



CBO
TRANSPORT

Jactin House
24 Hood Street
Manchester
M4 6WX

Project: The Former Marchon Chemical Works
High Road, Whitehaven

Proposed Redevelopment for
Residential Development

Client: Persimmon Homes and Whitehaven Developments Limited

Document: Transport Assessment

Figures and Appendices



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Figures and Appendices

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Figure 1.1 Site Location & Context

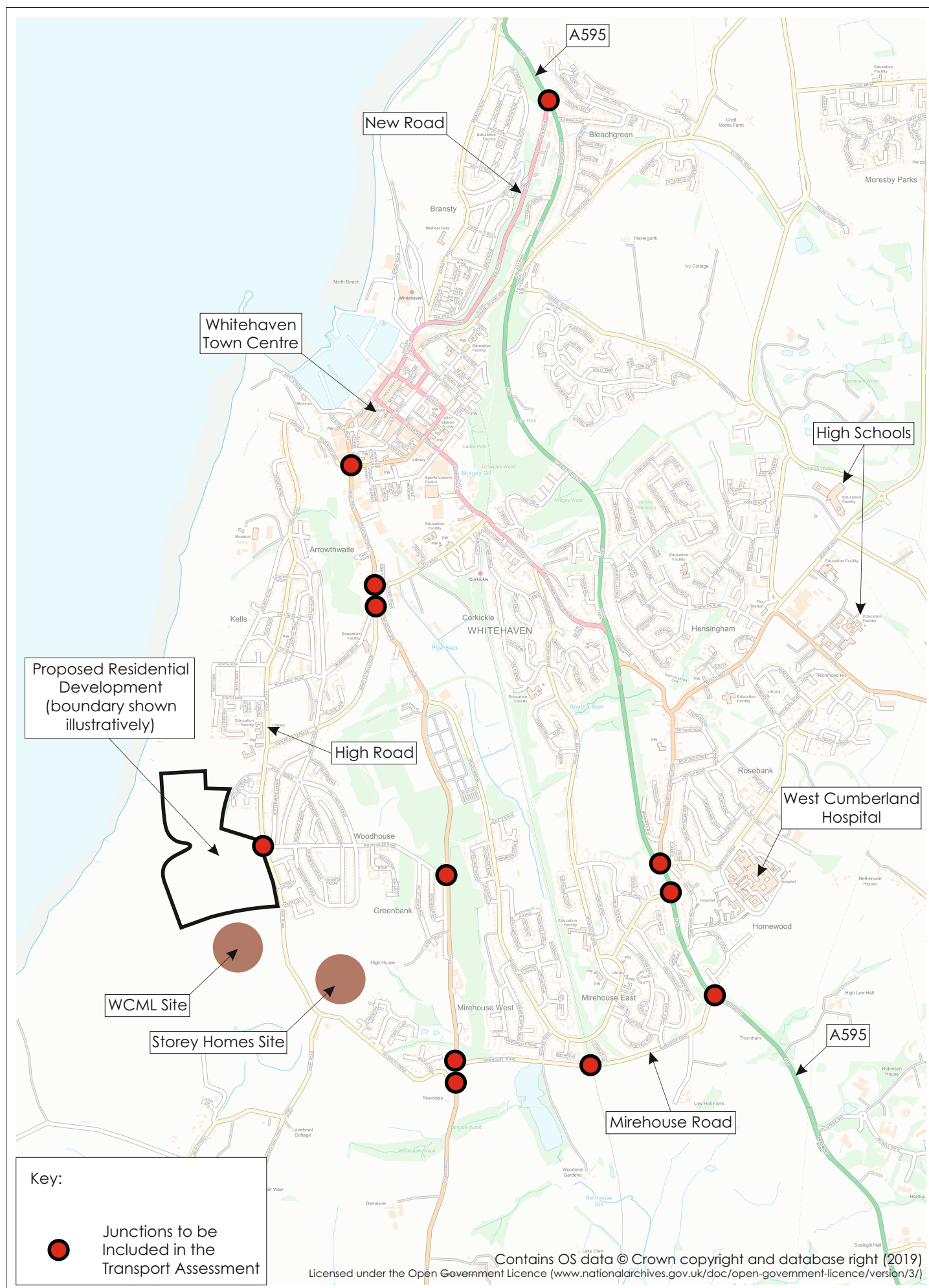


Figure 2.1 Local Facilities

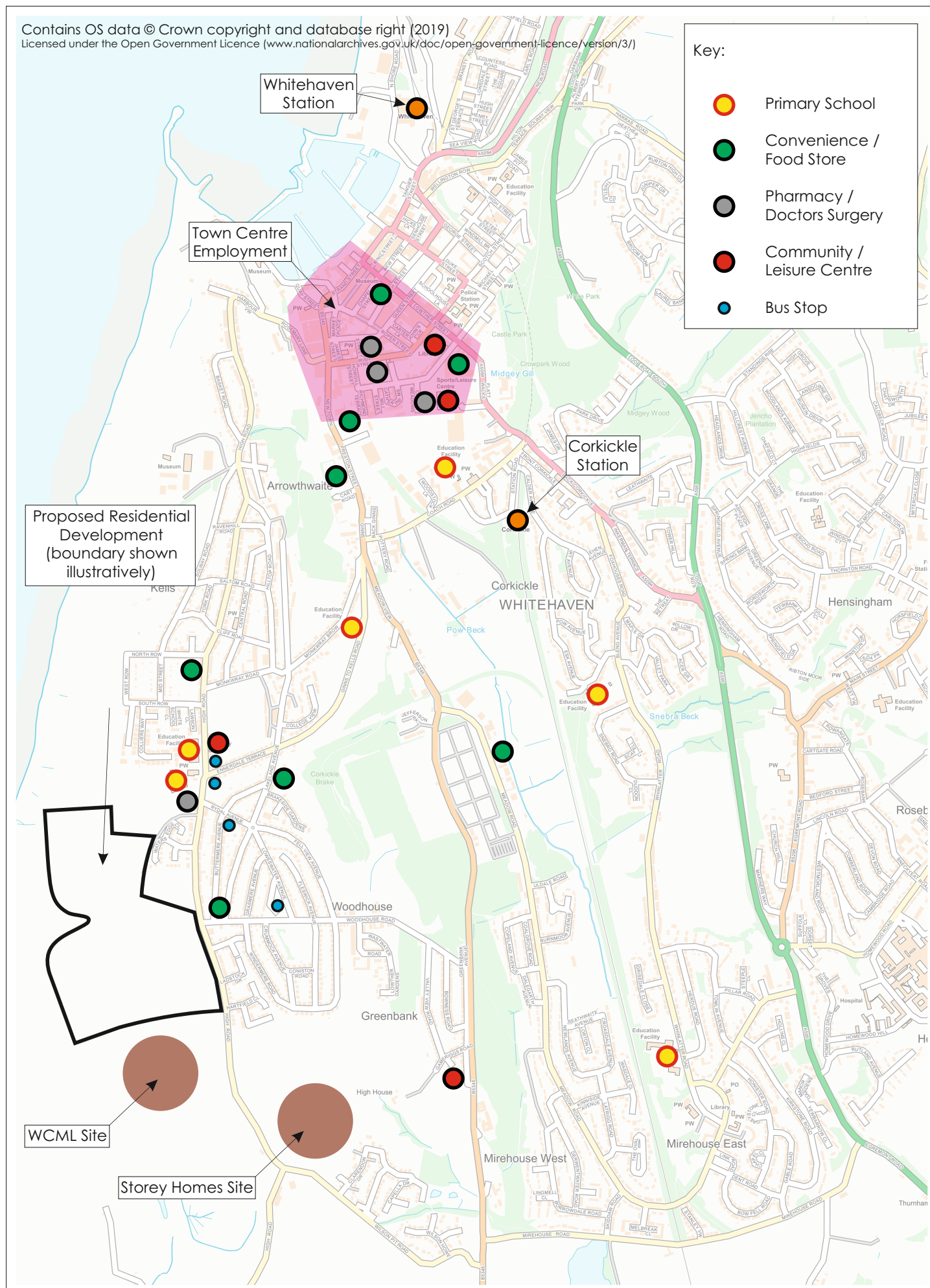


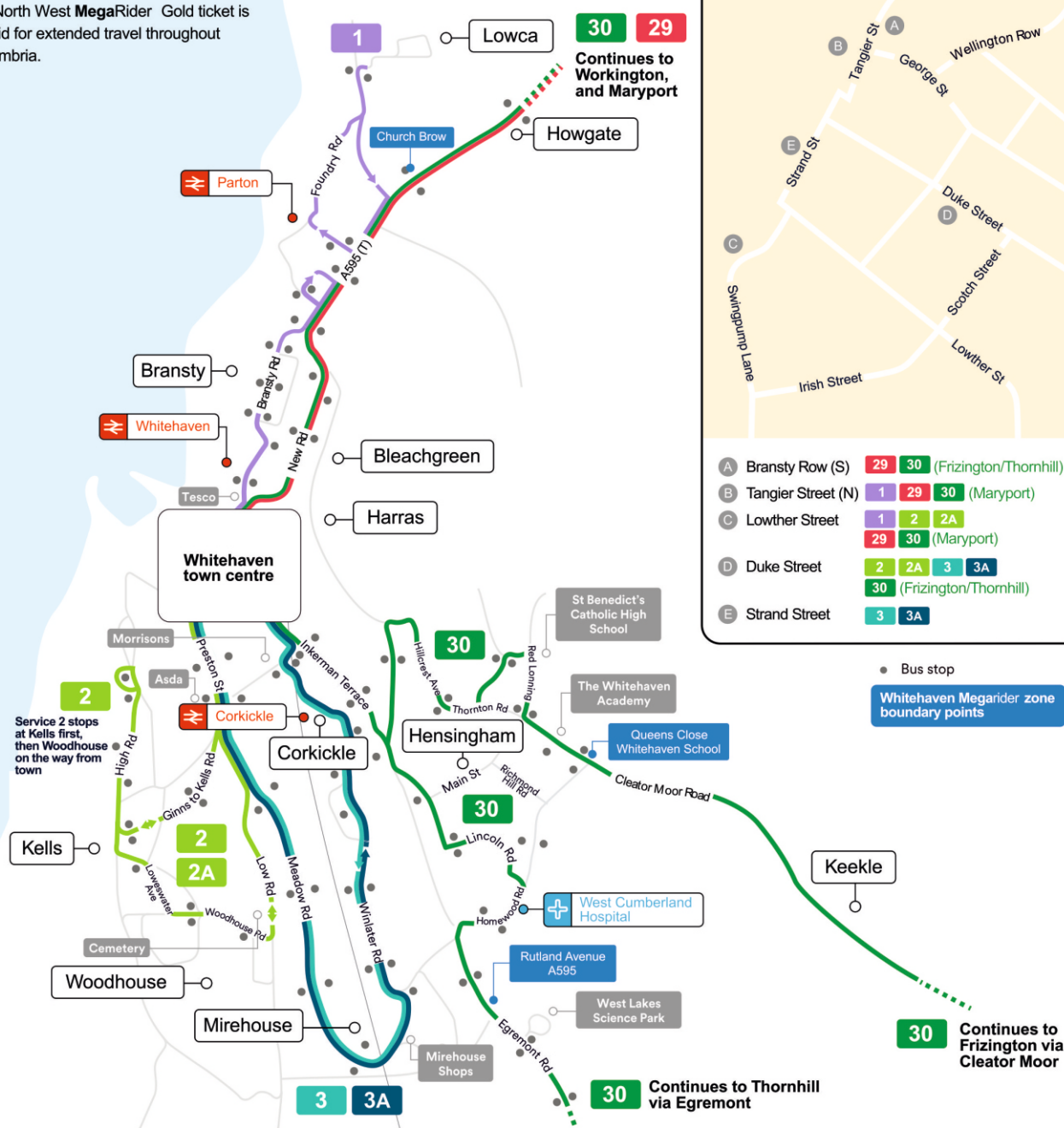
Figure 2.2 Local Bus Routes

Whitehaven



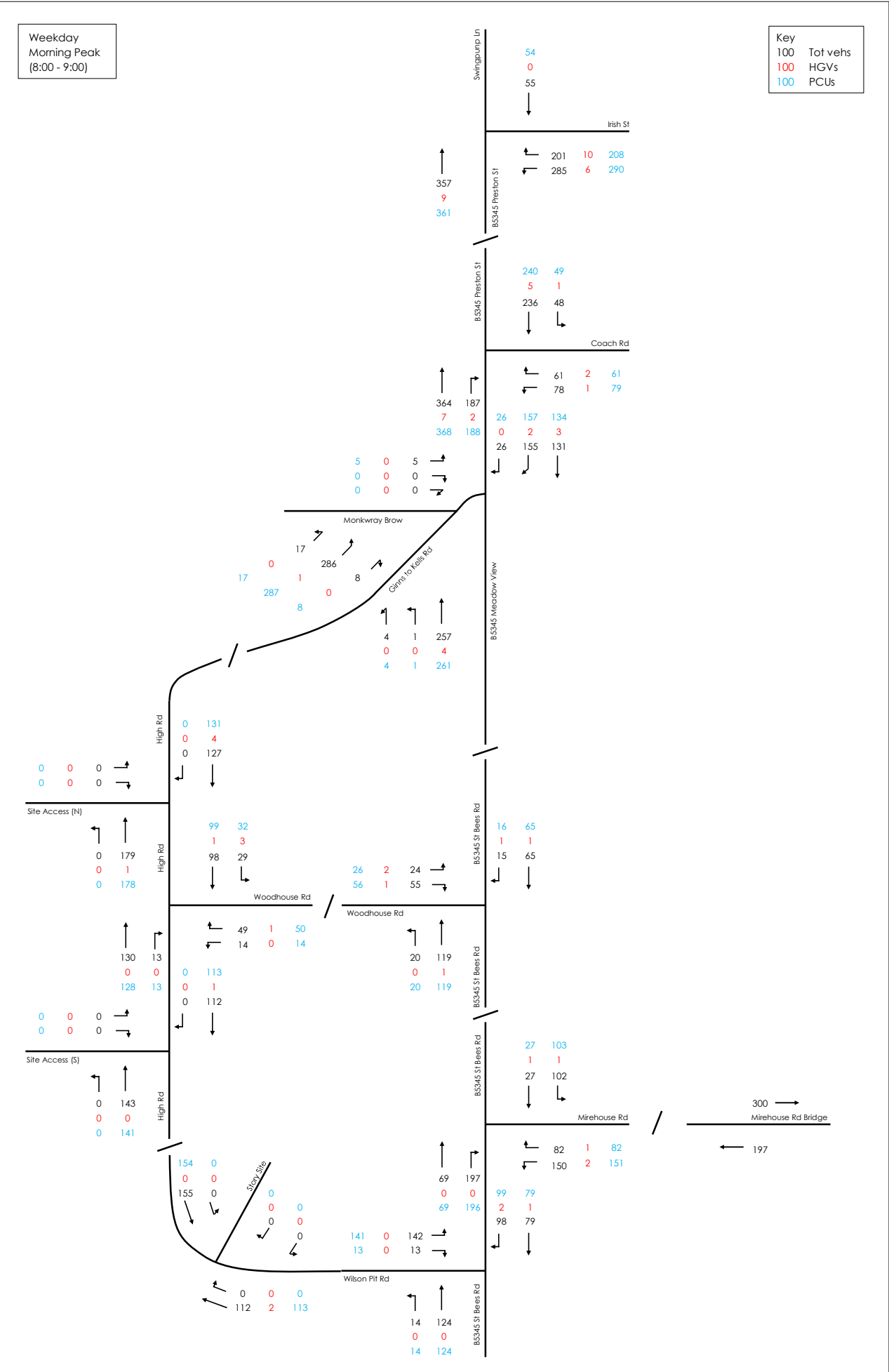
A West Cumbria **MegaRider Plus** ticket is valid for travel within West Cumbria to Cockermouth, Maryport and Whitehaven.

A North West **MegaRider Gold** ticket is valid for extended travel throughout Cumbria.



Correct at time of print; 2/11/2020

Figure 3.1a Observed Traffic Flows (Local Roads): Weekday Morning Peak



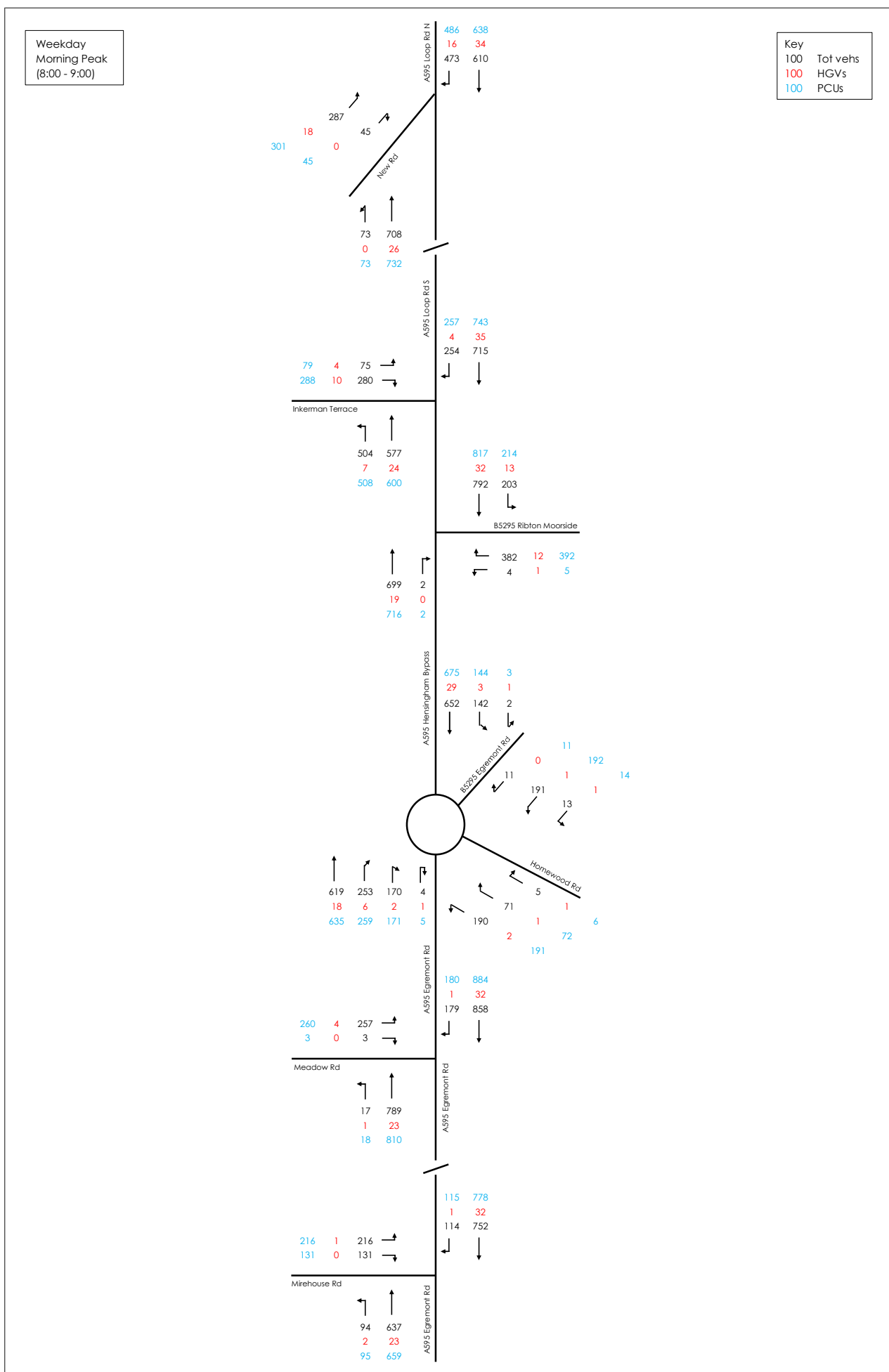


Figure 3.2a Observed Traffic Flows (Local Roads): Weekday Evening Peak

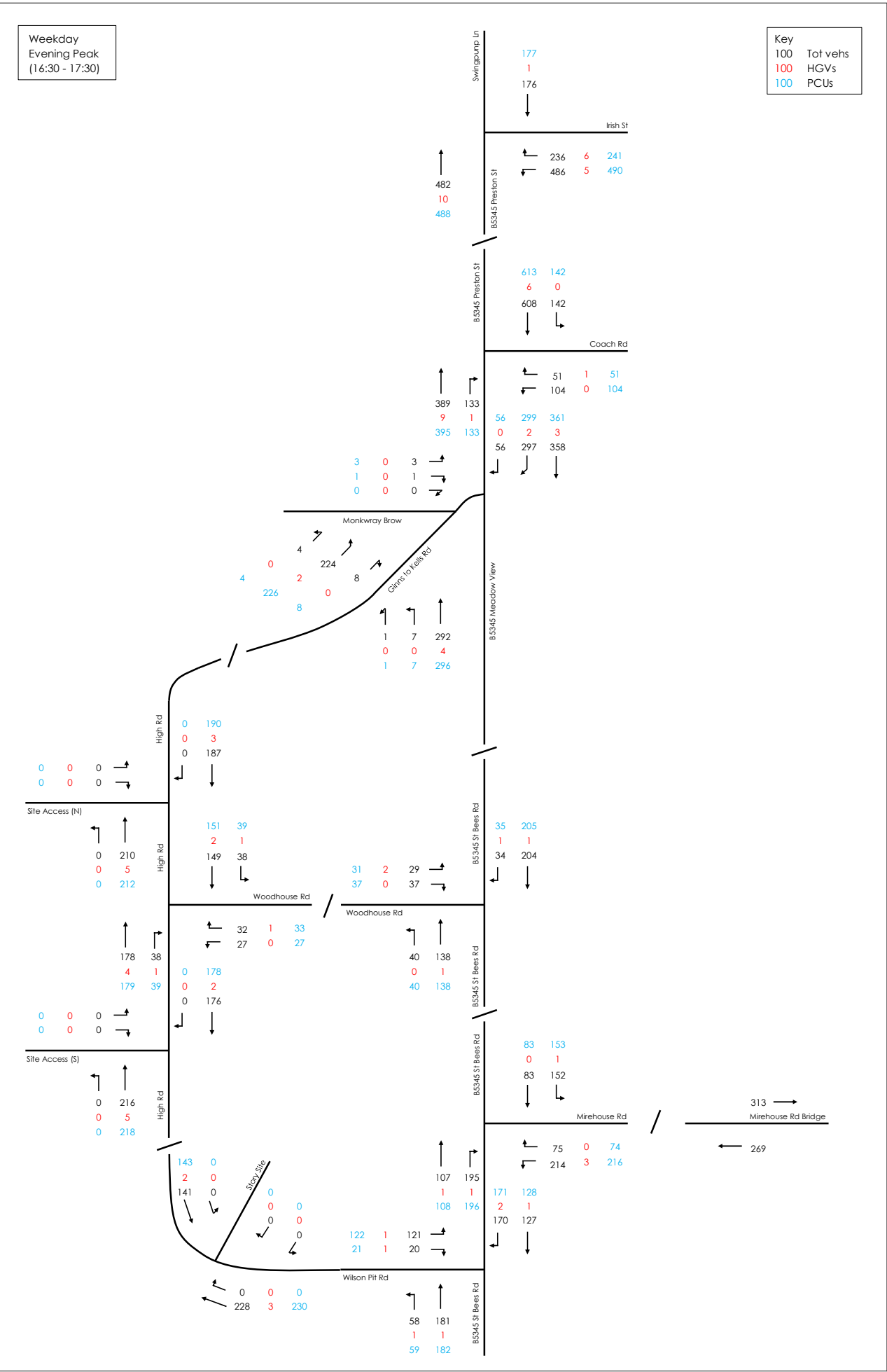
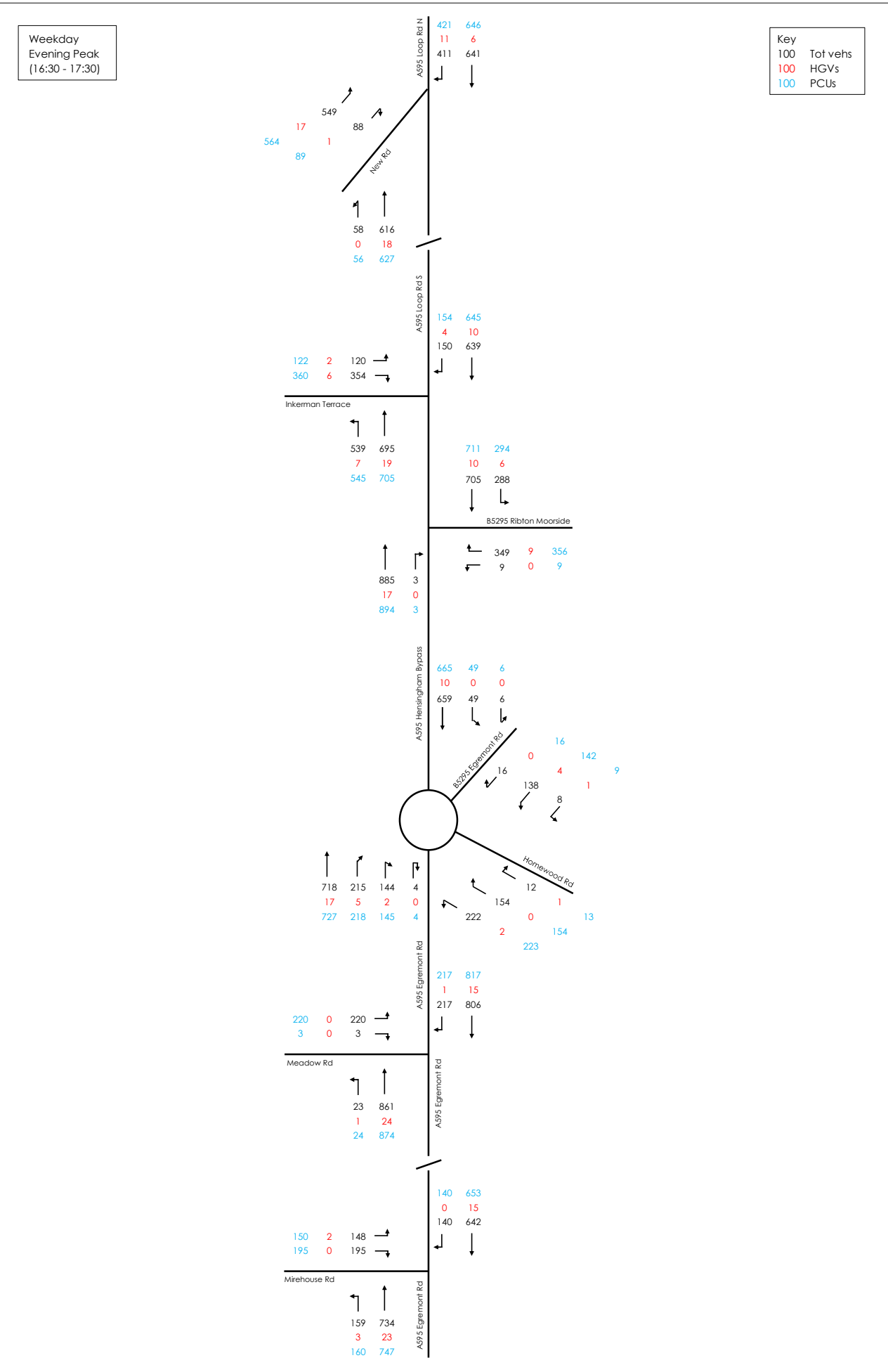


Figure 3.2b Observed Traffic Flows (A595 Corridor): Weekday Evening Peak



WCML Traffic Flows (Local Roads): Weekday Morning Peak

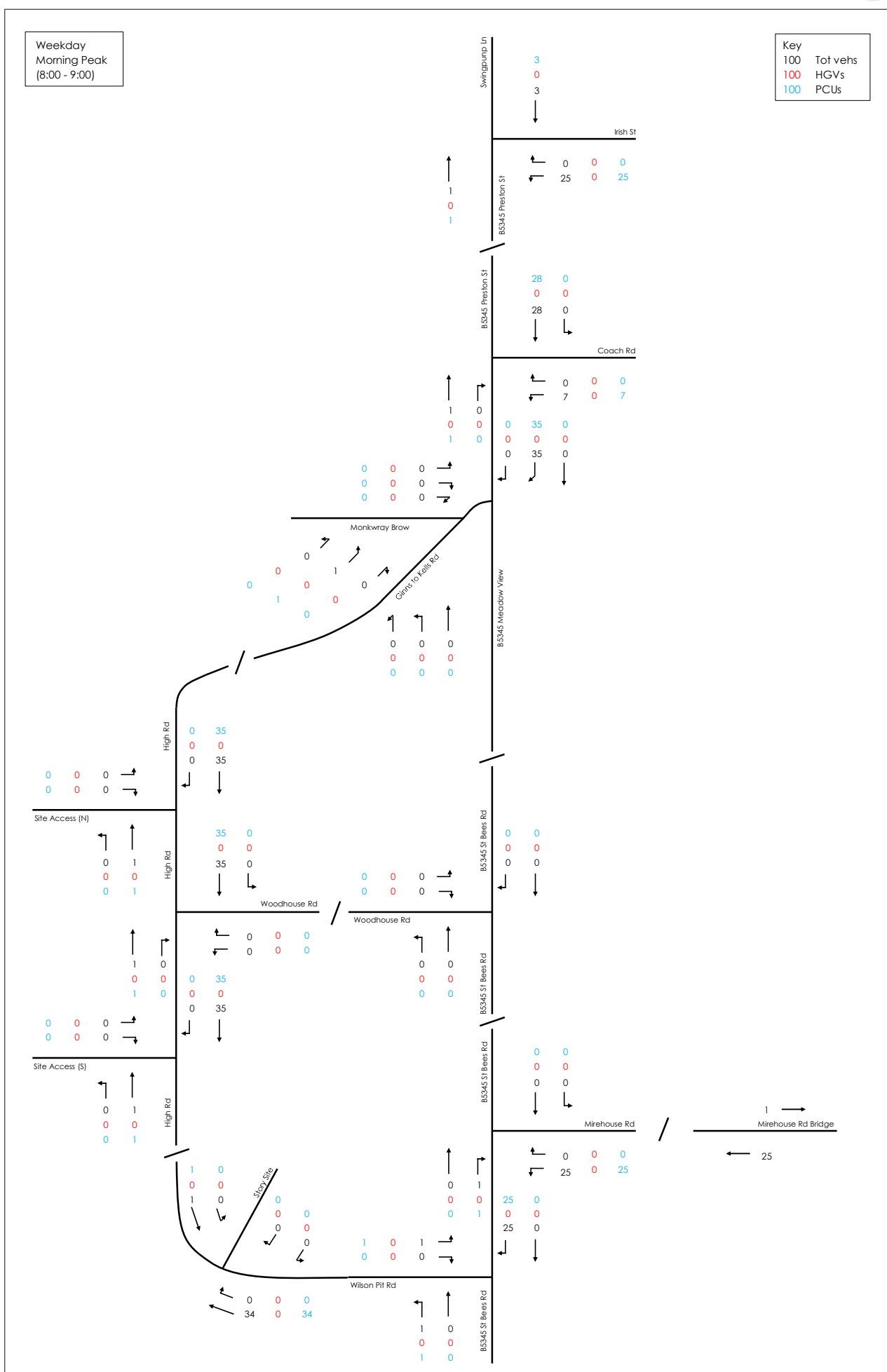


Figure 3.3b WCML Traffic Flows (A595 Corridor): Weekday Morning Peak

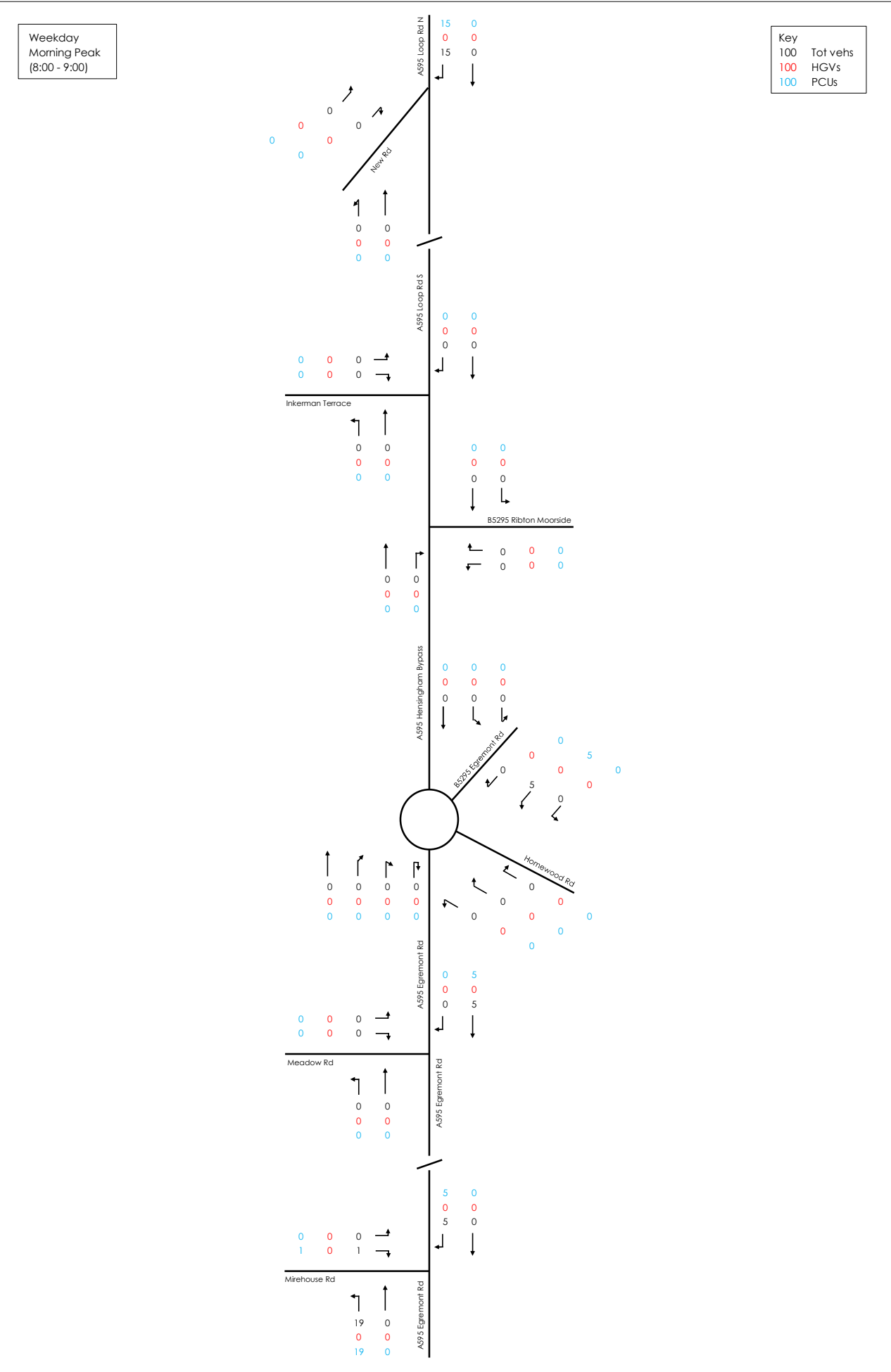


Figure 3.4a WCML Traffic Flows (Local Roads): Weekday Evening Peak



Figure 3.4b WCML Traffic Flows (A595 Corridor): Weekday Evening Peak

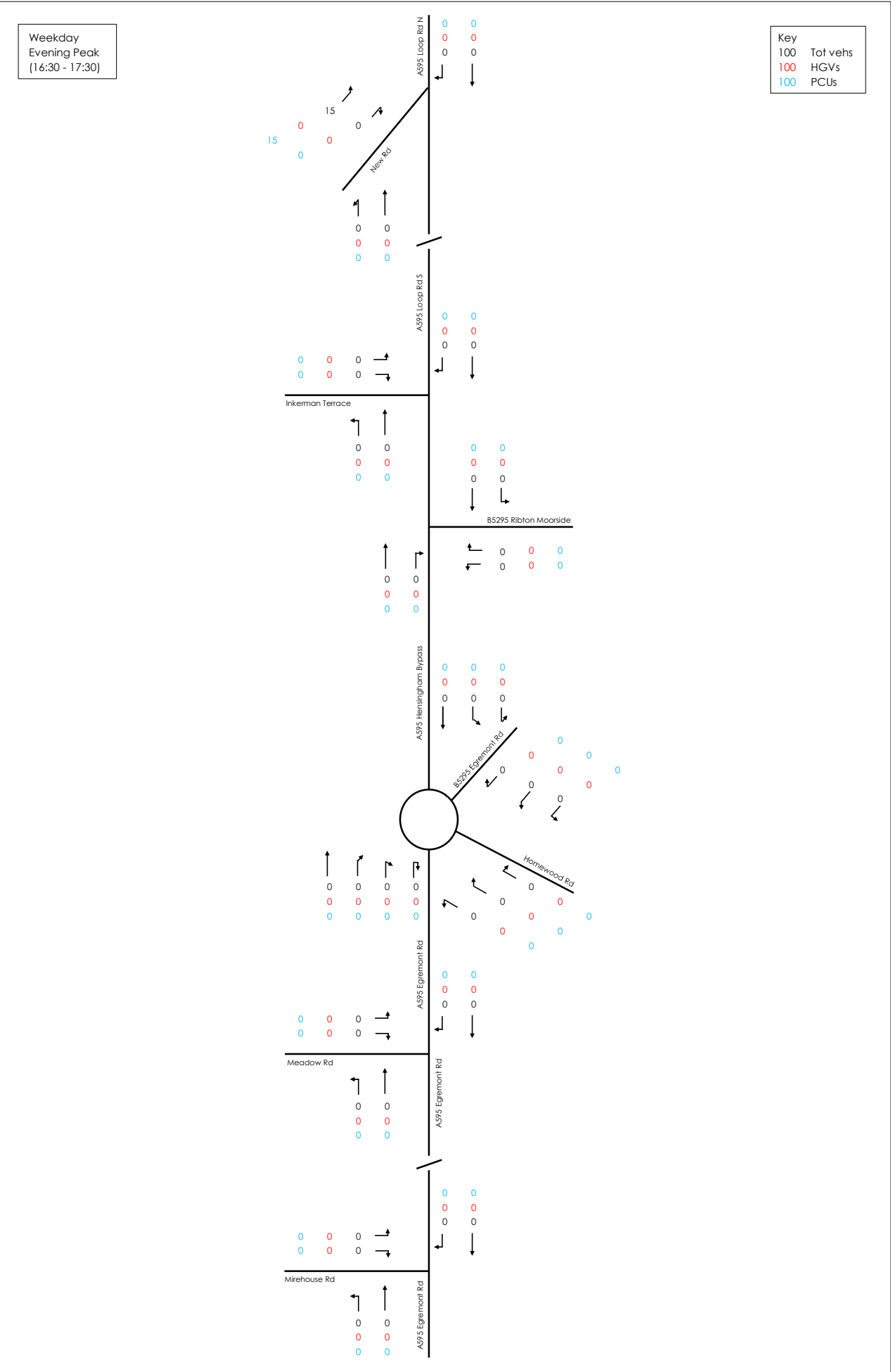


Figure 3.5a

Story Homes Development Traffic Flows (Local Roads): Weekday Morning Peak

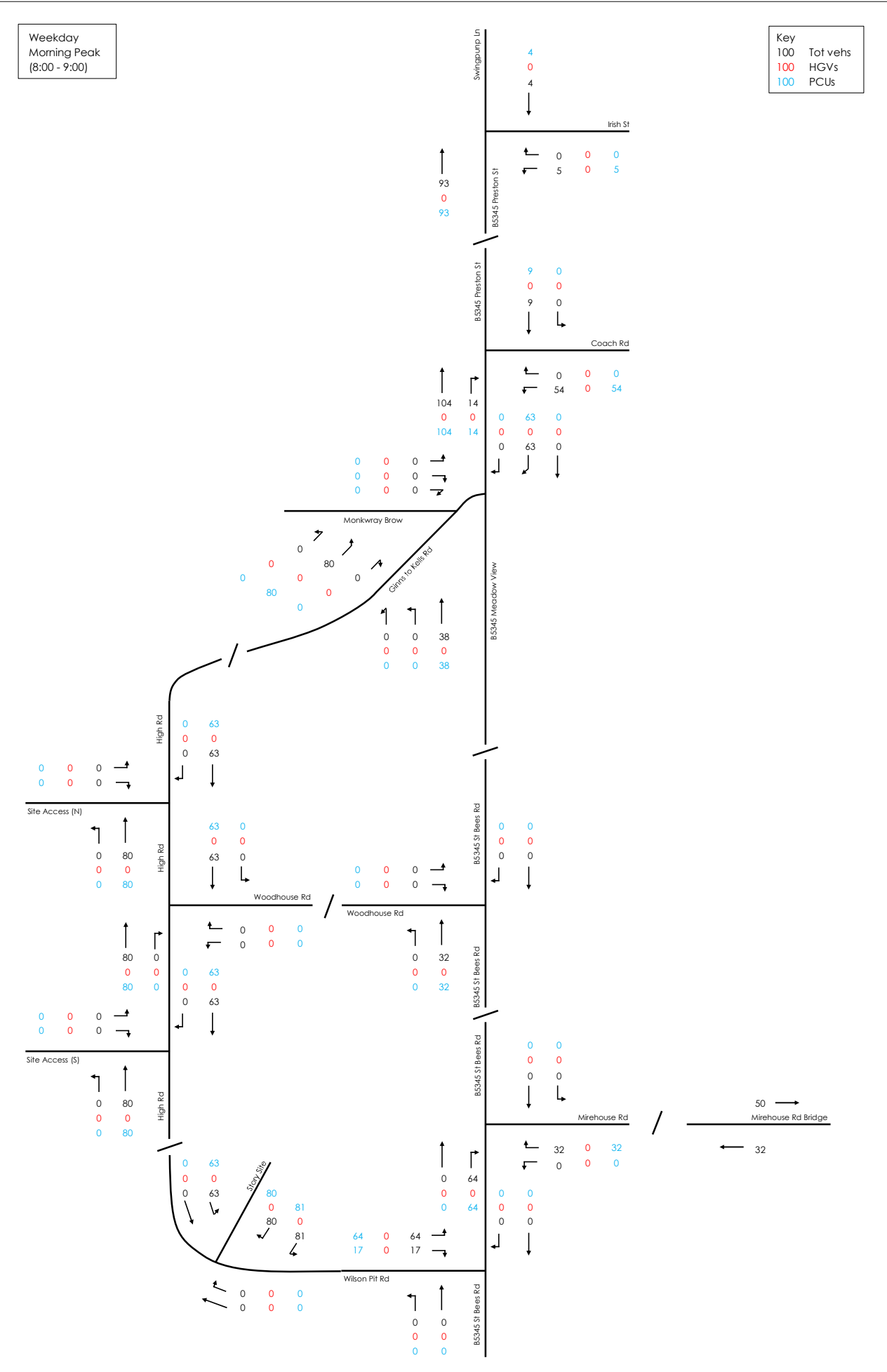
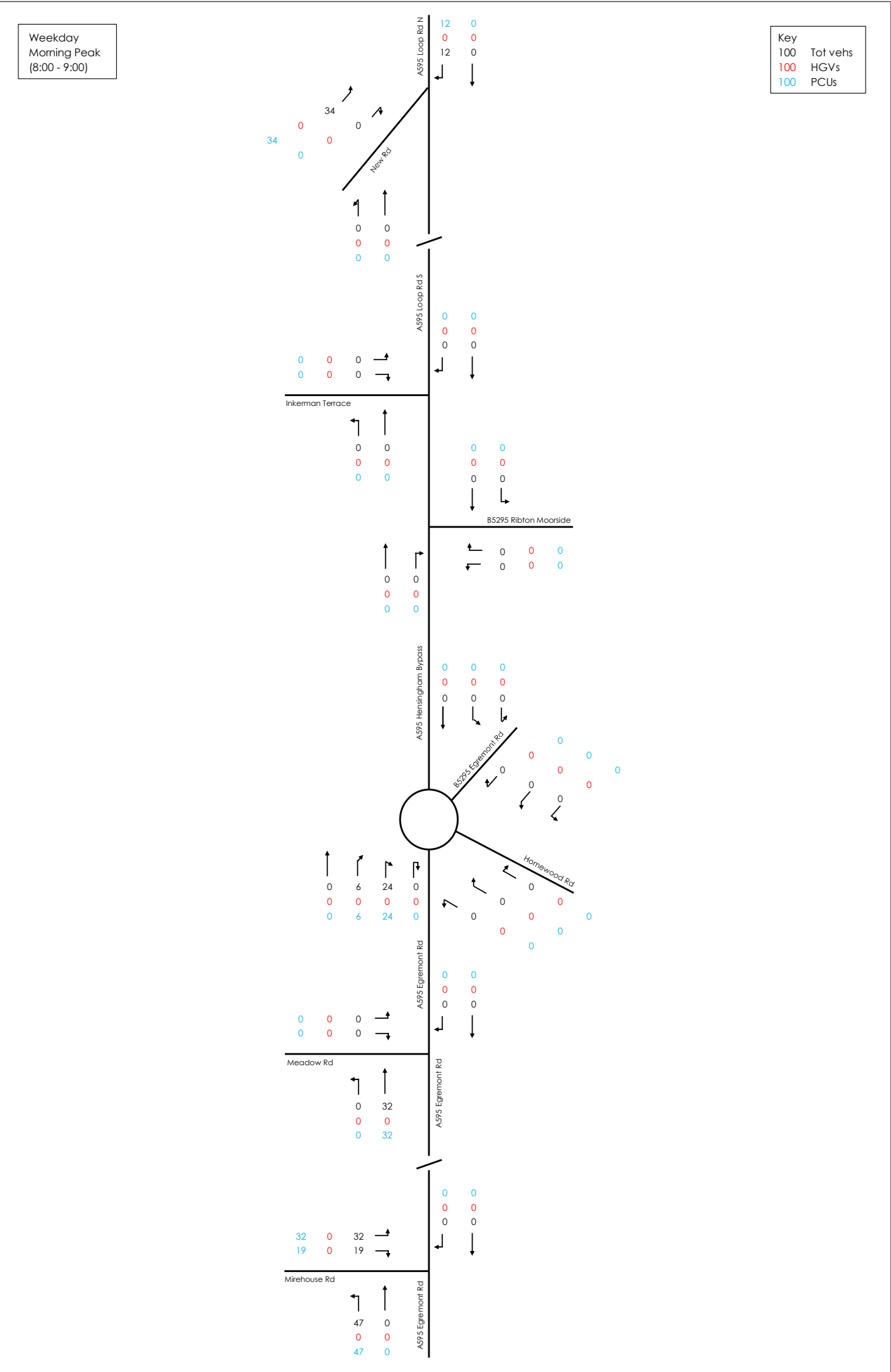


Figure 3.5b Story Homes Development Traffic Flows (A595 Corridor): Weekday Morning Peak



Story Homes Development Traffic Flows (Local Roads): Weekday Evening Peak

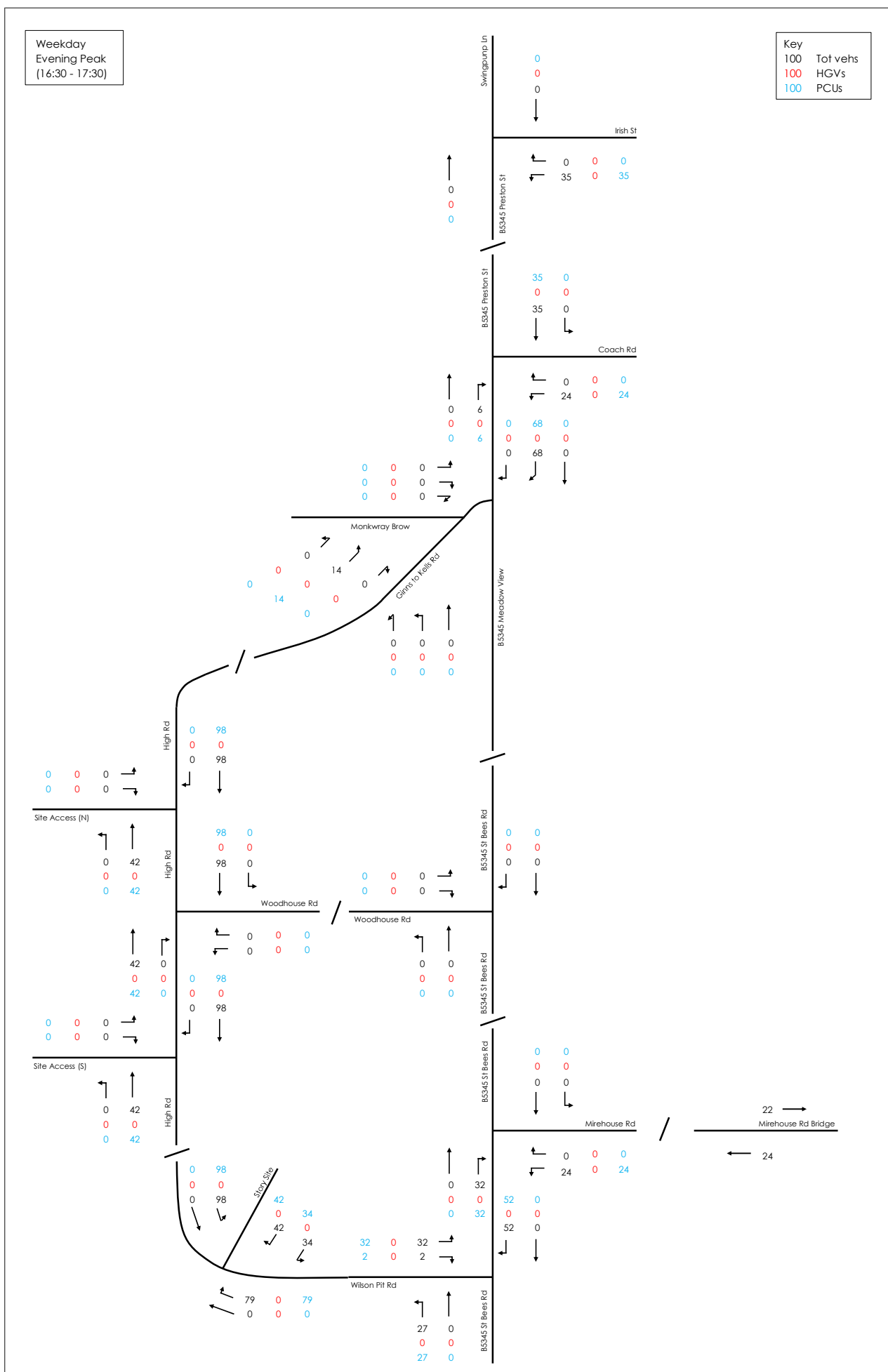


Figure 3.6b Story Homes Development Traffic Flows (A595 Corridor): Weekday Evening Peak

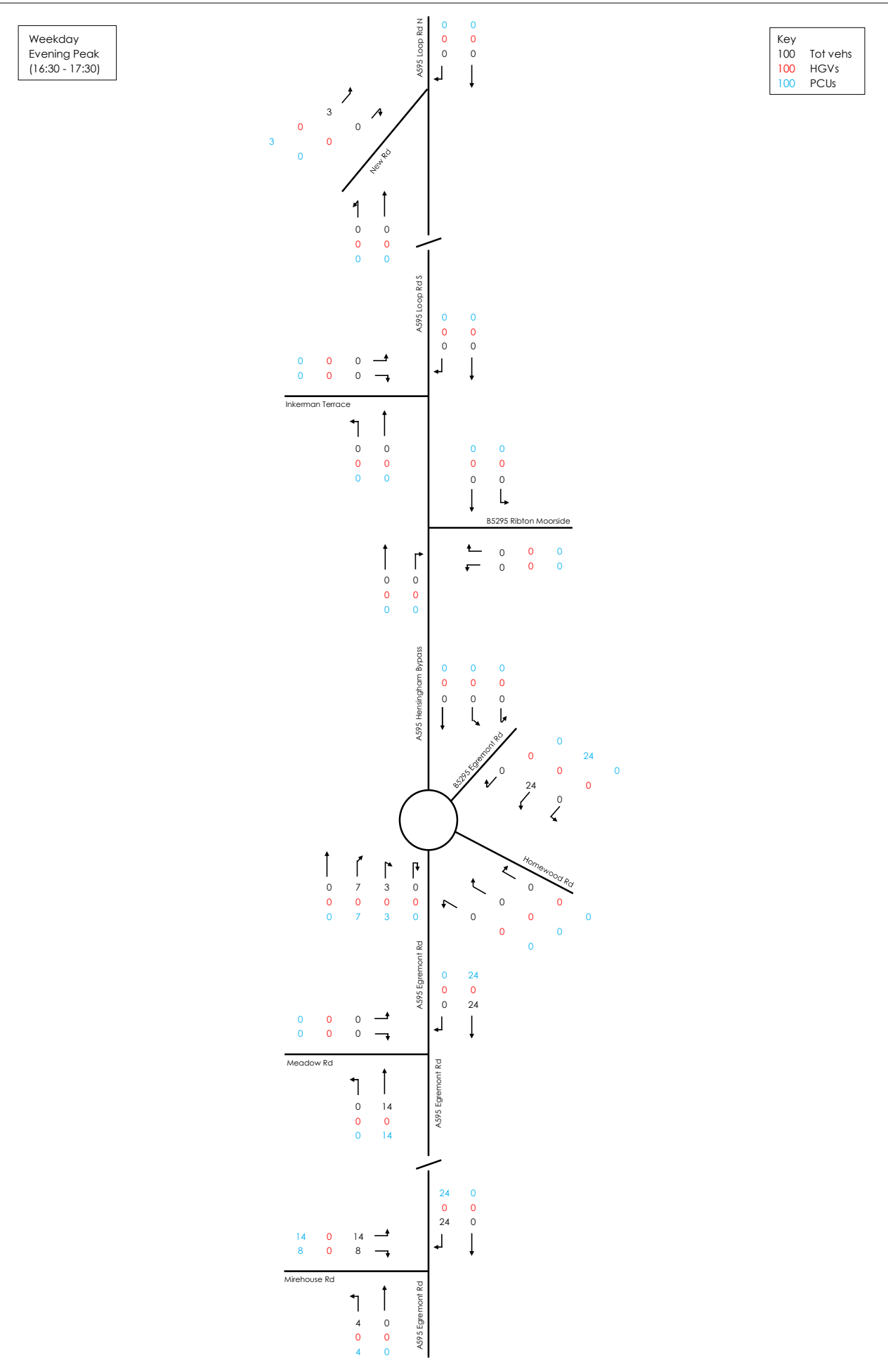


Figure 3.7a

Harras Moor Developments Traffic Flows (Local Roads): Weekday Morning Peak

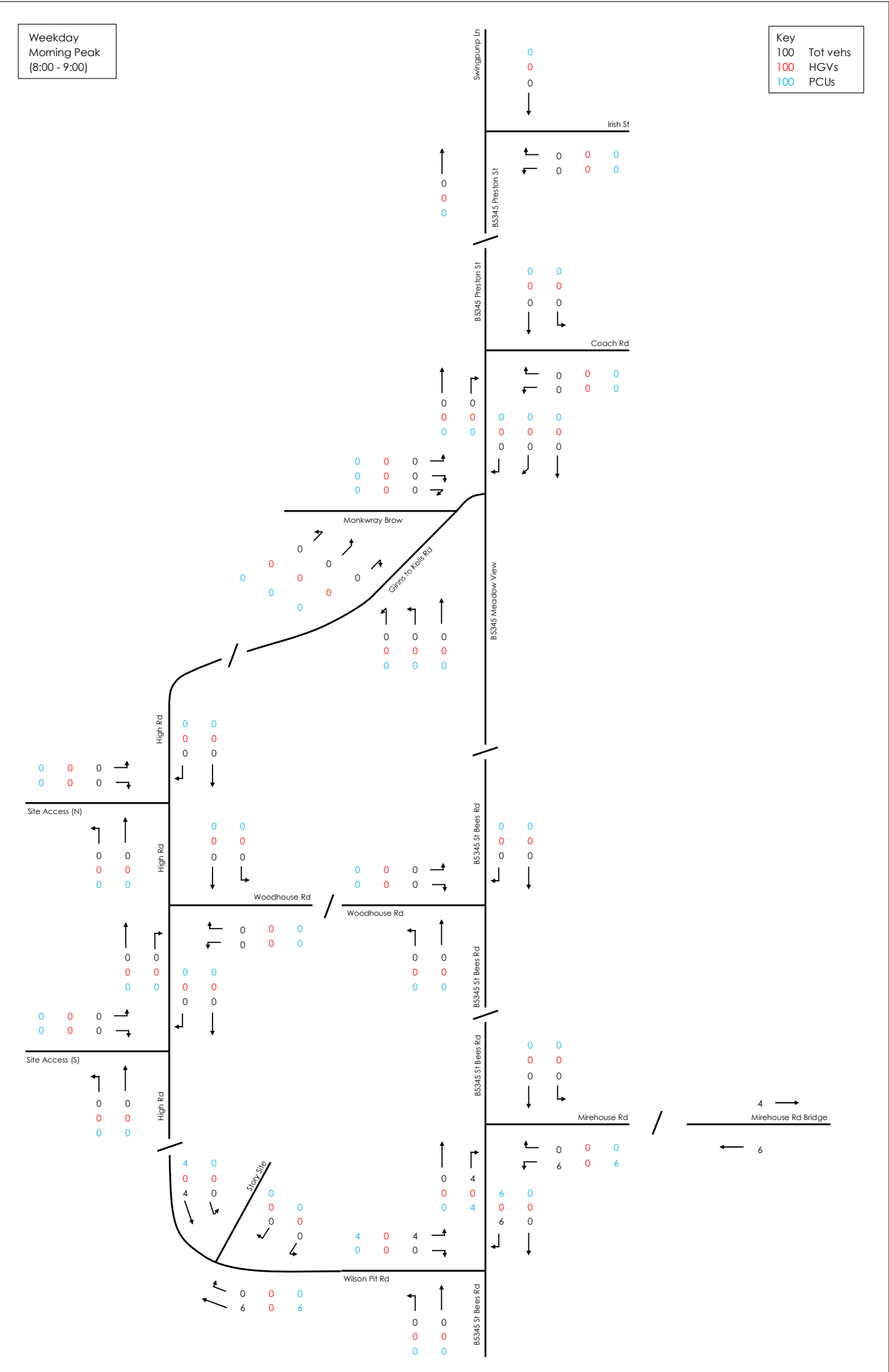


Figure 3.7b

Harras Moor Developments Traffic Flows (A595 Corridor): Weekday Morning Peak

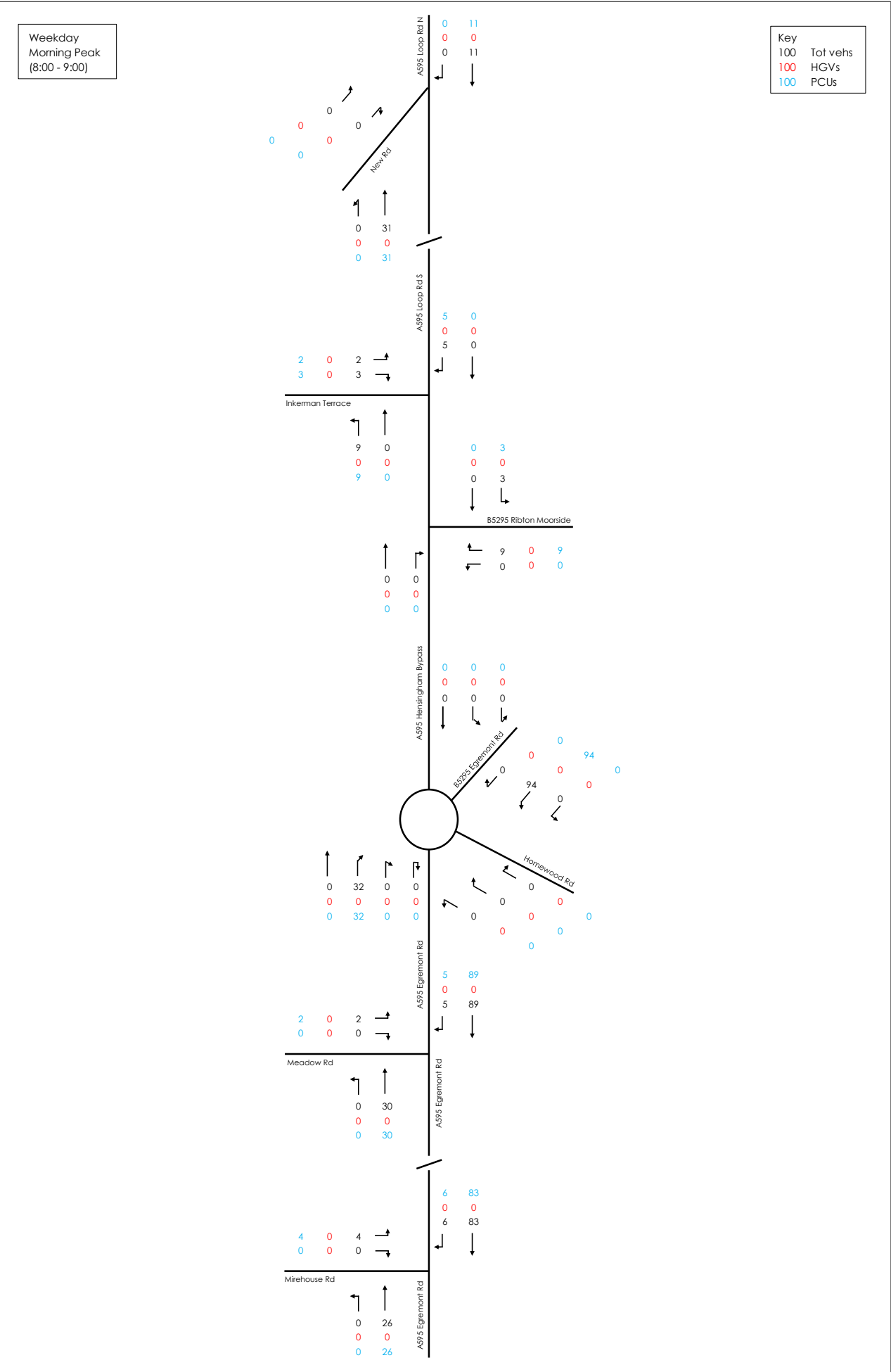


Figure 3.8a

Harras Moor Developments Traffic Flows (Local Roads): Weekday Evening Peak

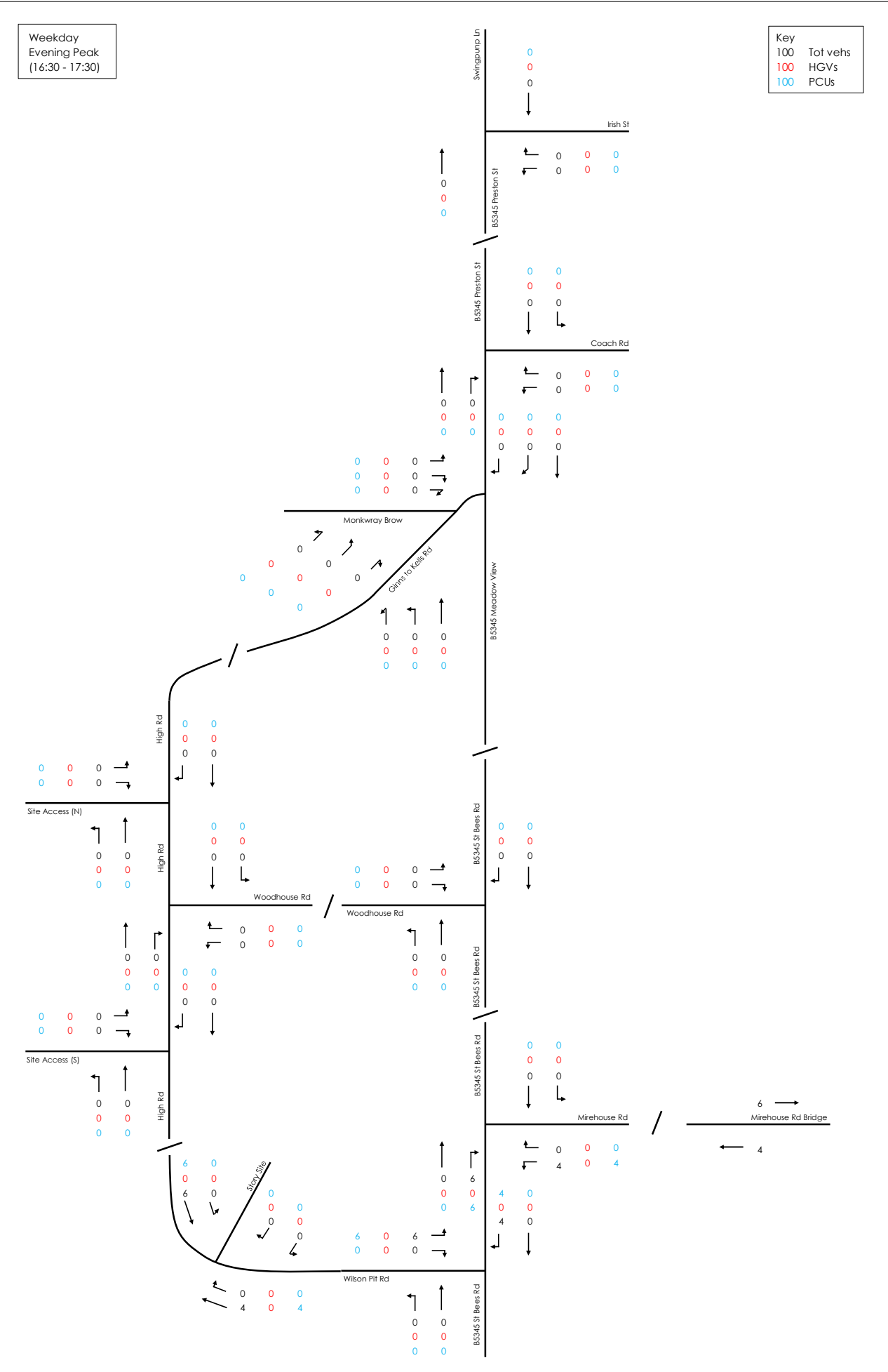
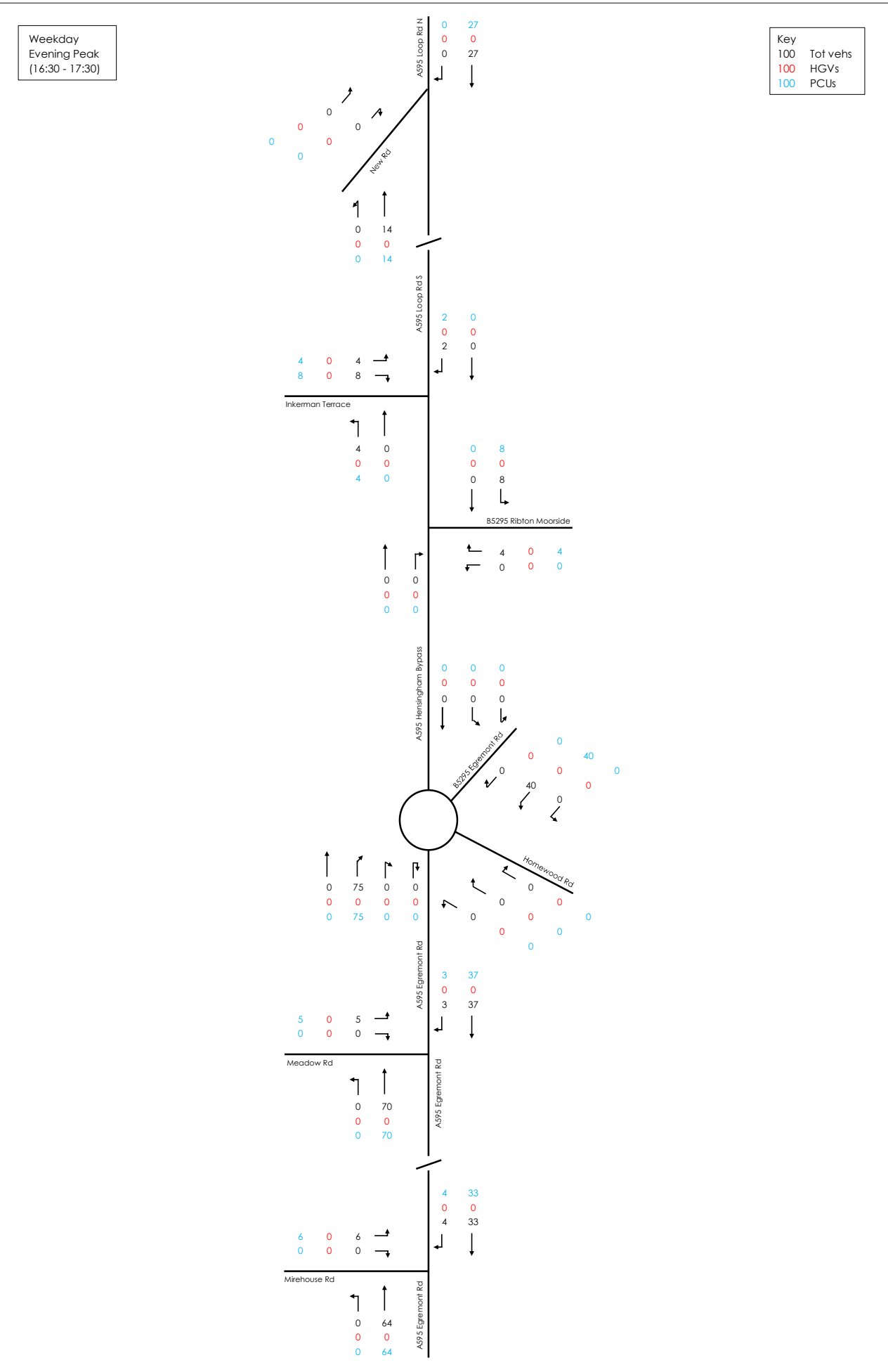


Figure 3.8b Harras Moor Development Traffic Flows (A595 Corridor): Weekday Evening Peak



Total Committed Development Traffic Flows (Local Roads): Weekday Morning Peak

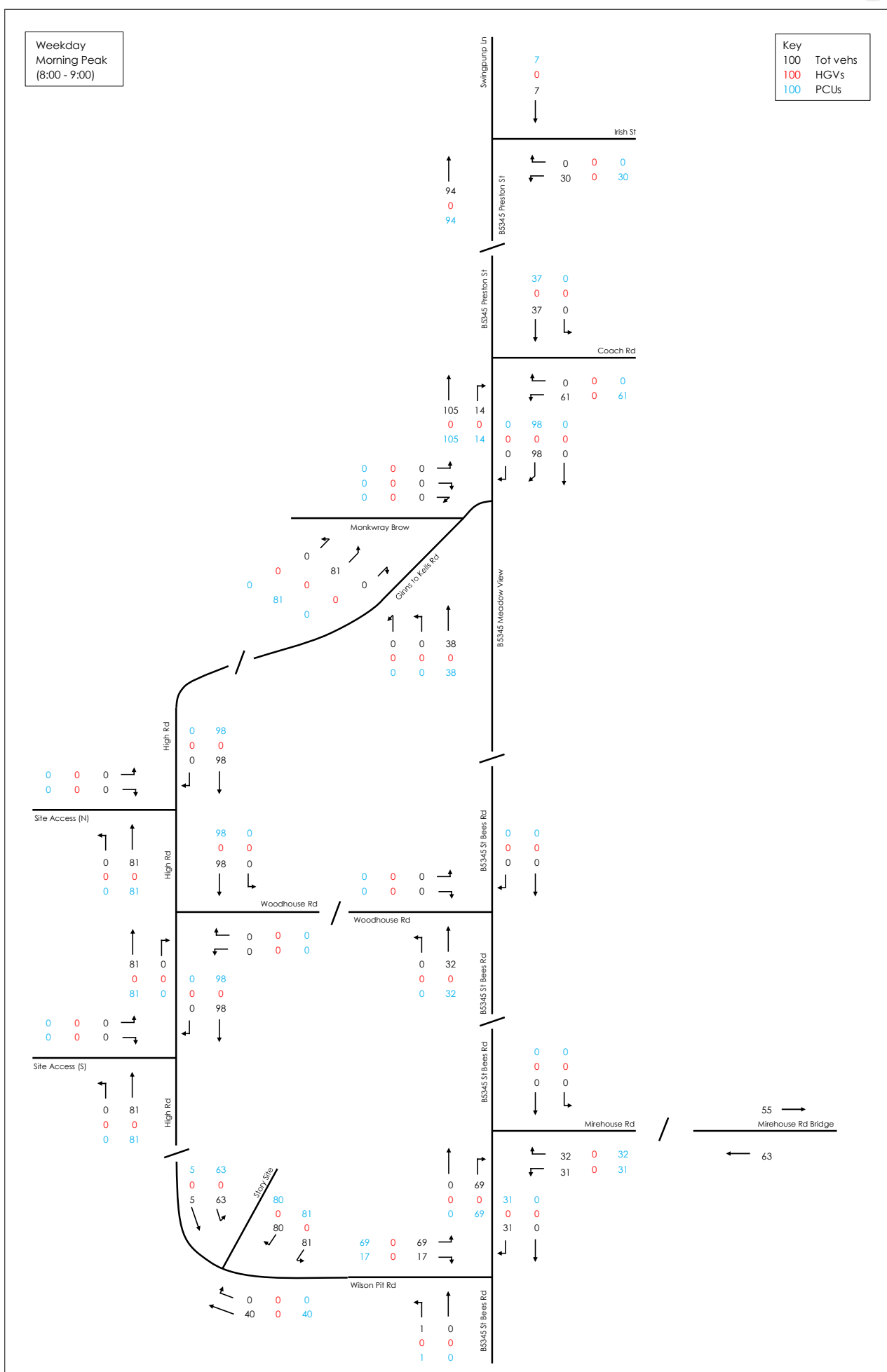


Figure 3.9b

Total Committed Development Traffic Flows (A595 Corridor): Weekday Morning Peak

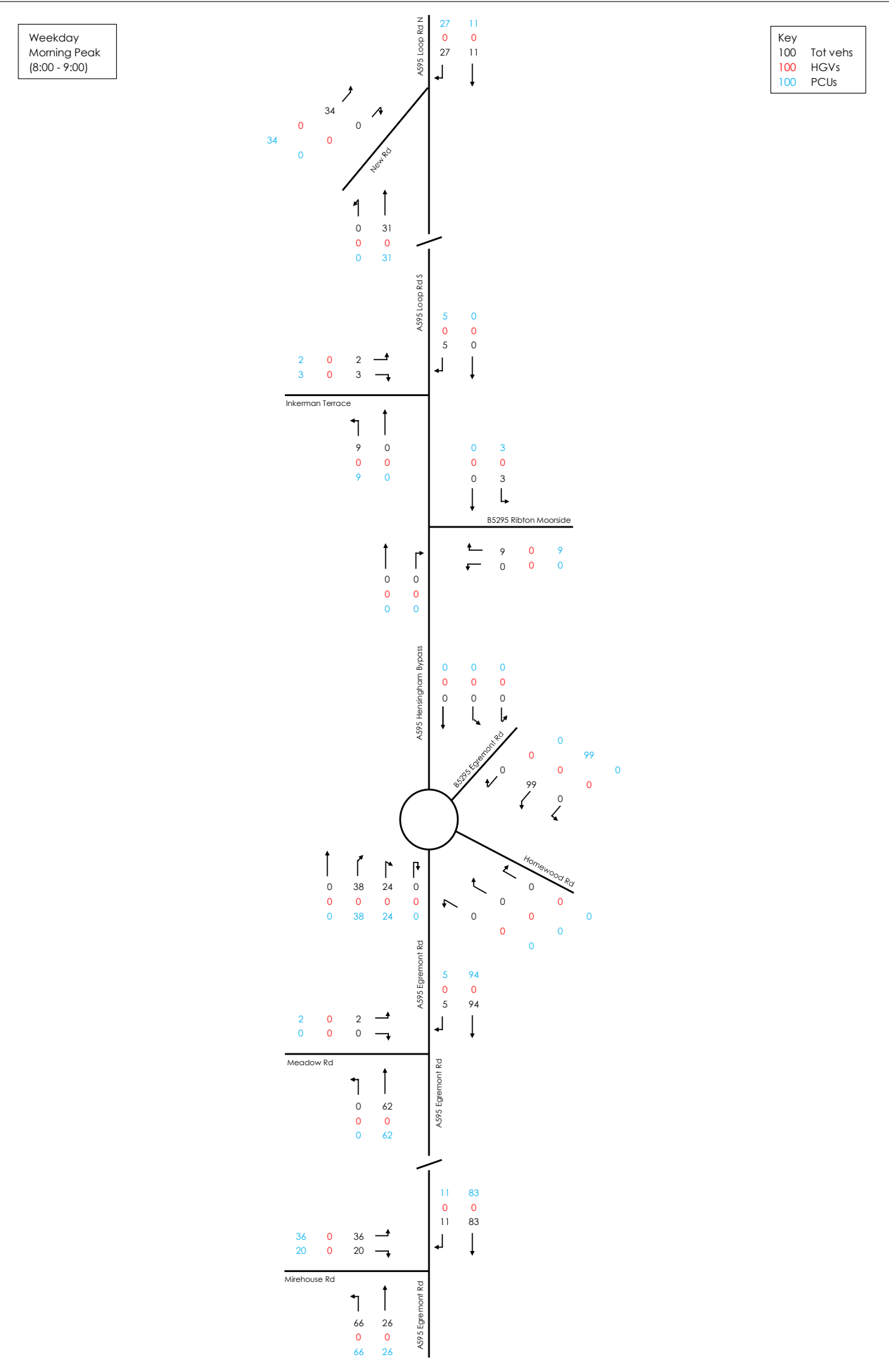
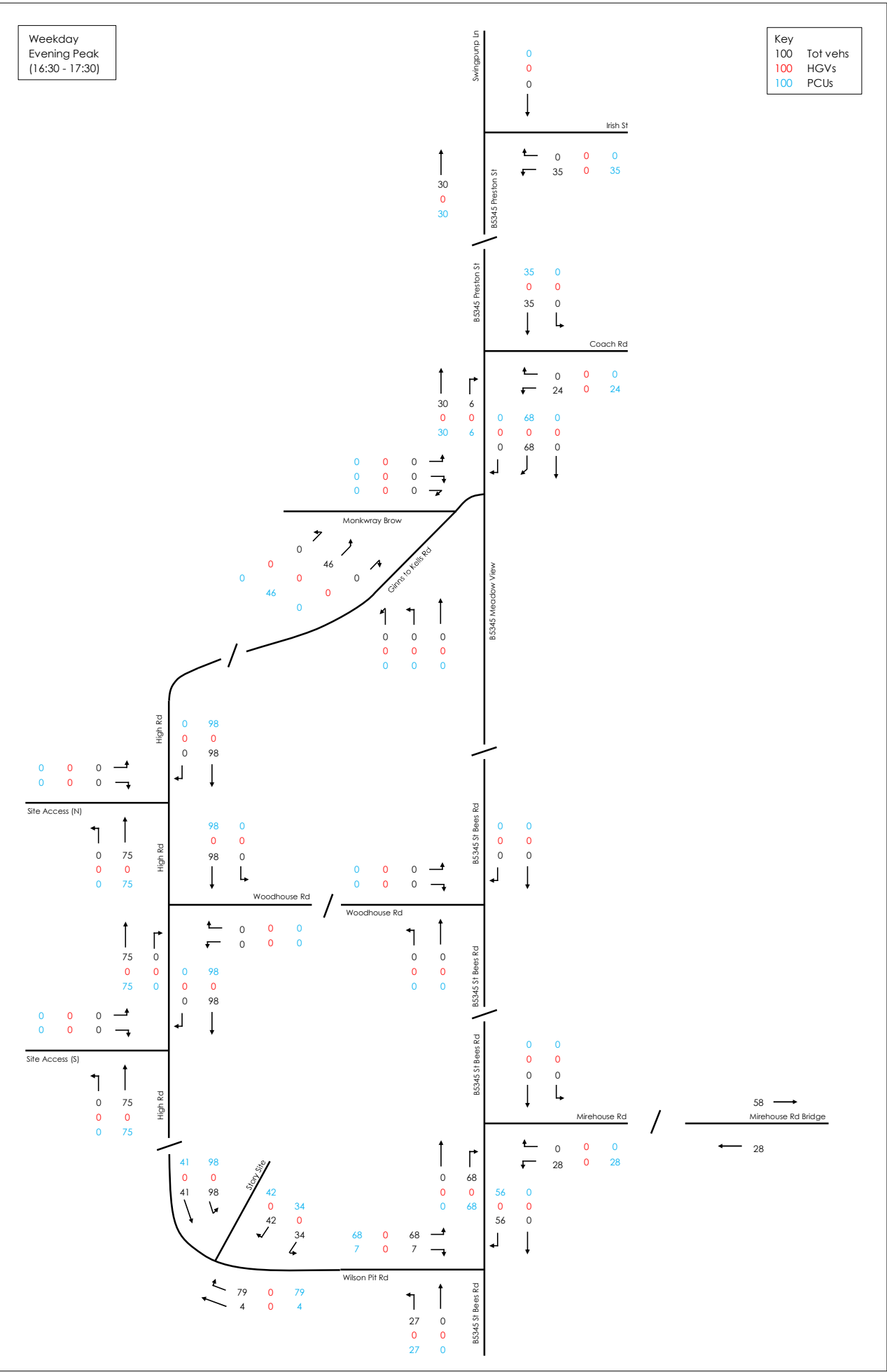


Figure 3.10a Total Committed Development Traffic Flows (Local Roads): Weekday Evening Peak



Total Committed Development Traffic Flows (A595 Corridor): Weekday Evening Peak

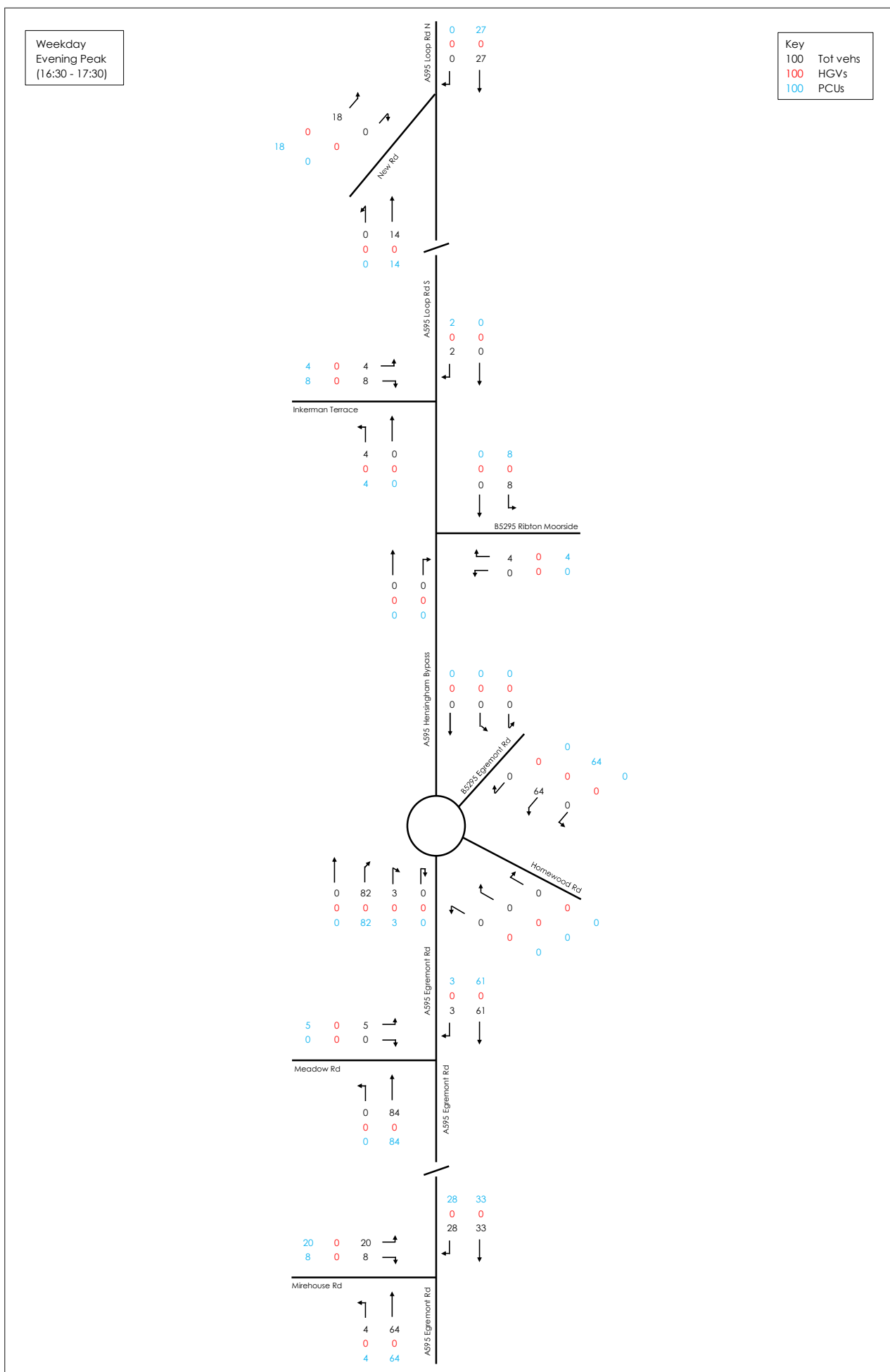


Figure 3.11a No Growth Base Traffic Flows (Local Roads): Weekday Morning Peak

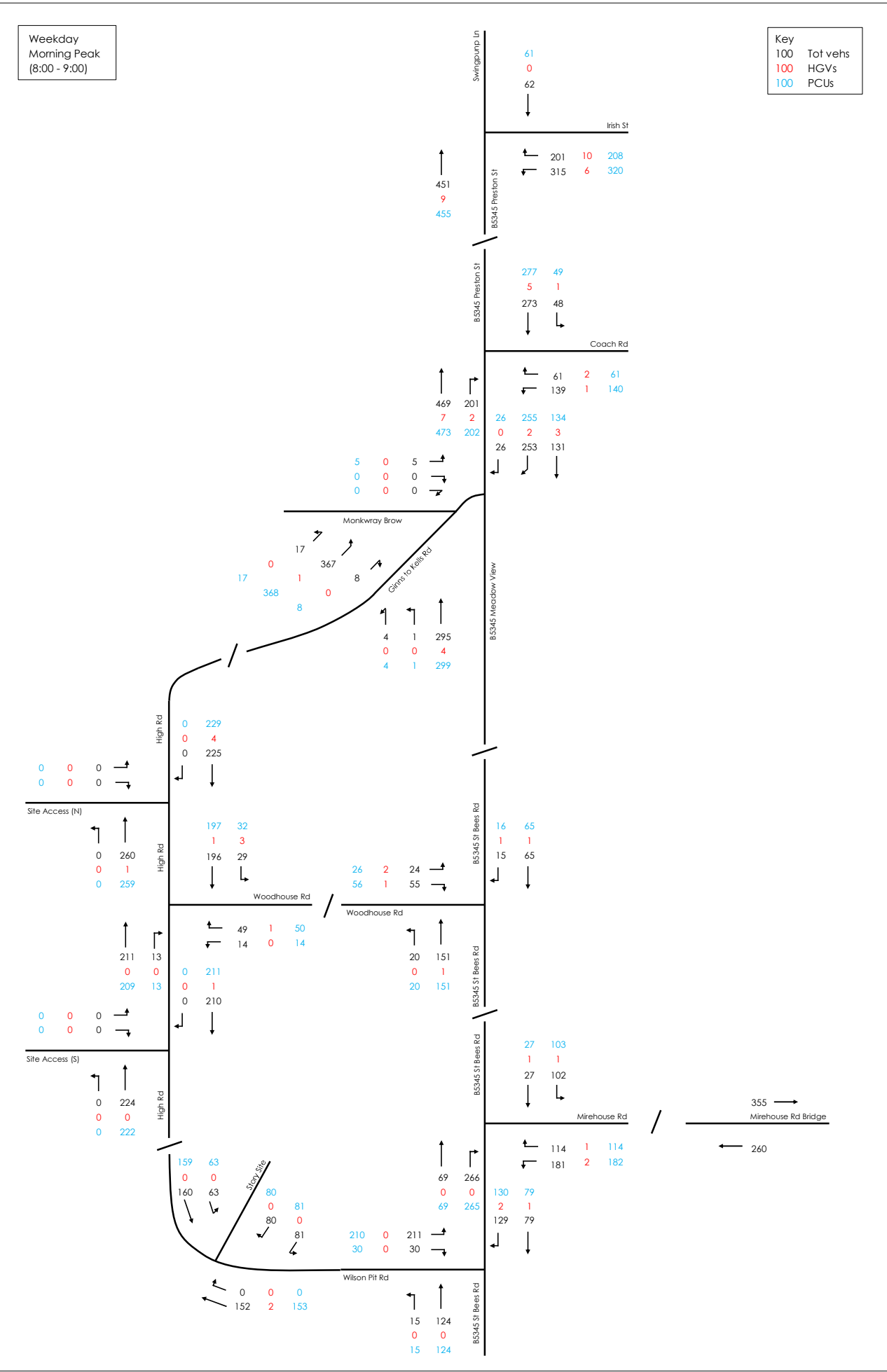


Figure 3.11b No Growth Base Traffic Flows (A595 Corridor): Weekday Morning Peak

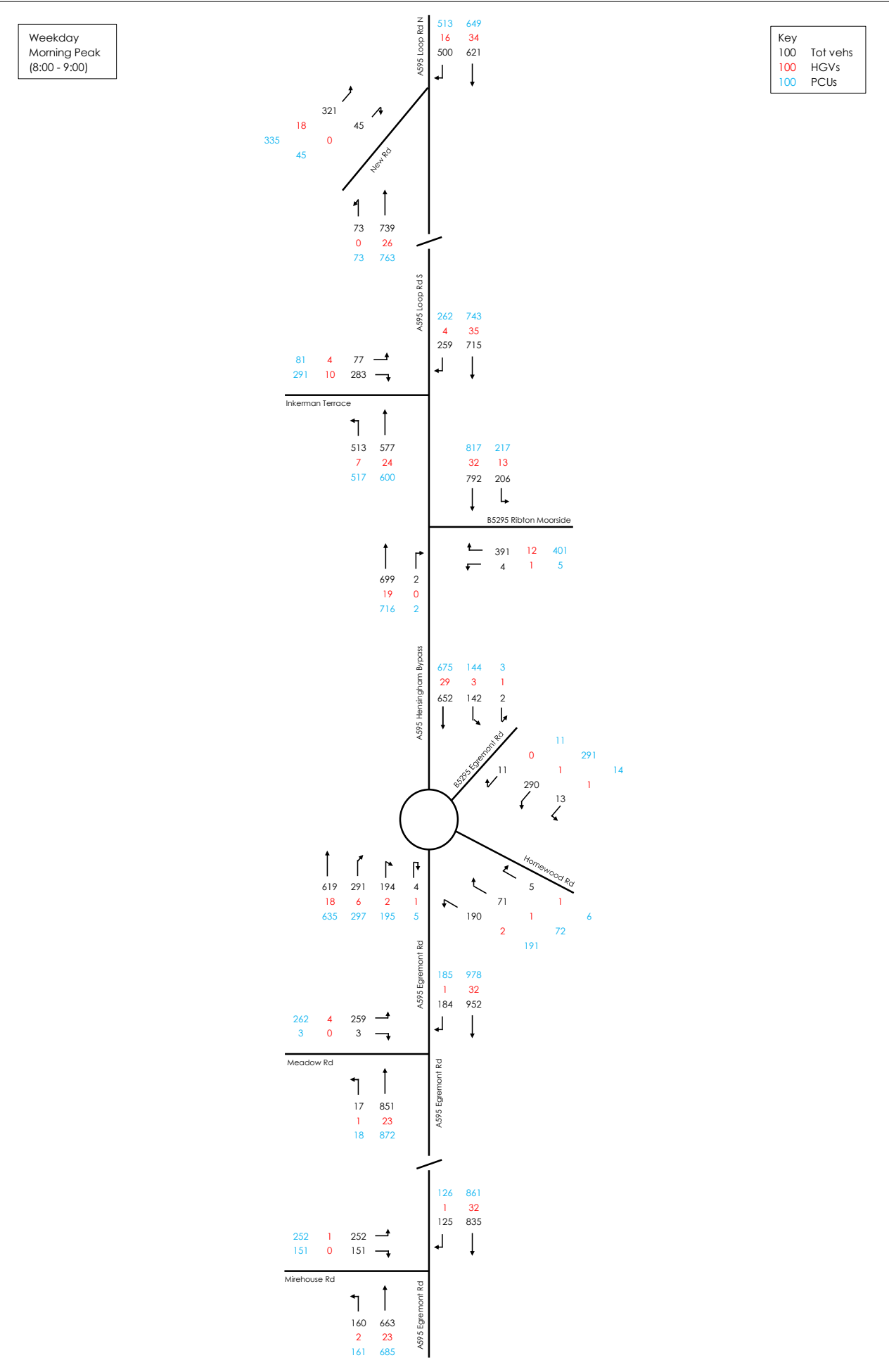


Figure 3.12a No Growth Base Traffic Flows (Local Roads): Weekday Evening Peak

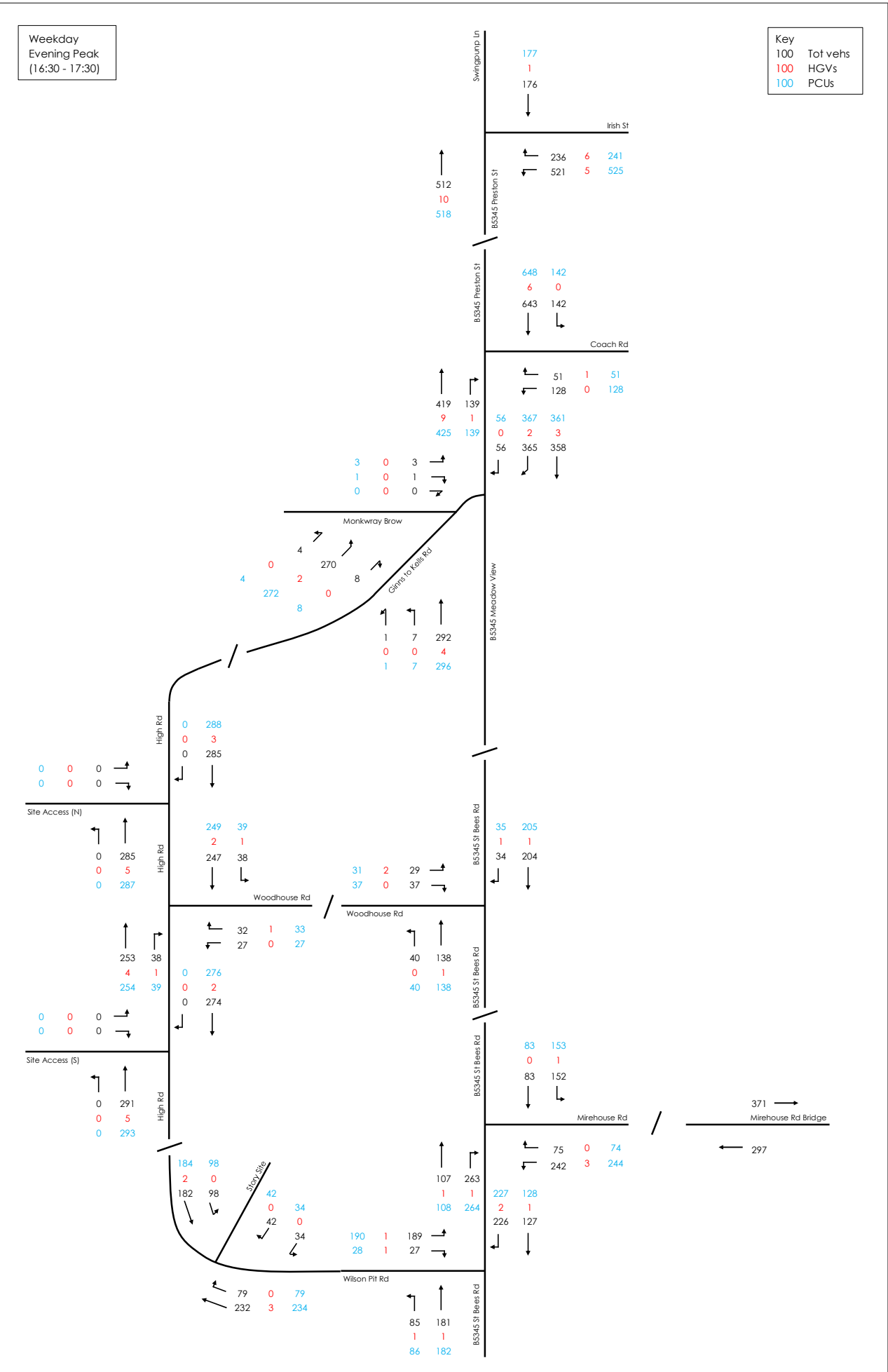


Figure 3.12b No Growth Base Traffic Flows (A595 Corridor): Weekday Evening Peak

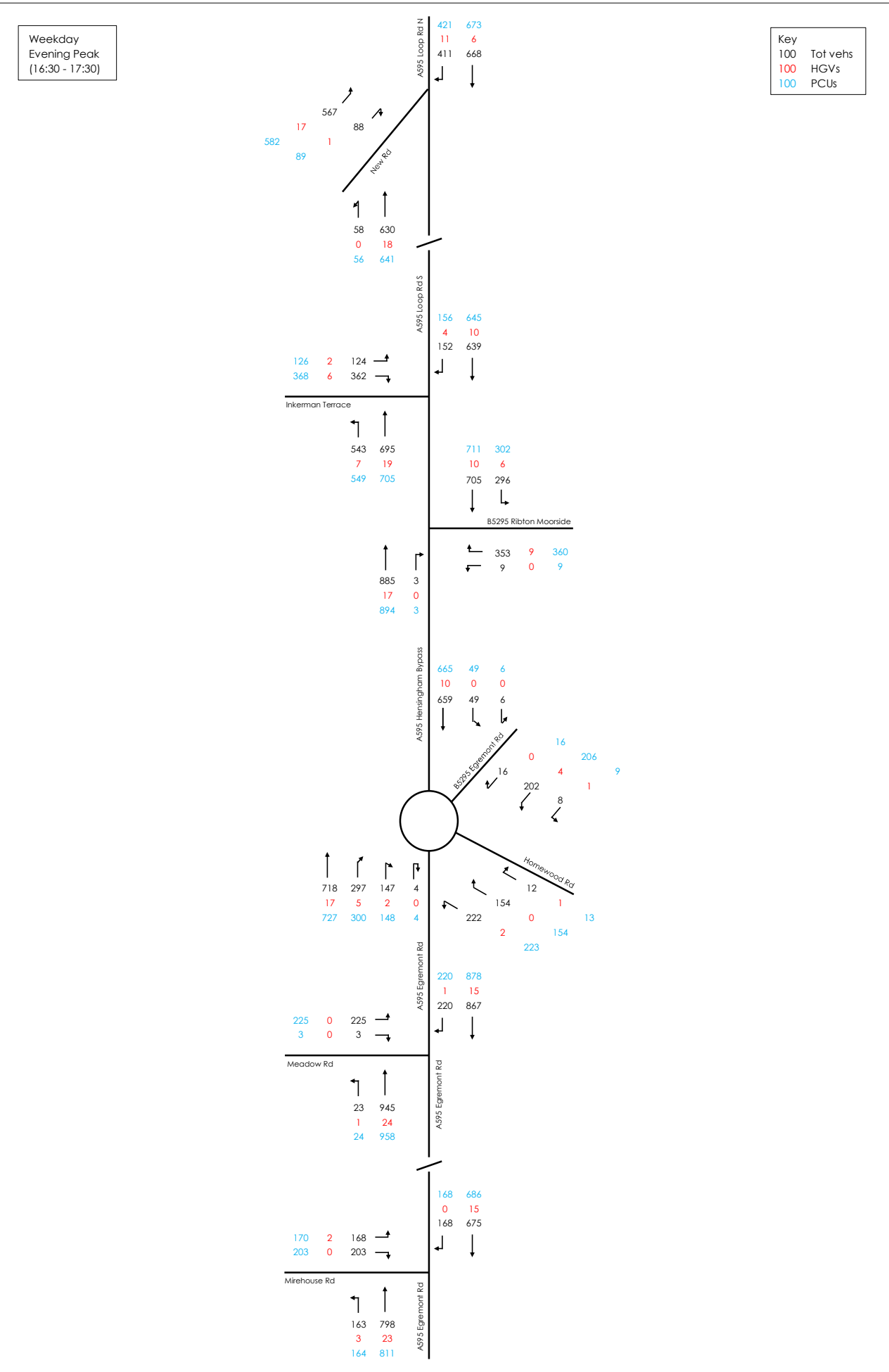


Figure 3.13a 2023 Base Traffic Flows (Local Roads): Weekday Morning Peak

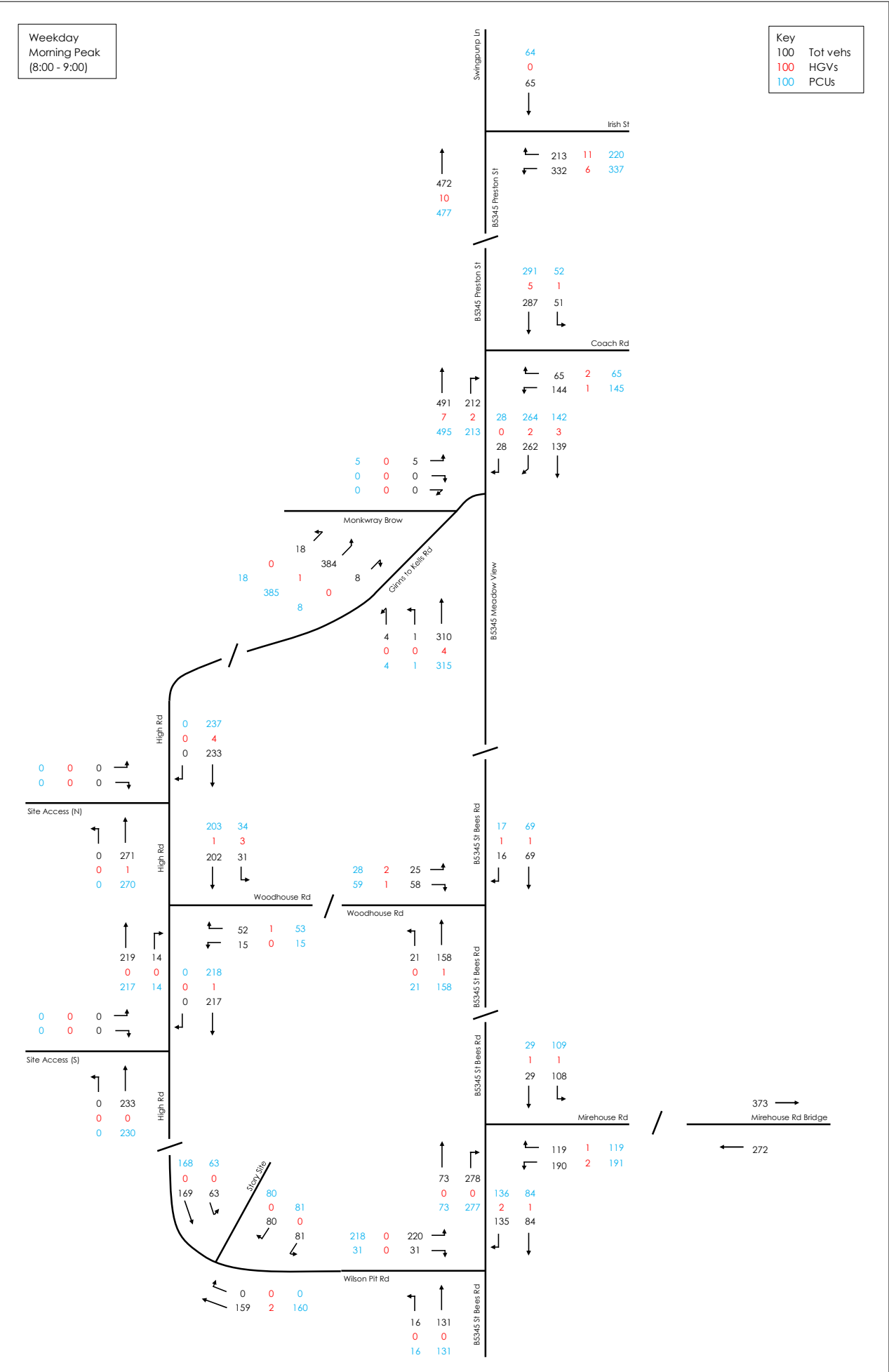


Figure 3.13b 2023 Base Traffic Flows (A595 Corridor): Weekday Morning Peak

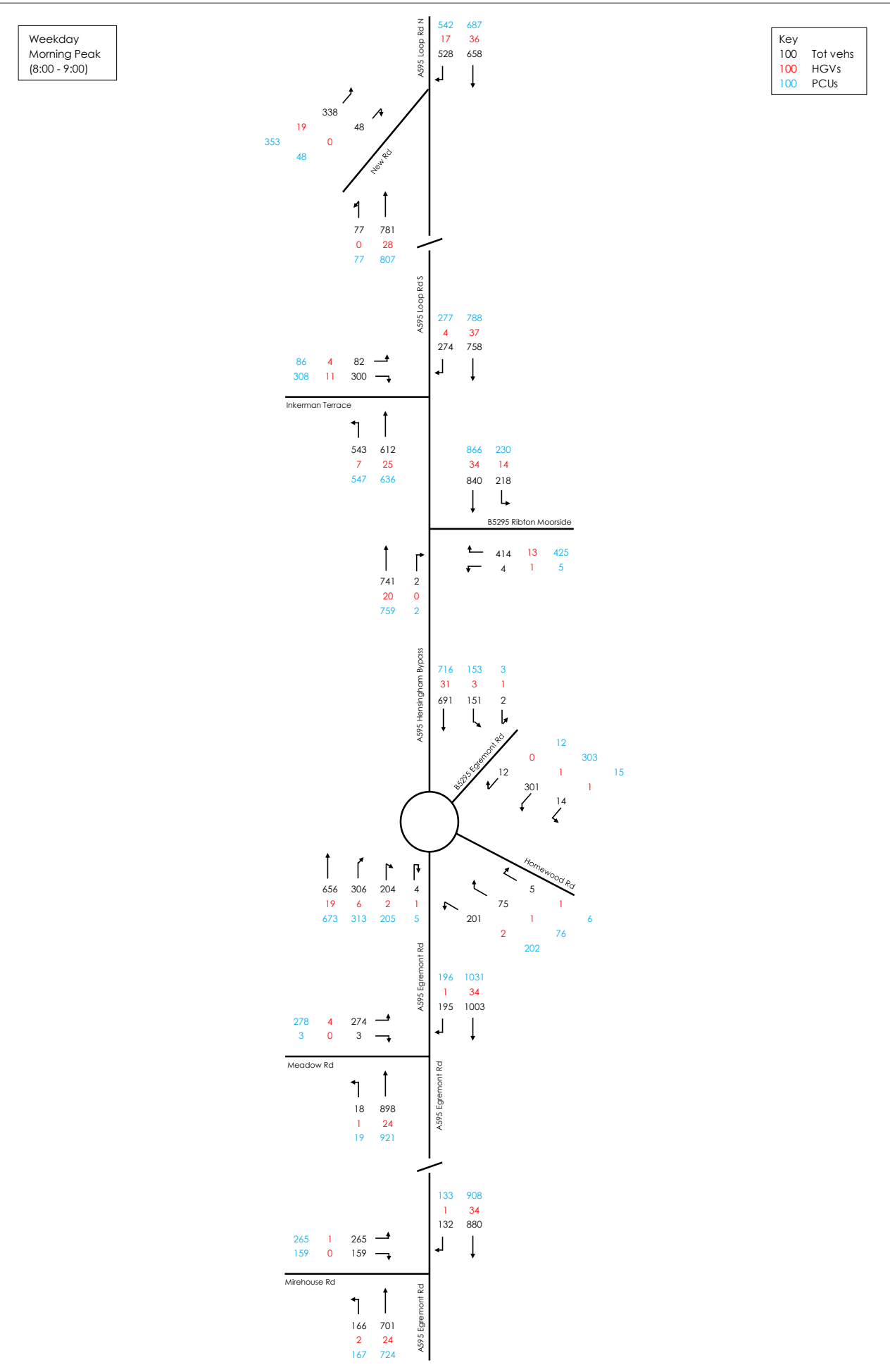


Figure 3.14a 2023 Base Traffic Flows (Local Roads): Weekday Evening Peak

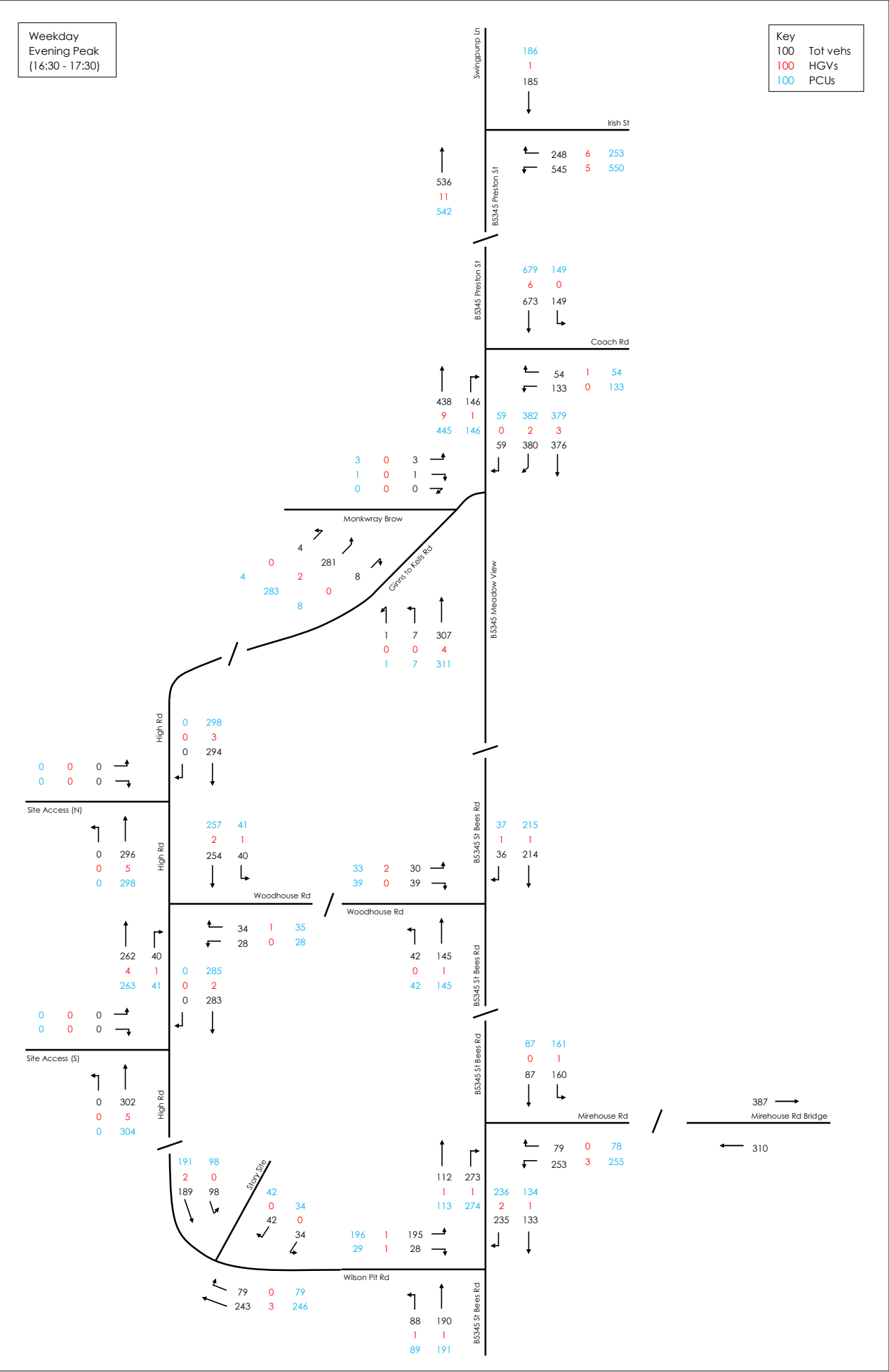


Figure 3.14b 2023 Base Traffic Flows (A595 Corridor): Weekday Evening Peak

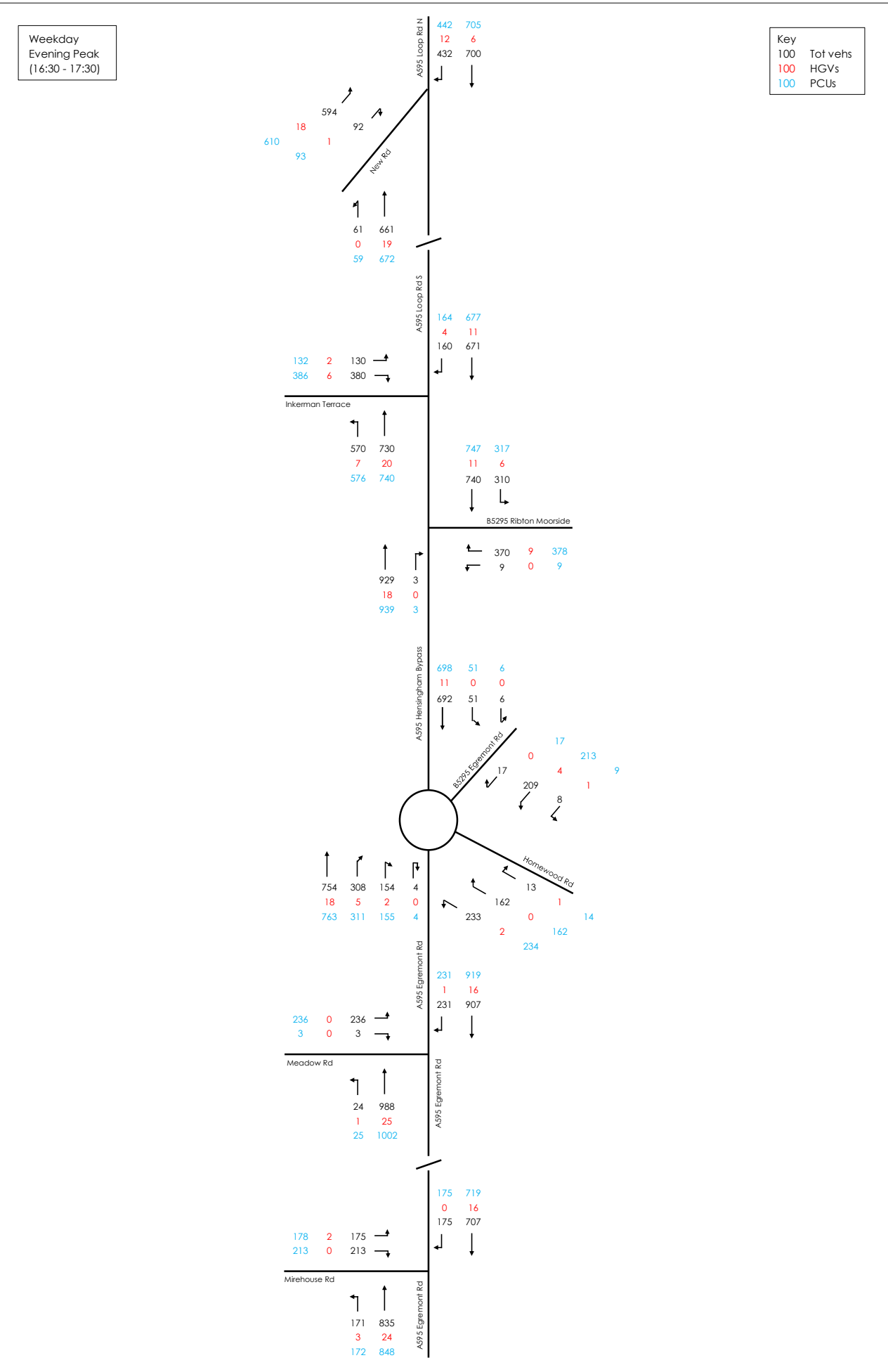


Figure 3.15a 2033 Base Traffic Flows (Local Roads): Weekday Morning Peak

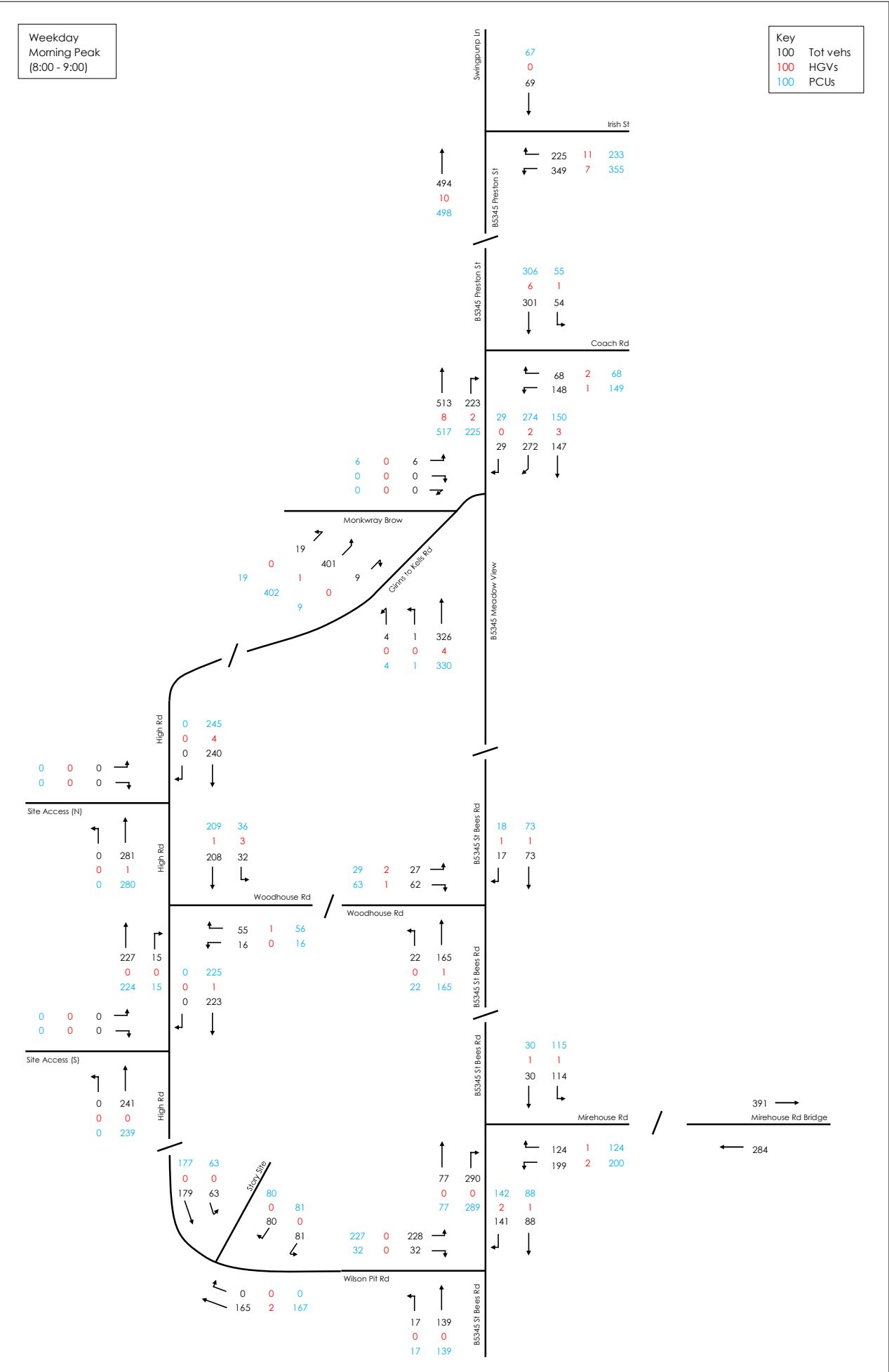


Figure 3.15b 2033 Base Traffic Flows (A595 Corridor): Weekday Morning Peak

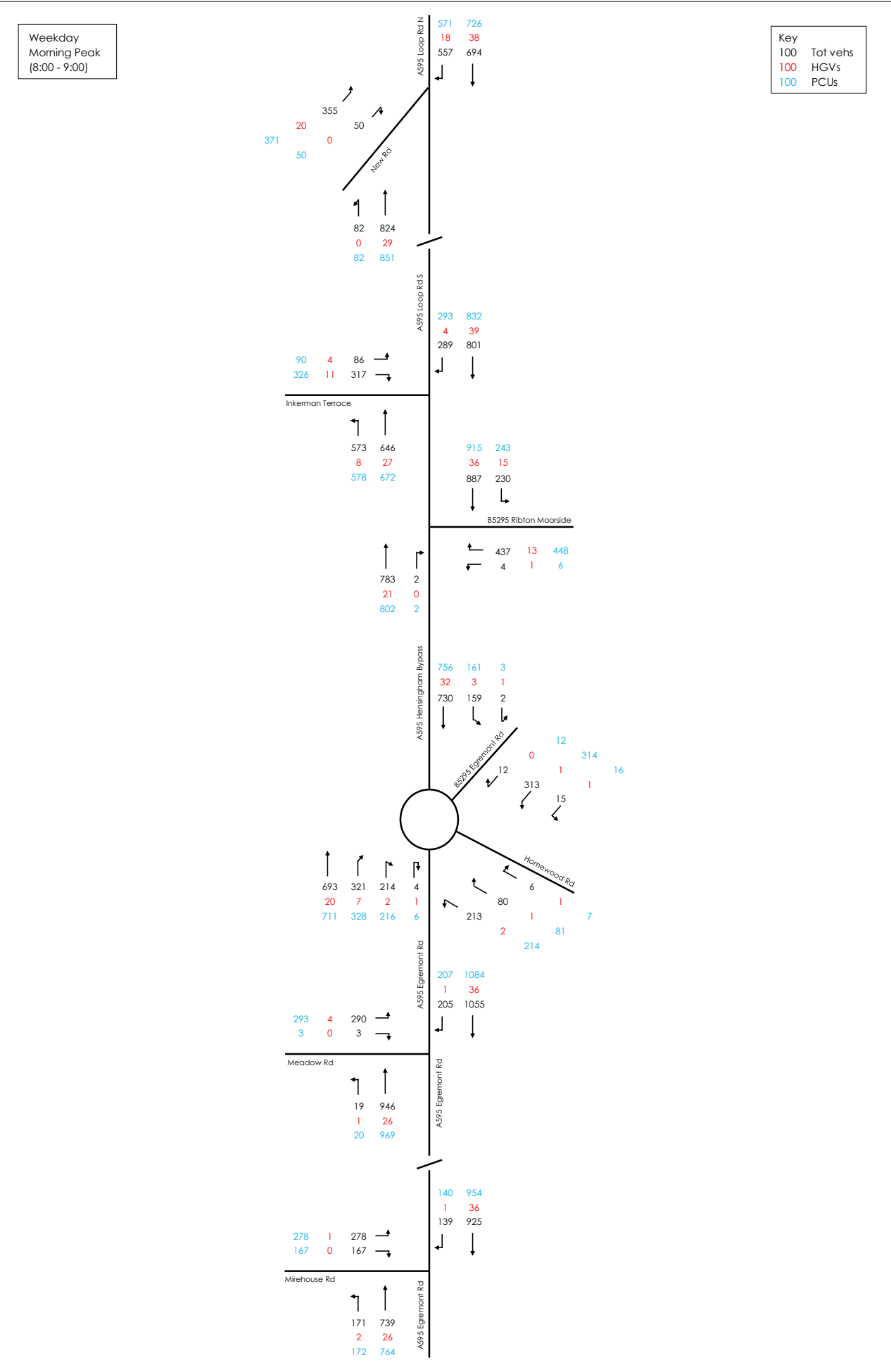


Figure 3.16a 2033 Base Traffic Flows (Local Roads): Weekday Evening Peak

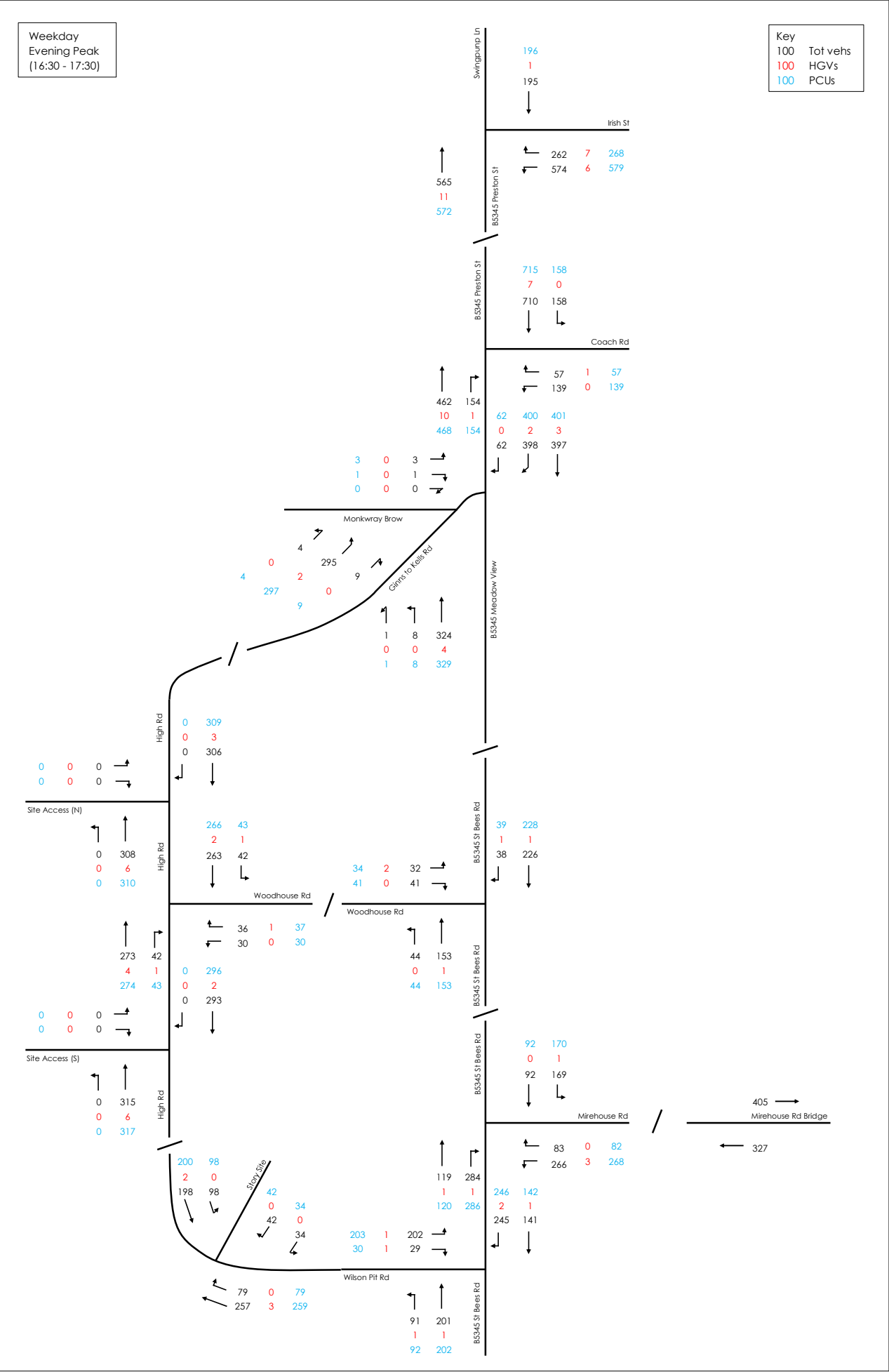
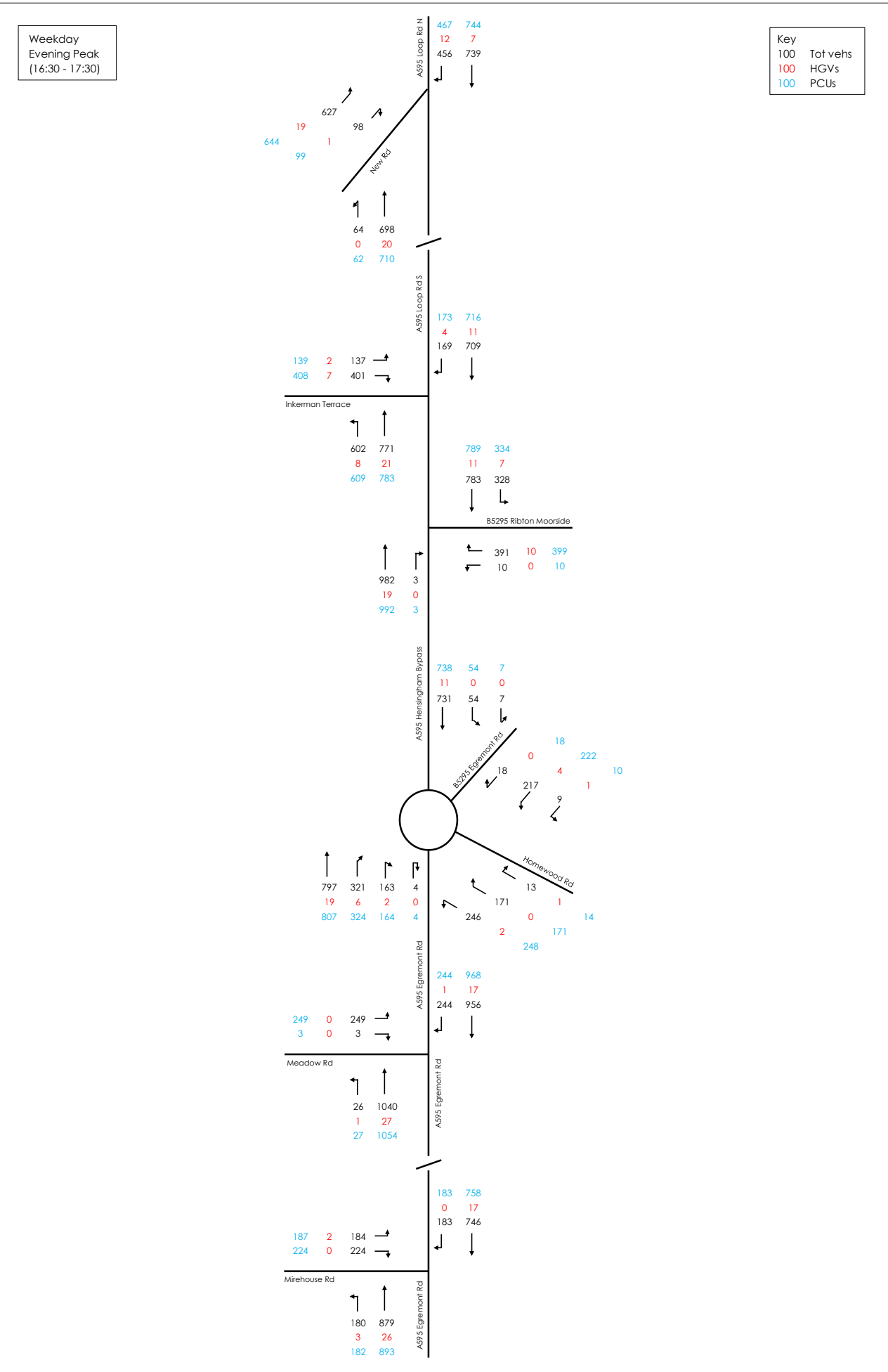


Figure 3.16b 2033 Base Traffic Flows (A595 Corridor): Weekday Evening Peak



Proposed Total Residential Traffic Flows (Local Roads): Weekday Morning Peak

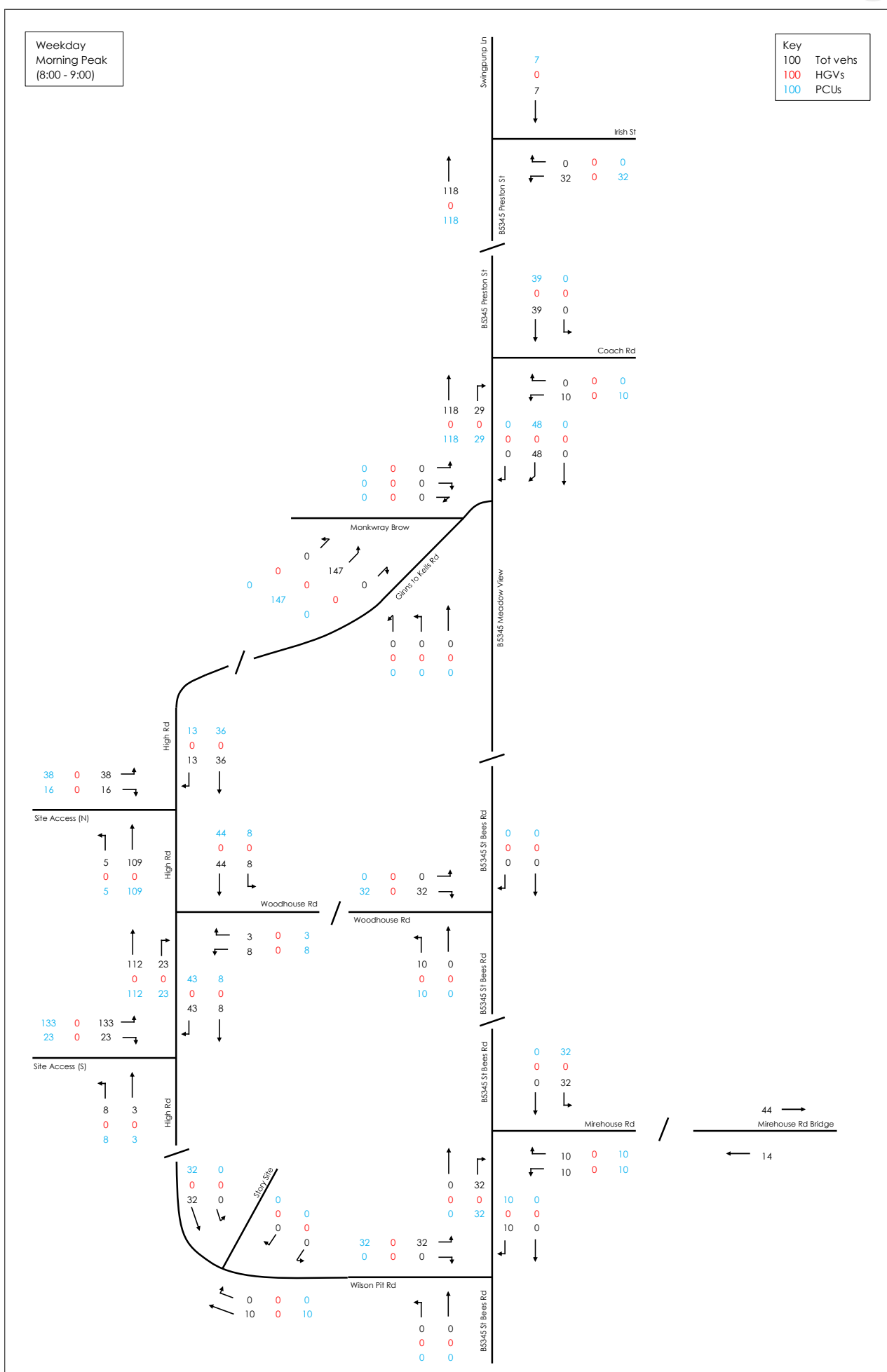
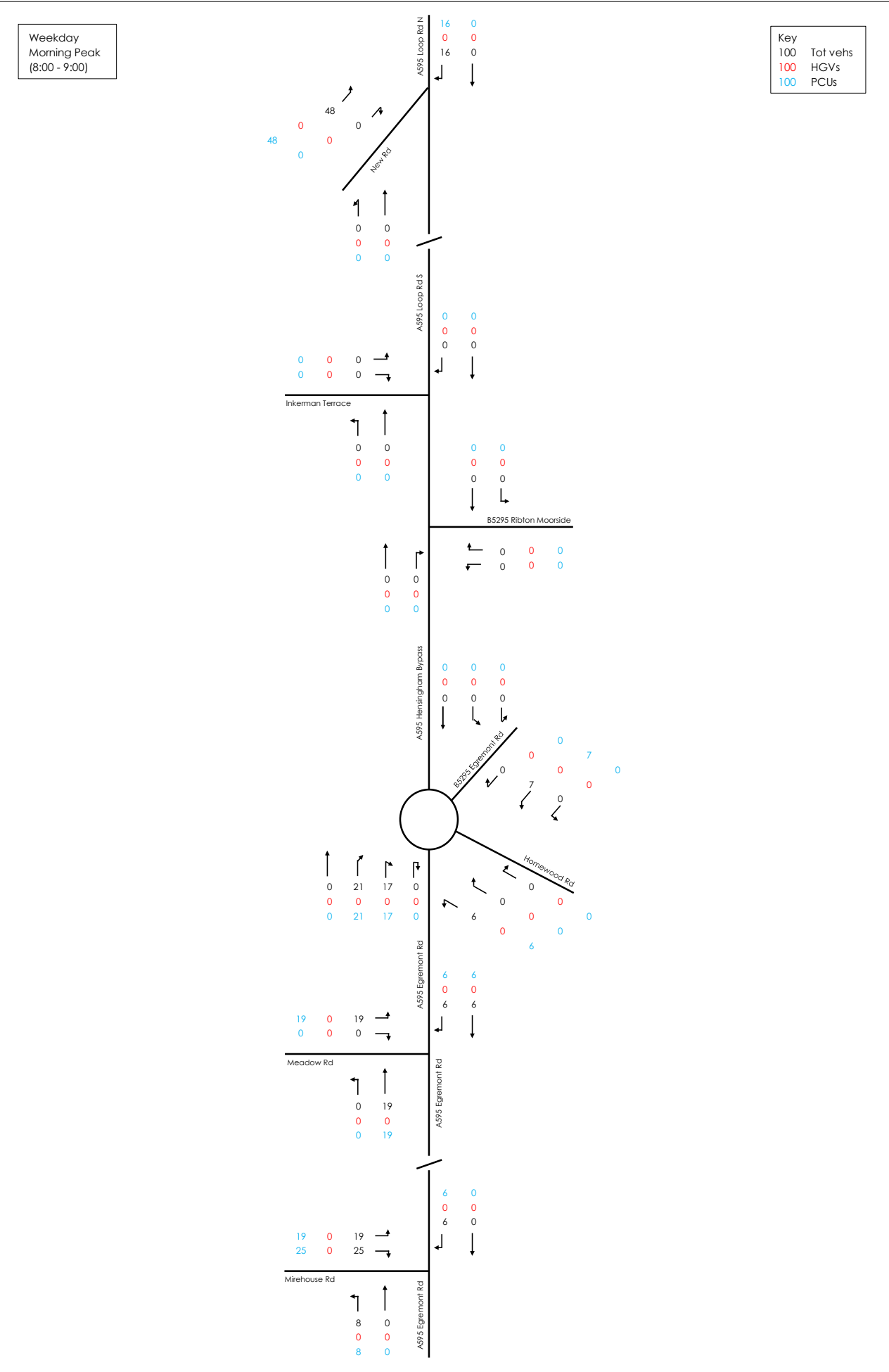


Figure 4.1b

Proposed Total Residential Traffic Flows (A595 Corridor): Weekday Morning Peak



Proposed Total Residential Traffic Flows (Local Roads): Weekday Evening Peak

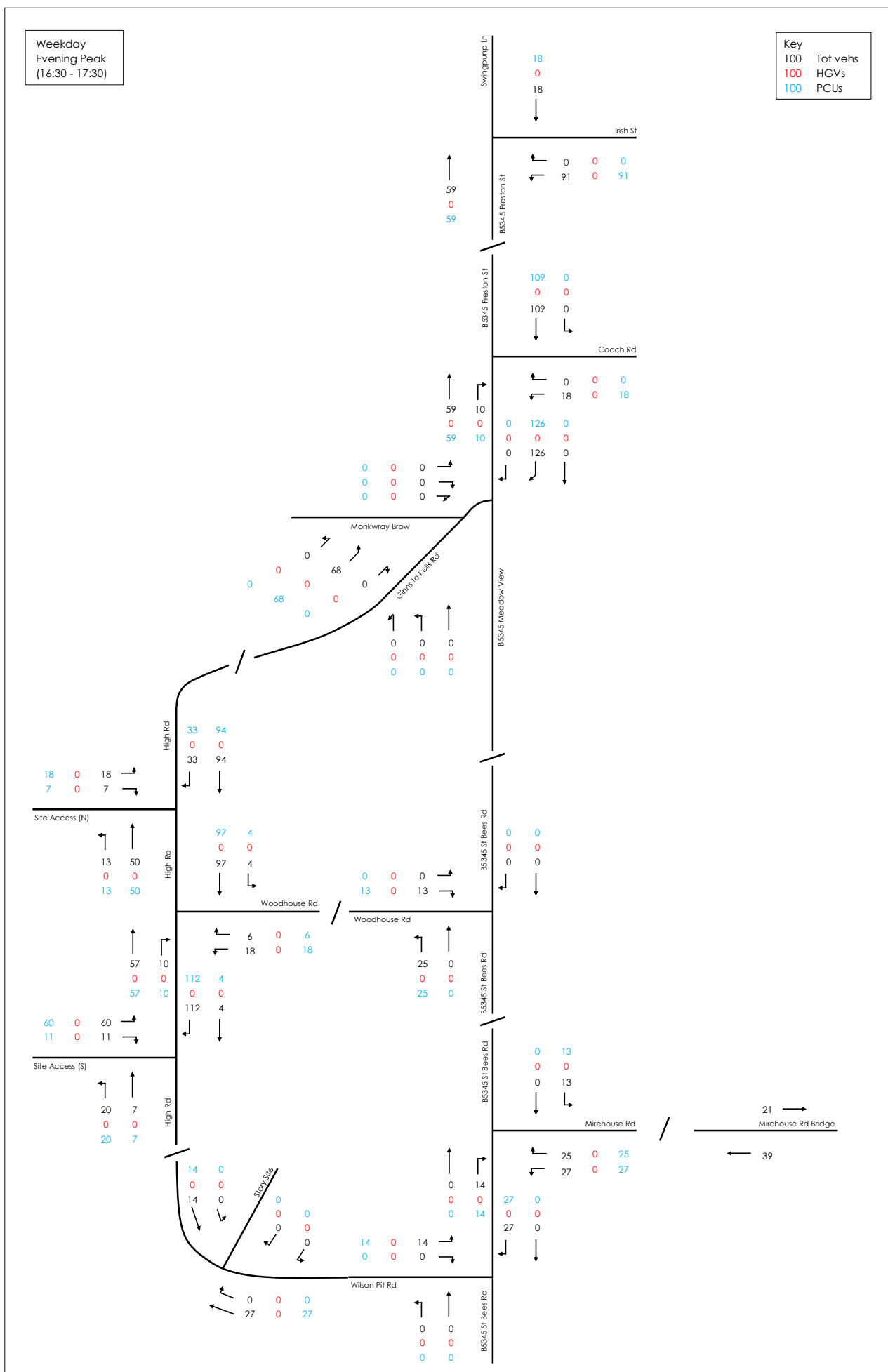
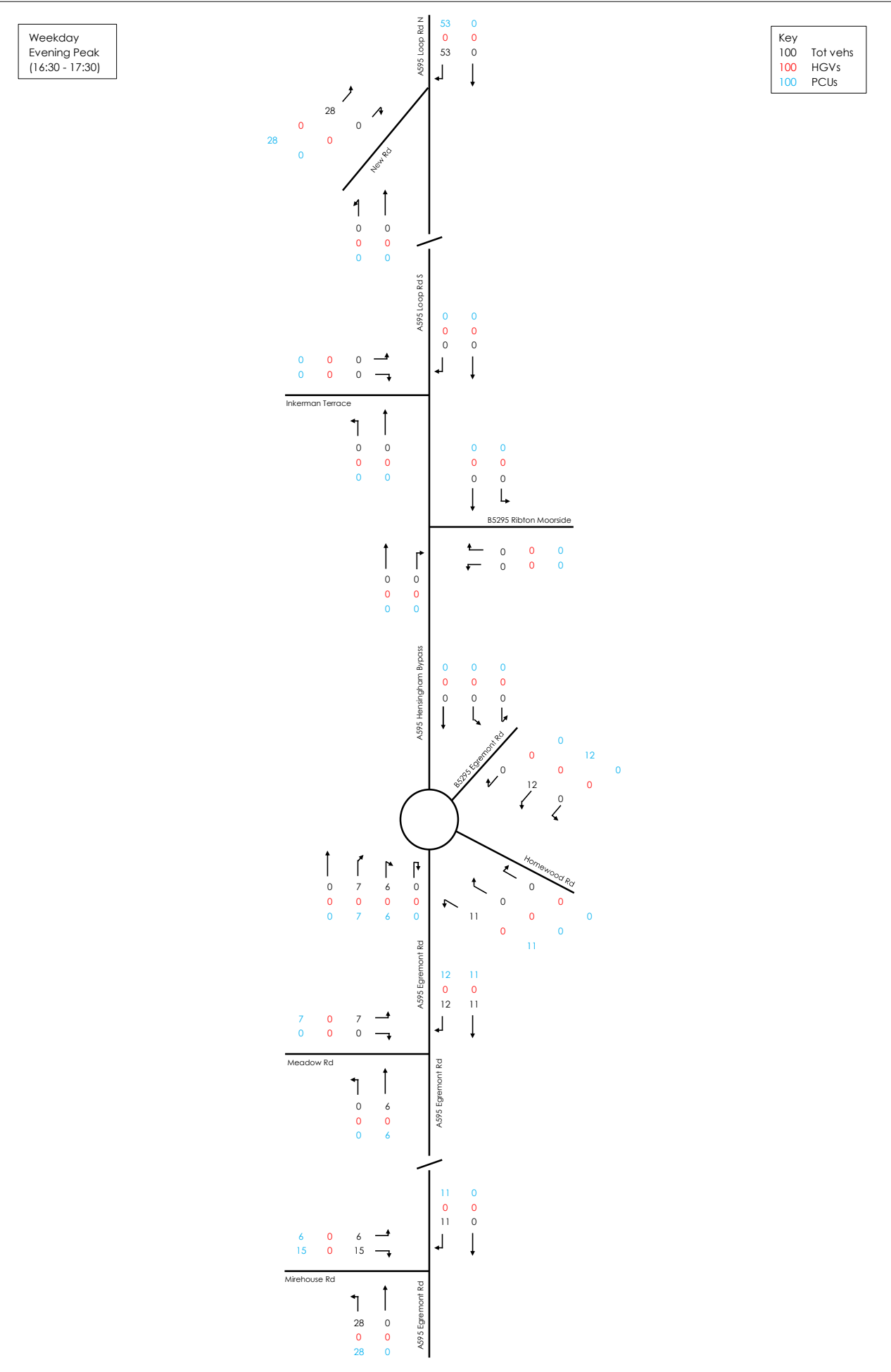


Figure 4.2b

Proposed Total Residential Traffic Flows (A595 Corridor): Weekday Evening Peak



Proposed Convenience Store Traffic Flows (Local Roads): Weekday Morning Peak

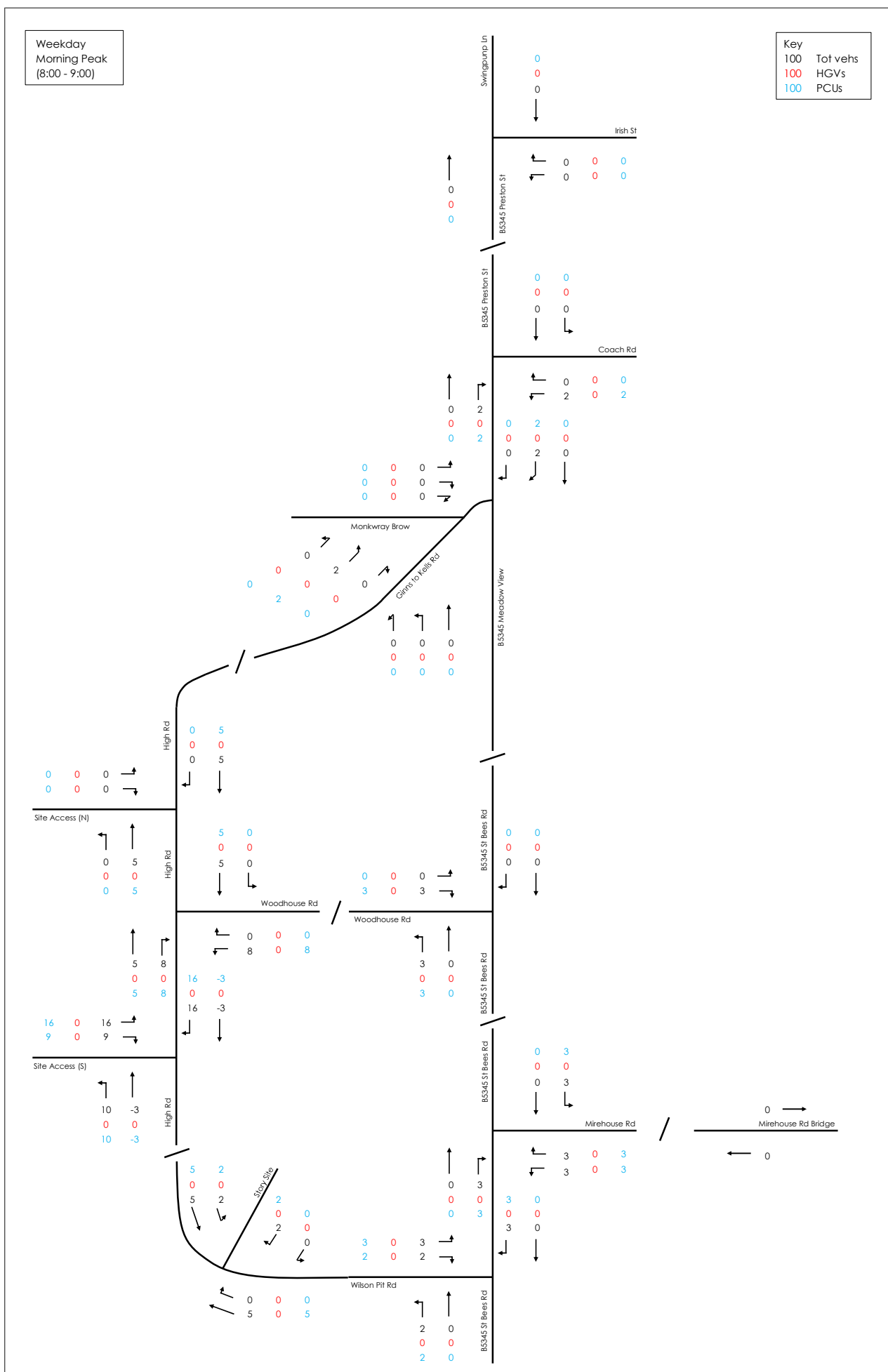


Figure 4.4

Proposed Convenience Store Traffic Flows (Local Roads): Weekday Evening Peak



Figure 4.5a

Proposed Pub Restaurant Traffic Flows (Local Roads): Weekday Evening Peak

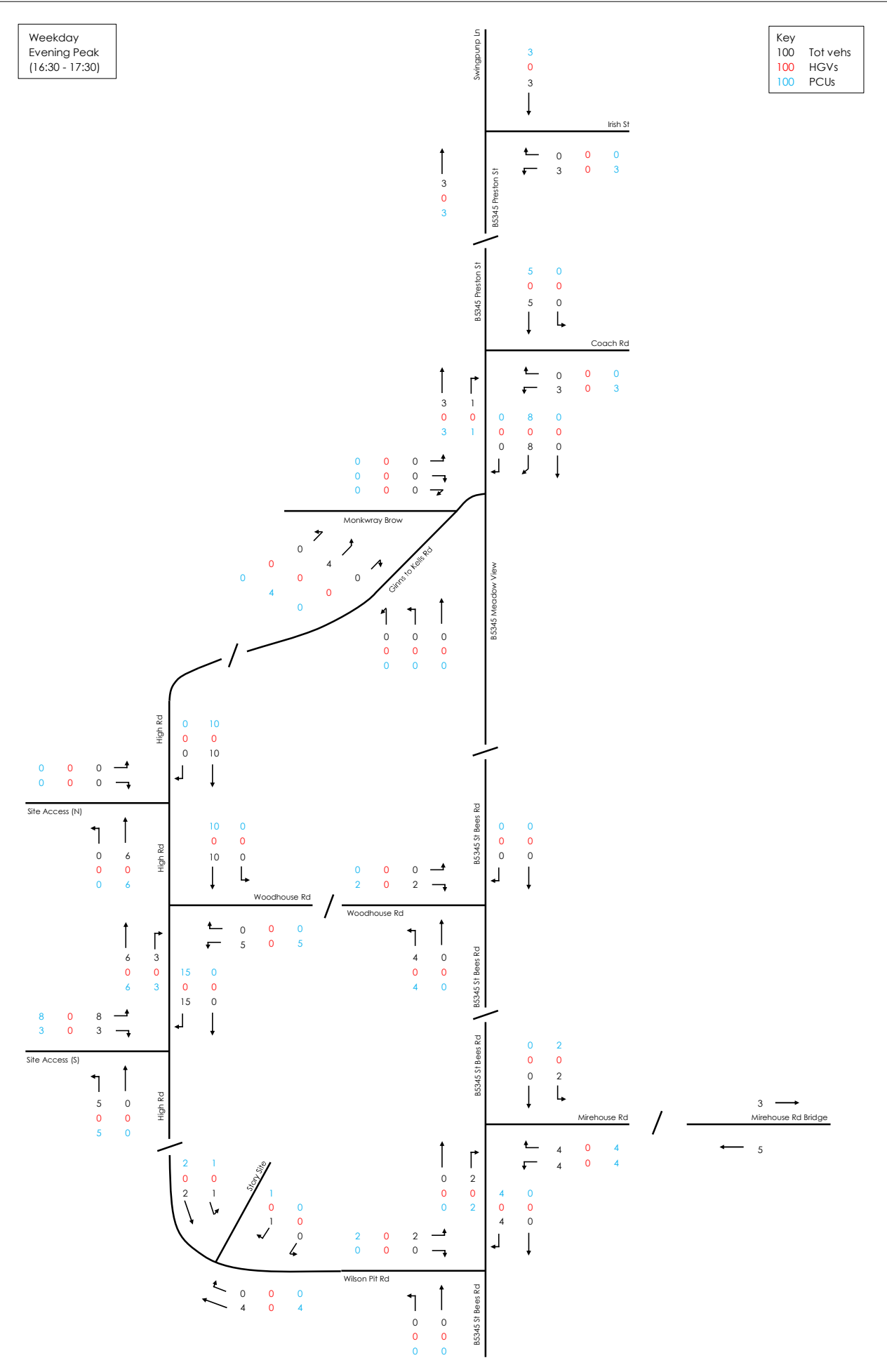


Figure 4.5b

Proposed Pub Restaurant Traffic Flows (A595 Corridor): Weekday Evening Peak

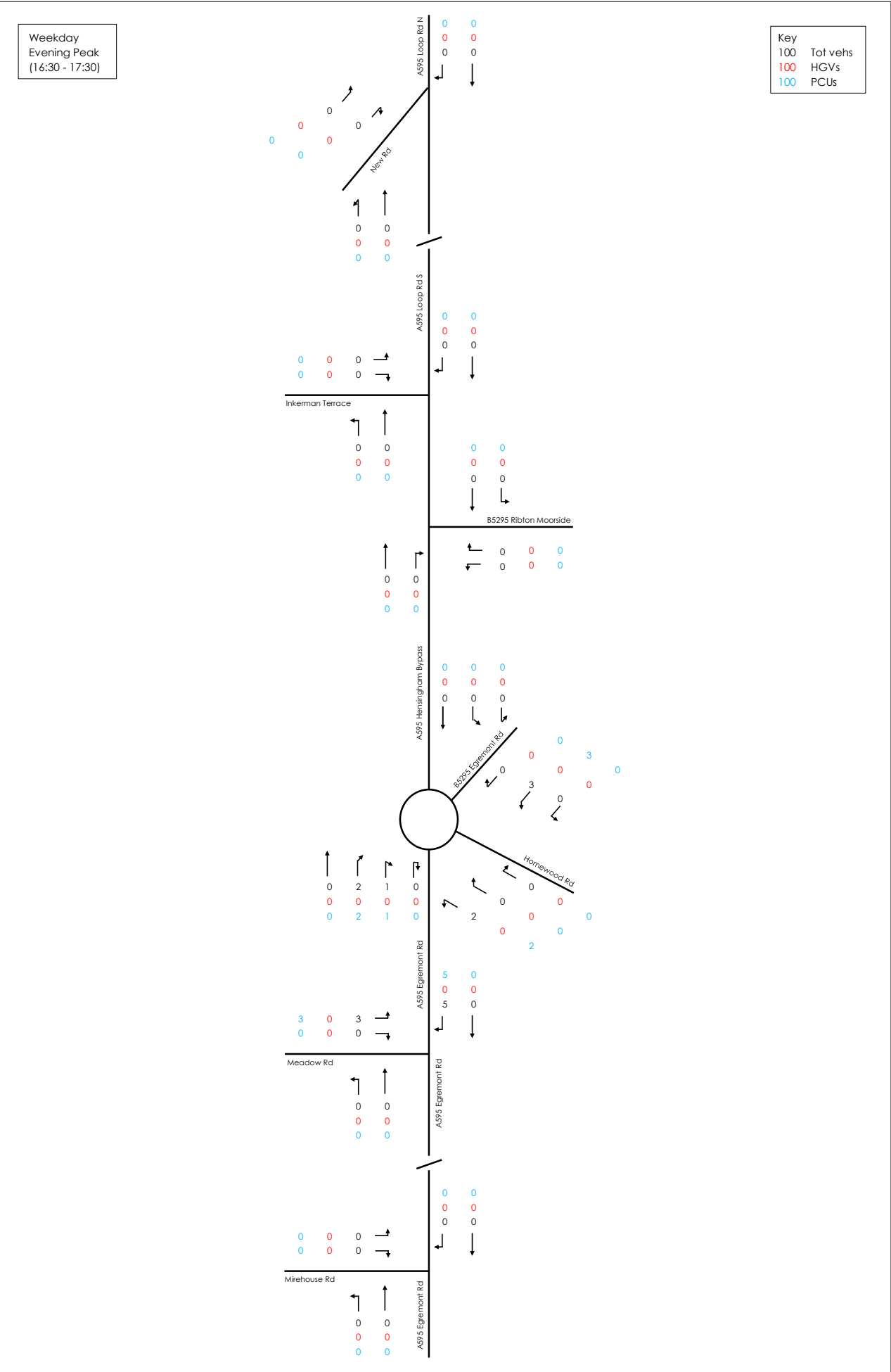


Figure 4.6a

No Growth with Development Traffic Flows (Local Roads): Weekday Morning Peak

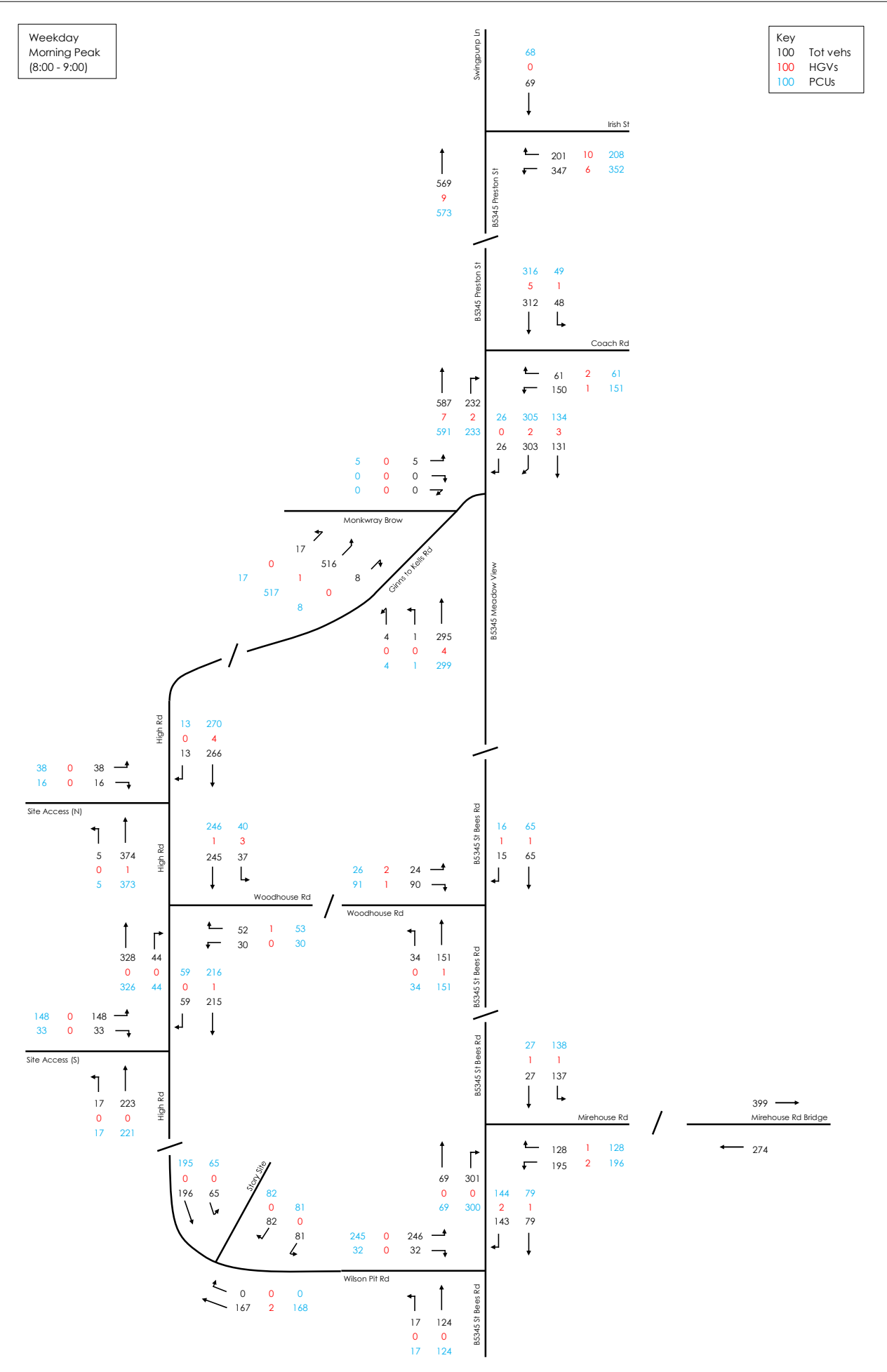


Figure 4.6b No Growth with Development Traffic Flows (A595 Corridor): Weekday Morning Peak

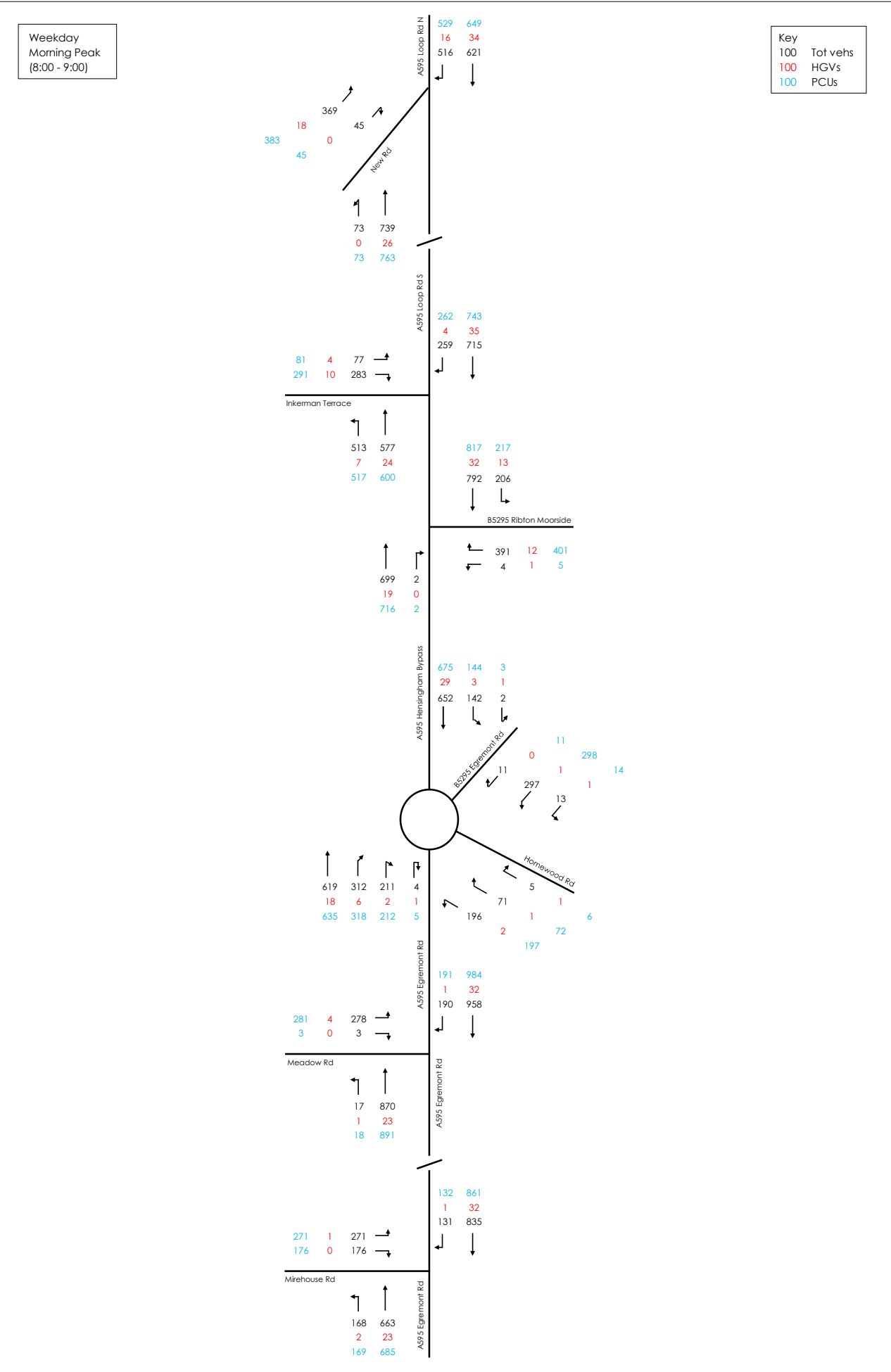


Figure 4.7a

No Growth with Development Traffic Flows (Local Roads): Weekday Evening Peak

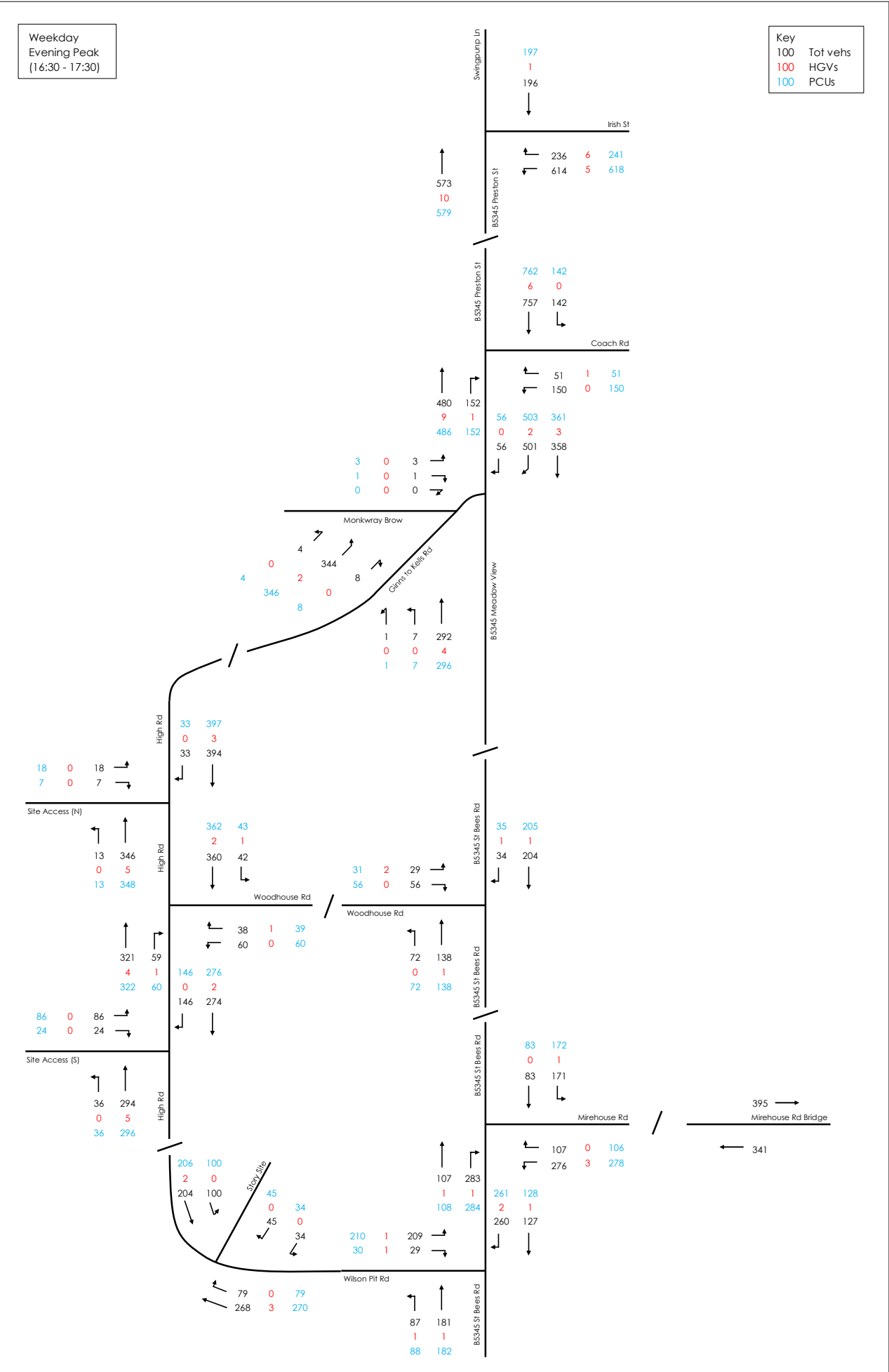


Figure 4.7b

No Growth with Development Traffic Flows (A595 Corridor): Weekday Evening Peak

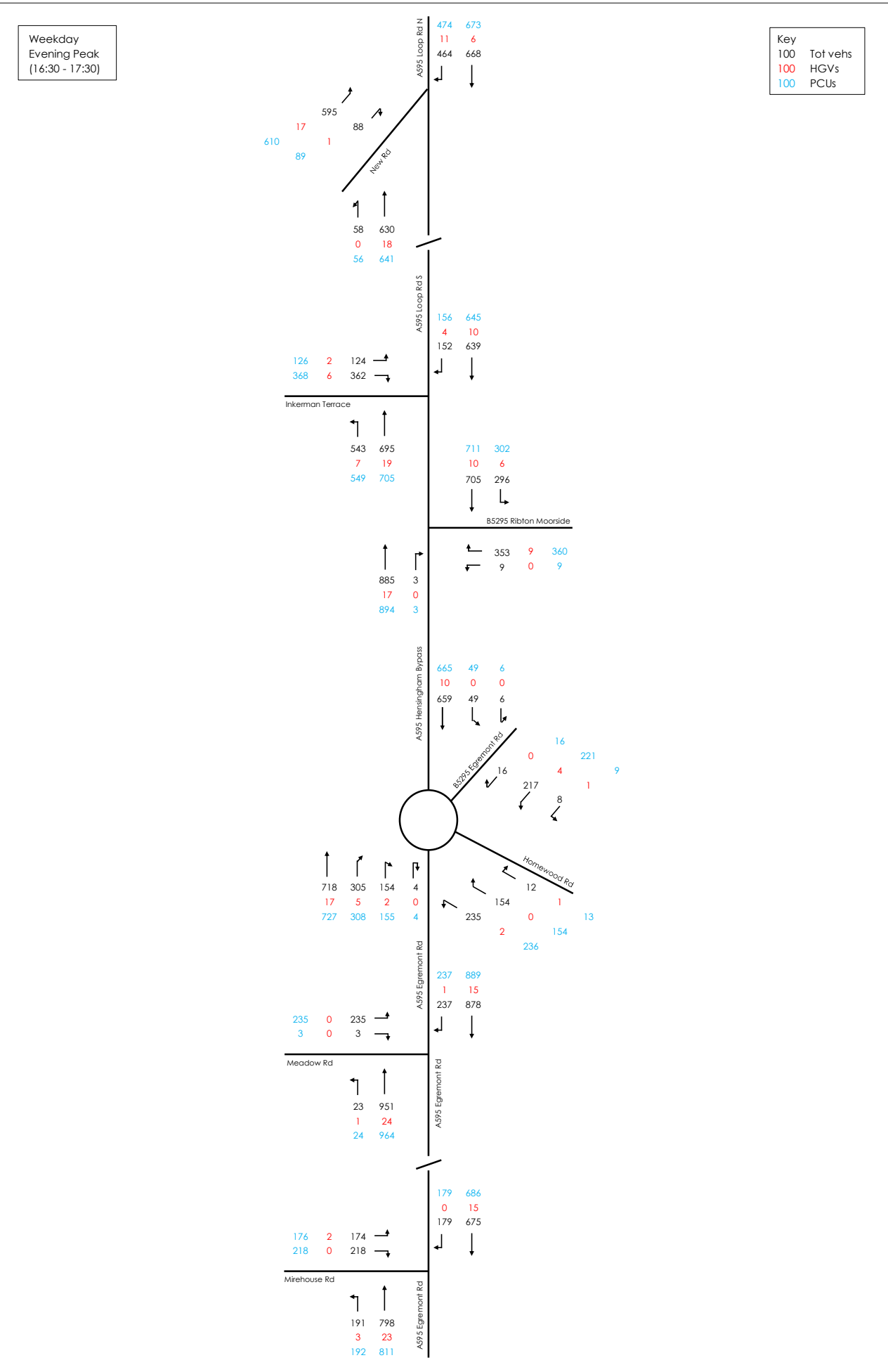


Figure 4.8a

2023 with Development Traffic Flows (Local Roads): Weekday Morning Peak

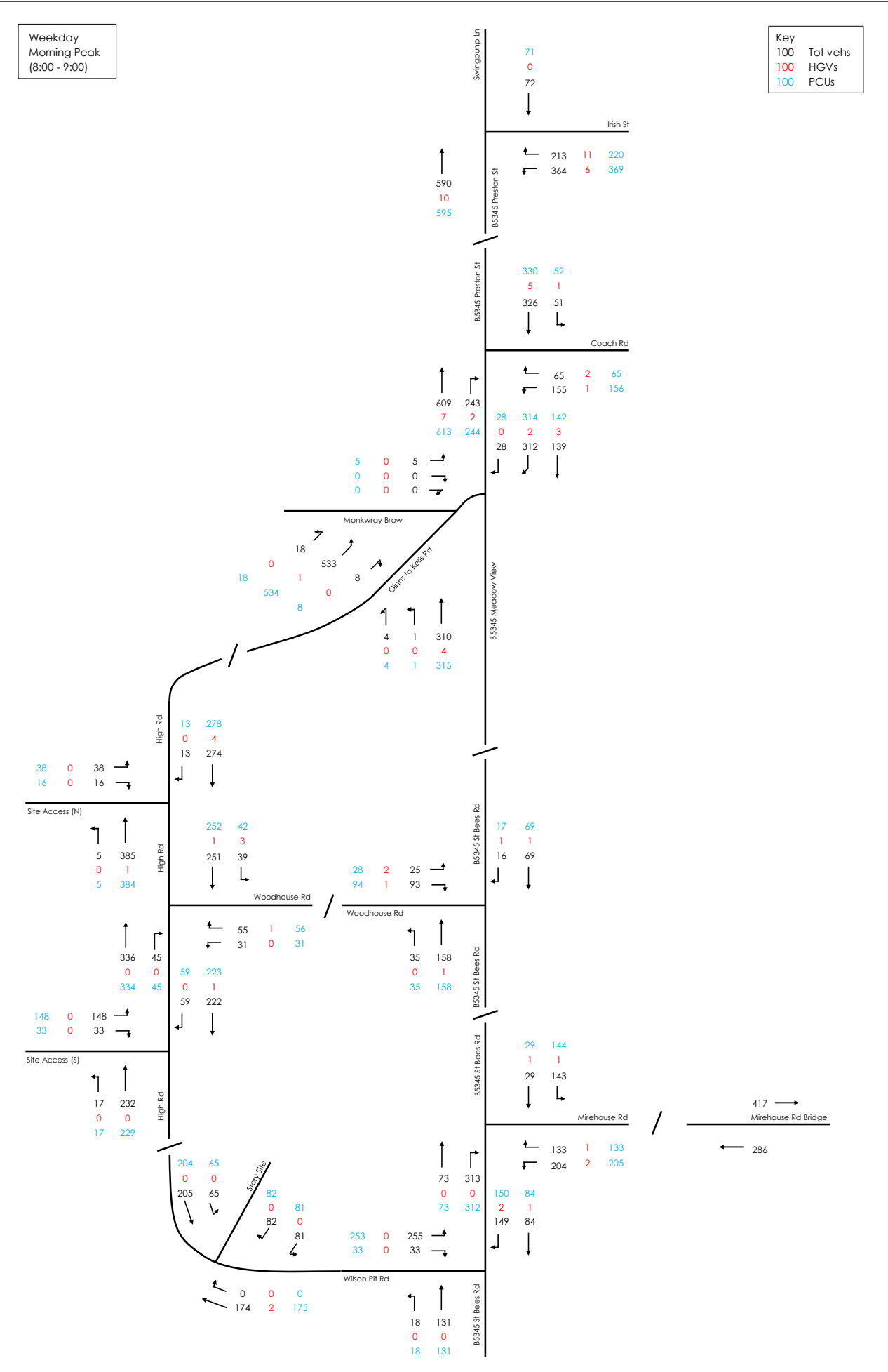


Figure 4.8b

2023 with Development Traffic Flows (A595 Corridor): Weekday Morning Peak

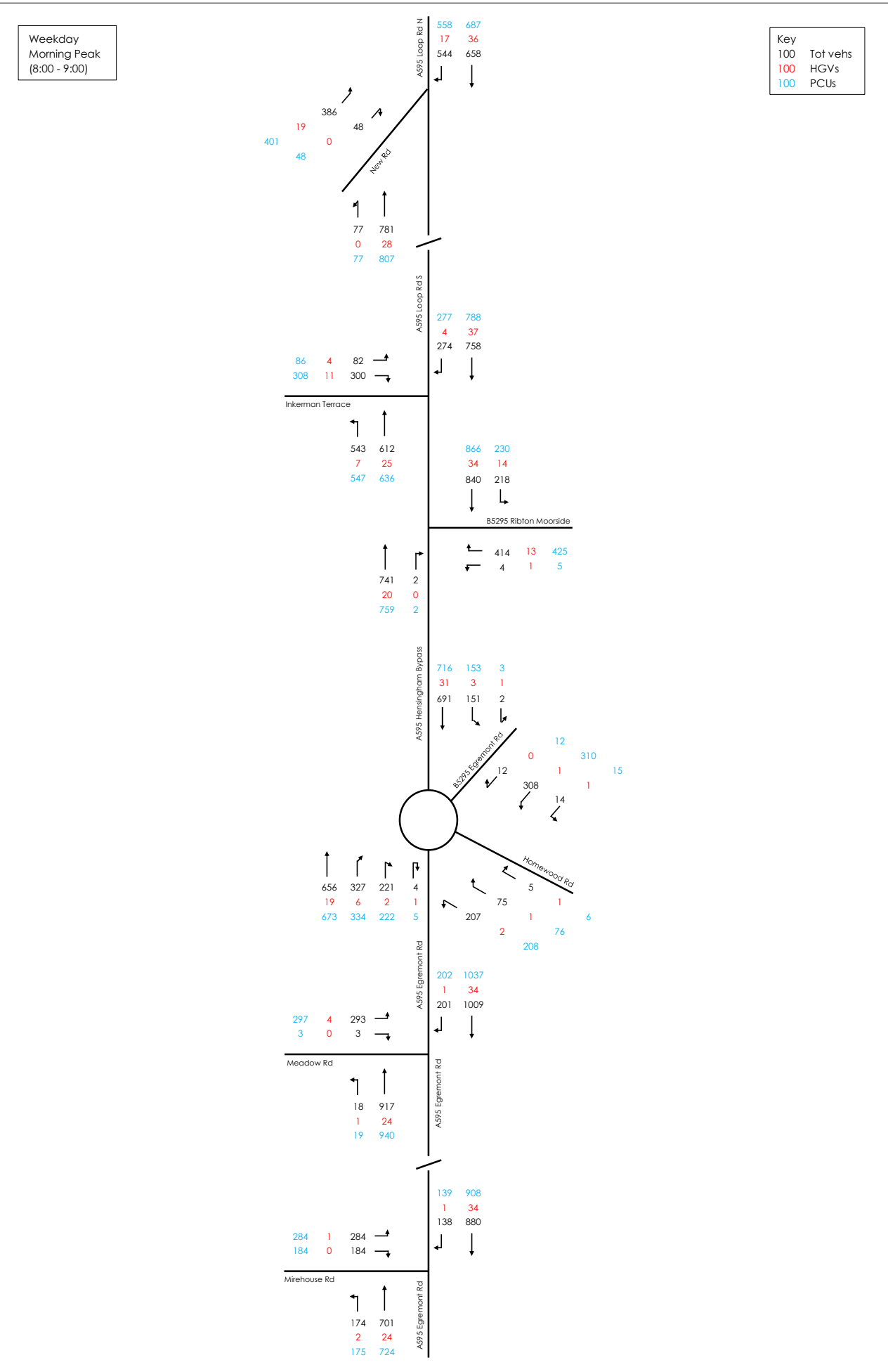


Figure 4.9a

2023 with Development Traffic Flows (Local Roads): Weekday Evening Peak

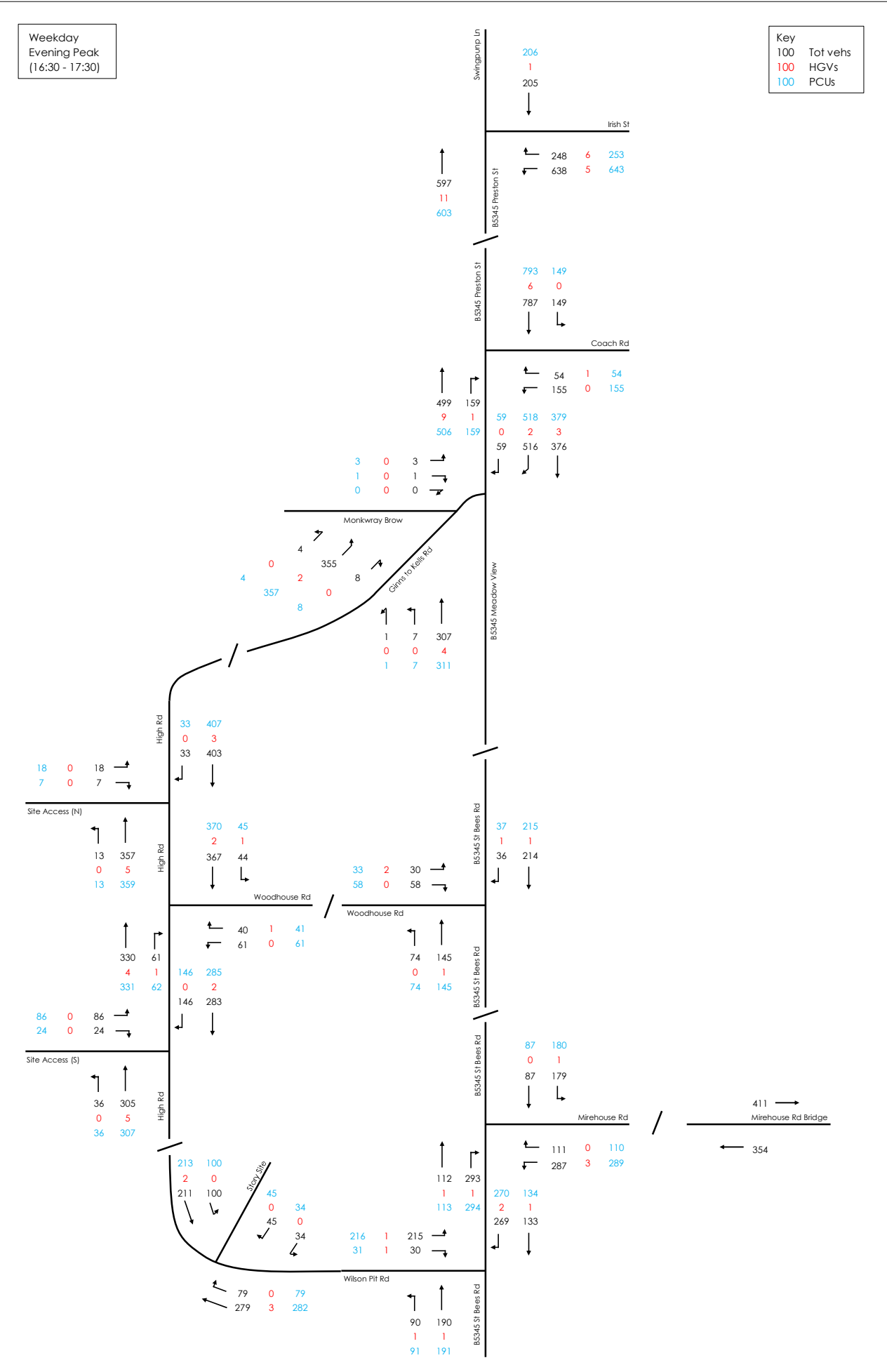


Figure 4.9b

2023 with Development Traffic Flows (A595 Corridor): Weekday Evening Peak

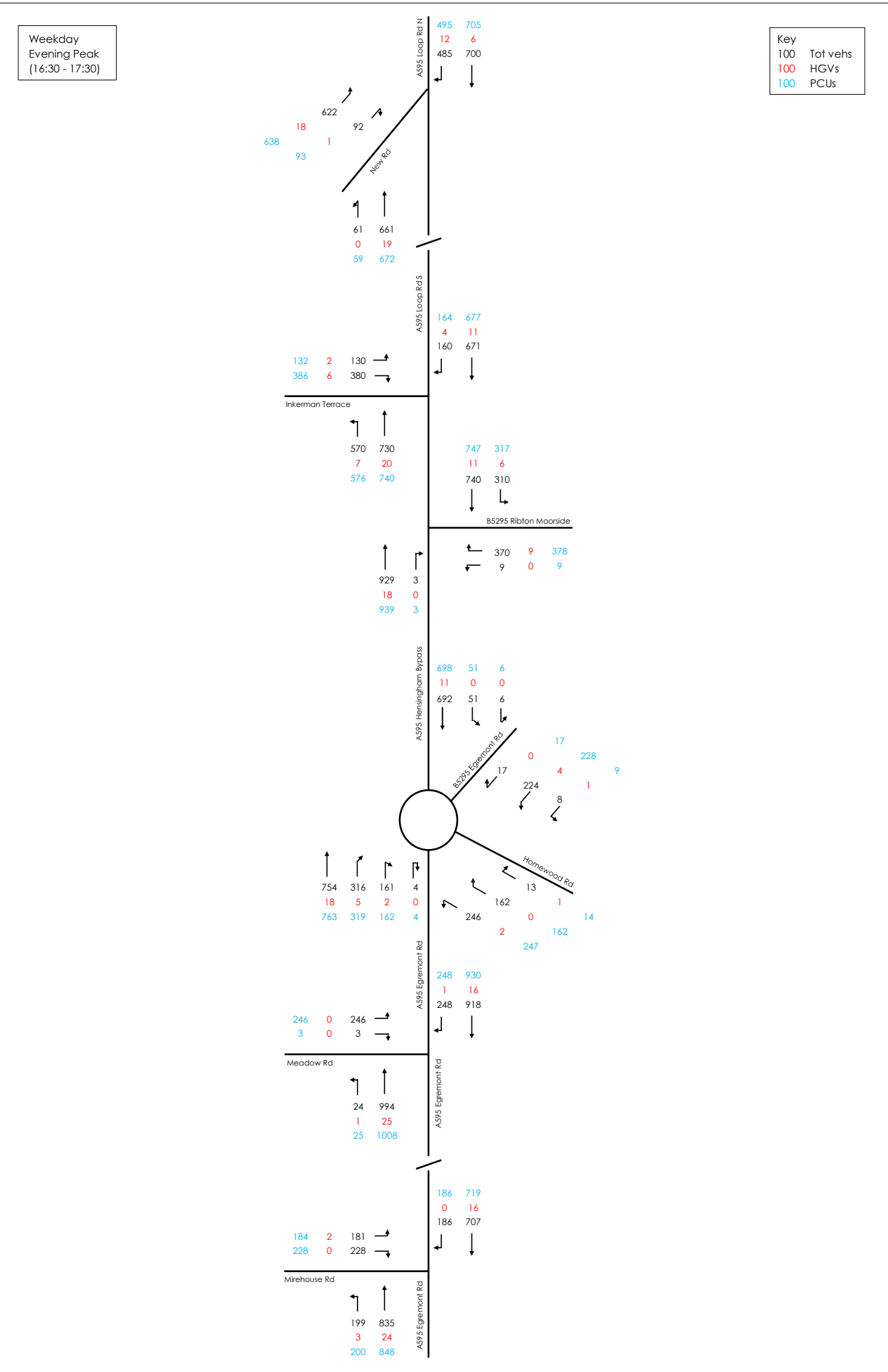


Figure 4.10a

2033 with Development Traffic Flows (Local Roads): Weekday Morning Peak

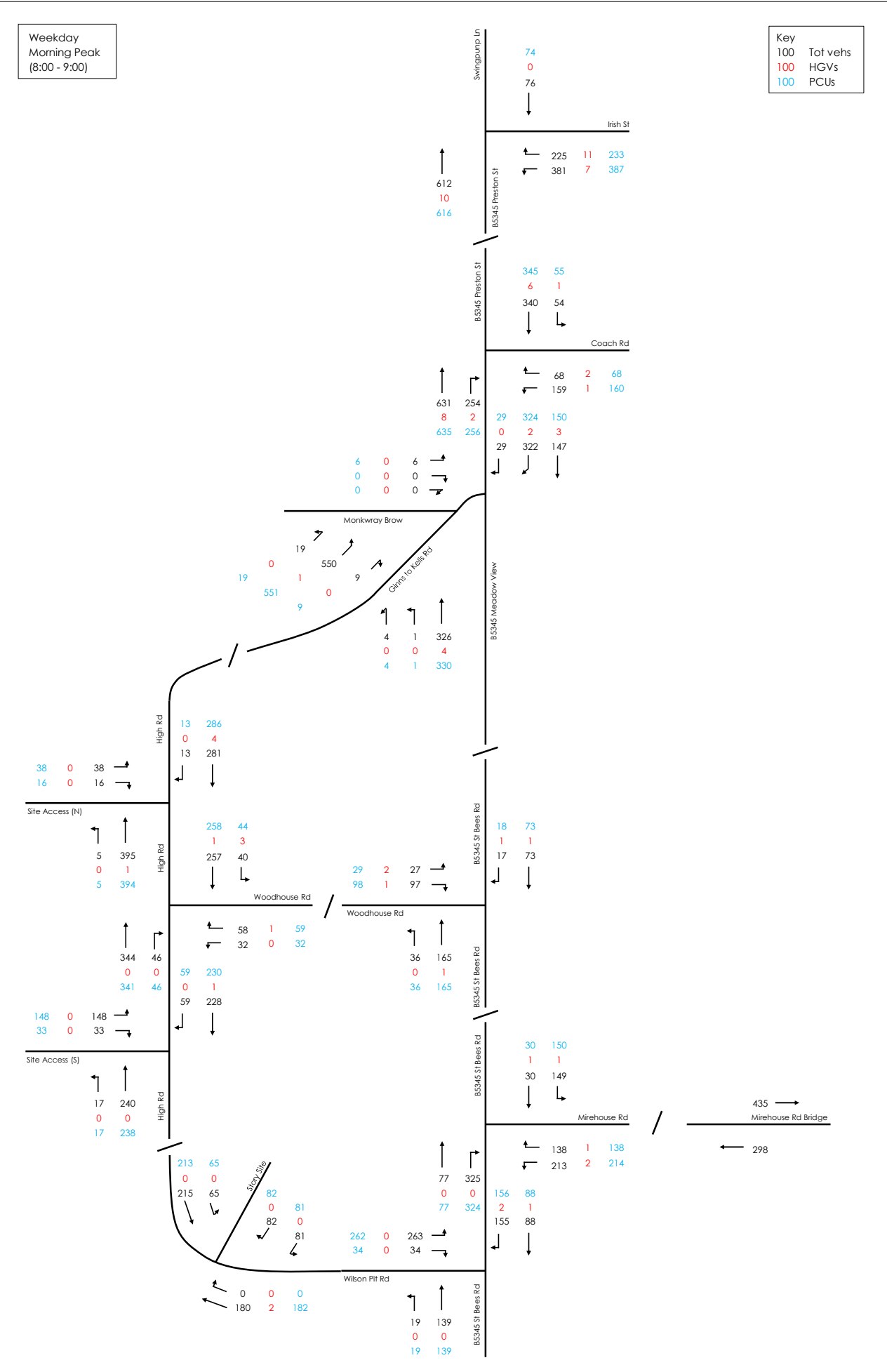
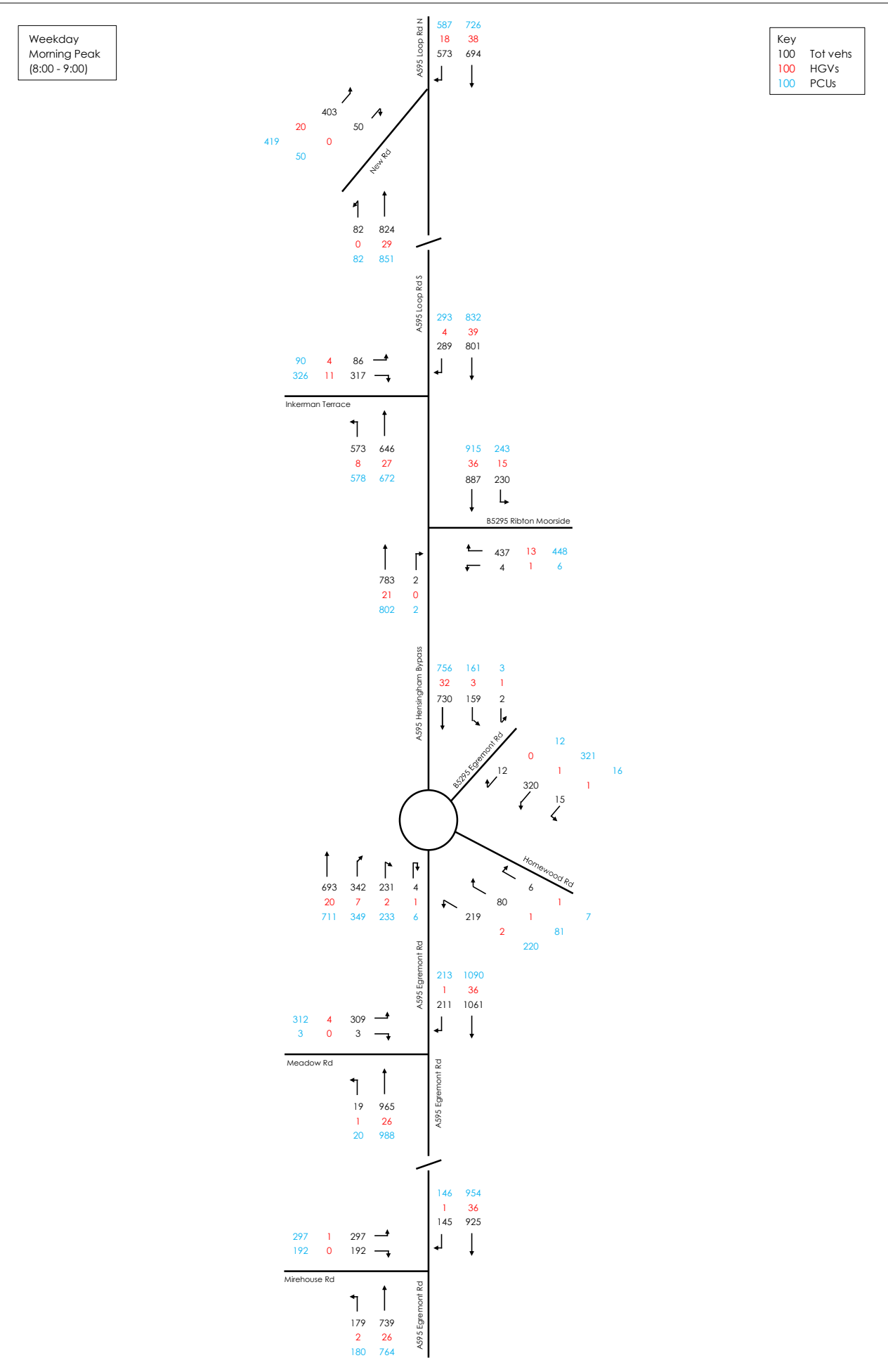


Figure 4.10b

2033 with Development Traffic Flows (A595 Corridor): Weekday Morning Peak



2033 with Development Traffic Flows (Local Roads): Weekday Evening Peak

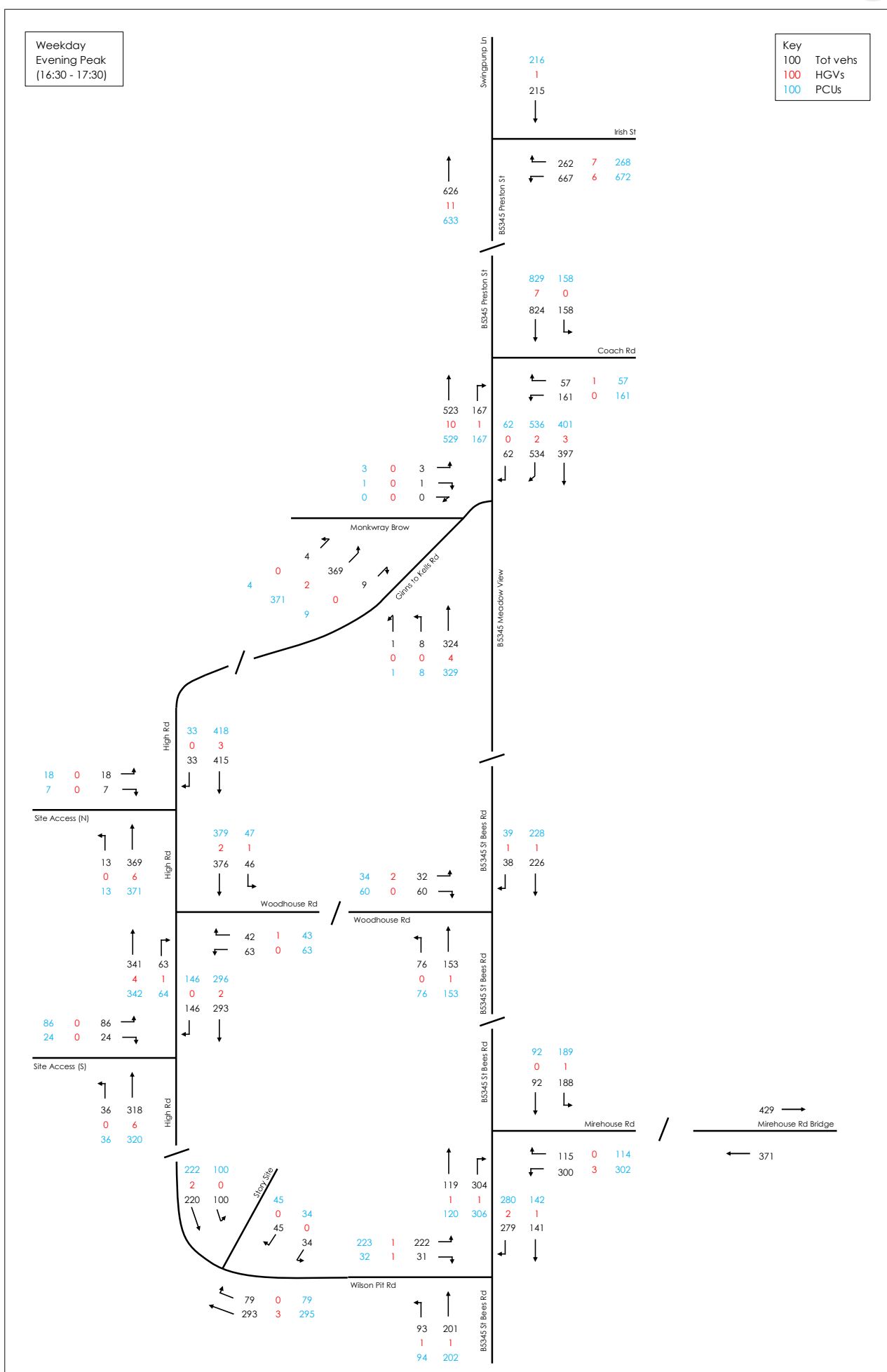
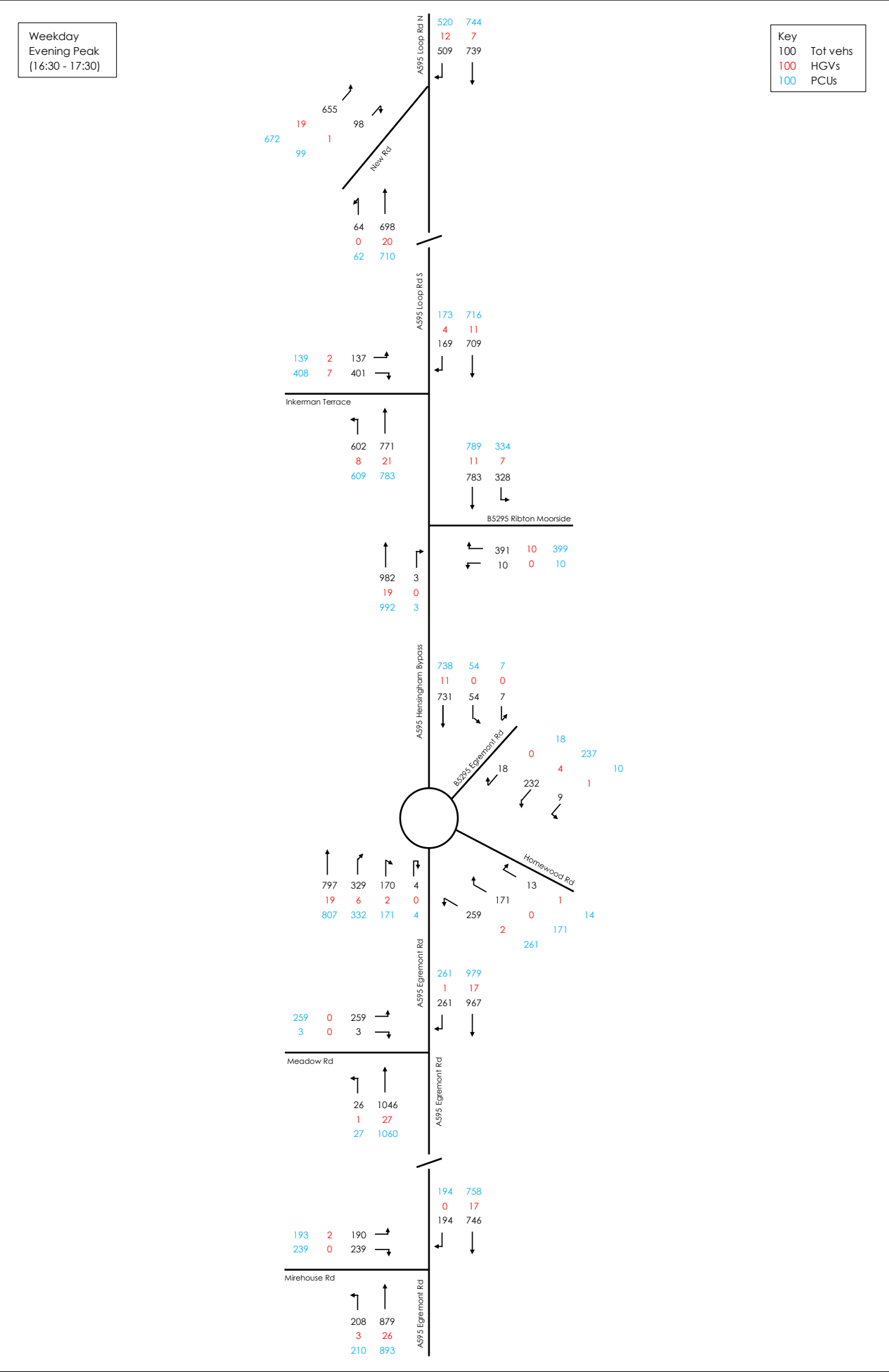


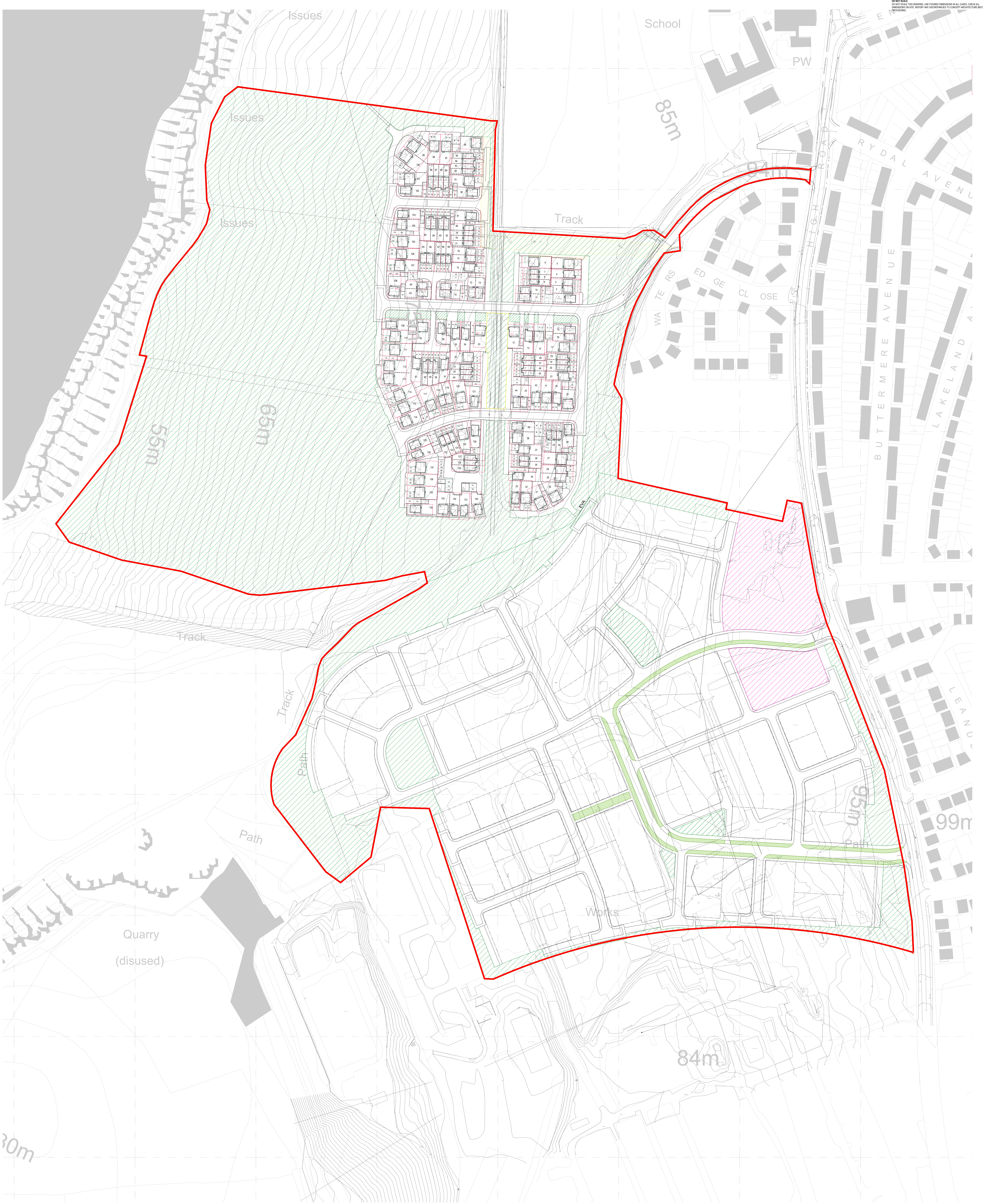
Figure 4.11b 2033 with Development Traffic Flows (A595 Corridor): Weekday Evening Peak





Appendix A: Indicative Masterplan and Proposed Phase 1 Site Layout





BLOCK PLAN KEY

- PUBLIC OPEN SPACE - 12,017 Hm = 29,7310 Acres
- BLOCK STRUCTURE
- COMMERCIAL AREA - 2.41 Acres
- PROPOSED GROSS SITE BOUNDARY - 70,5132 Acres
- NETT DEVELOPABLE AREA - 34,5241 Acres

PHASING PLAN KEY

Phase 1

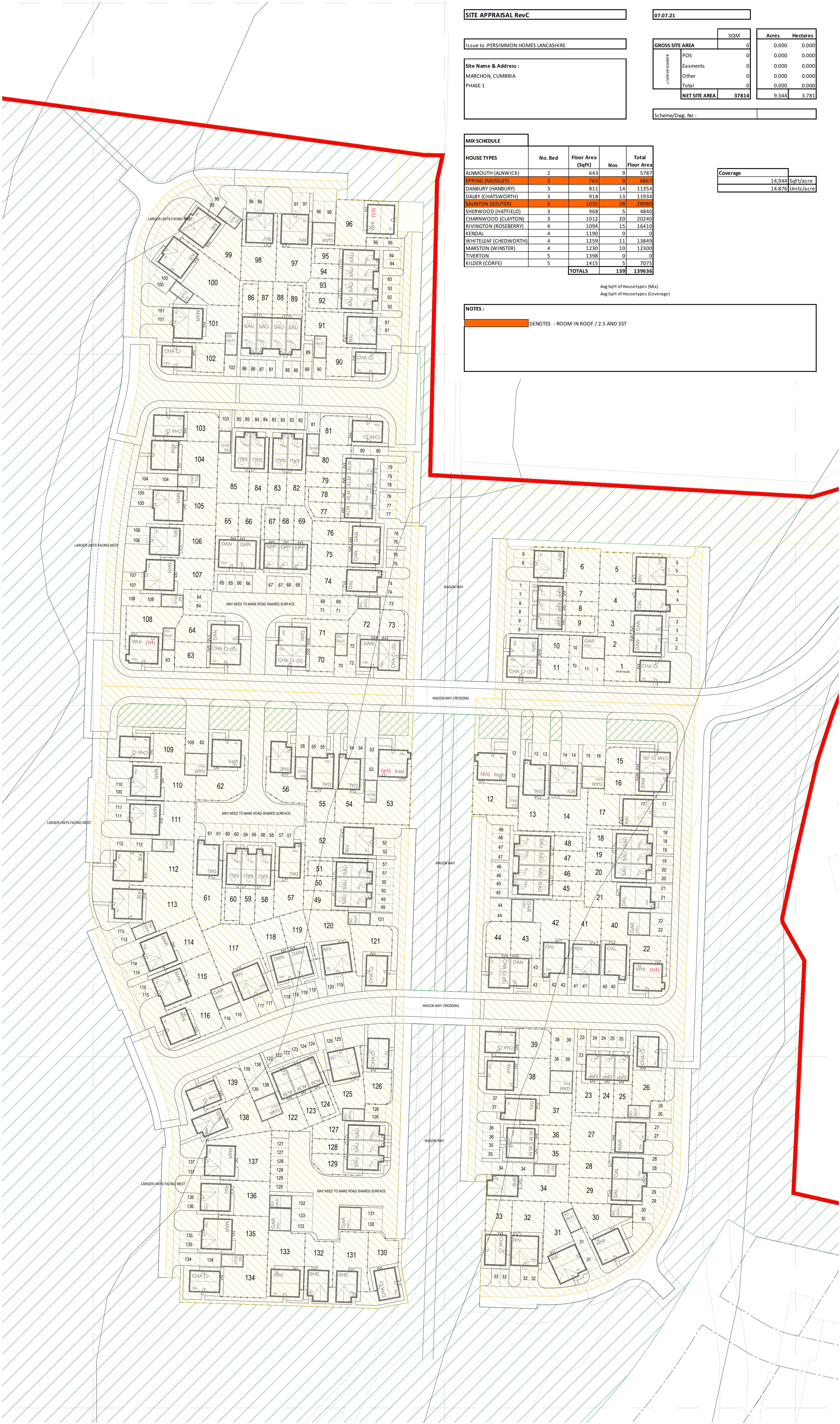
- Orange Line: 14,0715 Ha = 34,7714 Acre
- Nett Area: 3,7814 Ha X 2,471 = 9,3441 Acres = 139 units

Phase 2

- Purple Line: 14,4642 Ha = 35,7419 Acre
- Nett Area: 10,1948 Ha X 2,471 = 25,1848 Acres = 377 units

No.	Description	Drawn	Check	Drawn	Check	Date
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FEASIBILITY			
job / client			
MARCHION			
FOR PERMISON HOMES LANCASHIRE			
drawing title			
PROPOSED MASTERPLAN PLAN			
project no.	drawing no.	revision	date
CPT-257	MP_01	-	08.03.21
scale	drawn by	sheet size	
1/1000	KB	A0	
320J Mayoral Way Team Valley Trading Estate Gateshead NE11 0PT			
0191 - 4661613 info@cp-group.co.uk			



SITE APPRAISAL RevC

07.07.21

Issue to :PERSIMMON HOMES LANCASHIRE

Site Name & Address :
MARCHON, CUMBRIA
PHASE 1

	SQM	Acres	Hectares
GROSS SITE AREA	0	0.000	0.000
POS	0	0.000	0.000
Easments	0	0.000	0.000
Other	0	0.000	0.000
Total	0	0.000	0.000
NET SITE AREA	37814	9.344	3.781

Scheme/Dwg. No :

MIX SCHEDULE				
HOUSE TYPES	No. Bed	Floor Area (Sqft)	Nos	Total Floor Area
ALNMOUTH (ALNWICK)	2	643	9	5787
OPPING (MOSELEY)	3	763	9	6867
DANBURY (HARBURY)	3	811	14	11354
DALBY (CHATS WORTH)	3	918	13	11934
SAUNTON (SOUTER)	3	1035	28	28980
SHERWOOD (HATFIELD)	3	968	5	4840
CHARWOOD (CLAYTON)	3	1012	20	20240
RIVINGTON (ROSEBERRY)	4	1094	15	16410
KENDAL	4	1190	0	0
WHITELEAF (CHEDWORTH)	4	1259	11	13849
MARSTON (WINSTER)	4	1230	10	12300
TIVERTON	5	1398	0	0
KILDER (CORFE)	5	1415	5	7075
TOTALS			139	139636

Avg Sqft of Housetypes (Mix)
Avg Sqft of Housetypes (Coverage)

Coverage	
14.944	Sqft/acre
14.876	Units/acre

NOTES :
DENOTES - ROOM IN ROOF / 2.5 AND 3ST

DO NOT SCALE
DO NOT SCALE THIS DRAWING. USE FIGURED DIMENSIONS IN ALL CASES. CHECK ALL DIMENSIONS ON SITE. REPORT ANY DISCREPANCIES TO CONCEPT ARCHITECTURE BEFORE PROCEEDING.

NET AREA 3.7814 Ha - 9.3441 Acre

Rev	Description	Drawn	Date	Checked	Date
1	AMENDMENTS TO THE LAYOUT FOLLOWING HIGHWAY COMMENTS	HB	05.07.21	BT	05.07.21
2	AMENDMENTS TO THE LAYOUT FOLLOWING CLIENTS COMMENTS	HB	25.06.21	BT	25.06.21
3	HOUSE TYPE SWAP TO RIB RANGE	HB	21.06.21	BT	21.06.21

status
PLANNING

job / client
MARCHON
PERSIMMON HOMES LANCASHIRE

drawing title
SITE PLAN - NET AREA

PHASE 1

project no.	drawing no.	revision	date
CPT-257	PL-02	C	21.10.19
scale	drawn by	sheet size	
1:500	CD	A1	

3201
Mayoral Way
Team Valley Trading Estate
Gateshead
NE11 0RT

0191 - 4661611
info@cpt-group.co.uk





Appendix B: Proposed Access Arrangements

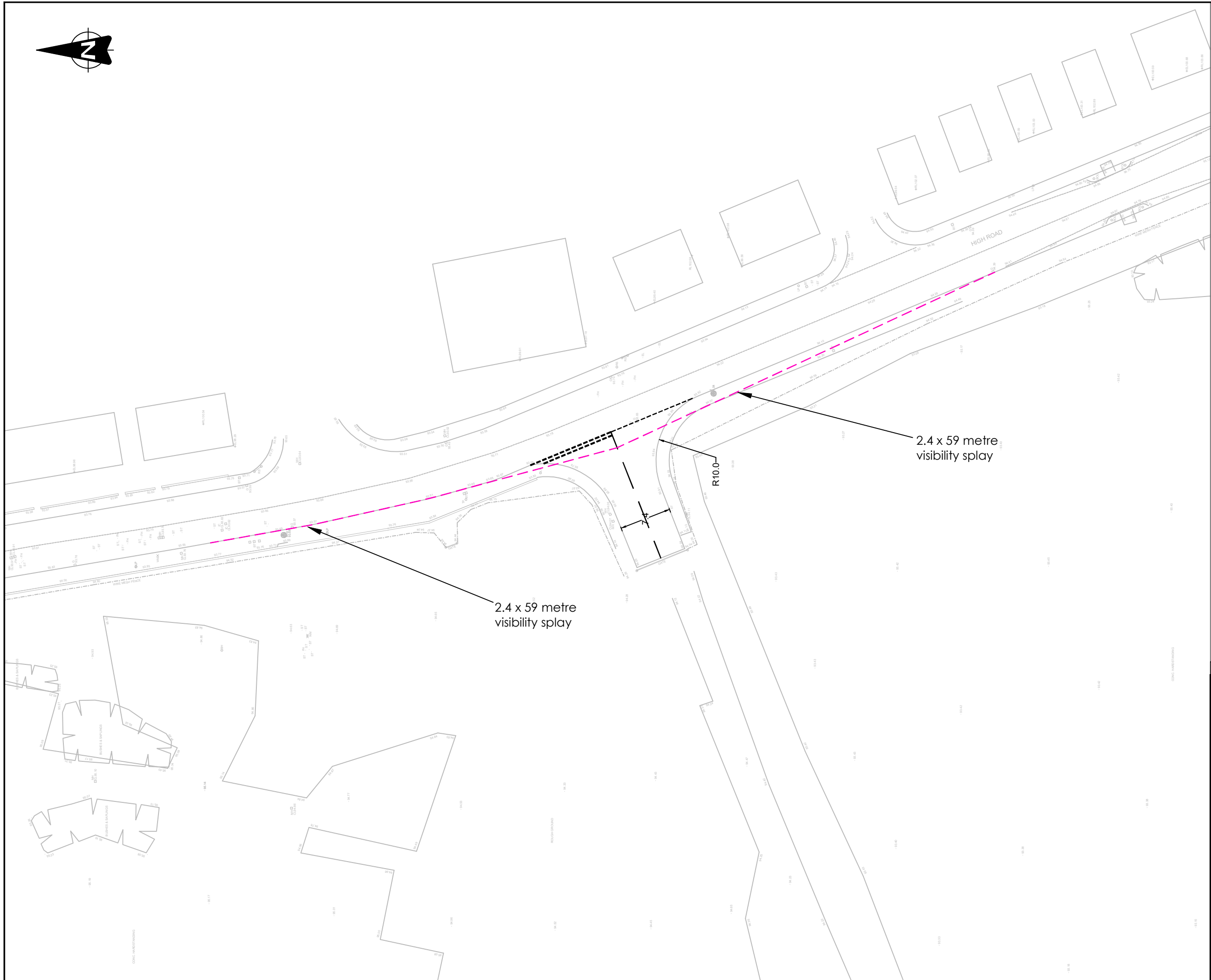




CBO
TRANSPORT

Barnett House
53 Fountain Street
Manchester
M2 2AN
T: 0161 235 6365
F: 0161 235 6566
E: info@cbotransport.co.uk
W: www.cbotransport.co.uk

Client		
Persimmon Homes		
Project		
High Road, Whitehaven		
Drawing Title		
Proposed Reuse of the Existing Northern Access with Footway Widening - Phase 1 Access		
Drawn	Checked	Approved
LPB	PC	PC
Scale / Size		Date
1:500@ A3		29.11.2018
Status	Drg No	Rev
Information	CBO-0542-003	A



Rev.	Date	Revision Details	Drawn	Check	App.



CBO
TRANSPORT

Barnett House
53 Fountain Street
Manchester
M2 2AN
T: 0161 235 6365
F: 0161 235 6566
E: info@cbotransport.co.uk
W: www.cbotransport.co.uk

Client

Persimmon Homes

Project

High Road, Whitehaven

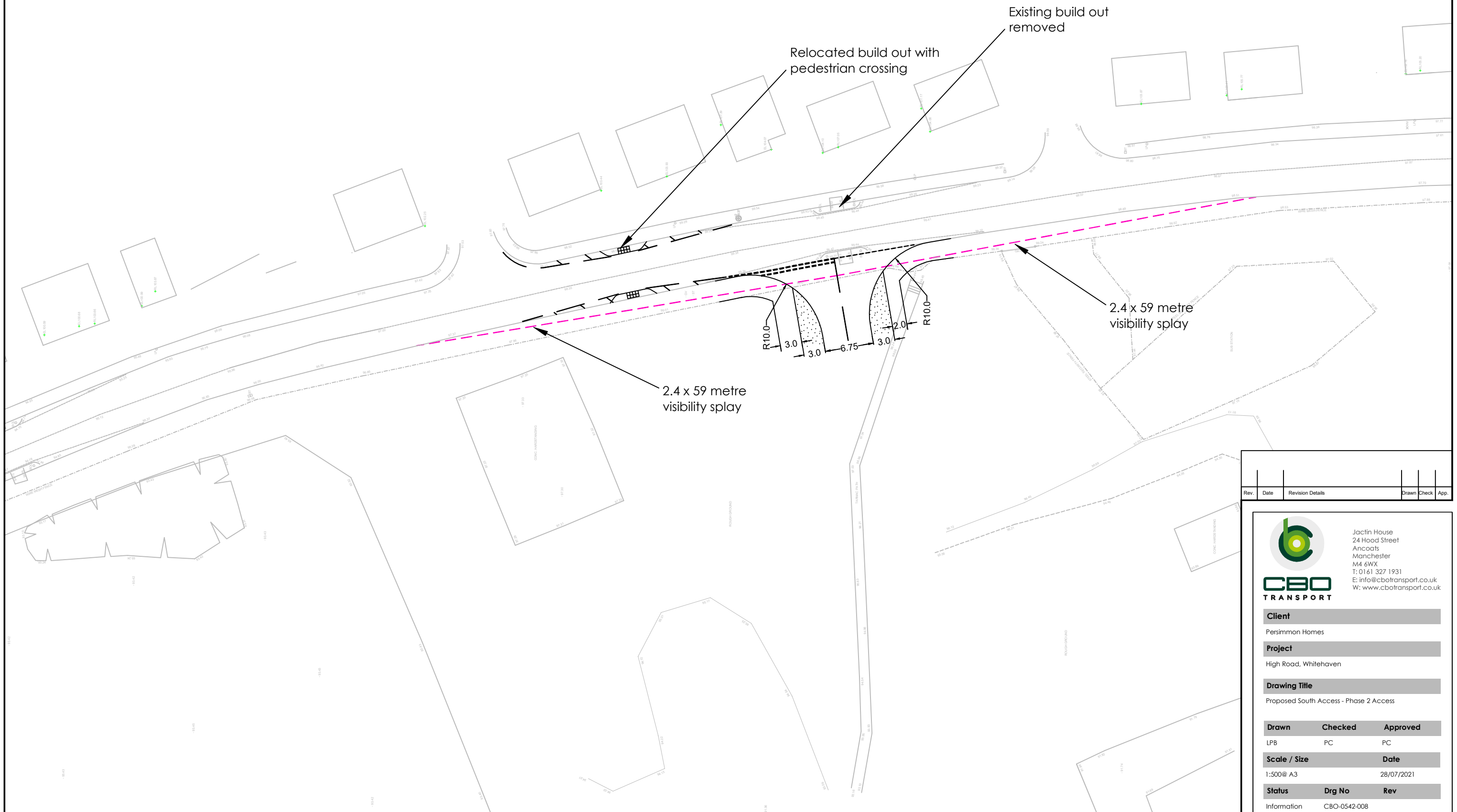
Drawing Title

Proposed Reuse of the Existing Southern Access - Phase 2 Access

Drawn	Checked	Approved
SFB	PC	PC

Scale / Size	Date
1:500@ A3	29.01.2019

Status	Drg No	Rev
Information	CBO-0542-005	



Rev.	Date	Revision Details	Drawn	Check	App.



CBO
TRANSPORT

Jactin House
24 Hood Street
Ancoats
Manchester
M4 6WX
T: 0161 327 1931
E: info@cbotransport.co.uk
W: www.cbotransport.co.uk

Client

Persimmon Homes

Project

High Road, Whitehaven

Drawing Title

Proposed South Access - Phase 2 Access

Drawn	Checked	Approved
-------	---------	----------

LPB	PC	PC
-----	----	----

Scale / Size	Date
--------------	------

1:500@ A3	28/07/2021
-----------	------------

Status	Drg No	Rev
--------	--------	-----

Information	CBO-0542-008	
-------------	--------------	--



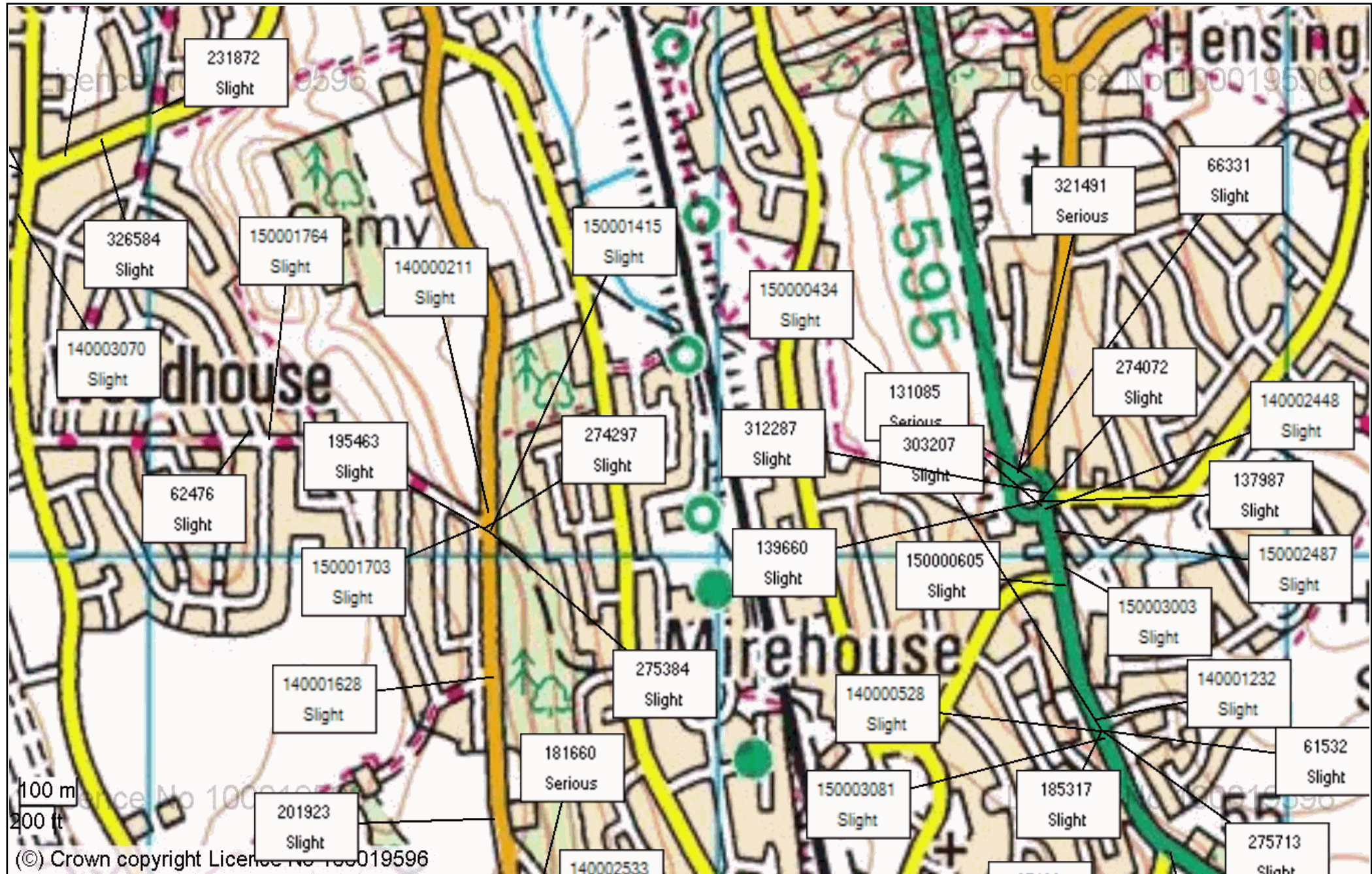
Appendix C: CCC Accident Maps

WIP

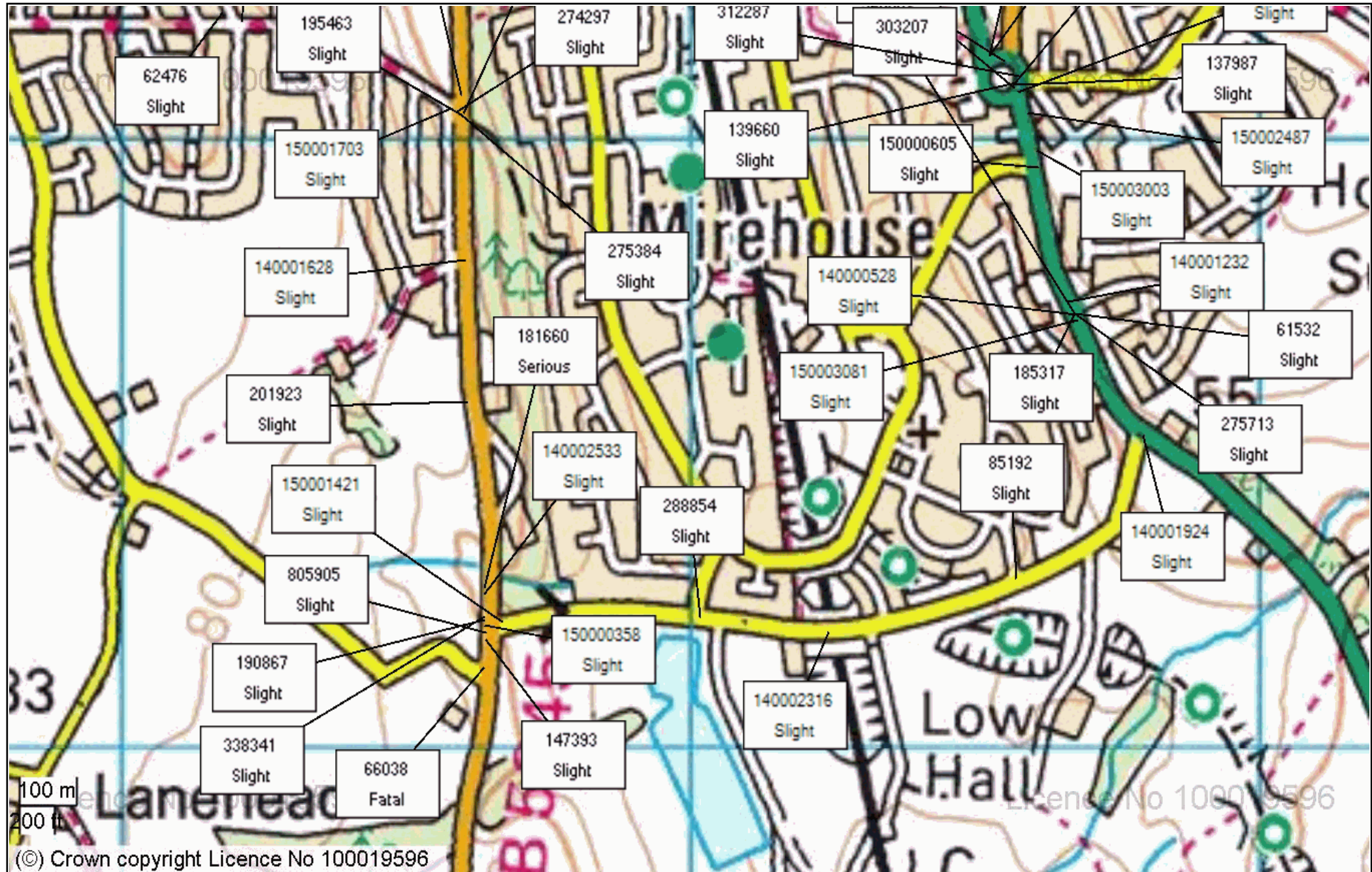


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WIP



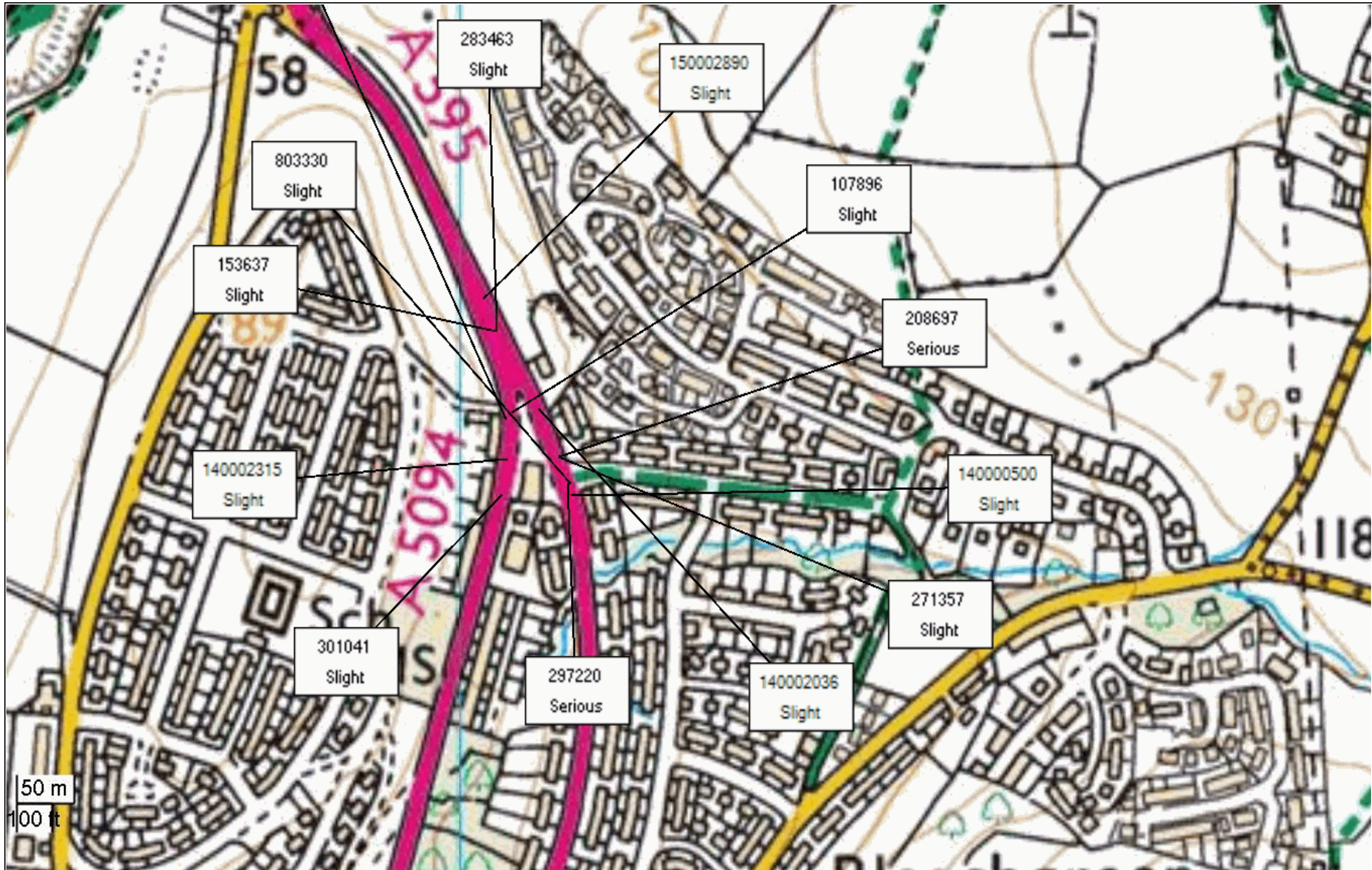
WIP



WIP



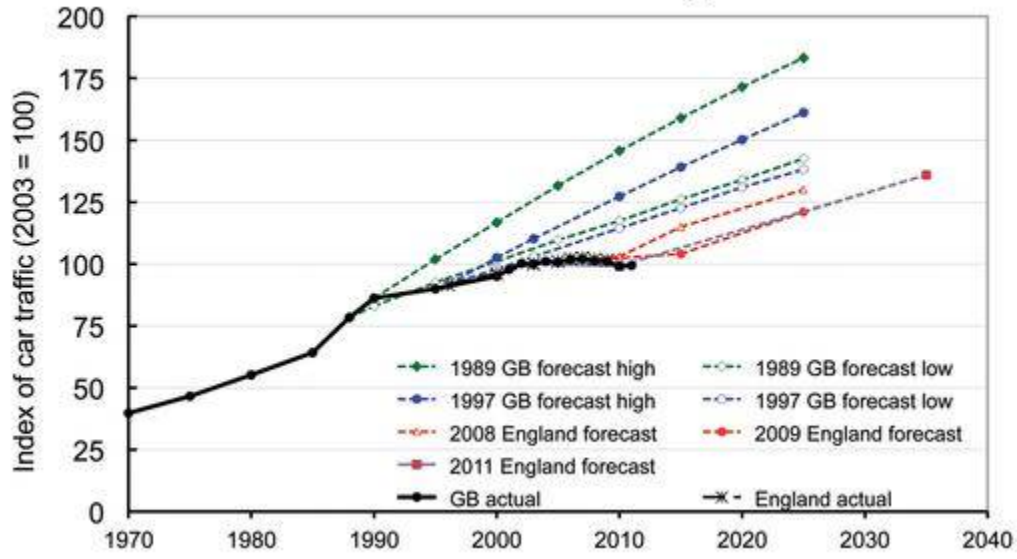
WIP





Appendix D: Traffic Growth Trends

DfT Forecasts and actual car traffic growth





Appendix E: TRICS Information (Residential)



Calculation Reference: AUDIT-751701-181009-1023

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	1 days
	HC HAMPSHIRE	1 days
	KC KENT	3 days
	WS WEST SUSSEX	2 days
03	SOUTH WEST	
	DV DEVON	2 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	1 days
	ST STAFFORDSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NE NORTH EAST LINCOLNSHIRE	1 days
	NY NORTH YORKSHIRE	3 days
09	NORTH	
	DH DURHAM	1 days
17	ULSTER (NORTHERN IRELAND)	
	AN ANTRIM	3 days
	AR ARMAGH	1 days
	DO DOWN	1 days

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

Secondary 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: Number of dwellings
 Actual Range: 50 to 805 (units:)
 Range Selected by User: 50 to 805 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/10 to 19/04/18

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	4 days
Tuesday	5 days
Wednesday	5 days
Thursday	4 days
Friday	3 days

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

Selected survey types:

Manual count	21 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)	10
Edge of Town	11

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	18
No Sub Category	3

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.

Secondary Filtering selection:

Use Class:

C3	21 days
----	---------

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	6 days
5,001 to 10,000	5 days
10,001 to 15,000	6 days
15,001 to 20,000	1 days
20,001 to 25,000	2 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	5 days
25,001 to 50,000	3 days
50,001 to 75,000	4 days
75,001 to 100,000	9 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	3 days
1.1 to 1.5	17 days
1.6 to 2.0	1 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	3 days
No	18 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	21 days
-----------------	---------

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

LIST OF SITES relevant to selection parameters

1	AN-03-A-07 CASTLE WAY ANTRIM	SEMI DETACHED / TERRACED HOUSING	ANTRIM
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 55 Survey date: TUESDAY 20/12/11		Survey Type: MANUAL
2	AN-03-A-08 BALLINDERRY ROAD LISBURN	HOUSES & FLATS	ANTRIM
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 204 Survey date: TUESDAY 29/10/13		Survey Type: MANUAL
3	AN-03-A-09 SLOEFIELD DRIVE CARRICKFERGUS	DETACHED & SEMI-DETACHED	ANTRIM
	Edge of Town No Sub Category Total Number of dwellings: 151 Survey date: WEDNESDAY 12/10/16		Survey Type: MANUAL
4	AR-03-A-01 BIRCHDALE MANOR LURGAN	MIXED HOUSES	ARMAGH
	Edge of Town Residential Zone Total Number of dwellings: 153 Survey date: TUESDAY 15/06/10		Survey Type: MANUAL
5	DH-03-A-01 GREENFIELDS ROAD BISHOP AUCKLAND	SEMI DETACHED	DURHAM
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 50 Survey date: TUESDAY 28/03/17		Survey Type: MANUAL
6	DO-03-A-03 OLD MILL HEIGHTS BELFAST DUNDONALD	DETACHED / SEMI DETACHED	DOWN
	Edge of Town Residential Zone Total Number of dwellings: 79 Survey date: WEDNESDAY 23/10/13		Survey Type: MANUAL
7	DV-03-A-02 MILLHEAD ROAD HONITON	HOUSES & BUNGALOWS	DEVON
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 116 Survey date: FRIDAY 25/09/15		Survey Type: MANUAL
8	DV-03-A-03 LOWER BRAND LANE HONITON	TERRACED & SEMI DETACHED	DEVON
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings: 70 Survey date: MONDAY 28/09/15		Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	ES-03-A-04 NEW LYDD ROAD CAMBER	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total Number of dwellings:	134	
	Survey date: FRIDAY	15/07/16	Survey Type: MANUAL
10	HC-03-A-19 CANADA WAY LIPHOOK	HOUSES & FLATS	HAMPSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings:	62	
	Survey date: MONDAY	27/11/17	Survey Type: MANUAL
11	KC-03-A-03 HYTHE ROAD ASHFORD WILLESBOROUGH	MIXED HOUSES & FLATS	KENT
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings:	51	
	Survey date: THURSDAY	14/07/16	Survey Type: MANUAL
12	KC-03-A-06 MARGATE ROAD HERNE BAY	MIXED HOUSES & FLATS	KENT
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings:	363	
	Survey date: WEDNESDAY	27/09/17	Survey Type: MANUAL
13	KC-03-A-07 RECVLVER ROAD HERNE BAY	MIXED HOUSES	KENT
	Edge of Town Residential Zone Total Number of dwellings:	288	
	Survey date: WEDNESDAY	27/09/17	Survey Type: MANUAL
14	NE-03-A-02 HANOVER WALK SCUNTHORPE	SEMI DETACHED & DETACHED	NORTH EAST LINCOLNSHIRE
	Edge of Town No Sub Category Total Number of dwellings:	432	
	Survey date: MONDAY	12/05/14	Survey Type: MANUAL
15	NY-03-A-06 HORSEFAIR BOROUGHBRIDGE	BUNGALOWS & SEMI DET.	NORTH YORKSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings:	115	
	Survey date: FRIDAY	14/10/11	Survey Type: MANUAL
16	NY-03-A-09 GRAMMAR SCHOOL LANE NORTHALLERTON	MIXED HOUSING	NORTH YORKSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total Number of dwellings:	52	
	Survey date: MONDAY	16/09/13	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

17	NY-03-A-10	HOUSES AND FLATS	NORTH YORKSHIRE
	BOROUGHBRIDGE ROAD		
	RIPON		
	Edge of Town		
	No Sub Category		
	Total Number of dwellings:	71	
	Survey date: TUESDAY	17/09/13	Survey Type: MANUAL
18	SH-03-A-05	SEMI-DETACHED / TERRACED	SHROPSHIRE
	SANDCROFT		
	TELFORD		
	SUTTON HILL		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	54	
	Survey date: THURSDAY	24/10/13	Survey Type: MANUAL
19	ST-03-A-07	DETACHED & SEMI-DETACHED	STAFFORDSHIRE
	BEACONSIDE		
	STAFFORD		
	MARSTON GATE		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	248	
	Survey date: WEDNESDAY	22/11/17	Survey Type: MANUAL
20	WS-03-A-04	MIXED HOUSES	WEST SUSSEX
	HILLS FARM LANE		
	HORSHAM		
	BROADBRIDGE HEATH		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	151	
	Survey date: THURSDAY	11/12/14	Survey Type: MANUAL
21	WS-03-A-06	MIXED HOUSES	WEST SUSSEX
	ELLIS ROAD		
	WEST HORSHAM		
	S BROADBRIDGE HEATH		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	805	
	Survey date: THURSDAY	02/03/17	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.

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

MULTI-MODAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	21	176	0.079	21	176	0.283	21	176	0.362
08:00 - 09:00	21	176	0.128	21	176	0.390	21	176	0.518
09:00 - 10:00	21	176	0.150	21	176	0.176	21	176	0.326
10:00 - 11:00	21	176	0.128	21	176	0.160	21	176	0.288
11:00 - 12:00	21	176	0.136	21	176	0.157	21	176	0.293
12:00 - 13:00	21	176	0.168	21	176	0.149	21	176	0.317
13:00 - 14:00	21	176	0.164	21	176	0.166	21	176	0.330
14:00 - 15:00	21	176	0.168	21	176	0.185	21	176	0.353
15:00 - 16:00	21	176	0.256	21	176	0.176	21	176	0.432
16:00 - 17:00	21	176	0.286	21	176	0.174	21	176	0.460
17:00 - 18:00	21	176	0.371	21	176	0.180	21	176	0.551
18:00 - 19:00	21	176	0.305	21	176	0.196	21	176	0.501
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.339			2.392			4.731

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

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

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Parameter summary

Trip rate parameter range selected:	50 - 805 (units:)
Survey date range:	01/01/10 - 19/04/18
Number of weekdays (Monday-Friday):	21
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
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 shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

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

MULTI-MODAL TAXIS

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	21	176	0.002	21	176	0.002	21	176	0.004
08:00 - 09:00	21	176	0.004	21	176	0.003	21	176	0.007
09:00 - 10:00	21	176	0.003	21	176	0.002	21	176	0.005
10:00 - 11:00	21	176	0.002	21	176	0.003	21	176	0.005
11:00 - 12:00	21	176	0.004	21	176	0.003	21	176	0.007
12:00 - 13:00	21	176	0.001	21	176	0.002	21	176	0.003
13:00 - 14:00	21	176	0.002	21	176	0.002	21	176	0.004
14:00 - 15:00	21	176	0.003	21	176	0.003	21	176	0.006
15:00 - 16:00	21	176	0.005	21	176	0.004	21	176	0.009
16:00 - 17:00	21	176	0.002	21	176	0.003	21	176	0.005
17:00 - 18:00	21	176	0.001	21	176	0.001	21	176	0.002
18:00 - 19:00	21	176	0.002	21	176	0.002	21	176	0.004
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.031			0.030			0.061

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.

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

MULTI-MODAL OGVS

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	21	176	0.001	21	176	0.001	21	176	0.002
08:00 - 09:00	21	176	0.001	21	176	0.001	21	176	0.002
09:00 - 10:00	21	176	0.003	21	176	0.001	21	176	0.004
10:00 - 11:00	21	176	0.003	21	176	0.003	21	176	0.006
11:00 - 12:00	21	176	0.002	21	176	0.002	21	176	0.004
12:00 - 13:00	21	176	0.002	21	176	0.004	21	176	0.006
13:00 - 14:00	21	176	0.001	21	176	0.001	21	176	0.002
14:00 - 15:00	21	176	0.001	21	176	0.002	21	176	0.003
15:00 - 16:00	21	176	0.002	21	176	0.001	21	176	0.003
16:00 - 17:00	21	176	0.002	21	176	0.002	21	176	0.004
17:00 - 18:00	21	176	0.001	21	176	0.001	21	176	0.002
18:00 - 19:00	21	176	0.001	21	176	0.001	21	176	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.020			0.020			0.040

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.

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

MULTI-MODAL PSVS

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	21	176	0.000	21	176	0.000	21	176	0.000
08:00 - 09:00	21	176	0.001	21	176	0.001	21	176	0.002
09:00 - 10:00	21	176	0.000	21	176	0.001	21	176	0.001
10:00 - 11:00	21	176	0.000	21	176	0.000	21	176	0.000
11:00 - 12:00	21	176	0.001	21	176	0.001	21	176	0.002
12:00 - 13:00	21	176	0.000	21	176	0.000	21	176	0.000
13:00 - 14:00	21	176	0.000	21	176	0.000	21	176	0.000
14:00 - 15:00	21	176	0.000	21	176	0.000	21	176	0.000
15:00 - 16:00	21	176	0.001	21	176	0.001	21	176	0.002
16:00 - 17:00	21	176	0.000	21	176	0.001	21	176	0.001
17:00 - 18:00	21	176	0.000	21	176	0.000	21	176	0.000
18:00 - 19:00	21	176	0.000	21	176	0.000	21	176	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.003			0.005			0.008

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.

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	21	176	0.003	21	176	0.005	21	176	0.008
08:00 - 09:00	21	176	0.001	21	176	0.008	21	176	0.009
09:00 - 10:00	21	176	0.001	21	176	0.002	21	176	0.003
10:00 - 11:00	21	176	0.002	21	176	0.004	21	176	0.006
11:00 - 12:00	21	176	0.002	21	176	0.001	21	176	0.003
12:00 - 13:00	21	176	0.003	21	176	0.002	21	176	0.005
13:00 - 14:00	21	176	0.004	21	176	0.004	21	176	0.008
14:00 - 15:00	21	176	0.002	21	176	0.001	21	176	0.003
15:00 - 16:00	21	176	0.005	21	176	0.003	21	176	0.008
16:00 - 17:00	21	176	0.007	21	176	0.006	21	176	0.013
17:00 - 18:00	21	176	0.008	21	176	0.008	21	176	0.016
18:00 - 19:00	21	176	0.005	21	176	0.003	21	176	0.008
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.043			0.047			0.090

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.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
 MULTI-MODAL VEHICLE OCCUPANTS
 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	21	176	0.098	21	176	0.396	21	176	0.494
08:00 - 09:00	21	176	0.164	21	176	0.632	21	176	0.796
09:00 - 10:00	21	176	0.185	21	176	0.238	21	176	0.423
10:00 - 11:00	21	176	0.160	21	176	0.214	21	176	0.374
11:00 - 12:00	21	176	0.174	21	176	0.219	21	176	0.393
12:00 - 13:00	21	176	0.215	21	176	0.204	21	176	0.419
13:00 - 14:00	21	176	0.224	21	176	0.224	21	176	0.448
14:00 - 15:00	21	176	0.225	21	176	0.250	21	176	0.475
15:00 - 16:00	21	176	0.417	21	176	0.237	21	176	0.654
16:00 - 17:00	21	176	0.442	21	176	0.248	21	176	0.690
17:00 - 18:00	21	176	0.545	21	176	0.254	21	176	0.799
18:00 - 19:00	21	176	0.431	21	176	0.285	21	176	0.716
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.280			3.401			6.681

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.

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	21	176	0.012	21	176	0.031	21	176	0.043
08:00 - 09:00	21	176	0.019	21	176	0.093	21	176	0.112
09:00 - 10:00	21	176	0.032	21	176	0.042	21	176	0.074
10:00 - 11:00	21	176	0.037	21	176	0.040	21	176	0.077
11:00 - 12:00	21	176	0.028	21	176	0.023	21	176	0.051
12:00 - 13:00	21	176	0.033	21	176	0.029	21	176	0.062
13:00 - 14:00	21	176	0.034	21	176	0.028	21	176	0.062
14:00 - 15:00	21	176	0.032	21	176	0.040	21	176	0.072
15:00 - 16:00	21	176	0.096	21	176	0.041	21	176	0.137
16:00 - 17:00	21	176	0.067	21	176	0.034	21	176	0.101
17:00 - 18:00	21	176	0.059	21	176	0.037	21	176	0.096
18:00 - 19:00	21	176	0.035	21	176	0.033	21	176	0.068
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.484			0.471			0.955

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.

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	21	176	0.000	21	176	0.014	21	176	0.014
08:00 - 09:00	21	176	0.000	21	176	0.016	21	176	0.016
09:00 - 10:00	21	176	0.001	21	176	0.009	21	176	0.010
10:00 - 11:00	21	176	0.001	21	176	0.002	21	176	0.003
11:00 - 12:00	21	176	0.001	21	176	0.004	21	176	0.005
12:00 - 13:00	21	176	0.002	21	176	0.003	21	176	0.005
13:00 - 14:00	21	176	0.004	21	176	0.002	21	176	0.006
14:00 - 15:00	21	176	0.003	21	176	0.003	21	176	0.006
15:00 - 16:00	21	176	0.010	21	176	0.004	21	176	0.014
16:00 - 17:00	21	176	0.009	21	176	0.004	21	176	0.013
17:00 - 18:00	21	176	0.015	21	176	0.002	21	176	0.017
18:00 - 19:00	21	176	0.015	21	176	0.004	21	176	0.019
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.061			0.067			0.128

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.

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

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	21	176	0.113	21	176	0.446	21	176	0.559
08:00 - 09:00	21	176	0.184	21	176	0.750	21	176	0.934
09:00 - 10:00	21	176	0.218	21	176	0.292	21	176	0.510
10:00 - 11:00	21	176	0.200	21	176	0.261	21	176	0.461
11:00 - 12:00	21	176	0.206	21	176	0.248	21	176	0.454
12:00 - 13:00	21	176	0.253	21	176	0.238	21	176	0.491
13:00 - 14:00	21	176	0.265	21	176	0.258	21	176	0.523
14:00 - 15:00	21	176	0.263	21	176	0.295	21	176	0.558
15:00 - 16:00	21	176	0.528	21	176	0.285	21	176	0.813
16:00 - 17:00	21	176	0.525	21	176	0.293	21	176	0.818
17:00 - 18:00	21	176	0.627	21	176	0.301	21	176	0.928
18:00 - 19:00	21	176	0.486	21	176	0.325	21	176	0.811
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.868			3.992			7.860

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.

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

MULTI-MODAL Servicing Vehicles

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	21	176	0.009	21	176	0.005	21	176	0.014
08:00 - 09:00	21	176	0.009	21	176	0.006	21	176	0.015
09:00 - 10:00	21	176	0.009	21	176	0.007	21	176	0.016
10:00 - 11:00	21	176	0.008	21	176	0.010	21	176	0.018
11:00 - 12:00	21	176	0.009	21	176	0.009	21	176	0.018
12:00 - 13:00	21	176	0.006	21	176	0.008	21	176	0.014
13:00 - 14:00	21	176	0.010	21	176	0.010	21	176	0.020
14:00 - 15:00	21	176	0.007	21	176	0.011	21	176	0.018
15:00 - 16:00	21	176	0.008	21	176	0.007	21	176	0.015
16:00 - 17:00	21	176	0.006	21	176	0.006	21	176	0.012
17:00 - 18:00	21	176	0.004	21	176	0.005	21	176	0.009
18:00 - 19:00	21	176	0.003	21	176	0.003	21	176	0.006
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.088			0.087			0.175

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 E1:TRICS Information (Commercial)



Calculation Reference: AUDIT-751701-210716-0732

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
 Category : O - CONVENIENCE STORE
 MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	1 days
03	SOUTH WEST	
	WL WILTSHIRE	1 days
04	EAST ANGLIA	
	NF NORFOLK	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	1 days
	SY SOUTH YORKSHIRE	1 days
	WY WEST YORKSHIRE	2 days
09	NORTH	
	DH DURHAM	1 days
	TW TYNE & WEAR	1 days
10	WALES	
	CF CARDIFF	2 days

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

Primary Filtering selection:

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

Parameter: Gross floor area
 Actual Range: 280 to 539 (units: sqm)
 Range Selected by User: 200 to 600 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 25/09/19

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
Wednesday	2 days
Thursday	1 days
Friday	5 days

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

Selected survey types:

Manual count	11 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)	6
Edge of Town	1
Neighbourhood Centre (PPS6 Local Centre)	4

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:

Commercial Zone	1
Residential Zone	9
High Street	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.

Secondary Filtering selection:

Use Class:

Not Known	1 days
E(a)	10 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

5,001 to 10,000	2 days
10,001 to 15,000	2 days
15,001 to 20,000	3 days
20,001 to 25,000	2 days
25,001 to 50,000	2 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	1 days
25,001 to 50,000	1 days
75,001 to 100,000	1 days
100,001 to 125,000	1 days
125,001 to 250,000	4 days
250,001 to 500,000	3 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	6 days
1.1 to 1.5	5 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.

Petrol filling station:

Included in the survey count	0 days
Excluded from count or no filling station	11 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No	11 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	11 days
-----------------	---------

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

LIST OF SITES relevant to selection parameters

1	CF-01-O-01 BUTE STREET CARDIFF CARDIFF BAY Neighbourhood Centre (PPS6 Local Centre) Commercial Zone Total Gross floor area: 450 sqm Survey date: WEDNESDAY 18/07/12	TESCO EXPRESS CARDIFF	Survey Type: MANUAL
2	CF-01-O-02 HEOL-Y-DERI CARDIFF RHIWBINA Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total Gross floor area: 350 sqm Survey date: FRIDAY 07/10/16	CO-OPERATIVE CARDIFF	Survey Type: MANUAL
3	DH-01-O-01 132 STATION LANE HARTLEPOOL SEATON CAREW Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area: 469 sqm Survey date: MONDAY 26/11/12	SAINSBURY'S LOCAL DURHAM	Survey Type: MANUAL
4	ES-01-O-01 THE SIDINGS HASTINGS ORE VALLEY Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area: 280 sqm Survey date: WEDNESDAY 19/12/12	ONE STOP EAST SUSSEX	Survey Type: MANUAL
5	NF-01-O-01 DEREHAM ROAD NORWICH Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area: 298 sqm Survey date: FRIDAY 26/10/12	TESCO EXPRESS NORFOLK	Survey Type: MANUAL
6	NY-01-O-03 FOREST ROAD NORTHALLERTON Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area: 305 sqm Survey date: MONDAY 19/09/16	CO-OPERATIVE NORTH YORKSHIRE	Survey Type: MANUAL
7	SY-01-O-02 ECCLESALL ROAD SHEFFIELD Neighbourhood Centre (PPS6 Local Centre) High Street Total Gross floor area: 306 sqm Survey date: FRIDAY 14/12/12	SAINSBURY'S LOCAL SOUTH YORKSHIRE	Survey Type: MANUAL
8	TW-01-O-02 ETHEL TERRACE SUNDERLAND CASTLETOWN Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area: 330 sqm Survey date: FRIDAY 07/04/17	CO-OPERATIVE TYNE & WEAR	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	WL-01-O-01	ONE STOP		WILTSHIRE
	THE CIRCLE			
	SWINDON			
	Suburban Area (PPS6 Out of Centre)			
	Residential Zone			
	Total Gross floor area:		292 sqm	
	Survey date: FRIDAY		23/09/16	Survey Type: MANUAL
10	WY-01-O-01	SAINSBURY'S LOCAL		WEST YORKSHIRE
	KEIGHLEY ROAD			
	BRADFORD			
	Edge of Town			
	Residential Zone			
	Total Gross floor area:		400 sqm	
	Survey date: THURSDAY		06/12/12	Survey Type: MANUAL
11	WY-01-O-02	CO-OPERATIVE		WEST YORKSHIRE
	AINSTY ROAD			
	WETHERBY			
	Neighbourhood Centre (PPS6 Local Centre)			
	Residential Zone			
	Total Gross floor area:		539 sqm	
	Survey date: MONDAY		26/09/16	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.

TRIP RATE for Land Use 01 - RETAIL/O - CONVENIENCE STORE

MULTI-MODAL TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 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	5	354	2.822	5	354	2.709	5	354	5.531
07:00 - 08:00	11	365	6.395	11	365	5.947	11	365	12.342
08:00 - 09:00	11	365	7.191	11	365	6.818	11	365	14.009
09:00 - 10:00	11	365	5.474	11	365	5.151	11	365	10.625
10:00 - 11:00	11	365	5.648	11	365	5.574	11	365	11.222
11:00 - 12:00	11	365	5.449	11	365	5.623	11	365	11.072
12:00 - 13:00	11	365	7.141	11	365	6.619	11	365	13.760
13:00 - 14:00	11	365	5.250	11	365	5.126	11	365	10.376
14:00 - 15:00	11	365	6.569	11	365	6.370	11	365	12.939
15:00 - 16:00	11	365	6.992	11	365	7.265	11	365	14.257
16:00 - 17:00	11	365	7.888	11	365	7.091	11	365	14.979
17:00 - 18:00	11	365	8.808	11	365	8.360	11	365	17.168
18:00 - 19:00	11	365	9.530	11	365	9.903	11	365	19.433
19:00 - 20:00	11	365	6.718	11	365	7.539	11	365	14.257
20:00 - 21:00	10	373	3.273	10	373	4.266	10	373	7.539
21:00 - 22:00	10	373	2.361	10	373	2.764	10	373	5.125
22:00 - 23:00	1	469	1.919	1	469	2.559	1	469	4.478
23:00 - 24:00									
Total Rates:			99.428			99.684			199.112

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

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

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Parameter summary

Trip rate parameter range selected:	280 - 539 (units: sqm)
Survey date range:	01/01/12 - 25/09/19
Number of weekdays (Monday-Friday):	11
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
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 shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 01 - RETAIL/O - CONVENIENCE STORE

MULTI-MODAL CYCLISTS

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 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	5	354	0.282	5	354	0.226	5	354	0.508
07:00 - 08:00	11	365	0.348	11	365	0.373	11	365	0.721
08:00 - 09:00	11	365	0.448	11	365	0.448	11	365	0.896
09:00 - 10:00	11	365	0.249	11	365	0.174	11	365	0.423
10:00 - 11:00	11	365	0.249	11	365	0.199	11	365	0.448
11:00 - 12:00	11	365	0.174	11	365	0.224	11	365	0.398
12:00 - 13:00	11	365	0.249	11	365	0.199	11	365	0.448
13:00 - 14:00	11	365	0.149	11	365	0.224	11	365	0.373
14:00 - 15:00	11	365	0.323	11	365	0.299	11	365	0.622
15:00 - 16:00	11	365	0.299	11	365	0.348	11	365	0.647
16:00 - 17:00	11	365	0.746	11	365	0.597	11	365	1.343
17:00 - 18:00	11	365	0.597	11	365	0.572	11	365	1.169
18:00 - 19:00	11	365	0.647	11	365	0.597	11	365	1.244
19:00 - 20:00	11	365	0.323	11	365	0.299	11	365	0.622
20:00 - 21:00	10	373	0.107	10	373	0.215	10	373	0.322
21:00 - 22:00	10	373	0.268	10	373	0.268	10	373	0.536
22:00 - 23:00	1	469	0.000	1	469	0.000	1	469	0.000
23:00 - 24:00									
Total Rates:			5.458			5.262			10.720

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.

TRIP RATE for Land Use 01 - RETAIL/O - CONVENIENCE STORE
 MULTI-MODAL PEDESTRIANS
 Calculation factor: 100 sqm
 BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 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	5	354	2.483	5	354	2.314	5	354	4.797
07:00 - 08:00	11	365	5.822	11	365	4.852	11	365	10.674
08:00 - 09:00	11	365	8.783	11	365	7.962	11	365	16.745
09:00 - 10:00	11	365	8.161	11	365	7.365	11	365	15.526
10:00 - 11:00	11	365	8.659	11	365	8.609	11	365	17.268
11:00 - 12:00	11	365	10.251	11	365	9.853	11	365	20.104
12:00 - 13:00	11	365	13.511	11	365	12.665	11	365	26.176
13:00 - 14:00	11	365	13.561	11	365	14.282	11	365	27.843
14:00 - 15:00	11	365	11.172	11	365	11.993	11	365	23.165
15:00 - 16:00	11	365	14.830	11	365	14.058	11	365	28.888
16:00 - 17:00	11	365	13.685	11	365	14.033	11	365	27.718
17:00 - 18:00	11	365	13.262	11	365	13.063	11	365	26.325
18:00 - 19:00	11	365	13.461	11	365	13.909	11	365	27.370
19:00 - 20:00	11	365	11.495	11	365	12.540	11	365	24.035
20:00 - 21:00	10	373	8.076	10	373	8.452	10	373	16.528
21:00 - 22:00	10	373	6.305	10	373	7.110	10	373	13.415
22:00 - 23:00	1	469	0.000	1	469	0.000	1	469	0.000
23:00 - 24:00									
Total Rates:			163.517			163.060			326.577

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.

TRIP RATE for Land Use 01 - RETAIL/O - CONVENIENCE STORE

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 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	5	354	5.813	5	354	5.418	5	354	11.231
07:00 - 08:00	11	365	13.710	11	365	12.292	11	365	26.002
08:00 - 09:00	11	365	18.413	11	365	17.094	11	365	35.507
09:00 - 10:00	11	365	15.253	11	365	13.785	11	365	29.038
10:00 - 11:00	11	365	15.626	11	365	15.501	11	365	31.127
11:00 - 12:00	11	365	17.542	11	365	17.144	11	365	34.686
12:00 - 13:00	11	365	22.493	11	365	21.100	11	365	43.593
13:00 - 14:00	11	365	20.179	11	365	20.826	11	365	41.005
14:00 - 15:00	11	365	19.507	11	365	19.856	11	365	39.363
15:00 - 16:00	11	365	24.285	11	365	23.862	11	365	48.147
16:00 - 17:00	11	365	24.832	11	365	23.936	11	365	48.768
17:00 - 18:00	11	365	25.678	11	365	25.031	11	365	50.709
18:00 - 19:00	11	365	26.922	11	365	27.519	11	365	54.441
19:00 - 20:00	11	365	20.652	11	365	22.642	11	365	43.294
20:00 - 21:00	10	373	12.557	10	373	14.140	10	373	26.697
21:00 - 22:00	10	373	9.391	10	373	10.813	10	373	20.204
22:00 - 23:00	1	469	2.772	1	469	3.625	1	469	6.397
23:00 - 24:00									
Total Rates:			295.625			294.584			590.209

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.

Calculation Reference: AUDIT-751701-210716-0725

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 06 - HOTEL, FOOD & DRINK

Category : C - PUB/RESTAURANT

TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	1 days
	EX ESSEX	1 days
	HC HAMPSHIRE	1 days
04	EAST ANGLIA	
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	LN LINCOLNSHIRE	1 days
	NR NORTHAMPTONSHIRE	1 days
	NT NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS	
	ST STAFFORDSHIRE	1 days
08	NORTH WEST	
	GM GREATER MANCHESTER	1 days
09	NORTH	
	DH DURHAM	1 days
	TW TYNE & WEAR	1 days
11	SCOTLAND	
	RF RENFREWSHIRE	1 days

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

Primary Filtering selection:

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

Parameter: Gross floor area
 Actual Range: 400 to 1100 (units: sqm)
 Range Selected by User: 400 to 1100 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/13 to 23/11/19

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:

Tuesday	4 days
Wednesday	1 days
Friday	7 days

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

Selected survey types:

Manual count	12 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	7
Neighbourhood Centre (PPS6 Local Centre)	3

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

Selected Location Sub Categories:

Industrial Zone	2
Commercial Zone	1
Residential Zone	5
Retail Zone	2
No Sub Category	2

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories

Secondary Filtering selection:

Use Class:

Sui Generis 12 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

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

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

Population within 5 miles:

5,001 to 25,000	2 days
100,001 to 125,000	1 days
125,001 to 250,000	4 days
250,001 to 500,000	5 days

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

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	4 days
1.1 to 1.5	6 days
1.6 to 2.0	1 days

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

Travel Plan:

No 12 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 12 days

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

LIST OF SITES relevant to selection parameters

1	DH-06-C-02	PUB/RESTAURANT	DURHAM
	STADIUM WAY		
	BISHOP AUCKLAND		
	TINDALE		
	Edge of Town		
	Retail Zone		
	Total Gross floor area:	450 sqm	
	Survey date: FRIDAY	31/03/17	Survey Type: MANUAL
2	ES-06-C-02	PUB/RESTAURANT	EAST SUSSEX
	HOVE STREET		
	BRIGHTON		
	HOVE		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total Gross floor area:	460 sqm	
	Survey date: FRIDAY	22/09/17	Survey Type: MANUAL
3	EX-06-C-02	HARVESTER	ESSEX
	LONDON ROAD		
	COLCHESTER		
	STANWAY		
	Edge of Town		
	No Sub Category		
	Total Gross floor area:	450 sqm	
	Survey date: FRIDAY	08/11/13	Survey Type: MANUAL
4	GM-06-C-04	HUNGRY HORSE	GREATER MANCHESTER
	HELSMAN LANE		
	ROCHDALE		
	Edge of Town		
	Residential Zone		
	Total Gross floor area:	525 sqm	
	Survey date: TUESDAY	20/10/15	Survey Type: MANUAL
5	HC-06-C-04	PUB/RESTAURANT	HAMPSHIRE
	APOLLO RISE		
	FARNBOROUGH		
	COVE		
	Suburban Area (PPS6 Out of Centre)		
	Industrial Zone		
	Total Gross floor area:	615 sqm	
	Survey date: TUESDAY	11/06/19	Survey Type: MANUAL
6	LN-06-C-01	FLAMING GRILL	LINCOLNSHIRE
	CRUSADER ROAD		
	LINCOLN		
	NEW BOULTHAM		
	Edge of Town		
	Retail Zone		
	Total Gross floor area:	760 sqm	
	Survey date: TUESDAY	10/10/17	Survey Type: MANUAL
7	NR-06-C-01	PUB/RESTAURANT	NORTHAMPTONSHIRE
	BEDFORD ROAD		
	NORTHAMPTON		
	BRACKMILLS		
	Edge of Town		
	Commercial Zone		
	Total Gross floor area:	620 sqm	
	Survey date: FRIDAY	11/11/16	Survey Type: MANUAL
8	NT-06-C-03	HARVESTER	NOTTINGHAMSHIRE
	CLIFTON LANE		
	NOTTINGHAM		
	WILFORD		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total Gross floor area:	450 sqm	
	Survey date: TUESDAY	18/06/13	Survey Type: MANUAL
9	RF-06-C-01	PUB/RESTAURANT	RENFREWSHIRE
	SATURN AVENUE		
	PAISLEY		
	Neighbourhood Centre (PPS6 Local Centre)		
	No Sub Category		
	Total Gross floor area:	1100 sqm	
	Survey date: FRIDAY	20/06/14	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

10	SF-06-C-02	PUB/RESTAURANT		SUFFOLK
	CLIFF ROAD			
	IPSWICH			
	Suburban Area (PPS6 Out of Centre)			
	Industrial Zone			
	Total Gross floor area:	875 sqm		
	Survey date: FRIDAY	18/09/15		Survey Type: MANUAL
11	ST-06-C-01	HARVESTER		STAFFORDSHIRE
	STONE ROAD			
	STOKE-ON-TRENT			
	TRENTAM			
	Edge of Town			
	Residential Zone			
	Total Gross floor area:	720 sqm		
	Survey date: WEDNESDAY	23/10/13		Survey Type: MANUAL
12	TW-06-C-01	PUB/RESTAURANT		TYNE & WEAR
	WHICKHAM HIGHWAY			
	GATESHEAD			
	Edge of Town			
	Residential Zone			
	Total Gross floor area:	400 sqm		
	Survey date: FRIDAY	04/10/13		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.

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/C - PUB/RESTAURANT

TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 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									
08:00 - 09:00									
09:00 - 10:00									
10:00 - 11:00	12	619	0.593	12	619	0.404	12	619	0.997
11:00 - 12:00	12	619	1.293	12	619	0.471	12	619	1.764
12:00 - 13:00	12	619	2.976	12	619	1.199	12	619	4.175
13:00 - 14:00	12	619	2.074	12	619	2.249	12	619	4.323
14:00 - 15:00	12	619	1.199	12	619	2.411	12	619	3.610
15:00 - 16:00	12	619	1.064	12	619	1.199	12	619	2.263
16:00 - 17:00	12	619	2.384	12	619	1.199	12	619	3.583
17:00 - 18:00	12	619	3.488	12	619	2.114	12	619	5.602
18:00 - 19:00	12	619	3.502	12	619	2.761	12	619	6.263
19:00 - 20:00	12	619	3.003	12	619	3.300	12	619	6.303
20:00 - 21:00	12	619	1.724	12	619	2.936	12	619	4.660
21:00 - 22:00	12	619	1.051	12	619	1.993	12	619	3.044
22:00 - 23:00	12	619	0.620	12	619	2.276	12	619	2.896
23:00 - 24:00	10	571	0.210	10	571	0.736	10	571	0.946
Total Rates:			25.181			25.248			50.429

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

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

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Parameter summary

Trip rate parameter range selected: 400 - 1100 (units: sqm)
 Survey date range: 01/01/13 - 23/11/19
 Number of weekdays (Monday-Friday): 12
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 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 shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.



Appendix F: JTW Trip Distribution



WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level)

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population All usual residents aged 16 and over in employment the week before the census
units Persons
date 2011
usual residence E02004004 : Copeland 005 (2011 super output area - middle layer)

place of work		Driving a car or van				
		North	East	South	Local	
E02004000 : Copeland 001	38	1.7	1.7			
E02004001 : Copeland 002	415	18.5				18.5
E02004002 : Copeland 003	239	10.7		10.7		
E02004003 : Copeland 004	74	3.3		3.3		
E02004004 : Copeland 005	133	5.9				5.9
E02004005 : Copeland 006	145	6.5			6.5	
E02004006 : Copeland 007	708	31.6			31.6	
E02004007 : Copeland 008	29	1.3			1.3	
E02003965 : Allerdale 001	8	0.4	0.4			
E02003966 : Allerdale 002	0	0	0			
E02003967 : Allerdale 003	4	0.2	0.2			
E02003968 : Allerdale 004	6	0.3	0.3			
E02003969 : Allerdale 005	7	0.3	0.3			
E02003970 : Allerdale 006	11	0.5	0.5			
E02003971 : Allerdale 007	17	0.8	0.8			
E02003972 : Allerdale 008	66	2.9	2.9			
E02003973 : Allerdale 009	99	4.4	4.4			
E02003974 : Allerdale 010	7	0.3	0.3			
E02003975 : Allerdale 011	96	4.3	4.3			
E02003976 : Allerdale 012	6	0.3	0.3			
Barrow-in-Furness	17	0.8			0.8	
Carlisle	41	1.8	1.8			
Eden	40	1.8	1.8			
Lancaster	1	0			0	
South Lakeland	14	0.6			0.6	
North East	9	0.4	0.4			
Scotland	8	0.4	0.4			
	2,238	100	21	14	41	24

In order to protect against disclosure of personal information, records have been swapped between different geographic areas. Some counts will be affected, particularly small counts at the lowest geographies.



Appendix G: B5345 Preston / Irish Street / Swingpump Lane Junction

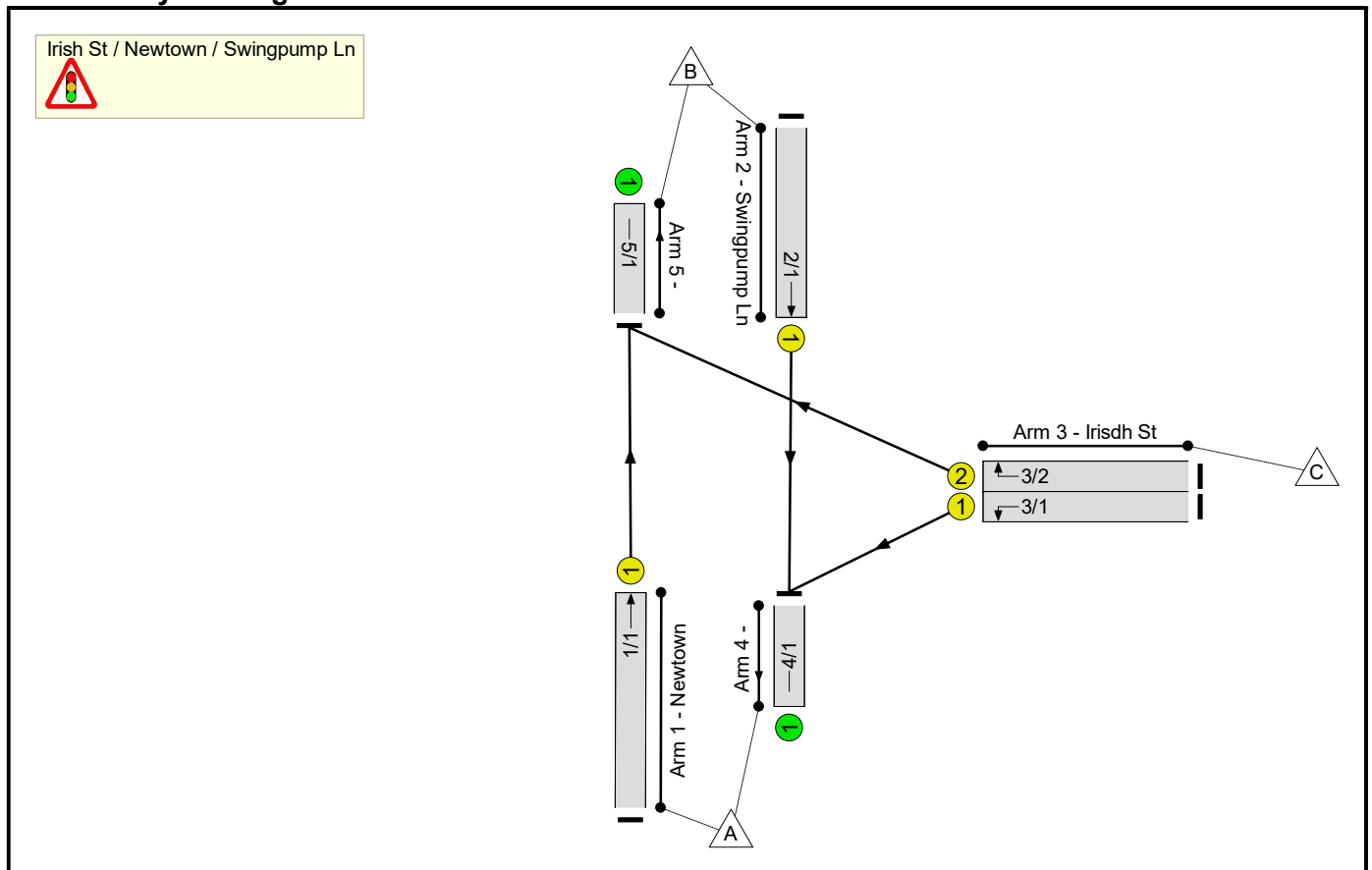


Irish Street, Preston Road, Swingpump Lane Existing Junction

Project and User Details

Project:	Former Marchon Site, Whitehaven
Title:	
Client:	Persimmon
Site Ref(s):	Irish Street
Design Layout Ref:	Existing
Model Purpose:	Planning
Model Assumptions:	CCC
Flow Details:	2033
Author:	

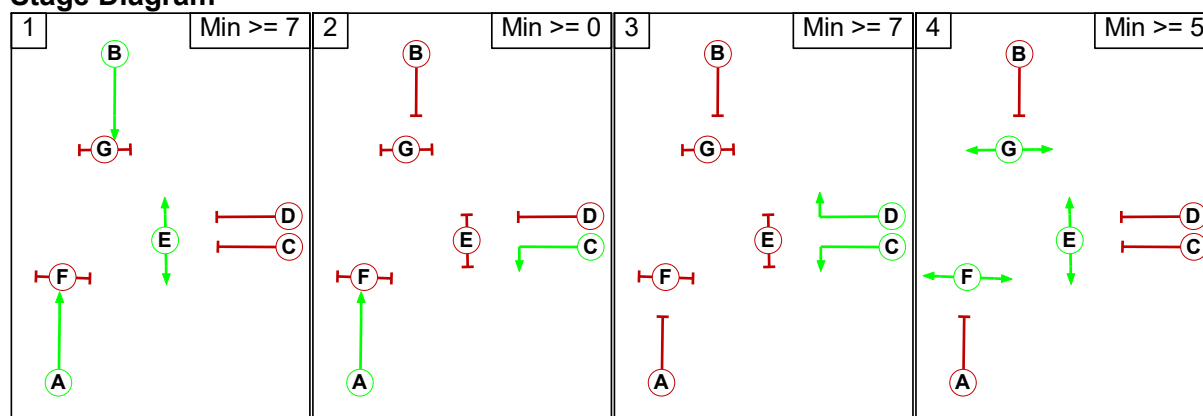
Network Layout Diagram



Phase Intergreens Matrix

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

Stage Diagram



Lane Input Data

Junction: Irish St / Newtown / Swingpump Ln												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Newtown)	U	A	2	3	60.0	Geom	-	3.80	0.00	Y	Arm 5 Ahead	Inf
2/1 (Swingpump Ln)	U	B	2	3	60.0	Geom	-	3.80	0.00	Y	Arm 4 Ahead	Inf
3/1 (Irisdh St)	U	C	2	3	60.0	Geom	-	3.20	0.00	Y	Arm 4 Left	7.00
3/2 (Irisdh St)	U	D	2	3	60.0	Geom	-	3.20	0.00	Y	Arm 5 Right	11.00
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Network Results

Scenario 1: 'Existing AM Peak' (FG1: 'Existing AM Peak', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	42.3%	4.4	1.1	5.5	-	-	-
Irish St / Newtown / Swingpump Ln	-	-	-		-	-	-	-	-	42.3%	4.4	1.1	5.5	-	-	-
1/1	Newtown Ahead	U	A		39	361	1995	1995	887	40.7%	1.7	0.3	2.0	20.4	6.1	6.5
2/1	Swingpump Ln Ahead	U	B		11	54	1995	1995	266	20.3%	0.5	0.1	0.6	43.2	1.2	1.3
3/1	Irisdh St Left	U	C		53	290	1594	1594	956	30.3%	0.7	0.2	0.9	11.5	3.5	3.8
3/2	Irisdh St Right	U	D		25	208	1703	1703	492	42.3%	1.5	0.4	1.9	32.2	4.2	4.5
4/1		U	-		-	344	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
5/1		U	-		-	569	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 112.9 PRC Over All Lanes (%): 112.9 Total Delay for Signalled Lanes (pcuHr): 5.48 Total Delay Over All Lanes(pcuHr): 5.48 Cycle Time (s): 90																

Scenario 2: 'Existing PM Peak' (FG2: 'Existing PM Peak', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	58.9%	7.7	2.2	9.9	-	-	-
Irish St / Newtown / Swingpump Ln	-	-	-		-	-	-	-	-	58.9%	7.7	2.2	9.9	-	-	-
1/1	Newtown Ahead	U	A		41	488	1995	1995	931	52.4%	2.3	0.5	2.8	21.0	8.5	9.1
2/1	Swingpump Ln Ahead	U	B		18	177	1995	1995	421	42.0%	1.5	0.4	1.9	38.1	3.8	4.1
3/1	Irisdh St Left	U	C		46	490	1594	1594	832	58.9%	2.0	0.7	2.7	20.1	8.4	9.2
3/2	Irisdh St Right	U	D		23	241	1703	1703	454	53.1%	1.9	0.6	2.4	36.6	5.1	5.7
4/1		U	-		-	667	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
5/1		U	-		-	729	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
C1					PRC for Signalled Lanes (%):		52.9	Total Delay for Signalled Lanes (pcuHr):			9.90	Cycle Time (s): 90				
					PRC Over All Lanes (%):		52.9	Total Delay Over All Lanes(pcuHr):			9.90					

Scenario 3: '2033 with Dev' (FG3: '2033 with Dev AM Peak', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	61.6%	6.3	2.2	8.5	-	-	-
Irish St / Newtown / Swingpump Ln	-	-	-		-	-	-	-	-	61.6%	6.3	2.2	8.5	-	-	-
1/1	Newtown Ahead	U	A		45	616	1995	1995	1020	60.4%	2.7	0.8	3.4	20.0	10.8	11.5
2/1	Swingpump Ln Ahead	U	B		8	74	1995	1995	200	37.1%	0.8	0.3	1.1	52.1	1.7	2.0
3/1	Irisdh St Left	U	C		56	387	1594	1594	1010	38.3%	0.9	0.3	1.2	10.9	4.6	4.9
3/2	Irisdh St Right	U	D		19	233	1703	1703	378	61.6%	2.0	0.8	2.8	43.8	5.2	6.0
4/1		U	-		-	461	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
5/1		U	-		-	849	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0

C1	PRC for Signalled Lanes (%): 46.2	Total Delay for Signalled Lanes (pcuHr): 8.50	Cycle Time (s): 90
	PRC Over All Lanes (%): 46.2	Total Delay Over All Lanes(pcuHr): 8.50	

Scenario 4: '2033 with Dev' (FG4: '2033 with Dev PM Peak', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	73.0%	10.0	4.3	14.3	-	-	-
Irish St / Newtown / Swingpump Ln	-	-	-		-	-	-	-	-	73.0%	10.0	4.3	14.3	-	-	-
1/1	Newtown Ahead	U	A		44	633	1995	1995	998	63.5%	2.9	0.9	3.8	21.4	11.4	12.3
2/1	Swingpump Ln Ahead	U	B		13	216	1995	1995	310	69.6%	2.2	1.1	3.3	54.6	5.1	6.2
3/1	Irisdh St Left	U	C		51	672	1594	1594	921	73.0%	2.6	1.3	3.9	21.0	12.1	13.5
3/2	Irisdh St Right	U	D		20	268	1703	1703	397	67.4%	2.3	1.0	3.4	45.1	6.0	7.0
4/1		U	-		-	888	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
5/1		U	-		-	901	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
C1																



Appendix H: B5345 Preston Road / Coach Road



Junctions 9												
PICADY 9 - Priority Intersection Module												
Version: 9.5.1.7462 © Copyright TRL Limited, 2019												
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Filename: B5345 Meadow View_Coach Rd 200721.j9
Path: L:\Projects\CBO-0542 High Road, Whitehaven\Modelling\PC Runs
Report generation date: 27/07/2021 15:01:24

- »Existing Layout - Existing, AM
- »Existing Layout - Existing, PM
- »Existing Layout - 2033 with Development, AM
- »Existing Layout - 2033 with Development, PM
- »Existing Layout - No Growth with Development, AM
- »Existing Layout - No Growth with Development, PM
- »Existing Layout - 2023 with Development, AM
- »Existing Layout - 2023 with Development, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity
	Existing Layout - Existing											
Stream B-AC	D1	0.4	11.31	0.30	B	59 %	D2	0.6	14.74	0.39	B	34 %
Stream C-AB		1.1	7.83	0.43	A	[Stream C-AB]		1.0	7.87	0.38	A	[Stream B-AC]
	Existing Layout - 2033 with Development											
Stream B-AC	D3	1.1	18.10	0.53	C	8 %	D4	1.8	29.98	0.65	D	3 %
Stream C-AB		5.1	15.78	0.75	C	[Stream C-AB]		2.8	11.47	0.60	B	[Stream B-AC]
	Existing Layout - No Growth with Development											
Stream B-AC	D5	0.9	15.06	0.47	C	18 %	D6	1.2	21.38	0.54	C	13 %
Stream C-AB		3.1	11.07	0.65	B	[Stream C-AB]		1.8	9.35	0.50	A	[Stream B-AC]
	Existing Layout - 2023 with Development											
Stream B-AC	D7	1.0	16.49	0.50	C	13 %	D8	1.4	24.61	0.59	C	8 %
Stream C-AB		3.9	12.86	0.70	B	[Stream C-AB]		2.2	10.15	0.55	B	[Stream B-AC]

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.
 Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	B5345 Meadow View_Coach Rd
Location	
Site number	
Date	10/04/2019
Version	
Status	
Identifier	
Client	
Jobnumber	CBO-0542
Enumerator	CBO
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	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	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 period length (min)	Time segment length (min)
D1	Existing	AM	FLAT	08:00	09:00	60	15
D2	Existing	PM	FLAT	16:30	17:30	60	15
D3	2033 with Development	AM	FLAT	08:00	09:00	60	15
D4	2033 with Development	PM	FLAT	16:30	17:30	60	15
D5	No Growth with Development	AM	FLAT	08:00	09:00	60	15
D6	No Growth with Development	PM	FLAT	16:30	17:30	60	15
D7	2023 with Development	AM	FLAT	08:00	09:00	60	15
D8	2023 with Development	PM	FLAT	16:30	17:30	60	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Existing Layout	100.000

Existing Layout - Existing, 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		4.36	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	59	Stream C-AB

Arms

Arms

Arm	Name	Description	Arm type
A	B5345 Meadow View (N)		Major
B	Coach Rd		Minor
C	B5345 Meadow View (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.72			90.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.65	22	25

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	529	0.089	0.225	0.142	0.322
B-C	681	0.097	0.244	-	-
C-B	626	0.224	0.224	-	-

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 period length (min)	Time segment length (min)
D1	Existing	AM	FLAT	08:00	09:00	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	284	100.000
B		✓	139	100.000
C		✓	551	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	48	236
	B	61	0	78
From	C	364	187	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.30	11.31	0.4	B
C-AB	0.43	7.83	1.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	139	458	0.303	137	0.4	11.163	B
C-AB	341	805	0.424	337	1.1	7.671	A
C-A	210			210			
A-B	48			48			
A-C	236			236			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	139	457	0.304	139	0.4	11.305	B
C-AB	344	806	0.426	343	1.1	7.822	A
C-A	207			207			
A-B	48			48			
A-C	236			236			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	139	457	0.304	139	0.4	11.307	B
C-AB	344	806	0.426	344	1.1	7.826	A
C-A	207			207			
A-B	48			48			
A-C	236			236			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	139	457	0.304	139	0.4	11.308	B
C-AB	344	806	0.426	344	1.1	7.826	A
C-A	207			207			
A-B	48			48			
A-C	236			236			

Existing Layout - Existing, 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		3.15	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	34	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D2	Existing	PM	FLAT	16:30	17:30	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	750	100.000
B		✓	155	100.000
C		✓	522	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
From	A	0	142	608
	B	51	0	104
	C	389	133	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.39	14.74	0.6	B
C-AB	0.38	7.87	1.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	155	400	0.388	153	0.6	14.416	B
C-AB	280	741	0.378	276	1.0	7.724	A
C-A	242			242			
A-B	142			142			
A-C	608			608			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	155	399	0.388	155	0.6	14.730	B
C-AB	282	743	0.380	282	1.0	7.867	A
C-A	240			240			
A-B	142			142			

A-C	608			608			
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17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	155	399	0.388	155	0.6	14.734	B
C-AB	282	743	0.380	282	1.0	7.868	A
C-A	240			240			
A-B	142			142			
A-C	608			608			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	155	399	0.388	155	0.6	14.737	B
C-AB	282	743	0.380	282	1.0	7.869	A
C-A	240			240			
A-B	142			142			
A-C	608			608			

Existing Layout - 2033 with 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		10.39	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	8	Stream C-AB

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D3	2033 with Development	AM	FLAT	08:00	09:00	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	398	100.000

B		✓	227	100.000
C		✓	885	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
From	A	0	54	344
	B	68	0	159
	C	631	254	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.53	18.10	1.1	C
C-AB	0.75	15.78	5.1	C
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	227	429	0.529	223	1.1	17.125	C
C-AB	722	973	0.742	705	4.5	13.265	B
C-A	163			163			
A-B	54			54			
A-C	344			344			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
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B-AC	227	426	0.533	227	1.1	18.048	C
C-AB	739	981	0.753	737	4.9	15.497	C
C-A	146			146			
A-B	54			54			
A-C	344			344			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	227	426	0.533	227	1.1	18.090	C
C-AB	740	982	0.754	740	5.0	15.710	C
C-A	145			145			
A-B	54			54			
A-C	344			344			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	227	426	0.533	227	1.1	18.103	C
C-AB	741	982	0.754	740	5.1	15.784	C
C-A	144			144			
A-B	54			54			
A-C	344			344			

Existing Layout - 2033 with 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		6.39	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	3	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D4	2033 with Development	PM	FLAT	16:30	17:30	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	982	100.000
B		✓	218	100.000
C		✓	690	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
From	A	0	158	824
	B	57	0	161
	C	523	167	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.65	29.98	1.8	D
C-AB	0.60	11.47	2.8	B
C-A				
A-B				
A-C				

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	218	340	0.642	211	1.7	26.901	D
C-AB	477	804	0.594	467	2.6	10.652	B
C-A	213			213			
A-B	158			158			
A-C	824			824			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	218	338	0.645	218	1.7	29.768	D
C-AB	486	810	0.600	485	2.7	11.420	B
C-A	204			204			
A-B	158			158			
A-C	824			824			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	218	338	0.646	218	1.8	29.924	D
C-AB	486	810	0.600	486	2.8	11.455	B
C-A	204			204			
A-B	158			158			
A-C	824			824			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	218	338	0.646	218	1.8	29.978	D
C-AB	486	810	0.601	486	2.8	11.469	B
C-A	204			204			
A-B	158			158			
A-C	824			824			

Existing Layout - No Growth with 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		7.19	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	18	Stream C-AB

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D5	No Growth with Development	AM	FLAT	08:00	09:00	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	360	100.000
B		✓	211	100.000
C		✓	819	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	48	312
	B	61	0	150
	C	587	232	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.47	15.06	0.9	C
C-AB	0.65	11.07	3.1	B
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	211	452	0.467	208	0.8	14.546	B
C-AB	609	948	0.643	598	2.9	10.220	B

C-A	210			210			
A-B	48			48			
A-C	312			312			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	211	450	0.469	211	0.9	15.037	C
C-AB	619	953	0.649	618	3.0	11.022	B
C-A	200			200			
A-B	48			48			
A-C	312			312			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	211	450	0.469	211	0.9	15.051	C
C-AB	619	953	0.649	619	3.1	11.061	B
C-A	200			200			
A-B	48			48			
A-C	312			312			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	211	450	0.469	211	0.9	15.055	C
C-AB	619	953	0.649	619	3.1	11.073	B
C-A	200			200			
A-B	48			48			
A-C	312			312			

Existing Layout - No Growth with 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		4.61	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	13	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D6	No Growth with Development	PM	FLAT	16:30	17:30	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	899	100.000
B		✓	201	100.000
C		✓	632	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	142	757
	B	51	0	150
	C	480	152	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.54	21.38	1.2	C
C-AB	0.50	9.35	1.8	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	201	370	0.543	196	1.1	20.224	C
C-AB	392	785	0.499	384	1.8	8.983	A
C-A	240			240			
A-B	142			142			
A-C	757			757			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	201	369	0.544	201	1.2	21.331	C
C-AB	397	788	0.503	396	1.8	9.339	A
C-A	235			235			
A-B	142			142			
A-C	757			757			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	201	369	0.544	201	1.2	21.363	C
C-AB	397	788	0.503	397	1.8	9.349	A
C-A	235			235			
A-B	142			142			
A-C	757			757			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	201	369	0.544	201	1.2	21.376	C
C-AB	397	788	0.504	397	1.8	9.352	A
C-A	235			235			
A-B	142			142			
A-C	757			757			

Existing Layout - 2023 with 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		8.47	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	13	Stream C-AB

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D7	2023 with Development	AM	FLAT	08:00	09:00	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	377	100.000
B		✓	220	100.000
C		✓	852	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	51	326
	B	65	0	155
	C	609	243	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.50	16.49	1.0	C
C-AB	0.70	12.86	3.9	B
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	220	441	0.499	216	1.0	15.783	C
C-AB	664	961	0.691	649	3.5	11.477	B
C-A	188			188			
A-B	51			51			
A-C	326			326			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	220	438	0.502	220	1.0	16.456	C
C-AB	676	967	0.699	675	3.8	12.753	B
C-A	176			176			
A-B	51			51			
A-C	326			326			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	220	438	0.502	220	1.0	16.478	C
C-AB	677	968	0.699	676	3.8	12.837	B
C-A	175			175			
A-B	51			51			
A-C	326			326			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	220	438	0.502	220	1.0	16.486	C
C-AB	677	968	0.699	677	3.9	12.865	B
C-A	175			175			
A-B	51			51			
A-C	326			326			

Existing Layout - 2023 with 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		5.29	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	8	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D8	2023 with Development	PM	FLAT	16:30	17:30	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	936	100.000
B		✓	209	100.000
C		✓	658	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	149	787
	B	54	0	155
	C	499	159	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.59	24.61	1.4	C
C-AB	0.55	10.15	2.2	B
C-A				
A-B				
A-C				

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	209	356	0.587	204	1.3	22.865	C
C-AB	429	793	0.540	420	2.1	9.639	A
C-A	229			229			
A-B	149			149			
A-C	787			787			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	209	355	0.589	209	1.4	24.557	C
C-AB	435	797	0.546	435	2.2	10.132	B
C-A	223			223			
A-B	149			149			
A-C	787			787			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	209	355	0.589	209	1.4	24.594	C
C-AB	435	797	0.546	435	2.2	10.151	B
C-A	223			223			
A-B	149			149			
A-C	787			787			

17:15 - 17:30

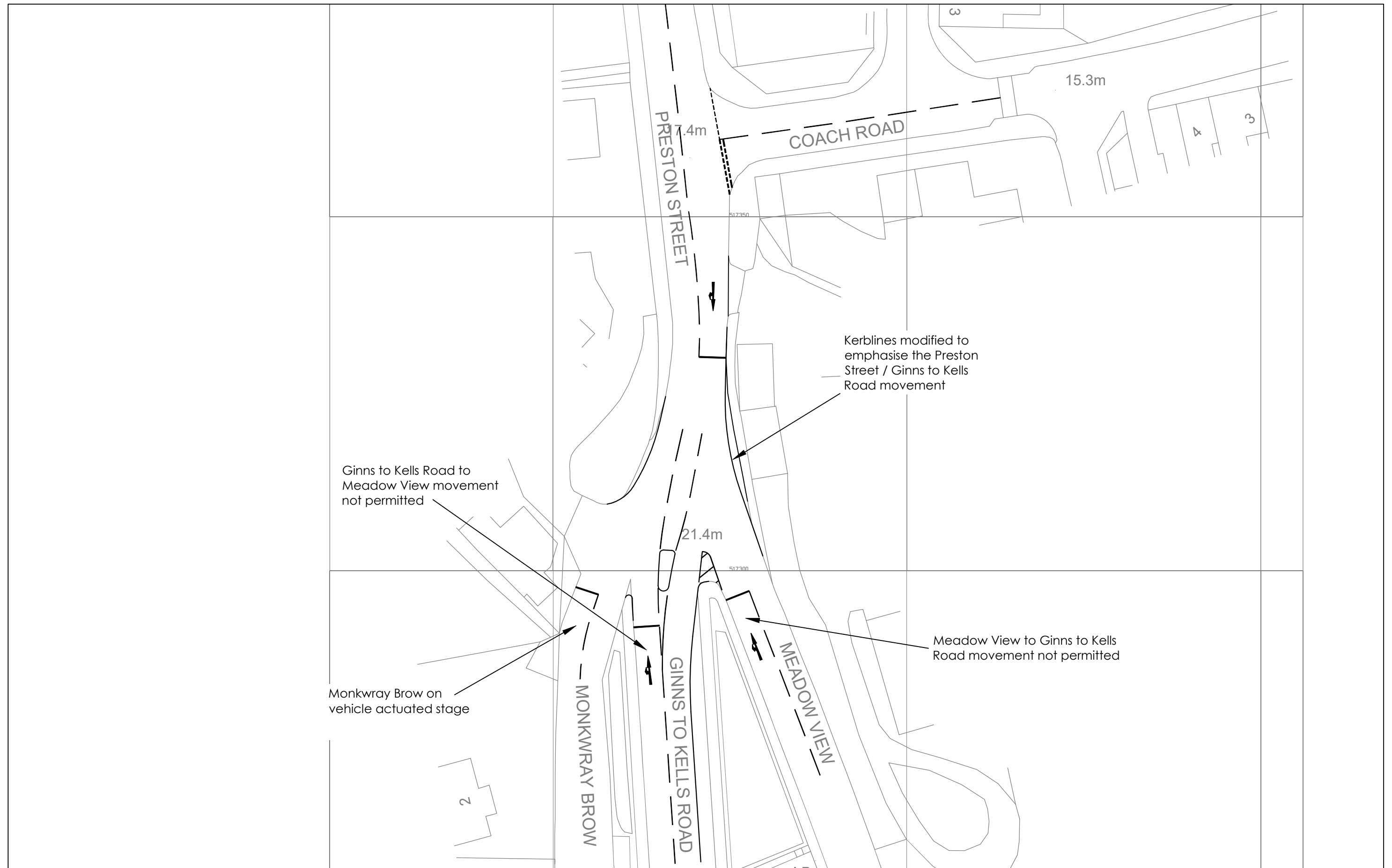
Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	209	355	0.589	209	1.4	24.606	C
C-AB	435	797	0.546	435	2.2	10.155	B
C-A	223			223			
A-B	149			149			
A-C	787			787			



Appendix I: B5345 Meadow View / Ginns to Kells Road Junction



Figure A11 Potential Traffic Signal Scheme - B5435 Meadow View / Ginns to Kells Road Junction
(1:500 @ A3)



Junctions 9
PICADY 9 - Priority Intersection Module
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Filename: B5345 Meadow View_Ginns to Kells Rd 200721.j9
Path: L:\Projects\CBO-0542 High Road, Whitehaven\Modelling\PC Runs
Report generation date: 28/07/2021 09:54:29

- »Existing Layout - Existing, AM
- »Existing Layout - Existing, PM
- »Existing Layout - 2033 with Dev, AM
- »Existing Layout - 2033 with Dev, PM
- »Existing Layout - No Growth with Dev, AM
- »Existing Layout - No Growth with Dev, PM
- »Existing Layout - No Growth Base, AM
- »Existing Layout - No Growth Base, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity
	Existing Layout - Existing											
Stream B-AC	D1	0.8	10.02	0.45	B	69 %	D2	0.6	9.06	0.37	A	6 %
Stream C-AB		0.6	8.54	0.35	A	[Stream B-AC]		5.2	23.78	0.81	C	[Stream C-AB]
	Existing Layout - 2033 with Dev											
Stream B-AC	D3	6.4	42.63	0.87	E	-3 %	D4	1.6	16.03	0.63	C	-30 %
Stream C-AB		2.7	19.14	0.71	C	[Stream B-AC]		120.6	442.21	1.31	F	[Stream C-AB]
	Existing Layout - No Growth with Dev											
Stream B-AC	D5	4.0	28.13	0.81	D	4 %	D6	1.3	13.25	0.57	B	-25 %
Stream C-AB		2.1	15.97	0.65	C	[Stream B-AC]		82.9	309.67	1.20	F	[Stream C-AB]
	Existing Layout - No Growth Base											
Stream B-AC	D7	1.5	13.72	0.60	B	33 %	D8	0.8	10.17	0.44	B	-6 %
Stream C-AB		1.4	12.47	0.55	B	[Stream B-AC]		14.7	64.23	0.96	F	[Stream C-AB]

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.
 Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	B5345 Meadow View_Ginns to Kells Rd
Location	
Site number	
Date	10/04/2019
Version	
Status	
Identifier	
Client	
Jobnumber	CBO-0542
Enumerator	CBO
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	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	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 period length (min)	Time segment length (min)
D1	Existing	AM	FLAT	08:00	09:00	60	15
D2	Existing	PM	FLAT	16:30	17:00	30	15
D3	2033 with Dev	AM	FLAT	08:00	09:00	60	15
D4	2033 with Dev	PM	FLAT	16:30	17:00	30	15
D5	No Growth with Dev	AM	FLAT	08:00	09:00	60	15
D6	No Growth with Dev	PM	FLAT	16:30	17:00	30	15
D7	No Growth Base	AM	FLAT	08:00	09:00	60	15
D8	No Growth Base	PM	FLAT	16:30	17:00	30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Existing Layout	100.000

Existing Layout - Existing, 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		5.63	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	69	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	B5345 Meadow View (S)		Major
B	Ginns to Kells Rd		Minor
C	B5345 Meadow View (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.42			90.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	4.70	66	21

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	596	0.102	0.257	0.162	0.368
B-C	746	0.107	0.271	-	-
C-B	626	0.228	0.228	-	-

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 period length (min)	Time segment length (min)
D1	Existing	AM	FLAT	08:00	09:00	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	262	100.000
B		✓	299	100.000
C		✓	312	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	5	257
	B	8	0	291
	C	131	181	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	2
	B	0	0	1
	C	2	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.45	10.02	0.8	B
C-AB	0.35	8.54	0.6	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	299	658	0.454	296	0.8	9.848	A
C-AB	227	649	0.349	224	0.6	8.439	A
C-A	85			85			
A-B	5			5			
A-C	257			257			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	299	658	0.454	299	0.8	10.021	B
C-AB	227	649	0.350	227	0.6	8.539	A
C-A	85			85			
A-B	5			5			
A-C	257			257			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	299	658	0.454	299	0.8	10.023	B
C-AB	227	649	0.350	227	0.6	8.541	A
C-A	85			85			
A-B	5			5			
A-C	257			257			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	299	658	0.454	299	0.8	10.023	B
C-AB	227	649	0.350	227	0.6	8.540	A
C-A	85			85			
A-B	5			5			
A-C	257			257			

Existing Layout - Existing, 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		14.01	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	6	Stream C-AB

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D2	Existing	PM	FLAT	16:30	17:00	30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	300	100.000
B		✓	236	100.000
C		✓	711	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	8	292
	B	9	0	227
From	C	358	353	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	1
	B	0	0	1
From	C	1	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.37	9.06	0.6	A
C-AB	0.81	23.78	5.2	C
C-A				
A-B				
A-C				

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	236	634	0.372	234	0.6	8.940	A
C-AB	640	799	0.801	621	4.7	19.400	C
C-A	71			71			
A-B	8			8			
A-C	292			292			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	236	633	0.373	236	0.6	9.057	A
C-AB	650	805	0.808	648	5.2	23.778	C
C-A	61			61			
A-B	8			8			

A-C	292			292			
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Existing Layout - 2033 with Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		23.40	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-3	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D3	2033 with Dev	AM	FLAT	08:00	09:00	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	331	100.000
B		✓	565	100.000
C		✓	498	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	5	326
	B	9	0	556
	C	147	351	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.87	42.63	6.4	E
C-AB	0.71	19.14	2.7	C
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	565	646	0.874	544	5.3	30.686	D
C-AB	454	646	0.704	444	2.5	17.319	C
C-A	44			44			
A-B	5			5			
A-C	326			326			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	565	646	0.875	562	5.9	40.533	E
C-AB	457	647	0.706	457	2.7	19.028	C
C-A	41			41			
A-B	5			5			
A-C	326			326			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	565	646	0.875	564	6.2	41.976	E
C-AB	457	647	0.706	457	2.7	19.107	C
C-A	41			41			
A-B	5			5			
A-C	326			326			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	565	646	0.875	564	6.4	42.630	E
C-AB	457	647	0.706	457	2.7	19.135	C
C-A	41			41			
A-B	5			5			
A-C	326			326			

Existing Layout - 2033 with Dev, 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		260.22	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-30	Stream C-AB

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D4	2033 with Dev	PM	FLAT	16:30	17:00	30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	333	100.000
B		✓	381	100.000
C		✓	993	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
From		A	B	C
	A	0	9	324
	B	9	0	372
	C	397	596	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A	B	C
	A	0	0	1
	B	0	0	1
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.63	16.03	1.6	C
C-AB	1.31	442.21	120.6	F
C-A				
A-B				
A-C				

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	381	622	0.613	375	1.5	14.245	B
C-AB	993	760	1.307	745	62.1	156.626	F
C-A	0			0			
A-B	9			9			
A-C	324			324			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	381	604	0.631	380	1.6	16.032	C
C-AB	993	760	1.307	759	120.6	442.214	F
C-A	0			0			
A-B	9			9			
A-C	324			324			

Existing Layout - No Growth with Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		16.59	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	4	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D5	No Growth with Dev	AM	FLAT	08:00	09:00	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	300	100.000
B		✓	529	100.000
C		✓	460	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	5	295
	B	8	0	521
	C	131	329	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.81	28.13	4.0	D

C-AB	0.65	15.97	2.1	C
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	529	656	0.807	514	3.6	23.514	C
C-AB	414	641	0.645	406	2.0	14.947	B
C-A	47			47			
A-B	5			5			
A-C	295			295			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	529	656	0.807	528	3.9	27.698	D
C-AB	415	642	0.647	415	2.0	15.928	C
C-A	45			45			
A-B	5			5			
A-C	295			295			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	529	656	0.807	529	4.0	28.010	D
C-AB	415	642	0.647	415	2.0	15.958	C
C-A	45			45			
A-B	5			5			
A-C	295			295			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	529	656	0.807	529	4.0	28.132	D
C-AB	415	642	0.647	415	2.1	15.971	C
C-A	45			45			
A-B	5			5			
A-C	295			295			

Existing Layout - No Growth with Dev, 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		183.18	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-25	Stream C-AB

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D6	No Growth with Dev	PM	FLAT	16:30	17:00	30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	300	100.000
B		✓	356	100.000
C		✓	918	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	8	292
	B	8	0	348
	C	361	557	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A	B	C
	A	0	0	1
	B	0	0	1
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.57	13.25	1.3	B
C-AB	1.20	309.67	82.9	F
C-A				
A-B				
A-C				

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	356	636	0.560	351	1.2	12.446	B
C-AB	918	764	1.202	742	43.9	114.312	F
C-A	0			0			
A-B	8			8			
A-C	292			292			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	356	627	0.568	356	1.3	13.253	B
C-AB	918	764	1.202	762	82.9	309.671	F
C-A	0			0			
A-B	8			8			
A-C	292			292			

Existing Layout - No Growth Base, 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		8.82	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	33	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D7	No Growth Base	AM	FLAT	08:00	09:00	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	300	100.000
B		✓	392	100.000
C		✓	410	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	5	295
	B	8	0	384
	C	131	279	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.60	13.72	1.5	B
C-AB	0.55	12.47	1.4	B
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	392	654	0.599	386	1.4	13.166	B
C-AB	351	641	0.547	345	1.3	12.020	B
C-A	59			59			
A-B	5			5			
A-C	295			295			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	392	654	0.599	392	1.5	13.710	B
C-AB	352	642	0.548	352	1.4	12.453	B
C-A	58			58			
A-B	5			5			
A-C	295			295			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	392	654	0.599	392	1.5	13.714	B
C-AB	352	642	0.548	352	1.4	12.465	B
C-A	58			58			
A-B	5			5			
A-C	295			295			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	392	654	0.599	392	1.5	13.723	B
C-AB	352	642	0.548	352	1.4	12.465	B
C-A	58			58			
A-B	5			5			
A-C	295			295			

Existing Layout - No Growth Base, 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		38.34	E

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-6	Stream C-AB

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D8	No Growth Base	PM	FLAT	16:30	17:00	30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	300	100.000
B		✓	282	100.000
C		✓	779	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	8	292
	B	8	0	274
	C	358	421	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A	B	C
	A	0	0	1
	B	0	0	1
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.44	10.17	0.8	B
C-AB	0.96	64.23	14.7	F
C-A				
A-B				
A-C				

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	282	637	0.442	279	0.8	9.959	A
C-AB	760	803	0.946	716	10.9	36.008	E
C-A	19			19			
A-B	8			8			
A-C	292			292			

16:45 - 17:00

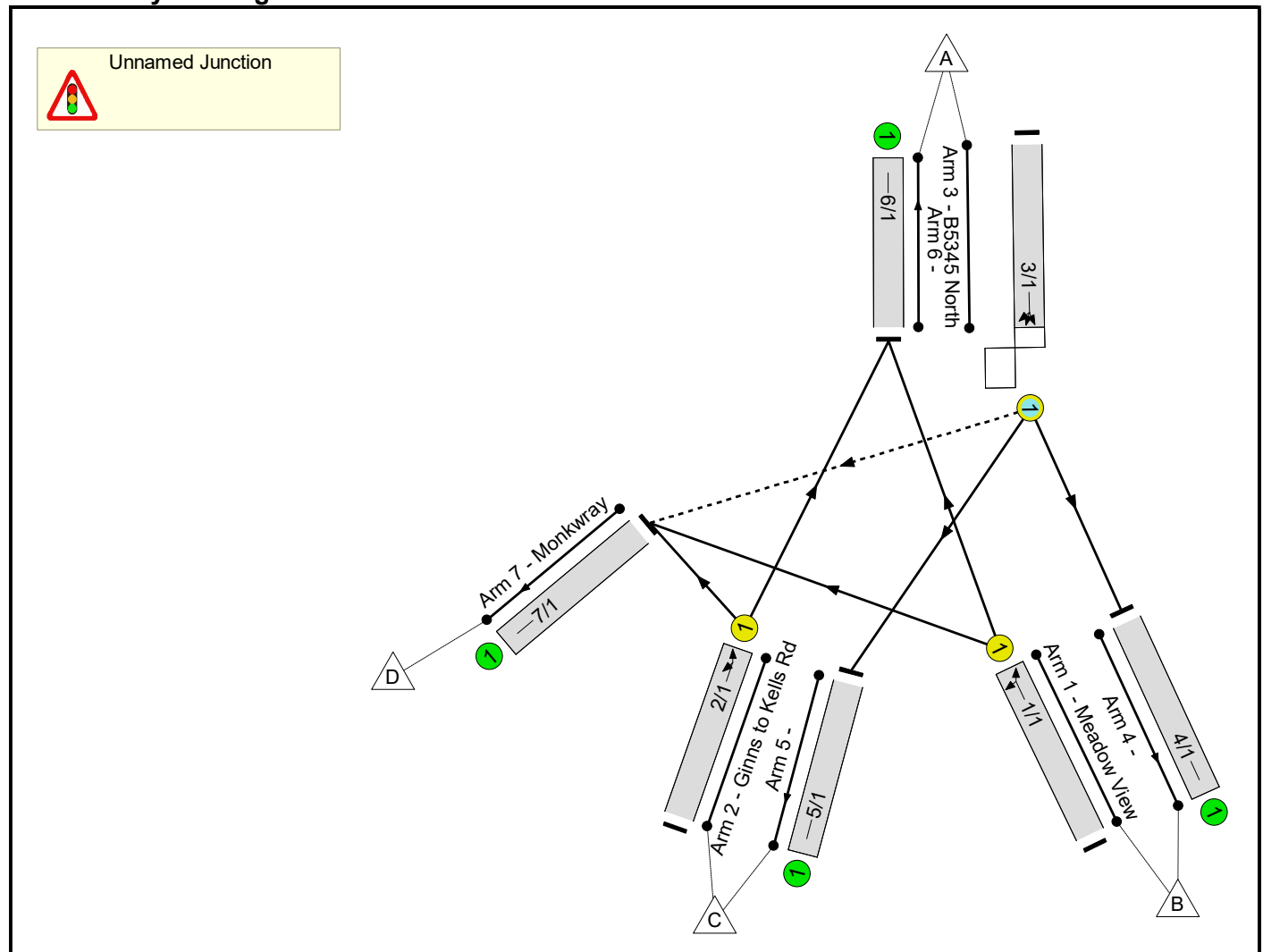
Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	282	636	0.444	282	0.8	10.169	B
C-AB	779	814	0.957	764	14.7	64.233	F
C-A	0			0			
A-B	8			8			
A-C	292			292			

Proposed Ginns to Kells Road Junction Improvement

Project and User Details

Project:	Former Marchon Site, Whitehaven
Title:	
Client:	Persimmon
Site Ref(s):	Ginns to Kells Road
Design Layout Ref:	Potential Traffic Signal Layout
Model Purpose:	Planning
Model Assumptions:	From Design
Flow Details:	2033
Author:	

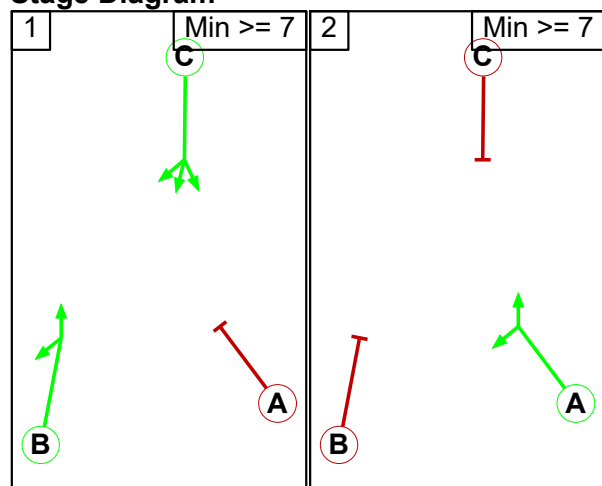
Network Layout Diagram



Phase Intergreens Matrix

Terminating Phase	Starting Phase			
	A	B	C	
	A	5	5	
	B	5	-	

Stage Diagram



Lane Input Data

Junction: Unnamed Junction												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Meadow View)	U	A	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 6 Ahead	Inf
											Arm 7 Left	Inf
2/1 (Ginns to Kells Rd)	U	B	2	3	60.0	Geom	-	4.60	0.00	Y	Arm 6 Ahead	100.00
											Arm 7 U-Turn	Inf
3/1 (B5345 North)	O	C	2	3	60.0	Geom	-	3.80	0.00	Y	Arm 4 Ahead	Inf
											Arm 5 Ahead	100.00
											Arm 7 Right	22.00
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (Monkwrway)	U		2	3	60.0	Inf	-	-	-	-	-	-

Network Results

Scenario 1: '2033 with Dev AM Peak' (FG1: '2033 with Dev AM Peak', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	53.3%	4.2	1.6	5.8	-	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	53.3%	4.2	1.6	5.8	-	-	-
1/1	Meadow View Ahead Left	U	A		19	335	1965	1965	655	51.1%	1.5	0.5	2.0	21.7	4.5	5.0
2/1	Ginns to Kells Rd Ahead U-Turn	U	B		31	581	2045	2045	1091	53.3%	1.5	0.6	2.0	12.7	6.3	6.9
3/1	B5345 North Ahead Ahead2 Right	O	C		31	509	1968	1968	1050	48.5%	1.2	0.5	1.7	12.4	5.2	5.7
4/1		U	-		-	150	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
5/1		U	-		-	330	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
6/1		U	-		-	892	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
7/1	Monkway	U	-		-	53	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 69.0 Total Delay for Signalled Lanes (pcuHr): 5.81 Cycle Time (s): 60 PRC Over All Lanes (%): 69.0 Total Delay Over All Lanes(pcuHr): 5.81																

Scenario 2: '2033 with Dev PM Peak' (FG2: '2033 with Dev PM Peak', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	79.4%	4.6	3.8	8.4	-	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	79.4%	4.6	3.8	8.4	-	-	-
1/1	Meadow View Ahead Left	U	A		12	338	1965	1965	426	79.4%	2.1	1.8	3.9	41.9	5.3	7.1
2/1	Ginns to Kells Rd Ahead U-Turn	U	B		38	375	2045	2045	1329	28.2%	0.5	0.2	0.7	6.4	2.6	2.8
3/1	B5345 North Ahead Ahead2 Right	O	C		38	999	1971	1971	1281	78.0%	2.1	1.7	3.8	13.8	11.7	13.4
4/1		U	-		-	401	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
5/1		U	-		-	536	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
6/1		U	-		-	700	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
7/1	Monkway	U	-		-	75	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 13.4 PRC Over All Lanes (%): 13.4 Total Delay for Signalled Lanes (pcuHr): 8.44 Total Delay Over All Lanes(pcuHr): 8.44 Cycle Time (s): 60																



Appendix J: A595 / Mirehouse Road Junction

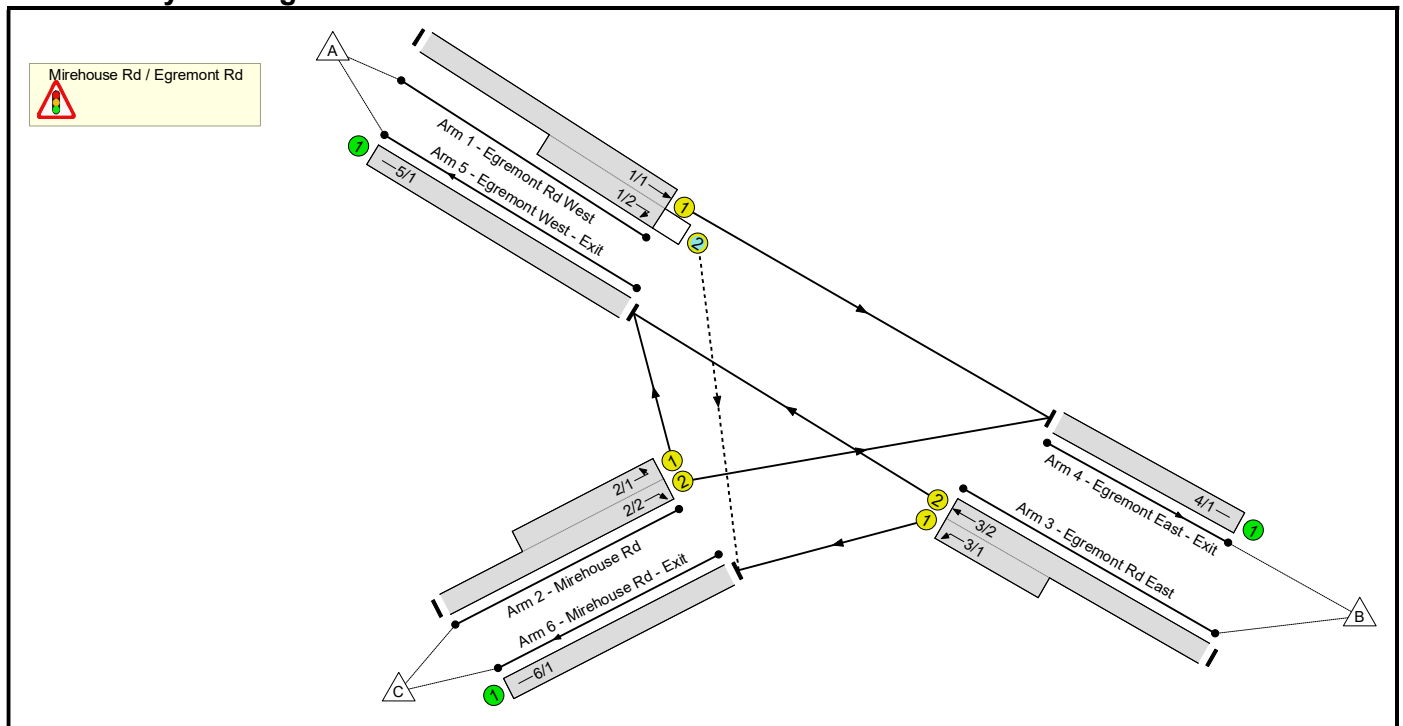


A595 / Mirehouse Road Existing Junction

Project and User Details

Project:	Former Marchon Site, Whitehaven
Title:	
Client:	Persimmon
Site Ref(s):	A595 Mirehouse Lane
Design Layout Ref:	Existing Layout
Model Purpose:	Planning
Model Assumptions:	AECOM
Flow Details:	Various
Author:	

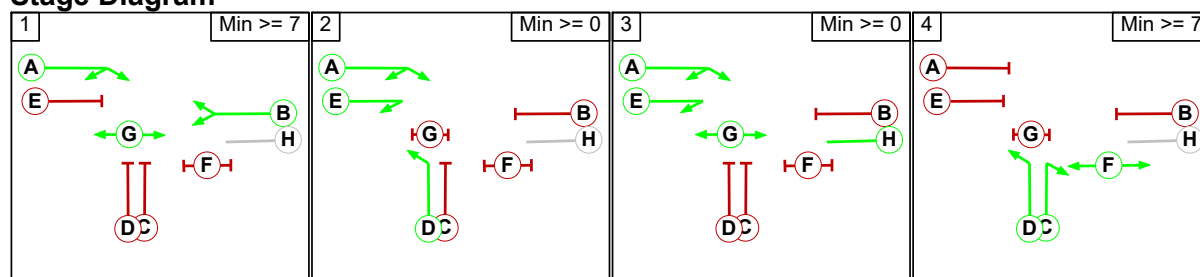
Network Layout Diagram



Phase Intergreens Matrix

Terminating Phase	Starting Phase							
	A	B	C	D	E	F	G	H
	A	-	7	-	-	-	-	-
	B	-	7	7	7	7	-	-
	C	7	7	-	7	-	-	-
	D	-	7	-	-	-	6	-
	E	-	7	7	-	7	-	-
	F	-	7	-	7	-	-	-
	G	-	-	7	-	-	-	-
	H	-	-	-	-	-	-	-

Stage Diagram



Lane Input Data

Junction: Mirehouse Rd / Egremont Rd												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Egremont Rd West)	U	A	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 4 Ahead	Inf
1/2 (Egremont Rd West)	O	A E	2	3	9.0	Geom	-	3.25	0.00	Y	Arm 6 Right	18.00
2/1 (Mirehouse Rd)	U	D	2	3	10.4	Geom	-	3.00	0.00	Y	Arm 5 Left	15.00
2/2 (Mirehouse Rd)	U	C	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 4 Right	20.00
3/1 (Egremont Rd East)	U	B	2	3	7.8	Geom	-	3.25	0.00	Y	Arm 6 Left	15.00
3/2 (Egremont Rd East)	U	B	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 5 Ahead	Inf
4/1 (Egremont East - Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (Egremont West - Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Mirehouse Rd - Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Network Results

Scenario 1: 'AM 2018 Observed' (FG1: 'AM 2018 Observed', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	58.8%	7.5	2.1	9.8	-	-	-
Mirehouse Rd / Egremont Rd	-	-	-		-	-	-	-	-	58.8%	7.5	2.1	9.8	-	-	-
1/1+1/2	Egremont Rd West Ahead Right	U+O	A	E	92	893	1945:1791	1945	1331+197	58.4 : 58.4%	1.2	0.7	2.2	8.8	10.2	10.9
2/2+2/1	Mirehouse Rd Right Left	U	C D		14:27	347	1781:1741	1781	223+373	58.8 : 57.9%	4.2	0.7	4.9	51.0	6.3	7.0
3/2+3/1	Egremont Rd East Ahead Left	U	B		79	754	1940:1764	1940	1158+167	56.9 : 56.9%	2.1	0.7	2.7	13.0	11.7	12.3
4/1	Egremont East - Exit	U	-		-	909	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
5/1	Egremont West - Exit	U	-		-	875	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
6/1	Mirehouse Rd - Exit	U	-		-	210	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 52.9 Total Delay for Signalled Lanes (pcuHr): 9.81 Cycle Time (s): 120 PRC Over All Lanes (%): 52.9 Total Delay Over All Lanes(pcuHr): 9.81																

Scenario 2: 'PM 2018 Observed' (FG2: 'PM 2018 Observed', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	69.5%	8.4	2.8	11.9	-	-	-
Mirehouse Rd / Egremont Rd	-	-	-		-	-	-	-	-	69.5%	8.4	2.8	11.9	-	-	-
1/1+1/2	Egremont Rd West Ahead Right	U+O	A	E	88	793	1945:1791	1945	1217+261	53.7 : 53.7%	1.3	0.6	2.6	11.7	8.3	8.9
2/2+2/1	Mirehouse Rd Right Left	U	C D		18:29	345	1781:1741	1781	282+217	69.2 : 69.2%	4.1	1.1	5.2	54.6	6.1	7.2
3/2+3/1	Egremont Rd East Ahead Left	U	B		77	907	1940:1764	1940	1074+230	69.5 : 69.5%	3.0	1.1	4.1	16.4	16.5	17.6
4/1	Egremont East - Exit	U	-		-	848	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
5/1	Egremont West - Exit	U	-		-	897	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
6/1	Mirehouse Rd - Exit	U	-		-	300	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
C1					PRC for Signalled Lanes (%):		29.5	Total Delay for Signalled Lanes (pcuHr):			11.94	Cycle Time (s): 120				
					PRC Over All Lanes (%):		29.5	Total Delay Over All Lanes(pcuHr):			11.94					

Scenario 3: 'AM No Growth with Dev' (FG3: 'AM No Growth with Development', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	67.1%	10.0	3.0	13.6	-	-	-
Mirehouse Rd / Egremont Rd	-	-	-		-	-	-	-	-	67.1%	10.0	3.0	13.6	-	-	-
1/1+1/2	Egremont Rd West Ahead Right	U+O	A	E	89	994	1945:1791	1945	1283+198	67.1 : 67.1%	1.8	1.0	3.4	12.2	14.4	15.4
2/2+2/1	Mirehouse Rd Right Left	U	C D		17:31	450	1781:1741	1781	267+407	66.6 : 66.9%	5.3	1.0	6.3	50.1	7.9	8.9
3/2+3/1	Egremont Rd East Ahead Left	U	B		75	855	1940:1764	1940	1024+254	66.9 : 66.9%	2.9	1.0	3.9	16.5	14.9	15.9
4/1	Egremont East - Exit	U	-		-	1039	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
5/1	Egremont West - Exit	U	-		-	957	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
6/1	Mirehouse Rd - Exit	U	-		-	303	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
C1					PRC for Signalled Lanes (%):		34.1	Total Delay for Signalled Lanes (pcuHr):			13.56	Cycle Time (s): 120				
					PRC Over All Lanes (%):		34.1	Total Delay Over All Lanes(pcuHr):			13.56					

Scenario 4: 'PM No Growth with Dev' (FG4: 'PM No Growth with Development', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	77.3%	10.2	4.0	15.4	-	-	-
Mirehouse Rd / Egremont Rd	-	-	-		-	-	-	-	-	77.3%	10.2	4.0	15.4	-	-	-
1/1+1/2	Egremont Rd West Ahead Right	U+O	A	E	88	865	1945:1791	1945	1179+283	58.2 : 63.3%	1.8	0.7	3.8	15.6	9.2	10.0
2/2+2/1	Mirehouse Rd Right Left	U	C D		18:29	394	1781:1741	1781	282+228	77.3 : 77.3%	4.8	1.7	6.4	58.7	7.0	8.6
3/2+3/1	Egremont Rd East Ahead Left	U	B		77	1003	1940:1764	1940	1058+250	76.7 : 76.7%	3.6	1.6	5.2	18.7	20.2	21.8
4/1	Egremont East - Exit	U	-		-	904	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
5/1	Egremont West - Exit	U	-		-	987	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
6/1	Mirehouse Rd - Exit	U	-		-	371	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
C1					PRC for Signalled Lanes (%):		16.4	Total Delay for Signalled Lanes (pcuHr):			15.40	Cycle Time (s): 120				
					PRC Over All Lanes (%):		16.4	Total Delay Over All Lanes(pcuHr):			15.40					

Scenario 5: 'AM 2033 with Dev' (FG5: 'AM 2033 with Development', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	74.3%	11.7	4.2	16.7	-	-	-
Mirehouse Rd / Egremont Rd	-	-	-		-	-	-	-	-	74.3%	11.7	4.2	16.7	-	-	-
1/1+1/2	Egremont Rd West Ahead Right	U+O	A	E	89	1101	1945:1791	1945	1284+198	74.3 : 74.3%	2.3	1.4	4.6	15.1	18.2	19.6
2/2+2/1	Mirehouse Rd Right Left	U	C D		17:31	492	1781:1741	1781	267+407	72.6 : 73.2%	5.8	1.3	7.2	52.5	8.8	10.1
3/2+3/1	Egremont Rd East Ahead Left	U	B		75	945	1940:1764	1940	1032+245	74.0 : 74.0%	3.5	1.4	4.9	18.8	18.6	20.0
4/1	Egremont East - Exit	U	-		-	1148	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
5/1	Egremont West - Exit	U	-		-	1062	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
6/1	Mirehouse Rd - Exit	U	-		-	328	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 21.1 PRC Over All Lanes (%): 21.1 Total Delay for Signalled Lanes (pcuHr): 16.72 Total Delay Over All Lanes(pcuHr): 16.72 Cycle Time (s): 120																

Scenario 6: 'PM 2033 with Dev' (FG6: 'PM 2033 with Development', Plan 1: 'Network Control Plan 1')

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Max Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	85.6%	12.3	7.2	20.8	-	-	-
Mirehouse Rd / Egremont Rd	-	-	-		-	-	-	-	-	85.6%	12.3	7.2	20.8	-	-	-
1/1+1/2	Egremont Rd West Ahead Right	U+O	A	E	88	952	1945:1791	1945	968+227	78.3 : 85.6%	2.7	1.9	5.9	22.4	11.9	13.8
2/2+2/1	Mirehouse Rd Right Left	U	C D		18:29	429	1781:1741	1781	282+224	84.8 : 84.8%	5.3	2.6	7.9	66.0	7.7	10.3
3/2+3/1	Egremont Rd East Ahead Left	U	B		77	1103	1940:1764	1940	1059+249	84.3 : 84.3%	4.4	2.6	7.0	23.0	25.4	28.1
4/1	Egremont East - Exit	U	-		-	997	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
5/1	Egremont West - Exit	U	-		-	1083	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
6/1	Mirehouse Rd - Exit	U	-		-	404	Inf	Inf	Inf	0.0%	0.0	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 5.2 PRC Over All Lanes (%): 5.2 Total Delay for Signalled Lanes (pcuHr): 20.83 Total Delay Over All Lanes(pcuHr): 20.83 Cycle Time (s): 120																



Appendix K: A595 / Meadow Road Junction

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.5.1.7462 © Copyright TRL Limited, 2019
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Filename: A595_Meadow Rd 200721.j9
Path: L:\Projects\CBO-0542 High Road, Whitehaven\Modelling\PC Runs
Report generation date: 27/07/2021 15:08:28

- »Existing Junction - 2033 with Dev, AM
- »Existing Junction - 2033 with Dev, PM
- »Existing Junction - No Growth with Dev, AM
- »Existing Junction - No Growth with Dev, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity
	Existing Junction - 2033 with Dev											
Stream B-C	D1	1.3	15.59	0.57	C	-3 % [Stream B-A]	D2	1.0	13.76	0.50	B	-7 % [Stream B-A]
Stream B-A		0.0	41.61	0.03	E			0.0	50.70	0.04	F	
Stream C-B		0.8	14.26	0.46	B			1.4	19.82	0.59	C	
	Existing Junction - No Growth with Dev											
Stream B-C	D3	0.9	12.30	0.49	B	7 % [Stream B-A]	D4	0.7	11.39	0.43	B	3 % [Stream B-A]
Stream B-A		0.0	27.40	0.02	D			0.0	31.91	0.03	D	
Stream C-B		0.6	12.03	0.39	B			1.0	15.63	0.51	C	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.
 Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	A595_Meadow Rd
Location	
Site number	
Date	12/02/2019
Version	
Status	
Identifier	
Client	

Jobnumber	CBO-0542
Enumerator	CBO
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	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	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 period length (min)	Time segment length (min)
D1	2033 with Dev	AM	FLAT	08:00	09:00	60	15
D2	2033 with Dev	PM	FLAT	16:30	17:30	60	15
D3	No Growth with Dev	AM	FLAT	08:00	09:00	60	15
D4	No Growth with Dev	PM	FLAT	16:30	17:30	60	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Existing Junction	100.000

Existing Junction - 2033 with Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.04	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-3	Stream B-A

Arms

Arms

Arm	Name	Description	Arm type
A	A595 Egremont Rd (S)		Major
B	Meadow Rd		Minor
C	A595 Egremont Rd (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	8.58		✓	3.20	120.0		-

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	6.00	5.30	4.60	✓	3.00	118	130

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	522	0.084	0.214	0.134	0.305
B-C	841	0.114	0.289	-	-
C-B	713	0.245	0.245	-	-

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 period length (min)	Time segment length (min)
D1	2033 with Dev	AM	FLAT	08:00	09:00	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	985	100.000
B		✓	313	100.000
C		✓	1274	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	19	966
	B	3	0	310
	C	1062	212	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	5	3
	B	0	0	1
From	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.57	15.59	1.3	C
B-A	0.03	41.61	0.0	E
C-A				
C-B	0.46	14.26	0.8	B
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	310	541	0.573	305	1.3	14.935	B
B-A	3	91	0.033	3	0.0	40.812	E
C-A	1062			1062			
C-B	212	464	0.456	209	0.8	13.913	B
A-B	19			19			
A-C	966			966			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	310	541	0.573	310	1.3	15.567	C
B-A	3	90	0.034	3	0.0	41.594	E
C-A	1062			1062			
C-B	212	464	0.456	212	0.8	14.253	B
A-B	19			19			
A-C	966			966			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	310	541	0.573	310	1.3	15.581	C
B-A	3	90	0.034	3	0.0	41.607	E
C-A	1062			1062			
C-B	212	464	0.456	212	0.8	14.258	B

A-B	19			19			
A-C	966			966			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	310	541	0.573	310	1.3	15.587	C
B-A	3	90	0.034	3	0.0	41.610	E
C-A	1062			1062			
C-B	212	464	0.456	212	0.8	14.258	B
A-B	19			19			
A-C	966			966			

Existing Junction - 2033 with Dev, 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		3.40	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-7	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D2	2033 with Dev	PM	FLAT	16:30	17:30	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	1072	100.000
B		✓	262	100.000
C		✓	1228	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	26	1046
	B	3	0	259
From	C	967	261	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	4	3
	B	0	0	0
From	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.50	13.76	1.0	B
B-A	0.04	50.70	0.0	F
C-A				
C-B	0.59	19.82	1.4	C
A-B				
A-C				

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	259	521	0.497	255	1.0	13.361	B
B-A	3	76	0.040	3	0.0	49.226	E
C-A	967			967			
C-B	261	442	0.590	256	1.4	18.760	C
A-B	26			26			
A-C	1046			1046			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	259	521	0.498	259	1.0	13.749	B
B-A	3	74	0.041	3	0.0	50.647	F
C-A	967			967			

C-B	261	442	0.590	261	1.4	19.783	C
A-B	26			26			
A-C	1046			1046			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	259	521	0.498	259	1.0	13.755	B
B-A	3	74	0.041	3	0.0	50.687	F
C-A	967			967			
C-B	261	442	0.590	261	1.4	19.810	C
A-B	26			26			
A-C	1046			1046			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	259	521	0.498	259	1.0	13.758	B
B-A	3	74	0.041	3	0.0	50.702	F
C-A	967			967			
C-B	261	442	0.590	261	1.4	19.820	C
A-B	26			26			
A-C	1046			1046			

Existing Junction - No Growth with Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.45	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	7	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D3	No Growth with Dev	AM	FLAT	08:00	09:00	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	887	100.000
B		✓	281	100.000
C		✓	1148	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
From	A	0	17	870
	B	3	0	278
	C	958	190	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
From	A	0	5	3
	B	0	0	1
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.49	12.30	0.9	B
B-A	0.02	27.40	0.0	D
C-A				
C-B	0.39	12.03	0.6	B
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	278	571	0.487	274	0.9	12.001	B
B-A	3	135	0.022	3	0.0	27.158	D
C-A	958			958			
C-B	190	489	0.388	188	0.6	11.837	B

A-B	17			17			
A-C	870			870			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	278	571	0.487	278	0.9	12.294	B
B-A	3	134	0.022	3	0.0	27.397	D
C-A	958			958			
C-B	190	489	0.388	190	0.6	12.029	B
A-B	17			17			
A-C	870			870			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	278	571	0.487	278	0.9	12.299	B
B-A	3	134	0.022	3	0.0	27.399	D
C-A	958			958			
C-B	190	489	0.388	190	0.6	12.031	B
A-B	17			17			
A-C	870			870			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	278	571	0.487	278	0.9	12.299	B
B-A	3	134	0.022	3	0.0	27.400	D
C-A	958			958			
C-B	190	489	0.388	190	0.6	12.031	B
A-B	17			17			
A-C	870			870			

Existing Junction - No Growth with Dev, 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		2.73	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	3	Stream B-A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D4	No Growth with Dev	PM	FLAT	16:30	17:30	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	974	100.000
B		✓	238	100.000
C		✓	1115	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	23	951
	B	3	0	235
	C	878	237	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A	B	C
	A	0	4	3
	B	0	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-C	0.43	11.39	0.7	B
B-A	0.03	31.91	0.0	D
C-A				
C-B	0.51	15.63	1.0	C
A-B				
A-C				

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	235	551	0.426	232	0.7	11.185	B
B-A	3	117	0.026	3	0.0	31.485	D
C-A	878			878			
C-B	237	467	0.507	233	1.0	15.131	C
A-B	23			23			
A-C	951			951			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	235	551	0.427	235	0.7	11.386	B
B-A	3	116	0.026	3	0.0	31.899	D
C-A	878			878			
C-B	237	467	0.507	237	1.0	15.619	C
A-B	23			23			
A-C	951			951			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	235	551	0.427	235	0.7	11.390	B
B-A	3	116	0.026	3	0.0	31.906	D
C-A	878			878			
C-B	237	467	0.507	237	1.0	15.628	C
A-B	23			23			
A-C	951			951			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-C	235	551	0.427	235	0.7	11.392	B
B-A	3	116	0.026	3	0.0	31.908	D
C-A	878			878			
C-B	237	467	0.507	237	1.0	15.634	C
A-B	23			23			
A-C	951			951			



Appendix L: A595 / B5295 Egremont Road Roundabout



Junctions 9											
ARCADY 9 - Roundabout Module											
Version: 9.5.1.7462 © Copyright TRL Limited, 2019											
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Filename: A595_B5295 Egremont Rd 200721.j9
Path: L:\Projects\CBO-0542 High Road, Whitehaven\Modelling\PC Runs
Report generation date: 27/07/2021 15:06:51

- »Existing Junction - 2033 with Dev, AM
- »Existing Junction - 2033 with Dev, PM
- »Existing Junction - 2033 Base, AM
- »Existing Junction - 2033 Base, PM
- »Existing Junction - No Growth Base, AM
- »Existing Junction - No Growth Base, PM
- »Existing Junction - No Growth with Dev, AM
- »Existing Junction - No Growth with Dev, PM
- »Existing Junction - Observed 2018, AM
- »Existing Junction - Observed 2018, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity
	Existing Junction - 2033 with Dev											
Arm 1	D1	0.8	7.92	0.43	A	-12 % [Arm 3]	D2	0.4	5.64	0.29	A	-16 % [Arm 3]
Arm 2		1.1	13.19	0.53	B			2.4	19.70	0.71	C	
Arm 3		69.9	193.57	1.04	F			132.4	364.25	1.11	F	
Arm 4		10.0	42.58	0.92	E			3.2	14.90	0.77	B	
	Existing Junction - 2033 Base											
Arm 1	D3	0.7	7.67	0.42	A	-9 % [Arm 3]	D4	0.4	5.49	0.27	A	-15 % [Arm 3]
Arm 2		1.0	12.74	0.51	B			2.1	17.72	0.68	C	
Arm 3		41.1	120.83	1.01	F			118.6	327.71	1.09	F	
Arm 4		8.8	37.47	0.91	E			3.2	14.65	0.76	B	
	Existing Junction - No Growth Base											
Arm 1	D5	0.6	6.41	0.36	A	2 % [Arm 3]	D6	0.3	5.00	0.24	A	-6 % [Arm 3]
Arm 2		0.7	9.84	0.42	A			1.3	12.46	0.57	B	
Arm 3		8.7	29.59	0.90	D			25.2	81.07	0.98	F	
Arm 4		3.8	17.50	0.80	C			2.2	11.07	0.69	B	
	Existing Junction - No Growth with Dev											
Arm 1	D7	0.6	6.61	0.37	A		D8	0.3	5.13	0.26	A	
Arm 2		0.8	10.09	0.43	B			1.5	13.41	0.60	B	

Arm 3		12.3	40.83	0.94	E	-2 %		31.5	98.39	1.00	F	-7 %
Arm 4		4.1	19.19	0.81	C			[Arm 3]	2.2	11.29	0.69	
	Existing Junction - Observed 2018											
Arm 1	D9	0.3	5.34	0.24	A	7 %						
Arm 2		0.6	8.70	0.39	A							
Arm 3		5.6	19.96	0.85	C							
Arm 4		3.3	15.26	0.77	C							
	Existing Junction - Observed 2018											
Arm 1							D10	0.2	4.59	0.17	A	0 %
Arm 2								1.2	11.23	0.55	B	
Arm 3								9.4	32.69	0.91	D	
Arm 4								1.9	9.84	0.66	A	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	A595_B5295 Egremont Rd
Location	
Site number	
Date	12/02/2019
Version	
Status	
Identifier	
Client	
Jobnumber	CBO-0542
Enumerator	CBO
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	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	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 period length (min)	Time segment length (min)
D1	2033 with Dev	AM	FLAT	08:00	09:00	60	15
D2	2033 with Dev	PM	FLAT	16:30	17:30	60	15
D3	2033 Base	AM	FLAT	08:00	09:00	60	15
D4	2033 Base	PM	FLAT	16:30	17:30	60	15
D5	No Growth Base	AM	FLAT	08:00	09:00	60	15
D6	No Growth Base	PM	FLAT	16:30	17:30	60	15
D7	No Growth with Dev	AM	FLAT	08:00	09:00	60	15

D8	No Growth with Dev	PM	FLAT	16:30	17:30	60	15
D9	Observed 2018	AM	FLAT	08:00	09:00	60	15
D10	Observed 2018	PM	FLAT	16:30	17:30	60	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Existing Junction	100.000

Existing Junction - 2033 with Dev, AM

Data Errors and Warnings

No errors or warnings

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	103.45	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-12	Arm 3

Arms

Arms

Arm	Name	Description
1	B5295 Egremont Rd	
2	Homewood Rd	
3	A595 Egremont Rd	
4	A595 Heningham Bypass	

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	3.41	5.57	9.7	27.0	48.0	20.5	
2	3.28	5.25	3.0	12.0	48.0	36.0	
3	3.77	5.41	11.8	10.0	48.0	52.0	
4	3.92	6.52	4.8	10.0	48.0	52.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.588	1480
2	0.491	1123
3	0.504	1300
4	0.502	1291

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 period length (min)	Time segment length (min)
D1	2033 with Dev	AM	FLAT	08:00	09:00	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	348	100.000
2		✓	305	100.000
3		✓	1273	100.000
4		✓	891	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1	2	3	4
From	1	0	15	321	12
	2	6	0	219	80
	3	344	232	4	693
	4	2	159	730	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	0	7	0	0
	2	17	0	1	1
	3	2	1	25	3
	4	50	2	4	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
08:00-08:15	1	348	349
	2	305	309
	3	1273	1304
	4	891	924
08:15-08:30	1	348	349
	2	305	309
	3	1273	1304

	4	891	924
08:30-08:45	1	348	349
	2	305	309
	3	1273	1304
	4	891	924
08:45-09:00	1	348	349
	2	305	309
	3	1273	1304
	4	891	924

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.43	7.92	0.8	A
2	0.53	13.19	1.1	B
3	1.04	193.57	69.9	F
4	0.92	42.58	10.0	E

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	348	1077	824	0.422	345	0.7	7.472	A
2	305	1040	591	0.516	301	1.0	12.252	B
3	1273	97	1221	1.043	1174	24.9	49.185	E
4	891	541	978	0.911	861	7.4	26.418	D

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	348	1107	806	0.432	348	0.8	7.859	A
2	305	1062	580	0.526	305	1.1	13.083	B
3	1273	98	1220	1.043	1209	40.9	108.070	F
4	891	557	970	0.919	885	8.9	38.244	E

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	348	1111	803	0.433	348	0.8	7.903	A
2	305	1064	578	0.527	305	1.1	13.156	B
3	1273	98	1220	1.043	1214	55.7	151.779	F
4	891	559	969	0.920	888	9.6	41.128	E

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	348	1113	802	0.434	348	0.8	7.920	A
2	305	1065	578	0.528	305	1.1	13.188	B
3	1273	98	1220	1.043	1216	69.9	193.568	F
4	891	560	968	0.920	889	10.0	42.581	E

Existing Junction - 2033 with Dev, PM

Data Errors and Warnings

No errors or warnings

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	177.57	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-16	Arm 3

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D2	2033 with Dev	PM	FLAT	16:30	17:30	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	259	100.000
2		✓	443	100.000
3		✓	1300	100.000
4		✓	792	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1	2	3	4
From	1	0	9	232	18
	2	13	0	259	171
	3	329	170	4	797
	4	7	54	731	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	0	11	2	0
	2	8	0	1	0
	3	2	1	0	2
	4	0	0	2	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:30-16:45	1	259	265
	2	443	447
	3	1300	1324
	4	792	807
16:45-17:00	1	259	265
	2	443	447
	3	1300	1324
	4	792	807
17:00-17:15	1	259	265
	2	443	447
	3	1300	1324
	4	792	807
17:15-17:30	1	259	265
	2	443	447
	3	1300	1324
	4	792	807

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.29	5.64	0.4	A
2	0.71	19.70	2.4	C
3	1.11	364.25	132.4	F
4	0.77	14.90	3.2	B

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	259	927	906	0.286	257	0.4	5.536	A
2	443	972	632	0.701	434	2.2	17.541	C
3	1300	198	1178	1.104	1148	38.1	69.538	F
4	792	457	1038	0.763	780	3.0	13.368	B

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	259	941	897	0.289	259	0.4	5.637	A
2	443	984	626	0.708	442	2.3	19.559	C
3	1300	202	1176	1.105	1173	69.9	174.948	F
4	792	467	1033	0.766	791	3.2	14.798	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	259	942	897	0.289	259	0.4	5.640	A
2	443	984	625	0.708	443	2.4	19.662	C
3	1300	202	1176	1.105	1175	101.2	269.577	F
4	792	467	1033	0.767	792	3.2	14.878	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	259	942	897	0.289	259	0.4	5.641	A
2	443	985	625	0.708	443	2.4	19.697	C
3	1300	202	1176	1.105	1175	132.4	364.253	F
4	792	468	1033	0.767	792	3.2	14.902	B

Existing Junction - 2033 Base, AM

Data Errors and Warnings

No errors or warnings

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	68.41	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-9	Arm 3

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D3	2033 Base	AM	FLAT	08:00	09:00	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	340	100.000
2		✓	299	100.000
3		✓	1232	100.000
4		✓	891	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		1	2	3	4
	1	0	15	313	12
	2	6	0	213	80
	3	321	214	4	693
	4	2	159	730	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1	2	3	4
	1	0	7	0	0
	2	17	0	1	1
	3	2	1	25	3
	4	50	2	4	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
08:00-08:15	1	340	341
	2	299	303

	3	1232	1262
	4	891	924
08:15-08:30	1	340	341
	2	299	303
	3	1232	1262
	4	891	924
08:30-08:45	1	340	341
	2	299	303
	3	1232	1262
	4	891	924
08:45-09:00	1	340	341
	2	299	303
	3	1232	1262
	4	891	924

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.42	7.67	0.7	A
2	0.51	12.74	1.0	B
3	1.01	120.83	41.1	F
4	0.91	37.47	8.8	E

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	340	1067	830	0.410	337	0.7	7.269	A
2	299	1034	593	0.504	295	1.0	11.915	B
3	1232	97	1220	1.010	1158	18.5	40.226	E
4	891	512	992	0.898	864	6.8	24.534	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	340	1096	812	0.419	340	0.7	7.617	A
2	299	1055	583	0.513	299	1.0	12.659	B
3	1232	98	1220	1.010	1196	27.4	78.943	F
4	891	529	983	0.906	886	7.9	34.256	D

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	340	1100	810	0.420	340	0.7	7.656	A

2	299	1057	582	0.514	299	1.0	12.720	B
3	1232	98	1220	1.010	1203	34.7	101.514	F
4	891	532	982	0.907	889	8.5	36.406	E

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	340	1101	809	0.420	340	0.7	7.670	A
2	299	1058	581	0.514	299	1.0	12.739	B
3	1232	98	1220	1.010	1206	41.1	120.831	F
4	891	534	981	0.908	890	8.8	37.473	E

Existing Junction - 2033 Base, PM

Data Errors and Warnings

No errors or warnings

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	160.75	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-15	Arm 3

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D4	2033 Base	PM	FLAT	16:30	17:30	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	244	100.000
2		✓	430	100.000
3		✓	1285	100.000
4		✓	792	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1	2	3	4
From	1	0	9	217	18
	2	13	0	246	171
	3	321	163	4	797
	4	7	54	731	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	0	11	2	0
	2	8	0	1	0
	3	2	1	0	2
	4	0	0	2	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:30-16:45	1	244	249
	2	430	434
	3	1285	1309
	4	792	807
16:45-17:00	1	244	249
	2	430	434
	3	1285	1309
	4	792	807
17:00-17:15	1	244	249
	2	430	434
	3	1285	1309
	4	792	807
17:15-17:30	1	244	249
	2	430	434
	3	1285	1309
	4	792	807

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.27	5.49	0.4	A
2	0.68	17.72	2.1	C
3	1.09	327.71	118.6	F
4	0.76	14.65	3.2	B

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	244	922	909	0.269	243	0.4	5.391	A
2	430	957	639	0.673	422	1.9	16.088	C
3	1285	199	1178	1.091	1145	35.0	65.208	F
4	792	448	1043	0.759	780	3.0	13.158	B

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	244	937	900	0.271	244	0.4	5.486	A
2	430	969	633	0.679	430	2.0	17.629	C
3	1285	202	1176	1.093	1172	63.3	160.580	F
4	792	458	1038	0.763	791	3.1	14.538	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	244	937	900	0.271	244	0.4	5.489	A
2	430	969	633	0.679	430	2.1	17.702	C
3	1285	202	1176	1.093	1174	91.0	244.251	F
4	792	459	1037	0.763	792	3.1	14.617	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	244	938	900	0.271	244	0.4	5.490	A
2	430	970	633	0.680	430	2.1	17.723	C
3	1285	202	1176	1.093	1175	118.6	327.713	F
4	792	459	1037	0.764	792	3.2	14.646	B

Existing Junction - No Growth Base, AM

Data Errors and Warnings

No errors or warnings

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	20.71	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	2	Arm 3

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D5	No Growth Base	AM	FLAT	08:00	09:00	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	314	100.000
2		✓	266	100.000
3		✓	1108	100.000
4		✓	796	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		1	2	3	4
	1	0	13	290	11
	2	5	0	190	71
	3	291	194	4	619
	4	2	142	652	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1	2	3	4
	1	0	7	0	0
	2	17	0	1	1
	3	2	1	25	3
	4	50	2	4	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
08:00-08:15	1	314	315
	2	266	269

	3	1108	1135
	4	796	826
08:15-08:30	1	314	315
	2	266	269
	3	1108	1135
	4	796	826
08:30-08:45	1	314	315
	2	266	269
	3	1108	1135
	4	796	826
08:45-09:00	1	314	315
	2	266	269
	3	1108	1135
	4	796	826

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.36	6.41	0.6	A
2	0.42	9.84	0.7	A
3	0.90	29.59	8.7	D
4	0.80	17.50	3.8	C

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	314	973	887	0.354	312	0.5	6.235	A
2	266	943	639	0.416	263	0.7	9.519	A
3	1108	86	1226	0.904	1079	7.3	21.419	C
4	796	481	1007	0.790	782	3.5	15.185	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	314	991	876	0.358	314	0.6	6.401	A
2	266	956	632	0.421	266	0.7	9.824	A
3	1108	87	1225	0.904	1105	8.2	28.235	D
4	796	493	1001	0.795	795	3.7	17.299	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	314	991	876	0.359	314	0.6	6.407	A

2	266	957	632	0.421	266	0.7	9.833	A
3	1108	87	1225	0.904	1107	8.5	29.170	D
4	796	493	1001	0.795	796	3.8	17.447	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	314	992	876	0.359	314	0.6	6.408	A
2	266	957	632	0.421	266	0.7	9.836	A
3	1108	87	1225	0.904	1107	8.7	29.586	D
4	796	494	1001	0.795	796	3.8	17.496	C

Existing Junction - No Growth Base, PM

Data Errors and Warnings

No errors or warnings

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	43.50	E

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-6	Arm 3

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D6	No Growth Base	PM	FLAT	16:30	17:30	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	226	100.000
2		✓	388	100.000
3		✓	1166	100.000
4		✓	714	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1	2	3	4
From	1	0	8	202	16
	2	12	0	222	154
	3	297	147	4	718
	4	6	49	659	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	0	11	2	0
	2	8	0	1	0
	3	2	1	0	2
	4	0	0	2	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:30-16:45	1	226	231
	2	388	391
	3	1166	1188
	4	714	727
16:45-17:00	1	226	231
	2	388	391
	3	1166	1188
	4	714	727
17:00-17:15	1	226	231
	2	388	391
	3	1166	1188
	4	714	727
17:15-17:30	1	226	231
	2	388	391
	3	1166	1188
	4	714	727

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.24	5.00	0.3	A
2	0.57	12.46	1.3	B
3	0.98	81.07	25.2	F
4	0.69	11.07	2.2	B

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	226	843	955	0.237	225	0.3	4.923	A
2	388	872	681	0.570	383	1.3	11.876	B
3	1166	180	1187	0.982	1109	14.2	34.570	D
4	714	438	1048	0.681	706	2.1	10.290	B

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	226	856	947	0.239	226	0.3	4.989	A
2	388	881	677	0.573	388	1.3	12.444	B
3	1166	182	1186	0.983	1146	19.2	61.089	F
4	714	452	1041	0.686	714	2.1	10.988	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	226	857	947	0.239	226	0.3	4.993	A
2	388	881	677	0.573	388	1.3	12.458	B
3	1166	182	1186	0.983	1152	22.6	72.672	F
4	714	455	1039	0.687	714	2.2	11.047	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	226	858	947	0.239	226	0.3	4.995	A
2	388	881	677	0.573	388	1.3	12.462	B
3	1166	182	1186	0.983	1156	25.2	81.066	F
4	714	456	1039	0.687	714	2.2	11.072	B

Existing Junction - No Growth with Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
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1	untitled	Standard Roundabout		1, 2, 3, 4	26.45	D
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Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-2	Arm 3

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D7	No Growth with Dev	AM	FLAT	08:00	09:00	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	321	100.000
2		✓	272	100.000
3		✓	1146	100.000
4		✓	796	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1	2	3	4
From	1	0	13	297	11
	2	5	0	196	71
	3	312	211	4	619
	4	2	142	652	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	0	7	0	0
	2	17	0	1	1
	3	2	1	25	3
	4	50	2	4	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
--------------	-----	-----------------	------------------------

08:00-08:15	1	321	322
	2	272	276
	3	1146	1174
	4	796	826
08:15-08:30	1	321	322
	2	272	276
	3	1146	1174
	4	796	826
08:30-08:45	1	321	322
	2	272	276
	3	1146	1174
	4	796	826
08:45-09:00	1	321	322
	2	272	276
	3	1146	1174
	4	796	826

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.37	6.61	0.6	A
2	0.43	10.09	0.8	B
3	0.94	40.83	12.3	E
4	0.81	19.19	4.1	C

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	321	987	879	0.365	319	0.6	6.403	A
2	272	949	636	0.428	269	0.7	9.741	A
3	1146	86	1226	0.935	1108	9.4	25.452	D
4	796	515	991	0.804	781	3.7	16.199	C

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	321	1007	867	0.370	321	0.6	6.594	A
2	272	963	629	0.432	272	0.8	10.076	B
3	1146	87	1226	0.935	1140	11.0	37.031	E
4	796	529	983	0.809	795	4.0	18.861	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	321	1008	866	0.371	321	0.6	6.603	A
2	272	964	629	0.433	272	0.8	10.089	B
3	1146	87	1226	0.935	1143	11.8	39.537	E
4	796	531	983	0.810	796	4.1	19.102	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	321	1008	866	0.371	321	0.6	6.607	A
2	272	964	629	0.433	272	0.8	10.093	B
3	1146	87	1226	0.935	1144	12.3	40.829	E
4	796	531	982	0.810	796	4.1	19.188	C

Existing Junction - No Growth with Dev, PM

Data Errors and Warnings

No errors or warnings

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	51.64	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-7	Arm 3

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D8	No Growth with Dev	PM	FLAT	16:30	17:30	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	241	100.000
2		✓	401	100.000
3		✓	1181	100.000
4		✓	714	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1	2	3	4
From	1	0	8	217	16
	2	12	0	235	154
	3	305	154	4	718
	4	6	49	659	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	0	11	2	0
	2	8	0	1	0
	3	2	1	0	2
	4	0	0	2	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:30-16:45	1	241	246
	2	401	404
	3	1181	1203
	4	714	727
16:45-17:00	1	241	246
	2	401	404
	3	1181	1203
	4	714	727
17:00-17:15	1	241	246
	2	401	404
	3	1181	1203
	4	714	727
17:15-17:30	1	241	246
	2	401	404
	3	1181	1203
	4	714	727

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.26	5.13	0.3	A
2	0.60	13.41	1.5	B
3	1.00	98.39	31.5	F

4	0.69	11.29	2.2	B
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Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	241	849	952	0.253	240	0.3	5.047	A
2	401	887	674	0.595	395	1.4	12.685	B
3	1181	180	1187	0.995	1117	16.0	37.308	E
4	714	450	1042	0.685	706	2.1	10.458	B

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	241	862	944	0.255	241	0.3	5.120	A
2	401	896	669	0.599	401	1.5	13.385	B
3	1181	182	1186	0.996	1155	22.5	69.351	F
4	714	465	1035	0.690	714	2.2	11.198	B

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	241	863	943	0.255	241	0.3	5.125	A
2	401	896	669	0.599	401	1.5	13.406	B
3	1181	182	1186	0.996	1161	27.4	85.582	F
4	714	467	1033	0.691	714	2.2	11.262	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	241	864	943	0.256	241	0.3	5.127	A
2	401	896	669	0.599	401	1.5	13.413	B
3	1181	182	1186	0.996	1165	31.5	98.389	F
4	714	469	1033	0.692	714	2.2	11.292	B

Existing Junction - Observed 2018, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
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1	untitled	Standard Roundabout		1, 2, 3, 4	15.74	C
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Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	7	Arm 3

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D9	Observed 2018	AM	FLAT	08:00	09:00	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	215	100.000
2		✓	266	100.000
3		✓	1046	100.000
4		✓	796	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1	2	3	4
	1	0	13	191	11
	2	5	0	190	71
	3	253	170	4	619
	4	2	142	652	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1	2	3	4
	1	0	7	0	0
	2	17	0	1	1
	3	2	1	25	3
	4	50	2	4	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
--------------	-----	-----------------	------------------------

08:00-08:15	1	215	216
	2	266	269
	3	1046	1072
	4	796	826
08:15-08:30	1	215	216
	2	266	269
	3	1046	1072
	4	796	826
08:30-08:45	1	215	216
	2	266	269
	3	1046	1072
	4	796	826
08:45-09:00	1	215	216
	2	266	269
	3	1046	1072
	4	796	826

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.24	5.34	0.3	A
2	0.39	8.70	0.6	A
3	0.85	19.96	5.6	C
4	0.77	15.26	3.3	C

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	215	952	898	0.239	214	0.3	5.251	A
2	266	847	686	0.388	264	0.6	8.480	A
3	1046	86	1225	0.854	1025	5.1	16.638	C
4	796	424	1035	0.769	784	3.1	13.694	B

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	215	967	889	0.242	215	0.3	5.340	A
2	266	858	680	0.391	266	0.6	8.691	A
3	1046	87	1225	0.854	1045	5.5	19.662	C
4	796	431	1031	0.772	795	3.3	15.170	C

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	215	968	889	0.242	215	0.3	5.343	A
2	266	858	680	0.391	266	0.6	8.696	A
3	1046	87	1225	0.854	1046	5.6	19.874	C
4	796	432	1031	0.772	796	3.3	15.243	C

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	215	968	889	0.242	215	0.3	5.343	A
2	266	858	680	0.391	266	0.6	8.697	A
3	1046	87	1225	0.854	1046	5.6	19.960	C
4	796	432	1031	0.772	796	3.3	15.264	C

Existing Junction - Observed 2018, PM

Data Errors and Warnings

No errors or warnings

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	20.25	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	0	Arm 3

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D10	Observed 2018	PM	FLAT	16:30	17:30	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	162	100.000
2		✓	388	100.000
3		✓	1081	100.000
4		✓	714	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1	2	3	4
From	1	0	8	138	16
	2	12	0	222	154
	3	215	144	4	718
	4	6	49	659	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	0	11	2	0
	2	8	0	1	0
	3	2	1	0	2
	4	0	0	2	0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (Veh/hr)	Demand in PCU (PCU/hr)
16:30-16:45	1	162	166
	2	388	391
	3	1081	1101
	4	714	727
16:45-17:00	1	162	166
	2	388	391
	3	1081	1101
	4	714	727
17:00-17:15	1	162	166
	2	388	391
	3	1081	1101
	4	714	727
17:15-17:30	1	162	166
	2	388	391
	3	1081	1101
	4	714	727

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.17	4.59	0.2	A
2	0.55	11.23	1.2	B
3	0.91	32.69	9.4	D

4	0.66	9.84	1.9	A
---	------	------	-----	---

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	162	844	954	0.170	161	0.2	4.538	A
2	388	809	712	0.545	383	1.2	10.798	B
3	1081	180	1187	0.911	1050	7.7	22.782	C
4	714	365	1085	0.658	707	1.9	9.343	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	162	855	947	0.171	162	0.2	4.584	A
2	388	817	709	0.548	388	1.2	11.218	B
3	1081	182	1186	0.912	1077	8.7	30.841	D
4	714	374	1080	0.661	714	1.9	9.813	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	162	856	947	0.171	162	0.2	4.585	A
2	388	817	708	0.548	388	1.2	11.227	B
3	1081	182	1186	0.912	1079	9.1	32.113	D
4	714	374	1080	0.661	714	1.9	9.833	A

17:15 - 17:30

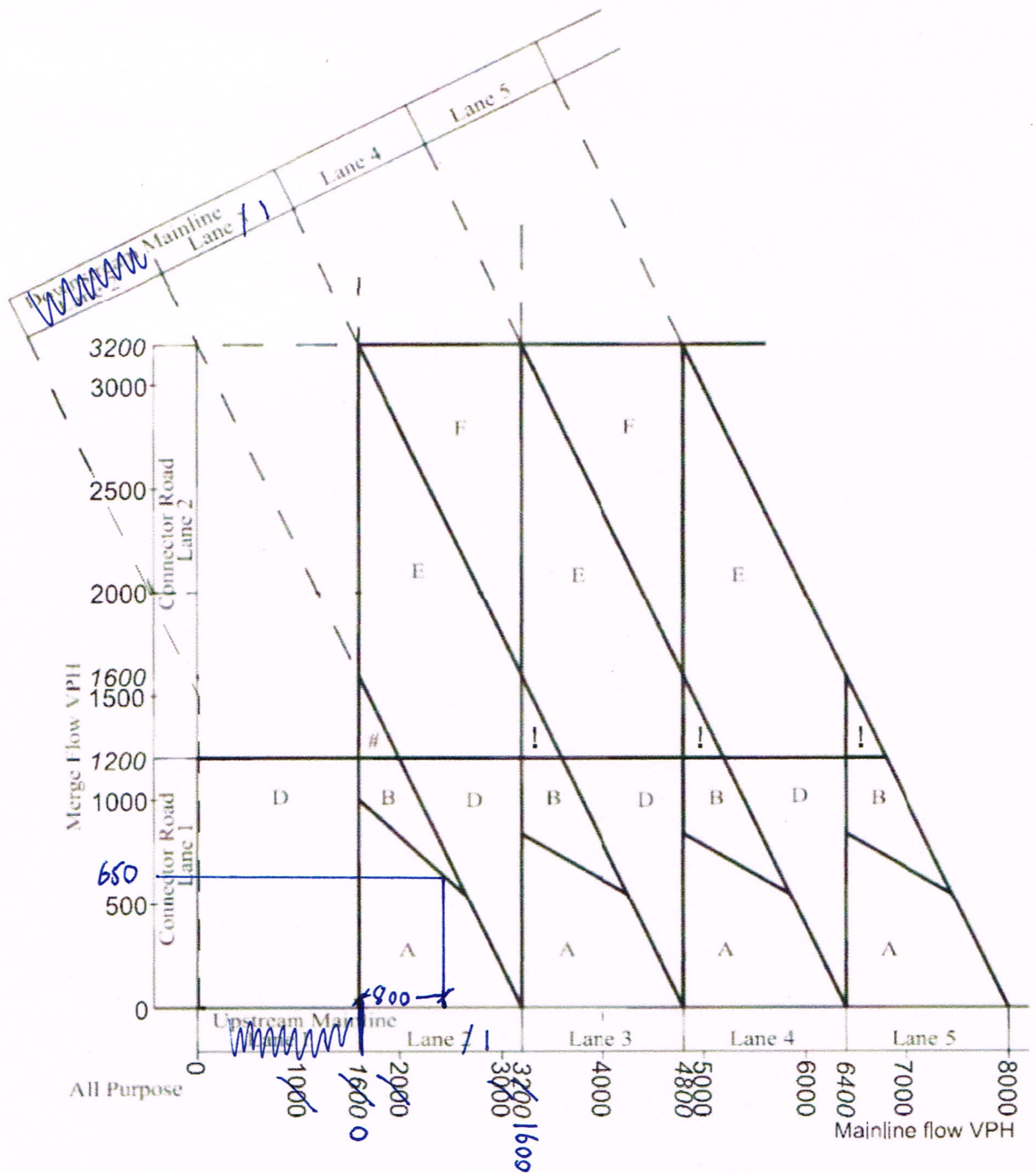
Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	162	856	947	0.171	162	0.2	4.585	A
2	388	817	708	0.548	388	1.2	11.230	B
3	1081	182	1186	0.912	1080	9.4	32.693	D
4	714	375	1080	0.661	714	1.9	9.838	A



Appendix M: A595 / A5094 New Road Junction



Figure 3.12a All-purpose road merging diagram



New Road to A595 Northbound Merge

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: A595 (N) to New Road 200731.j9

Path: L:\Projects\CBO-0542 High Road, Whitehaven\Modelling\PC Runs

Report generation date: 27/07/2021 15:03:28

- »Existing Layout - Observed, AM
- »Existing Layout - Observed, PM
- »Existing Layout - No Growth Base Flows, AM
- »Existing Layout - No Growth Base Flow, PM
- »Existing Layout - No Growth with Dev, AM
- »Existing Layout - No Growth with Dev, PM
- »Existing Layout - 2023 Base Flow, PM
- »Existing Layout - 2023 with Dev Flow, PM
- »Existing Layout - 2033 Base Flow, PM
- »Existing Layout - 2033 with Dev Flow, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Network Residual Capacity
	Existing Layout - Observed											
Stream B-AC	D1	0.0	0.00	0.00	A	-8 %	D2	0.0	0.00	0.00	A	7 %
Stream C-B		8.0	64.18	0.90	F	[Stream C-B]		2.9	25.77	0.75	D	[Stream C-B]
	Existing Layout - No Growth Base Flows											
Stream B-AC	D3	0.0	0.00	0.00	A	-12 %						
Stream C-B		15.7	119.19	0.97	F	[Stream C-B]						
	Existing Layout - No Growth Base Flow											
Stream B-AC							D4	0.0	0.00	0.00	A	6 %
Stream C-B								3.0	26.48	0.75	D	[Stream C-B]
	Existing Layout - No Growth with Dev											
Stream B-AC	D5	0.0	0.00	0.00	A	-14 %	D6	0.0	0.00	0.00	A	-3 %
Stream C-B		22.7	163.44	1.00	F	[Stream C-B]		5.2	42.48	0.85	E	[Stream C-B]
	Existing Layout - 2023 Base Flow											
Stream B-AC							D7	0.0	0.00	0.00	A	1 %
Stream C-B								3.9	33.56	0.80	D	[Stream C-B]

	Existing Layout - 2023 with Dev Flow										
Stream B-AC						D8	0.0	0.00	0.00	A	-7 %
Stream C-B							7.3	57.20	0.89	F	[Stream C-B]
	Existing Layout - 2033 Base Flow										
Stream B-AC						D9	0.0	0.00	0.00	A	-5 %
Stream C-B							5.8	47.93	0.86	E	[Stream C-B]
	Existing Layout - 2033 with Dev Flow										
Stream B-AC						D10	0.0	0.00	0.00	A	-11 %
Stream C-B							13.2	99.25	0.95	F	[Stream C-B]

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	A595 to New Road
Location	
Site number	
Date	17/05/2019
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	CBO
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	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	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 period length (min)	Time segment length (min)
D1	Observed	AM	FLAT	08:00	09:00	60	15
D2	Observed	PM	FLAT	16:30	17:30	60	15
D3	No Growth Base Flows	AM	FLAT	08:00	09:00	60	15
D4	No Growth Base Flow	PM	FLAT	16:30	17:30	60	15
D5	No Growth with Dev	AM	FLAT	08:00	09:00	60	15
D6	No Growth with Dev	PM	FLAT	16:30	17:30	60	15
D7	2023 Base Flow	PM	FLAT	16:30	17:30	60	15
D8	2023 with Dev Flow	PM	FLAT	16:30	17:30	60	15
D9	2033 Base Flow	PM	FLAT	16:30	17:30	60	15

D10	2033 with Dev Flow	PM	FLAT	16:30	17:30	60	15
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Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Existing Layout	100.000

Existing Layout - Observed, 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		16.72	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-8	Stream C-B

Arms

Arms

Arm	Name	Description	Arm type
A	A595 Loop Road North (S)		Major
B	New Road		Minor
C	A595 Loop Road North (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	7.39		✓	3.00	179.0		-

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	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.00	10	10

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	486	0.083	0.210	0.132	0.300
B-C	630	0.091	0.229	-	-
C-B	737	0.268	0.268	-	-

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 period length (min)	Time segment length (min)
D1	Observed	AM	FLAT	08:00	09:00	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	708	100.000
B		✓	0	100.000
C		✓	1083	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	0	708
	B	0	0	0
	C	610	473	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A	B	C
	A	0	0	4
	B	0	0	0
	C	6	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-A				
C-B	0.90	64.18	8.0	F
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	164	0.000	0	0.0	0.000	A
C-A	610			610			
C-B	473	523	0.904	449	6.0	40.293	E
A-B	0			0			
A-C	708			708			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	153	0.000	0	0.0	0.000	A
C-A	610			610			
C-B	473	523	0.904	469	7.1	58.129	F
A-B	0			0			
A-C	708			708			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	151	0.000	0	0.0	0.000	A
C-A	610			610			
C-B	473	523	0.904	471	7.6	62.106	F
A-B	0			0			
A-C	708			708			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	151	0.000	0	0.0	0.000	A
C-A	610			610			
C-B	473	523	0.904	472	8.0	64.181	F
A-B	0			0			
A-C	708			708			

Existing Layout - Observed, 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		6.40	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	7	Stream C-B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D2	Observed	PM	FLAT	16:30	17:30	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	616	100.000
B		✓	0	100.000
C		✓	1052	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	0	616
	B	0	0	0
	C	641	411	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-A				
C-B	0.75	25.77	2.9	D
A-B				
A-C				

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	217	0.000	0	0.0	0.000	A
C-A	641			641			
C-B	411	550	0.747	400	2.7	22.683	C
A-B	0			0			
A-C	616			616			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	213	0.000	0	0.0	0.000	A
C-A	641			641			
C-B	411	550	0.747	410	2.8	25.561	D
A-B	0			0			
A-C	616			616			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	213	0.000	0	0.0	0.000	A
C-A	641			641			
C-B	411	550	0.747	411	2.9	25.715	D
A-B	0			0			
A-C	616			616			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	213	0.000	0	0.0	0.000	A
C-A	641			641			
C-B	411	550	0.747	411	2.9	25.774	D
A-B	0			0			
A-C	616			616			

Existing Layout - No Growth Base Flows, 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		31.71	D

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-12	Stream C-B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D3	No Growth Base Flows	AM	FLAT	08:00	09:00	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	739	100.000
B		✓	0	100.000
C		✓	1121	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	0	739
	B	0	0	0
	C	621	500	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A	B	C
	A	0	0	4
	B	0	0	0
	C	5	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-A				
C-B	0.97	119.19	15.7	F
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	141	0.000	0	0.0	0.000	A
C-A	621			621			
C-B	500	515	0.971	464	9.0	53.074	F
A-B	0			0			
A-C	739			739			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	125	0.000	0	0.0	0.000	A
C-A	621			621			
C-B	500	515	0.971	488	12.1	91.435	F
A-B	0			0			
A-C	739			739			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	119	0.000	0	0.0	0.000	A
C-A	621			621			
C-B	500	515	0.971	492	14.2	107.647	F
A-B	0			0			
A-C	739			739			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	115	0.000	0	0.0	0.000	A
C-A	621			621			
C-B	500	515	0.971	494	15.7	119.190	F
A-B	0			0			
A-C	739			739			

Existing Layout - No Growth Base Flow, 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		6.42	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	6	Stream C-B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D4	No Growth Base Flow	PM	FLAT	16:30	17:30	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	630	100.000
B		✓	0	100.000
C		✓	1079	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
From	A	0	0	630
	B	0	0	0
	C	668	411	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A

C-A				
C-B	0.75	26.48	3.0	D
A-B				
A-C				

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	209	0.000	0	0.0	0.000	A
C-A	668			668			
C-B	411	546	0.752	400	2.7	23.172	C
A-B	0			0			
A-C	630			630			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	204	0.000	0	0.0	0.000	A
C-A	668			668			
C-B	411	546	0.752	410	2.9	26.239	D
A-B	0			0			
A-C	630			630			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	204	0.000	0	0.0	0.000	A
C-A	668			668			
C-B	411	546	0.752	411	2.9	26.411	D
A-B	0			0			
A-C	630			630			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	204	0.000	0	0.0	0.000	A
C-A	668			668			
C-B	411	546	0.752	411	3.0	26.476	D
A-B	0			0			
A-C	630			630			

Existing Layout - No Growth with Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		44.50	E

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-14	Stream C-B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D5	No Growth with Dev	AM	FLAT	08:00	09:00	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	739	100.000
B		✓	0	100.000
C		✓	1137	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	0	739
	B	0	0	0
	C	621	516	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A	B	C
	A	0	0	4
	B	0	0	0
	C	5	3	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-A				
C-B	1.00	163.44	22.7	F
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	134	0.000	0	0.0	0.000	A
C-A	621			621			
C-B	516	515	1.002	472	11.0	60.113	F
A-B	0			0			
A-C	739			739			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	114	0.000	0	0.0	0.000	A
C-A	621			621			
C-B	516	515	1.002	497	15.8	112.485	F
A-B	0			0			
A-C	739			739			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	105	0.000	0	0.0	0.000	A
C-A	621			621			
C-B	516	515	1.002	501	19.5	140.551	F
A-B	0			0			
A-C	739			739			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	97	0.000	0	0.0	0.000	A
C-A	621			621			
C-B	516	515	1.002	503	22.7	163.438	F
A-B	0			0			
A-C	739			739			

Existing Layout - No Growth with Dev, 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		11.27	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-3	Stream C-B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D6	No Growth with Dev	PM	FLAT	16:30	17:30	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	630	100.000
B		✓	0	100.000
C		✓	1132	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	0	630
	B	0	0	0
	C	668	464	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-A				
C-B	0.85	42.48	5.2	E
A-B				
A-C				

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	188	0.000	0	0.0	0.000	A
C-A	668			668			
C-B	464	546	0.849	446	4.5	31.878	D
A-B	0			0			
A-C	630			630			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	181	0.000	0	0.0	0.000	A
C-A	668			668			
C-B	464	546	0.849	462	4.9	40.843	E
A-B	0			0			
A-C	630			630			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	180	0.000	0	0.0	0.000	A
C-A	668			668			
C-B	464	546	0.849	463	5.1	41.982	E
A-B	0			0			
A-C	630			630			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	180	0.000	0	0.0	0.000	A
C-A	668			668			
C-B	464	546	0.849	464	5.2	42.480	E
A-B	0			0			
A-C	630			630			

Existing Layout - 2023 Base Flow, 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		8.15	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	1	Stream C-B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D7	2023 Base Flow	PM	FLAT	16:30	17:30	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	661	100.000
B		✓	0	100.000
C		✓	1132	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	0	661
	B	0	0	0
	C	700	432	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-A				
C-B	0.80	33.56	3.9	D
A-B				
A-C				

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	186	0.000	0	0.0	0.000	A
C-A	700			700			
C-B	432	538	0.803	418	3.5	27.519	D
A-B	0			0			
A-C	661			661			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	180	0.000	0	0.0	0.000	A
C-A	700			700			
C-B	432	538	0.803	431	3.7	32.916	D
A-B	0			0			
A-C	661			661			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	180	0.000	0	0.0	0.000	A
C-A	700			700			
C-B	432	538	0.803	432	3.8	33.375	D
A-B	0			0			
A-C	661			661			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	180	0.000	0	0.0	0.000	A
C-A	700			700			
C-B	432	538	0.803	432	3.9	33.556	D
A-B	0			0			
A-C	661			661			

Existing Layout - 2023 with Dev Flow, 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		15.03	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-7	Stream C-B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D8	2023 with Dev Flow	PM	FLAT	16:30	17:30	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	661	100.000
B		✓	0	100.000
C		✓	1185	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	0	661
	B	0	0	0
	C	700	485	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-A				
C-B	0.89	57.20	7.3	F
A-B				
A-C				

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	166	0.000	0	0.0	0.000	A
C-A	700			700			
C-B	485	543	0.893	462	5.7	37.643	E
A-B	0			0			
A-C	661			661			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	157	0.000	0	0.0	0.000	A
C-A	700			700			
C-B	485	543	0.893	481	6.6	52.755	F
A-B	0			0			
A-C	661			661			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	155	0.000	0	0.0	0.000	A
C-A	700			700			
C-B	485	543	0.893	483	7.0	55.722	F
A-B	0			0			
A-C	661			661			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	154	0.000	0	0.0	0.000	A
C-A	700			700			
C-B	485	543	0.893	484	7.3	57.199	F
A-B	0			0			
A-C	661			661			

Existing Layout - 2033 Base Flow, 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		11.63	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-5	Stream C-B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D9	2033 Base Flow	PM	FLAT	16:30	17:30	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	698	100.000
B		✓	0	100.000
C		✓	1195	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	0	698
	B	0	0	0
	C	739	456	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-A				
C-B	0.86	47.93	5.8	E
A-B				
A-C				

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	158	0.000	0	0.0	0.000	A
C-A	739			739			
C-B	456	528	0.864	437	4.8	34.468	D
A-B	0			0			
A-C	698			698			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	150	0.000	0	0.0	0.000	A
C-A	739			739			
C-B	456	528	0.864	454	5.4	45.523	E
A-B	0			0			
A-C	698			698			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	149	0.000	0	0.0	0.000	A
C-A	739			739			
C-B	456	528	0.864	455	5.6	47.173	E
A-B	0			0			
A-C	698			698			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	148	0.000	0	0.0	0.000	A
C-A	739			739			
C-B	456	528	0.864	455	5.8	47.925	E
A-B	0			0			
A-C	698			698			

Existing Layout - 2033 with Dev Flow, 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		25.97	D

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-11	Stream C-B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D10	2033 with Dev Flow	PM	FLAT	16:30	17:30	60	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	698	100.000
B		✓	0	100.000
C		✓	1248	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	0	698
	B	0	0	0
	C	739	509	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-A				
C-B	0.95	99.25	13.2	F
A-B				
A-C				

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	137	0.000	0	0.0	0.000	A
C-A	739			739			
C-B	509	533	0.955	476	8.3	48.716	E
A-B	0			0			
A-C	698			698			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	122	0.000	0	0.0	0.000	A
C-A	739			739			
C-B	509	533	0.955	499	10.7	80.228	F
A-B	0			0			
A-C	698			698			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	117	0.000	0	0.0	0.000	A
C-A	739			739			
C-B	509	533	0.955	503	12.2	91.712	F
A-B	0			0			
A-C	698			698			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	0	115	0.000	0	0.0	0.000	A
C-A	739			739			
C-B	509	533	0.955	505	13.2	99.252	F
A-B	0			0			
A-C	698			698			