSHIRE
	HARE STREET ROAD		
	BUNTINGFORD		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	160	
	Survey date: MONDAY	08/07/19	Survey Type: MANUAL
9	KC-03-A-04	SEMI-DETACHED & TERRACED	KENT
	KILN BARN ROAD		
	AYLESFORD		
	DITTON		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	110	
	Survey date: FRIDAY	22/09/17	Survey Type: MANUAL
10	KC-03-A-10	MIXED HOUSES	KENT
	HEADCORN ROAD		
	STAPLEHURST		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	106	
	Survey date: TUESDAY	09/05/23	Survey Type: MANUAL
11	NF-03-A-33	MIXED HOUSES	NORFOLK
	LONDON ROAD		
	ATTLEBOROUGH		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	143	
	Survey date: THURSDAY	29/09/22	Survey Type: MANUAL
12	NF-03-A-35	MIXED HOUSES & FLATS	NORFOLK
	REPTON AVENUE		
	NORWICH		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	116	
	Survey date: WEDNESDAY	28/09/22	Survey Type: MANUAL
13	NF-03-A-52	MIXED HOUSES	NORFOLK
	LYNNSPORT WAY		
	KING'S LYNN		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	130	
	Survey date: TUESDAY	07/11/23	Survey Type: MANUAL
14	SF-03-A-09	MIXED HOUSES & FLATS	SUFFOLK
	FOXHALL ROAD		
	IPSWICH		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	179	
	Survey date: THURSDAY	24/06/21	Survey Type: MANUAL

Highgate Transportation Ltd Park Street Bristol

Licence No: 355901

LIST OF SITES relevant to selection parameters (Cont.)

15	SF-03-A-10	TERRACED & SEMI-DETACHED	SUFFOLK
	LOVETOFTS DRIVE		
	IPSWICH		
	WHITEHOUSE		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	149	
	Survey date: TUESDAY	22/06/21	Survey Type: MANUAL
16	WB-03-A-03	MIXED HOUSES	WEST BERKSHIRE
	DORKING WAY		
	READING		
	CALCOT		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	108	
	Survey date: FRIDAY	09/09/22	Survey Type: MANUAL
17	WS-03-A-08	MIXED HOUSES	WEST SUSSEX
	ROUNDSTONE LANE		
	ANGMERING		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	180	
	Survey date: THURSDAY	19/04/18	Survey Type: MANUAL
18	WS-03-A-12	MIXED HOUSES	WEST SUSSEX
	MADGWICK LANE		
	CHICHESTER		
	WESTHAMPNETT		
	Edge of Town		
	Village		
	Total No of Dwellings:	152	
	Survey date: WEDNESDAY	16/06/21	Survey Type: MANUAL
19	WS-03-A-13	MIXED HOUSES & FLATS	WEST SUSSEX
	LITTLEHAMPTON ROAD		
	WORTHING		
	WEST DURRINGTON		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	197	
	Survey date: WEDNESDAY	23/06/21	Survey Type: MANUAL
20	WS-03-A-14	MIXED HOUSES	WEST SUSSEX
	TODDINGTON LANE		
	LITTLEHAMPTON		
	WICK		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	117	
	Survey date: WEDNESDAY	20/10/21	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.

Highgate Transportation Ltd Park Street Bristol

Licence No: 355901

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TOTAL VEHICLES

Calculation factor: **1 DWELLS**

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.75

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	20	141	0.069	20	141	0.287	20	141	0.356
08:00 - 09:00	20	141	0.141	20	141	0.362	20	141	0.503
09:00 - 10:00	20	141	0.134	20	141	0.167	20	141	0.301
10:00 - 11:00	20	141	0.137	20	141	0.155	20	141	0.292
11:00 - 12:00	20	141	0.142	20	141	0.133	20	141	0.275
12:00 - 13:00	20	141	0.147	20	141	0.143	20	141	0.290
13:00 - 14:00	20	141	0.164	20	141	0.153	20	141	0.317
14:00 - 15:00	20	141	0.163	20	141	0.197	20	141	0.360
15:00 - 16:00	20	141	0.261	20	141	0.167	20	141	0.428
16:00 - 17:00	20	141	0.262	20	141	0.150	20	141	0.412
17:00 - 18:00	20	141	0.317	20	141	0.170	20	141	0.487
18:00 - 19:00	20	141	0.266	20	141	0.139	20	141	0.405
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.203			2.223			4.426

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.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

Trip rate parameter range selected: 106 - 197 (units:)
 Survey date date range: 01/01/16 - 07/11/23
 Number of weekdays (Monday-Friday): 20
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 2
 Surveys manually removed from selection: 0

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.

Highgate Transportation Ltd Park Street Bristol

Licence No: 355901

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL CYCLISTS

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	20	141	0.003	20	141	0.013	20	141	0.016
08:00 - 09:00	20	141	0.009	20	141	0.029	20	141	0.038
09:00 - 10:00	20	141	0.002	20	141	0.006	20	141	0.008
10:00 - 11:00	20	141	0.003	20	141	0.005	20	141	0.008
11:00 - 12:00	20	141	0.005	20	141	0.004	20	141	0.009
12:00 - 13:00	20	141	0.004	20	141	0.005	20	141	0.009
13:00 - 14:00	20	141	0.003	20	141	0.004	20	141	0.007
14:00 - 15:00	20	141	0.006	20	141	0.007	20	141	0.013
15:00 - 16:00	20	141	0.026	20	141	0.013	20	141	0.039
16:00 - 17:00	20	141	0.021	20	141	0.010	20	141	0.031
17:00 - 18:00	20	141	0.013	20	141	0.006	20	141	0.019
18:00 - 19:00	20	141	0.009	20	141	0.004	20	141	0.013
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.104			0.106			0.210

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.

Highgate Transportation Ltd Park Street Bristol

Licence No: 355901

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL PEDESTRIANS

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	20	141	0.020	20	141	0.049	20	141	0.069
08:00 - 09:00	20	141	0.054	20	141	0.148	20	141	0.202
09:00 - 10:00	20	141	0.044	20	141	0.039	20	141	0.083
10:00 - 11:00	20	141	0.020	20	141	0.027	20	141	0.047
11:00 - 12:00	20	141	0.042	20	141	0.042	20	141	0.084
12:00 - 13:00	20	141	0.038	20	141	0.035	20	141	0.073
13:00 - 14:00	20	141	0.031	20	141	0.035	20	141	0.066
14:00 - 15:00	20	141	0.044	20	141	0.045	20	141	0.089
15:00 - 16:00	20	141	0.130	20	141	0.059	20	141	0.189
16:00 - 17:00	20	141	0.076	20	141	0.040	20	141	0.116
17:00 - 18:00	20	141	0.057	20	141	0.032	20	141	0.089
18:00 - 19:00	20	141	0.043	20	141	0.034	20	141	0.077
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.599			0.585			1.184

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.

Highgate Transportation Ltd Park Street Bristol

Licence No: 355901

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL PUBLIC TRANSPORT USERS

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	20	141	0.002	20	141	0.032	20	141	0.034
08:00 - 09:00	20	141	0.002	20	141	0.043	20	141	0.045
09:00 - 10:00	20	141	0.001	20	141	0.010	20	141	0.011
10:00 - 11:00	20	141	0.003	20	141	0.004	20	141	0.007
11:00 - 12:00	20	141	0.006	20	141	0.007	20	141	0.013
12:00 - 13:00	20	141	0.005	20	141	0.006	20	141	0.011
13:00 - 14:00	20	141	0.006	20	141	0.006	20	141	0.012
14:00 - 15:00	20	141	0.011	20	141	0.008	20	141	0.019
15:00 - 16:00	20	141	0.030	20	141	0.006	20	141	0.036
16:00 - 17:00	20	141	0.019	20	141	0.004	20	141	0.023
17:00 - 18:00	20	141	0.020	20	141	0.001	20	141	0.021
18:00 - 19:00	20	141	0.021	20	141	0.001	20	141	0.022
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.126			0.128			0.254

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.

Highgate Transportation Ltd Park Street Bristol

Licence No: 355901

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TOTAL PEOPLE

Calculation factor: **1 DWELLS**

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.75

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	20	141	0.100	20	141	0.492	20	141	0.592
08:00 - 09:00	20	141	0.223	20	141	0.812	20	141	1.035
09:00 - 10:00	20	141	0.211	20	141	0.281	20	141	0.492
10:00 - 11:00	20	141	0.200	20	141	0.239	20	141	0.439
11:00 - 12:00	20	141	0.233	20	141	0.221	20	141	0.454
12:00 - 13:00	20	141	0.238	20	141	0.230	20	141	0.468
13:00 - 14:00	20	141	0.256	20	141	0.240	20	141	0.496
14:00 - 15:00	20	141	0.279	20	141	0.322	20	141	0.601
15:00 - 16:00	20	141	0.631	20	141	0.294	20	141	0.925
16:00 - 17:00	20	141	0.518	20	141	0.256	20	141	0.774
17:00 - 18:00	20	141	0.521	20	141	0.273	20	141	0.794
18:00 - 19:00	20	141	0.443	20	141	0.231	20	141	0.674
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.853			3.891			7.744

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.

Appendix 15

Sensitivity Test Technical Note (HTp/2401/TN/03)

TECHNICAL NOTE

PROJECT: Land at Woodgate Nurseries, Lidsey Road, Woodgate – Up to 130 Residential Dwellings

REPORT: 2401/TN/03 – Technical Note – Sensitivity Modelling of Additional 700 Dwellings

DATE: July 2024

Introduction

1. This Technical Note has been prepared by Highgate Transportation (HTp) to set out the capacity modelling results of the following junctions, with vehicle trips associated with an additional 700 dwellings applied to the local highway network:
 - i. Site Access/Lidsey Road
 - ii. Woodgate Level Crossing
 - iii. War Memorial Roundabout
 - iv. Saltbox Roundabout
2. It was agreed with WSCC Highways as part of the pre-application discussions, the background traffic growth includes for 2,300 dwellings associated with the BEW Strategic site. However, it was requested by the highway officer that we undertake a sensitivity test in 2031 for an additional 700 dwellings.
3. It should be noted that the additional 700 dwellings are not supported by planning permission.

Context

4. The purpose of identifying and testing 700 more dwellings derives from ADC Local Plan Policy SD5 which sets out that the (policy H SP2c) BEW Strategic Allocation will provide at least 2,300 dwellings over the plan period (which runs up to 2031). The policy confirms that there will be up to 3,000 dwellings in total, with the balance of 700 dwellings coming forward "beyond 2031". For this reason, there is no development plan support for the additional 700 dwellings now or before the adoption of the next local plan. This means that planning applications are unlikely to come forward before that time on the site, as developers seek to meet the present allocation objectives. For the 2,300 homes and other development (including commercial, community and education), the present plan policy (H SP2c) requires that "*Development proposals must demonstrate compliance with the following key design and infrastructure requirements*". This includes the A29 realignment project and a range of other highway network changes and improvements. To be clear, under the same policy that authorises that housing etc development, these improvements **must** come forwards.

5. Turning to the additional 700 homes, the adoption timetable for the new local plan is presently targeting “Winter 2026”¹. No major elements of BEW’s 2,300 homes are yet to receive planning permission. Several applications are under consideration² albeit only c.1,000 homes are being pursued via full planning applications and a further (up to) 1,250 is in outline. If we assume, for the sake of argument, that these will each achieve approval from ADC this year, we are advised that with regard to relevant factors³ the sequencing of existing development is very likely to deliver less than 1,500 completed homes by 2031.
6. In other words, the prospect of the residual 800 homes being also completed (i.e. to 2,300) and sold/occupied, and an additional 700 dwellings (i.e. to 3,000) also being brought “online” by 2031 is a theoretical point of discussion. Finally, it is also relevant to set out that, when further housing delivery is considered for adoption in the next local plan, as well as when any applications for such come forwards for consideration, there will be a need to assess the impact and mitigation needs for that development *at that time*. Arun District Council has a longstanding shortfall in housing land supply which they are trying to address positively in their district by encouraging applications for residential development on sites considered⁴ to be ‘deliverable’ within 5 years. For reasons set out the provision of the 700 dwellings beyond the BEW allocation in H SP2c, and considered in this note, is not something that will come forwards in that period to meet the shortfall in housing.
7. WSCC used 3,000 dwellings to determine mitigation for the BEW development proposals, therefore, it was considered by WSCC Highways as part of the pre-application discussion that an assessment should be included for 3,000 dwellings being built and occupied by 2031.
8. It should be noted that in any event, the local highway network would benefit from the planned infrastructure (under Policy H SP2c) coming forward before the current allocation (2,300 homes) is completed, and therefore this would serve the theoretical additional 700 units to be built afterwards. Transport Assessments for forthcoming applications would set out what mitigation would be proposed to accommodate the traffic associated with the additional developments at that time.

¹ Arun District Council Local Development Scheme 2023-2025 (July 2023)

² Including (1) ~600 homes by Barratt David Wilson, ~400 homes CALA and “up to” 1,250 homes BEW Southern Consortium

³ i.e. further regulatory burden, site disposal, infrastructure delivery, physical build programming, typical individual site sales rates, and cumulative site market absorption rate

⁴ In their Housing & Economic Land Availability Assessments

9. Therefore, the capacity modelling included within this Technical Note should be considered as a theoretical sensitivity test to include for the vehicular trips associated with the additional 700 dwellings, and the results do not demonstrate a realistic expectation of the capacity of the junctions in 2031.
10. Furthermore, given that the additional 700 dwellings are not supported by planning permission, the distribution of trips onto the local highway network cannot be applied realistically. Therefore, the capacity assessments should be taken as a potential representation of the impact that the vehicular trips associated with additional 700 dwellings could have on the local highway network, but are not a realistic scenario for the capacity of the junctions.
11. The additional 700 dwellings have, however, been applied using alternative assumptions in TEMPro for the following scenarios:
 - i. 2031 – End of Arun Local Plan Period without proposed development (including mitigation proposed as part of Phase 1 A29 scheme)
 - ii. 2031 – End of Arun Local Plan Period with proposed development (including mitigation proposed as part of Phase 1 A29 scheme)
12. The proposed development traffic and committed development traffic is based on the traffic flows set out in Section 7.0 of the Transport Assessment. The flow diagrams are contained in **Appendix 1**.

Background Traffic Growth

13. The base traffic data, as set out in Section 2.0 of the Transport Assessment has been growthed using NTEM TEMPro v8.1 (core) with an additional 700 dwellings applied using alternative assumptions. The growth rates are contained in **Appendix 2** and are set out in **Table 1**.

Table 1 – TEMPRO Growth Rates

	AM	PM
2019 - 2031 (+700)	1.1544	1.1641
2023 - 2031 (+700)	1.1408	1.1500

Site Access Junction

14. The proposed site access junction has been assessed using PICADY which forms part of the Junctions 9 software suite. The output of the PICADY assessment is set out in **Table 2** with the full output at **Appendix 3**.

Table 2 – Site access/A29 Lidsey Road capacity analysis

Arm	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
Site Access	0.4	20.80	0.28	0.2	21.15	0.19
A29 Lidsey Road	0.0	6.43	0.05	0.1	6.65	0.12

15. From **Table 2**, it can be seen that with the traffic associated with the additional 700 dwellings applied to the background traffic, the junction will still work well within capacity with minimal queuing on both arms during the AM and PM peak hours, with only up to one vehicle queuing on Lidsey Road in the PM peak hour, which can be accommodated within the right turn lane of the proposed junction arrangement.
16. Therefore, it is considered that the access junction approved under application AL/129/21/OUT is still acceptable with the traffic associated with the additional 700 dwellings applied to the local highway network within this sensitivity test.

Woodgate Level Crossing

17. A standalone LinSig model of Woodgate level crossing has been prepared using a mixture of site observations, flows calculated within this report and traffic surveys.
18. The results are summarised in **Table 3**, with the full output at **Appendix 4**.

Table 3 – Woodgate Level Crossing capacity analysis

Junction	Southbound		Northbound	
	Deg Sat (%)	Queue Length (PCU)	Deg Sat (%)	Queue Length (PCU)
AM	47.4%	33.4	54.7%	45.4
PM	84.1%	92.4	42.4%	31.8

19. **Table 3** demonstrates that with the traffic associated with an additional 700 dwellings included in 2031, during the AM peak hour, the southbound queue length could be up to 192 metres and the northbound queues could be up to 261 metres in length. These queue lengths do not reach the primary school in the north or reach the proposed site access in the south.
20. When compared to the 2031 Base plus proposed development and committed development scenario (Table 8.8 of the Transport Assessment), the sensitivity test results in an additional three vehicles queuing southbound and an additional four vehicles queuing northbound. This increase is considered negligible.
21. During the PM peak hour, the southbound queue length could be up to 532 metres and the northbound queues could be up to 183 metres in length. The southbound queue would pass Aldingbourne Primary school in the PM peak hour, however, this queue length will occur outside of school hours. The northbound queue length does not reach the proposed site access in the south.
22. In any event, as set out in **paragraph 6**, to accommodate the vehicular traffic associated with the additional 700 dwellings, highway infrastructure would likely be required to be implemented before the dwellings come forward with mitigation proposed by the applicant of those proposed developments.

War Memorial Roundabout

23. The War Memorial roundabout has been assessed using ARCADY which forms part of the Junctions 9 software suite. The modelling scenario includes the Phase 1 A29 realignment scheme given that the infrastructure would be required to accommodate the vehicular traffic associated with the additional 700 dwellings.
24. The results are summarised in **Table 4**, with the full output at **Appendix 5**.

Table 4 – War Memorial roundabout capacity analysis

Arm	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
B2233 Barnham Road	3.0	12.47	0.75	0.4	5.51	0.28
A29 Nyton Road	1.6	4.71	0.61	1.0	3.53	0.49
A29 Fontwell Avenue	0.9	6.55	0.47	9.5	39.29	0.92

25. From **Table 4**, it can be seen that with the traffic associated with the additional 700 dwellings applied to the background traffic, the junction will still work well within capacity with minimal queuing on all arms during the AM peak hour.
26. During the PM peak hour, Barnham Road and Nyton Road will be working well within capacity. Fontwell Avenue has an RFC of 0.92 which is starting to reach theoretical capacity. However, the queue is shown as up to only 10 vehicles, with a delay of up to 40 seconds, which is not considered to be severe.
27. When compared to the 2031 Base plus proposed development and committed development, with Phase 1 A29 Scheme included (Table 8.12 of the Transport Assessment), the sensitivity test results in an additional four vehicles queuing on Fontwell Avenue, with an increase in delay of up to only 16 seconds, to a total of just under 40 seconds, which is not considered to be a severe delay.

Saltbox Roundabout

28. The Saltbox roundabout has been assessed using ARCADY. Two capacity assessment scenarios have been carried out as follows:
 - i. Without any mitigation on the roundabout, i.e. geometry based on the existing roundabout (**Table 5**)
 - ii. With mitigation proposed in ADC's Local Plan (**Table 6**) which includes:
 - a. Widening on the A259 to provide three entry lanes
 - b. Widening on A29 (southern arm) to provide three entry lanes
 - c. Widening on A29 (northern arm) to provide three entry lanes
29. The full output is contained in **Appendix 6**.

Table 5 – Saltbox roundabout capacity analysis (no mitigation)

Arm	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
A29 (Northern Arm)	1.1	4.84	0.52	1.9	7.04	0.65
A259	54.7	133.97	1.07	22.9	67.35	0.99
Newlands Road	0.4	10.83	0.26	0.9	14.14	0.45
A29 (Southern Arm)	5.5	11.42	0.84	15.0	28.43	0.95
Saltbox	1.4	19.16	0.57	4.3	63.99	0.84

30. From **Table 5**, it can be seen that with the traffic associated with the additional 700 dwellings applied to the highway network, during the AM peak hour, the A259 is over capacity, with an RFC of 1.07 and a queue of up to 55 vehicles. All other arms are operating within capacity.
31. During the PM peak hour, with the traffic associated with the additional 700 dwellings applied to the highway network, the A259 and A29 (southern arm) are shown to have an RFC of 0.99 and 0.95 respectively. The A259 is recorded to have a queue length of up to 23 vehicles and a delay of up to 68 seconds. The A29 (southern arm) is recorded to have a queue length of up to 15 vehicles with a delay of up to 29 seconds. All other arms are operating within capacity.

Table 6 – Saltbox roundabout capacity analysis (with mitigation)

Arm	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
A29 (Northern Arm)	0.6	2.50	0.36	0.8	3.02	0.44
A259	3.8	10.38	0.78	2.8	8.19	0.73
Newlands Road	0.5	12.13	0.28	0.9	14.67	0.46
A29 (Southern Arm)	1.2	2.41	0.53	1.5	2.71	0.59
Saltbox	1.2	16.86	0.54	3.1	44.75	0.77

32. From **Table 6**, it can be seen that all arms are working within capacity in both the AM and PM peak hours.
33. It is therefore not considered that any further mitigation is required at the roundabout.

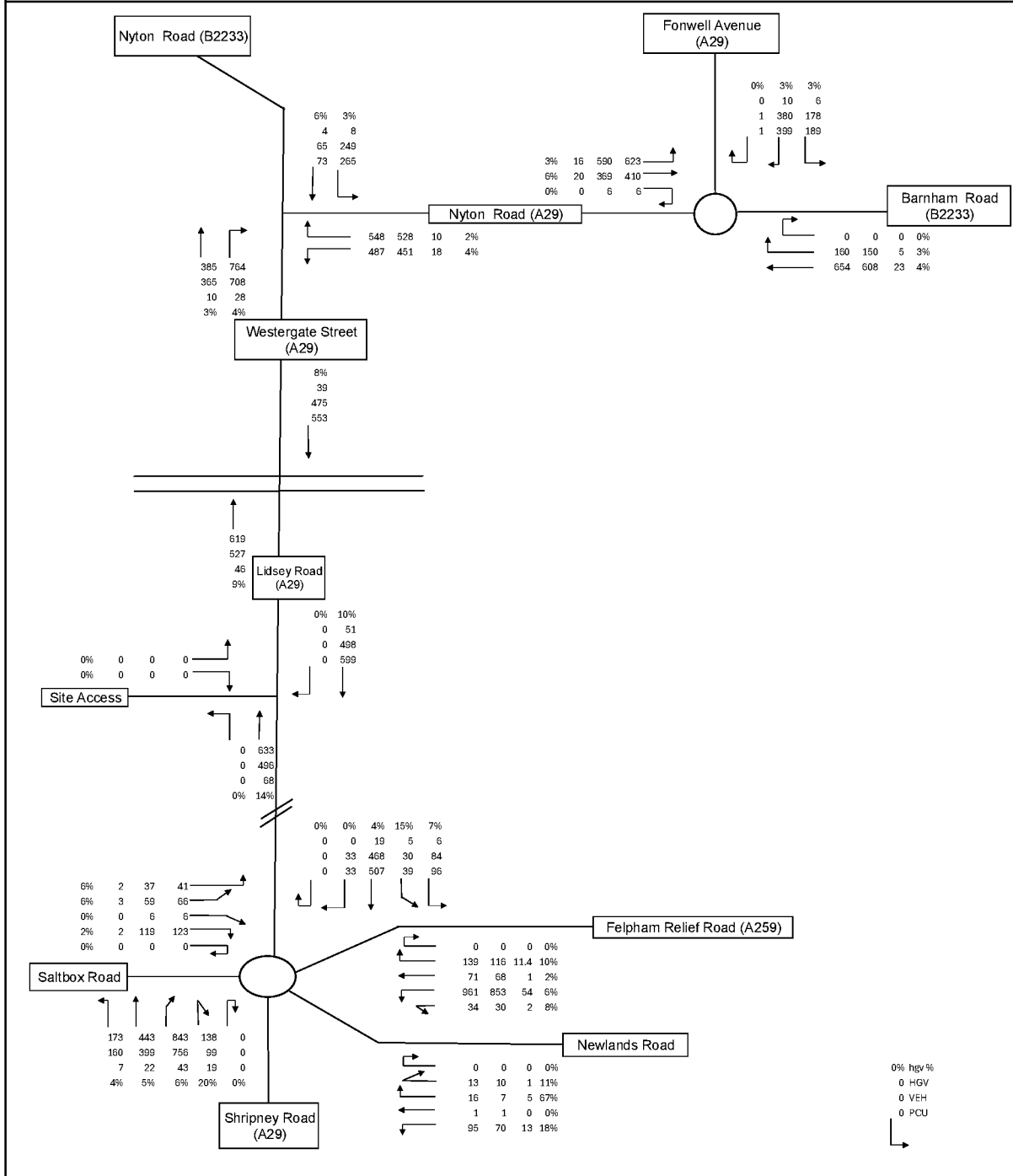
Summary

34. It has been demonstrated that the site access/A29 Lidsey Road junction and the Woodgate Level Crossing capacity modelling show only a negligible increase in queuing and delay with the traffic associated with the additional 700 dwellings compared to the scenarios contained in the Transport Assessment. Additionally, the junctions continue to operate well within capacity.
35. It has also been demonstrated that the War Memorial Roundabout works well within capacity during the AM peak hour, with only the A29 Fontwell Avenue arm starting to reach theoretical capacity in the PM peak hour. However, the length of queue and delay is not considered to be a level that represents a severe impact.
36. The Saltbox roundabout has been shown to be working within capacity in both the AM and PM peak hours with the ADC Local Plan mitigation applied, and therefore, it is considered that no further mitigation is required.
37. It should be noted that in any event, the local highway network would likely need infrastructure to come forward for the additional 700 units to be built, with the Transport Assessments for forthcoming applications setting out what mitigation would be proposed to accommodate the traffic associated with the additional developments.
38. Therefore, the capacity modelling included within this Technical Note is a sensitivity test demonstrating the potential impact of traffic associated with the additional 700 dwellings and the results do not demonstrate a realistic expectation of the capacity of the junctions in 2031.
39. Furthermore, given that the additional 700 dwellings are not supported by planning permissions, the distribution of trips onto the local highway network cannot be applied realistically. Therefore, the conclusions from capacity assessments for this sensitivity test should be taken as a potential representation of the impact the additional 700 dwellings could have on the local highway network, not a realistic representation of the likely impact to and capacity of the junctions in 2031.

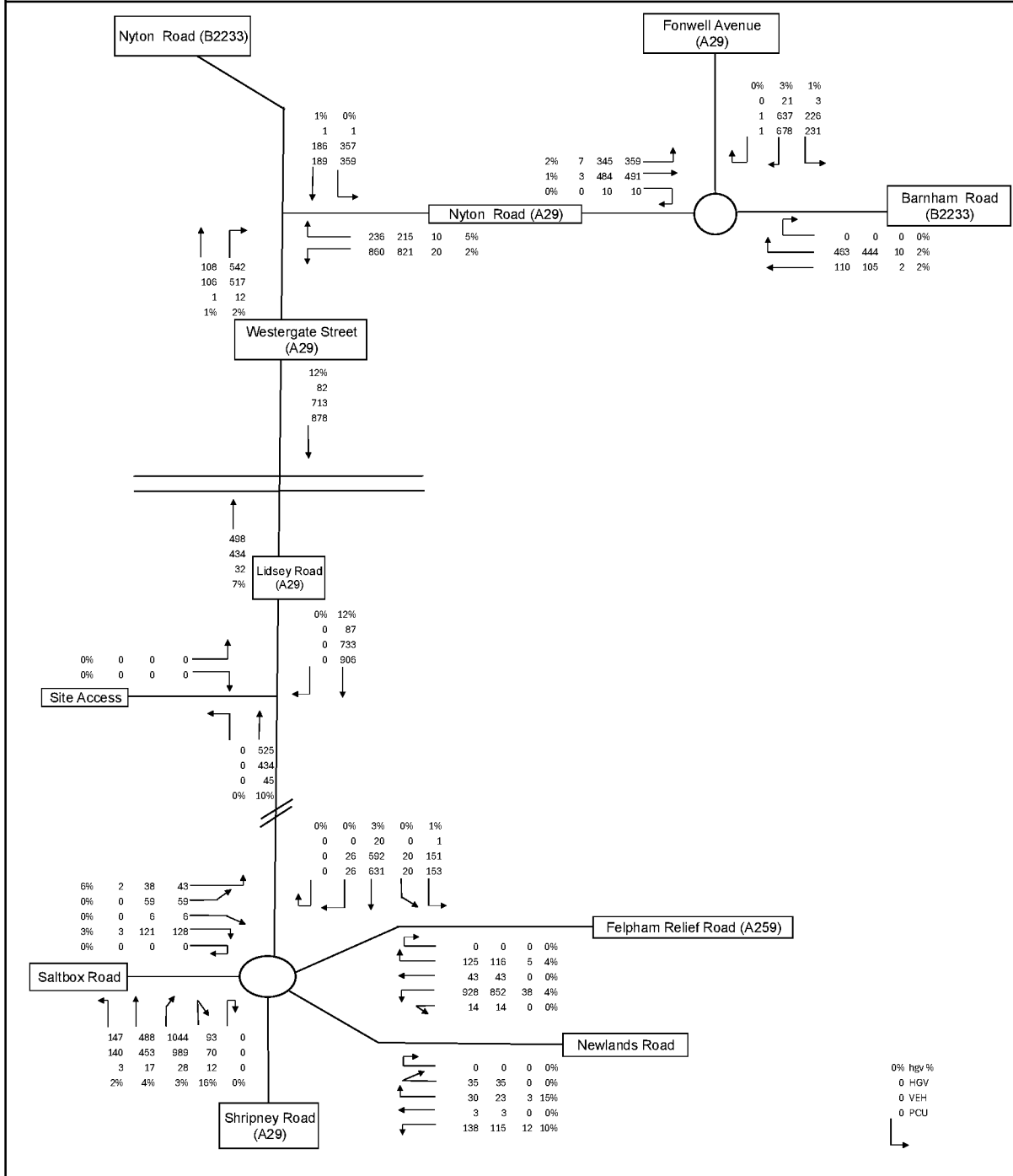
Appendix 1

Flow Diagrams

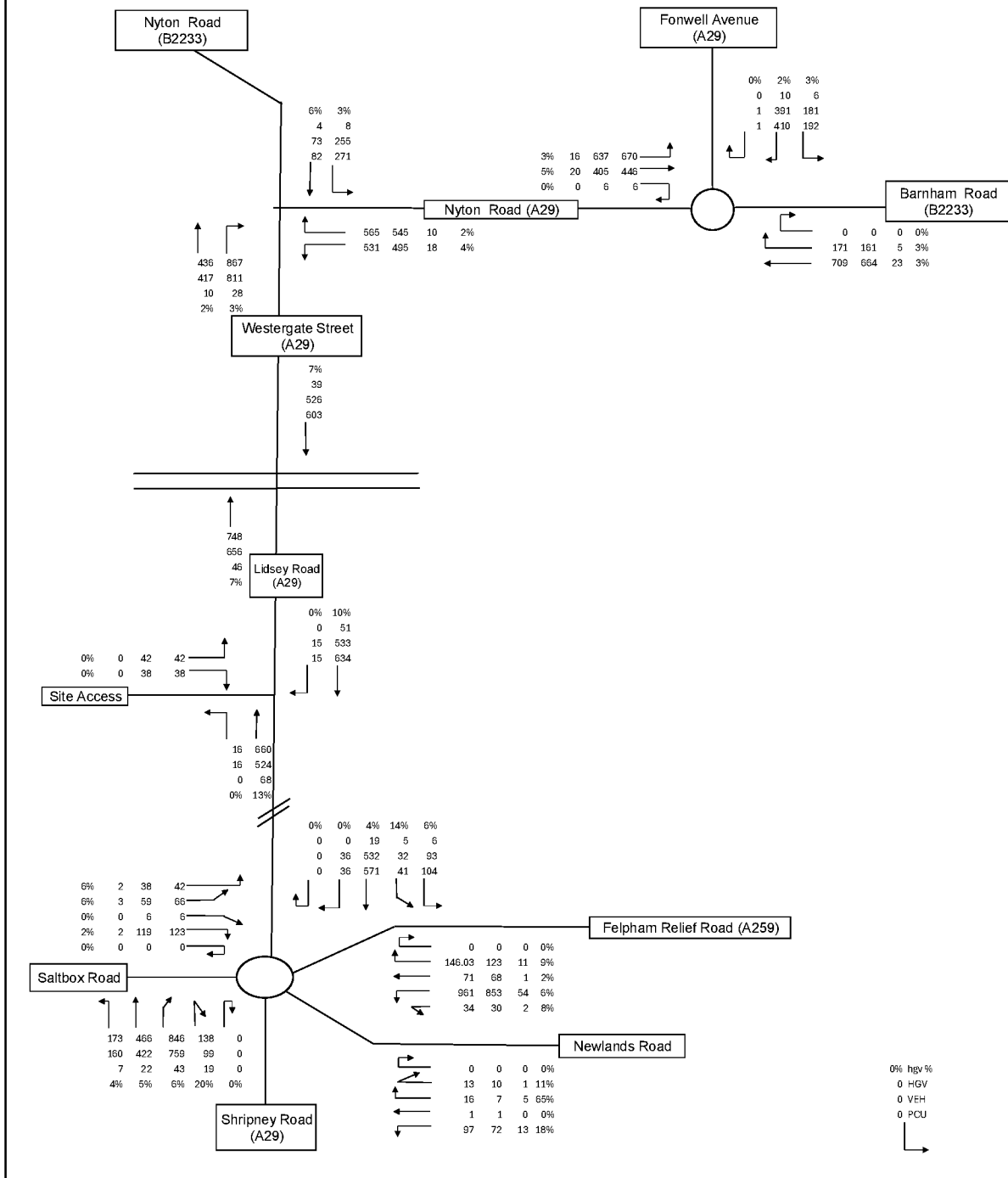
2031 AM Base (700 SENSITIVITY)



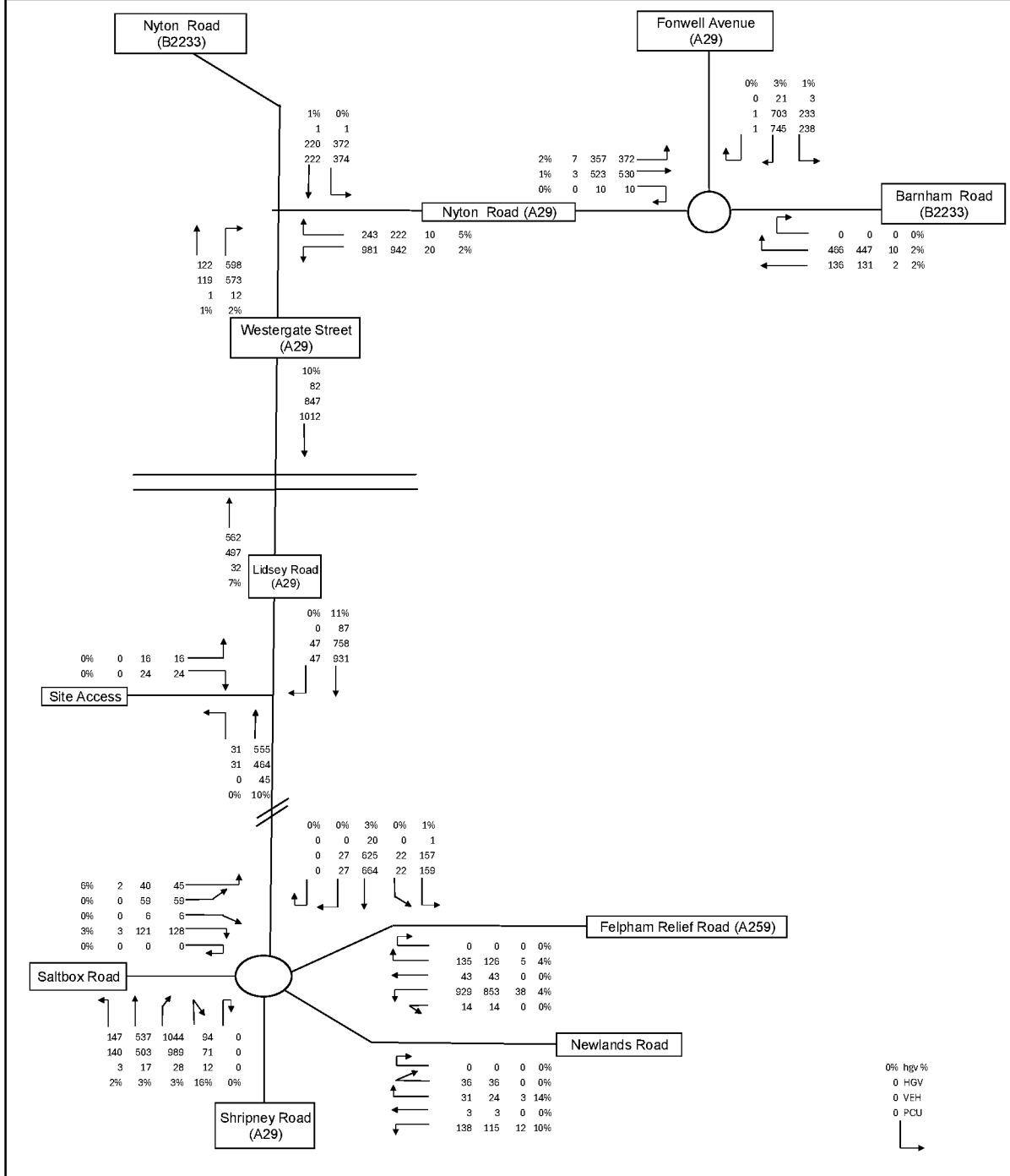
2031 PM Base (700 SENSITIVITY)



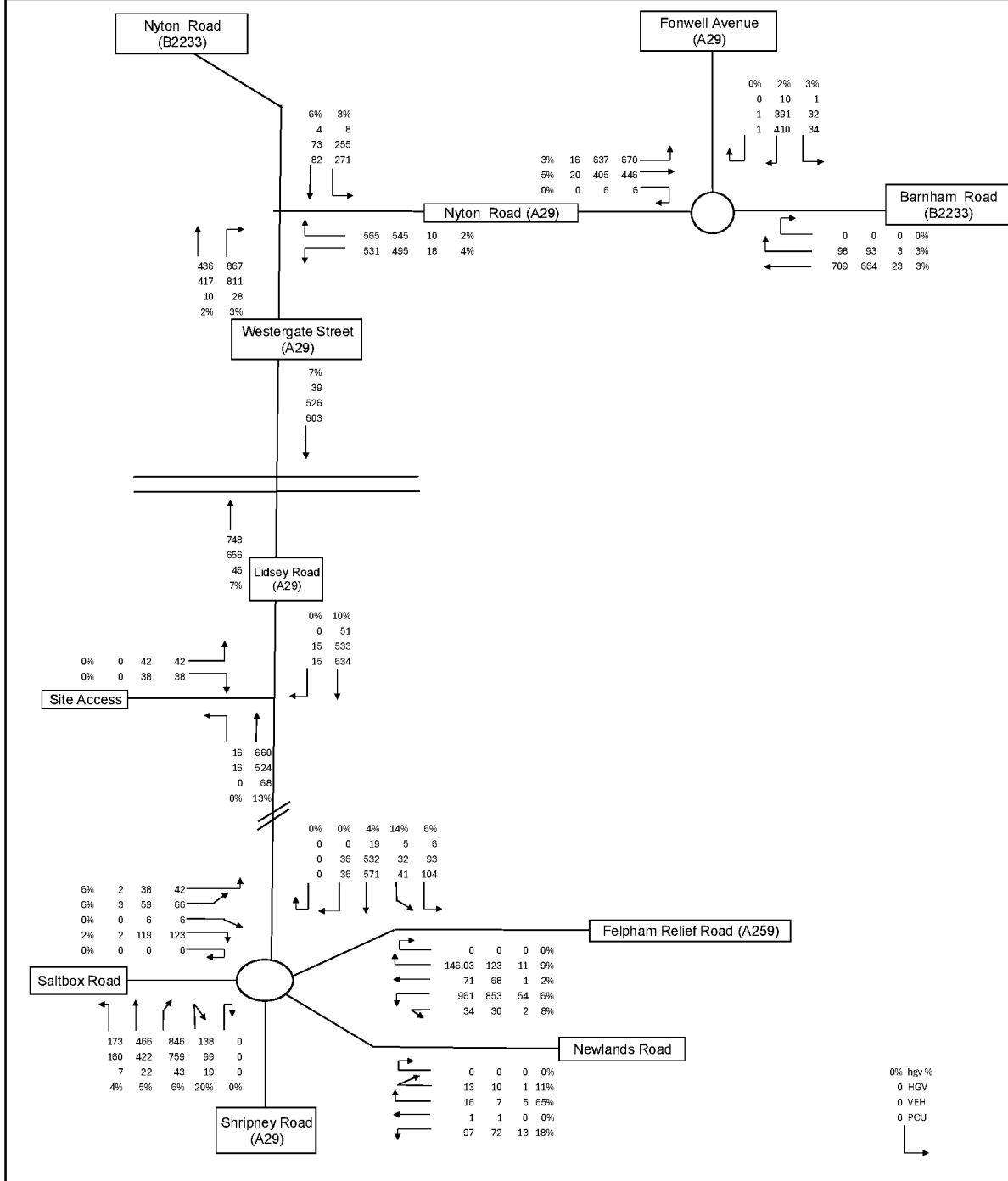
2031 AM Base (700 SENSITIVITY) + Committed Development



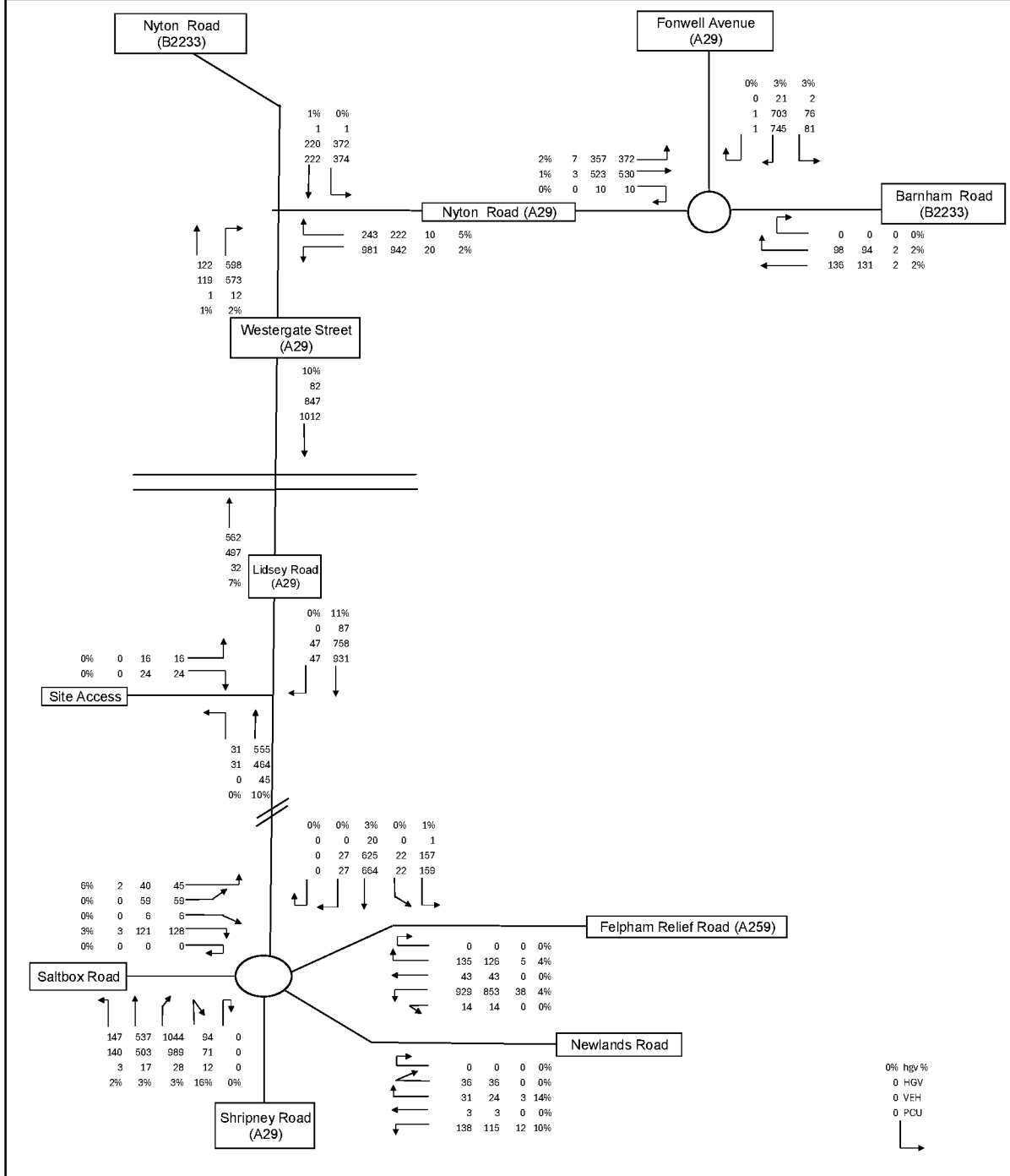
2031 PM Base (700 SENSITIVITY) + Committed Development



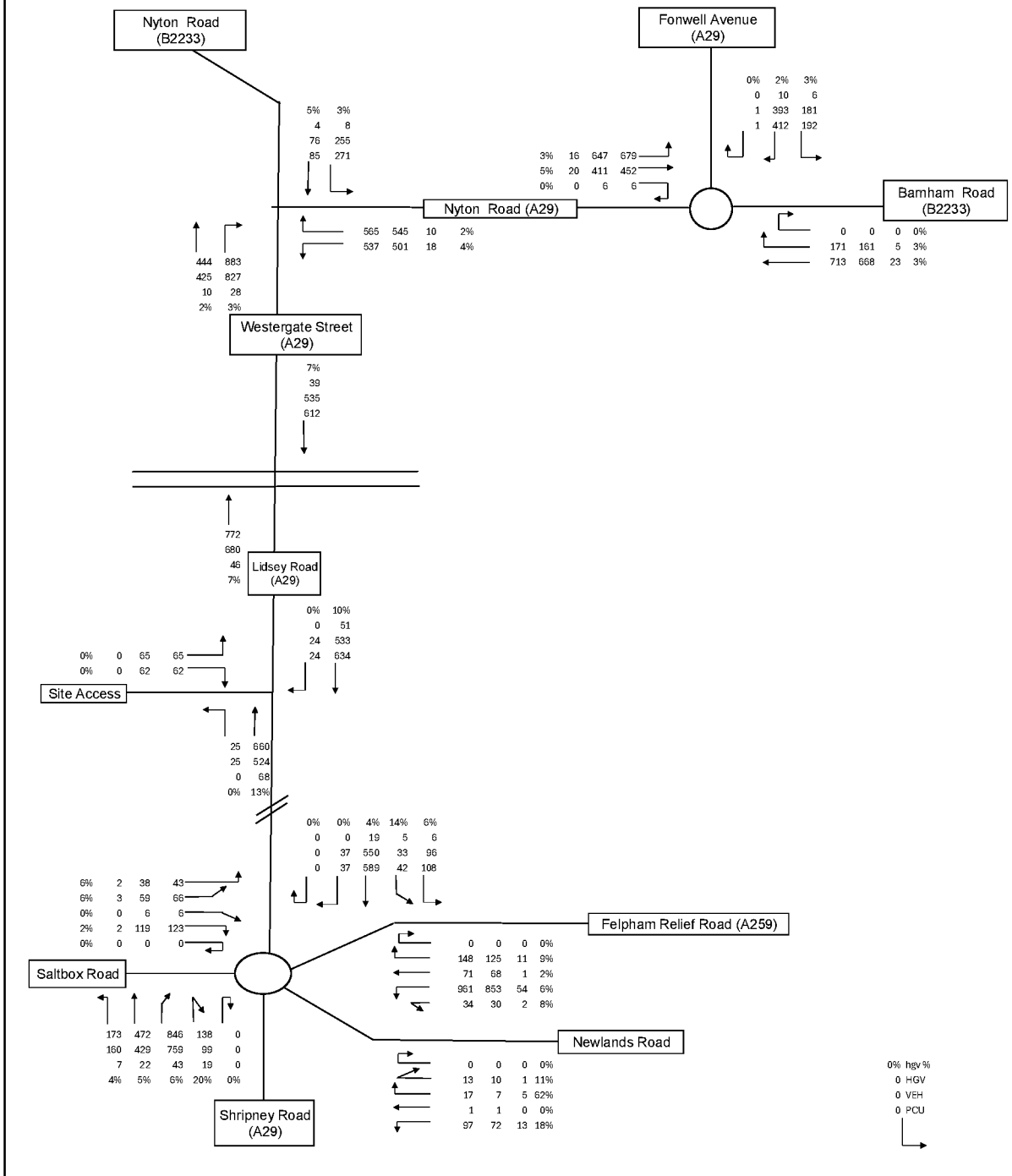
2031 AM BASE (700 SENSITIVITY) + COMMITTED DEVELOPMENT + A29 Phase 1 Mitigation



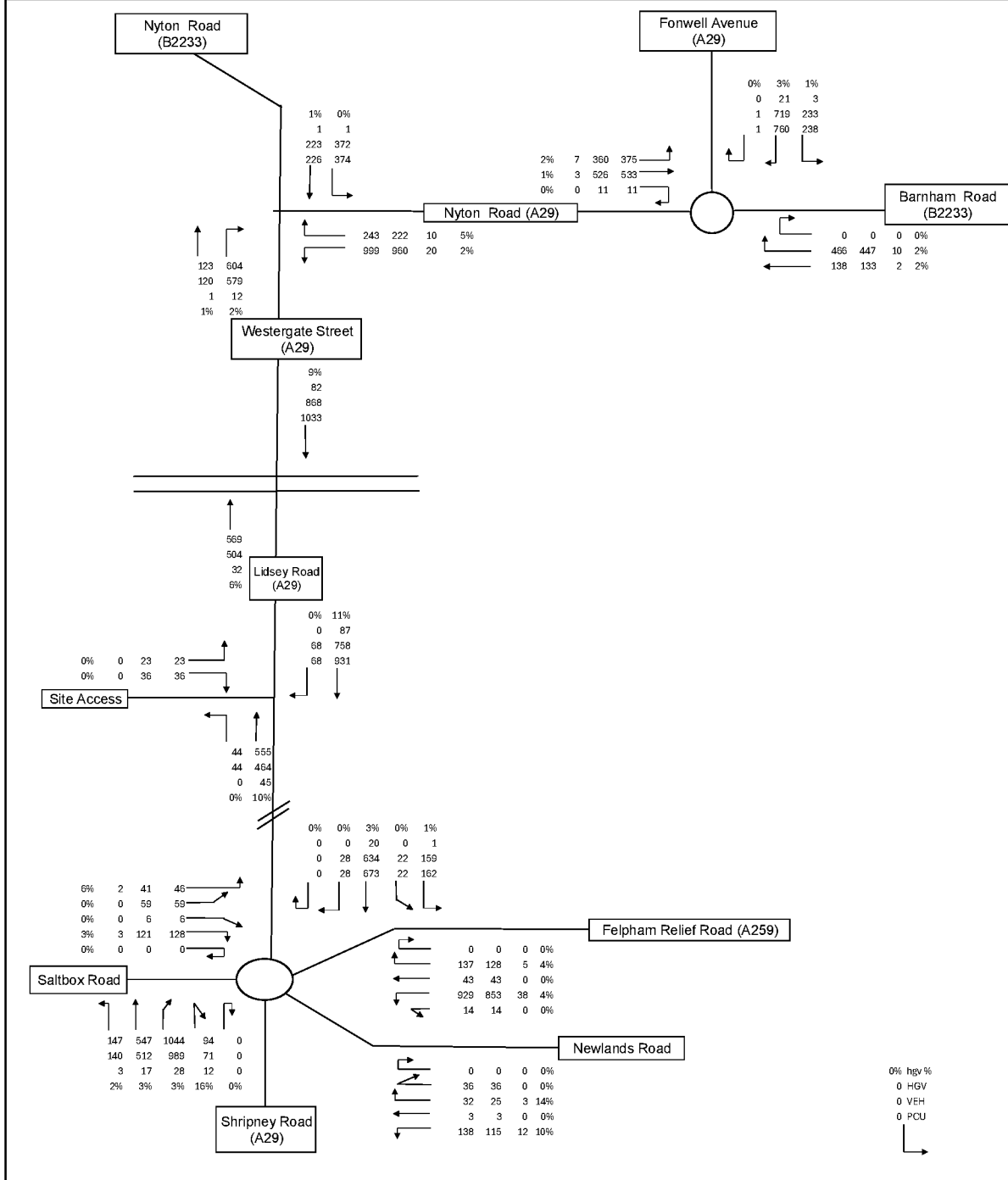
2031 PM BASE (700 SENSITIVITY) + COMMITTED DEVELOPMENT + A29 Phase 1 Mitigation



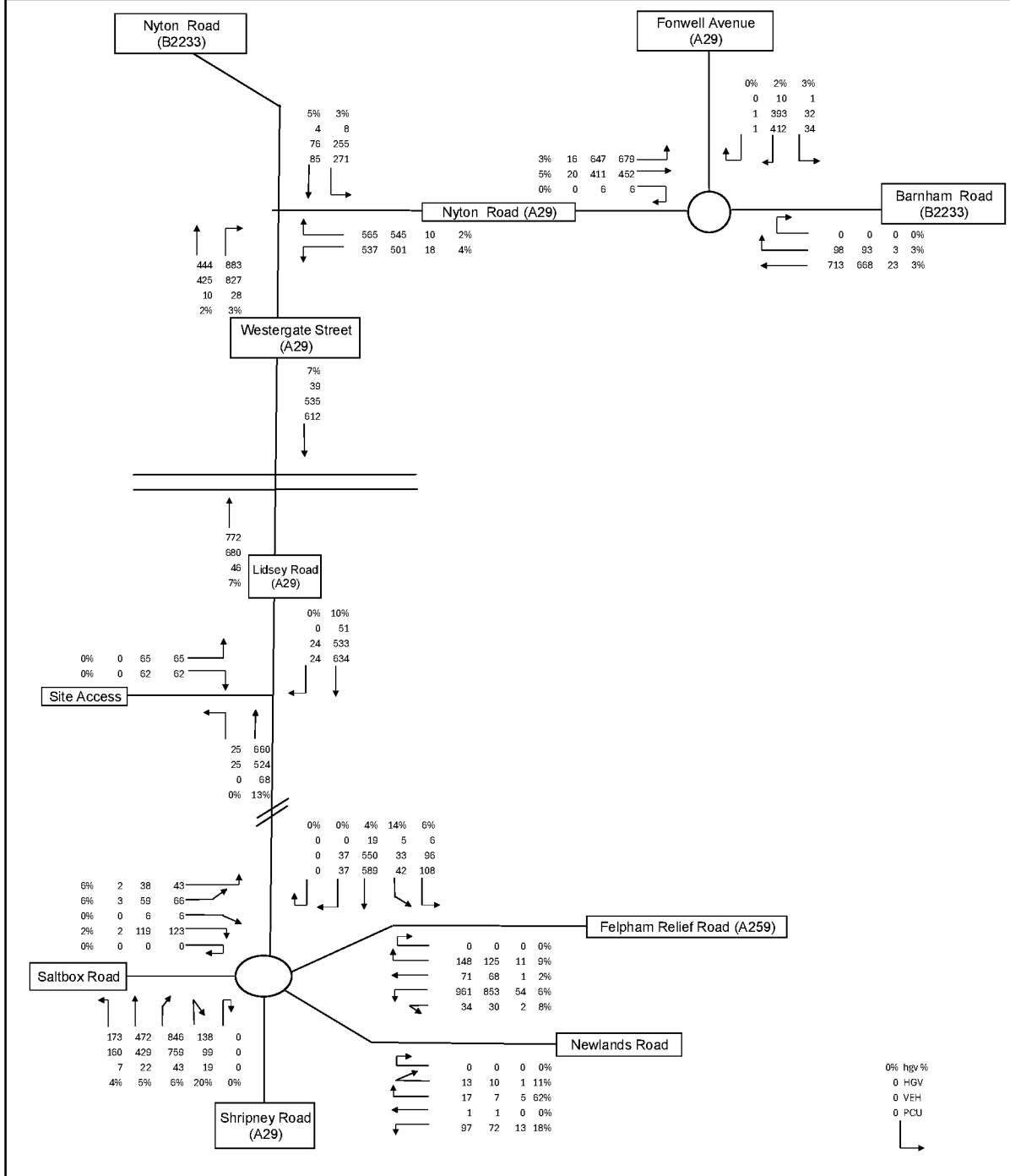
2031 AM BASE (700 SENSITIVITY) + COMMITTED DEVELOPMENT + PROPOSED DEVELOPMENT



2031 PM BASE (700 SENSITIVITY) + COMMITTED DEVELOPMENT + PROPOSED DEVELOPMENT



2031 AM BASE (700 SENSITIVITY) + COMMITTED DEVELOPMENT + PROPOSED DEVELOPMENT + A29 Phase 1 Mitigation



Appendix 2

TEMPro Growth Rates

TEMPro main form

☐ Select Type of Comparison
☐ Date and items
☐ Trip end selection
☐ Trip end by time period selection

Select item period:

Weekend: AM peak period (0700 - 0900)

Trip end type:

☐ Production/Attraction
☐ Origin/Destination

Select data type:

☒ Growth factors (2031 Data/2019 Data)
☐ Future Year (2031) - Base Year (2019)
☐ Base year data (2019)
☐ Future year data (2031)

*Alternative Assumptions Applied

*Behavioural results indicate that there is a twice level of conditions in data presented at the road level than when aggregated to higher geographical levels

☒ Car Driver
☐ Car Passenger
☐ Night work
☐ Multi-employment
☐ Permanent Worker

Area Description	None	High	All Processes	Destination
Level	None	High		Destination
002006544	Arun 003	1.2082		1.0841

VLM traffic data, 9 Landmarks

☐ Simulation Core
☐ Base Year: 2019
☐ Future Year: 2031

Time Period: Weekday AM peak period (0700 - 0900)

2: Select NTA Set/sets:

NTA Element Description	From	To
NRTP 2012 Core	2015	2030
NRTP 2022 Behavioural Change	2015	2030
NRTP 2022 High Economy	2015	2030
NRTP 2022 Low Economy	2015	2030
NRTP 2022 Mode-balanced Decarbonisation	2015	2030
NRTP 2022 Regional	2015	2030
NRTP 2022 Technology	2015	2030
NRTP 2022 Vehicle-led Decarbonisation	2015	2030

2: Select Areas to make up the geographic region:

☒ Arun 003 (002006544)

3: Select area type:

☐ Urban
☐ Rural
☐ All

4: Select road type:

☐ Motorway
☐ Trunk
☐ A Road
☐ Minor
☐ All

5: Select which area it serves:

☐ Region
☐ England

Calculate the adjusted local growth figure

Results

Level	Area	Local Growth figure
002006544	Arun 003	1.1544

TEMPro Input Form

Select Type of Comparison

Base selection

Top end selection

Top end by Year, period selection

Select time period

Weekday PM peak period (1600 - 1859)

Top end time

Production/Attraction

Origin/Destination

Select data type

Growth factors (2021 Data/2019 Data)

Future Year (2051) - Base Year (2019)

Base year data (2019)

Future year data (2051)

*Alternative Assumptions Applied

*Tabulated results indicate that there is a lower level of confidence in data presented at this level than when aggregated to higher geographical levels

Area Description

Level: Area 003

Name: Arun 003

Origin: 1.1992

Destination: 1.1925

Area Description

Level: Area 003

Name: Arun 003

Origin: 1.1992

Destination: 1.1925

TEMPro Traffic Growth Analysis

Scenario Core

Base Year: 2019

Future Year: 2051

Time Period: Weekday PM peak period (1600 - 1859)

1. Select NRM Dataset:

TEM Dataset Description	From	To
NRTP 2022 Core	2015	2060
NRTP 2022 Behavioural Change	2015	2060
NRTP 2022 High Economy	2015	2060
NRTP 2022 Low Economy	2015	2060
NRTP 2022 Mode-balanced Decarbonisation	2015	2060
NRTP 2022 Regional	2015	2060
NRTP 2022 Technology	2015	2060
NRTP 2022 Vehicle-led Decarbonisation	2015	2060

2. Select Areas to make up the geographic region:

Area 003 (EQ2006514)

3. Select area type:

Urban

Rural

24

4. Select road type:

Motorway

Trunk

A Road

Minor

A1

5. Select which area it serves:

Region

England

Calculate the adjusted local growth figure

Results

Level	Area	Local Growth Figure
EQ2006514	Arun 003	1.1941

Apply Alternative Assumptions

Alternative Assumptions

Area	Current Assumptions				Alternative Assumptions			
	Base HH	Base Jobs	Future HH	Future Jobs	Base HH	Base Jobs	Future HH	Future Jobs
Arundel (E020065+4)	4404	4172	4274	4502	4404	4172	5464	4562

TEMPro - Sensitivity Test

Select Type of Comparison:

- Between scenarios
- Against selection
- Percentage increase/decrease

Select time period:

Weekday AM peak period (0700 - 0959)

Select road type:

- Production/Attraction
- Origin/Destination

Select data type:

- Growth factors (2031 Data/2023 Data)
- Future year (2031) - Base Year (2023)
- Base year data (2023)
- Future year data (2031)

All sensitive Assumptions Applied

* Stabilised results indicate that there is a lesser level of confidence in data presented at this local level than when aggregated to higher geographical levels

Area Description

Level	Area	Area Description	Origin	Destination
EN2006544	Arton 003		1,176.4	1,06.75

TEMPro - Growth Calculator

Scenario Core: Base Year: 2023 Future Year: 2031

Time Period: Weekday AM peak period (0700 - 0959)

1. Select NIM Datasets:

NIM Dataset Description	From	To
NRTP 2022 Core	2015	2080
NRTP 2022 Behavioural Change	2015	2080
NRTP 2022 High Economy	2015	2050
NRTP 2022 Low Economy	2015	2050
NRTP 2022 Mode-balanced Decarbonisation	2015	2050
NRTP 2022 Regional	2015	2080
NRTP 2022 Technology	2015	2080
NRTP 2022 Vehicle-led Decarbonisation	2015	2050

2. Select Areas to make up the geographic region:

3. Select area type:

- Urban
- Rural
- All

4. Select road type:

- Motorway
- Trunk
- A Road
- Minor
- All

5. Select which area it serves:

- Region
- England

Calculate the adjusted local growth figure

Results

Level	Area	Local Growth Figure
EN2006544	Arton 003	1,140.8

2050 - Year 2050

Select Type of Comparison:

- Data enter here.
- File and selection.
- File entry time period selection.

Select time period:

Weekday PM peak period (1600 - 1859)

Time end type:

- Production/Attraction
- Origin/Destination

Select data years:

- Growth factors (2031 Data/2023 Data)
- Future year (2031) - Base Year (2023)
- Base year data (2023)
- Future year data (2031)

*No iterative Assumptions Applied

*Selected results indicate that there is a lower level of confidence in data presented at this coarse level than when aggregated to higher geographical levels

Work Done On User Car Footings Auto Search Full Unassigned Combined Modes

Area Description	Name	Origin	Destination
Level	Area 003	1.000	1.000
EC0200544	Area 003	1.000	1.000

NIM Higher Growth Tools Screen

Scenario: Core Base Year: 2023 Future Year: 2031

Time Period: Weekday PM peak period (1600 - 1859)

1. Select NIM Datasets

NIM Dataset Description	From	To
NRTP 2022 Core	2015	2050
NRTP 2022 Behavioural Change	2015	2050
NRTP 2022 High Economy	2015	2050
NRTP 2022 Low Economy	2015	2050
NRTP 2022 Mode-balanced Decarbonisation	2015	2050
NRTP 2022 Regional	2015	2050
NRTP 2022 Technology	2015	2050
NRTP 2022 vehicle-led Decarbonisation	2015	2050

2. Select Areas to make up the geographic region:

Area 003 (EC0200544)

3. Select area type:

- Urban
- Rural
- All

4. Select road type:

- Motorway
- Trunk
- A Road
- Other
- All

5. Select which areas it serves:

- Region
- England

Calculate the adjusted local growth figure

Results

Level	Area	Local Growth Figure
EC0200544	Area 003	1.1500

2401 – TEMPro Growth Factors – Sensitivity Test

HighgateTransportation

	Current Assumptions				Alternative Assumptions			
Area	Base H#4	Base Jobs	Future H#4	Future Jobs	Base H#4	Base Jobs	Future H#4	Future Jobs
Arum 003 (E02006544)	4505	4440	4784	4602	4505	4440	5484	4562

Appendix 3

Site access/A29 Lidsey Road Modelling Outputs

Junctions 9	
PICADY 9 - Priority Intersection Module	
Version: 9.5.2.1013 © Copyright TRL Limited, 2019	
From: [REDACTED] To: [REDACTED]	
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution	

Filename: Site Access - 700 Tempro Sensitivity.j9

Path: C:\Users\JosephTucker\OneDrive - Highgate Transportation\Shared Documents - HTp\2400 - Projects\2401 - Woodgate QW3\Modelling\Junctions 9\Site Access\SS

Report generation date: 03/07/2024 10:31:13

»2031 Base + Committed Development + Proposed Development (+700 Tempro), AM

»2031 Base + Committed Development + Proposed Development (+700 Tempro), PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2031 Base + Committed Development + Proposed Development (+700 Tempro)								
Stream B-C	0.2	9.24	0.16	A	0.1	7.92	0.05	A
Stream B-A	0.4	20.80	0.28	C	0.2	21.15	0.19	C
Stream C-AB	0.0	6.43	0.05	A	0.1	6.65	0.12	A

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

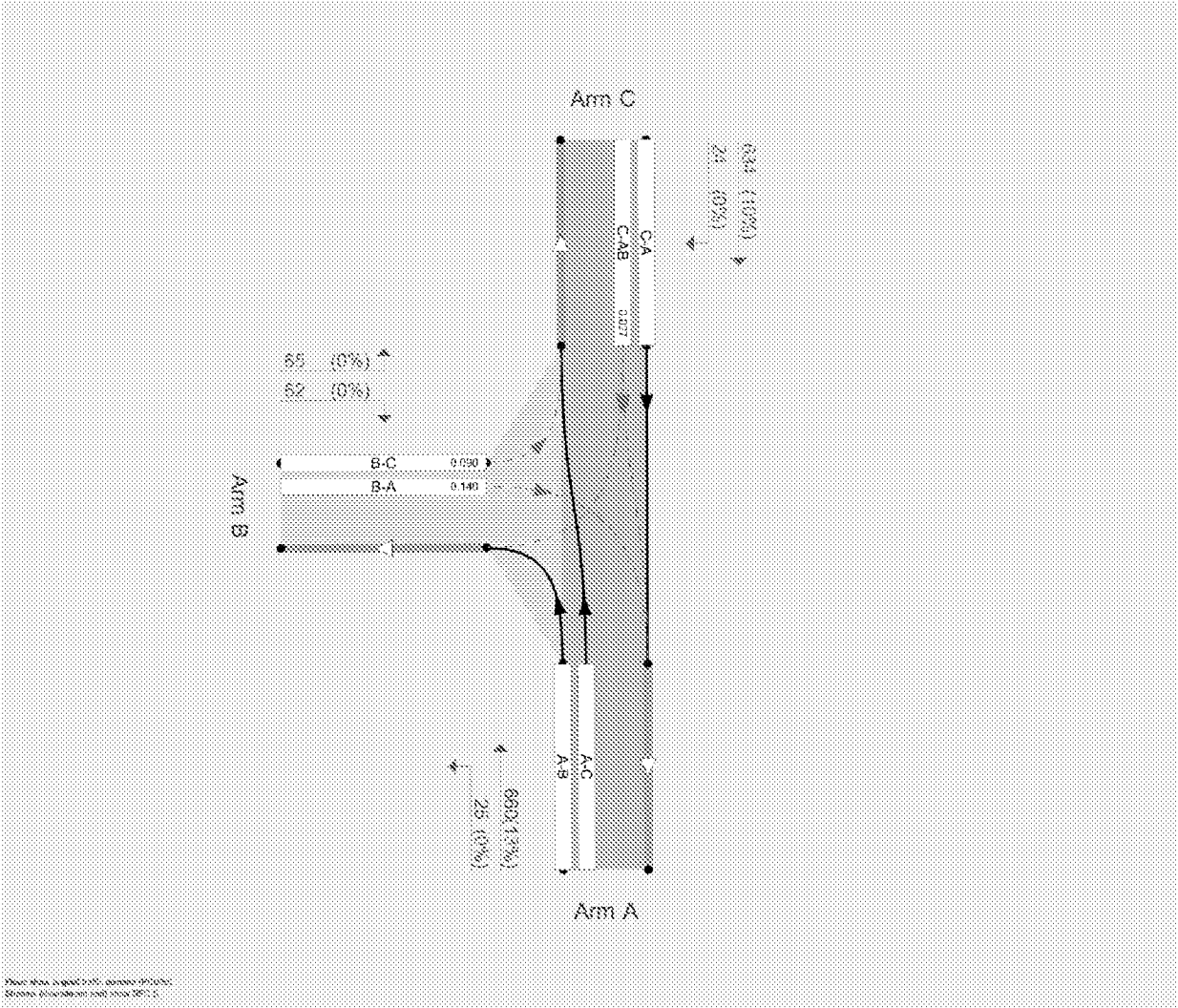
File summary

File Description

Title	
Location	
Site number	
Date	11/01/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AzureAD\Brad
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2031 Base + Committed Development + Proposed Development (+700 Tempo)	AM	ONE HOUR	07:45	09:15	15	✓
D12	2031 Base + Committed Development + Proposed Development (+700 Tempo)	PM	ONE HOUR	15:45	17:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2031 Base + Committed Development + Proposed Development (+700 Temprow), AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.39	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A29 (S)		Major
B	Site Access Road		Minor
C	A29 (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.50		✓	3.50	250.0	✓	3.50

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	8.50	4.90	3.65	3.65		2.00	16	16

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	532	0.095	0.240	0.151	0.342
B-C	694	0.104	0.263	-	-
C-B	820	0.311	0.311	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2031 Base + Committed Development + Proposed Development (+700 Temprow)	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	685	100.000
B		ONE HOUR	✓	127	100.000
C		ONE HOUR	✓	658	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	25	660
	B	62	0	65
	C	634	24	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	13
	B	0	0	0
	C	10	0	0

Results**Results Summary for whole modelled period**

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.16	9.24	0.2	A	60	89
B-A	0.28	20.80	0.4	C	57	85
C-AB	0.05	6.43	0.0	A	22	33
C-A					582	873
A-B					23	34
A-C					606	908

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	49	12	542	0.090	49	0.0	0.1	7.285	A
B-A	47	12	333	0.140	46	0.0	0.2	12.509	B
C-AB	18	5	660	0.027	18	0.0	0.0	5.606	A
C-A	477	119			477				
A-B	19	5			19				
A-C	497	124			497				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	15	510	0.115	58	0.1	0.1	7.975	A
B-A	56	14	295	0.189	55	0.2	0.2	15.040	C
C-AB	22	5	629	0.034	22	0.0	0.0	5.926	A
C-A	570	142			570				
A-B	22	6			22				
A-C	593	148			593				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	72	18	462	0.155	71	0.1	0.2	9.211	A
B-A	68	17	241	0.283	68	0.2	0.4	20.680	C

C-AB	26	7	586	0.045	26	0.0	0.0	6.433	A
C-A	698	175			698				
A-B	28	7			28				
A-C	727	182			727				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	72	18	461	0.155	72	0.2	0.2	9.235	A
B-A	68	17	241	0.283	68	0.4	0.4	20.803	C
C-AB	26	7	586	0.045	26	0.0	0.0	6.433	A
C-A	698	175			698				
A-B	28	7			28				
A-C	727	182			727				

08:45 - 08:50

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	15	509	0.115	59	0.2	0.1	8.003	A
B-A	56	14	295	0.189	56	0.4	0.2	15.125	C
C-AB	22	5	629	0.034	22	0.0	0.0	5.929	A
C-A	570	142			570				
A-B	22	6			22				
A-C	593	148			593				

08:50 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	49	12	541	0.090	49	0.1	0.1	7.321	A
B-A	47	12	333	0.140	47	0.2	0.2	12.576	B
C-AB	18	5	660	0.027	18	0.0	0.0	5.609	A
C-A	477	119			477				
A-B	19	5			19				
A-C	497	124			497				

2031 Base + Committed Development + Proposed Development (+700 Tempo), PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.84	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2031 Base + Committed Development + Proposed Development (+700 Tempo)	PM	ONE HOUR	15:45	17:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	599	100.000
B		ONE HOUR	✓	59	100.000
C		ONE HOUR	✓	999	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
From		A	B	C
	A	0	44	555
	B	36	0	23
	C	931	68	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A	B	C
	A	0	0	10
	B	0	0	0
	C	11	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)

B-C	0.05	7.92	0.1	A	21	32
B-A	0.19	21.15	0.2	C	33	50
C-AB	0.12	6.65	0.1	A	62	94
C-A					854	1281
A-B					40	61
A-C					509	764

Main Results for each time segment

16:45 - 16:50

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	4	544	0.032	17	0.0	0.0	6.836	A
B-A	27	7	319	0.085	27	0.0	0.1	12.287	B
C-AB	51	13	680	0.075	51	0.0	0.1	5.717	A
C-A	701	175			701				
A-B	33	8			33				
A-C	418	104			418				

16:50 - 16:55

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	21	5	518	0.040	21	0.0	0.0	7.234	A
B-A	32	8	273	0.118	32	0.1	0.1	14.915	B
C-AB	61	15	653	0.094	61	0.1	0.1	6.080	A
C-A	837	209			837				
A-B	40	10			40				
A-C	499	125			499				

16:55 - 16:59

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	25	6	480	0.053	25	0.0	0.1	7.907	A
B-A	40	10	210	0.189	39	0.1	0.2	21.057	C
C-AB	75	19	616	0.122	75	0.1	0.1	6.651	A
C-A	1025	256			1025				
A-B	48	12			48				
A-C	611	153			611				

16:59 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	25	6	480	0.053	25	0.1	0.1	7.915	A
B-A	40	10	210	0.189	40	0.2	0.2	21.146	C
C-AB	75	19	616	0.122	75	0.1	0.1	6.653	A
C-A	1025	256			1025				
A-B	48	12			48				
A-C	611	153			611				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	21	5	518	0.040	21	0.1	0.0	7.243	A
B-A	32	8	273	0.118	33	0.2	0.1	14.982	B
C-AB	61	15	653	0.094	61	0.1	0.1	6.085	A
C-A	837	209			837				
A-B	40	10			40				
A-C	499	125			499				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	4	543	0.032	17	0.0	0.0	6.848	A
B-A	27	7	319	0.085	27	0.1	0.1	12.334	B
C-AB	51	13	680	0.075	51	0.1	0.1	5.723	A
C-A	701	175			701				
A-B	33	8			33				
A-C	418	104			418				

Appendix 4

Woodgate Level Crossing Modelling Outputs

Basic Results Summary

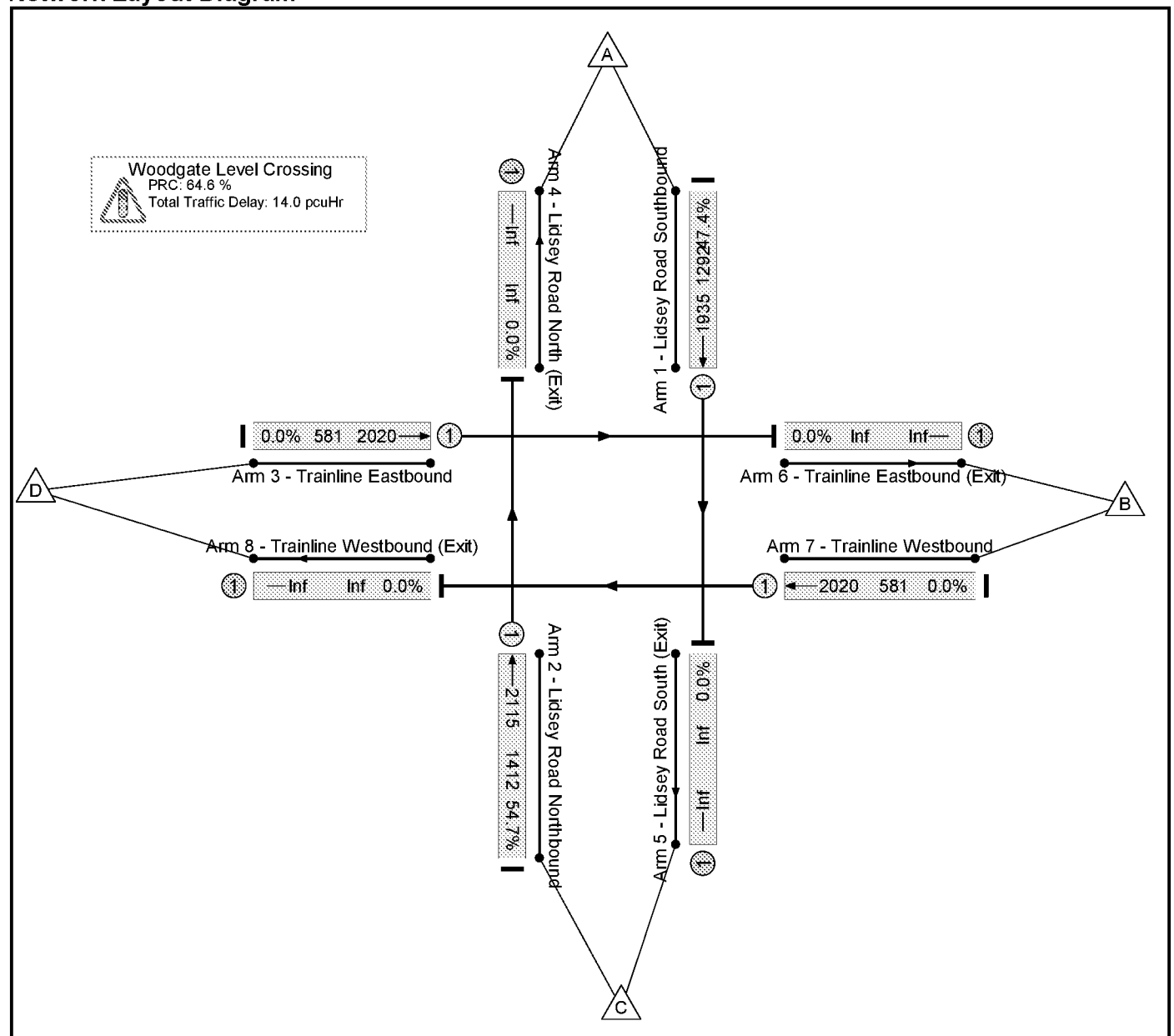
Basic Results Summary

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	Level Crossing - 700 Sensitivity.lsg3x
Author:	
Company:	
Address:	

Scenario 1: '2031 Base + Committed Development + Proposed Development + 700 (Tempo) AM' (FG1: '2031 Base + Committed Development + Proposed Development + 700 (Tempo)', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

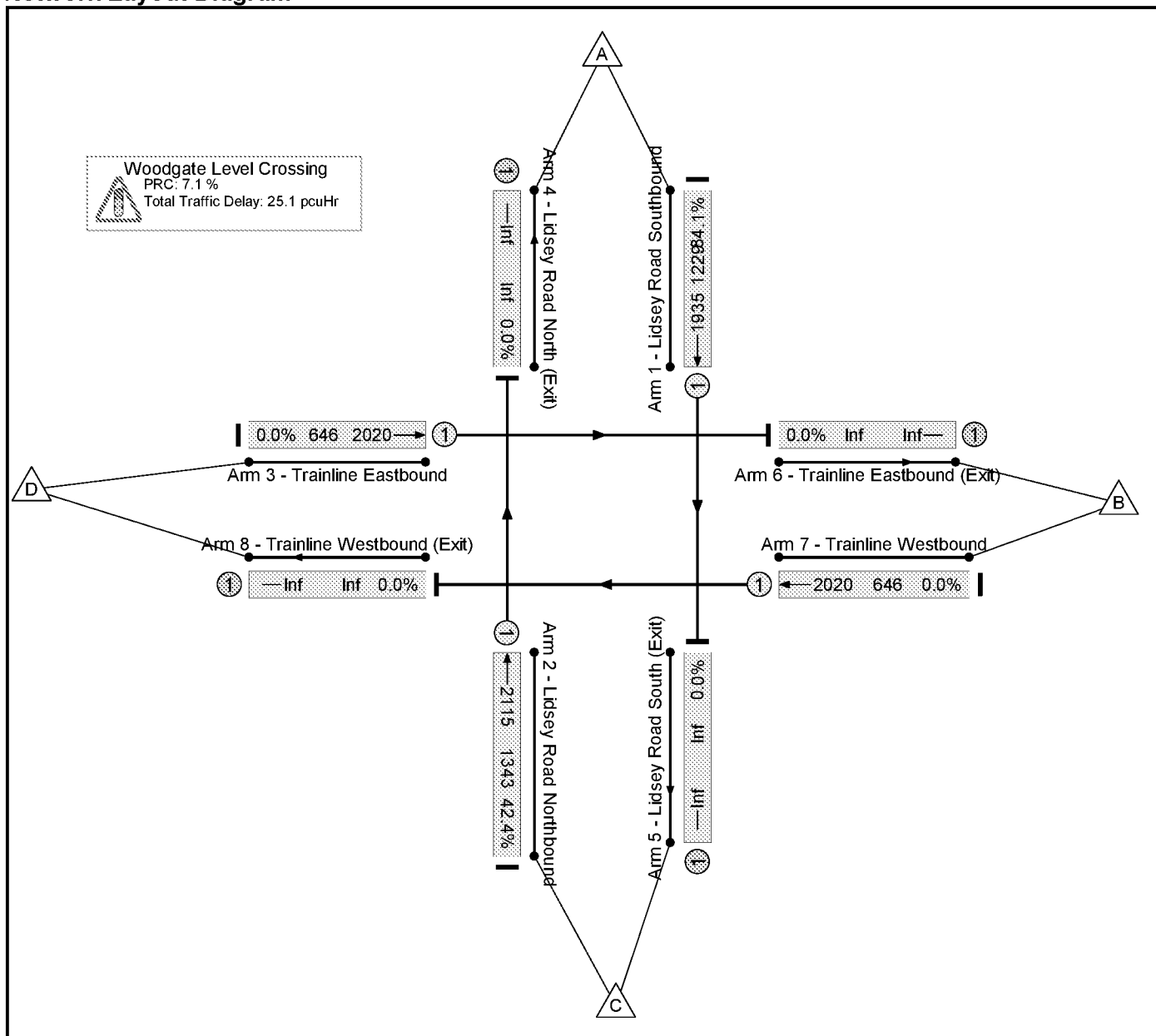
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	54.7%	0	0	0	14.0	-	-
Woodgate Level Crossing	-	-	-		-	-	-	-	-	-	54.7%	0	0	0	14.0	-	-
1/1	Lidsey Road Southbound Ahead	U	B		1	266	-	612	1935	1292	47.4%	-	-	-	5.9	35.0	33.4
2/1	Lidsey Road Northbound Ahead	U	A		1	266	-	772	2115	1412	54.7%	-	-	-	8.1	37.6	45.4
3/1	Trainline Eastbound Ahead	U	C		1	114	-	0	2020	581	0.0%	-	-	-	0.0	0.0	0.0
7/1	Trainline Westbound Ahead	U	D		1	114	-	0	2020	581	0.0%	-	-	-	0.0	0.0	0.0
C1																	

Basic Results Summary

Scenario 2: '2031 Base + Committed Development + Proposed Development + 700 (Tempo) PM' (FG2: '2031 Base + Committed Development + Proposed Development + 700 (Tempo)', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	84.1%	0	0	0	25.1	-	-
Woodgate Level Crossing	-	-	-		-	-	-	-	-	-	84.1%	0	0	0	25.1	-	-
1/1	Lidsey Road Southbound Ahead	U	B		1	253	-	1033	1935	1229	84.1%	-	-	-	19.0	66.1	92.4
2/1	Lidsey Road Northbound Ahead	U	A		1	253	-	569	2115	1343	42.4%	-	-	-	6.1	38.8	31.8
3/1	Trainline Eastbound Ahead	U	C		1	127	-	0	2020	646	0.0%	-	-	-	0.0	0.0	0.0
7/1	Trainline Westbound Ahead	U	D		1	127	-	0	2020	646	0.0%	-	-	-	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 7.1 Total Delay for Signalled Lanes (pcuHr): 25.10 Cycle Time (s): 400 PRC Over All Lanes (%): 7.1 Total Delay Over All Lanes(pcuHr): 25.10																	

Appendix 5

War Memorial Roundabout Modelling Outputs

Junctions 9	
ARCADY 9 - Roundabout Module	
Version: 9.5.2.1013	
© Copyright TRL Limited, 2019	
For sales and distribution information, program advice and maintenance, contact TRL:	
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution.	

Filename: WMR (Advanced) - 700 Unit Sensitivity.j9
Path: C:\Users\JosephTucker\OneDrive - Highgate Transportation\Shared Documents - HTP\2400 - Projects\2401 - Woodgate QW3\Modelling\Junctions 9\War Memorial
Report generation date: 04/07/2024 10:18:26

»2031 Base + Committed Development + Proposed Development + Phase 1 A29 Scheme (+700 Tempo), AM
»2031 Base + Committed Development + Proposed Development + Phase 1 A29 Scheme (+700 Tempo), PM

Summary of junction performance

AM						PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
2031 Base + Committed Development + Proposed Development + Phase 1 A29 Scheme (+700 Tempo)										
Arm A	D1	3.0	12.47	0.75	B	D2	0.4	5.51	0.28	A
Arm B		1.6	4.71	0.61	A		1.0	3.53	0.49	A
Arm C		0.9	6.55	0.47	A		9.5	36.25	0.92	E

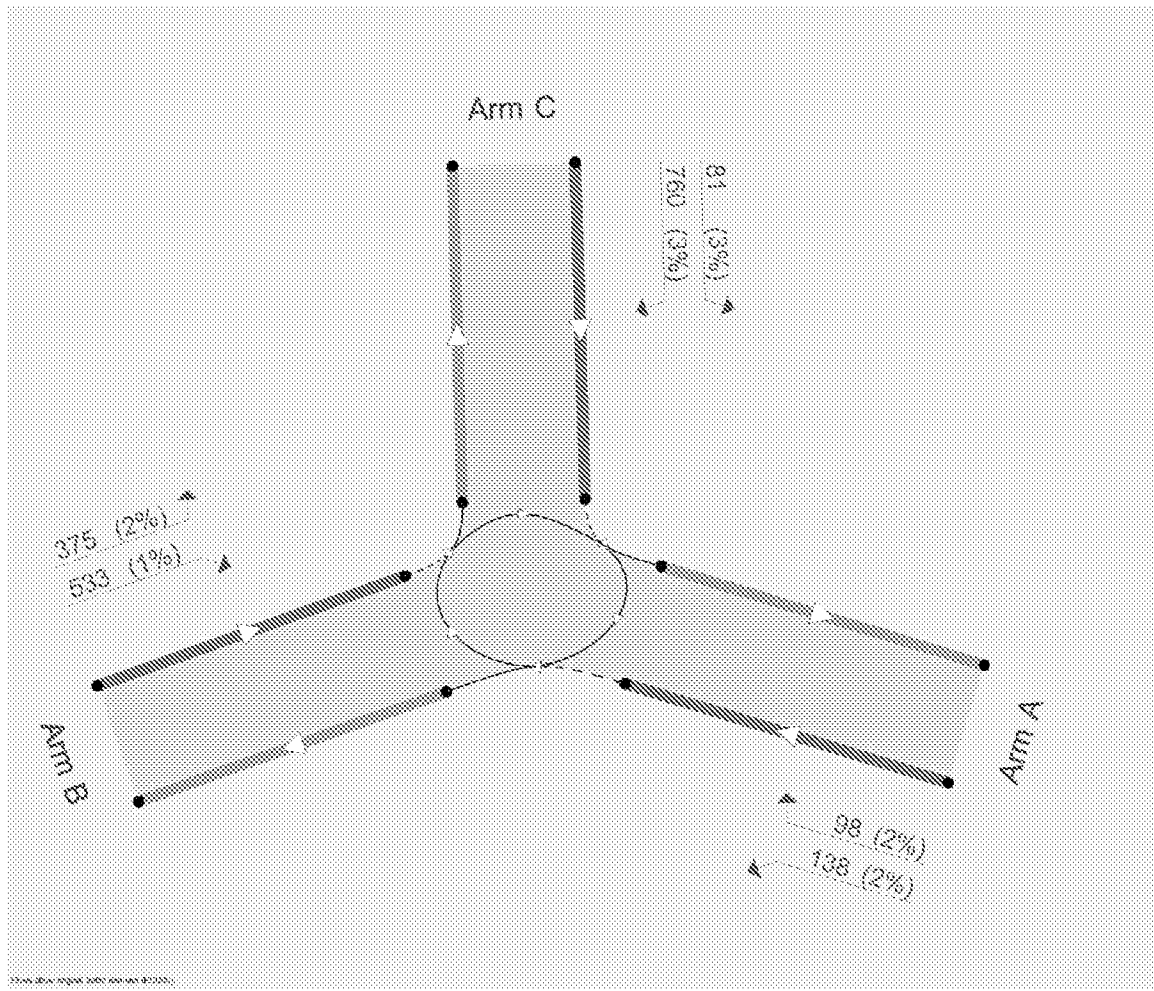
There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set
Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description	
Title	
Location	
Site number	
Date	06/06/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AzureAD\JosephTucker
Description	

Units

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



Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2031 Base + Committed Development + Proposed Development + Phase 1 A29 Scheme (+700 Tempo)	AM	ONE HOUR	07:45	09:15	15	✓
D2	2031 Base + Committed Development + Proposed Development + Phase 1 A29 Scheme (+700 Tempo)	PM	ONE HOUR	15:45	17:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2031 Base + Committed Development + Proposed Development + Phase 1 A29 Scheme (+700 Tempo), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm B - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C	7.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	Barnham Road B2233	
B	Nyton Road A29	
C	Fontwell Avenue A29	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A	3.42	5.28	16.0	300.0	25.0	7.5	
B	4.78	6.50	38.0	999.0	25.0	9.5	
C	4.00	4.50	1.2	6.8	25.0	47.5	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A	Direct	ARCADY 6 CT10 Import	-396
B	Direct	ARCADY 6 CT10 Import	0
C	Direct	ARCADY 6 CT10 Import	-120

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A	0.685	1230
B	0.788	2130
C	0.485	958

The slope and intercept shown above include any corrections and adjustments.

Arm Capacity Adjustments

Arm	Type	Reason	Direct capacity adjustment (PCU/hr)
A	Direct		275
B	Direct		0
C	Direct		340

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2031 Base + Committed Development + Proposed Development + Phase 1 A29 Scheme (+700 Tempo)	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	811	100.000
B		ONE HOUR	✓	1137	100.000
C		ONE HOUR	✓	447	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	713	98
	B	452	6	679
	C	34	412	1

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	3	3
	B	5	0	3
	C	3	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.75	12.47	3.0	E	744	1116
B	0.61	4.71	1.6	A	1043	1565
C	0.47	6.55	0.9	A	410	615

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	611	153	314	1290	0.473	607	365	0.0	0.9	5.401	B
B	856	214	74	2072	0.413	853	847	0.0	0.7	3.057	B
C	337	84	344	1131	0.297	335	584	0.0	0.4	4.604	B

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	729	182	376	1247	0.585	727	436	0.9	1.4	7.098	A
B	1022	256	89	2060	0.496	1021	1014	0.7	1.0	3.591	A
C	402	100	411	1099	0.366	401	698	0.4	0.6	5.265	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	893	223	460	1190	0.751	887	534	1.4	2.9	12.007	B
B	1252	313	108	2045	0.612	1249	1239	1.0	1.6	4.682	B
C	492	123	503	1054	0.467	491	854	0.6	0.9	6.515	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	893	223	461	1189	0.751	893	535	2.9	3.0	12.474	E
B	1252	313	109	2044	0.612	1252	1245	1.6	1.6	4.713	A

C	492	123	504	1053	0.467	492	857	0.9	0.9	6.546	A
---	-----	-----	-----	------	-------	-----	-----	-----	-----	-------	---

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	729	182	378	1246	0.585	735	438	3.0	1.5	7.341	A
B	1022	256	90	2059	0.496	1025	1023	1.6	1.0	3.616	A
C	402	100	413	1098	0.366	403	702	0.9	0.6	5.298	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	611	153	316	1288	0.474	613	366	1.5	0.9	5.504	A
B	856	214	75	2071	0.413	857	854	1.0	0.7	3.079	A
C	337	84	345	1131	0.298	337	587	0.6	0.4	4.634	A

2031 Base + Committed Development + Proposed Development + Phase 1 A29 Scheme (+700 Tempo), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm B - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		A, B, C	18.84	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2031 Base + Committed Development + Proposed Development + Phase 1 A29 Scheme (+700 Tempo)	PM	ONE HOUR	15:45	17:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	236	100.000
B		ONE HOUR	✓	919	100.000
C		ONE HOUR	✓	842	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	138	98
	B	533	11	375
	C	81	760	1

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	2	2
	B	1	0	2
	C	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A	0.28	5.51	0.4	A	217	325

B	0.49	3.53	1.0	A	843	1265
C	0.92	29.29	9.5	E	773	1159

Main Results for each time segment

16:45 - 16:50

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	178	44	576	1110	0.160	177	461	0.0	0.2	3.931	A
B	692	173	74	2072	0.334	690	679	0.0	0.5	2.638	A
C	634	158	408	1100	0.576	628	356	0.0	1.4	7.776	A

16:50 - 16:55

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	212	53	690	1032	0.206	212	551	0.2	0.3	4.476	A
B	826	207	89	2060	0.401	825	813	0.5	0.7	2.954	A
C	757	189	489	1061	0.713	753	426	1.4	2.5	11.855	B

16:55 - 16:59

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	260	65	829	937	0.277	259	673	0.3	0.4	5.416	A
B	1012	253	109	2045	0.495	1011	980	0.7	1.0	3.525	A
C	927	232	598	1008	0.927	904	521	2.5	8.2	30.562	C

16:59 - 16:58

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	260	65	846	926	0.281	260	676	0.4	0.4	5.514	A
B	1012	253	109	2044	0.495	1012	996	1.0	1.0	3.534	A
C	927	232	599	1007	0.927	922	522	8.2	9.5	29.236	E

16:58 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	212	53	718	1013	0.210	213	555	0.4	0.3	4.592	A
B	826	207	89	2060	0.401	827	842	1.0	0.7	2.963	A
C	757	189	490	1060	0.714	784	427	9.5	2.7	14.593	B

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A	178	44	586	1104	0.161	178	463	0.3	0.2	3.969	A
B	692	173	75	2071	0.334	693	689	0.7	0.5	2.648	A
C	634	158	410	1099	0.577	639	357	2.7	1.4	8.143	A

Appendix 6

Saltbox Roundabout Modelling Outputs

Junctions 9							
ARCADY 9 - Roundabout Module							
Version: 9.5.2.1013							
© Copyright TRL Limited, 2019							
For sales and distribution information, program advice and maintenance, contact TRL							
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution							

Filename: Saltbox (No Systra Mitigation) - 700 Dwelling Sensitivity.j9
Path: C:\Users\JosephTucker\OneDrive - Highgate Transportation\Shared Documents - HTp\2400 - Projects\2401 - Woodgate QW3\Modelling\Junctions 9\Saltbox
Report generation date: 02/07/2024 14:30:06

»2031 Base + Corn Dev + Prop Dev (+700 Tempo), AM
»2031 Base + Corn Dev + Prop Dev (+700 Tempo), PM

Summary of junction performance

AM						PM					
Set ID	Queue (PCU)	Delay (s)	RFC	LOS		Set ID	Queue (PCU)	Delay (s)	RFC	LOS	
2031 Base + Corn Dev + Prop Dev (+700 Tempo)											
Arm 1	D1	1.1	4.84	0.52	A	D2	1.9	7.04	0.65	A	
Arm 2		54.7	135.97	1.07	F		22.9	67.35	0.99	F	
Arm 3		0.4	10.83	0.26	B		0.9	14.14	0.45	B	
Arm 4		5.5	11.42	0.84	B		15.0	28.43	0.98	D	
Arm 5		1.4	19.16	0.57	C		4.3	45.93	0.84	F	

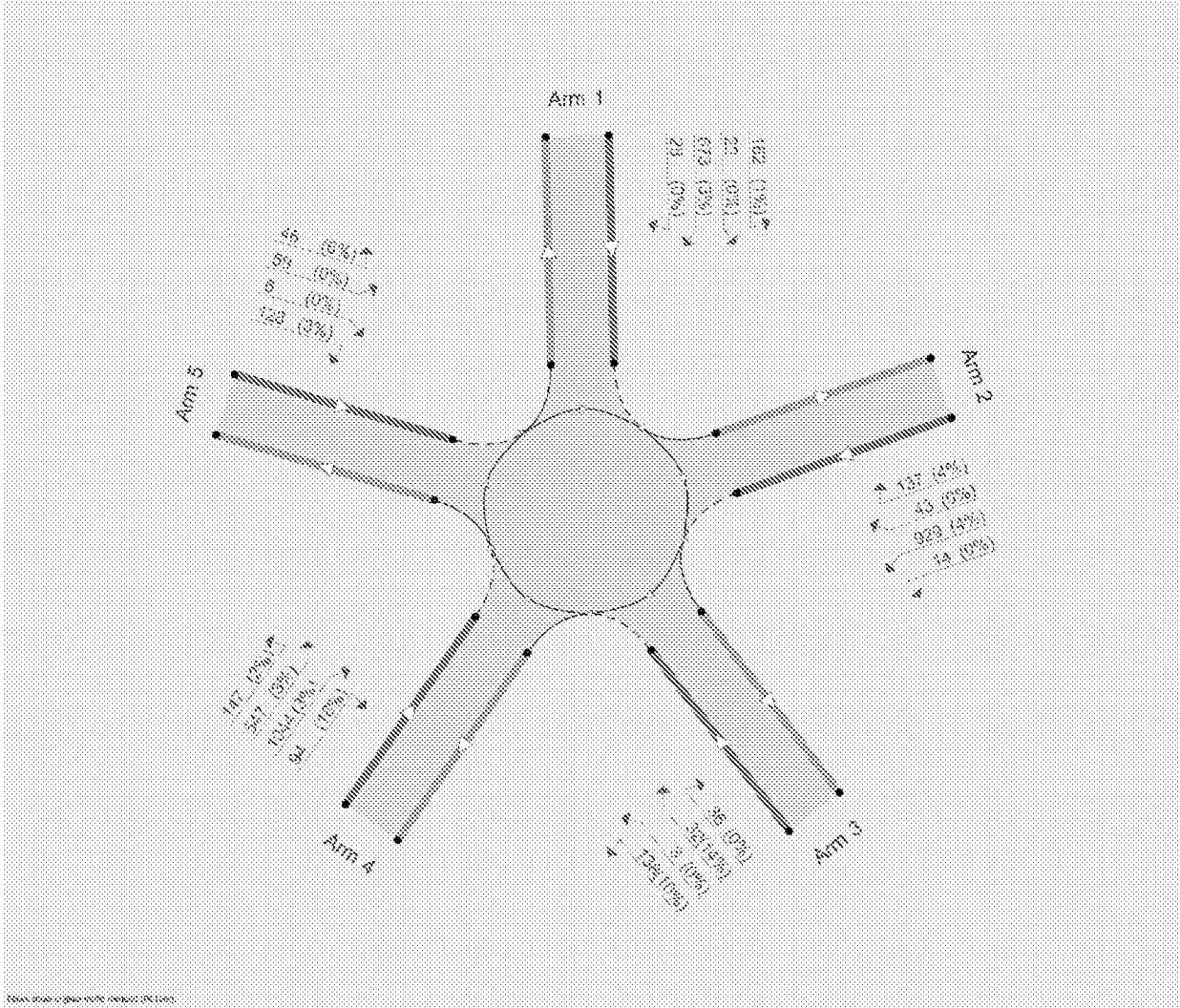
There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.
Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description	
Title	
Location	
Site number	
Date	07/06/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AzureAD\AliceHowse
Description	

Units

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



Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2031 Base + Com Dev + Prop Dev (+700 Tempo)	AM	ONE HOUR	07:45	09:15	15	✓
D2	2031 Base + Com Dev + Prop Dev (+700 Tempo)	PM	ONE HOUR	15:45	17:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2031 Base + Com Dev + Prop Dev (+700 Temp), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	47.92	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A29 (N)	A29 (N)
2	A259 (E)	A259 (E)
3	Newlands Road	Newlands Road
4	A29 (S)	A29 (S)
5	Saltbox	Saltbox

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	7.23	9.28	4.4	34.5	59.8	18.5	
2	4.71	6.27	21.5	16.1	59.8	18.0	
3	4.97	6.21	3.1	14.0	59.8	24.0	
4	7.20	7.20	0.0	19.8	59.8	10.0	
5	3.61	4.91	5.4	15.4	59.8	13.5	

Slope / Intercept / Capacity

Roundabout Slope and intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.728	2588
2	0.595	1865
3	0.553	1670
4	0.686	2332
5	0.513	1372

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2031 Base + Com Dev + Prop Dev (+700 Temp)	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
-----	------------	--------------	--------------	-------------------------	--------------------

1		ONE HOUR	✓	776	100.000
2		ONE HOUR	✓	1214	100.000
3		ONE HOUR	✓	128	100.000
4		ONE HOUR	✓	1629	100.000
5		ONE HOUR	✓	238	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
		1	2	3	4	5
From	1	0	108	42	589	37
	2	148	0	34	961	71
	3	17	13	0	97	1
	4	472	846	138	0	173
	5	43	66	6	123	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1	2	3	4	5
From	1	0	6	14	4	0
	2	9	0	8	6	2
	3	62	11	0	18	0
	4	5	6	20	0	4
	5	6	6	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.52	4.84	1.1	2.0	A	712	1068
2	1.07	133.97	54.7	119.3	F	1114	1671
3	0.26	10.83	0.4	1.7	B	117	176
4	0.84	11.42	5.5	26.2	B	1495	2242
5	0.57	19.16	1.4	6.5	C	218	328

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	584	146	893	1937	0.302	582	509	0.0	0.4	2.775	A
2	914	228	701	1448	0.631	907	774	0.0	1.8	6.979	A
3	96	24	1443	872	0.111	96	165	0.0	0.1	5.628	A
4	1226	307	215	2185	0.561	1221	1324	0.0	1.3	3.958	A
5	179	45	1224	745	0.241	178	211	0.0	0.3	6.574	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	698	174	1069	1809	0.386	697	609	0.4	0.7	3.383	A
2	1091	273	839	1366	0.799	1083	926	1.8	3.9	13.120	B
3	115	29	1725	716	0.161	115	197	0.1	0.2	7.263	A
4	1464	366	256	2156	0.679	1461	1583	1.3	2.2	5.490	A
5	214	53	1465	621	0.344	213	253	0.3	0.5	9.126	A

08:15 - 08:30

	Total	Junction	Circulating			Throughput	Start	End		Unsignalised
--	-------	----------	-------------	--	--	------------	-------	-----	--	--------------

Arm	Demand (PCU/hr)	Arrivals (PCU)	flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	(exit side)	queue (PCU)	queue (PCU)	Delay (s)	level of service
1	854	214	1302	1639	0.521	852	731	0.7	1.1	4.774	A
2	1337	334	1025	1255	0.895	1225	1130	3.9	31.9	84.817	F
3	141	35	2012	557	0.253	140	238	0.2	0.4	10.461	B
4	1794	448	296	2129	0.842	1781	1857	2.2	5.3	10.661	B
5	262	66	1774	463	0.566	259	303	0.5	1.3	18.062	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	854	214	1312	1632	0.523	854	737	1.1	1.1	4.839	A
2	1337	334	1029	1253	0.867	1246	1137	31.9	54.7	130.975	F
3	141	35	2035	545	0.259	141	240	0.4	0.4	10.826	B
4	1794	448	300	2126	0.843	1793	1876	5.3	5.5	11.419	B
5	262	66	1787	456	0.574	262	305	1.3	1.4	19.161	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	698	174	1082	1800	0.388	700	640	1.1	0.7	3.429	A
2	1091	273	845	1362	0.801	1289	936	54.7	5.2	74.784	F
3	115	29	1930	603	0.191	116	205	0.4	0.3	8.979	A
4	1464	366	294	2130	0.687	1477	1751	5.5	2.4	5.978	A
5	214	53	1504	601	0.356	217	267	1.4	0.6	9.800	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	584	146	901	1932	0.302	585	515	0.7	0.5	2.799	A
2	914	228	706	1445	0.632	927	780	5.2	1.9	7.561	A
3	96	24	1466	859	0.112	97	166	0.3	0.2	5.740	A
4	1226	307	219	2182	0.562	1230	1345	2.4	1.4	4.047	A
5	179	45	1236	739	0.242	180	214	0.6	0.3	6.694	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.45	0.00	0.00	0.45	0.45			N/A	N/A
2	1.78	0.16	1.45	3.16	4.10			N/A	N/A
3	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4	1.35	0.60	1.19	1.58	1.86			N/A	N/A
5	0.33	0.00	0.00	0.33	0.33			N/A	N/A

08:00 - 08:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.65	0.08	0.77	1.41	1.49			N/A	N/A
2	3.95	0.06	0.87	11.10	17.83			N/A	N/A
3	0.23	0.00	0.00	0.23	0.23			N/A	N/A
4	2.21	0.05	0.47	6.04	10.25			N/A	N/A
5	0.54	0.05	0.55	1.36	1.46			N/A	N/A

08:15 - 08:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.13	0.03	0.27	1.13	1.13			N/A	N/A
2	31.91	5.52	26.52	60.81	74.00			N/A	N/A
3	0.40	0.03	0.31	0.56	0.59			N/A	N/A
4	5.30	0.03	0.34	7.31	26.16			N/A	N/A
5	1.29	0.03	0.29	1.29	3.05			N/A	N/A

08:30 - 08:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.14	0.03	0.28	1.14	1.98			N/A	N/A
2	54.68	12.45	47.31	99.71	119.33			N/A	N/A

3	0.42	0.04	0.39	1.40	1.70			N/A	N/A
4	5.51	0.03	0.30	5.51	14.07			N/A	N/A
5	1.36	0.03	0.31	1.74	6.49			N/A	N/A

08:45 - 08:50

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.67	0.58	1.05	1.46	1.52			N/A	N/A
2	5.18	0.05	0.46	14.36	26.88			N/A	N/A
3	0.29	0.00	0.00	0.29	0.29			N/A	N/A
4	2.39	0.06	0.79	6.32	9.75			N/A	N/A
5	0.58	0.05	0.52	1.37	1.48			N/A	N/A

08:50 - 08:55

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.46	0.03	0.34	1.14	1.35			N/A	N/A
2	1.87	0.03	0.30	1.87	5.79			N/A	N/A
3	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4	1.38	0.04	0.38	3.44	6.73			N/A	N/A
5	0.34	0.03	0.33	1.08	1.33			N/A	N/A

2031 Base + Com Dev + Prop Dev (+700 Temprow), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	35.49	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2031 Base + Com Dev + Prop Dev (+700 Temprow)	PM	ONE HOUR	15:45	17:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	885	100.000
2		ONE HOUR	✓	1123	100.000
3		ONE HOUR	✓	209	100.000
4		ONE HOUR	✓	1832	100.000
5		ONE HOUR	✓	239	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	162	22	673	28
	2	137	0	14	929	43
	3	32	36	0	138	3
	4	547	1044	94	0	147
	5	46	59	6	128	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
	1	2	3	4	5	
From	1	0	1	0	3	0
	2	4	0	0	4	0
	3	14	0	0	10	0
	4	3	3	16	0	2
	5	6	0	0	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.65	7.04	1.9	2.1	A	812	1218
2	0.59	6.735	22.9	26.0	F	1030	1546
3	0.45	14.14	0.9	4.3	B	192	288
4	0.95	28.43	15.0	31.1	D	1681	2522
5	0.84	63.39	4.3	21.8	F	219	329

Main Results for each time segment

15:45 - 16:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	666	167	1023	1842	0.362	664	570	0.0	0.6	3.125	A
2	845	211	713	1441	0.587	840	975	0.0	1.5	6.159	A
3	157	39	1451	868	0.181	156	102	0.0	0.2	5.486	A
4	1379	345	209	2189	0.630	1372	1398	0.0	1.7	4.527	A
5	180	45	1415	647	0.278	178	166	0.0	0.4	7.870	A

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	796	199	1224	1696	0.469	794	682	0.6	0.9	4.084	A
2	1010	252	853	1357	0.744	1004	1166	1.5	2.9	10.398	B
3	188	47	1735	711	0.264	187	122	0.2	0.4	7.459	A
4	1647	412	250	2161	0.762	1641	1672	1.7	3.2	7.091	A
5	215	54	1693	505	0.426	213	198	0.4	0.7	12.640	B

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	974	244	1473	1515	0.643	971	819	0.9	1.8	6.731	A
2	1236	309	1036	1248	0.881	1183	1407	2.9	16.3	46.393	E
3	230	58	2072	524	0.439	228	147	0.4	0.8	13.140	B
4	2017	504	298	2128	0.848	1979	2003	3.2	12.7	21.129	D
5	263	66	2039	327	0.804	253	238	0.7	3.3	44.816	E

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	974	244	1496	1498	0.651	974	832	1.8	1.9	7.037	A
2	1236	309	1044	1244	0.894	1210	1426	16.3	22.8	67.359	F
3	230	58	2105	506	0.455	230	149	0.8	0.9	14.141	B
4	2017	504	303	2124	0.950	2008	2032	12.7	15.0	28.432	D
5	263	66	2069	312	0.845	259	242	3.3	4.3	65.934	F

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	796	199	1269	1663	0.478	799	711	1.9	0.9	4.287	A
2	1010	252	868	1348	0.749	1088	1200	22.8	3.3	18.475	D
3	188	47	1830	658	0.286	190	126	0.9	0.4	8.378	A
4	1647	412	264	2151	0.766	1693	1756	15.0	3.5	8.909	A
5	215	54	1751	475	0.453	229	206	4.3	0.9	15.839	D

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
-----	-----------------------	-------------------------	---------------------------	-------------------	-----	---------------------	---------------------------------	-------------------	-----------------	-----------	-------------------------------

1	666	167	1035	1834	0.363	668	577	0.9	0.6	3.168	A
2	845	211	719	1437	0.588	853	984	3.3	1.5	6.466	A
3	157	39	1468	858	0.183	158	103	0.4	0.2	5.587	A
4	1379	345	211	2187	0.631	1386	1415	3.5	1.8	4.692	A
5	180	45	1430	639	0.282	182	167	0.9	0.4	8.119	A

Queue Variation Results for each time segment

15:45 - 16:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.58	0.56	1.02	1.43	1.49			N/A	N/A
2	1.45	0.34	1.32	2.03	2.60			N/A	N/A
3	0.24	0.00	0.00	0.24	0.24			N/A	N/A
4	1.74	0.54	1.08	2.60	3.02			N/A	N/A
5	0.39	0.00	0.00	0.39	0.39			N/A	N/A

16:00 - 16:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.90	0.06	0.72	1.66	2.12			N/A	N/A
2	2.89	0.05	0.51	8.01	13.18			N/A	N/A
3	0.39	0.00	0.00	0.39	0.39			N/A	N/A
4	3.21	0.05	0.47	8.98	15.66			N/A	N/A
5	0.74	0.05	0.57	1.22	1.78			N/A	N/A

16:15 - 16:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.81	0.03	0.27	1.81	1.81			N/A	N/A
2	16.30	0.31	8.68	40.92	56.06			N/A	N/A
3	0.83	0.03	0.28	0.83	0.83			N/A	N/A
4	12.74	0.07	1.53	37.36	60.93			N/A	N/A
5	3.33	0.05	0.45	9.30	16.53			N/A	N/A

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.88	0.03	0.28	1.88	1.88			N/A	N/A
2	22.95	0.24	10.42	60.89	86.00			N/A	N/A
3	0.89	0.03	0.34	1.73	4.32			N/A	N/A
4	14.96	0.05	0.49	41.74	81.06			N/A	N/A
5	4.33	0.05	0.47	12.24	21.85			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.95	0.14	0.97	1.21	1.66			N/A	N/A
2	3.27	0.04	0.41	8.69	17.15			N/A	N/A
3	0.44	0.03	0.30	0.58	1.11			N/A	N/A
4	3.51	0.05	0.45	9.79	17.60			N/A	N/A
5	0.88	0.04	0.40	2.03	3.46			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.59	0.05	0.48	1.40	1.52			N/A	N/A
2	1.51	0.03	0.30	1.51	6.15			N/A	N/A
3	0.25	0.03	0.27	0.49	0.52			N/A	N/A
4	1.79	0.03	0.32	2.82	9.05			N/A	N/A
5	0.41	0.03	0.30	1.04	1.78			N/A	N/A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.2.1013
© Copyright TRL Limited, 2019

For sales and distribution information, program advice and maintenance, contact TRL: [REDACTED]

The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: Saltbox (With Systra Mitigation) - 700 Dwelling Sensitivity.j9
Path: C:\Users\JosephTucker\OneDrive - Highgate Transportation\Shared Documents - HTp\2400 - Projects\2401 - Woodgate QW3\Modelling\Junctions 9\Saltbox
Report generation date: 02/07/2024 14:33:34

»2031 Base + Com Dev + Prop Dev (+700 Tempro), AM
»2031 Base + Com Dev + Prop Dev (+700 Tempro), PM

Summary of junction performance

AM						PM					
Set ID	Queue (PCU)	Delay (s)	RFC	LOS		Set ID	Queue (PCU)	Delay (s)	RFC	LOS	
2031 Base + Com Dev + Prop Dev (+700 Tempro)											
Arm 1	D1	0.6	2.50	0.36	A	D2	0.8	3.02	0.44	A	
Arm 2		3.8	10.38	0.78	B		2.8	8.19	0.73	A	
Arm 3		0.5	12.13	0.28	B		0.9	14.67	0.46	B	
Arm 4		1.2	2.41	0.53	A		1.5	2.71	0.59	A	
Arm 5		1.2	16.86	0.54	C		3.1	44.75	0.77	E	

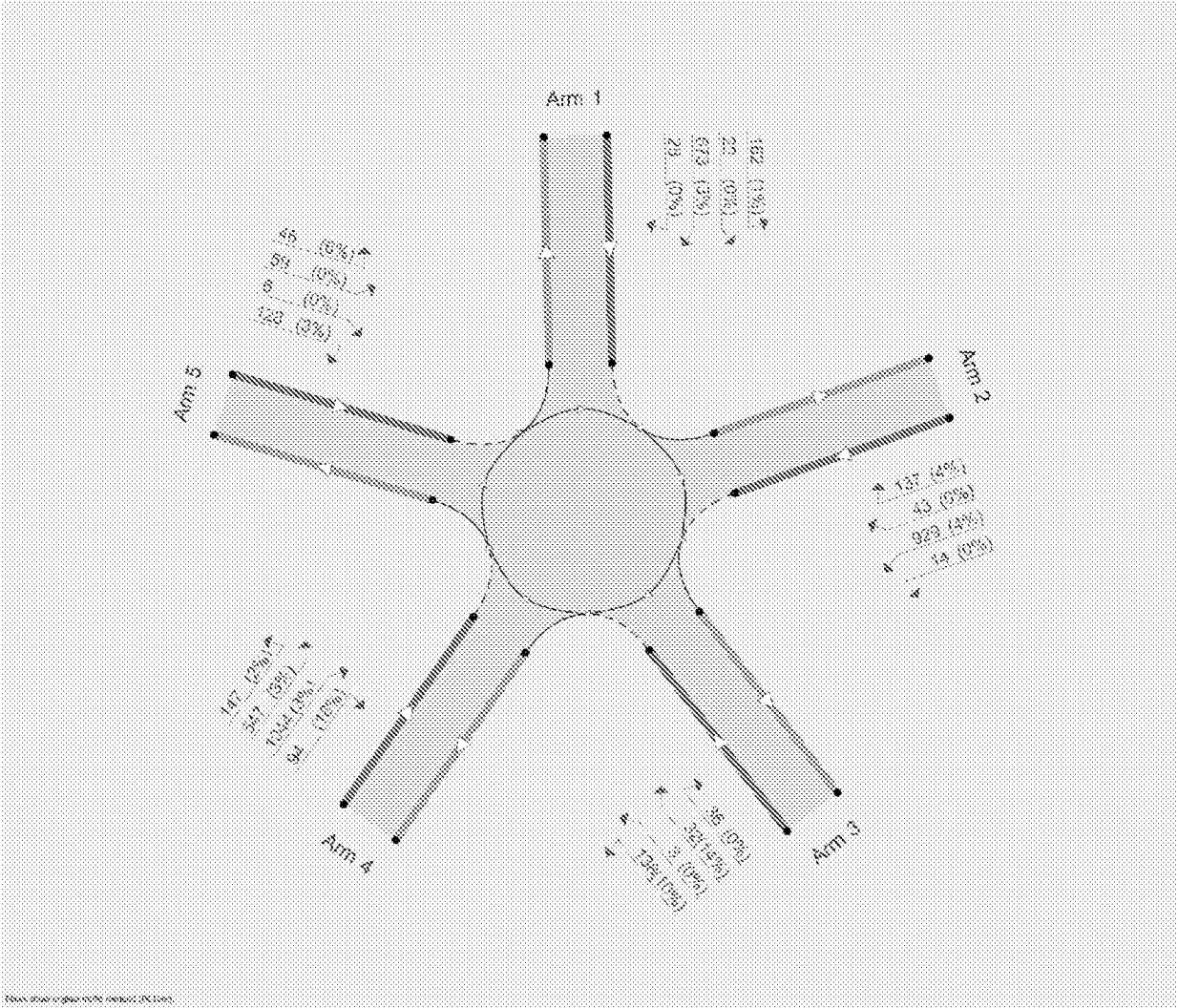
There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.
Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

File summary

File Description	
Title	
Location	
Site number	
Date	07/06/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AzureAD\AliceHowse
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75	✓			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2031 Base + Com Dev + Prop Dev (+700 Tempo)	AM	ONE HOUR	07:45	09:15	15	✓
D2	2031 Base + Com Dev + Prop Dev (+700 Tempo)	PM	ONE HOUR	15:45	17:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2031 Base + Com Dev + Prop Dev (+700 Tempro), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	6.03	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A29 (N)	A29 (N)
2	A259 (E)	A259 (E)
3	Newlands Road	Newlands Road
4	A29 (S)	A29 (S)
5	Saltbox	Saltbox

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	9.84	11.77	3.6	47.7	63.1	11.0	
2	4.71	9.68	25.0	13.7	63.1	19.5	
3	4.97	5.64	2.7	14.0	63.1	24.0	
4	7.40	13.40	36.7	30.2	63.1	15.5	
5	3.61	4.91	5.4	15.4	63.1	11.5	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.866	3498
2	0.658	2381
3	0.527	1619
4	0.887	3665
5	0.499	1381

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2031 Base + Com Dev + Prop Dev (+700 Tempro)	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	776	100.000
2		ONE HOUR	✓	1214	100.000
3		ONE HOUR	✓	128	100.000
4		ONE HOUR	✓	1629	100.000
5		ONE HOUR	✓	238	100.000

Origin-Destination Data

Demand (PCU/hr)

	To					
	1	2	3	4	5	
From	1	0	108	42	589	37
	2	148	0	34	961	71
	3	17	13	0	97	1
	4	472	846	138	0	173
	5	43	66	6	123	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
	1	2	3	4	5	
From	1	0	6	14	4	0
	2	9	0	8	6	2
	3	62	11	0	18	0
	4	5	6	20	0	4
	5	6	6	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.36	2.50	0.6	2.8	A	712	1068
2	0.78	10.38	3.8	15.1	B	1114	1671
3	0.28	12.13	0.5	1.2	B	117	176
4	0.53	2.41	1.2	1.5	A	1495	2242
5	0.54	16.86	1.2	5.7	C	218	328

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	584	146	895	2723	0.215	583	510	0.0	0.3	1.759	A
2	914	228	702	1919	0.476	910	776	0.0	1.0	3.776	A
3	96	24	1447	857	0.112	96	165	0.0	0.2	5.734	A
4	1226	307	215	3474	0.353	1224	1328	0.0	0.6	1.702	A
5	179	45	1227	769	0.233	178	212	0.0	0.3	6.311	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	698	174	1070	2571	0.271	697	611	0.3	0.4	2.009	A
2	1091	273	840	1828	0.597	1089	928	1.0	1.6	5.155	A
3	115	29	1731	708	0.163	115	198	0.2	0.2	7.368	A
4	1464	366	257	3437	0.426	1464	1588	0.6	0.8	1.942	A
5	214	53	1468	649	0.330	213	253	0.3	0.5	8.563	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	854	214	1309	2364	0.361	854	747	0.4	0.6	2.491	A
2	1337	334	1027	1705	0.784	1328	1136	1.6	3.7	9.933	A
3	141	35	2114	506	0.278	140	242	0.2	0.5	11.904	B
4	1794	448	314	3387	0.530	1792	1939	0.8	1.2	2.403	A
5	262	66	1796	485	0.541	259	310	0.5	1.2	16.396	C

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	854	214	1312	2361	0.362	854	749	0.6	0.6	2.498	A
2	1337	334	1029	1703	0.785	1336	1137	3.7	3.8	10.384	B
3	141	35	2123	501	0.281	141	242	0.5	0.5	12.132	E
4	1794	448	316	3385	0.530	1794	1948	1.2	1.2	2.409	A
5	262	66	1799	483	0.542	262	310	1.2	1.2	16.857	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	698	174	1075	2567	0.272	698	613	0.6	0.4	2.015	A
2	1091	273	843	1826	0.598	1100	930	3.8	1.6	5.327	A
3	115	29	1745	701	0.164	116	198	0.5	0.2	7.487	A
4	1464	366	260	3435	0.426	1466	1601	1.2	0.8	1.949	A
5	214	53	1472	647	0.331	217	254	1.2	0.5	8.739	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	584	146	899	2720	0.215	585	513	0.4	0.3	1.762	A
2	914	228	705	1917	0.477	916	778	1.6	1.0	3.828	A
3	96	24	1455	853	0.113	97	166	0.2	0.2	5.784	A
4	1226	307	217	3473	0.353	1227	1336	0.8	0.6	1.710	A
5	179	45	1231	767	0.234	180	213	0.5	0.3	6.373	A

Queue Variation Results for each time segment

09:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.28	0.00	0.00	0.28	0.28			N/A	N/A
2	0.96	0.58	1.06	1.49	1.54			N/A	N/A
3	0.15	0.00	0.00	0.15	0.15			N/A	N/A
4	0.58	0.58	1.07	1.49	1.54			N/A	N/A
5	0.31	0.00	0.00	0.31	0.31			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.39	0.00	0.00	0.39	0.39			N/A	N/A
2	1.55	0.05	0.49	3.99	6.31			N/A	N/A
3	0.23	0.00	0.00	0.23	0.23			N/A	N/A
4	0.79	0.07	0.77	1.53	1.53			N/A	N/A
5	0.50	0.04	0.44	1.31	1.43			N/A	N/A

09:15 - 09:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.59	0.03	0.26	0.59	0.59			N/A	N/A
2	3.67	0.03	0.31	3.67	15.07			N/A	N/A
3	0.46	0.03	0.31	0.56	0.59			N/A	N/A
4	1.19	0.03	0.27	1.19	1.19			N/A	N/A
5	1.18	0.03	0.28	1.18	1.70			N/A	N/A

09:30 - 09:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker

1	0.59	0.03	0.32	1.56	2.75			N/A	N/A
2	3.77	0.03	0.29	3.77	6.49			N/A	N/A
3	0.47	0.04	0.40	1.23	1.23			N/A	N/A
4	1.20	0.03	0.28	1.20	1.20			N/A	N/A
5	1.20	0.03	0.31	1.44	5.65			N/A	N/A

08:45 - 09:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.39	0.00	0.00	0.39	0.39			N/A	N/A
2	1.60	0.06	0.84	3.80	5.51			N/A	N/A
3	0.24	0.00	0.00	0.24	0.24			N/A	N/A
4	0.79	0.59	1.07	1.49	1.54			N/A	N/A
5	0.52	0.05	0.46	1.32	1.44			N/A	N/A

09:00 - 09:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.29	0.00	0.00	0.29	0.29			N/A	N/A
2	0.96	0.04	0.40	2.38	4.12			N/A	N/A
3	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4	0.58	0.58	1.07	1.49	1.54			N/A	N/A
5	0.32	0.03	0.31	0.95	1.26			N/A	N/A

2031 Base + Com Dev + Prop Dev (+700 Temp), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	7.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2031 Base + Com Dev + Prop Dev (+700 Temp)	PM	ONE HOUR	15:45	17:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	885	100.000
2		ONE HOUR	✓	1123	100.000
3		ONE HOUR	✓	209	100.000
4		ONE HOUR	✓	1832	100.000
5		ONE HOUR	✓	239	100.000

Origin-Destination Data

Demand (PCU/hr)

		To					
From		1	2	3	4	5	
	1	0	162	22	673	28	
	2	137	0	14	929	43	
	3	32	36	0	138	3	
	4	547	1044	94	0	147	
	5	46	59	6	128	0	

Vehicle Mix

Heavy Vehicle Percentages

		To					
From		1	2	3	4	5	
	1	0	1	0	3	0	
	2	4	0	0	4	0	
	3	14	0	0	10	0	
	4	3	3	16	0	2	
	5	6	0	0	3	0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	0.44	3.02	0.8	3.0	A	812	1218
2	0.73	8.19	2.8	6.5	A	1030	1546
3	0.46	14.67	0.9	4.6	B	192	288
4	0.59	2.71	1.5	2.7	A	1681	2522
5	0.77	24.75	3.1	16.4	E	219	329

Main Results for each time segment

15:45 - 16:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	666	167	1026	2609	0.255	665	572	0.0	0.4	1.897	A
2	845	211	714	1911	0.442	842	977	0.0	0.8	3.486	A
3	157	39	1454	854	0.184	156	102	0.0	0.2	5.595	A
4	1379	345	209	3480	0.396	1377	1401	0.0	0.7	1.770	A
5	180	45	1420	673	0.268	178	166	0.0	0.4	7.461	A

16:00 - 16:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	796	199	1227	2435	0.327	795	684	0.4	0.5	2.249	A
2	1010	252	854	1819	0.555	1008	1168	0.8	1.3	4.596	A
3	188	47	1739	703	0.267	187	122	0.2	0.4	7.564	A
4	1647	412	250	3443	0.478	1646	1676	0.7	0.9	2.072	A
5	215	54	1698	534	0.403	214	198	0.4	0.7	11.506	B

16:15 - 16:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	974	244	1496	2202	0.443	973	836	0.5	0.8	3.000	A
2	1236	309	1041	1696	0.729	1231	1428	1.3	2.7	7.943	A
3	230	58	2123	502	0.459	228	149	0.4	0.9	14.185	B
4	2017	504	306	3394	0.594	2015	2045	0.9	1.5	2.696	A
5	263	66	2078	344	0.765	255	243	0.7	2.8	16.374	E

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	974	244	1504	2195	0.444	974	839	0.8	0.8	3.021	A
2	1236	309	1046	1692	0.731	1236	1432	2.7	2.8	8.187	A
3	230	58	2133	496	0.464	230	150	0.9	0.9	14.672	B
4	2017	504	307	3393	0.595	2017	2056	1.5	1.5	2.708	A
5	263	66	2081	342	0.768	262	243	2.8	3.1	44.746	E

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	796	199	1238	2425	0.328	797	689	0.8	0.5	2.268	A
2	1010	252	861	1814	0.557	1015	1174	2.8	1.3	4.714	A
3	188	47	1754	696	0.270	190	123	0.9	0.4	7.759	A
4	1647	412	252	3441	0.479	1649	1691	1.5	1.0	2.083	A
5	215	54	1702	531	0.404	224	199	3.1	0.7	12.395	B

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
-----	-----------------------	-------------------------	---------------------------	-------------------	-----	---------------------	---------------------------------	-------------------	-----------------	-----------	-------------------------------

1	666	167	1031	2605	0.256	667	575	0.5	0.4	1.905	A
2	845	211	717	1909	0.443	847	981	1.3	0.8	3.529	A
3	157	39	1462	849	0.185	158	103	0.4	0.2	5.658	A
4	1379	345	211	3478	0.397	1380	1410	1.0	0.7	1.776	A
5	180	45	1424	670	0.268	181	167	0.7	0.4	7.584	A

Queue Variation Results for each time segment

15:45 - 16:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.35	0.00	0.00	0.35	0.35			N/A	N/A
2	0.82	0.57	1.04	1.45	1.50			N/A	N/A
3	0.24	0.00	0.00	0.24	0.24			N/A	N/A
4	0.68	0.57	1.04	1.45	1.50			N/A	N/A
5	0.37	0.00	0.00	0.37	0.37			N/A	N/A

16:00 - 16:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.50	0.04	0.43	1.28	1.41			N/A	N/A
2	1.28	0.05	0.52	3.03	4.62			N/A	N/A
3	0.39	0.00	0.00	0.39	0.39			N/A	N/A
4	0.94	0.06	0.62	1.88	2.70			N/A	N/A
5	0.68	0.05	0.57	1.41	1.41			N/A	N/A

16:15 - 16:30

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.81	0.03	0.26	0.81	0.81			N/A	N/A
2	2.71	0.03	0.29	2.71	6.47			N/A	N/A
3	0.89	0.03	0.28	0.89	0.89			N/A	N/A
4	1.51	0.03	0.26	1.51	1.51			N/A	N/A
5	2.81	0.04	0.39	7.34	14.76			N/A	N/A

16:30 - 16:45

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.81	0.03	0.29	0.81	2.98			N/A	N/A
2	2.77	0.03	0.28	2.77	2.77			N/A	N/A
3	0.92	0.03	0.34	1.69	4.56			N/A	N/A
4	1.51	0.03	0.27	1.51	1.51			N/A	N/A
5	3.08	0.04	0.37	7.46	16.40			N/A	N/A

16:45 - 17:00

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.50	0.00	0.00	0.50	0.50			N/A	N/A
2	1.32	0.08	1.02	2.61	3.51			N/A	N/A
3	0.41	0.03	0.30	0.54	1.02			N/A	N/A
4	0.95	0.57	1.04	1.45	1.50			N/A	N/A
5	0.71	0.04	0.39	1.63	2.67			N/A	N/A

17:00 - 17:15

Arm	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.35	0.00	0.00	0.35	0.35			N/A	N/A
2	0.83	0.05	0.45	1.82	2.77			N/A	N/A
3	0.25	0.03	0.27	0.49	0.52			N/A	N/A
4	0.68	0.17	0.94	1.43	1.49			N/A	N/A
5	0.38	0.03	0.30	1.16	1.65			N/A	N/A

Appendix 16

TEMPro Growth Rates

100 Highgate Junction

Select type of connection:
 One-directional
 Two-way alternating
 Two-way free-flowing

Select time period:
 Weekday AM peak period (0700 - 0900)

Choose road type:
 Production/Attraction
 Origin/Destination

Select data type:
 Growth factors (2024 Data/2019 Data)
 Future Year (2024) - Base Year (2019)
 Base year data (2019)
 Future year data (2024)

*Behavioural results indicate that there is a lower level of confidence in data presented at this local level than when aggregated to higher geographical levels

Area Description: Level: E02006544 Name: Arun 003 Origin: 1,6949 Destination: 1,8321

TEM Traffic growth calculations

Scenario Core Base Year: 2019 Future Year: 2024
 Time Period: Weekday AM peak period (0700 - 0900)
 Select 2019 Dataset:

2019 Dataset Description	From	To
NRTP 2022 Core	2019	2060
NRTP 2022 Behavioural Change	2019	2060
NRTP 2022 High Economy	2019	2060
NRTP 2022 Low Economy	2019	2060
NRTP 2022 Mode balanced Decarbonisation	2019	2060
NRTP 2022 Regional	2019	2060
NRTP 2022 Technology	2019	2060
NRTP2022 Vehicle-led Decarbonisation	2019	2060

2. Select Areas to make up the geographic region:
☒ Arun 003 (E02006544)

3. Select area type:
☐ Urban
☐ Rural
☐ All

4. Select road type:
☐ Motorway
☐ Trunk
☐ A Road
☐ B-Road
☐ All

5. Select which area it serves:
☐ Region
☐ England

Calculate the requested local growth figure

Results

Level	Area	Local Growth Figure
E02006544	Arun 003	1.0186

100 Area Growth Factors

Select type of comparison:

Scenario selection:

Input and selection:

Input level for time period selection:

Select time period:

Weekday PM peak period (1600 - 1800)

Time period type:

Production/Attraction

Origin/Destination

Select data type:

Growth factors (2024 Data/2015 Data)

Future year (2024) - Base Year (2015)

Base year data (2015)

Future year data (2024)

*Detailed results indicate that there is a lower level of confidence in data presented at the local level than when aggregated to higher geographic levels

Results

Mode: ☒ All Modes ☐ Car Driver ☐ Car Passenger ☐ Bus/Transit ☐ Two-Wheeled Vehicle ☐ Combined Modes

Area Description	Name	Origin	All Modes	Destination
Level:	Area 002	Arun 002	1.0137	1.0137

100 Traffic Growth Calculations

Scenario Case: Base Year: 2015 Future Year: 2024

Time Period: Weekday PM peak period (1600 - 1800)

1. Select NTH Scenarios:

100M District Description	From	To
181TP 2022 Core	2015	2060
181TP 2022 Behavioural Change	2015	2060
181TP 2022 High Economy	2015	2060
181TP 2022 Low Economy	2015	2060
181TP 2022 Moderate/Decarbonisation	2015	2060
181TP 2022 Regional	2015	2060
181TP 2022 Technology	2015	2060
181TP 2022 Vehicle Decarbonisation	2015	2060

2. Select Areas to make up the geographic region:

3. Select area type:

4. Select road type:

5. Select selection if correct:

Calculate the expected local growth figure

Results

Level:	Area:	Local Growth Figure
EU2008544	ARUN 002	1.0137

Area	Current Assumptions			
	Base HH	Base Jobs	Future HH	Future Jobs
Arun 003 (E02006544)	4404	4572	4542	4457

100% Full Screen

Select Type of Comparison:

- Decade selection:
- Tripartite selection:
- Tripartite/Decade selection:

Select time period:

Weekend 0.75 peak period (0900 - 0959)

Select end type:

- Production/Attraction
- Origin/Destination

Select data type:

- Growth Factors (2028 Data/2019 Data)
- Future year (2028) - Base Year (2019)
- Base year data (2019)
- Future year data (2028)

*Reliability results indicates that there is a lower level of confidence in data presented at the local level than when aggregated to higher geographical levels.

Results

Area Description: Level: None Origin: All Provinces Destination: 1.0575

Area Description: Level: Arun D02 Origin: 1.0615 Destination: 1.0575

1. Select NCTN Dataset:

NCTN Dataset Description	From	To
NCTN 2022 Core	2015	2060
NCTN 2022 Regional Change	2015	2060
NCTN 2022 High Economy	2015	2060
NCTN 2022 Low Economy	2015	2060
NCTN 2022 Mode-balanced Decarbonisation	2015	2060
NCTN 2022 Regional	2015	2060
NCTN 2022 Technology	2015	2060
NCTN 2022 Vehicle-led Decarbonisation	2015	2060

2. Select areas to make up the geographic region:

3. Select area type:

4. Select road type:

5. Select which area it serves:

Calculate the adjusted local growth figure:

Results

Level	Area	Local Growth Figure
E02006144	Arun D02	1.0448

HighgateTransportation

Select Type of Comparison:

Time selection:

Top and bottom time:

Time and by base period selection:

Select time period:

Weekly PM peak period (1600 - 1829)

Select road type:

Production/Attraction

Origin/Destination

Select data type:

Growth Factors (2028 Data/2015 Data)

Future Year (2028) - Base Year (2015)

Base year data (2015)

Future year data (2028)

Results

*Revised results indicate that there is a lower level of confidence in data presented at the road level than when aggregated to higher geographic levels.

Level	Area Description	Area	Origin	Destination
EU2006544		Arun 092	1.0501	1.0605

Time 1 with Growth Factors

Scenario Code: Base Year: 2015 Future Year: 2028

Time Period: Weekly PM peak period (1600 - 1829)

1. Select NPM Dataset:

NPM Dataset Description	From	To
NRTP 2022 Core	2015	2060
NRTP 2022 Behavioural Change	2015	2060
NRTP 2022 High Economy	2015	2060
NRTP 2022 Low Economy	2015	2060
NRTP 2022 Mode-balanced Decarbonisation	2015	2060
NRTP 2022 Respond	2015	2060
NRTP 2022 Technology	2015	2060
NRTP 2022 Vehicle-led decarbonisation	2015	2060

2. Select Areas to make up the geographic region:

3. Select area type:

4. Select road type:

5. Select which area it serves:

Calculate the adjusted total growth figure

Results

Level	Area	Total Growth Figure
EU2006544	Arun 092	1.0505

Area	Current Assumptions			
	Base HH	Base Jobs	Future HH	Future Jobs
Arun 003 (E02006544)	4404	4372	4682	4521

HighgateTransportation

Select Type of Calculation: ☐ Production/Attraction ☐ Origin/Destination

Select date base:

☒ Growth factors (2011 Data/2019 Data)
☐ Future Year (2031) - Base Year (2019)
☐ Base year data (2019)
☐ Future year data (2031)

Estimated results indicate that there is a lower level of confidence in data presented at the zonal level than when aggregated to higher geographical levels.

Select time period:

Weekday AM peak period (0700 - 0900)

Trip end type:

☒ Production/Attraction
☐ Origin/Destination

Area/Description:

Level	Name	Origin	Destination
ED2000544	Arun 003	1.0778	1.0794

Results

2011 - 2031 Growth Calculations

Scenario: Core Base Year: 2015 Future Year: 2031

Time Period: Weekday AM peak period (0700 - 0900)

1. Select RTM Dataset:

RTM Dataset Description	From	To
MRTP 2022 Core	2015	2060
MRTP 2022 Behavioural Change	2015	2060
MRTP 2022 High Economy	2015	2060
MRTP 2022 Low Economy	2015	2060
MRTP 2022 Mode-balanced Decarbonisation	2015	2060
MRTP 2022 Regional	2015	2060
MRTP 2022 Technology	2015	2060
MRTP 2022 Vertically Decarbonisation	2015	2060

2. Select Areas to make up the geographic region:

3. Select area type:

4. Select road type:

5. Select which area it serves:

Calculate the adjusted local growth figure

Results

Level	Name	Local Growth Figure
ED2000544	Arun 003	1.0792

HighgateTransportation

Select Type of Calculation: ☐ Production/Attraction ☐ Origin/Destination

Select date base:

☒ Growth factors (2011 Data/2019 Data)
☐ Future Year (2031) - Base Year (2019)
☐ Base year data (2019)
☐ Future year data (2031)

Estimated results indicate that there is a lower level of confidence in data presented at the zonal level than when aggregated to higher geographical levels.

Select time period:

Weekday AM peak period (0700 - 0900)

Trip end type:

☒ Production/Attraction
☐ Origin/Destination

Area/Description:

Area:

Year:

Origin:

Destination:

Results

2011 - 2031 Growth Calculations

Scenario: Core Base Year: 2015 Future Year: 2031

Time Period: Weekday AM peak period (0700 - 0900)

1. Select RTM Dataset:

RTM Dataset Description	From	To
MRTP 2022 Core	2015	2060
MRTP 2022 Behavioural Change	2015	2060
MRTP 2022 High Economy	2015	2060
MRTP 2022 Low Economy	2015	2060
MRTP 2022 Mode-balanced Decarbonisation	2015	2060
MRTP 2022 Regional	2015	2060
MRTP 2022 Technology	2015	2060
MRTP 2022 Vertically Decarbonisation	2015	2060

2. Select Areas to make up the geographic region:

☒ Area: 001 (E0200544)

3. Select area type:

☐ Urban
☐ Rural
☐ N/A

4. Select road type:

☐ Motorway
☐ Trunk
☒ A Road
☐ Minor
☐ A2

5. Select which area it serves:

☒ Region
☐ England

Calculate the adjusted local growth figure

Results

Level	Area	Local Growth Figure
E0200544	Arun 003	1.0792

Planning Tools

Select type of calculation
☒ Data collection
☐ Trip end selection
☐ The entire time period selected

Select time period
Weekday PM peak period (1600 - 1800)

Trip end type
☒ Production/Attraction
☐ Origin/Destination

Select date from
☒ Growth factors (2021 Data/2019 Data)
☐ Future Year (2021) - Base Year (2019)
☐ Base year data (2019)
☐ Future year data (2021)

*Modelled results indicate that there is a higher level of confidence in data presented at the zonal level than where aggregated to higher geographical levels

Work / Lock City Driver Run Message Run Results Load Unload Message Unmodel Message

Area Description	Name	Crown	All Purpose	Destruction
E0200674	Arun G03	1.0778		1.0777

11% traffic growth 11 stations

Scenario Core Base Year: 2019 Future Year: 2021
Time Period: Weekday PM peak period (1600 - 1800)

1. Select RTSS Database:

RTSS Database Description	From	To
NRTP 2022 Core	2015	2050
NRTP 2022 Behavioural Change	2015	2050
NRTP 2022 High Economy	2015	2050
NRTP 2022 Low Economy	2015	2050
NRTP 2022 Medium-Led Decarbonisation	2015	2050
NRTP 2022 Regional	2015	2050
NRTP 2022 Technology	2015	2050
NRTP 2022 Vehicle-led Decarbonisation	2015	2050

2. Select Areas to make up the geographic regions

3. Select area type:

4. Select road type:

5. Select which area it serves:

Calculate the anticipated fast growth figure

Results

Level	Area	Fast Growth Figure
E0200674	Arun G03	1.0502

Area	Current Assumptions			
	Base HH	Base Jobs	Future HH	Future Jobs
Arun 003 (E02006544)	4404	4372	4784	4562

TEMPro calculator

Select type of comparison:

- Local selection:
- Trip end selection:
- Trip end by time period selection:

Select base period:

Weekday AM peak period (0700 - 0900)

Time and place

- Production/Attraction
- Origin/Destination

Select date base

- Growth factors (2024 Data/2023 Data)
- Future year (2024) - Base year (2023)
- Base year data (2023)
- Future year data (2024)

Finalised results indicate that there is a lower level of confidence in data presented at the local level than when aggregated to higher geographical levels.

Results

Mode: ☒ Car Driver ☐ Car Passenger ☐ Bus/Coach ☐ Rail/Underground ☐ Combined Modes

Area Description	Name	Origin	Destination
Level	Arun 003	1.0077	1.0089
E02006544	Arun 003		

TEMPro growth Calculations

Scenario: Core Base Year: 2023 Future Year: 2024

Time Period: Weekday AM peak period (0700 - 0900)

1. Select GTM Database:

GTM Database Description	From	To
NRTP 2022 Core	2015	2060
NRTP 2022 Behavioural Change	2015	2060
NRTP 2022 High Economy	2015	2060
NRTP 2022 Low Economy	2015	2060
NRTP 2022 Mode-balanced Decarbonisation	2015	2060
NRTP 2022 Regional	2015	2060
NRTP 2022 Technology	2015	2060
NRTP 2022 Vehicle-led Decarbonisation	2015	2060

2. Select areas to make up the geographic region:

3. Select area type:

4. Select road type:

5. Select which area it covers:

Calculate the adjusted local growth figure

Results

Level	Name	Local Growth Figure
E02006544	Arun 003	1.0057

TEMPro - react form

Select Type of Calculation:
 Data selection:
 Time period selection:
 Time period for time period selection:

Select time period:
 Weekday PM peak period (1600 - 1855):

Select date type:
 Growth factors (2024 Data) (2023 Data):
 Future Year (2024) - Base Year (2023):
 Base year date (2023):
 Future year date (2024):

*Refined results indicate that there is a lower level of confidence in data presented at the local level than when aggregated to higher geographical levels

Work: Core: Car Driver: Car/Tramcycle: Bus/Coach: Suburban/semi-rural: Commercial/Industrial:

Area Destination:
 Level: None:
 ED2006544: Arun 003

All Purposes:
 Origin: 1,0071:
 Destination: 1,0074

Input and Output:
 Production/Attraction:
 Origin/Destination:

TEMPro - Growth Calculations

Scenario: Core:
 Base Year: 2023:
 Future Year: 2024:
 Time Period: Weekday PM peak period (1600 - 1855):

1. Select NFM Dataset:

NTM Dataset Description	From	To
NRTF 2022 Core	2015	2060
NRTF 2022 Behavioural Change	2015	2060
NRTF 2022 High Economy	2015	2060
NRTF 2022 Low Economy	2015	2060
NRTF 2022 Mode-balanced Decarbonisation	2015	2060
NRTF 2022 Regional	2015	2060
NRTF 2022 Technology	2015	2060
NRTF 2022 Vehicle-led Decarbonisation	2015	2060

2. Select Areas to make up the geographic region:
☒ Arun 003 (ED2006544):

3. Select area type:
☒ Urban:
☐ Rural:
☐ All:

4. Select road type:
☒ Motorway:
☐ Trunk:
☐ A Road:
☐ Minor:
☐ All:

5. Select which area it serves:
☒ Region:
☐ England:

Calculate the adjusted local growth figure

Results

Level	Area	Local Growth Figure
ED2006544	Arun 003	1.0036

2401 – TEMPro Growth Factors

HighgateTransportation

	Current Assumptions			
Area	Base HH	Base Jobs	Future HH	Future Jobs
Arun 003 (E02006544)	4505	4440	4542	4457

TEMPro calculator

Select Type of Comparison:

- ☒ Data selection
- ☐ Trip end selection
- ☐ Trip end by area/area selection

Select time period:

Weekday AM peak period (0700 - 0959)

Select road type:

- ☒ Production/Attraction
- ☐ Origin/Destination

Select data from:

- ☒ Growth factors (2029 Data/2023 Data)
- ☐ Future Year (2028) - Base Year (2023)
- ☐ Base year data (2023)
- ☐ Future year data (2028)

*Statistical results indicate that there is a lower level of confidence in data presented at the local level than when aggregated to higher geographical levels

Results

Area/Description	Level	Area	Origin	Destination
			0.0000	1.0000
			1.0000	1.0000

TEMPro Growth Calculators

Scenario Name: Base Year: 2023 Future Year: 2028

Time Period: Weekday AM peak period (0700 - 0959)

1. Select NIM Dataset:

NIM Dataset Description	From	To
NRTM 2022 Core	2015	2060
NRTM 2022 Behavioural Change	2015	2060
NRTM 2022 High Economy	2015	2060
NRTM 2022 Low Economy	2015	2060
NRTM 2022 Mode-balanced Decarbonisation	2015	2060
NRTM 2022 Regional	2015	2060
NRTM 2022 Technology	2015	2060
NRTM 2022 Vehicle-led Decarbonisation	2015	2060

2. Select Areas for making up the geographic region:

3. Select area type:

4. Select road type:

5. Select which area it serves:

Calculate the adjusted local growth figure

Results

Level	Area	Local Growth Figure
002005944	Arun 002	1.0375

[illegible]

Area	Current Assumptions			
	Base HH	Base Jobs	Future HH	Future Jobs
Arum 003 (E02006544)	4505	4440	4662	4521

NTMPro main form

Select Type of Comparison

Between windows

Time and subperiod

Aggregated by base period selection

Select base period

Weekday AM peak period (0700 - 0900)

Select road type

Production/Attraction

Origin/Destination

Select data type

Growth factors (2011 Data/2013 Data)

Future Year (2011) - Base Year (2013)

Base year date (2013)

Future year date (2011)

*Holdback results indicate that there is a lower level of confidence in data presented at the road level than when aggregated to higher geographical levels

Results

Level: Area Description

Level	Name	Origin	AS Popces	Destination
EGG00344	Arun CG3	1,0458		1,0480

NTMPro Growth Factors

Scenario Core

Time Period: Weekday AM peak period (0700 - 0900)

Base Year: 2013

Future Year: 2031

1. Select RTM Dataset:

RTM Dataset Description	From	To
NRTP 2022 Core	2015	2040
NRTP 2022 Behavioural Change	2015	2040
NRTP 2022 High Economy	2015	2040
NRTP 2022 Low Economy	2015	2040
NRTP 2022 Mode-balanced Decarbonisation	2015	2040
NRTP 2022 Regional	2015	2040
NRTP 2022 Technology	2015	2040
NRTP 2022 Vehicle-led Decarbonisation	2015	2040

2. Select Areas to make up the geographic region:

3. Select area type:

4. Select road type:

5. Select which area it serves:

Calculate the adjusted local growth figure

Results

Level	Area	Local Growth Figure
EGG00344	Arun CG3	1.0555

[illegible]

Area	Current Assumptions			
	Base HH	Base Jobs	Future HH	Future Jobs
Arun 003 (E02006544)	4505	4440	4704	4562

Appendix 17

Junction Modelling Outputs

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.2.1013 © Copyright TRL Limited, 2019
For sales and distribution information, program advice and maintenance, contact TRL:
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: Site Access.j9

Path: C:\Users\JosephTucker\OneDrive - Highgate Transportation\Shared Documents - HTP\2400 - Projects\2401 - Woodgate QW3\Modelling\Junctions 9\Site Access

Report generation date: 05/07/2024 10:21:04

»2024 Base + Committed Development, AM
 »2024 Base + Committed Development, PM
 »2024 Base + Proposed Development, AM
 »2024 Base + Proposed Development, PM
 »2024 Base + Committed Development + Proposed Development, AM
 »2024 Base + Committed Development + Proposed Development, PM
 »2028 Base + Committed Development, AM
 »2028 Base + Committed Development, PM
 »2028 Base + Proposed Development, AM
 »2028 Base + Proposed Development, PM
 »2028 Base + Committed Development + Proposed Development, AM
 »2028 Base + Committed Development + Proposed Development, PM
 »2031 Base + Committed Development, AM
 »2031 Base + Committed Development, PM
 »2031 Base + Proposed Development, AM
 »2031 Base + Proposed Development, PM
 »2031 Base + Committed Development + Proposed Development, AM
 »2031 Base + Committed Development + Proposed Development, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
2024 Base + Committed Development								
Stream B-C	0.1	7.84	0.09	A	0.0	7.28	0.03	A
Stream B-A	0.2	15.36	0.15	C	0.1	15.57	0.10	C
Stream C-AB	0.0	6.01	0.03	A	0.1	6.09	0.08	A
2024 Base + Proposed Development								
Stream B-C	0.1	7.35	0.05	A	0.0	6.93	0.01	A
Stream B-A	0.1	13.34	0.09	B	0.0	13.31	0.05	B
Stream C-AB	0.0	5.84	0.02	A	0.0	5.66	0.04	A
2024 Base + Committed Development + Proposed Development								
Stream B-C	0.2	8.66	0.15	A	0.1	7.55	0.05	A
Stream B-A	0.3	17.56	0.25	C	0.2	17.25	0.16	C
Stream C-AB	0.0	6.15	0.04	A	0.1	6.38	0.12	A
2028 Base + Committed Development								
Stream B-C	0.1	7.94	0.09	A	0.0	7.35	0.03	A
Stream B-A	0.2	15.90	0.16	C	0.1	16.21	0.11	C
Stream C-AB	0.0	6.08	0.03	A	0.1	6.15	0.08	A
2028 Base + Proposed Development								
Stream B-C	0.1	7.44	0.05	A	0.0	6.99	0.01	A
Stream B-A	0.1	13.75	0.09	B	0.1	13.77	0.05	B
Stream C-AB	0.0	5.90	0.02	A	0.0	5.71	0.04	A
2028 Base + Committed Development + Proposed Development								
Stream B-C	0.2	8.79	0.15	A	0.1	7.63	0.05	A
Stream B-A	0.3	18.27	0.26	C	0.2	18.04	0.17	C
Stream C-AB	0.0	6.22	0.04	A	0.1	6.45	0.12	A
2031 Base + Committed Development								
Stream B-C	0.1	8.03	0.09	A	0.0	7.41	0.04	A
Stream B-A	0.2	16.38	0.16	C	0.1	16.78	0.11	C

Stream C-AB	0.0	6.14	0.03	A	0.1	6.19	0.08	A
2031 Base + Proposed Development								
Stream B-C	0.1	7.51	0.05	A	0.0	7.04	0.01	A
Stream B-A	0.1	14.11	0.09	B	0.1	14.19	0.05	B
Stream C-AB	0.0	5.95	0.02	A	0.0	5.75	0.04	A
2031 Base + Committed Development + Proposed Development								
Stream B-C	0.2	8.91	0.15	A	0.1	7.70	0.05	A
Stream B-A	0.4	18.92	0.26	C	0.2	18.75	0.17	C
Stream C-AB	0.0	6.28	0.04	A	0.1	6.50	0.12	A

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

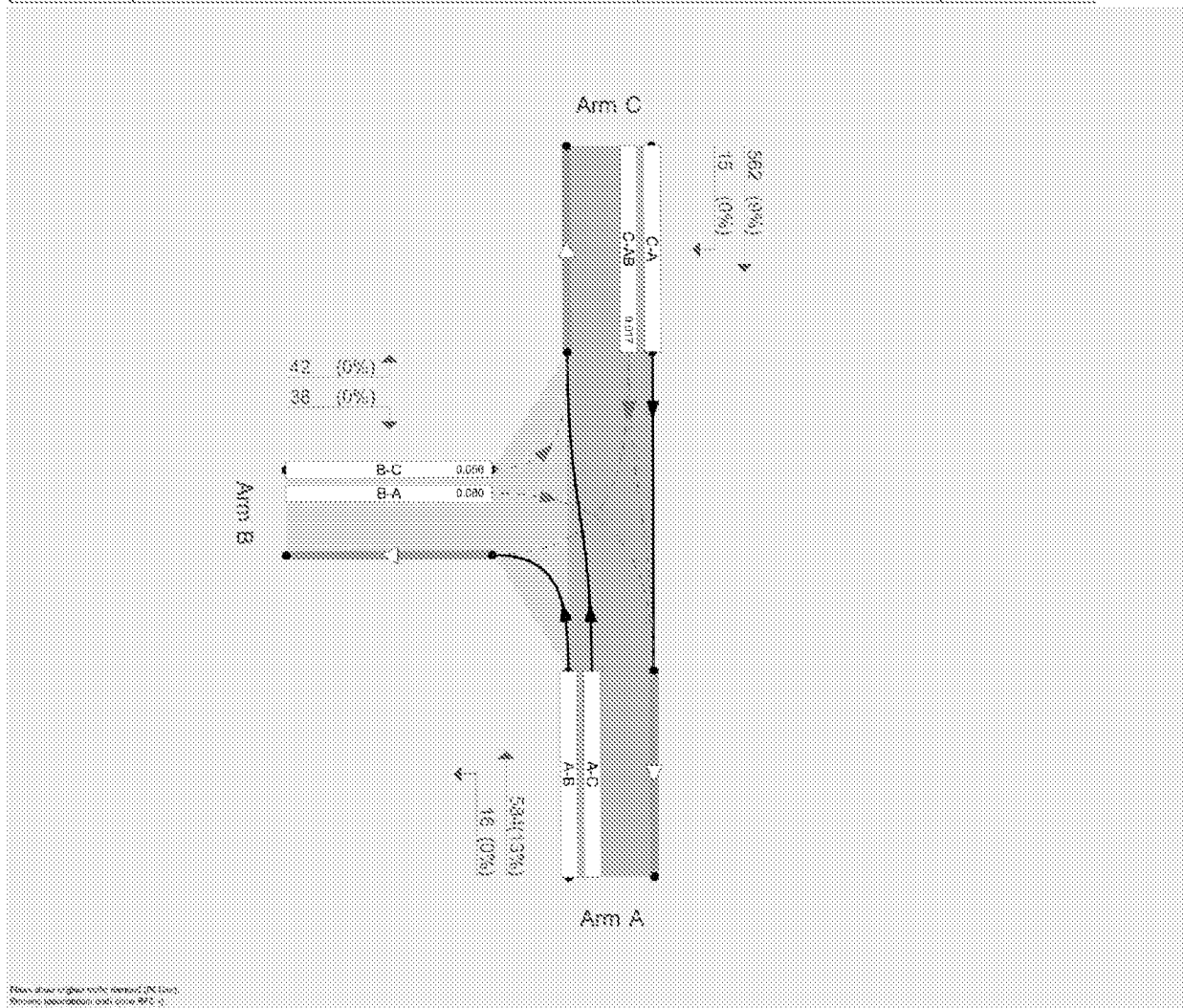
File summary

File Description

Title	
Location	
Site number	
Date	11/01/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AzureAD\Brad
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 Base + Committed Development	AM	ONE HOUR	07:45	09:15	15	✓
D4	2024 Base + Committed Development	PM	ONE HOUR	15:45	17:15	15	✓
D5	2024 Base + Proposed Development	AM	ONE HOUR	07:45	09:15	15	✓
D6	2024 Base + Proposed Development	PM	ONE HOUR	15:45	17:15	15	✓
D7	2024 Base + Committed Development + Proposed Development	AM	ONE HOUR	07:45	09:15	15	✓
D8	2024 Base + Committed Development + Proposed Development	PM	ONE HOUR	15:45	17:15	15	✓
D11	2028 Base + Committed Development	AM	ONE HOUR	07:45	09:15	15	✓
D12	2028 Base + Committed Development	PM	ONE HOUR	15:45	17:15	15	✓
D13	2028 Base + Proposed Development	AM	ONE HOUR	07:45	09:15	15	✓
D14	2028 Base + Proposed Development	PM	ONE HOUR	15:45	17:15	15	✓
D15	2028 Base + Committed Development + Proposed Development	AM	ONE HOUR	07:45	09:15	15	✓
D16	2028 Base + Committed Development + Proposed Development	PM	ONE HOUR	15:45	17:15	15	✓
D19	2031 Base + Committed Development	AM	ONE HOUR	07:45	09:15	15	✓
D20	2031 Base + Committed Development	PM	ONE HOUR	15:45	17:15	15	✓
D21	2031 Base + Proposed Development	AM	ONE HOUR	07:45	09:15	15	✓
D22	2031 Base + Proposed Development	PM	ONE HOUR	15:45	17:15	15	✓
D23	2031 Base + Committed Development + Proposed Development	AM	ONE HOUR	07:45	09:15	15	✓
D24	2031 Base + Committed Development + Proposed Development	PM	ONE HOUR	15:45	17:15	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2024 Base + Committed Development, AM

Data Errors and Warnings

No errors or warnings.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A29 (S)		Major
B	Site Access Road		Minor
C	A29 (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.50		✓	3.50	250.0	✓	3.50

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	8.50	4.90	3.65	3.65		2.00	16	16

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	529	0.094	0.238	0.150	0.341
B-C	698	0.105	0.265	-	-
C-B	820	0.311	0.311	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2024 Base + Committed Development	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	600	100.000

B	ONE HOUR	✓	80	100.000
C	ONE HOUR	✓	577	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
	A	B	C	
From	A	0	16	584
	B	38	0	42
	C	562	15	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	13
	B	0	0	0
	C	9	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.09	7.84	0.1	A	39	58
B-A	0.15	15.36	0.2	C	35	52
C-AB	0.03	6.01	0.0	A	14	21
C-A					516	774
A-B					15	22
A-C					536	804

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	32	8	569	0.056	31	0.0	0.1	6.693	A
B-A	29	7	356	0.080	28	0.0	0.1	10.969	B
C-AB	11	3	680	0.017	11	0.0	0.0	5.383	A
C-A	423	106			423				
A-B	12	3			12				
A-C	440	110			440				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	38	9	543	0.070	38	0.1	0.1	7.130	A
B-A	34	9	323	0.106	34	0.1	0.1	12.470	B
C-AB	13	3	653	0.021	13	0.0	0.0	5.631	A
C-A	505	126			505				
A-B	14	4			14				
A-C	525	131			525				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	46	12	506	0.091	46	0.1	0.1	7.833	A
B-A	42	10	276	0.152	42	0.1	0.2	15.337	C
C-AB	17	4	615	0.027	16	0.0	0.0	6.014	A
C-A	619	155			619				
A-B	18	4			18				

A-C	643	161			643				
-----	-----	-----	--	--	-----	--	--	--	--

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	46	12	505	0.092	46	0.1	0.1	7.841	A
B-A	42	10	276	0.151	42	0.2	0.2	15.360	B
C-AB	17	4	615	0.027	17	0.0	0.0	6.014	A
C-A	619	155			619				
A-B	18	4			18				
A-C	643	161			643				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	38	9	542	0.070	38	0.1	0.1	7.139	A
B-A	34	9	323	0.106	34	0.2	0.1	12.493	B
C-AB	13	3	653	0.021	14	0.0	0.0	5.633	A
C-A	505	126			505				
A-B	14	4			14				
A-C	525	131			525				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	32	8	568	0.056	32	0.1	0.1	6.710	A
B-A	29	7	356	0.080	29	0.1	0.1	10.993	B
C-AB	11	3	680	0.017	11	0.0	0.0	5.383	A
C-A	423	106			423				
A-B	12	3			12				
A-C	440	110			440				

2024 Base + Committed Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2024 Base + Committed Development	PM	ONE HOUR	15:45	17:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	519	100.000
B		ONE HOUR	✓	40	100.000
C		ONE HOUR	✓	863	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A	B	C
From	A	0	31	488
	B	24	0	16
	C	816	47	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
From	A	0	0	10
	B	0	0	0
	C	11	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.03	7.28	0.0	A	15	22
B-A	0.10	15.57	0.1	C	22	33
C-AB	0.08	6.09	0.1	A	43	65
C-A					749	1123

A-B					28	43
A-C					448	672

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	3	563	0.021	12	0.0	0.0	6.537	A
B-A	18	5	352	0.051	18	0.0	0.1	10.775	B
C-AB	35	9	699	0.051	35	0.0	0.1	5.422	A
C-A	614	154			614				
A-B	23	6			23				
A-C	367	92			367				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14	4	542	0.027	14	0.0	0.0	6.824	A
B-A	22	5	312	0.069	21	0.1	0.1	12.380	B
C-AB	42	11	675	0.063	42	0.1	0.1	5.685	A
C-A	734	183			734				
A-B	28	7			28				
A-C	439	110			439				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	18	4	512	0.034	18	0.0	0.0	7.276	A
B-A	26	7	258	0.103	26	0.1	0.1	15.548	C
C-AB	52	13	643	0.081	52	0.1	0.1	6.089	A
C-A	898	225			898				
A-B	34	9			34				
A-C	537	134			537				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	18	4	512	0.034	18	0.0	0.0	7.278	A
B-A	26	7	258	0.103	26	0.1	0.1	15.570	C
C-AB	52	13	643	0.081	52	0.1	0.1	6.089	A
C-A	898	225			898				
A-B	34	9			34				
A-C	537	134			537				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14	4	542	0.027	14	0.0	0.0	6.828	A
B-A	22	5	312	0.069	22	0.1	0.1	12.396	B
C-AB	42	11	675	0.063	42	0.1	0.1	5.686	A
C-A	734	183			734				
A-B	28	7			28				
A-C	439	110			439				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	3	562	0.021	12	0.0	0.0	6.541	A
B-A	18	5	352	0.051	18	0.1	0.1	10.795	B
C-AB	35	9	699	0.051	35	0.1	0.1	5.425	A
C-A	614	154			614				
A-B	23	6			23				
A-C	367	92			367				

2024 Base + Proposed Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2024 Base + Proposed Development	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	566	100.000
B		ONE HOUR	✓	47	100.000
C		ONE HOUR	✓	536	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	9	557
	B	24	0	23
	C	527	9	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	14
	B	0	0	0
	C	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.05	7.35	0.1	A	21	32
B-A	0.09	13.34	0.1	B	22	33
C-AB	0.02	5.84	0.0	A	8	12
C-A					484	725

A-B				8	12
A-C				511	767

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	4	571	0.030	17	0.0	0.0	6.498	A
B-A	18	5	372	0.049	18	0.0	0.1	10.149	B
C-AB	7	2	688	0.010	7	0.0	0.0	5.284	A
C-A	397	99			397				
A-B	7	2			7				
A-C	419	105			419				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	21	5	548	0.038	21	0.0	0.0	6.831	A
B-A	22	5	341	0.063	22	0.1	0.1	11.282	B
C-AB	8	2	662	0.012	8	0.0	0.0	5.503	A
C-A	474	118			474				
A-B	8	2			8				
A-C	501	125			501				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	25	6	515	0.049	25	0.0	0.1	7.350	A
B-A	26	7	296	0.089	26	0.1	0.1	13.330	B
C-AB	10	2	627	0.016	10	0.0	0.0	5.836	A
C-A	580	145			580				
A-B	10	2			10				
A-C	613	153			613				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	25	6	515	0.049	25	0.1	0.1	7.352	A
B-A	26	7	296	0.089	26	0.1	0.1	13.337	B
C-AB	10	2	627	0.016	10	0.0	0.0	5.836	A
C-A	580	145			580				
A-B	10	2			10				
A-C	613	153			613				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	21	5	547	0.038	21	0.1	0.0	6.836	A
B-A	22	5	341	0.063	22	0.1	0.1	11.292	B
C-AB	8	2	662	0.012	8	0.0	0.0	5.505	A
C-A	474	118			474				
A-B	8	2			8				
A-C	501	125			501				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	4	571	0.030	17	0.0	0.0	6.509	A
B-A	18	5	373	0.048	18	0.1	0.1	10.159	B
C-AB	7	2	688	0.010	7	0.0	0.0	5.286	A
C-A	397	99			397				
A-B	7	2			7				
A-C	419	105			419				

2024 Base + Proposed Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2024 Base + Proposed Development	PM	ONE HOUR	15:45	17:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	471	100.000
B		ONE HOUR	✓	19	100.000
C		ONE HOUR	✓	812	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	13	458
	B	12	0	7
	C	791	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	10
	B	0	0	0
	C	12	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.01	6.93	0.0	A	6	10
B-A	0.05	13.31	0.0	B	11	17
C-AB	0.04	5.66	0.0	A	19	29
C-A					726	1089

A-B					12	18
A-C					420	630

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	1	571	0.009	5	0.0	0.0	6.366	A
B-A	9	2	370	0.024	9	0.0	0.0	9.958	A
C-AB	16	4	710	0.022	16	0.0	0.0	5.184	A
C-A	596	149			596				
A-B	10	2			10				
A-C	345	86			345				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6	2	553	0.011	6	0.0	0.0	6.588	A
B-A	11	3	334	0.032	11	0.0	0.0	11.134	B
C-AB	19	5	689	0.027	19	0.0	0.0	5.373	A
C-A	711	178			711				
A-B	12	3			12				
A-C	412	103			412				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	2	527	0.015	8	0.0	0.0	6.926	A
B-A	13	3	284	0.047	13	0.0	0.0	13.301	B
C-AB	23	6	659	0.035	23	0.0	0.0	5.659	A
C-A	871	218			871				
A-B	14	4			14				
A-C	504	126			504				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	2	527	0.015	8	0.0	0.0	6.927	A
B-A	13	3	284	0.047	13	0.0	0.0	13.306	B
C-AB	23	6	659	0.035	23	0.0	0.0	5.659	A
C-A	871	218			871				
A-B	14	4			14				
A-C	504	126			504				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6	2	552	0.011	6	0.0	0.0	6.593	A
B-A	11	3	334	0.032	11	0.0	0.0	11.141	B
C-AB	19	5	689	0.027	19	0.0	0.0	5.374	A
C-A	711	178			711				
A-B	12	3			12				
A-C	412	103			412				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	1	571	0.009	5	0.0	0.0	6.370	A
B-A	9	2	370	0.024	9	0.0	0.0	9.963	A
C-AB	16	4	710	0.022	16	0.0	0.0	5.186	A
C-A	596	149			596				
A-B	10	2			10				
A-C	345	86			345				

2024 Base + Committed Development + Proposed Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2024 Base + Committed Development + Proposed Development	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	609	100.000
B		ONE HOUR	✓	127	100.000
C		ONE HOUR	✓	586	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
From		A	B	C
	A	0	25	584
	B	62	0	65
	C	562	24	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A	B	C
	A	0	0	13
	B	0	0	0
	C	9	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.15	8.66	0.2	A	60	89

B-A	0.25	17.56	0.3	C	57	85
C-AB	0.04	6.15	0.0	A	22	33
C-A					516	774
A-B					23	34
A-C					536	804

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	49	12	558	0.088	49	0.0	0.1	7.066	A
B-A	47	12	355	0.131	46	0.0	0.1	11.628	B
C-AB	18	5	678	0.027	18	0.0	0.0	5.455	A
C-A	423	106			423				
A-B	19	5			19				
A-C	440	110			440				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	15	529	0.110	58	0.1	0.1	7.645	A
B-A	56	14	321	0.174	56	0.1	0.2	13.558	B
C-AB	22	5	650	0.033	22	0.0	0.0	5.726	A
C-A	505	126			505				
A-B	22	6			22				
A-C	525	131			525				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	72	18	488	0.147	71	0.1	0.2	8.644	A
B-A	68	17	273	0.250	68	0.2	0.3	17.504	C
C-AB	26	7	612	0.043	26	0.0	0.0	6.147	A
C-A	619	155			619				
A-B	28	7			28				
A-C	643	161			643				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	72	18	487	0.147	72	0.2	0.2	8.660	A
B-A	68	17	273	0.250	68	0.3	0.3	17.558	C
C-AB	26	7	612	0.043	26	0.0	0.0	6.147	A
C-A	619	155			619				
A-B	28	7			28				
A-C	643	161			643				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	15	528	0.111	59	0.2	0.1	7.666	A
B-A	56	14	321	0.174	56	0.3	0.2	13.620	B
C-AB	22	5	650	0.033	22	0.0	0.0	5.727	A
C-A	505	126			505				
A-B	22	6			22				
A-C	525	131			525				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	49	12	557	0.088	49	0.1	0.1	7.091	A
B-A	47	12	355	0.131	47	0.2	0.2	11.680	B
C-AB	18	5	678	0.027	18	0.0	0.0	5.458	A
C-A	423	106			423				
A-B	19	5			19				
A-C	440	110			440				

2024 Base + Committed Development + Proposed Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.83	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2024 Base + Committed Development + Proposed Development	PM	ONE HOUR	15:45	17:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	532	100.000
B		ONE HOUR	✓	59	100.000
C		ONE HOUR	✓	884	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	44	488
	B	36	0	23
	C	816	68	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	10
	B	0	0	0
	C	11	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.05	7.55	0.1	A	21	32

B-A	0.16	17.25	0.2	C	33	50
C-AB	0.12	6.38	0.1	A	62	94
C-A					749	1123
A-B					40	61
A-C					448	672

Main Results for each time segment

16:45 - 16:55

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	4	557	0.031	17	0.0	0.0	6.667	A
B-A	27	7	346	0.078	27	0.0	0.1	11.278	B
C-AB	51	13	696	0.074	51	0.0	0.1	5.578	A
C-A	614	154			614				
A-B	33	8			33				
A-C	367	92			367				

16:55 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	21	5	535	0.039	21	0.0	0.0	7.003	A
B-A	32	8	305	0.106	32	0.1	0.1	13.202	B
C-AB	61	15	672	0.091	61	0.1	0.1	5.894	A
C-A	734	183			734				
A-B	40	10			40				
A-C	439	110			439				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	25	6	502	0.050	25	0.0	0.1	7.546	A
B-A	40	10	248	0.160	39	0.1	0.2	17.210	C
C-AB	75	19	639	0.117	75	0.1	0.1	6.381	A
C-A	898	225			898				
A-B	48	12			48				
A-C	537	134			537				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	25	6	502	0.050	25	0.1	0.1	7.550	A
B-A	40	10	248	0.160	40	0.2	0.2	17.254	C
C-AB	75	19	639	0.117	75	0.1	0.1	6.384	A
C-A	898	225			898				
A-B	48	12			48				
A-C	537	134			537				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	21	5	534	0.039	21	0.1	0.0	7.009	A
B-A	32	8	305	0.106	33	0.2	0.1	13.243	B
C-AB	61	15	672	0.091	61	0.1	0.1	5.898	A
C-A	734	183			734				
A-B	40	10			40				
A-C	439	110			439				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	4	557	0.031	17	0.0	0.0	6.678	A
B-A	27	7	346	0.078	27	0.1	0.1	11.314	B
C-AB	51	13	696	0.074	51	0.1	0.1	5.586	A
C-A	614	154			614				
A-B	33	8			33				
A-C	367	92			367				

2028 Base + Committed Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2028 Base + Committed Development	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	619	100.000
B		ONE HOUR	✓	80	100.000
C		ONE HOUR	✓	595	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	16	603
	B	38	0	42
	C	580	15	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	13
	B	0	0	0
	C	9	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.09	7.94	0.1	A	39	58
B-A	0.16	15.90	0.2	C	35	52
C-AB	0.03	6.08	0.0	A	14	21
C-A					532	798

A-B				15	22
A-C				553	830

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	32	8	565	0.056	31	0.0	0.1	6.742	A
B-A	29	7	351	0.082	28	0.0	0.1	11.154	B
C-AB	11	3	676	0.017	11	0.0	0.0	5.419	A
C-A	437	109			437				
A-B	12	3			12				
A-C	454	113			454				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	38	9	538	0.070	38	0.1	0.1	7.197	A
B-A	34	9	316	0.108	34	0.1	0.1	12.757	B
C-AB	13	3	647	0.021	13	0.0	0.0	5.678	A
C-A	521	130			521				
A-B	14	4			14				
A-C	542	136			542				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	46	12	500	0.093	46	0.1	0.1	7.936	A
B-A	42	10	268	0.156	42	0.1	0.2	15.874	C
C-AB	17	4	609	0.027	16	0.0	0.0	6.080	A
C-A	639	160			639				
A-B	18	4			18				
A-C	664	166			664				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	46	12	499	0.093	46	0.1	0.1	7.944	A
B-A	42	10	268	0.156	42	0.2	0.2	15.900	C
C-AB	17	4	609	0.027	17	0.0	0.0	6.080	A
C-A	639	160			639				
A-B	18	4			18				
A-C	664	166			664				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	38	9	537	0.070	38	0.1	0.1	7.210	A
B-A	34	9	316	0.108	34	0.2	0.1	12.780	B
C-AB	13	3	647	0.021	14	0.0	0.0	5.681	A
C-A	521	130			521				
A-B	14	4			14				
A-C	542	136			542				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	32	8	564	0.056	32	0.1	0.1	6.760	A
B-A	29	7	351	0.082	29	0.1	0.1	11.179	B
C-AB	11	3	676	0.017	11	0.0	0.0	5.419	A
C-A	437	109			437				
A-B	12	3			12				
A-C	454	113			454				

2028 Base + Committed Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.54	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2028 Base + Committed Development	PM	ONE HOUR	15:45	17:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	535	100.000
B		ONE HOUR	✓	40	100.000
C		ONE HOUR	✓	890	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	31	504
	B	24	0	16
	C	843	47	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	10
	B	0	0	0
	C	11	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.03	7.35	0.0	A	15	22
B-A	0.11	16.21	0.1	C	22	33
C-AB	0.08	6.15	0.1	A	43	65
C-A					774	1160

A-B					28	43
A-C					462	694

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	3	560	0.022	12	0.0	0.0	6.574	A
B-A	18	5	346	0.052	18	0.0	0.1	10.979	B
C-AB	35	9	695	0.051	35	0.0	0.1	5.453	A
C-A	635	159			635				
A-B	23	6			23				
A-C	379	95			379				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14	4	538	0.027	14	0.0	0.0	6.873	A
B-A	22	5	305	0.071	21	0.1	0.1	12.701	B
C-AB	42	11	671	0.063	42	0.1	0.1	5.725	A
C-A	758	189			758				
A-B	28	7			28				
A-C	453	113			453				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	18	4	507	0.035	18	0.0	0.0	7.348	A
B-A	26	7	249	0.106	26	0.1	0.1	16.183	C
C-AB	52	13	637	0.081	52	0.1	0.1	6.146	A
C-A	928	232			928				
A-B	34	9			34				
A-C	555	139			555				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	18	4	507	0.035	18	0.0	0.0	7.350	A
B-A	26	7	249	0.106	26	0.1	0.1	16.207	C
C-AB	52	13	637	0.081	52	0.1	0.1	6.146	A
C-A	928	232			928				
A-B	34	9			34				
A-C	555	139			555				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14	4	538	0.027	14	0.0	0.0	6.880	A
B-A	22	5	305	0.071	22	0.1	0.1	12.724	B
C-AB	42	11	671	0.063	42	0.1	0.1	5.727	A
C-A	758	189			758				
A-B	28	7			28				
A-C	453	113			453				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	3	559	0.022	12	0.0	0.0	6.578	A
B-A	18	5	346	0.052	18	0.1	0.1	11.000	B
C-AB	35	9	695	0.051	35	0.1	0.1	5.458	A
C-A	635	159			635				
A-B	23	6			23				
A-C	379	95			379				

2028 Base + Proposed Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	2028 Base + Proposed Development	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	585	100.000
B		ONE HOUR	✓	47	100.000
C		ONE HOUR	✓	554	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	9	576
	B	24	0	23
	C	545	9	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	14
	B	0	0	0
	C	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.05	7.44	0.1	A	21	32
B-A	0.09	13.75	0.1	B	22	33
C-AB	0.02	5.90	0.0	A	8	12
C-A					500	750

A-B				8	12
A-C				529	793

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	4	567	0.031	17	0.0	0.0	6.542	A
B-A	18	5	367	0.049	18	0.0	0.1	10.311	B
C-AB	7	2	683	0.010	7	0.0	0.0	5.319	A
C-A	410	103			410				
A-B	7	2			7				
A-C	434	108			434				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	21	5	543	0.038	21	0.0	0.0	6.891	A
B-A	22	5	334	0.065	22	0.1	0.1	11.521	B
C-AB	8	2	657	0.012	8	0.0	0.0	5.548	A
C-A	490	122			490				
A-B	8	2			8				
A-C	518	129			518				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	25	6	509	0.050	25	0.0	0.1	7.436	A
B-A	26	7	288	0.092	26	0.1	0.1	13.741	B
C-AB	10	2	620	0.016	10	0.0	0.0	5.898	A
C-A	600	150			600				
A-B	10	2			10				
A-C	634	159			634				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	25	6	509	0.050	25	0.1	0.1	7.439	A
B-A	26	7	288	0.092	26	0.1	0.1	13.748	B
C-AB	10	2	620	0.016	10	0.0	0.0	5.898	A
C-A	600	150			600				
A-B	10	2			10				
A-C	634	159			634				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	21	5	543	0.038	21	0.1	0.0	6.899	A
B-A	22	5	334	0.065	22	0.1	0.1	11.530	B
C-AB	8	2	657	0.012	8	0.0	0.0	5.548	A
C-A	490	122			490				
A-B	8	2			8				
A-C	518	129			518				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	4	567	0.031	17	0.0	0.0	6.551	A
B-A	18	5	367	0.049	18	0.1	0.1	10.320	B
C-AB	7	2	683	0.010	7	0.0	0.0	5.319	A
C-A	410	103			410				
A-B	7	2			7				
A-C	434	108			434				

2028 Base + Proposed Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	2028 Base + Proposed Development	PM	ONE HOUR	15:45	17:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	487	100.000
B		ONE HOUR	✓	19	100.000
C		ONE HOUR	✓	839	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	13	474
	B	12	0	7
	C	818	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	10
	B	0	0	0
	C	12	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.01	6.99	0.0	A	6	10
B-A	0.05	13.77	0.1	B	11	17
C-AB	0.04	5.71	0.0	A	19	29
C-A					751	1126

A-B				12	18
A-C				435	652

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	1	568	0.009	5	0.0	0.0	6.400	A
B-A	9	2	364	0.025	9	0.0	0.0	10.133	B
C-AB	16	4	706	0.022	16	0.0	0.0	5.212	A
C-A	616	154			616				
A-B	10	2			10				
A-C	357	89			357				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6	2	549	0.011	6	0.0	0.0	6.633	A
B-A	11	3	327	0.033	11	0.0	0.0	11.397	B
C-AB	19	5	684	0.028	19	0.0	0.0	5.409	A
C-A	735	184			735				
A-B	12	3			12				
A-C	426	107			426				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	2	523	0.015	8	0.0	0.0	6.987	A
B-A	13	3	275	0.048	13	0.0	0.0	13.765	B
C-AB	23	6	654	0.035	23	0.0	0.0	5.708	A
C-A	901	225			901				
A-B	14	4			14				
A-C	522	130			522				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	2	523	0.015	8	0.0	0.0	6.989	A
B-A	13	3	275	0.048	13	0.0	0.1	13.770	B
C-AB	23	6	654	0.035	23	0.0	0.0	5.708	A
C-A	901	225			901				
A-B	14	4			14				
A-C	522	130			522				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6	2	549	0.011	6	0.0	0.0	6.638	A
B-A	11	3	327	0.033	11	0.1	0.0	11.404	B
C-AB	19	5	684	0.028	19	0.0	0.0	5.412	A
C-A	735	184			735				
A-B	12	3			12				
A-C	426	107			426				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	1	567	0.009	5	0.0	0.0	6.405	A
B-A	9	2	364	0.025	9	0.0	0.0	10.138	B
C-AB	16	4	706	0.022	16	0.0	0.0	5.212	A
C-A	616	154			616				
A-B	10	2			10				
A-C	357	89			357				

2028 Base + Committed Development + Proposed Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D15	2028 Base + Committed Development + Proposed Development	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	628	100.000
B		ONE HOUR	✓	127	100.000
C		ONE HOUR	✓	604	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	25	603
	B	62	0	65
	C	580	24	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	13
	B	0	0	0
	C	9	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.15	8.79	0.2	A	60	89

B-A	0.26	18.27	0.3	C	57	85
C-AB	0.04	6.22	0.0	A	22	33
C-A					532	798
A-B					23	34
A-C					553	830

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	49	12	554	0.088	49	0.0	0.1	7.121	A
B-A	47	12	350	0.134	46	0.0	0.2	11.835	B
C-AB	18	5	673	0.027	18	0.0	0.0	5.492	A
C-A	437	109			437				
A-B	19	5			19				
A-C	454	113			454				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	15	524	0.111	58	0.1	0.1	7.725	A
B-A	56	14	314	0.177	55	0.2	0.2	13.900	B
C-AB	22	5	645	0.033	22	0.0	0.0	5.775	A
C-A	521	130			521				
A-B	22	6			22				
A-C	542	136			542				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	72	18	481	0.149	71	0.1	0.2	8.777	A
B-A	68	17	265	0.257	68	0.2	0.3	18.194	C
C-AB	26	7	605	0.044	26	0.0	0.0	6.216	A
C-A	639	160			639				
A-B	28	7			28				
A-C	664	166			664				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	72	18	481	0.149	72	0.2	0.2	8.794	A
B-A	68	17	265	0.257	68	0.3	0.3	18.271	C
C-AB	26	7	605	0.044	26	0.0	0.0	6.216	A
C-A	639	160			639				
A-B	28	7			28				
A-C	664	166			664				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	15	523	0.112	59	0.2	0.1	7.749	A
B-A	56	14	314	0.177	56	0.3	0.2	13.965	B
C-AB	22	5	645	0.033	22	0.0	0.0	5.778	A
C-A	521	130			521				
A-B	22	6			22				
A-C	542	136			542				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	49	12	553	0.089	49	0.1	0.1	7.147	A
B-A	47	12	350	0.133	47	0.2	0.2	11.892	B
C-AB	18	5	673	0.027	18	0.0	0.0	5.495	A
C-A	437	109			437				
A-B	19	5			19				
A-C	454	113			454				

2028 Base + Committed Development + Proposed Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.83	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	2028 Base + Committed Development + Proposed Development	PM	ONE HOUR	15:45	17:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	548	100.000
B		ONE HOUR	✓	59	100.000
C		ONE HOUR	✓	911	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
From		A	B	C
	A	0	44	504
	B	36	0	23
	C	843	68	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A	B	C
	A	0	0	10
	B	0	0	0
	C	11	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.05	7.63	0.1	A	21	32

B-A	0.17	18.04	0.2	C	33	50
C-AB	0.12	6.45	0.1	A	62	94
C-A					774	1160
A-B					40	61
A-C					462	694

Main Results for each time segment

16:45 - 16:55

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	4	554	0.031	17	0.0	0.0	6.707	A
B-A	27	7	339	0.080	27	0.0	0.1	11.500	B
C-AB	51	13	692	0.074	51	0.0	0.1	5.611	A
C-A	635	159			635				
A-B	33	8			33				
A-C	379	95			379				

16:55 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	21	5	531	0.039	21	0.0	0.0	7.056	A
B-A	32	8	297	0.109	32	0.1	0.1	13.572	B
C-AB	61	15	667	0.092	61	0.1	0.1	5.937	A
C-A	758	189			758				
A-B	40	10			40				
A-C	453	113			453				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	25	6	497	0.051	25	0.0	0.1	7.627	A
B-A	40	10	239	0.166	39	0.1	0.2	17.989	C
C-AB	75	19	633	0.118	75	0.1	0.1	6.444	A
C-A	928	232			928				
A-B	48	12			48				
A-C	555	139			555				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	25	6	497	0.051	25	0.1	0.1	7.632	A
B-A	40	10	239	0.166	40	0.2	0.2	18.040	C
C-AB	75	19	633	0.118	75	0.1	0.1	6.446	A
C-A	928	232			928				
A-B	48	12			48				
A-C	555	139			555				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	21	5	530	0.039	21	0.1	0.0	7.066	A
B-A	32	8	297	0.109	33	0.2	0.1	13.617	B
C-AB	61	15	667	0.092	61	0.1	0.1	5.942	A
C-A	758	189			758				
A-B	40	10			40				
A-C	453	113			453				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	4	553	0.031	17	0.0	0.0	6.718	A
B-A	27	7	339	0.080	27	0.1	0.1	11.538	B
C-AB	51	13	692	0.074	51	0.1	0.1	5.617	A
C-A	635	159			635				
A-B	33	8			33				
A-C	379	95			379				

2031 Base + Committed Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.79	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D19	2031 Base + Committed Development	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	635	100.000
B		ONE HOUR	✓	80	100.000
C		ONE HOUR	✓	610	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
From		A	B	C
	A	0	16	619
	B	38	0	42
	C	595	15	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A	B	C
	A	0	0	13
	B	0	0	0
	C	9	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.09	8.03	0.1	A	39	58
B-A	0.16	16.38	0.2	C	35	52
C-AB	0.03	6.14	0.0	A	14	21
C-A					546	819

A-B				15	22
A-C				568	852

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	32	8	562	0.056	31	0.0	0.1	6.784	A
B-A	29	7	346	0.083	28	0.0	0.1	11.312	B
C-AB	11	3	672	0.017	11	0.0	0.0	5.450	A
C-A	448	112			448				
A-B	12	3			12				
A-C	466	117			466				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	38	9	534	0.071	38	0.1	0.1	7.254	A
B-A	34	9	311	0.110	34	0.1	0.1	13.009	B
C-AB	13	3	643	0.021	13	0.0	0.0	5.718	A
C-A	535	134			535				
A-B	14	4			14				
A-C	556	139			556				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	46	12	495	0.093	46	0.1	0.1	8.025	A
B-A	42	10	261	0.160	42	0.1	0.2	16.353	C
C-AB	17	4	603	0.027	16	0.0	0.0	6.137	A
C-A	655	164			655				
A-B	18	4			18				
A-C	682	170			682				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	46	12	494	0.094	46	0.1	0.1	8.033	A
B-A	42	10	262	0.160	42	0.2	0.2	16.383	C
C-AB	17	4	603	0.027	17	0.0	0.0	6.137	A
C-A	655	164			655				
A-B	18	4			18				
A-C	682	170			682				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	38	9	533	0.071	38	0.1	0.1	7.265	A
B-A	34	9	311	0.110	34	0.2	0.1	13.035	B
C-AB	13	3	643	0.021	14	0.0	0.0	5.719	A
C-A	535	134			535				
A-B	14	4			14				
A-C	556	139			556				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	32	8	561	0.056	32	0.1	0.1	6.799	A
B-A	29	7	346	0.083	29	0.1	0.1	11.340	B
C-AB	11	3	672	0.017	11	0.0	0.0	5.452	A
C-A	448	112			448				
A-B	12	3			12				
A-C	466	117			466				

2031 Base + Committed Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.54	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D20	2031 Base + Committed Development	PM	ONE HOUR	15:45	17:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	548	100.000
B		ONE HOUR	✓	40	100.000
C		ONE HOUR	✓	913	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	31	517
	B	24	0	16
	C	866	47	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	10
	B	0	0	0
	C	11	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.04	7.41	0.0	A	15	22
B-A	0.11	16.78	0.1	C	22	33
C-AB	0.08	6.19	0.1	A	43	65
C-A					795	1192

A-B				28	43
A-C				474	712

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	3	557	0.022	12	0.0	0.0	6.605	A
B-A	18	5	340	0.053	18	0.0	0.1	11.155	B
C-AB	35	9	692	0.051	35	0.0	0.1	5.478	A
C-A	652	163			652				
A-B	23	6			23				
A-C	389	97			389				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14	4	535	0.027	14	0.0	0.0	6.914	A
B-A	22	5	299	0.072	21	0.1	0.1	12.984	B
C-AB	42	11	667	0.063	42	0.1	0.1	5.759	A
C-A	779	195			779				
A-B	28	7			28				
A-C	465	116			465				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	18	4	504	0.035	18	0.0	0.0	7.407	A
B-A	26	7	241	0.110	26	0.1	0.1	16.752	C
C-AB	52	13	633	0.082	52	0.1	0.1	6.193	A
C-A	953	238			953				
A-B	34	9			34				
A-C	569	142			569				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	18	4	503	0.035	18	0.0	0.0	7.410	A
B-A	26	7	241	0.110	26	0.1	0.1	16.778	C
C-AB	52	13	633	0.082	52	0.1	0.1	6.193	A
C-A	953	238			953				
A-B	34	9			34				
A-C	569	142			569				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	14	4	535	0.027	14	0.0	0.0	6.922	A
B-A	22	5	299	0.072	22	0.1	0.1	13.009	B
C-AB	42	11	667	0.063	42	0.1	0.1	5.762	A
C-A	779	195			779				
A-B	28	7			28				
A-C	465	116			465				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	3	557	0.022	12	0.0	0.0	6.612	A
B-A	18	5	340	0.053	18	0.1	0.1	11.177	B
C-AB	35	9	692	0.051	35	0.1	0.1	5.481	A
C-A	652	163			652				
A-B	23	6			23				
A-C	389	97			389				

2031 Base + Proposed Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.46	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D21	2031 Base + Proposed Development	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	601	100.000
B		ONE HOUR	✓	47	100.000
C		ONE HOUR	✓	569	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	9	592
	B	24	0	23
	C	560	9	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	14
	B	0	0	0
	C	10	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.05	7.51	0.1	A	21	32
B-A	0.09	14.11	0.1	B	22	33
C-AB	0.02	5.95	0.0	A	8	12
C-A					514	771

A-B					8	12
A-C					543	815

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	4	564	0.031	17	0.0	0.0	6.581	A
B-A	18	5	362	0.050	18	0.0	0.1	10.446	B
C-AB	7	2	680	0.010	7	0.0	0.0	5.348	A
C-A	422	105			422				
A-B	7	2			7				
A-C	446	111			446				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	21	5	539	0.038	21	0.0	0.0	6.942	A
B-A	22	5	328	0.066	22	0.1	0.1	11.728	B
C-AB	8	2	652	0.012	8	0.0	0.0	5.586	A
C-A	503	126			503				
A-B	8	2			8				
A-C	532	133			532				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	25	6	505	0.050	25	0.0	0.1	7.510	A
B-A	26	7	281	0.094	26	0.1	0.1	14.103	B
C-AB	10	2	615	0.016	10	0.0	0.0	5.952	A
C-A	617	154			617				
A-B	10	2			10				
A-C	652	163			652				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	25	6	504	0.050	25	0.1	0.1	7.513	A
B-A	26	7	281	0.094	26	0.1	0.1	14.113	B
C-AB	10	2	615	0.016	10	0.0	0.0	5.952	A
C-A	617	154			617				
A-B	10	2			10				
A-C	652	163			652				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	21	5	539	0.038	21	0.1	0.0	6.951	A
B-A	22	5	329	0.066	22	0.1	0.1	11.738	B
C-AB	8	2	652	0.012	8	0.0	0.0	5.586	A
C-A	503	126			503				
A-B	8	2			8				
A-C	532	133			532				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	4	564	0.031	17	0.0	0.0	6.590	A
B-A	18	5	362	0.050	18	0.1	0.1	10.457	B
C-AB	7	2	680	0.010	7	0.0	0.0	5.349	A
C-A	422	105			422				
A-B	7	2			7				
A-C	446	111			446				

2031 Base + Proposed Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D22	2031 Base + Proposed Development	PM	ONE HOUR	15:45	17:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	500	100.000
B		ONE HOUR	✓	19	100.000
C		ONE HOUR	✓	863	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	13	487
	B	12	0	7
	C	842	21	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	10
	B	0	0	0
	C	12	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.01	7.04	0.0	A	6	10
B-A	0.05	14.19	0.1	B	11	17
C-AB	0.04	5.75	0.0	A	19	29
C-A					773	1159

A-B					12	18
A-C					447	670

Main Results for each time segment

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	1	565	0.009	5	0.0	0.0	6.429	A
B-A	9	2	359	0.025	9	0.0	0.0	10.287	B
C-AB	16	4	703	0.022	16	0.0	0.0	5.235	A
C-A	634	158			634				
A-B	10	2			10				
A-C	367	92			367				

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6	2	546	0.012	6	0.0	0.0	6.670	A
B-A	11	3	320	0.034	11	0.0	0.0	11.631	B
C-AB	19	5	681	0.028	19	0.0	0.0	5.439	A
C-A	757	189			757				
A-B	12	3			12				
A-C	438	109			438				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	2	519	0.015	8	0.0	0.0	7.038	A
B-A	13	3	267	0.050	13	0.0	0.1	14.187	B
C-AB	23	6	649	0.036	23	0.0	0.0	5.749	A
C-A	927	232			927				
A-B	14	4			14				
A-C	536	134			536				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	2	519	0.015	8	0.0	0.0	7.040	A
B-A	13	3	267	0.050	13	0.1	0.1	14.192	B
C-AB	23	6	649	0.036	23	0.0	0.0	5.749	A
C-A	927	232			927				
A-B	14	4			14				
A-C	536	134			536				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6	2	546	0.012	6	0.0	0.0	6.672	A
B-A	11	3	320	0.034	11	0.1	0.0	11.636	B
C-AB	19	5	681	0.028	19	0.0	0.0	5.441	A
C-A	757	189			757				
A-B	12	3			12				
A-C	438	109			438				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	5	1	565	0.009	5	0.0	0.0	6.434	A
B-A	9	2	359	0.025	9	0.0	0.0	10.294	B
C-AB	16	4	703	0.022	16	0.0	0.0	5.237	A
C-A	634	158			634				
A-B	10	2			10				
A-C	367	92			367				

2031 Base + Committed Development + Proposed Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.37	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D23	2031 Base + Committed Development + Proposed Development	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	644	100.000
B		ONE HOUR	✓	127	100.000
C		ONE HOUR	✓	619	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
From		A	B	C
	A	0	25	619
	B	62	0	65
	C	595	24	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
From		A	B	C
	A	0	0	13
	B	0	0	0
	C	9	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.15	8.91	0.2	A	60	89

B-A	0.26	18.92	0.4	C	57	85
C-AB	0.04	6.28	0.0	A	22	33
C-A					546	819
A-B					23	34
A-C					568	852

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	49	12	550	0.089	49	0.0	0.1	7.168	A
B-A	47	12	345	0.135	46	0.0	0.2	12.018	B
C-AB	18	5	670	0.027	18	0.0	0.0	5.524	A
C-A	448	112			448				
A-B	19	5			19				
A-C	466	117			466				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	15	520	0.112	58	0.1	0.1	7.793	A
B-A	56	14	309	0.181	55	0.2	0.2	14.199	B
C-AB	22	5	640	0.034	22	0.0	0.0	5.816	A
C-A	535	134			535				
A-B	22	6			22				
A-C	556	139			556				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	72	18	476	0.150	71	0.1	0.2	8.892	A
B-A	68	17	258	0.264	68	0.2	0.3	18.828	C
C-AB	26	7	600	0.044	26	0.0	0.0	6.276	A
C-A	655	164			655				
A-B	28	7			28				
A-C	682	170			682				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	72	18	475	0.151	72	0.2	0.2	8.912	A
B-A	68	17	259	0.264	68	0.3	0.4	18.916	C
C-AB	26	7	600	0.044	26	0.0	0.0	6.276	A
C-A	655	164			655				
A-B	28	7			28				
A-C	682	170			682				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	15	519	0.113	59	0.2	0.1	7.818	A
B-A	56	14	309	0.180	56	0.4	0.2	14.273	B
C-AB	22	5	640	0.034	22	0.0	0.0	5.817	A
C-A	535	134			535				
A-B	22	6			22				
A-C	556	139			556				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	49	12	550	0.089	49	0.1	0.1	7.195	A
B-A	47	12	345	0.135	47	0.2	0.2	12.078	B
C-AB	18	5	670	0.027	18	0.0	0.0	5.524	A
C-A	448	112			448				
A-B	19	5			19				
A-C	466	117			466				

2031 Base + Committed Development + Proposed Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.83	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D24	2031 Base + Committed Development + Proposed Development	PM	ONE HOUR	15:45	17:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	561	100.000
B		ONE HOUR	✓	59	100.000
C		ONE HOUR	✓	934	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	44	517
	B	36	0	23
	C	866	68	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	10
	B	0	0	0
	C	11	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.05	7.70	0.1	A	21	32

B-A	0.17	18.75	0.2	C	33	50
C-AB	0.12	6.50	0.1	A	62	94
C-A					795	1192
A-B					40	61
A-C					474	712

Main Results for each time segment

16:45 - 16:55

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	4	551	0.031	17	0.0	0.0	6.739	A
B-A	27	7	334	0.081	27	0.0	0.1	11.694	B
C-AB	51	13	689	0.074	51	0.0	0.1	5.637	A
C-A	652	163			652				
A-B	33	8			33				
A-C	389	97			389				

16:55 - 16:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	21	5	528	0.039	21	0.0	0.0	7.101	A
B-A	32	8	291	0.111	32	0.1	0.1	13.897	B
C-AB	61	15	664	0.092	61	0.1	0.1	5.973	A
C-A	778	195			778				
A-B	40	10			40				
A-C	465	116			465				

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	25	6	493	0.051	25	0.0	0.1	7.695	A
B-A	40	10	232	0.171	39	0.1	0.2	18.693	C
C-AB	75	19	629	0.119	75	0.1	0.1	6.495	A
C-A	953	238			953				
A-B	48	12			48				
A-C	569	142			569				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	25	6	493	0.051	25	0.1	0.1	7.702	A
B-A	40	10	232	0.171	40	0.2	0.2	18.753	C
C-AB	75	19	629	0.119	75	0.1	0.1	6.498	A
C-A	953	238			953				
A-B	48	12			48				
A-C	569	142			569				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	21	5	527	0.039	21	0.1	0.0	7.111	A
B-A	32	8	291	0.111	33	0.2	0.1	13.942	B
C-AB	61	15	664	0.092	61	0.1	0.1	5.975	A
C-A	778	195			778				
A-B	40	10			40				
A-C	465	116			465				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	4	551	0.031	17	0.0	0.0	6.750	A
B-A	27	7	334	0.081	27	0.1	0.1	11.733	B
C-AB	51	13	689	0.074	51	0.1	0.1	5.646	A
C-A	652	163			652				
A-B	33	8			33				
A-C	389	97			389				

Basic Results Summary

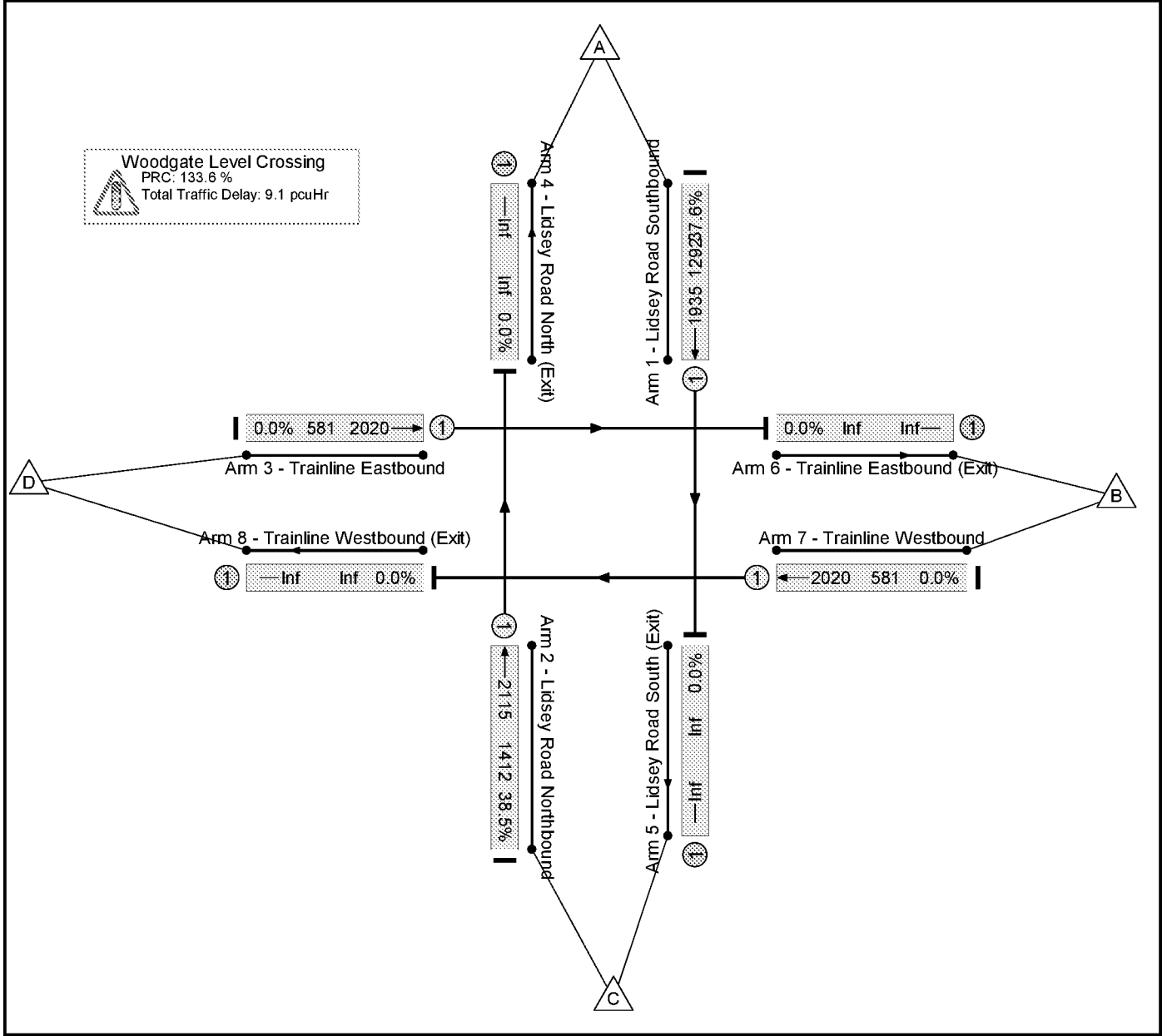
Basic Results Summary

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	Level Crossing.lsg3x
Author:	
Company:	
Address:	

Scenario 1: '2024 Base AM' (FG1: '2024 Base AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

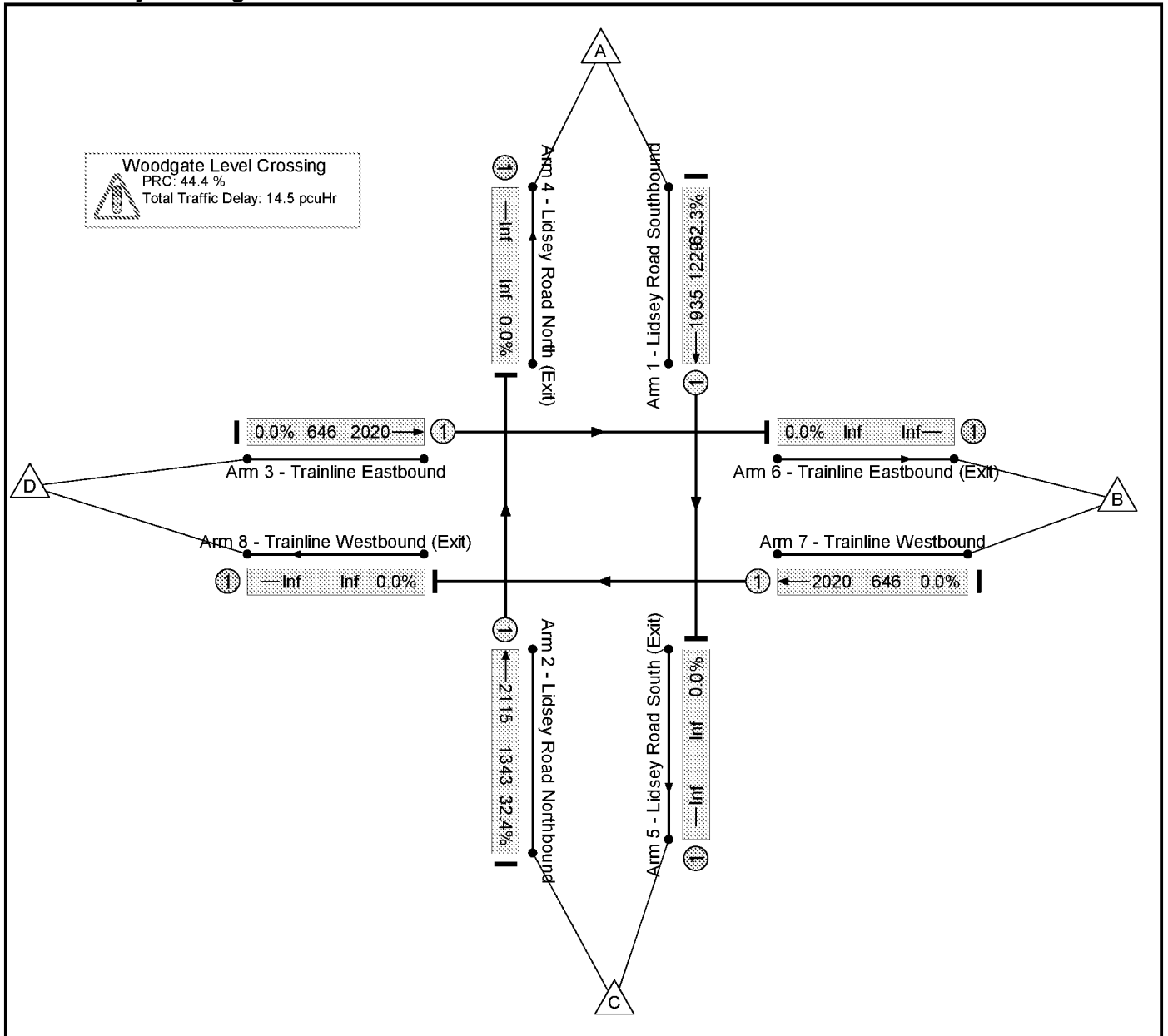
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	38.5%	0	0	0	9.1	-	-
Woodgate Level Crossing	-	-	-		-	-	-	-	-	-	38.5%	0	0	0	9.1	-	-
1/1	Lidsey Road Southbound Ahead	U	B		1	266	-	486	1935	1292	37.6%	-	-	-	4.3	31.8	24.2
2/1	Lidsey Road Northbound Ahead	U	A		1	266	-	544	2115	1412	38.5%	-	-	-	4.8	31.8	27.4
3/1	Trainline Eastbound Ahead	U	C		1	114	-	0	2020	581	0.0%	-	-	-	0.0	0.0	0.0
7/1	Trainline Westbound Ahead	U	D		1	114	-	0	2020	581	0.0%	-	-	-	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 133.6PRC Over All Lanes (%): 133.6 Total Delay for Signalled Lanes (pcuHr): 9.10Total Delay Over All Lanes(pcuHr): 9.10 Cycle Time (s): 400																	

Basic Results Summary

Scenario 2: '2024 Base PM' (FG2: '2024 Base PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

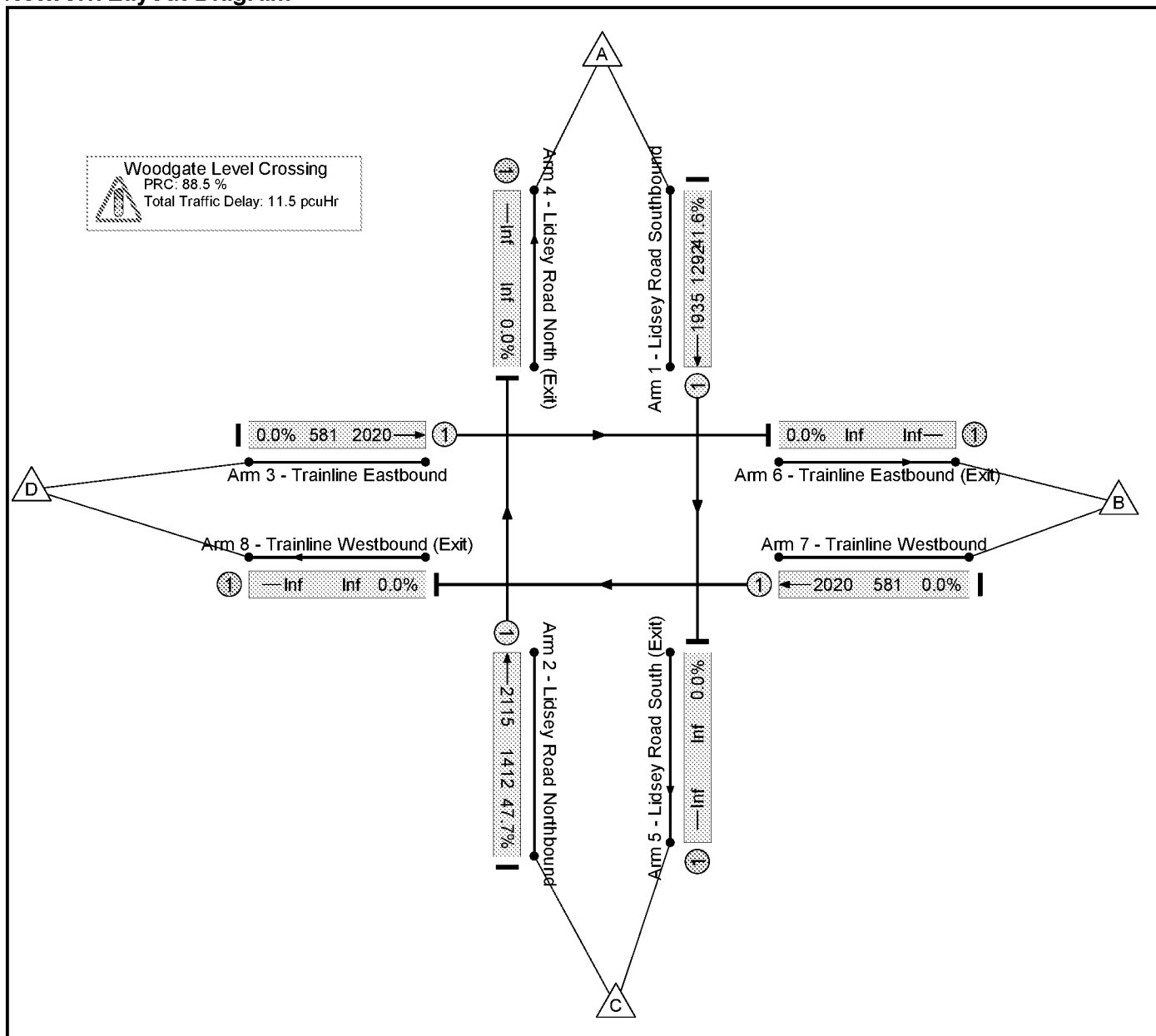
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	62.3%	0	0	0	14.5	-	-
Woodgate Level Crossing	-	-	-		-	-	-	-	-	-	62.3%	0	0	0	14.5	-	-
1/1	Lidsey Road Southbound Ahead	U	B		1	253	-	766	1935	1229	62.3%	-	-	-	10.2	48.0	52.1
2/1	Lidsey Road Northbound Ahead	U	A		1	253	-	435	2115	1343	32.4%	-	-	-	4.3	35.5	22.4
3/1	Trainline Eastbound Ahead	U	C		1	127	-	0	2020	646	0.0%	-	-	-	0.0	0.0	0.0
7/1	Trainline Westbound Ahead	U	D		1	127	-	0	2020	646	0.0%	-	-	-	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 44.4 Total Delay for Signalled Lanes (pcuHr): 14.50 Cycle Time (s): 400 PRC Over All Lanes (%): 44.4 Total Delay Over All Lanes(pcuHr): 14.50																	

Basic Results Summary

Scenario 3: '2024 Base + Committed Development AM' (FG3: '2024 Base + Committed Development AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

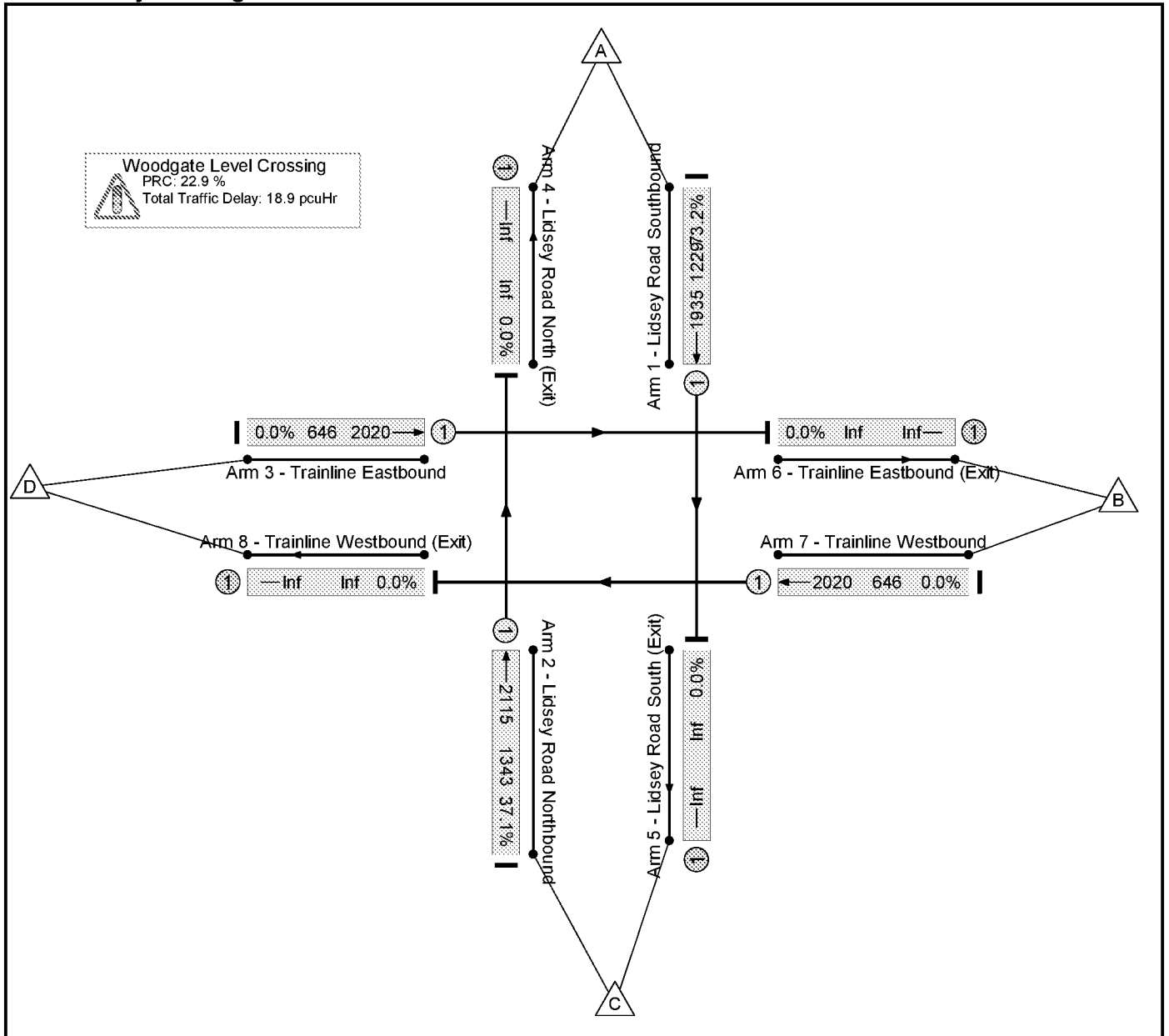
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	47.7%	0	0	0	11.5	-	-
Woodgate Level Crossing	-	-	-		-	-	-	-	-	-	47.7%	0	0	0	11.5	-	-
1/1	Lidsey Road Southbound Ahead	U	B		1	266	-	537	1935	1292	41.6%	-	-	-	4.9	33.0	27.8
2/1	Lidsey Road Northbound Ahead	U	A		1	266	-	674	2115	1412	47.7%	-	-	-	6.5	34.9	37.0
3/1	Trainline Eastbound Ahead	U	C		1	114	-	0	2020	581	0.0%	-	-	-	0.0	0.0	0.0
7/1	Trainline Westbound Ahead	U	D		1	114	-	0	2020	581	0.0%	-	-	-	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%):		88.5	PRC Over All Lanes (%):		88.5	Total Delay for Signalled Lanes (pcuHr):		11.45	Total Delay Over All Lanes(pcuHr):		11.45	Cycle Time (s): 400	

Basic Results Summary

Scenario 4: '2024 Base + Committed Development PM' (FG4: '2024 Base + Committed Development PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

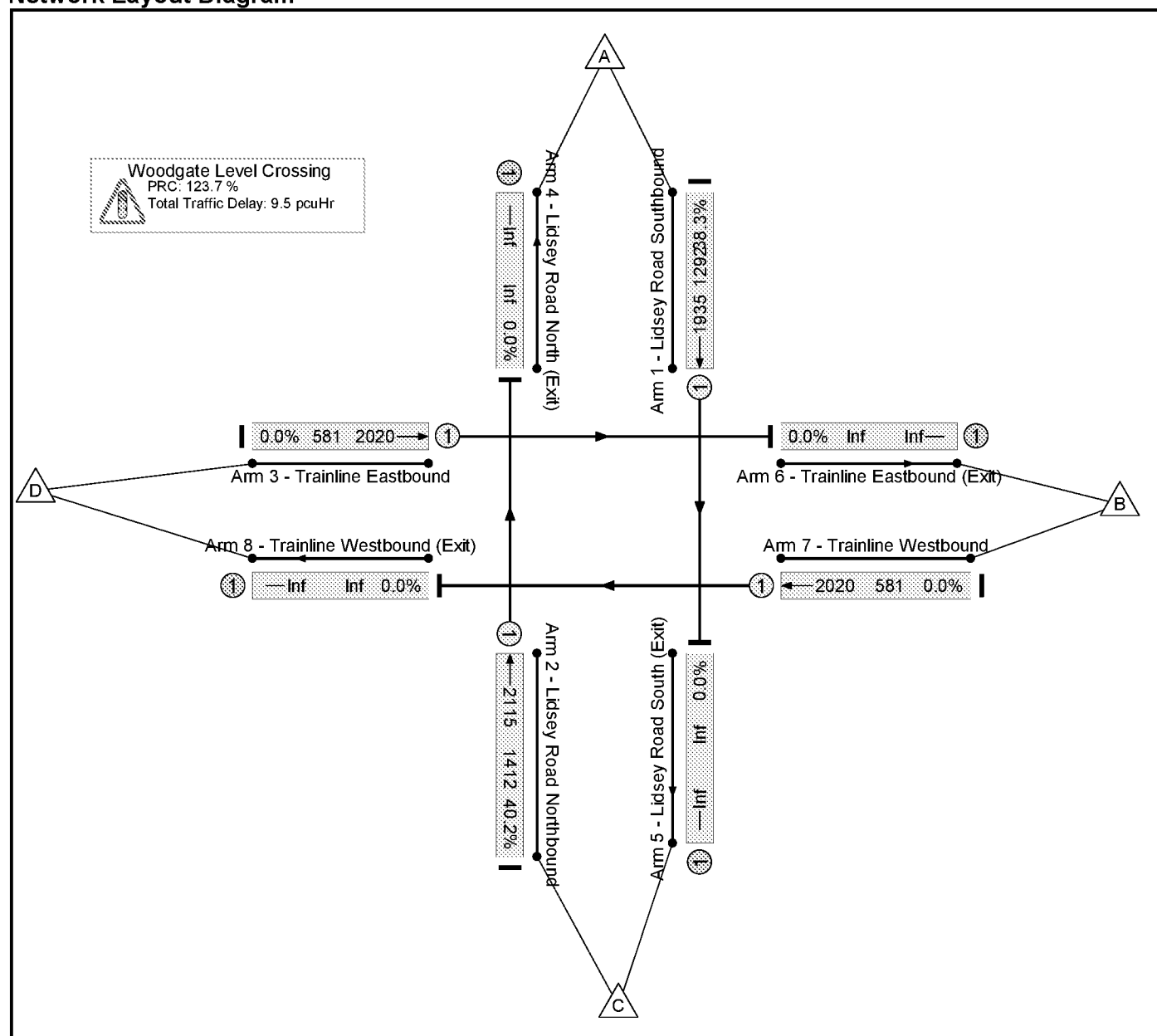
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	73.2%	0	0	0	18.9	-	-
Woodgate Level Crossing	-	-	-		-	-	-	-	-	-	73.2%	0	0	0	18.9	-	-
1/1	Lidsey Road Southbound Ahead	U	B		1	253	-	900	1935	1229	73.2%	-	-	-	13.8	55.2	89.4
2/1	Lidsey Road Northbound Ahead	U	A		1	253	-	498	2115	1343	37.1%	-	-	-	5.1	37.0	26.6
3/1	Trainline Eastbound Ahead	U	C		1	127	-	0	2020	646	0.0%	-	-	-	0.0	0.0	0.0
7/1	Trainline Westbound Ahead	U	D		1	127	-	0	2020	646	0.0%	-	-	-	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 22.9 Total Delay for Signalled Lanes (pcuHr): 18.93 Cycle Time (s): 400 PRC Over All Lanes (%): 22.9 Total Delay Over All Lanes(pcuHr): 18.93																	

Basic Results Summary

Scenario 5: '2024 Base + Proposed Development AM' (FG5: '2024 Base + Proposed Development AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

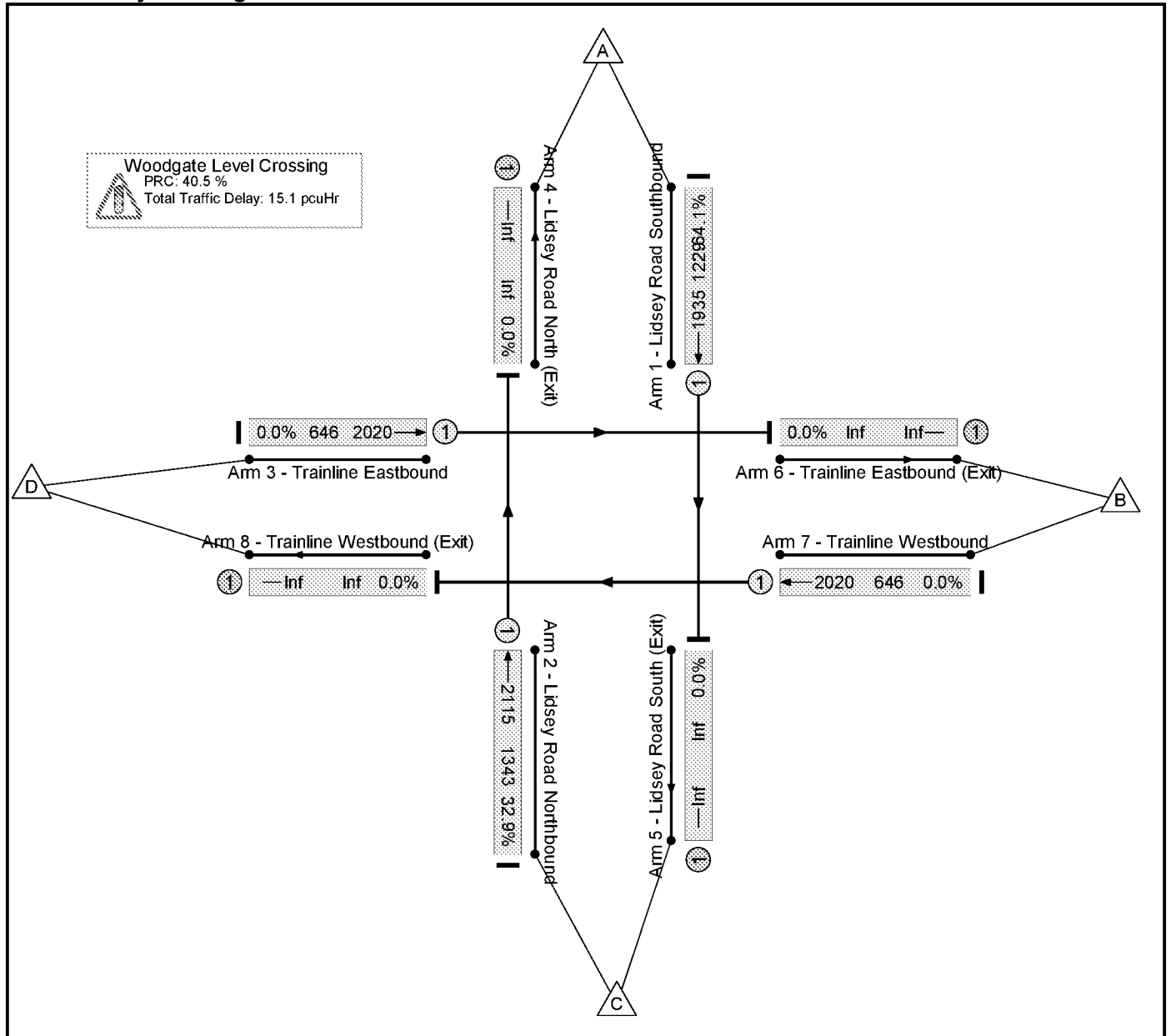
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	40.2%	0	0	0	9.5	-	-
Woodgate Level Crossing	-	-	-		-	-	-	-	-	-	40.2%	0	0	0	9.5	-	-
1/1	Lidsey Road Southbound Ahead	U	B		1	266	-	495	1935	1292	38.3%	-	-	-	4.4	32.0	24.8
2/1	Lidsey Road Northbound Ahead	U	A		1	266	-	568	2115	1412	40.2%	-	-	-	5.1	32.4	28.9
3/1	Trainline Eastbound Ahead	U	C		1	114	-	0	2020	581	0.0%	-	-	-	0.0	0.0	0.0
7/1	Trainline Westbound Ahead	U	D		1	114	-	0	2020	581	0.0%	-	-	-	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 123.7 Total Delay for Signalled Lanes (pcuHr): 9.50 Cycle Time (s): 400 PRC Over All Lanes (%): 123.7 Total Delay Over All Lanes(pcuHr): 9.50																	

Basic Results Summary

Scenario 6: '2024 Base + Proposed Development PM' (FG6: '2024 Base + Proposed Development PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

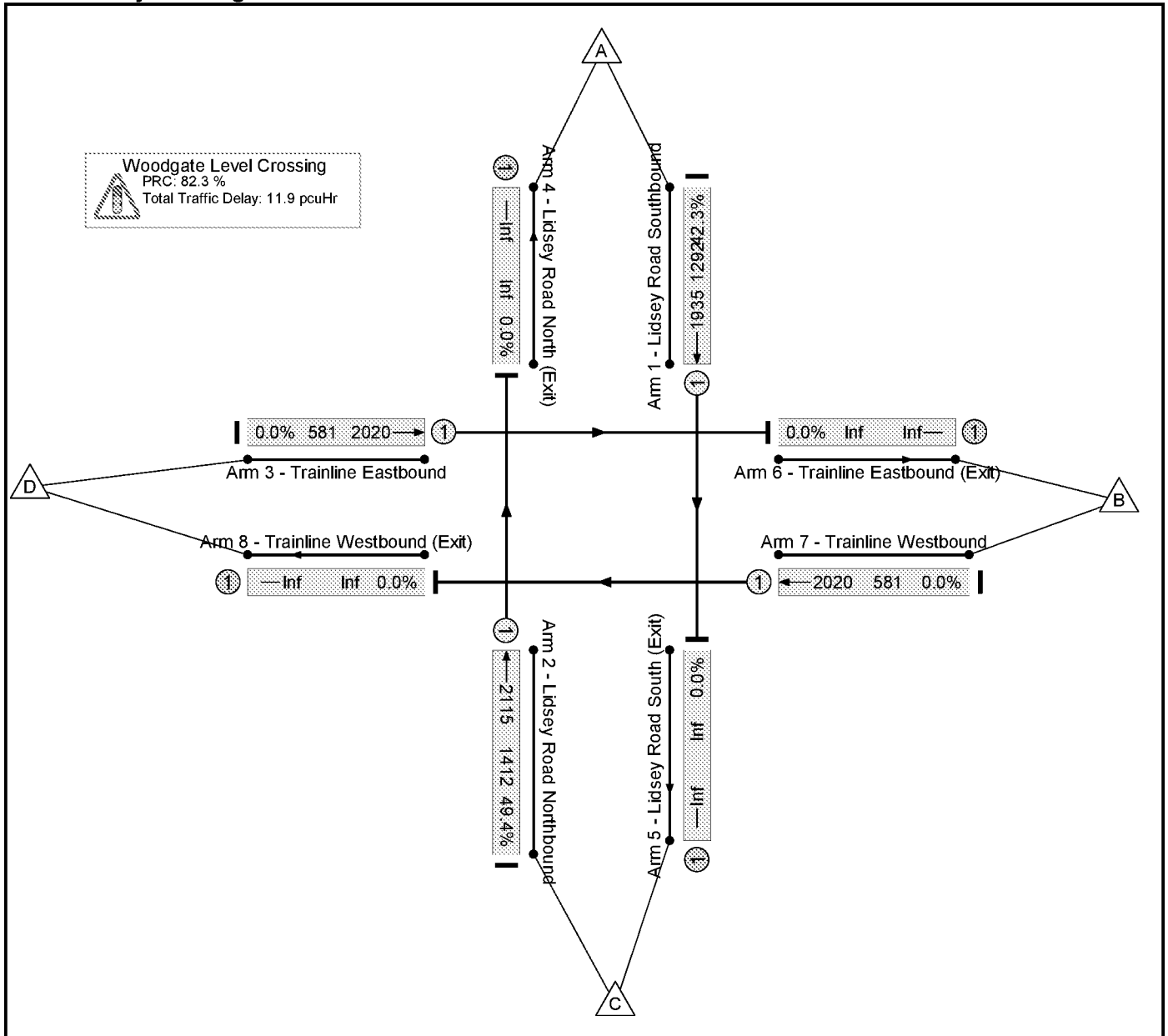
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	64.1%	0	0	0	15.1	-	-
Woodgate Level Crossing	-	-	-		-	-	-	-	-	-	64.1%	0	0	0	15.1	-	-
1/1	Lidsey Road Southbound Ahead	U	B		1	253	-	787	1935	1229	64.1%	-	-	-	10.7	49.0	54.7
2/1	Lidsey Road Northbound Ahead	U	A		1	253	-	442	2115	1343	32.9%	-	-	-	4.4	35.7	22.8
3/1	Trainline Eastbound Ahead	U	C		1	127	-	0	2020	646	0.0%	-	-	-	0.0	0.0	0.0
7/1	Trainline Westbound Ahead	U	D		1	127	-	0	2020	646	0.0%	-	-	-	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 40.5 Total Delay for Signalled Lanes (pcuHr): 15.09 Cycle Time (s): 400 																	

Basic Results Summary

Scenario 7: '2024 Base + Committed Development + Proposed Development AM' (FG7: '2024 Base + Committed Development + Proposed Development AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

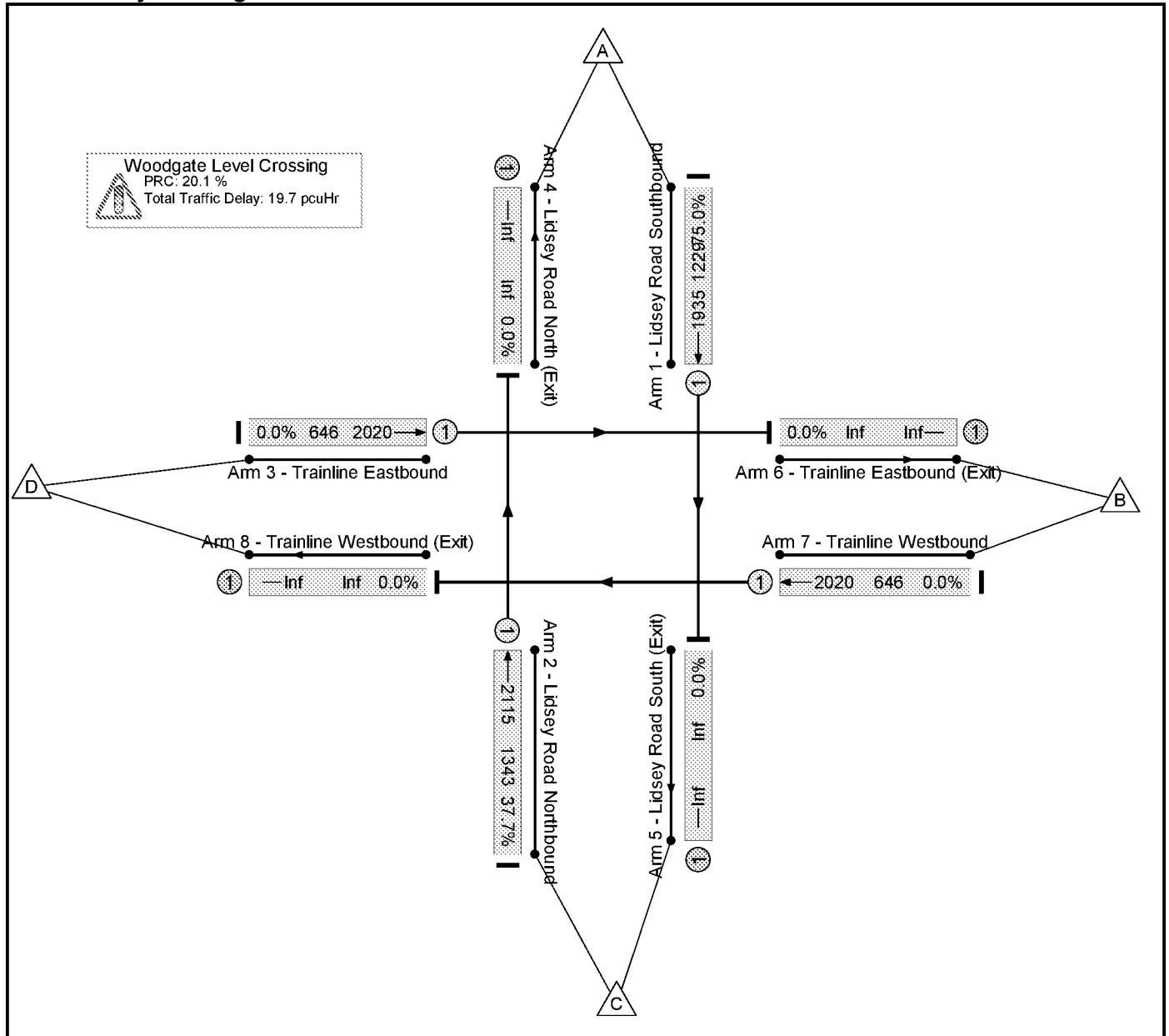
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	49.4%	0	0	0	11.9	-	-
Woodgate Level Crossing	-	-	-		-	-	-	-	-	-	49.4%	0	0	0	11.9	-	-
1/1	Lidsey Road Southbound Ahead	U	B		1	266	-	546	1935	1292	42.3%	-	-	-	5.0	33.2	28.4
2/1	Lidsey Road Northbound Ahead	U	A		1	266	-	697	2115	1412	49.4%	-	-	-	6.9	35.5	38.8
3/1	Trainline Eastbound Ahead	U	C		1	114	-	0	2020	581	0.0%	-	-	-	0.0	0.0	0.0
7/1	Trainline Westbound Ahead	U	D		1	114	-	0	2020	581	0.0%	-	-	-	0.0	0.0	0.0
C1																	

Basic Results Summary

Scenario 8: '2024 Base + Committed Development + Proposed Development PM' (FG8: '2024 Base + Committed Development + Proposed Development PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

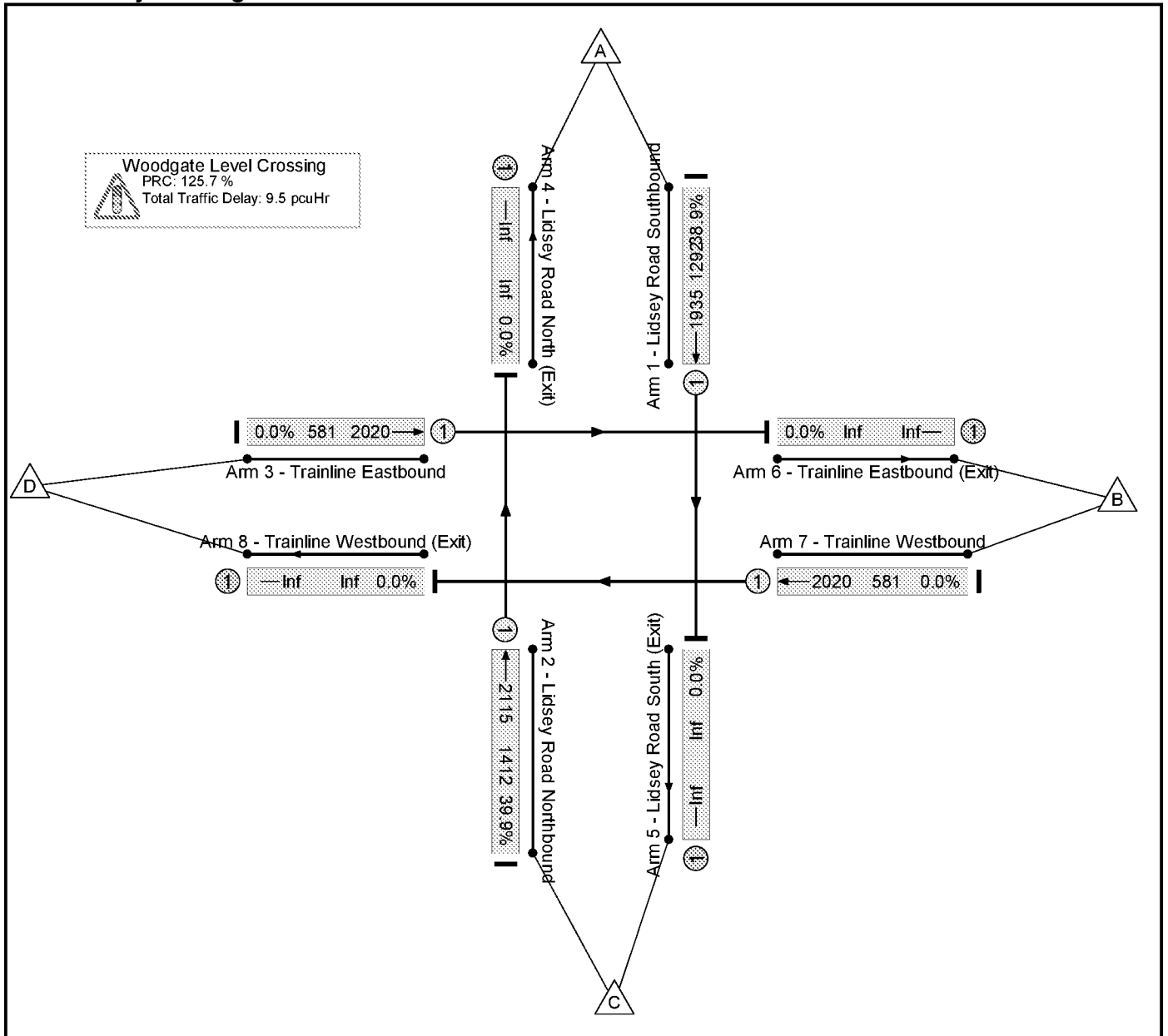
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	75.0%	0	0	0	19.7	-	-
Woodgate Level Crossing	-	-	-		-	-	-	-	-	-	75.0%	0	0	0	19.7	-	-
1/1	Lidsey Road Southbound Ahead	U	B		1	253	-	921	1935	1229	75.0%	-	-	-	14.5	56.6	72.6
2/1	Lidsey Road Northbound Ahead	U	A		1	253	-	506	2115	1343	37.7%	-	-	-	5.2	37.2	27.1
3/1	Trainline Eastbound Ahead	U	C		1	127	-	0	2020	646	0.0%	-	-	-	0.0	0.0	0.0
7/1	Trainline Westbound Ahead	U	D		1	127	-	0	2020	646	0.0%	-	-	-	0.0	0.0	0.0
C1																	

Basic Results Summary

Scenario 9: '2028 Base AM' (FG9: '2028 Base AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

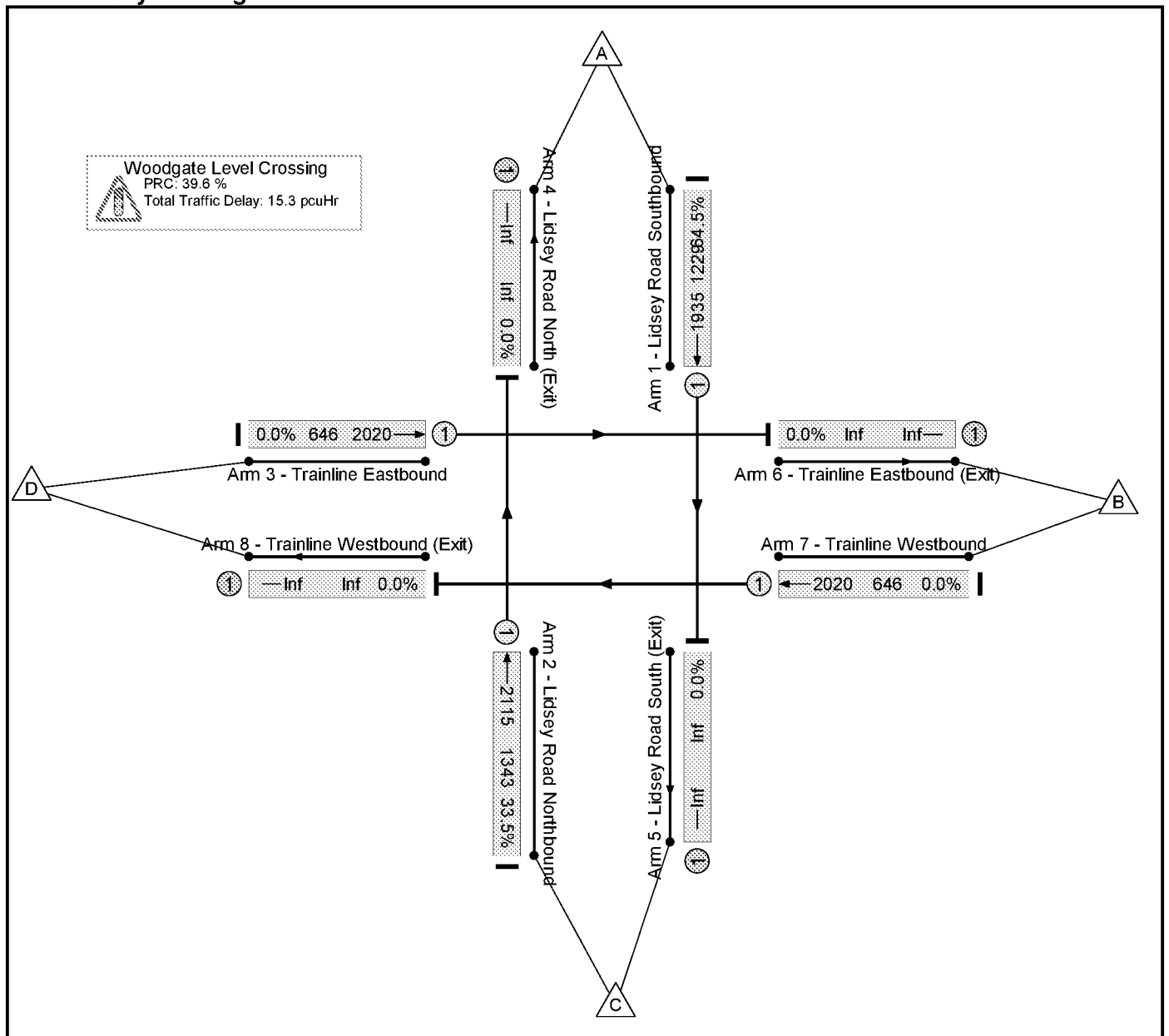


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	39.9%	0	0	0	9.5	-	-
Woodgate Level Crossing	-	-	-		-	-	-	-	-	-	39.9%	0	0	0	9.5	-	-
1/1	Lidsey Road Southbound Ahead	U	B		1	266	-	503	1935	1292	38.9%	-	-	-	4.5	32.2	25.3
2/1	Lidsey Road Northbound Ahead	U	A		1	266	-	563	2115	1412	39.9%	-	-	-	5.0	32.3	28.6
3/1	Trainline Eastbound Ahead	U	C		1	114	-	0	2020	581	0.0%	-	-	-	0.0	0.0	0.0
7/1	Trainline Westbound Ahead	U	D		1	114	-	0	2020	581	0.0%	-	-	-	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 125.7 PRC Over All Lanes (%): 125.7 Total Delay for Signalled Lanes (pcuHr): 9.54 Total Delay Over All Lanes(pcuHr): 9.54 Cycle Time (s): 400																	

Network Layout Diagram



Basic Results Summary

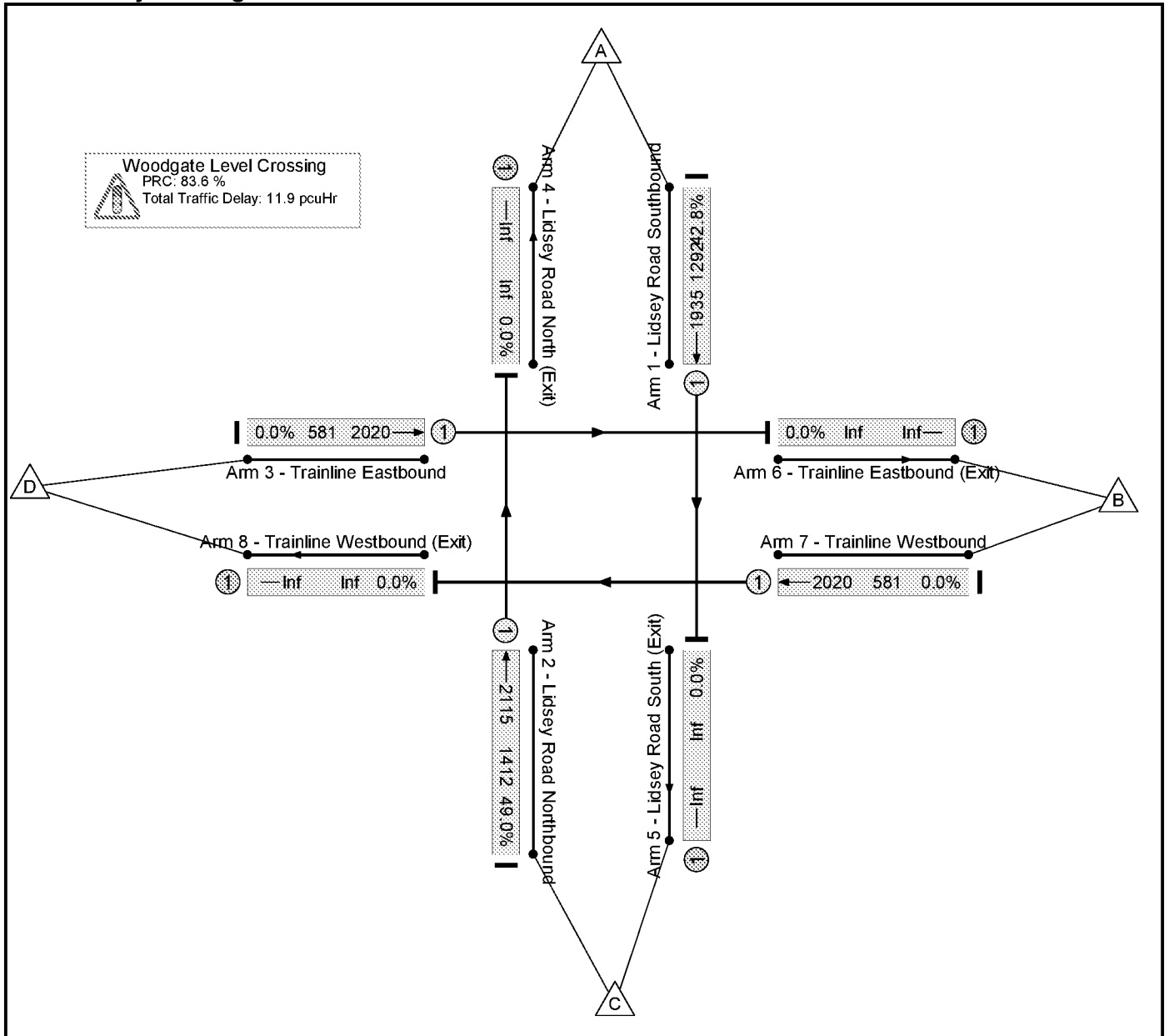
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	64.5%	0	0	0	15.3	-	-
Woodgate Level Crossing	-	-	-		-	-	-	-	-	-	64.5%	0	0	0	15.3	-	-
1/1	Lidsey Road Southbound Ahead	U	B		1	253	-	792	1935	1229	64.5%	-	-	-	10.8	49.2	55.2
2/1	Lidsey Road Northbound Ahead	U	A		1	253	-	450	2115	1343	33.5%	-	-	-	4.5	35.9	23.4
3/1	Trainline Eastbound Ahead	U	C		1	127	-	0	2020	646	0.0%	-	-	-	0.0	0.0	0.0
7/1	Trainline Westbound Ahead	U	D		1	127	-	0	2020	646	0.0%	-	-	-	0.0	0.0	0.0
C1				PRC for Signalled Lanes (%):		39.6	PRC Over All Lanes (%):		39.6	Total Delay for Signalled Lanes (pcuHr):		15.31	Total Delay Over All Lanes(pcuHr):		15.31	Cycle Time (s): 400	

Basic Results Summary

Scenario 11: '2028 Base + Committed Development AM' (FG11: '2028 Base + Committed Development AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

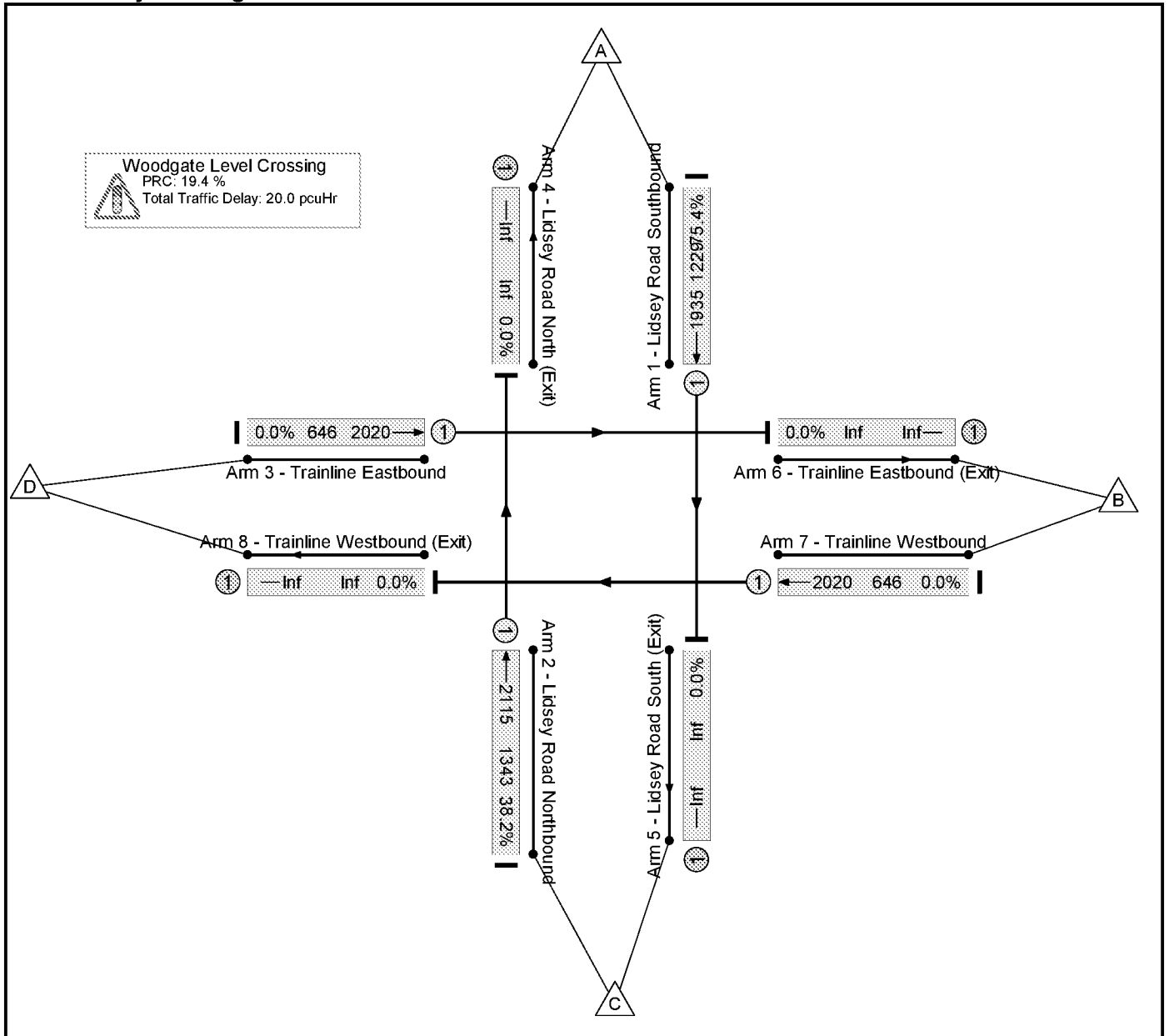


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	49.0%	0	0	0	11.9	-	-
Woodgate Level Crossing	-	-	-		-	-	-	-	-	-	49.0%	0	0	0	11.9	-	-
1/1	Lidsey Road Southbound Ahead	U	B		1	266	-	553	1935	1292	42.8%	-	-	-	5.1	33.4	28.9
2/1	Lidsey Road Northbound Ahead	U	A		1	266	-	692	2115	1412	49.0%	-	-	-	6.8	35.4	38.3
3/1	Trainline Eastbound Ahead	U	C		1	114	-	0	2020	581	0.0%	-	-	-	0.0	0.0	0.0
7/1	Trainline Westbound Ahead	U	D		1	114	-	0	2020	581	0.0%	-	-	-	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 83.6 Total Delay for Signalled Lanes (pcuHr): 11.93 Cycle Time (s): 400 																	

Network Layout Diagram

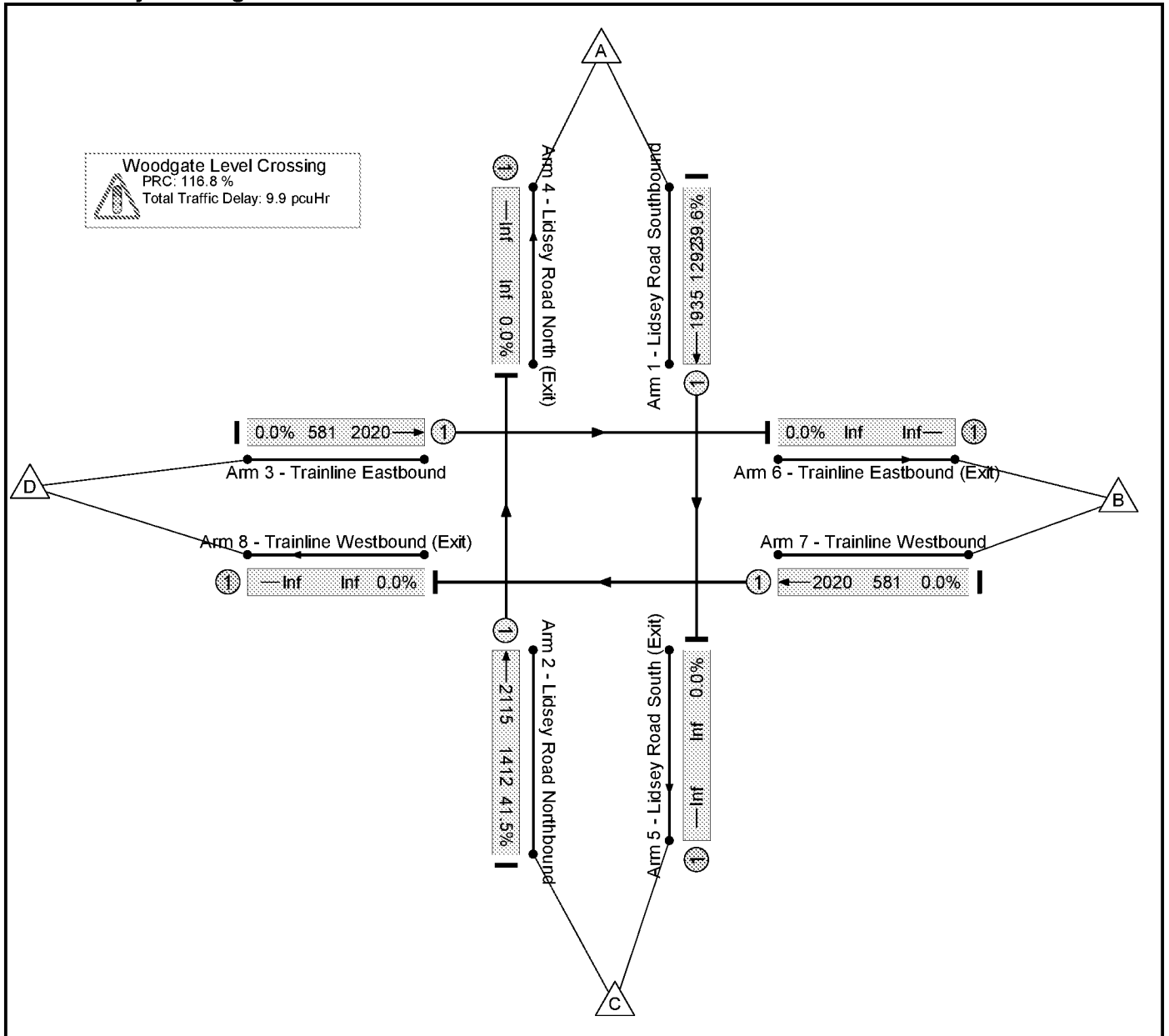


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	75.4%	0	0	0	20.0	-	-
Woodgate Level Crossing	-	-	-		-	-	-	-	-	-	75.4%	0	0	0	20.0	-	-
1/1	Lidsey Road Southbound Ahead	U	B		1	253	-	926	1935	1229	75.4%	-	-	-	14.7	57.0	73.3
2/1	Lidsey Road Northbound Ahead	U	A		1	253	-	513	2115	1343	38.2%	-	-	-	5.3	37.3	27.7
3/1	Trainline Eastbound Ahead	U	C		1	127	-	0	2020	646	0.0%	-	-	-	0.0	0.0	0.0
7/1	Trainline Westbound Ahead	U	D		1	127	-	0	2020	646	0.0%	-	-	-	0.0	0.0	0.0
C1																	

Network Layout Diagram

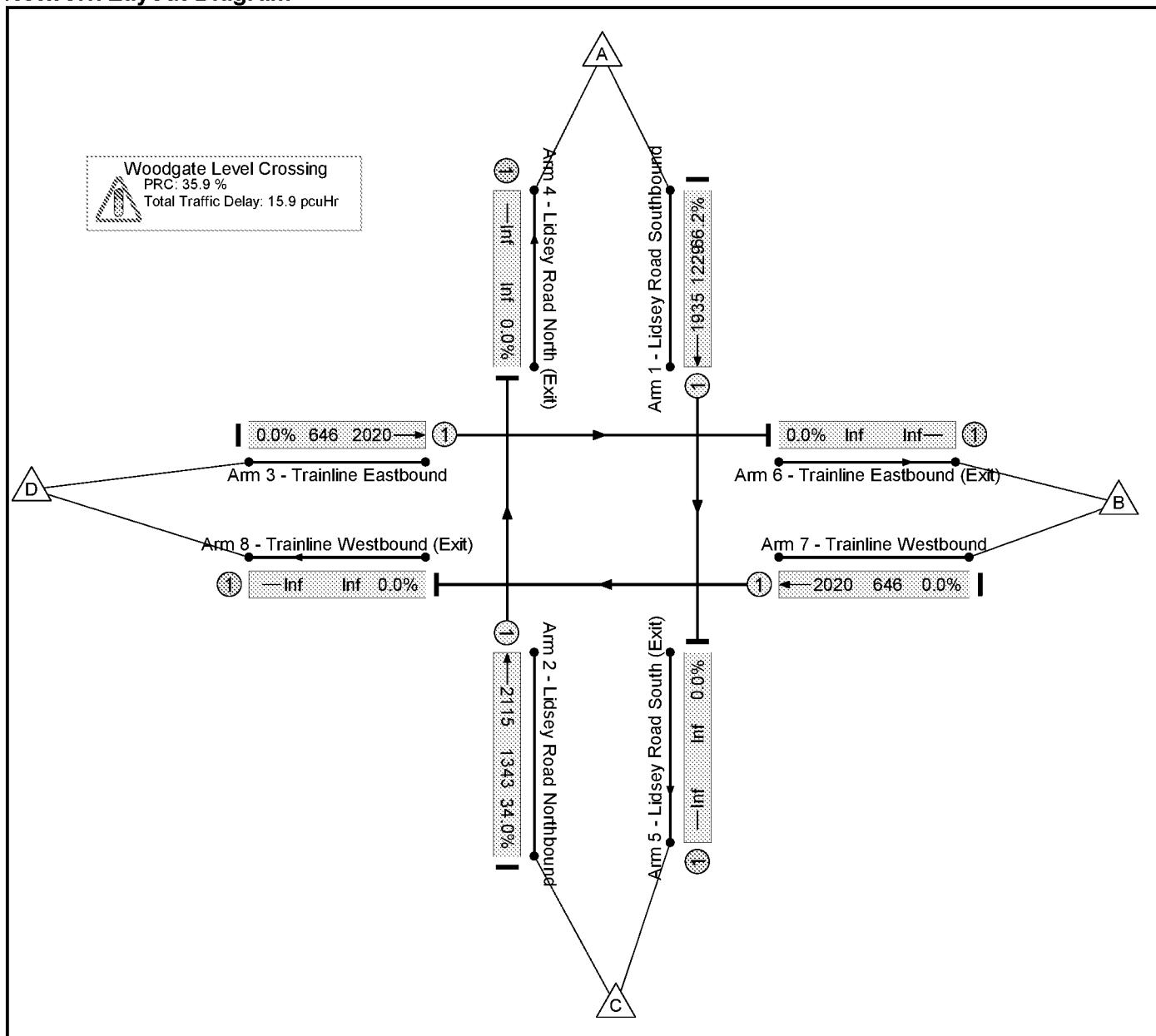


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	41.5%	0	0	0	9.9	-	-
Woodgate Level Crossing	-	-	-		-	-	-	-	-	-	41.5%	0	0	0	9.9	-	-
1/1	Lidsey Road Southbound Ahead	U	B		1	266	-	512	1935	1292	39.6%	-	-	-	4.6	32.4	25.9
2/1	Lidsey Road Northbound Ahead	U	A		1	266	-	586	2115	1412	41.5%	-	-	-	5.3	32.8	30.1
3/1	Trainline Eastbound Ahead	U	C		1	114	-	0	2020	581	0.0%	-	-	-	0.0	0.0	0.0
7/1	Trainline Westbound Ahead	U	D		1	114	-	0	2020	581	0.0%	-	-	-	0.0	0.0	0.0
C1																	

Network Layout Diagram



Basic Results Summary

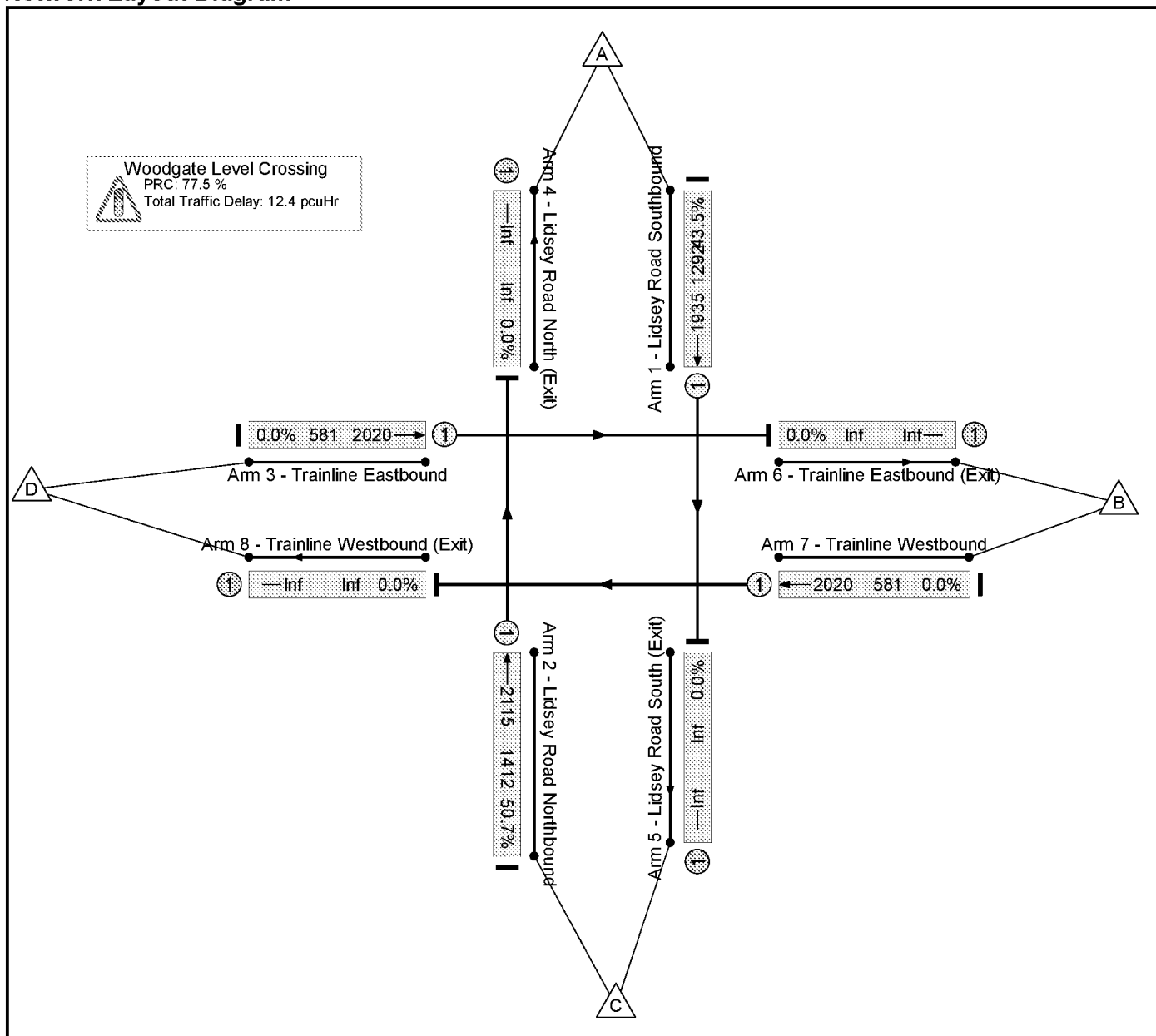
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	66.2%	0	0	0	15.9	-	-
Woodgate Level Crossing	-	-	-		-	-	-	-	-	-	66.2%	0	0	0	15.9	-	-
1/1	Lidsey Road Southbound Ahead	U	B		1	253	-	814	1935	1229	66.2%	-	-	-	11.4	50.3	58.0
2/1	Lidsey Road Northbound Ahead	U	A		1	253	-	457	2115	1343	34.0%	-	-	-	4.6	36.0	23.9
3/1	Trainline Eastbound Ahead	U	C		1	127	-	0	2020	646	0.0%	-	-	-	0.0	0.0	0.0
7/1	Trainline Westbound Ahead	U	D		1	127	-	0	2020	646	0.0%	-	-	-	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 35.9 Total Delay for Signalled Lanes (pcuHr): 15.95 Cycle Time (s): 400 PRC Over All Lanes (%): 35.9 Total Delay Over All Lanes(pcuHr): 15.95																	

Basic Results Summary

Scenario 15: '2028 Base + Committed Development + Proposed Development AM' (FG15: '2028 Base + Committed Development + Proposed Development AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

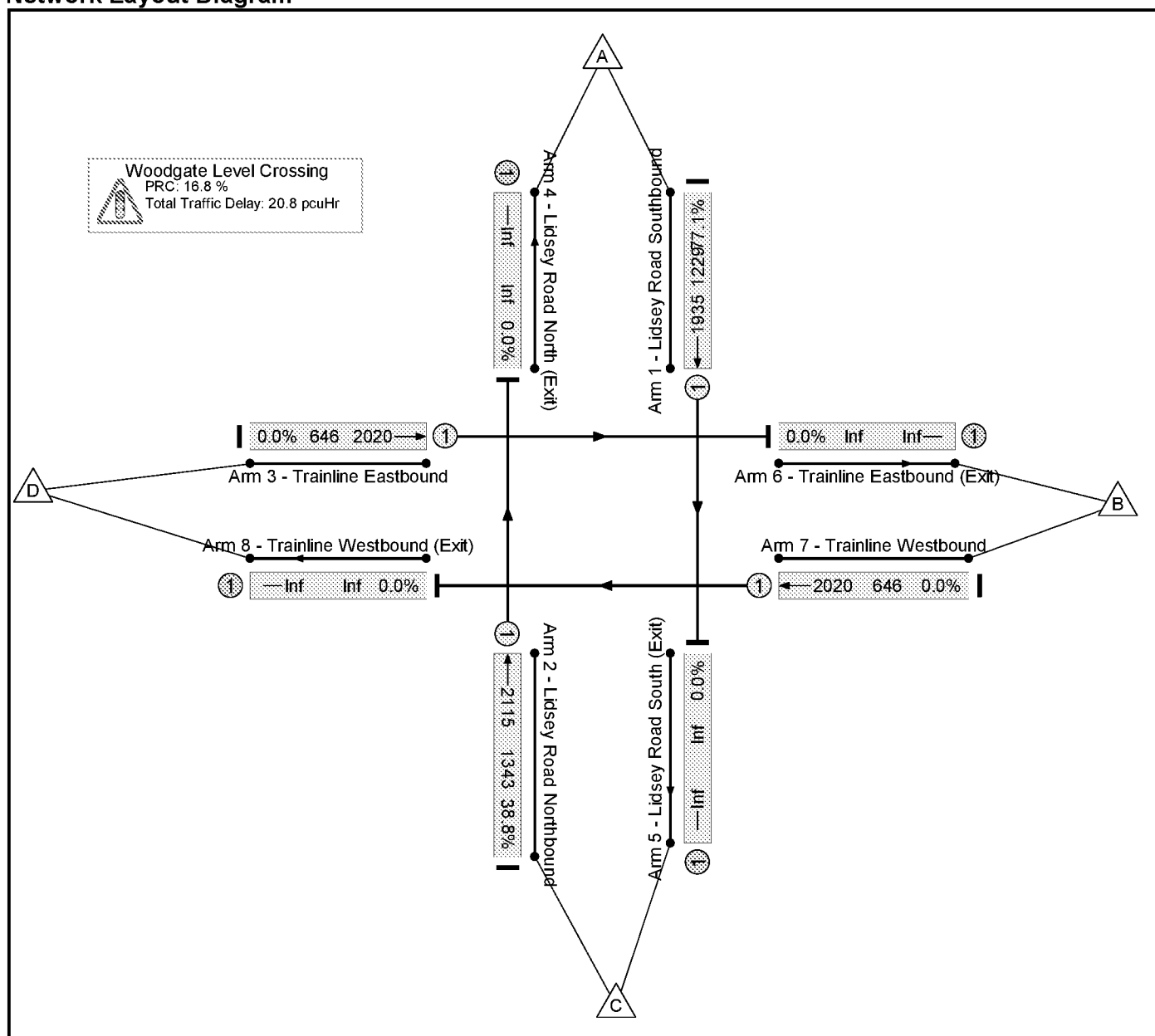
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	50.7%	0	0	0	12.4	-	-
Woodgate Level Crossing	-	-	-		-	-	-	-	-	-	50.7%	0	0	0	12.4	-	-
1/1	Lidsey Road Southbound Ahead	U	B		1	266	-	562	1935	1292	43.5%	-	-	-	5.2	33.6	29.6
2/1	Lidsey Road Northbound Ahead	U	A		1	266	-	716	2115	1412	50.7%	-	-	-	7.2	36.0	40.5
3/1	Trainline Eastbound Ahead	U	C		1	114	-	0	2020	581	0.0%	-	-	-	0.0	0.0	0.0
7/1	Trainline Westbound Ahead	U	D		1	114	-	0	2020	581	0.0%	-	-	-	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 77.5 Total Delay for Signalled Lanes (pcuHr): 12.41 Cycle Time (s): 400 PRC Over All Lanes (%): 77.5 Total Delay Over All Lanes(pcuHr): 12.41																	

Basic Results Summary

Scenario 16: '2028 Base + Committed Development + Proposed Development PM' (FG16: '2028 Base + Committed Development + Proposed Development PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	77.1%	0	0	0	20.8	-	-
Woodgate Level Crossing	-	-	-		-	-	-	-	-	-	77.1%	0	0	0	20.8	-	-
1/1	Lidsey Road Southbound Ahead	U	B		1	253	-	947	1935	1229	77.1%	-	-	-	15.4	58.5	76.6
2/1	Lidsey Road Northbound Ahead	U	A		1	253	-	521	2115	1343	38.8%	-	-	-	5.4	37.5	28.2
3/1	Trainline Eastbound Ahead	U	C		1	127	-	0	2020	646	0.0%	-	-	-	0.0	0.0	0.0
7/1	Trainline Westbound Ahead	U	D		1	127	-	0	2020	646	0.0%	-	-	-	0.0	0.0	0.0
C1																	

Basic Results Summary

Scenario 17: '2031 Base AM' (FG17: '2031 Base AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

