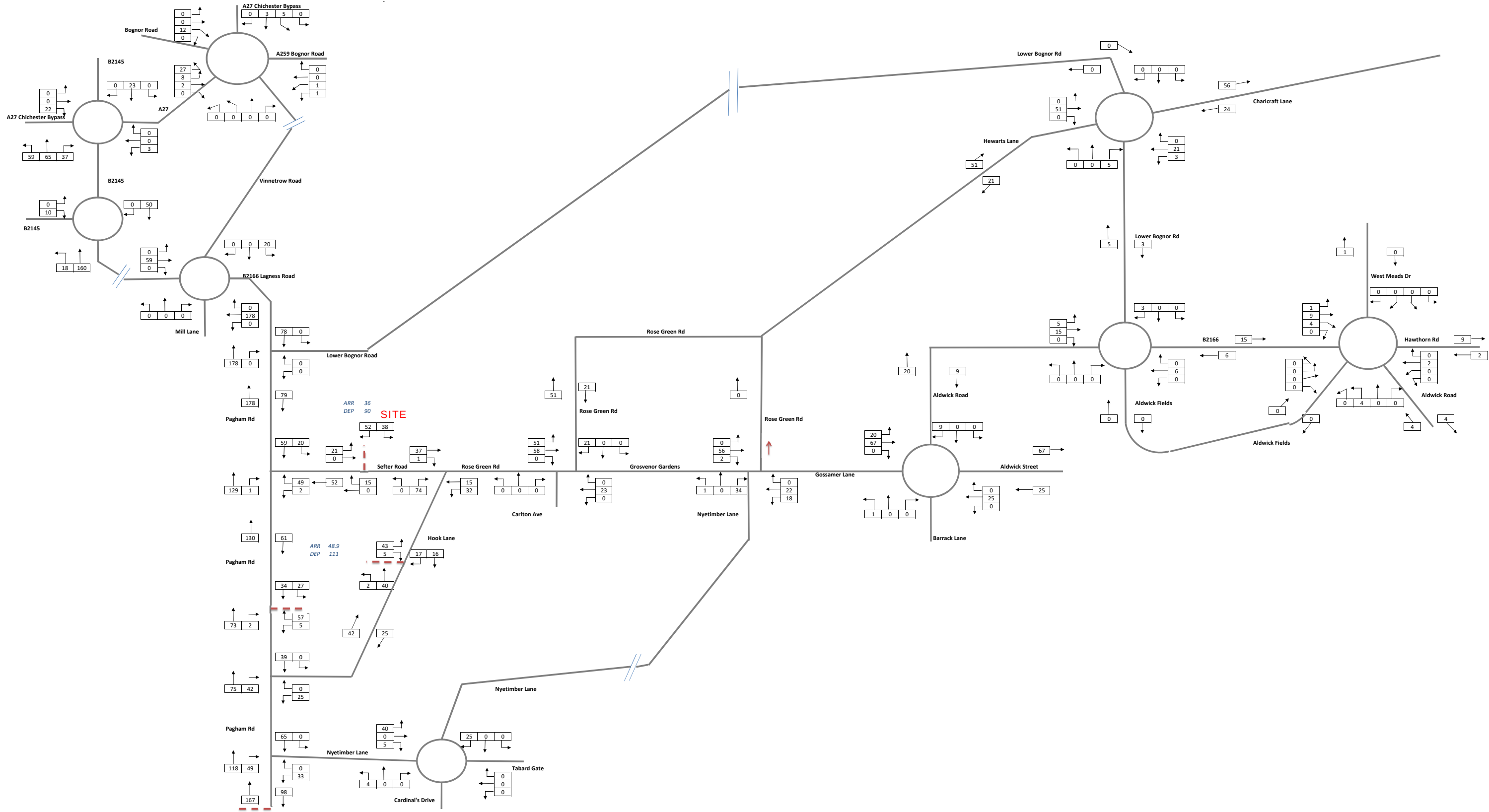
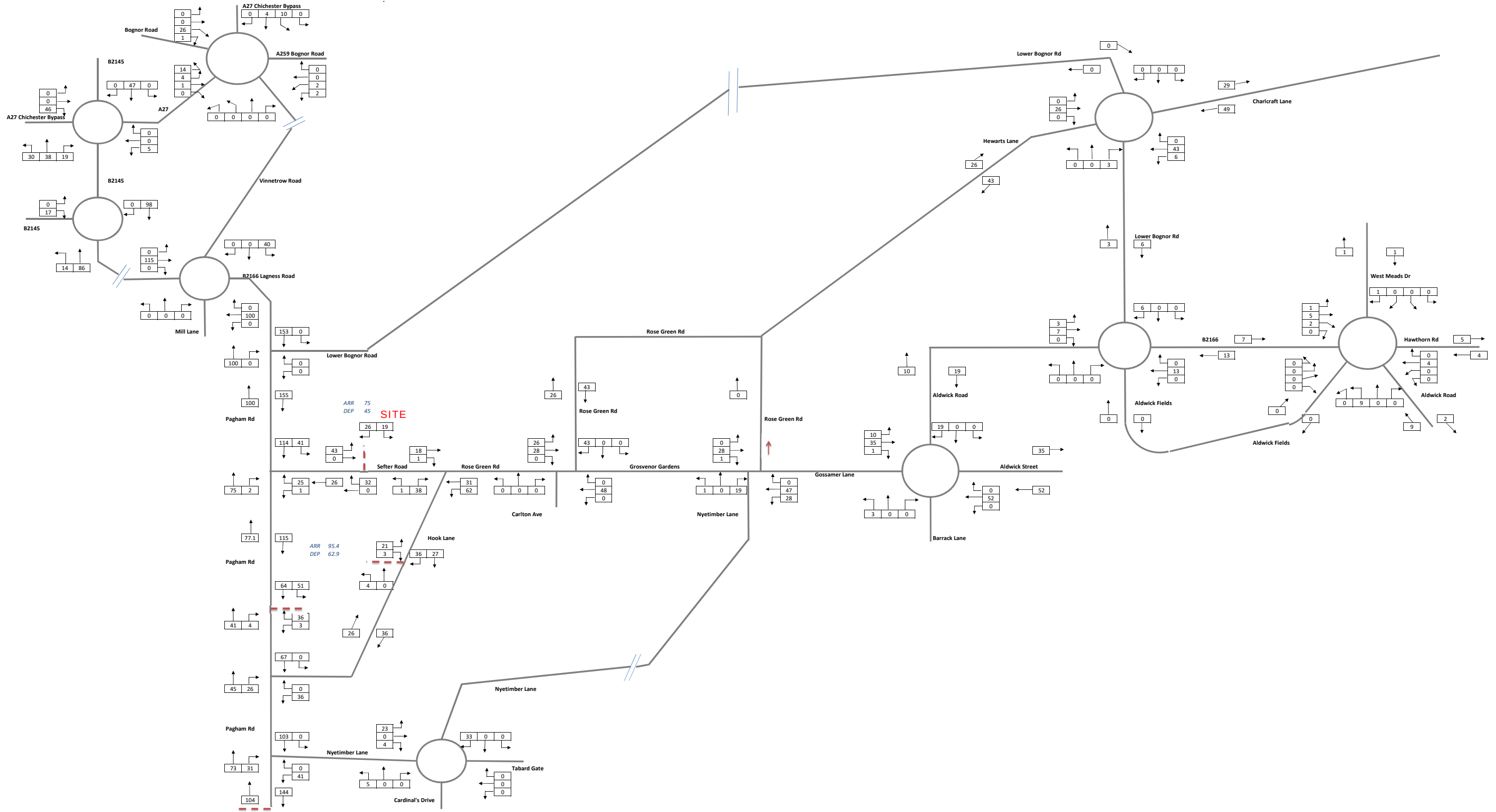




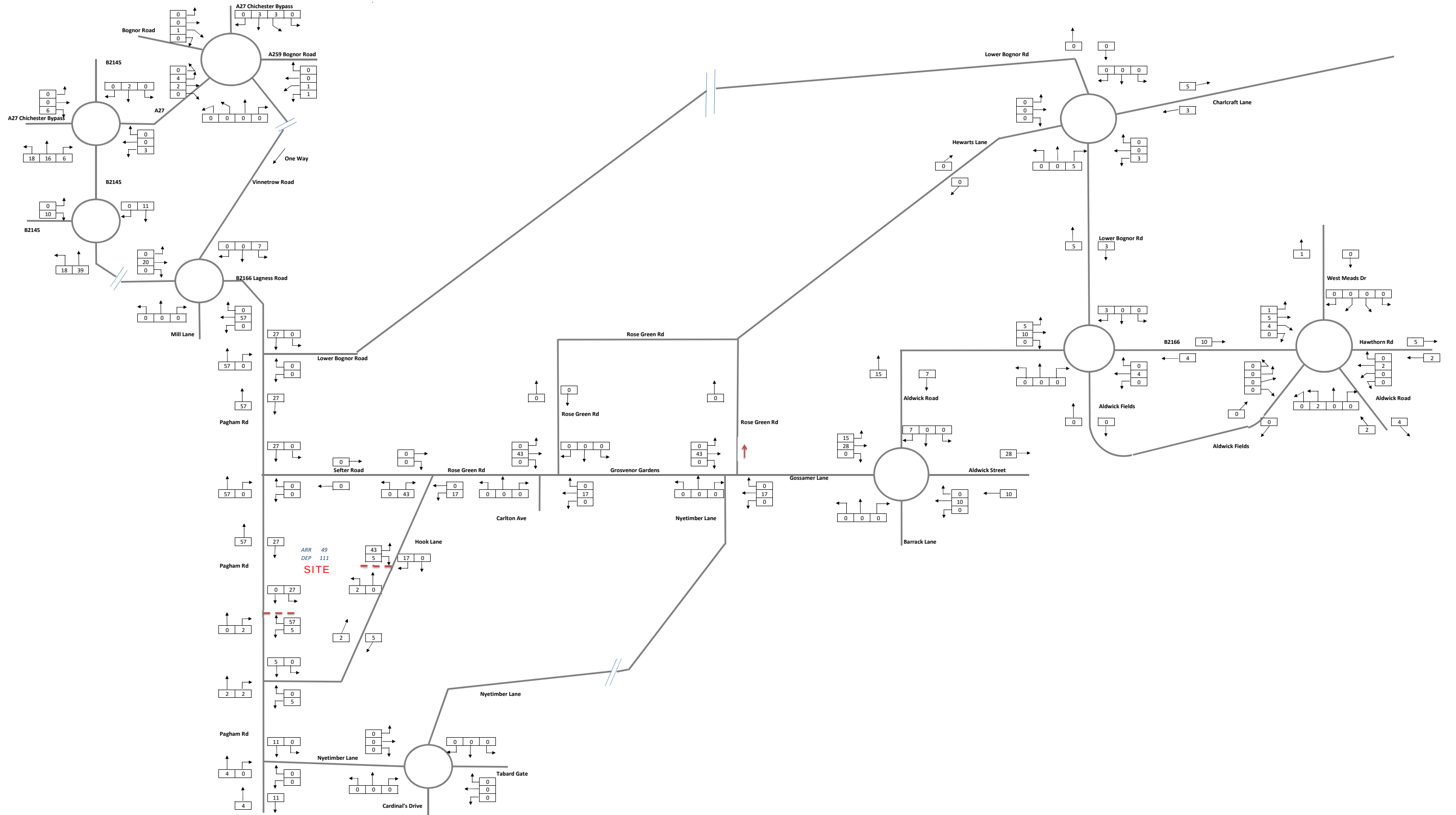
Total Developments
300 Dwellings & 80 Bed Care Home - Hook Lane
400 Dwellings, 70 Bed Care Home, local centre & single form entry school - Pagham Road
250 Dwellings - Seftor Road

Hook Lane, Pagham
JNY 8840
Total Allocated Development sites Traffic Flows
AM Peak
All Vehicles



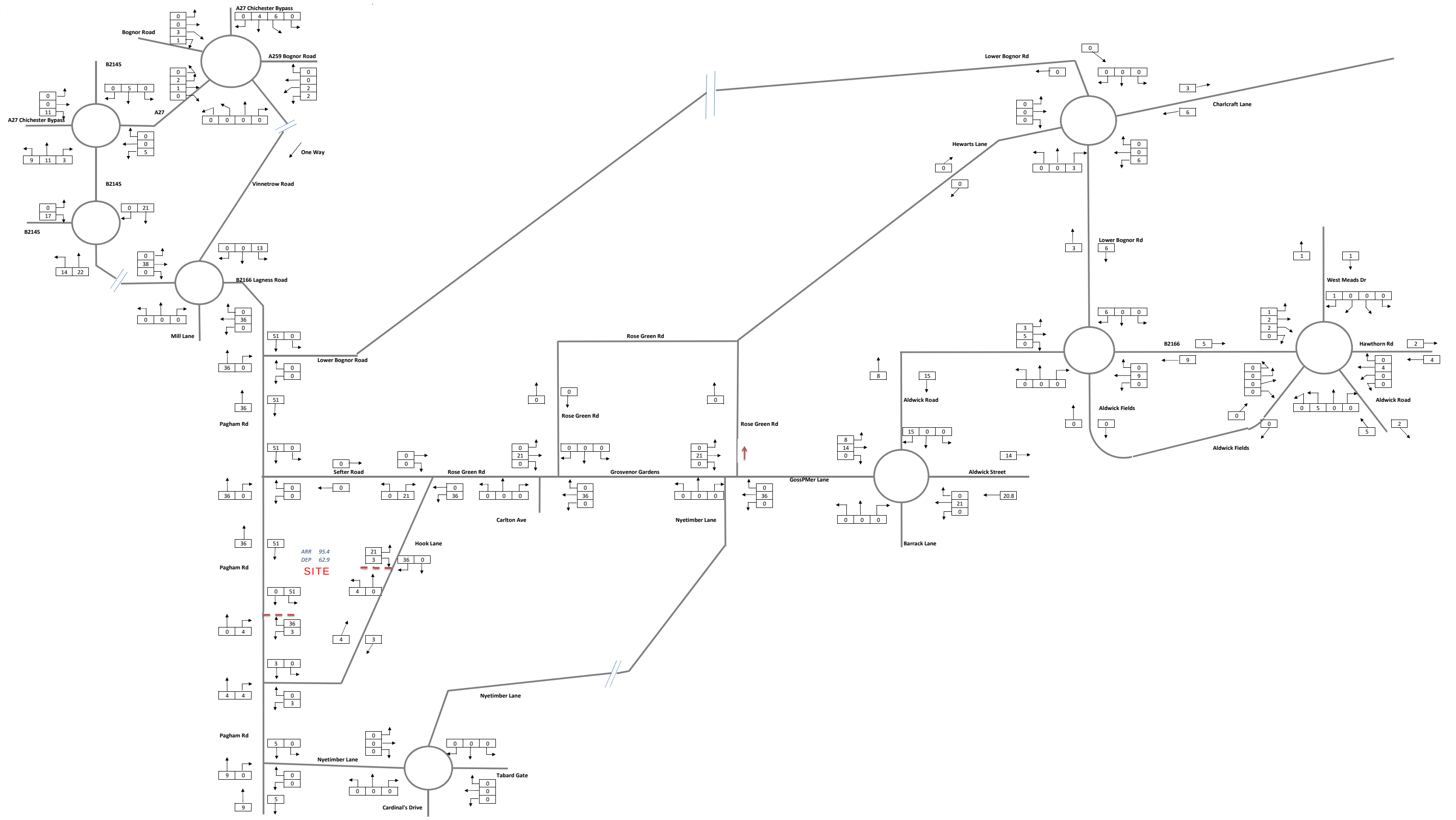
Total Developments
300 Dwellings & 80 Bed Care Home - Hook Lane
400 Dwellings, 70 Bed Care Home, local centre & single form entry school - Pagham Road
250 Dwellings - Sefter Road

Hook Lane, Pagham
JNY 8840
Total Allocated Development sites Traffic Flows
PM Peak
All Vehicles



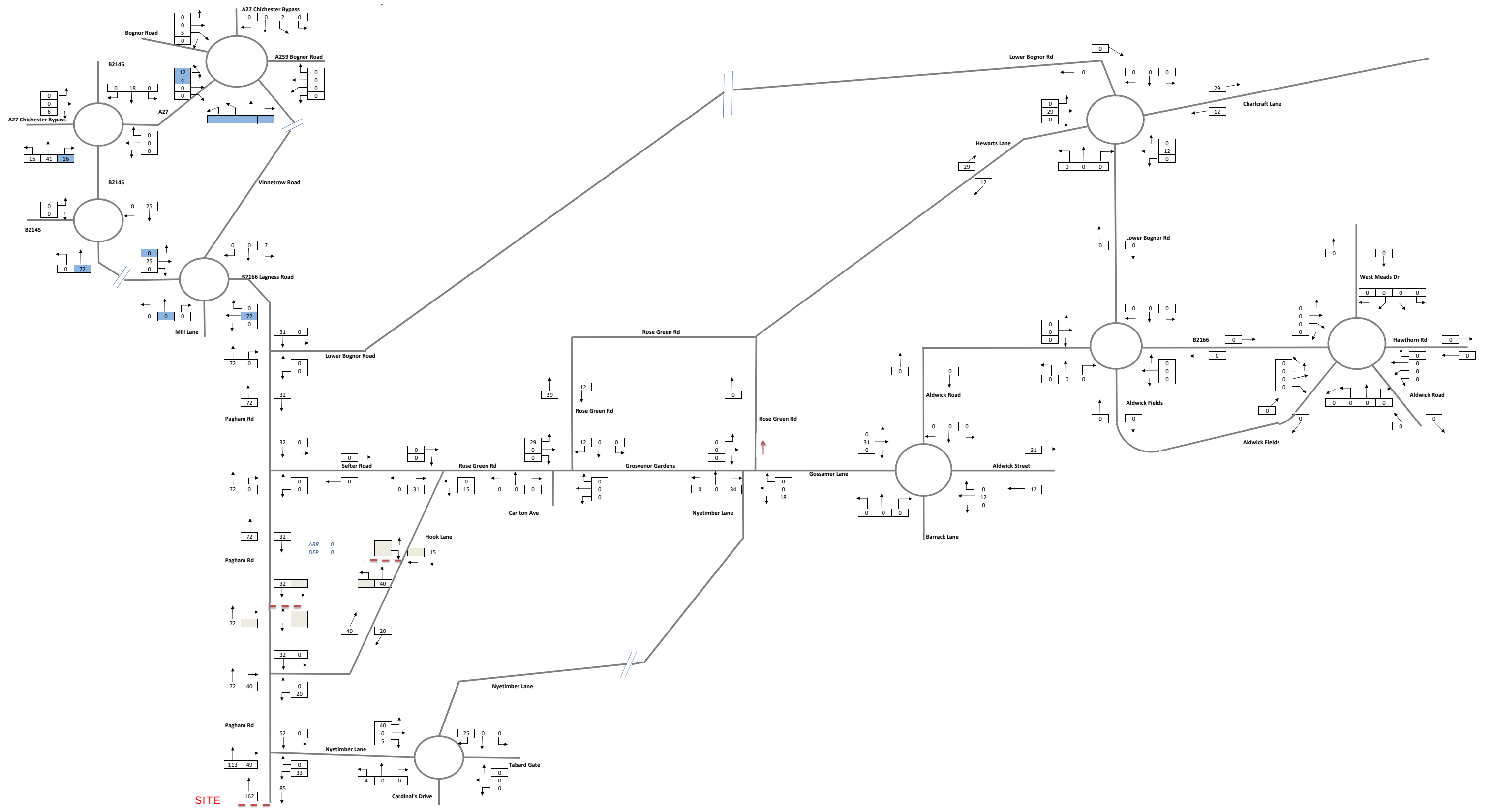
Includes: 300 Dwellings & 80 Bed Care Home

Hook Lane, Pagham
JNY 8840
Hook Lane Total Development traffic Flows
AM Peak (08:00 - 09:00)
All Vehicles



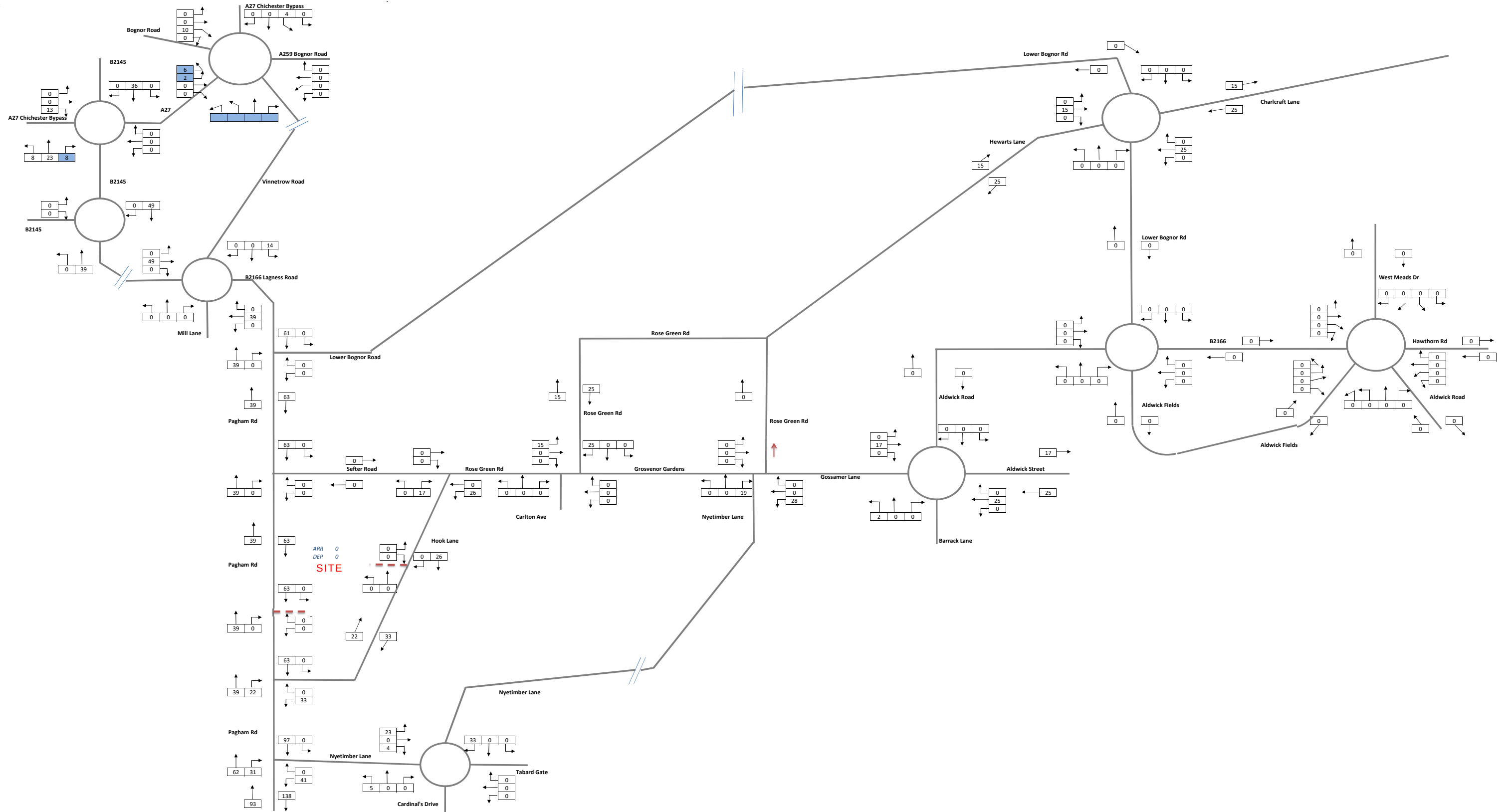
Includes: 300 Dwellings & 80 Bed Care Home

Hook Lane, PaghPM
JNY 8840
Hook Lane Total Development traffic Flows
PM Peak (17:00 - 18:00)
All Vehicles

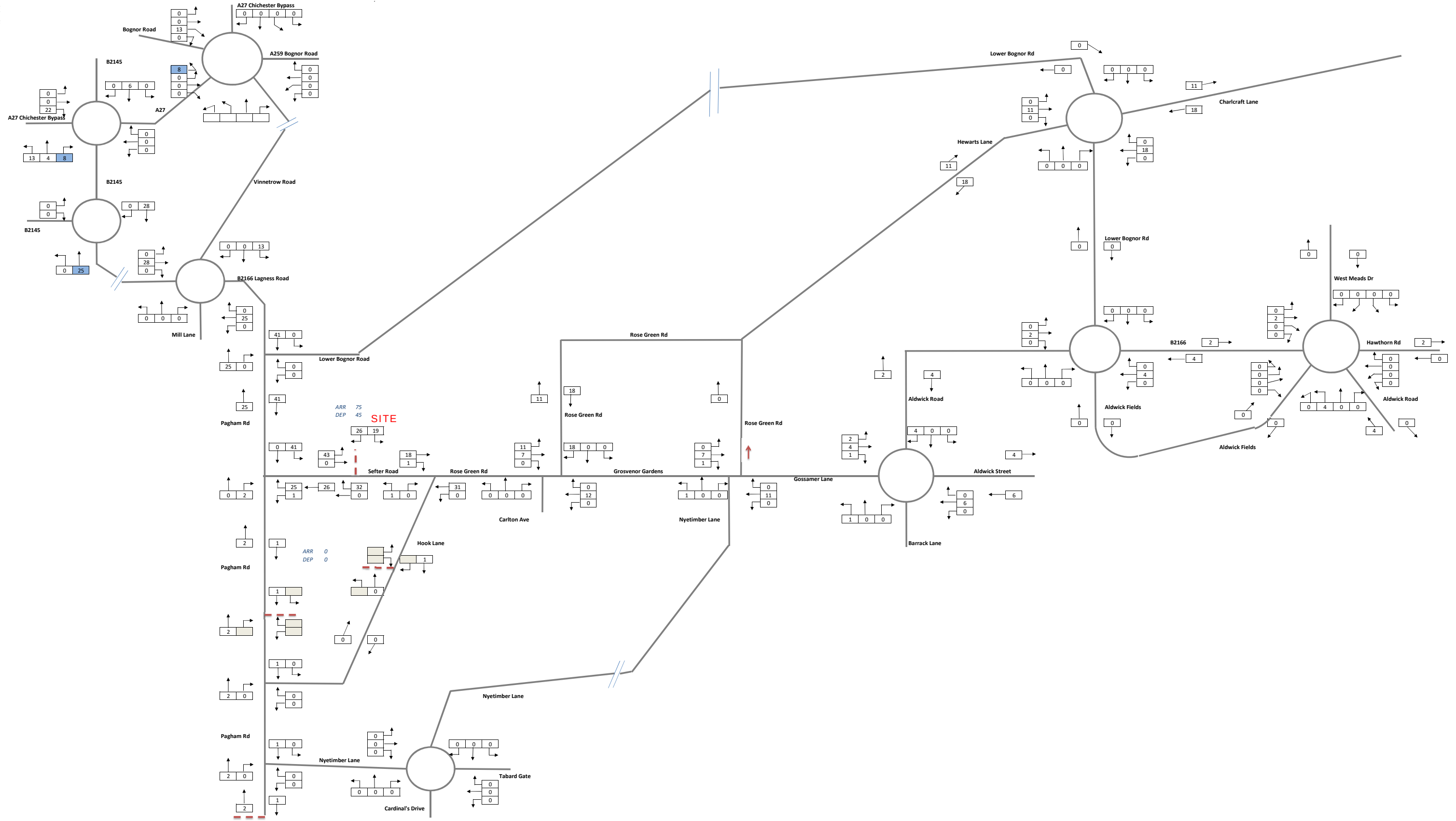


400 Residential Development + Care Home + Local Centre + Single Form Entry school
Flows from Highgate Transportation

Hook Lane, Pagham
JNY 8840
Pagham Road South Development Traffic Flows
AM Peak
All Vehicles



Hook Lane, Pagham
JNY 8840
Sefter Road North Development Traffic Flows
AM Peak
All Vehicles



Dataset Version:	70
Result Type:	Trip ends by time period
Base Year:	2016
Future Year:	2031
Trip Purpose Group:	All purposes
Time Period:	Weekday AM peak period (0700 - 0959)
Trip End Type:	Origin/Destination
Alternative Assumptions Applied:	Yes

Level	Area	Local Growth Figure
County	West Sussex	1.173135
Authority	Arun	1.179725
E02006560	Arun 019	1.124394

Assumptions applied
Base HH
4595
Future HH
4745 (+150)

Dataset Version:	70
Result Type:	Trip ends by time period
Base Year:	2016
Future Year:	2031
Trip Purpose Group:	All purposes
Time Period:	Weekday AM peak period (0700 - 0959)
Trip End Type:	Origin/Destination
Alternative Assumptions Applied:	No

Urban Area, Principal Rd

Level	Area	Local Growth Figure
County	West Sussex	1.173083
Authority	Arun	1.17962
E02006560	Arun 019	1.195937

Dataset Version:	70
Result Type:	Trip ends by time period
Base Year:	2016
Future Year:	2031
Trip Purpose Group:	All purposes
Time Period:	Weekday PM peak period (1600 - 1859)
Trip End Type:	Origin/Destination
Alternative Assumptions Applied:	Yes

Level	Area	Local Growth Figure
County	West Sussex	1.17439
Authority	Arun	1.181764
E02006560	Arun 019	1.117648

Assumptions applied
Base HH = 4595
Future HH = 4745 (+150)

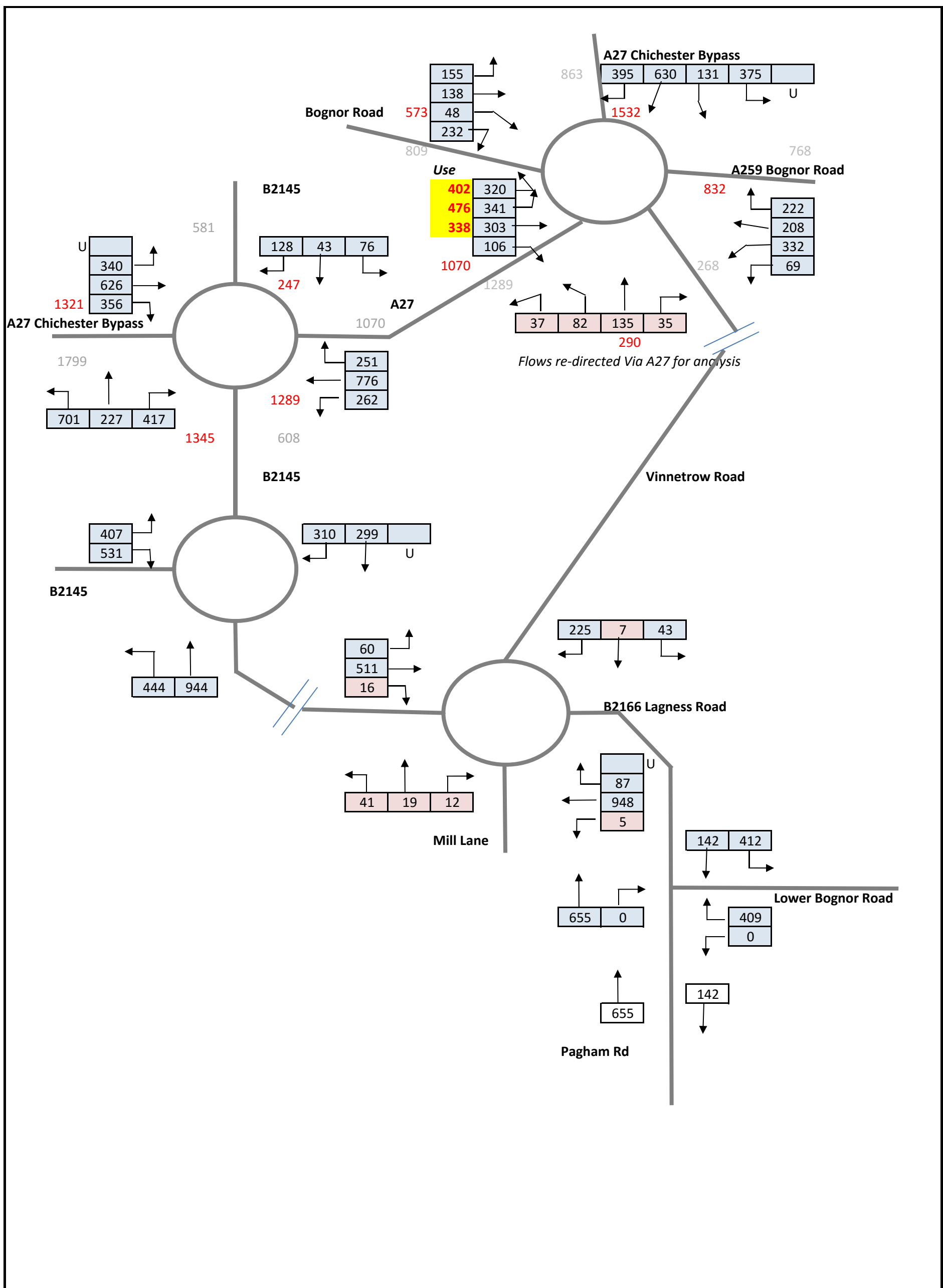
Dataset Version:	70
Result Type:	Trip ends by time period
Base Year:	2016
Future Year:	2031
Trip Purpose Group:	All purposes
Time Period:	Weekday PM peak period (1600 - 1859)
Trip End Type:	Origin/Destination
Alternative Assumptions Applied:	No

		Urban Area, Principal Rd
Level	Area	Local Growth Figure
County	West Sussex	1.174338
Authority	Arun	1.181712
E02006560	Arun 019	1.200068









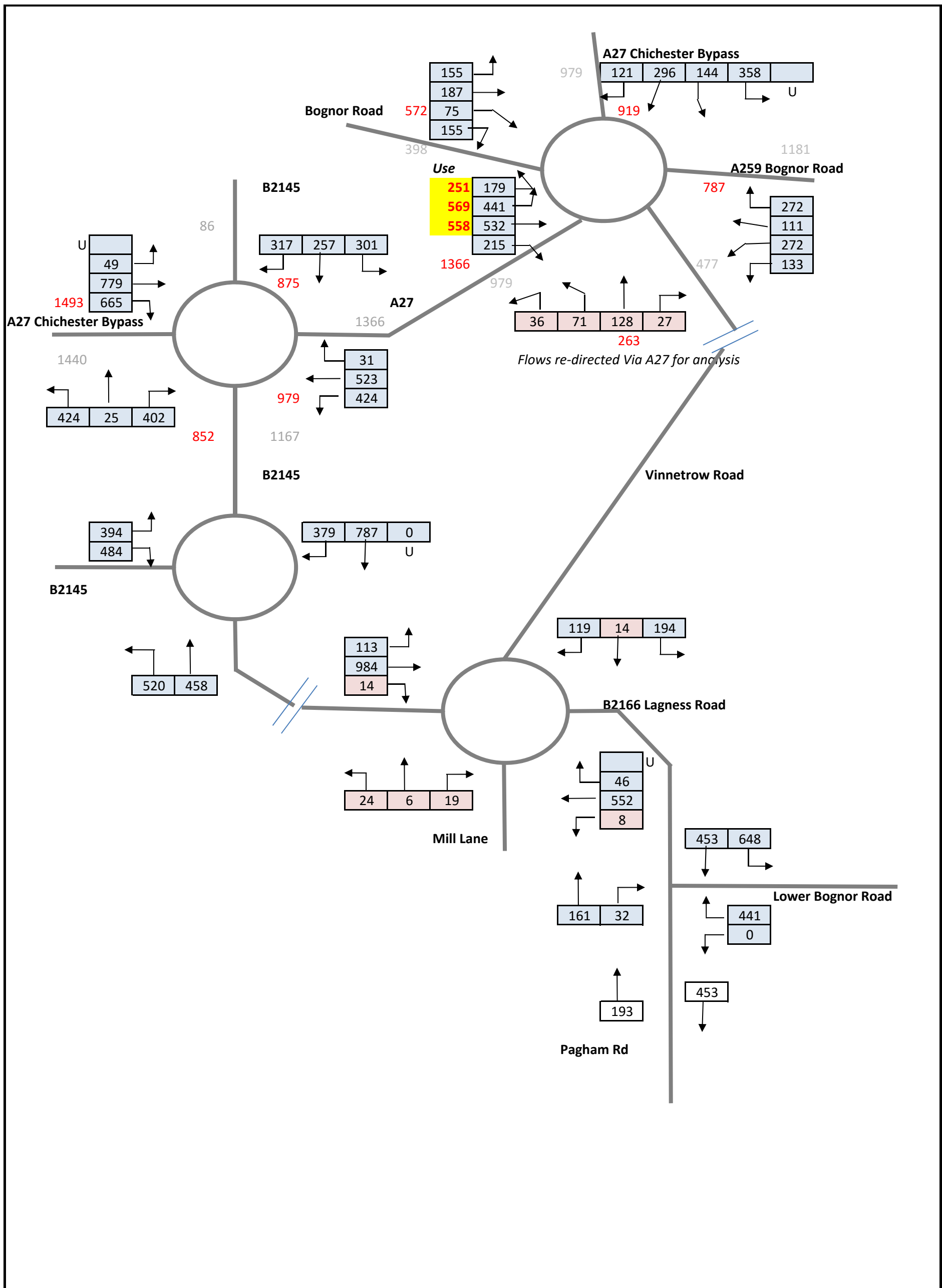
Note: The entry flows at the Bognor Road junction have been assigned in proportion to the exit flows provided in the SATURN model

Based 2031 Observed flows used as no flows were provided in SATURN model

Growth Rate : 1.195 (Chichester 2016 - 2031)

Hook Lane, Pagham
JNY 8840
2031+ All Devs (SATURN FLOWS)
AM Peak - No Mitigation
PCU's





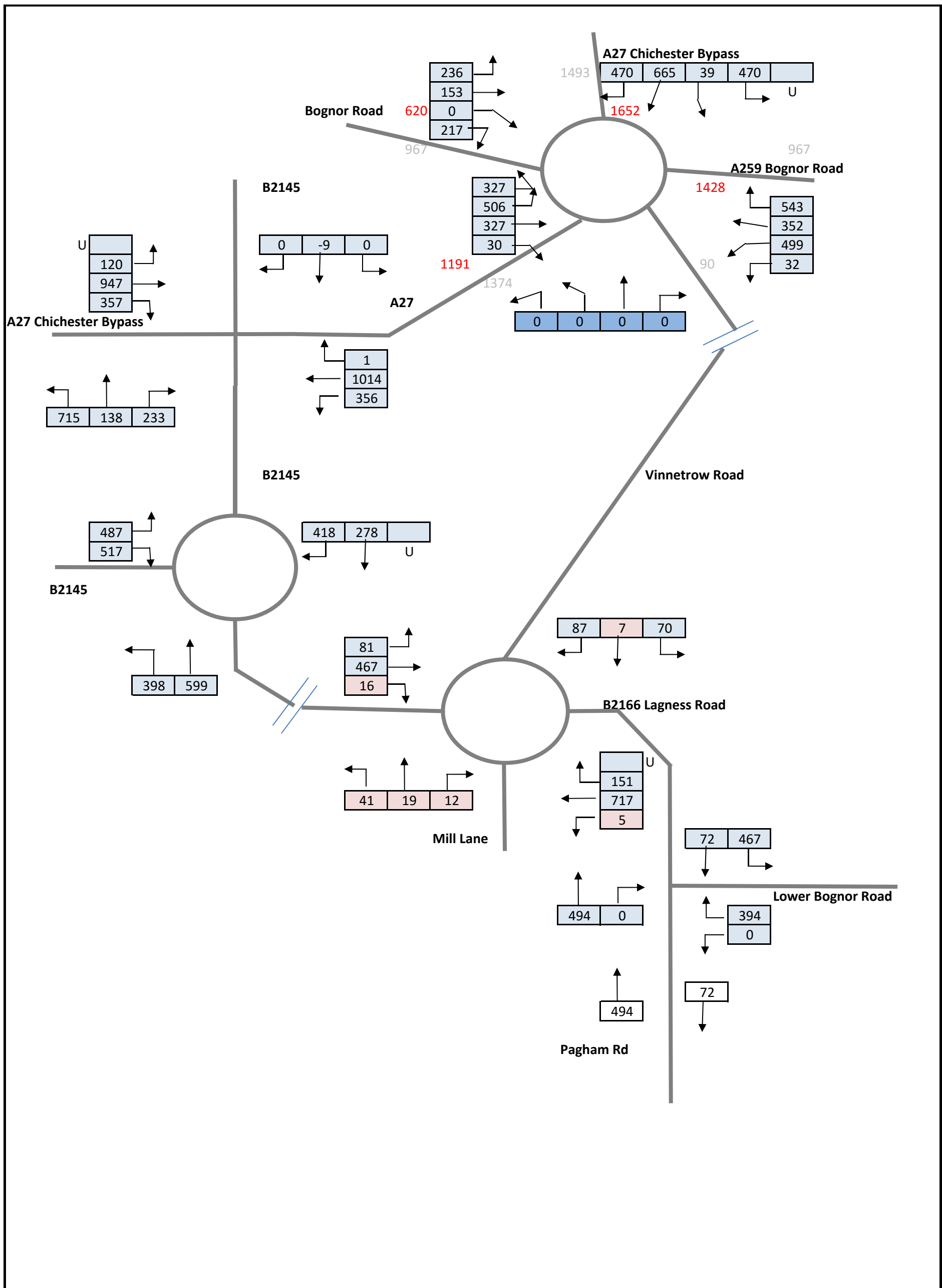
Note: The entry flows at the Bognor Road junction have been assigned in proportion to the exit flows provided in the SATURN model

Based 2031 Observed flows used as no flows were provided in SATURN model

Growth Rate : 1.198 (Chichester 2016 - 2031)

Hook Lane, Pagham
JNY 8840
2031+ All Devs (SATURN FLOWS)
PM Peak - No Mitigation
PCU's





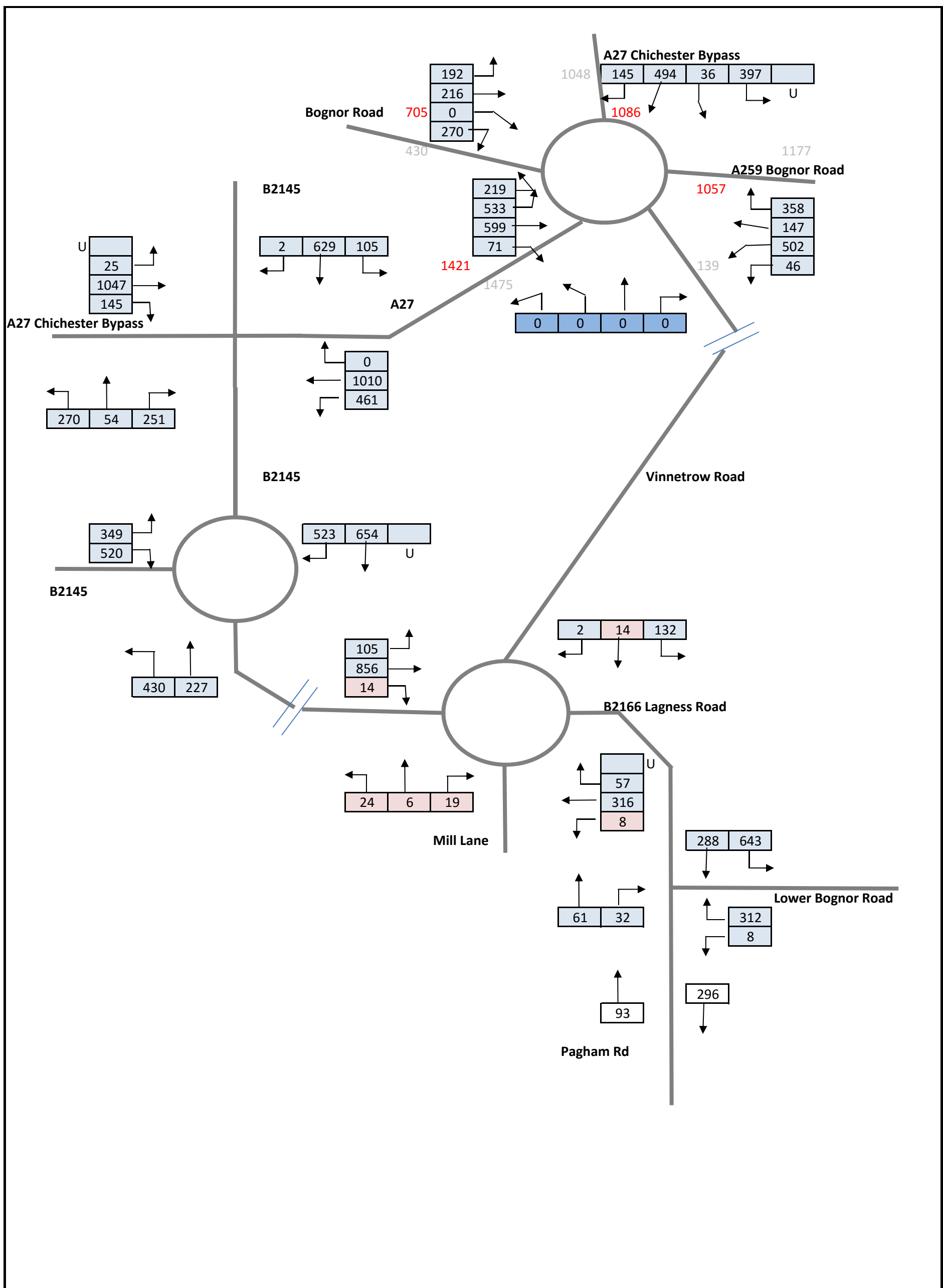
Note: The entry flows at the Bognor Road junction have been assigned in proportion to the exit flows provided in the SATURN model

Based 2031 Observed flows used as no flows were provided in SATURN model

Growth Rate : 1.195 (Chichester 2016 - 2031)

Hook Lane, Pagham
JNY 8840
2031 - Exc Pagham Devs (SATURN FLOWS)
AM Peak - With Mitigation
PCU's





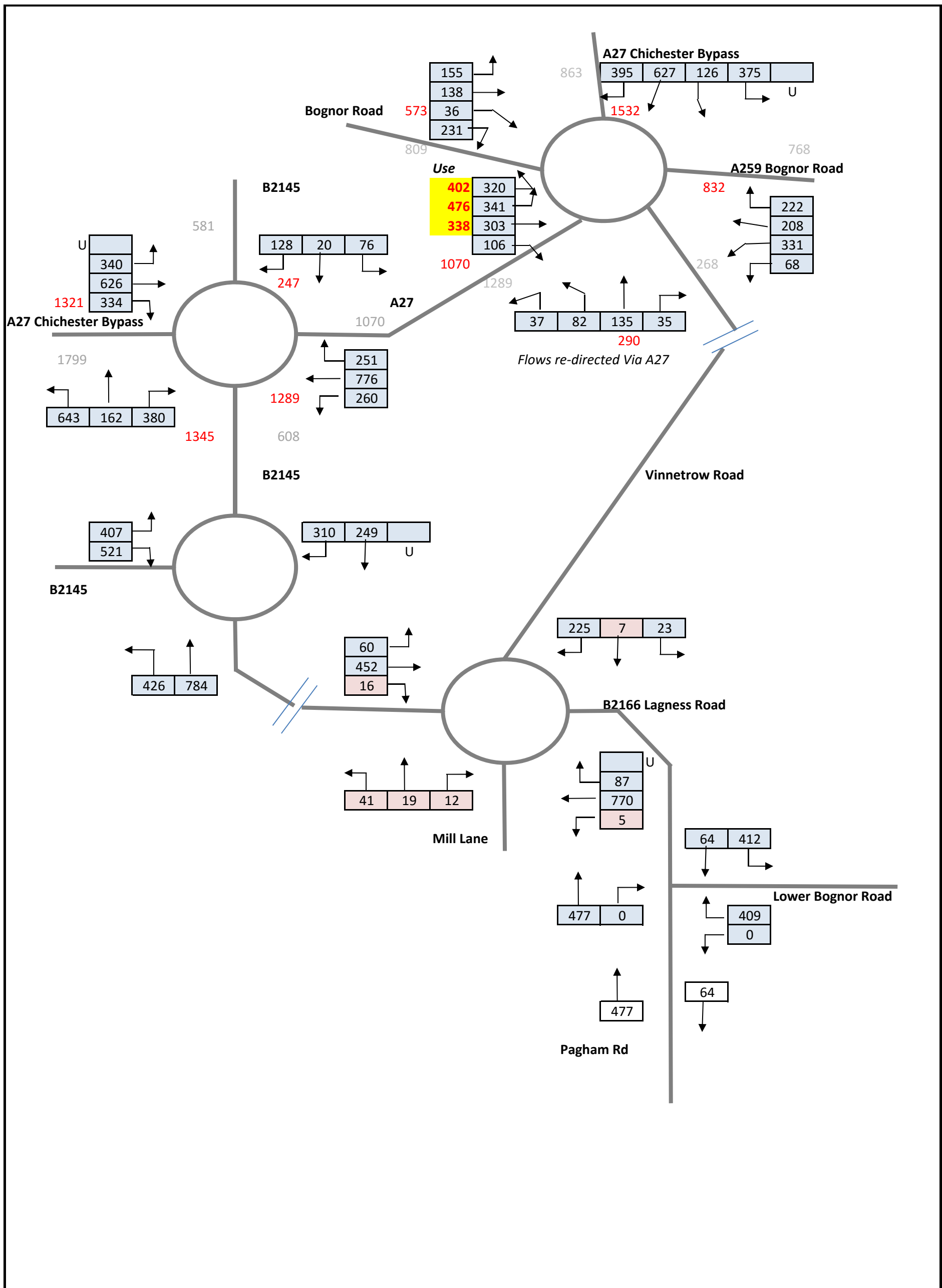
Note: The entry flows at the Bognor Road junction have been assigned in proportion to the exit flows provided in the SATURN model

Based 2031 Observed flows used as no flows were provided in SATURN model

Growth Rate : 1.198 (Chichester 2016 - 2031)

Hook Lane, Pagham
JNY 8840
2031 - Exc Pagham Devs (SATURN FLOWS)
PM Peak - With Mitigation
PCU's





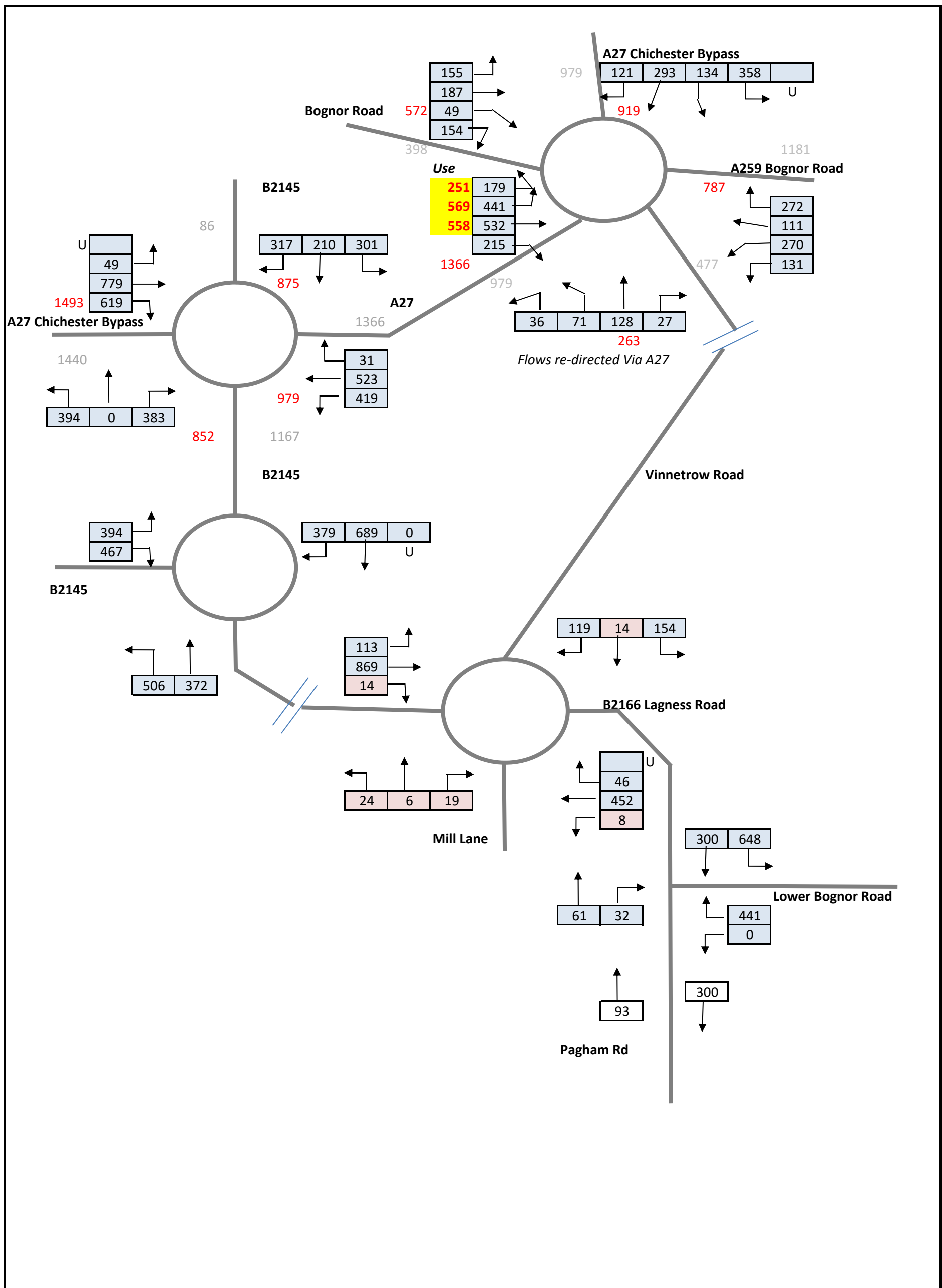
Note: The entry flows at the Bognor Road junction have been assigned in proportion to the exit flows provided in the SATURN model

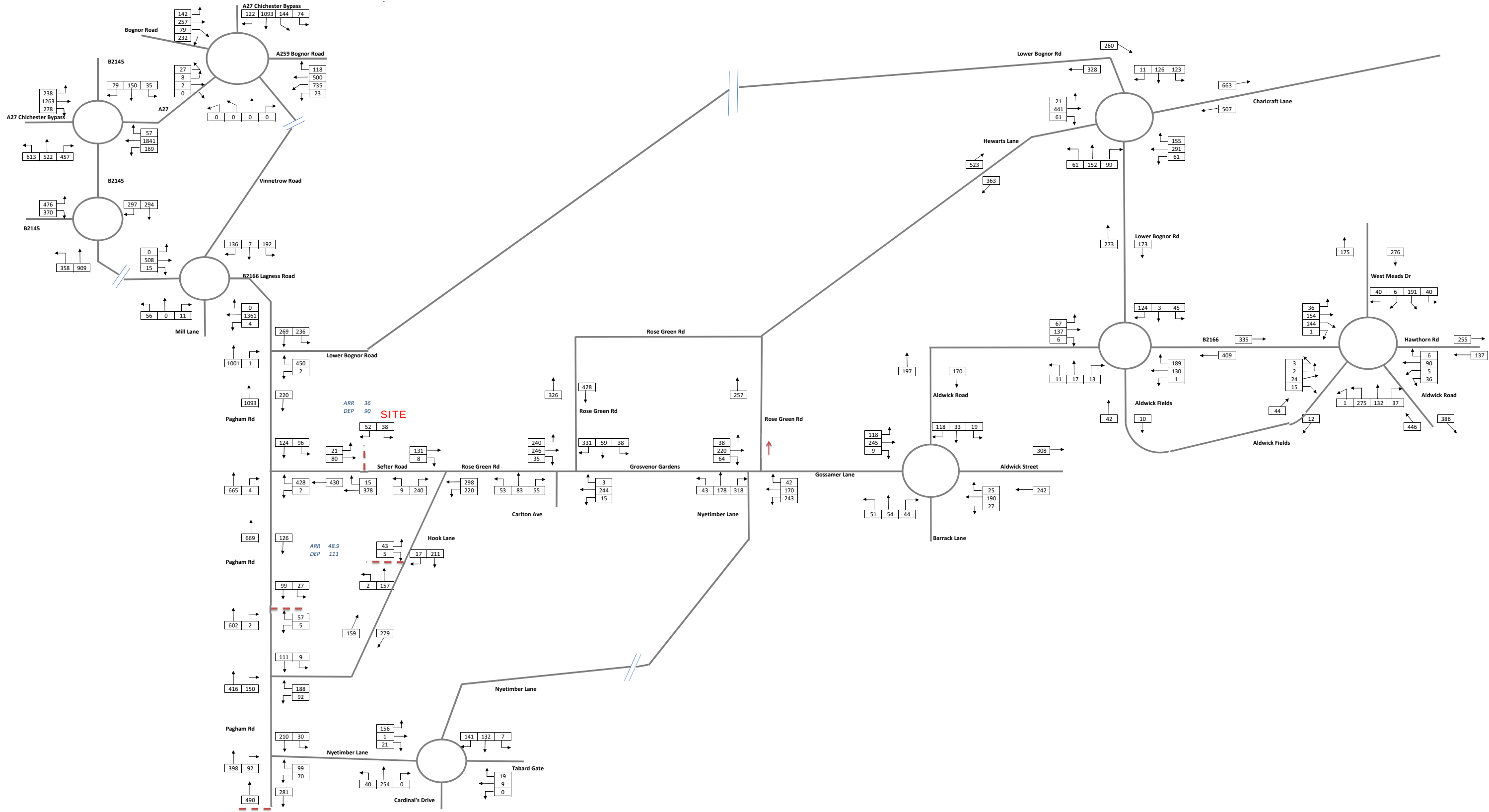
Based 2031 Observed flows used as no flows were provided in SATURN model

Growth Rate : 1.195 (Chichester 2016 - 2031)

Hook Lane, Pagham
JNY 8840
2031 - Exc Pagham Devs (SATURN FLOWS)
AM Peak - No Mitigation
PCU's



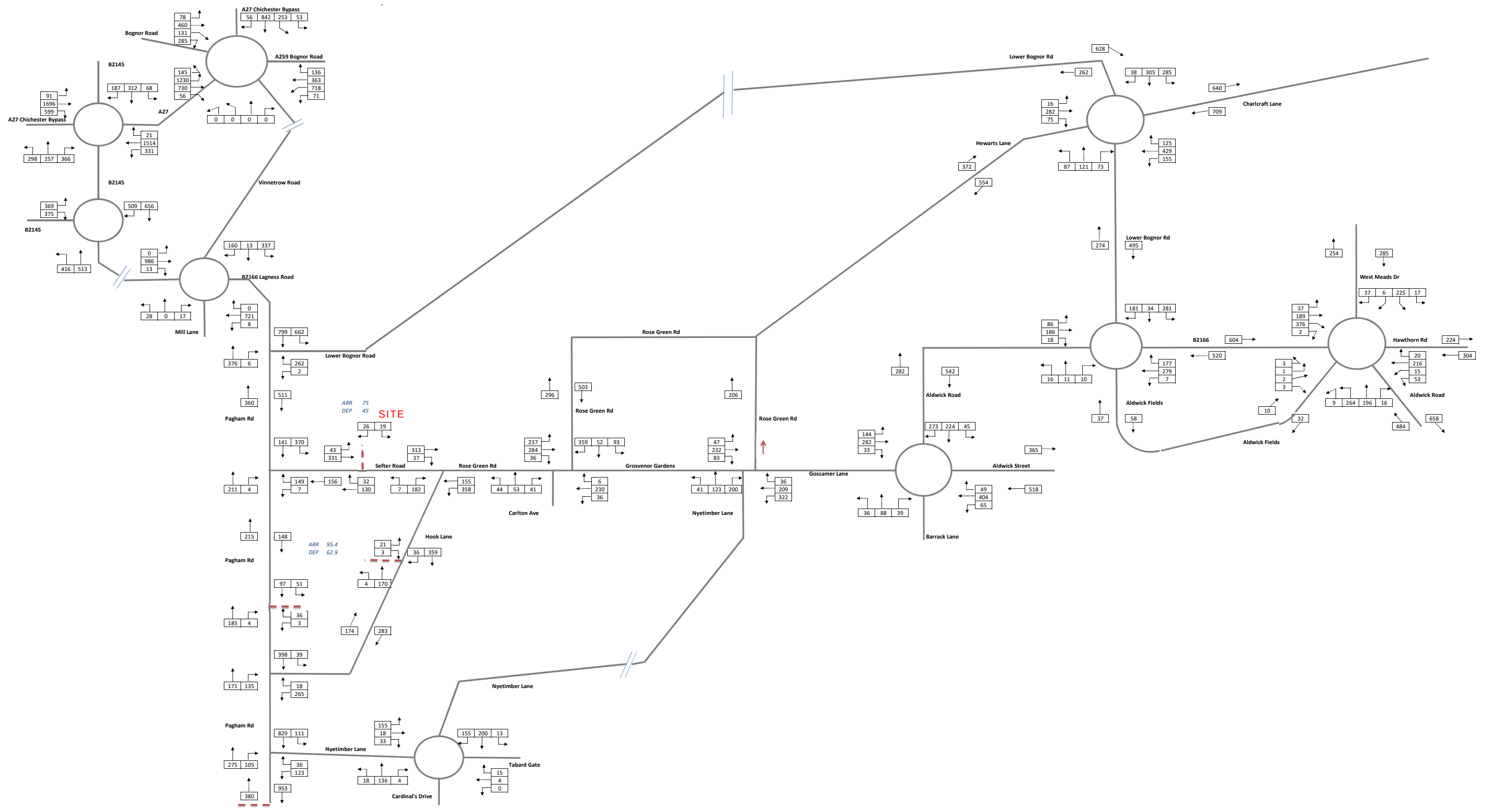




Includes:
Pagham Road Site - residential (400 Dwellings), Care Home & Local Centre & school
Hook Lane Site - 300 Dwellings & Care Home
Seftor lane -Total 250 dwellings

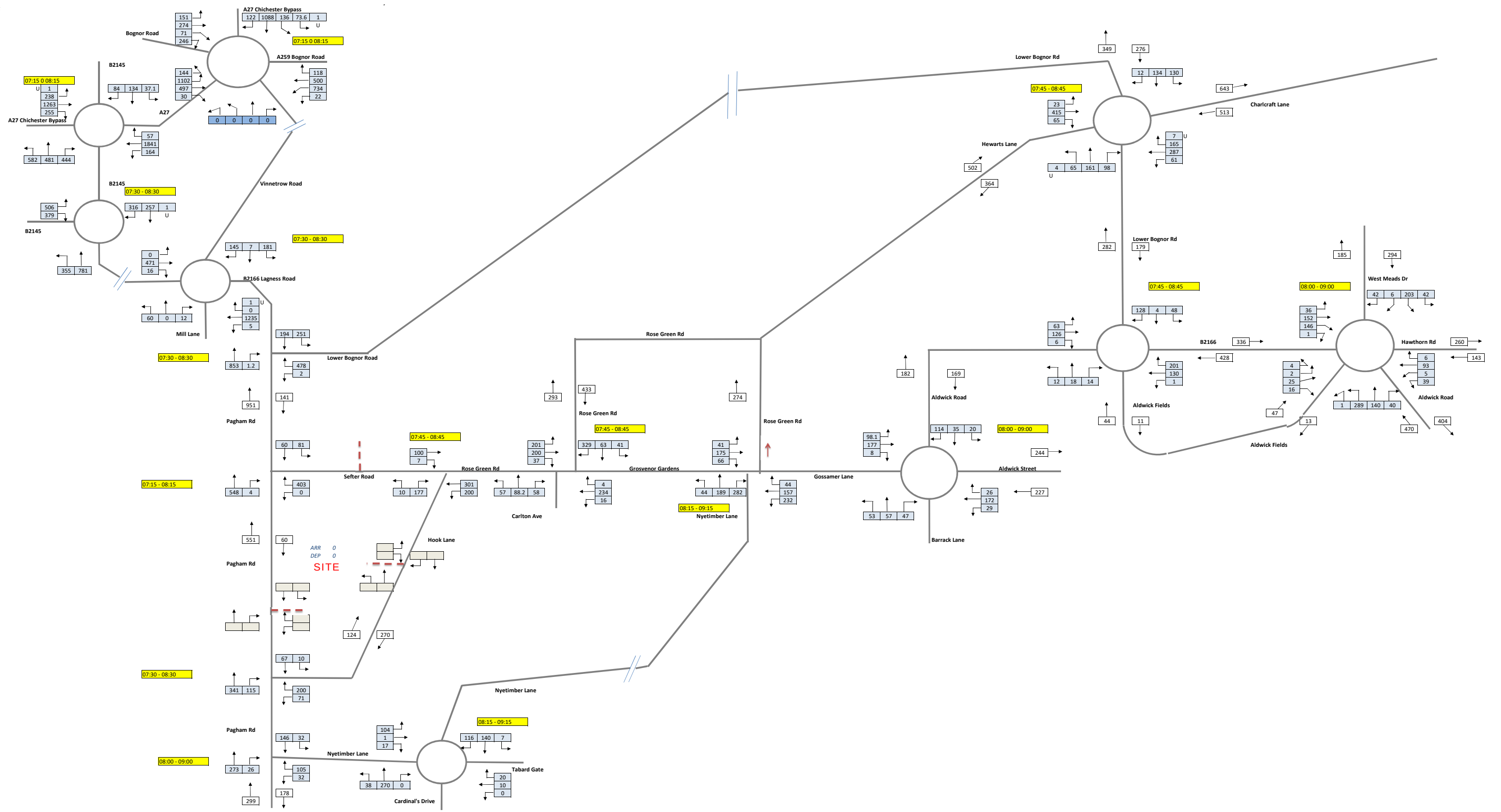
Vinnetrow Road changed to one-way as per HE proposals

Hook Lane, Pagham
JNY 8840
2031 Base + Committed + ALL Development Traffic Flows
AM Peak
All Vehicles



Includes:
Pagham Road Site - residential (400 Dwellings), Care Home & Local Centre & school
Hook Lane Site - 300 Dwellings & Care Home
Sefter lane -Total 250 dwellings
Vinnetrow Road changed to one-way as per HE proposals

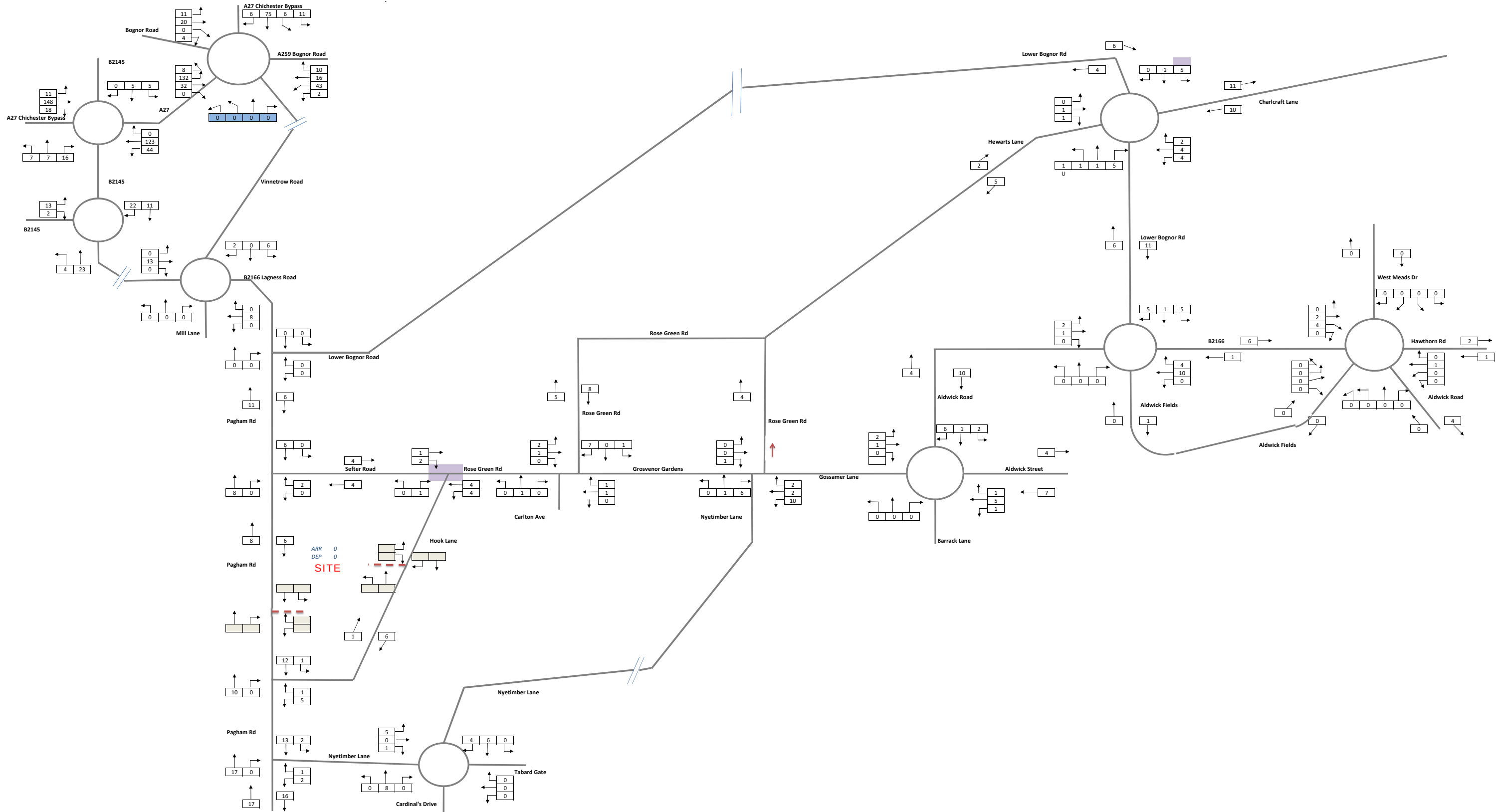
Hook Lane, Pagham
JNY 8840
2031 Base + Committed + ALL Development Traffic Flows
PM Peak
All Vehicles

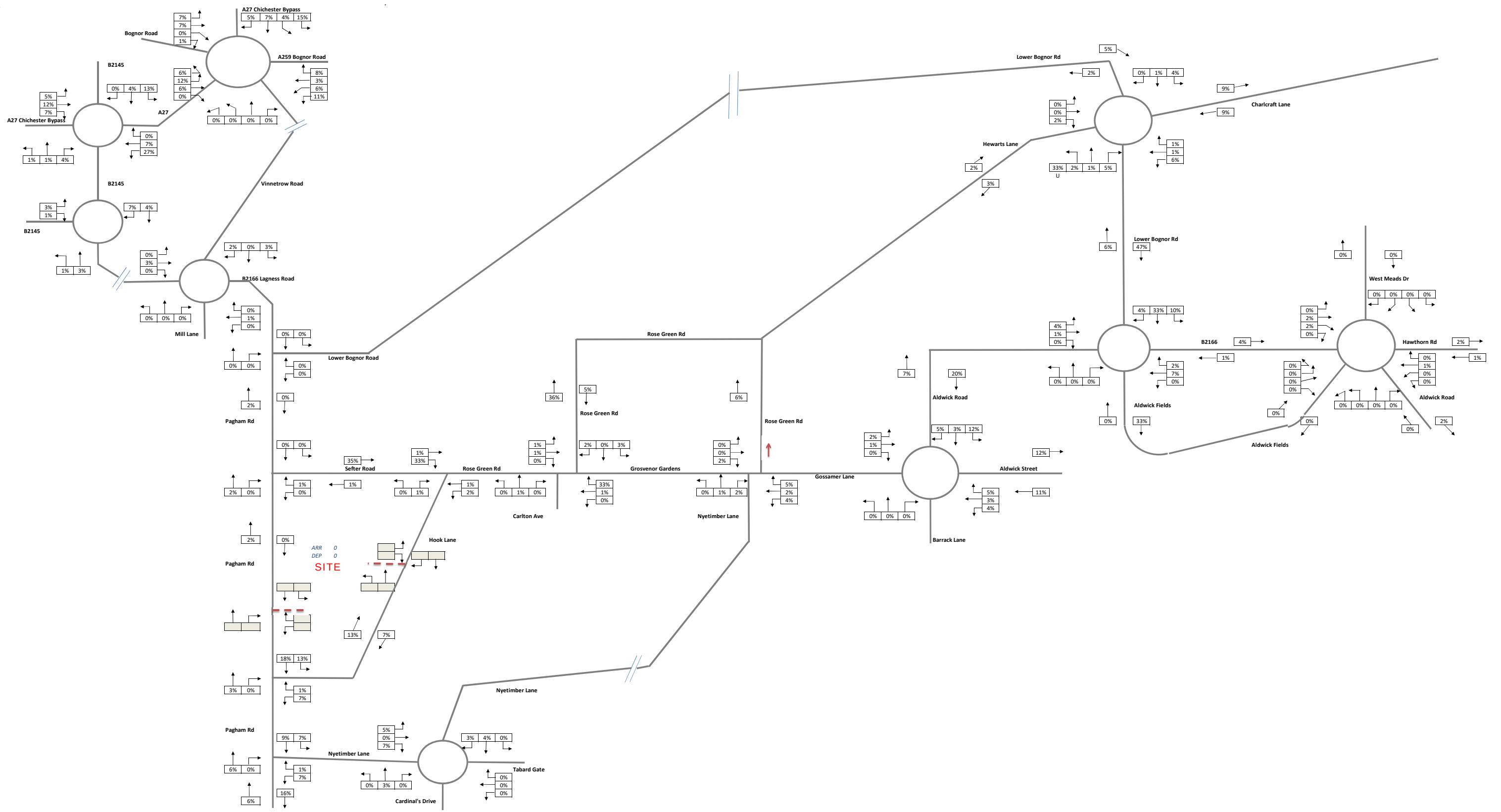


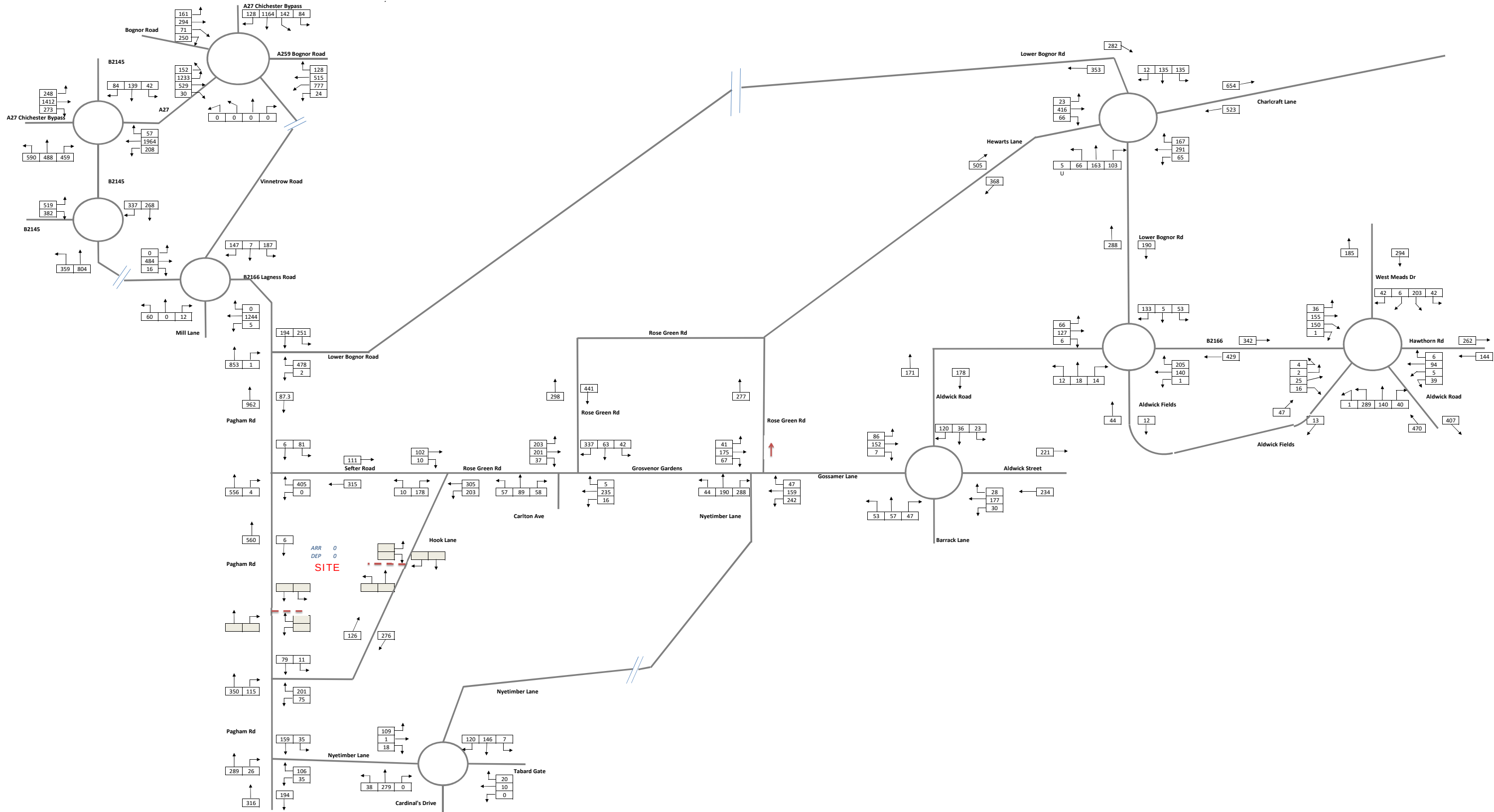
Figures above include Cars, LGV, OGV1, OGV2 & PSV
Each Junction Peak Period Identified
2016 - 2031 Growth Rate: Arun district
AM 1.196 Principal
1.21 Trunk Road

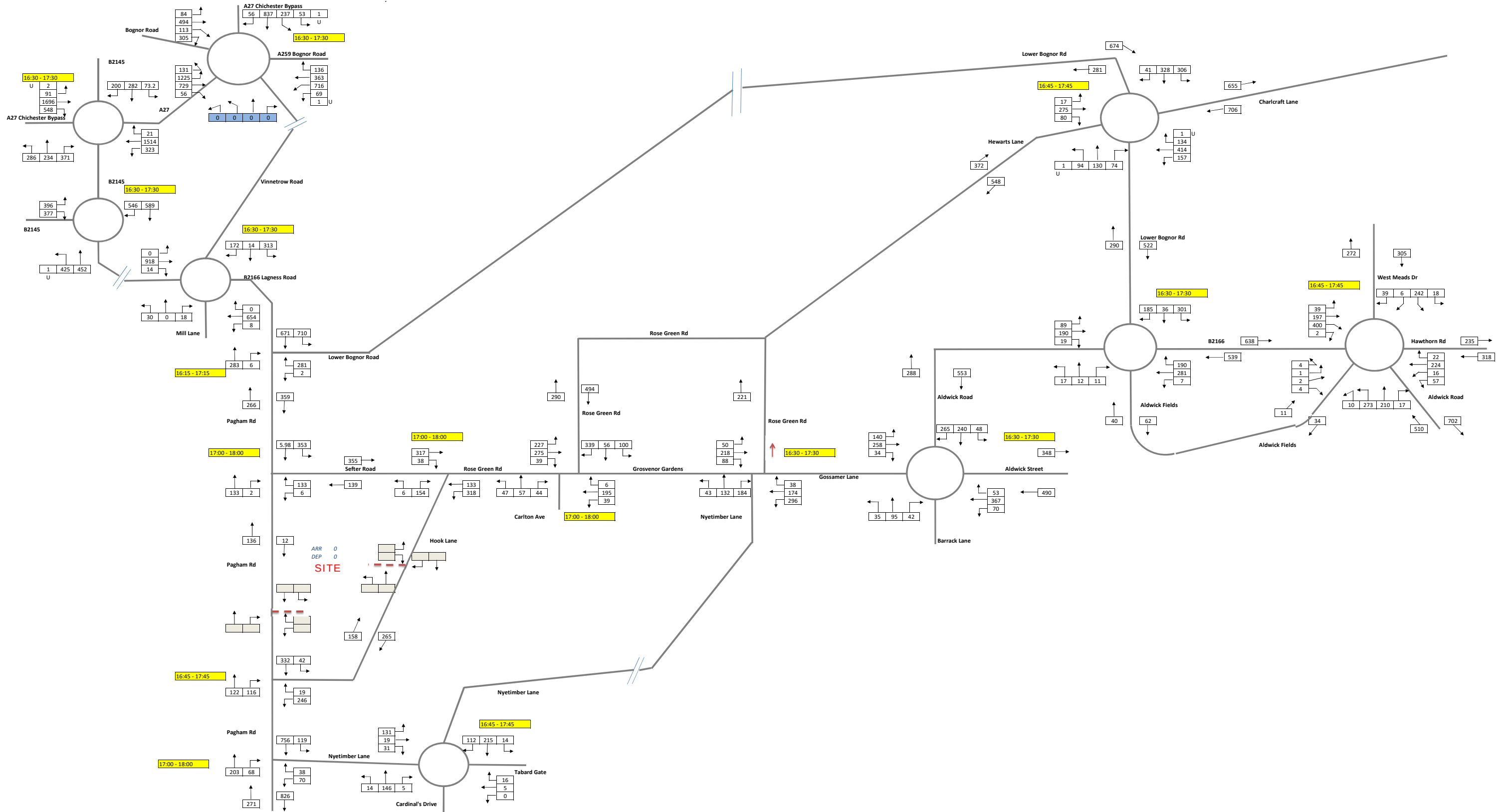
Hook Lane, Pagham

2031 Base Traffic Flows
AM Peak (various Times)
All Vehicles







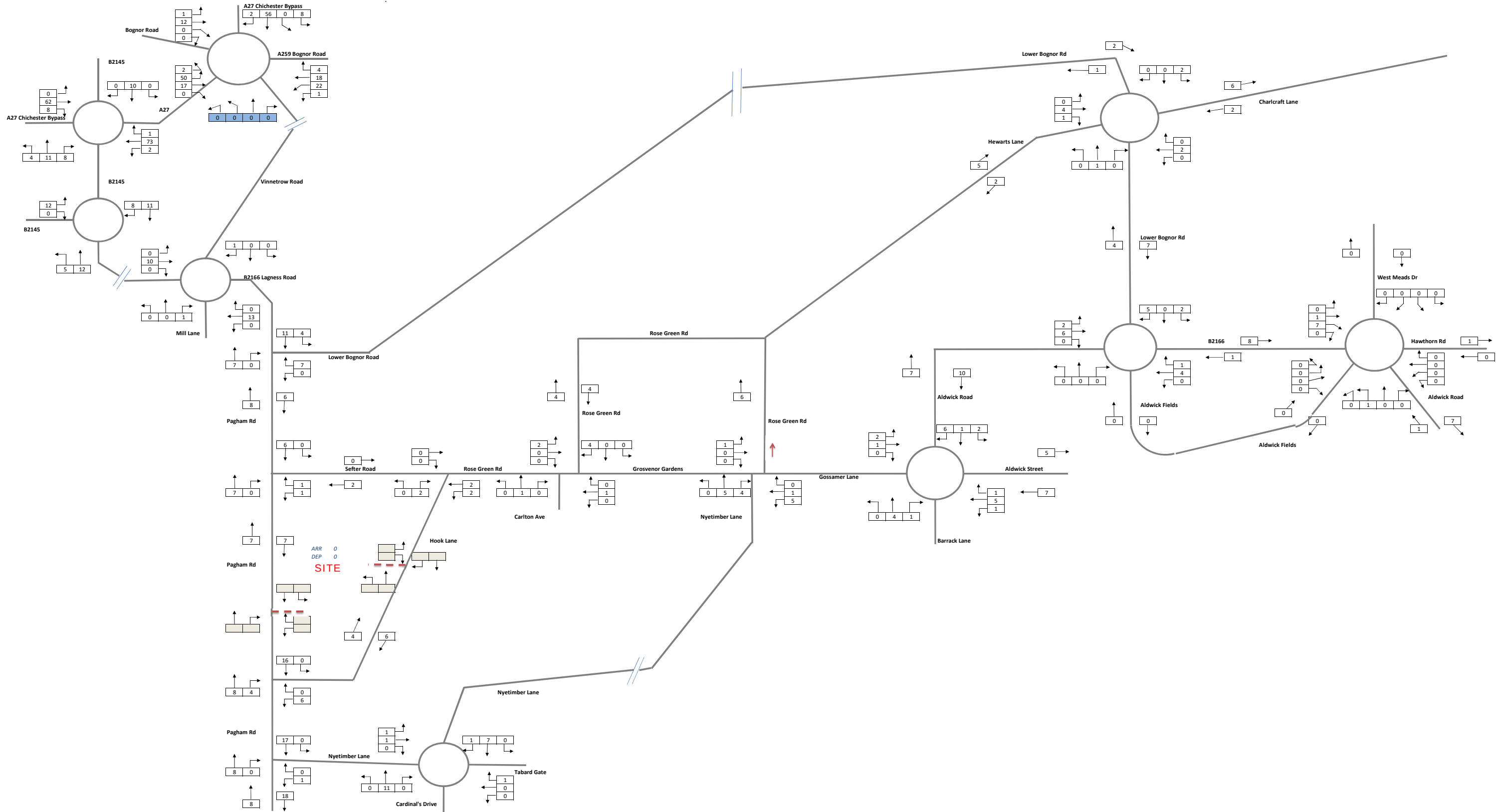


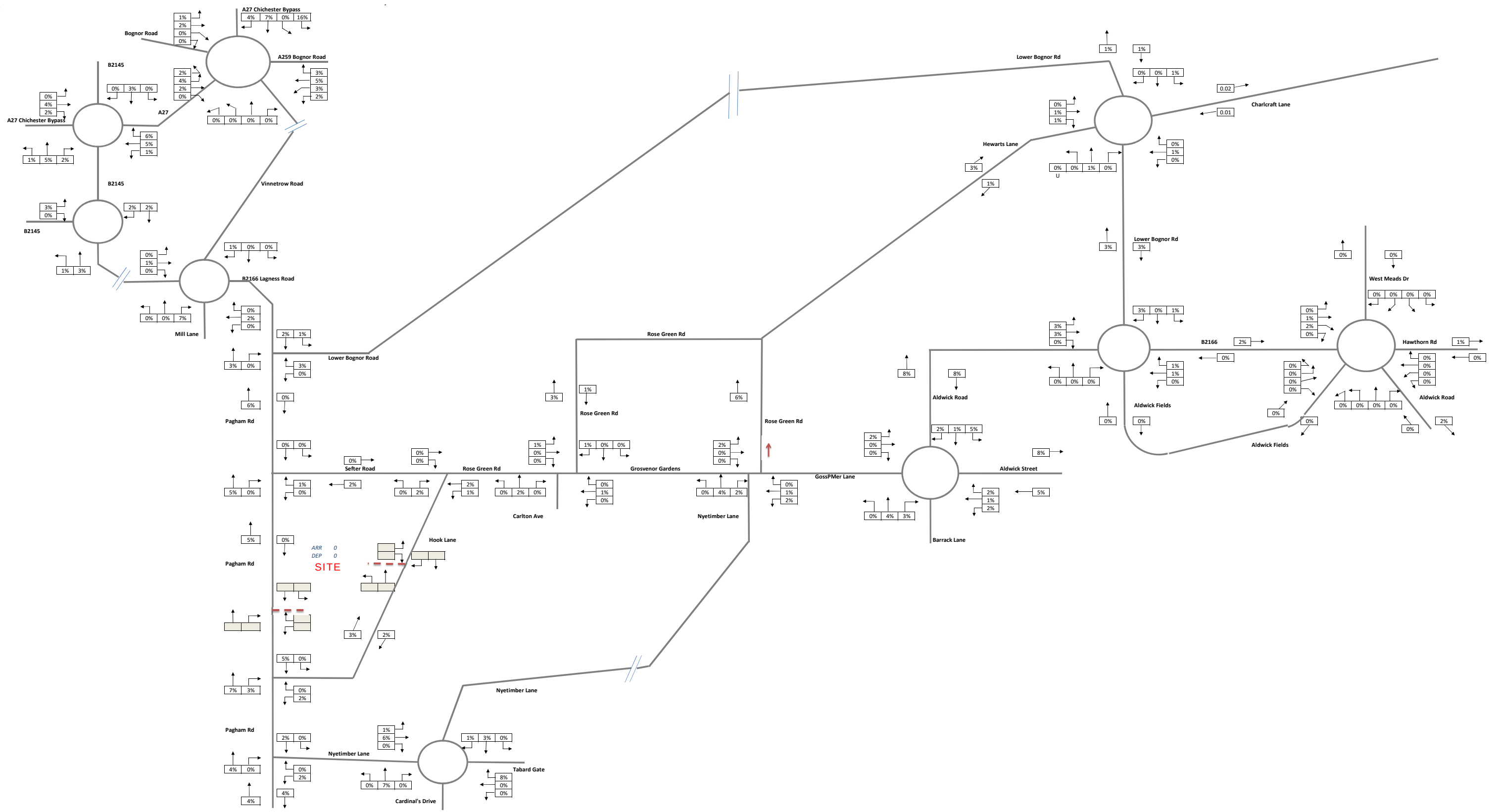
Figures above include Cars, LGV, OGV1, OGV2 & PSV
2016 - 2031 Growth Rate: Arun district
Principal Road
PM 1.200

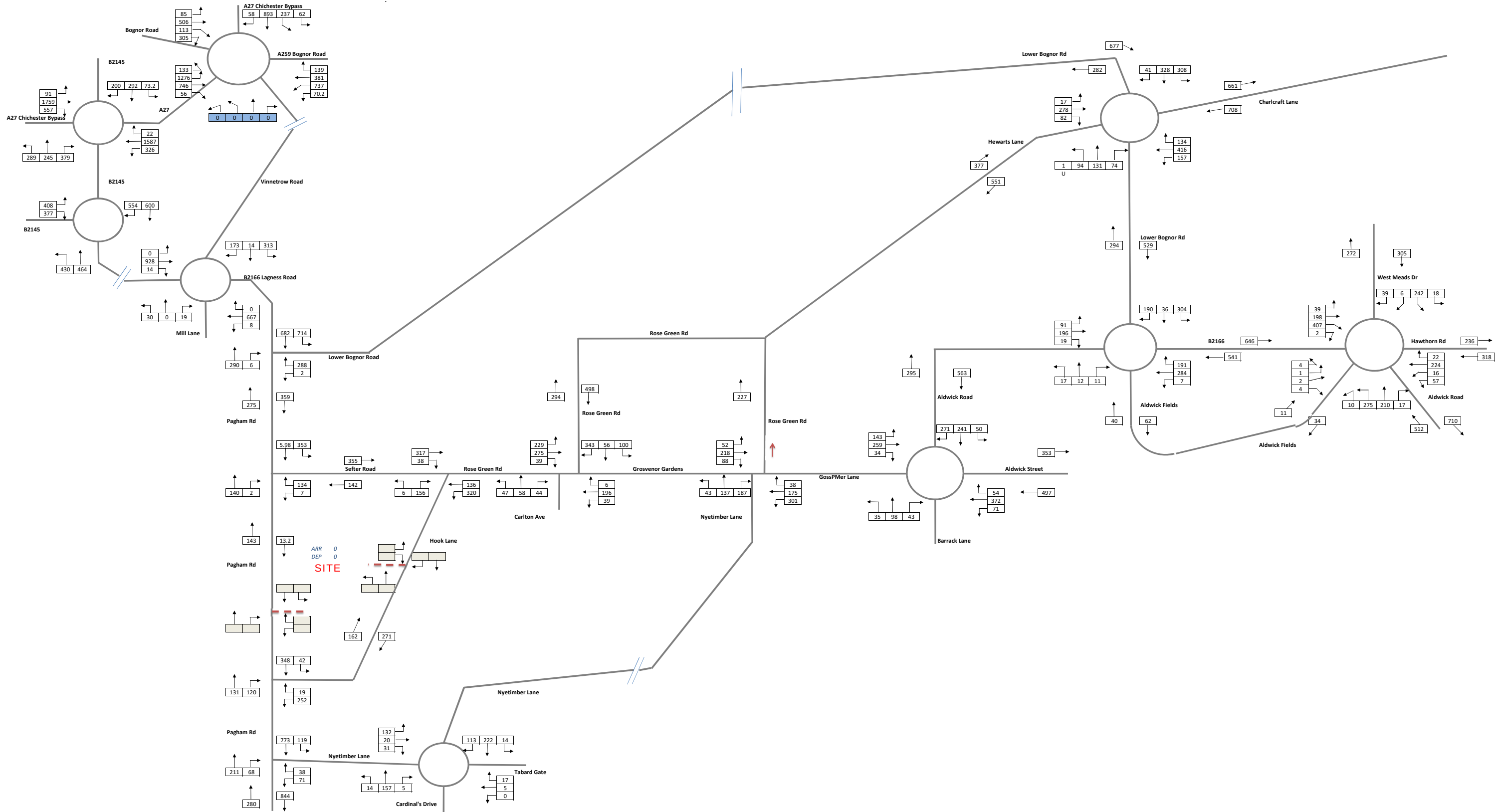
Trunk Road
PM 1.21

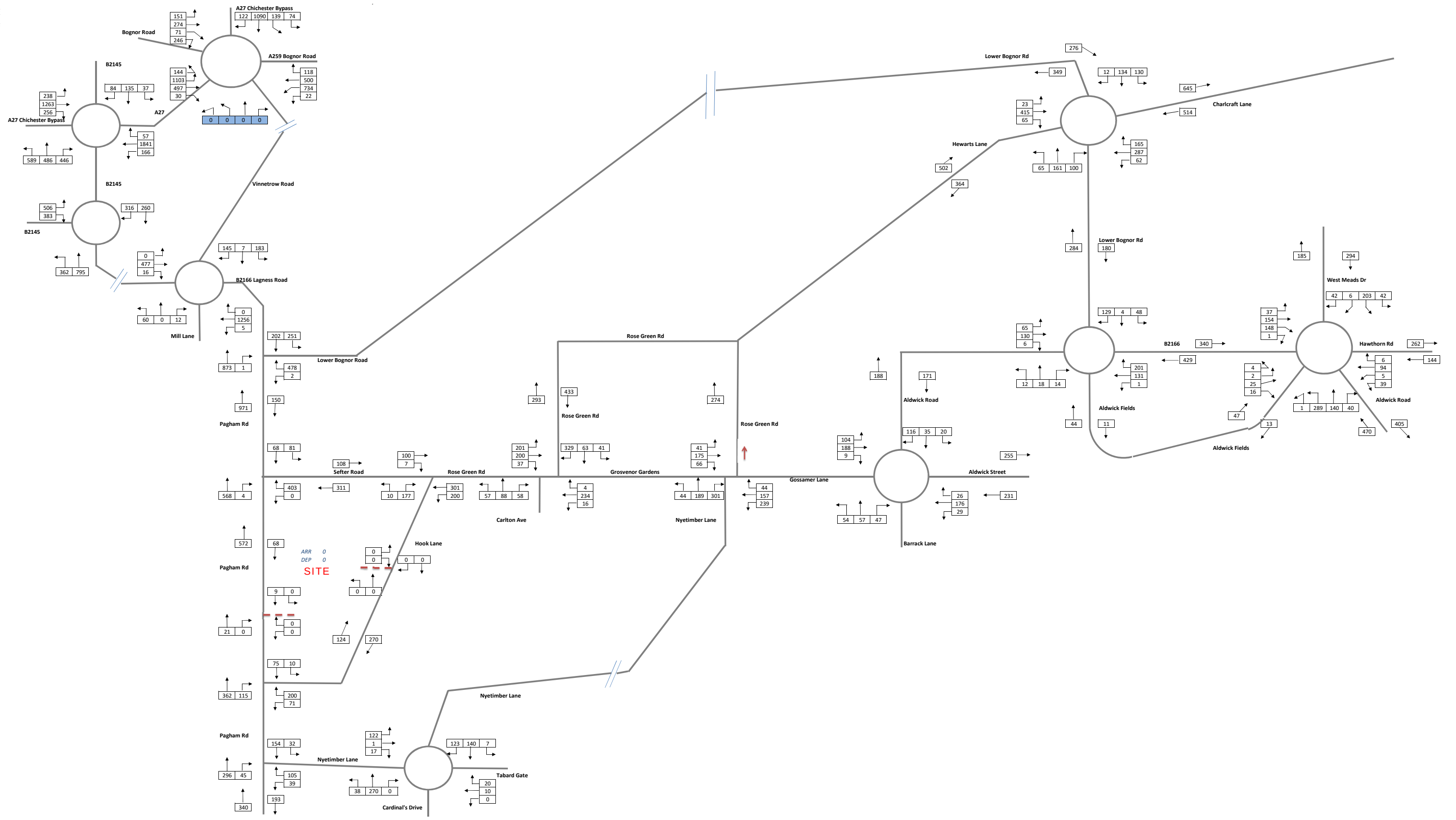
Hook Lane, Pagham

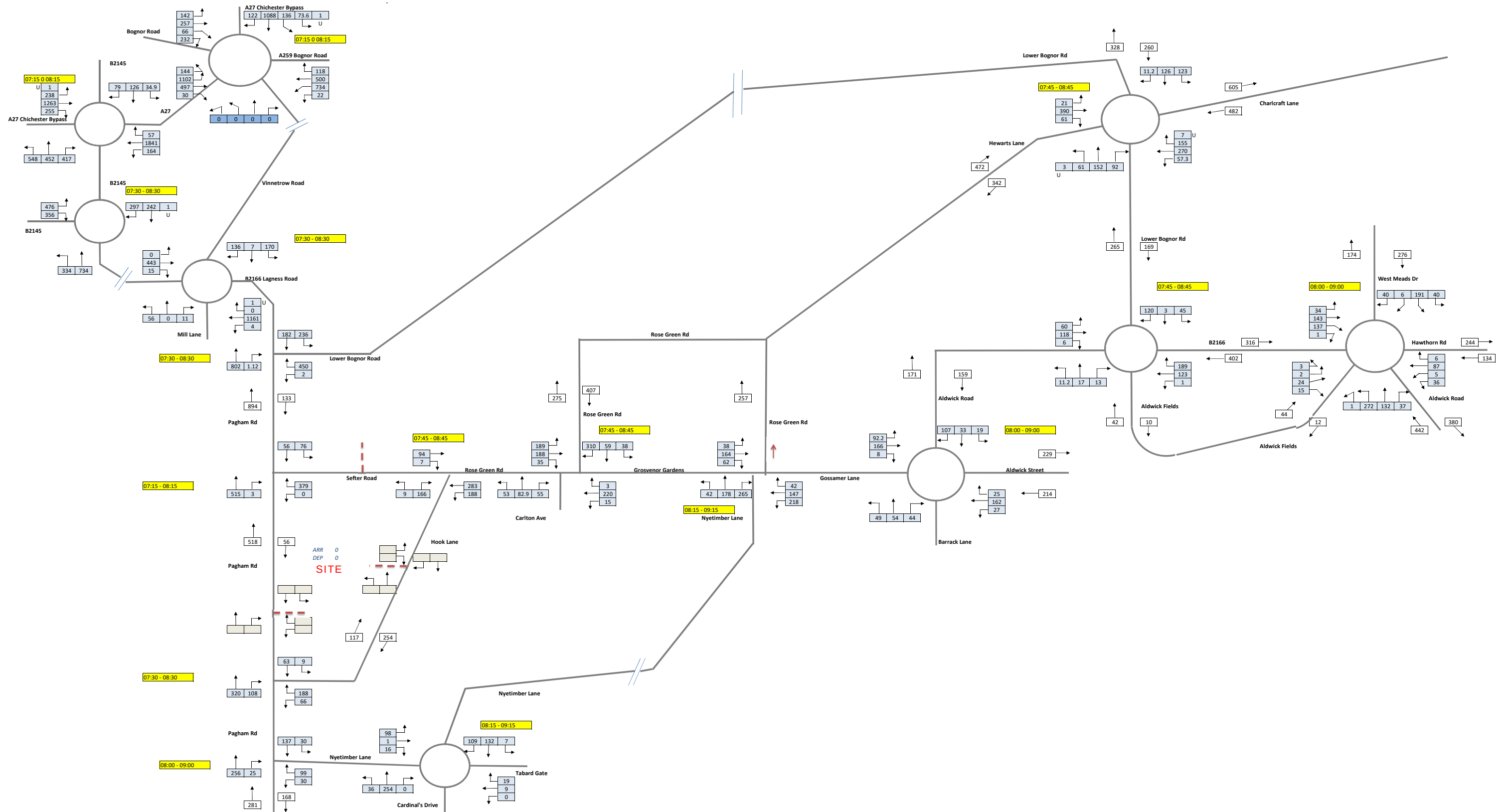
2031 Base Traffic Flows
PM Peak (Various Times)
All Vehicles

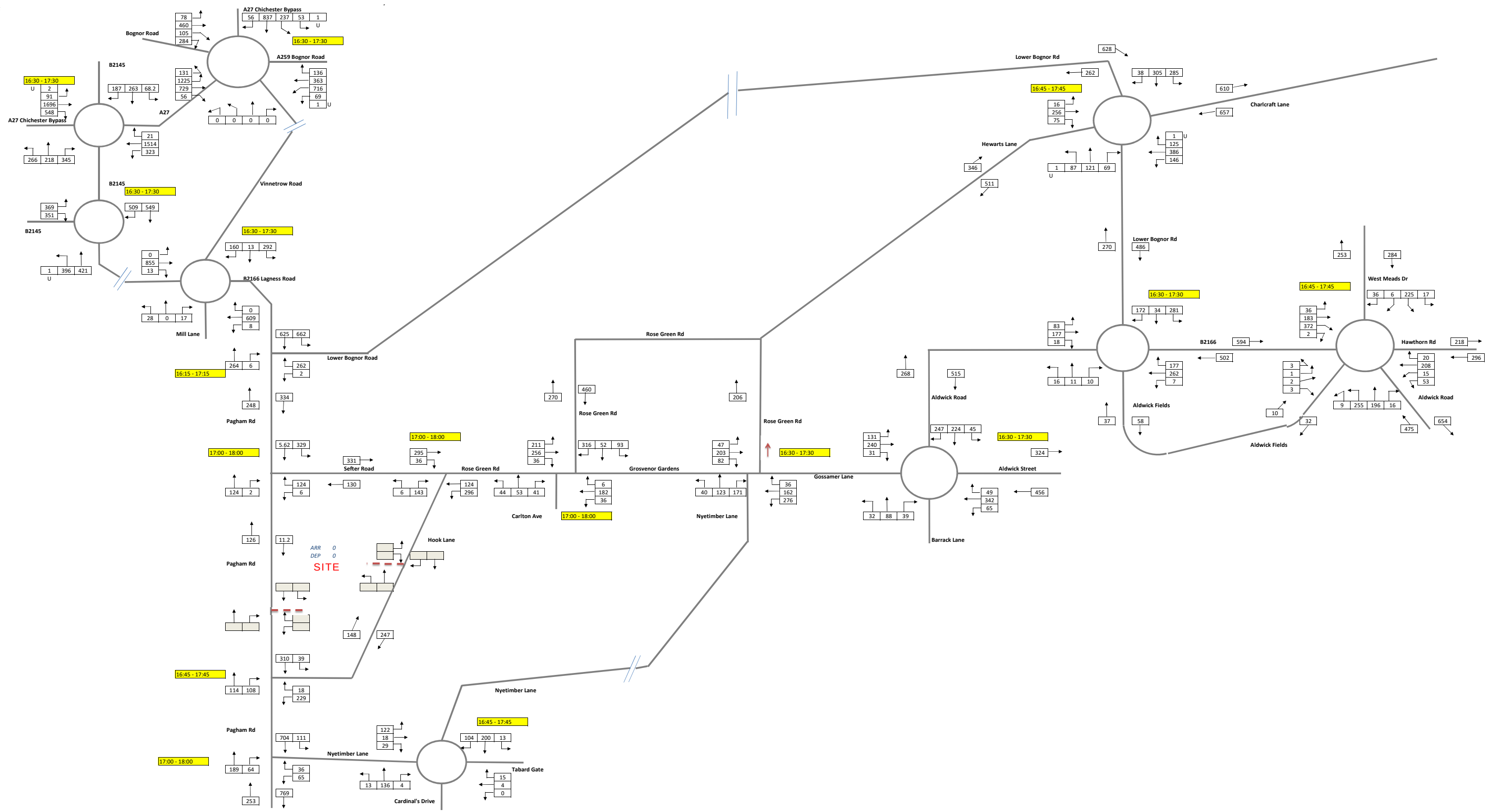










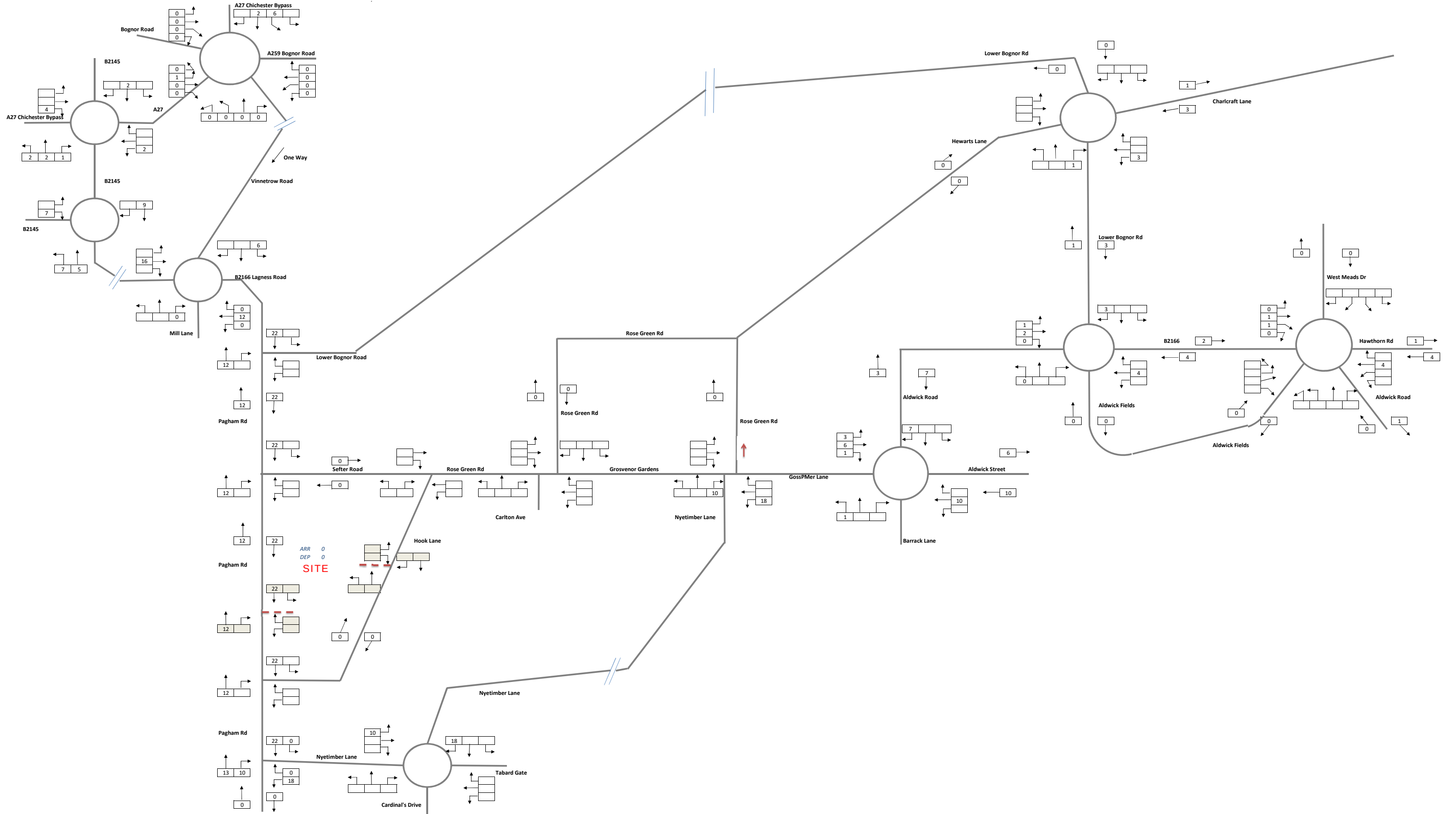


Figures above include Cars,LGV, OGV1, OGV2 & PSV
2016 - 2031 Growth Rate: Arun district
Principal Road
AM 1.118 (DISCOUNTED RATES APPLIED)

Trunk Road
PM 1.21

Hook Lane, Pagham

2031 Base Traffic Flows
PM Peak (Various Times)
All Vehicles



Junctions 9
ARCADY 9 - Roundabout Module
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017
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Filename: AM_PM_B2145 & B2166.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\20170207 Revised Traffic Flows\20170207_2031 Base and Committed and ALL Development

Report generation date: 08/02/2017 14:36:19

»2031 Base + Committed + ALL Development, AM

»2031 Base + Committed + ALL Development, PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2031 Base + Committed + ALL Development															
1 - B2145 North	0.9	1.9	5.13	0.48	A	44.08	E	-7 %	9.1	50.2	27.24	0.91	D	17.72	C	2 % [1 - B2145 North]
2 - B2166	32.6	100.6	79.24	1.02	F			[2 - B2166]	4.3	21.0	15.37	0.82	C			
3 - untitled	4.5	22.0	18.25	0.83	C			1.3	1.5	5.81	0.57	A				

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	(untitled)
Location	
Site number	
Date	05/12/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
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 segment length (min)
D1	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed + ALL Development	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed + ALL Development, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2145 jw B2166	Standard Roundabout	44.08	E

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-7	2 - B2166

Arms

Arms

Arm	Name	Description
1	B2145 North	
2	B2166	
3	untitled	

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 - B2145 North	3.30	7.10	11.4	46.0	15.0	8.0	
2 - B2166	3.20	7.80	16.0	24.0	15.0	37.0	
3 - untitled	4.10	7.70	9.0	65.0	15.0	10.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - B2145 North	0.703	1719
2 - B2166	0.654	1668
3 - untitled	0.740	1898

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:30	09:00	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 - B2145 North		✓	592	100.000
2 - B2166		✓	1304	100.000
3 - untitled		✓	850	100.000

Origin-Destination Data

Demand (Veh/hr)

	To		
	1 - B2145 North	2 - B2166	3 - untitled

From	1 - B2145 North	0	294	298
	2 - B2166	934	0	370
	3 - untitled	477	373	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - B2145 North	2 - B2166	3 - untitled
	1 - B2145 North	0	4	7
	2 - B2166	2	0	1
	3 - untitled	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - B2145 North	0.48	5.13	0.9	1.9	A
2 - B2166	1.02	79.24	32.6	100.6	F
3 - untitled	0.83	18.25	4.5	22.0	C

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	446	279	1441	0.309	444	0.4	3.603	A
2 - B2166	982	223	1486	0.661	974	1.9	6.931	A
3 - untitled	640	698	1351	0.474	636	0.9	5.012	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	532	334	1404	0.379	532	0.6	4.122	A
2 - B2166	1172	268	1456	0.805	1164	3.9	12.029	B
3 - untitled	764	834	1250	0.611	762	1.5	7.333	A

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)	LOS
1 - B2145 North	652	406	1356	0.481	651	0.9	5.093	A
2 - B2166	1436	327	1415	1.015	1364	21.8	44.733	E
3 - untitled	936	977	1144	0.818	926	4.1	15.817	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)	LOS
1 - B2145 North	652	410	1353	0.482	652	0.9	5.130	A
2 - B2166	1436	328	1414	1.015	1393	32.6	79.243	F
3 - untitled	936	998	1128	0.829	934	4.5	18.247	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)	LOS
1 - B2145 North	532	340	1400	0.380	533	0.6	4.159	A
2 - B2166	1172	269	1455	0.806	1284	4.6	31.203	D
3 - untitled	764	920	1186	0.644	775	1.9	8.973	A

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)	LOS
1 - B2145 North	446	282	1439	0.310	446	0.5	3.627	A
2 - B2166	982	225	1485	0.661	992	2.0	7.441	A
3 - untitled	640	711	1341	0.477	644	0.9	5.185	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.45	0.00	0.00	0.45	0.45			N/A	N/A
2 - B2166	1.90	0.35	1.18	3.07	3.84			N/A	N/A
3 - untitled	0.89	0.55	1.00	1.40	1.45			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.61	0.09	0.82	1.36	1.43			N/A	N/A
2 - B2166	3.88	0.06	0.98	10.86	17.17			N/A	N/A
3 - untitled	1.54	0.05	0.52	3.88	5.97			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.92	0.03	0.26	0.92	0.92			N/A	N/A
2 - B2166	21.82	1.10	14.58	49.88	65.12			N/A	N/A
3 - untitled	4.11	0.03	0.34	7.97	22.00			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.92	0.03	0.27	0.92	1.93			N/A	N/A
2 - B2166	32.56	1.30	21.16	76.35	100.59			N/A	N/A
3 - untitled	4.53	0.03	0.30	4.53	19.26			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.62	0.55	1.00	1.40	1.45			N/A	N/A
2 - B2166	4.56	0.04	0.43	12.58	23.74			N/A	N/A
3 - untitled	1.86	0.06	0.78	4.72	7.06			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.45	0.03	0.34	1.13	1.31			N/A	N/A
2 - B2166	1.99	0.03	0.30	1.99	8.82			N/A	N/A
3 - untitled	0.92	0.03	0.33	2.07	4.50			N/A	N/A

2031 Base + Committed + ALL Development, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2145 jw B2166	Standard Roundabout	17.72	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	2	1 - B2145 North

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2031 Base + Committed + ALL Development	PM	ONE HOUR	16:30	18:00	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 - B2145 North		✓	1162	100.000
2 - B2166		✓	942	100.000
3 - untitled		✓	745	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2145 North	2 - B2166	3 - untitled
From	1 - B2145 North	0	653	509
	2 - B2166	522	0	420
	3 - untitled	369	376	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - B2145 North	2 - B2166	3 - untitled
From	1 - B2145 North	0	2	2
	2 - B2166	3	0	1
	3 - untitled	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - B2145 North	0.91	27.24	9.1	50.2	D
2 - B2166	0.82	15.37	4.3	21.0	C
3 - untitled	0.57	5.81	1.3	1.5	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)	LOS
1 - B2145 North	875	282	1491	0.587	869	1.4	5.741	A
2 - B2166	709	381	1385	0.512	705	1.0	5.265	A
3 - untitled	561	391	1577	0.356	559	0.5	3.526	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)	LOS
1 - B2145 North	1045	338	1453	0.719	1040	2.5	8.638	A
2 - B2166	847	456	1336	0.634	844	1.7	7.283	A
3 - untitled	670	468	1519	0.441	669	0.8	4.227	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)	LOS
1 - B2145 North	1279	413	1401	0.913	1257	8.2	22.148	C
2 - B2166	1037	550	1274	0.814	1028	4.0	14.112	B
3 - untitled	820	570	1443	0.568	818	1.3	5.742	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)	LOS
1 - B2145 North	1279	414	1400	0.914	1276	9.1	27.236	D
2 - B2166	1037	559	1268	0.818	1036	4.3	15.367	C
3 - untitled	820	574	1440	0.570	820	1.3	5.812	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	1045	339	1452	0.720	1070	2.7	10.035	B
2 - B2166	847	469	1327	0.638	857	1.8	7.804	A
3 - untitled	670	475	1514	0.442	672	0.8	4.284	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	875	284	1490	0.587	880	1.4	5.944	A
2 - B2166	709	385	1382	0.513	712	1.1	5.398	A
3 - untitled	561	395	1574	0.356	562	0.6	3.557	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.40	0.57	1.30	1.78	1.92			N/A	N/A
2 - B2166	1.04	0.55	1.00	1.40	1.45			N/A	N/A
3 - untitled	0.55	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	2.48	0.05	0.49	6.80	11.03			N/A	N/A
2 - B2166	1.70	0.05	0.58	4.35	6.69			N/A	N/A
3 - untitled	0.78	0.08	0.81	1.37	1.37			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	8.16	0.05	0.62	23.59	41.72			N/A	N/A
2 - B2166	4.05	0.03	0.32	6.76	20.98			N/A	N/A
3 - untitled	1.30	0.03	0.26	1.30	1.30			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
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1 - B2145 North	9.09	0.04	0.38	21.19	50.16			N/A	N/A
2 - B2166	4.27	0.03	0.29	4.27	14.60			N/A	N/A
3 - untitled	1.31	0.03	0.27	1.31	1.49			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	2.66	0.04	0.42	7.31	13.17			N/A	N/A
2 - B2166	1.80	0.05	0.52	4.72	7.37			N/A	N/A
3 - untitled	0.80	0.22	0.94	1.40	1.46			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.44	0.03	0.31	2.57	7.42			N/A	N/A
2 - B2166	1.07	0.04	0.35	2.61	5.08			N/A	N/A
3 - untitled	0.56	0.05	0.57	1.32	1.41			N/A	N/A

Junctions 9															
ARCADY 9 - Roundabout Module															
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017															
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The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution															

Filename: AM_PM_B2166-Aldwick Rd-Aldwick Fields.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\20170207 Revised Traffic Flows\20170207_2031 Base and Committed and ALL Development

Report generation date: 08/02/2017 14:02:10

»2031 Base + Committed + ALL Development, AM

»2031 Base + Committed + ALL Development, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed + ALL Development														
1 - B2166 Lower Bognor Road	0.1	2.71	0.13	A	3.13	A	207 %	0.6	3.63	0.36	A	3.72	A	111 %
2 - B2166 Aldwick Road	0.3	3.53	0.26	A			[2 - B2166 Aldwick Road]	0.6	4.29	0.38	A			[2 - B2166 Aldwick Road]
3 - Aldwick Fields	0.1	4.07	0.05	A				0.1	4.62	0.05	A			
4 - Aldwick Road	0.2	2.69	0.15	A				0.3	2.88	0.21	A			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	B2166/Aldwick Fields/Aldwick Road
Location	Rose Green, Pagham
Site number	
Date	15/06/2016
Version	
Status	Existing Junction
Identifier	
Client	
Jobnumber	JNY8840
Enumerator	EUR\pauline.pettitt
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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	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 segment length (min)	Run automatically
D7	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:45	09:15	15	✓
D8	2031 Base + Committed + ALL Development	PM	ONE HOUR	16:30	18:00	15	✓

Analysis Set Details

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

2031 Base + Committed + ALL Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3,4	3.13	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	207	2 - B2166 Aldwick Road

Arms

Arms

Arm	Name	Description
1	B2166 Lower Bognor Road	
2	B2166 Aldwick Road	
3	Aldwick Fields	
4	Aldwick Road	

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 - B2166 Lower Bognor Road	3.65	7.60	19.5	8.7	29.8	28.5	
2 - B2166 Aldwick Road	3.70	6.40	7.1	17.5	29.8	20.5	
3 - Aldwick Fields	3.30	5.00	5.9	9.7	29.8	28.5	
4 - Aldwick Road	3.70	6.60	17.5	23.6	29.8	19.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - B2166 Lower Bognor Road	0.645	1725
2 - B2166 Aldwick Road	0.631	1529
3 - Aldwick Fields	0.543	1209
4 - Aldwick Road	0.687	1773

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2166 Lower Bognor Road		ONE HOUR	✓	174	100.000
2 - B2166 Aldwick Road		ONE HOUR	✓	323	100.000
3 - Aldwick Fields		ONE HOUR	✓	42	100.000
4 - Aldwick Road		ONE HOUR	✓	213	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - B2166 Lower Bognor Road	2 - B2166 Aldwick Road	3 - Aldwick Fields	4 - Aldwick Road
From	1 - B2166 Lower Bognor Road	0	45	3	126
	2 - B2166 Aldwick Road	190	0	1	132
	3 - Aldwick Fields	17	14	0	11
	4 - Aldwick Road	68	139	6	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - B2166 Lower Bognor Road	2 - B2166 Aldwick Road	3 - Aldwick Fields	4 - Aldwick Road
From	1 - B2166 Lower Bognor Road	0	10	33	4
	2 - B2166 Aldwick Road	2	0	0	7
	3 - Aldwick Fields	0	0	0	0
	4 - Aldwick Road	4	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - B2166 Lower Bognor Road	0.13	2.71	0.1	A	160	239
2 - B2166 Aldwick Road	0.26	3.53	0.3	A	296	445
3 - Aldwick Fields	0.05	4.07	0.1	A	39	58
4 - Aldwick Road	0.15	2.69	0.2	A	195	293

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - B2166 Lower Bognor Road	131	33	119	1554	0.084	131	206	0.0	0.1	2.530	A
2 - B2166 Aldwick Road	243	61	101	1405	0.173	242	149	0.0	0.2	3.094	A
3 - Aldwick Fields	32	8	336	1019	0.031	31	8	0.0	0.0	3.646	A
4 - Aldwick Road	160	40	166	1625	0.099	160	202	0.0	0.1	2.456	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - B2166 Lower Bognor Road	156	39	143	1539	0.102	156	247	0.1	0.1	2.603	A
2 - B2166 Aldwick Road	290	73	121	1393	0.209	290	178	0.2	0.3	3.265	A
3 - Aldwick Fields	38	9	402	981	0.038	38	9	0.0	0.0	3.814	A
4 - Aldwick Road	191	48	199	1603	0.119	191	242	0.1	0.1	2.549	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - B2166 Lower Bognor Road	192	48	175	1519	0.126	191	303	0.1	0.1	2.710	A
2 - B2166 Aldwick Road	356	89	149	1375	0.259	355	218	0.3	0.3	3.529	A
3 - Aldwick Fields	46	12	493	930	0.050	46	11	0.0	0.1	4.072	A
4 - Aldwick Road	235	59	243	1572	0.149	234	296	0.1	0.2	2.690	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - B2166 Lower Bognor Road	192	48	175	1519	0.126	192	303	0.1	0.1	2.710	A
2 - B2166 Aldwick Road	356	89	149	1375	0.259	356	218	0.3	0.3	3.529	A

3 - Aldwick Fields	46	12	493	930	0.050	46	11	0.1	0.1	4.073	A
4 - Aldwick Road	235	59	243	1572	0.149	235	296	0.2	0.2	2.690	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - B2166 Lower Bognor Road	156	39	143	1539	0.102	157	247	0.1	0.1	2.603	A
2 - B2166 Aldwick Road	290	73	121	1393	0.209	291	178	0.3	0.3	3.270	A
3 - Aldwick Fields	38	9	403	981	0.038	38	9	0.1	0.0	3.819	A
4 - Aldwick Road	191	48	199	1603	0.119	192	242	0.2	0.1	2.553	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - B2166 Lower Bognor Road	131	33	120	1553	0.084	131	207	0.1	0.1	2.530	A
2 - B2166 Aldwick Road	243	61	102	1405	0.173	243	149	0.3	0.2	3.098	A
3 - Aldwick Fields	32	8	338	1018	0.031	32	8	0.0	0.0	3.649	A
4 - Aldwick Road	160	40	167	1625	0.099	160	203	0.1	0.1	2.457	A

2031 Base + Committed + ALL Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3,4	3.72	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	111	2 - B2166 Aldwick Road

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2031 Base + Committed + ALL Development	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2166 Lower Bognor Road		ONE HOUR	✓	497	100.000
2 - B2166 Aldwick Road		ONE HOUR	✓	464	100.000
3 - Aldwick Fields		ONE HOUR	✓	37	100.000
4 - Aldwick Road		ONE HOUR	✓	299	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - B2166 Lower Bognor Road	2 - B2166 Aldwick Road	3 - Aldwick Fields	4 - Aldwick Road
	1 - B2166 Lower Bognor Road	0	281	34	182
	2 - B2166 Aldwick Road	177	0	7	280
	3 - Aldwick Fields	11	10	0	16
	4 - Aldwick Road	87	194	18	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1 - B2166 Lower Bognor Road	2 - B2166 Aldwick Road	3 - Aldwick Fields	4 - Aldwick Road
	1 - B2166 Lower Bognor Road	0	1	0	3
	2 - B2166 Aldwick Road	1	0	0	1
	3 - Aldwick Fields	0	0	0	0
	4 - Aldwick Road	3	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - B2166 Lower Bognor Road	0.36	3.63	0.6	A	456	684
2 - B2166 Aldwick Road	0.38	4.29	0.6	A	426	639

3 - Aldwick Fields	0.05	4.62	0.1	A	34	51
4 - Aldwick Road	0.21	2.88	0.3	A	274	412

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - B2166 Lower Bognor Road	374	94	167	1589	0.236	373	206	0.0	0.3	2.959	A
2 - B2166 Aldwick Road	349	87	176	1402	0.249	348	364	0.0	0.3	3.412	A
3 - Aldwick Fields	28	7	479	944	0.030	28	44	0.0	0.0	3.928	A
4 - Aldwick Road	225	56	148	1624	0.139	224	359	0.0	0.2	2.571	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - B2166 Lower Bognor Road	447	112	199	1567	0.285	446	247	0.3	0.4	3.212	A
2 - B2166 Aldwick Road	417	104	210	1379	0.302	417	436	0.3	0.4	3.736	A
3 - Aldwick Fields	33	8	574	892	0.037	33	53	0.0	0.0	4.191	A
4 - Aldwick Road	269	67	178	1604	0.168	269	429	0.2	0.2	2.695	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - B2166 Lower Bognor Road	547	137	244	1538	0.356	547	302	0.4	0.5	3.629	A
2 - B2166 Aldwick Road	511	128	257	1349	0.379	510	533	0.4	0.6	4.286	A
3 - Aldwick Fields	41	10	703	821	0.050	41	65	0.0	0.1	4.612	A
4 - Aldwick Road	329	82	218	1577	0.209	329	526	0.2	0.3	2.883	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - B2166 Lower Bognor Road	547	137	244	1538	0.356	547	303	0.5	0.6	3.633	A
2 - B2166 Aldwick Road	511	128	258	1349	0.379	511	534	0.6	0.6	4.294	A
3 - Aldwick Fields	41	10	704	821	0.050	41	65	0.1	0.1	4.615	A
4 - Aldwick Road	329	82	218	1577	0.209	329	526	0.3	0.3	2.884	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - B2166 Lower Bognor Road	447	112	200	1567	0.285	447	248	0.6	0.4	3.216	A
2 - B2166 Aldwick Road	417	104	211	1379	0.302	418	437	0.6	0.4	3.746	A
3 - Aldwick Fields	33	8	575	891	0.037	33	53	0.1	0.0	4.197	A
4 - Aldwick Road	269	67	178	1604	0.168	269	430	0.3	0.2	2.699	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - B2166 Lower Bognor Road	374	94	167	1588	0.236	375	207	0.4	0.3	2.966	A
2 - B2166 Aldwick Road	349	87	176	1401	0.249	350	365	0.4	0.3	3.424	A
3 - Aldwick Fields	28	7	482	943	0.030	28	44	0.0	0.0	3.935	A
4 - Aldwick Road	225	56	149	1623	0.139	225	360	0.2	0.2	2.576	A

Junctions 9															
ARCADY 9 - Roundabout Module															
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Filename: AM_PM_B2166-Hewarts Lane-Chalcraff Lane.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\20170207 Revised Traffic Flows\20170207_2031 Base and Committed and ALL Development

Report generation date: 08/02/2017 14:15:13

»2031 Base + Committed + ALL Development, AM

»2031 Base + Committed + ALL Development, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed + ALL Development														
1 - Lower Bognor Road N	0.4	5.56	0.31	A	5.32	A	52 % [4 - Hewarts Lane]	1.8	9.48	0.65	A	7.01	A	29 % [1 - Lower Bognor Road N]
2 - Chalcraft Lane	0.6	4.00	0.39	A				1.5	6.74	0.59	A			
3 - Lower Bognor Road S	0.5	4.92	0.32	A				0.4	5.14	0.31	A			
4 - Hewarts Lane	1.1	6.75	0.52	A				0.5	4.77	0.35	A			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	B2166/Hewarts Lane/Chalcraff Lane
Location	Rose Green, Pagham
Site number	
Date	15/06/2016
Version	
Status	Existing Junction
Identifier	
Client	
Jobnumber	JNY8840
Enumerator	EUR\pauline.pettitt
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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	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 segment length (min)	Run automatically
D7	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:45	09:15	15	✓
D8	2031 Base + Committed + ALL Development	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2031 Base + Committed + ALL Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3,4	5.32	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	52	4 - Hewarts Lane

Arms

Arms

Arm	Name	Description
1	Lower Bognor Road N	
2	Chalcraft Lane	
3	Lower Bognor Road S	
4	Hewarts Lane	

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 - Lower Bognor Road N	2.90	5.60	7.6	14.4	32.0	0.0	
2 - Chalcraft Lane	3.20	6.60	10.9	74.0	32.0	11.5	
3 - Lower Bognor Road S	3.35	6.20	5.8	30.9	32.0	21.0	
4 - Hewarts Lane	3.40	5.90	7.7	12.1	32.0	24.5	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Lower Bognor Road N	0.614	1369
2 - Chalcraft Lane	0.673	1634
3 - Lower Bognor Road S	0.613	1416
4 - Hewarts Lane	0.587	1384

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Lower Bognor Road N		ONE HOUR	✓	260	100.000
2 - Chalcraft Lane		ONE HOUR	✓	511	100.000

3 - Lower Bognor Road S	ONE HOUR	✓	314	100.000
4 - Hewarts Lane	ONE HOUR	✓	525	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Lower Bognor Road N	2 - Chalcraft Lane	3 - Lower Bognor Road S	4 - Hewarts Lane
From	1 - Lower Bognor Road N	0	123	126	11
	2 - Chalcraft Lane	156	0	63	292
	3 - Lower Bognor Road S	152	101	0	61
	4 - Hewarts Lane	21	443	61	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Lower Bognor Road N	2 - Chalcraft Lane	3 - Lower Bognor Road S	4 - Hewarts Lane
From	1 - Lower Bognor Road N	0	4	1	0
	2 - Chalcraft Lane	1	0	6	1
	3 - Lower Bognor Road S	1	5	0	2
	4 - Hewarts Lane	0	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Lower Bognor Road N	0.31	5.56	0.4	A	239	358
2 - Chalcraft Lane	0.39	4.00	0.6	A	469	703
3 - Lower Bognor Road S	0.32	4.92	0.5	A	288	432
4 - Hewarts Lane	0.52	6.75	1.1	A	482	723

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Lower Bognor Road N	196	49	453	1062	0.184	195	247	0.0	0.2	4.146	A
2 - Chalcraft Lane	385	96	148	1508	0.255	383	500	0.0	0.3	3.196	A
3 - Lower Bognor Road S	236	59	344	1174	0.201	235	187	0.0	0.3	3.832	A
4 - Hewarts Lane	395	99	307	1197	0.330	393	273	0.0	0.5	4.467	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Lower Bognor Road N	234	58	543	1008	0.232	233	295	0.2	0.3	4.645	A
2 - Chalcraft Lane	459	115	178	1488	0.309	459	599	0.3	0.4	3.495	A
3 - Lower Bognor Road S	282	71	412	1133	0.249	282	224	0.3	0.3	4.229	A
4 - Hewarts Lane	472	118	367	1161	0.407	471	327	0.5	0.7	5.213	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Lower Bognor Road N	286	72	664	934	0.306	286	362	0.3	0.4	5.546	A
2 - Chalcraft Lane	563	141	218	1462	0.385	562	733	0.4	0.6	3.997	A
3 - Lower Bognor Road S	346	86	505	1077	0.321	345	275	0.3	0.5	4.915	A
4 - Hewarts Lane	578	145	450	1112	0.520	576	400	0.7	1.1	6.706	A

08:30 - 08:45

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Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Lower Bognor Road N	286	72	666	933	0.307	286	362	0.4	0.4	5.564	A
2 - Chalcraft Lane	563	141	218	1461	0.385	563	734	0.6	0.6	4.005	A
3 - Lower Bognor Road S	346	86	505	1077	0.321	346	275	0.5	0.5	4.923	A
4 - Hewarts Lane	578	145	450	1111	0.520	578	401	1.1	1.1	6.748	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Lower Bognor Road N	234	58	546	1006	0.232	234	296	0.4	0.3	4.665	A
2 - Chalcraft Lane	459	115	178	1488	0.309	460	601	0.6	0.4	3.504	A
3 - Lower Bognor Road S	282	71	413	1132	0.249	283	225	0.5	0.3	4.239	A
4 - Hewarts Lane	472	118	368	1160	0.407	473	328	1.1	0.7	5.251	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Lower Bognor Road N	196	49	456	1060	0.185	196	248	0.3	0.2	4.167	A
2 - Chalcraft Lane	385	96	149	1507	0.255	385	503	0.4	0.3	3.208	A
3 - Lower Bognor Road S	236	59	346	1173	0.202	237	189	0.3	0.3	3.847	A
4 - Hewarts Lane	395	99	308	1196	0.330	396	274	0.7	0.5	4.502	A

2031 Base + Committed + ALL Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3,4	7.01	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	29	1 - Lower Bognor Road N

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2031 Base + Committed + ALL Development	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Lower Bognor Road N		ONE HOUR	✓	628	100.000
2 - Chalcraft Lane		ONE HOUR	✓	710	100.000
3 - Lower Bognor Road S		ONE HOUR	✓	281	100.000
4 - Hewarts Lane		ONE HOUR	✓	373	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - Lower Bognor Road N	2 - Chalcraft Lane	3 - Lower Bognor Road S	4 - Hewarts Lane
	1 - Lower Bognor Road N	0	285	305	38
	2 - Chalcraft Lane	125	0	156	429
	3 - Lower Bognor Road S	121	73	0	87
	4 - Hewarts Lane	16	282	75	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1 - Lower Bognor Road N	2 - Chalcraft Lane	3 - Lower Bognor Road S	4 - Hewarts Lane
	1 - Lower Bognor Road N	0	1	0	0
	2 - Chalcraft Lane	0	0	0	1
	3 - Lower Bognor Road S	1	0	0	0
	4 - Hewarts Lane	0	1	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Lower Bognor Road N	0.65	9.48	1.8	A	576	864
2 - Chalcrafft Lane	0.59	6.74	1.5	A	652	977
3 - Lower Bognor Road S	0.31	5.14	0.4	A	258	387
4 - Hewarts Lane	0.35	4.77	0.5	A	342	513

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Lower Bognor Road N	473	118	322	1164	0.406	470	196	0.0	0.7	5.169	A
2 - Chalcrafft Lane	535	134	313	1414	0.378	532	479	0.0	0.6	4.072	A
3 - Lower Bognor Road S	212	53	444	1137	0.186	211	401	0.0	0.2	3.881	A
4 - Hewarts Lane	281	70	239	1231	0.228	280	415	0.0	0.3	3.778	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Lower Bognor Road N	565	141	386	1125	0.502	563	235	0.7	1.0	6.400	A
2 - Chalcrafft Lane	638	160	375	1372	0.465	637	574	0.6	0.9	4.890	A
3 - Lower Bognor Road S	253	63	531	1084	0.233	252	481	0.2	0.3	4.330	A
4 - Hewarts Lane	335	84	286	1203	0.279	335	497	0.3	0.4	4.143	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Lower Bognor Road N	691	173	473	1071	0.646	688	288	1.0	1.8	9.328	A
2 - Chalcrafft Lane	782	195	458	1317	0.594	779	703	0.9	1.4	6.671	A
3 - Lower Bognor Road S	309	77	650	1011	0.306	309	588	0.3	0.4	5.129	A
4 - Hewarts Lane	411	103	350	1166	0.352	410	608	0.4	0.5	4.758	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Lower Bognor Road N	691	173	473	1071	0.646	691	288	1.8	1.8	9.481	A
2 - Chalcrafft Lane	782	195	460	1315	0.594	782	705	1.4	1.5	6.743	A
3 - Lower Bognor Road S	309	77	652	1010	0.306	309	590	0.4	0.4	5.140	A
4 - Hewarts Lane	411	103	351	1166	0.352	411	610	0.5	0.5	4.768	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Lower Bognor Road N	565	141	387	1124	0.502	568	236	1.8	1.0	6.507	A
2 - Chalcrafft Lane	638	160	378	1371	0.466	641	577	1.5	0.9	4.947	A
3 - Lower Bognor Road S	253	63	534	1082	0.234	253	484	0.4	0.3	4.348	A
4 - Hewarts Lane	335	84	288	1203	0.279	336	500	0.5	0.4	4.155	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Lower Bognor Road N	473	118	324	1163	0.407	474	198	1.0	0.7	5.239	A
2 - Chalcrafft Lane	535	134	315	1412	0.378	536	483	0.9	0.6	4.112	A
3 - Lower Bognor Road S	212	53	447	1136	0.186	212	404	0.3	0.2	3.897	A
4 - Hewarts Lane	281	70	241	1230	0.228	281	418	0.4	0.3	3.794	A

Junctions 9
ARCADY 9 - Roundabout Module
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Filename: AM_PM_Gossamer Lane-Aldwick Road-Barrack Lane.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\20170207_2031 Base and Committed and ALL Development

Report generation date: 09/03/2017 11:06:39

»2031 Base + Committed + ALL Development, AM
»2031 Base + Committed + ALL Development, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed + ALL Development														
1 - Aldwick Road	0.2	4.46	0.19	A	4.33	A	145 % [4 - Gossamer Lane]	1.5	8.96	0.60	A	7.54	A	37 % [2 - Aldwick Street]
2 - Aldwick Street	0.3	3.75	0.22	A				1.3	8.22	0.57	A			
3 - Barrack Lane	0.2	4.72	0.18	A				0.3	6.90	0.25	A			
4 - Gossamer Lane	0.5	4.49	0.34	A				0.7	5.30	0.43	A			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	Gossamer Lane/Aldwick Road/Barrack Lane
Location	Rose Green, Pagham
Site number	
Date	15/06/2016
Version	
Status	Existing junction
Identifier	
Client	
Jobnumber	JNY8840
Enumerator	EUR\pauline.pettitt
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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	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 segment length (min)	Run automatically
D7	2031 Base + Committed + ALL Development	AM	ONE HOUR	08:00	09:30	15	✓

D8	2031 Base + Committed + ALL Development	PM	ONE HOUR	16:30	18:00	15	✓
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Analysis Set Details

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

2031 Base + Committed + ALL Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3,4	4.33	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	145	4 - Gossamer Lane

Arms

Arms

Arm	Name	Description
1	Aldwick Road	
2	Aldwick Street	
3	Barrack Lane	
4	Gossamer Lane	

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 - Aldwick Road	3.70	4.50	8.1	8.8	24.0	28.5	
2 - Aldwick Street	4.10	5.50	1.3	16.9	24.0	18.5	
3 - Barrack Lane	3.50	5.10	1.7	12.2	24.0	25.5	
4 - Gossamer Lane	3.70	5.60	1.8	20.9	24.0	17.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Aldwick Road	0.548	1231
2 - Aldwick Street	0.606	1379
3 - Barrack Lane	0.547	1163
4 - Gossamer Lane	0.597	1312

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2031 Base + Committed + ALL Development	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

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

1 - Aldwick Road		ONE HOUR	✓	170	100.000
2 - Aldwick Street		ONE HOUR	✓	242	100.000
3 - Barrack Lane		ONE HOUR	✓	149	100.000
4 - Gossamer Lane		ONE HOUR	✓	372	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Aldwick Road	2 - Aldwick Street	3 - Barrack Lane	4 - Gossamer Lane
From	1 - Aldwick Road	0	19	33	118
	2 - Aldwick Street	25	0	27	190
	3 - Barrack Lane	54	44	0	51
	4 - Gossamer Lane	118	245	9	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Aldwick Road	2 - Aldwick Street	3 - Barrack Lane	4 - Gossamer Lane
From	1 - Aldwick Road	0	12	3	5
	2 - Aldwick Street	5	0	4	3
	3 - Barrack Lane	6	3	0	0
	4 - Gossamer Lane	2	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Aldwick Road	0.19	4.46	0.2	A	156	234
2 - Aldwick Street	0.22	3.75	0.3	A	222	333
3 - Barrack Lane	0.18	4.72	0.2	A	137	205
4 - Gossamer Lane	0.34	4.49	0.5	A	341	512

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	128	32	223	1050	0.122	127	148	0.0	0.1	3.898	A
2 - Aldwick Street	182	46	120	1261	0.144	182	231	0.0	0.2	3.332	A
3 - Barrack Lane	112	28	250	991	0.113	112	52	0.0	0.1	4.094	A
4 - Gossamer Lane	280	70	92	1238	0.226	279	269	0.0	0.3	3.748	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	153	38	268	1027	0.149	153	177	0.1	0.2	4.118	A
2 - Aldwick Street	218	54	144	1247	0.174	217	277	0.2	0.2	3.496	A
3 - Barrack Lane	134	33	299	963	0.139	134	62	0.1	0.2	4.339	A
4 - Gossamer Lane	334	84	110	1227	0.273	334	322	0.3	0.4	4.032	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	187	47	328	995	0.188	187	217	0.2	0.2	4.452	A

2 - Aldwick Street	266	67	176	1227	0.217	266	339	0.2	0.3	3.746	A
3 - Barrack Lane	164	41	366	926	0.177	164	76	0.2	0.2	4.719	A
4 - Gossamer Lane	410	102	135	1211	0.338	409	395	0.4	0.5	4.483	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	187	47	328	995	0.188	187	217	0.2	0.2	4.455	A
2 - Aldwick Street	266	67	176	1227	0.217	266	339	0.3	0.3	3.746	A
3 - Barrack Lane	164	41	367	926	0.177	164	76	0.2	0.2	4.722	A
4 - Gossamer Lane	410	102	135	1211	0.338	410	395	0.5	0.5	4.489	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	153	38	268	1027	0.149	153	177	0.2	0.2	4.122	A
2 - Aldwick Street	218	54	144	1247	0.175	218	277	0.3	0.2	3.499	A
3 - Barrack Lane	134	33	300	963	0.139	134	62	0.2	0.2	4.345	A
4 - Gossamer Lane	334	84	111	1227	0.273	335	323	0.5	0.4	4.039	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	128	32	225	1050	0.122	128	148	0.2	0.1	3.907	A
2 - Aldwick Street	182	46	121	1261	0.144	182	232	0.2	0.2	3.339	A
3 - Barrack Lane	112	28	251	990	0.113	112	52	0.2	0.1	4.102	A
4 - Gossamer Lane	280	70	93	1238	0.226	280	271	0.4	0.3	3.760	A

2031 Base + Committed + ALL Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3,4	7.54	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	37	2 - Aldwick Street

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2031 Base + Committed + ALL Development	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Aldwick Road		ONE HOUR	✓	542	100.000
2 - Aldwick Street		ONE HOUR	✓	518	100.000
3 - Barrack Lane		ONE HOUR	✓	161	100.000
4 - Gossamer Lane		ONE HOUR	✓	459	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Aldwick Road	2 - Aldwick Street	3 - Barrack Lane	4 - Gossamer Lane
From	1 - Aldwick Road	0	45	224	273
	2 - Aldwick Street	49	0	65	404
	3 - Barrack Lane	88	39	0	34
	4 - Gossamer Lane	144	282	33	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1 - Aldwick Road	2 - Aldwick Street	3 - Barrack Lane	4 - Gossamer Lane
From	1 - Aldwick Road	0	5	1	2
	2 - Aldwick Street	2	0	2	1
	3 - Barrack Lane	4	3	0	0
	4 - Gossamer Lane	2	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Aldwick Road	0.60	8.96	1.5	A	497	746
2 - Aldwick Street	0.57	8.22	1.3	A	475	713
3 - Barrack Lane	0.25	6.90	0.3	A	148	222
4 - Gossamer Lane	0.43	5.30	0.7	A	421	632

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	408	102	265	1065	0.383	406	210	0.0	0.6	5.437	A
2 - Aldwick Street	390	97	397	1122	0.348	388	274	0.0	0.5	4.893	A
3 - Barrack Lane	121	30	543	837	0.145	121	241	0.0	0.2	5.021	A
4 - Gossamer Lane	346	86	132	1223	0.283	344	532	0.0	0.4	4.088	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	487	122	318	1037	0.470	486	252	0.6	0.9	6.524	A
2 - Aldwick Street	466	116	475	1074	0.434	465	329	0.5	0.8	5.904	A
3 - Barrack Lane	145	36	651	779	0.186	145	289	0.2	0.2	5.675	A
4 - Gossamer Lane	413	103	158	1207	0.342	412	638	0.4	0.5	4.527	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	597	149	389	999	0.598	594	309	0.9	1.5	8.857	A
2 - Aldwick Street	570	143	581	1009	0.565	568	402	0.8	1.3	8.123	A
3 - Barrack Lane	177	44	796	701	0.253	177	353	0.2	0.3	6.867	A
4 - Gossamer Lane	505	126	193	1185	0.426	504	780	0.5	0.7	5.282	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	597	149	390	998	0.598	597	309	1.5	1.5	8.961	A
2 - Aldwick Street	570	143	583	1008	0.566	570	403	1.3	1.3	8.221	A
3 - Barrack Lane	177	44	799	699	0.254	177	354	0.3	0.3	6.898	A
4 - Gossamer Lane	505	126	194	1185	0.427	505	783	0.7	0.7	5.297	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	487	122	319	1036	0.470	490	253	1.5	0.9	6.611	A
2 - Aldwick Street	466	116	479	1072	0.435	468	330	1.3	0.8	5.981	A
3 - Barrack Lane	145	36	656	776	0.186	145	291	0.3	0.2	5.707	A
4 - Gossamer Lane	413	103	159	1206	0.342	413	642	0.7	0.5	4.545	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	408	102	267	1065	0.383	409	212	0.9	0.6	5.501	A
2 - Aldwick Street	390	97	400	1119	0.348	391	276	0.8	0.5	4.949	A
3 - Barrack Lane	121	30	548	835	0.145	121	243	0.2	0.2	5.049	A
4 - Gossamer Lane	346	86	133	1222	0.283	346	537	0.5	0.4	4.111	A

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017
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Filename: AM_PMHook Lane Site Access.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\20170207

Revised Traffic Flows\20170207_2031 Base and Committed and ALL Development

Report generation date: 08/02/2017 12:00:33

»2031 Base + Committed + ALL Development, AM

»2031 Base + Committed + ALL Development, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed + ALL Development														
Stream B-AC	0.3	9.05	0.20	A	1.92	A	159 %	0.1	8.07	0.09	A	0.92	A	213 %
Stream C-AB	0.1	5.22	0.08	A			[Stream B-AC]	0.1	4.71	0.08	A			[Stream B-AC]

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	Hook Lane Proposed Site Access
Location	Rose Green, Pagham
Site number	
Date	15/06/2016
Version	
Status	Proposed
Identifier	
Client	Hallam Land Management
Jobnumber	JNY8840
Enumerator	EUR\pauline.pettitt
Description	Based on Drg No 5

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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	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 segment length (min)	Run automatically
D1	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:45	09:15	15	✓
D2	2031 Base + Committed + ALL Development	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2031 Base + Committed + ALL Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	1.92	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	159	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	Hook Lane S		Major
B	Site Access		Minor
C	Hook Lane 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 - Hook Lane N	7.30			150.0	✓	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 - Site Access	One lane	3.00	40	40

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	510	0.088	0.222	0.139	0.317
1	B-C	649	0.094	0.237	-	-
1	C-B	661	0.242	0.242	-	-

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

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

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

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Hook Lane S		ONE HOUR	✓	224	100.000
B - Site Access		ONE HOUR	✓	92	100.000
C - Hook Lane N		ONE HOUR	✓	254	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - Hook Lane S	B - Site Access	C - Hook Lane N
	A - Hook Lane S	0	53	171
	B - Site Access	42	0	50
	C - Hook Lane N	217	37	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - Hook Lane S	B - Site Access	C - Hook Lane N
	A - Hook Lane S	0	0	1
	B - Site Access	0	0	0
	C - Hook Lane N	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.20	9.05	0.3	A	84	127
C-AB	0.08	5.22	0.1	A	47	70
C-A					186	279
A-B					49	73
A-C					157	235

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	69	17	524	0.132	69	0.0	0.2	7.893	A
C-AB	36	9	726	0.049	36	0.0	0.1	5.211	A
C-A	155	39			155				
A-B	40	10			40				
A-C	129	32			129				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	83	21	514	0.161	83	0.2	0.2	8.349	A
C-AB	45	11	740	0.061	45	0.1	0.1	5.181	A

C-A	183	46			183				
A-B	48	12			48				
A-C	154	38			154				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	101	25	499	0.203	101	0.2	0.3	9.043	A
C-AB	60	15	759	0.078	59	0.1	0.1	5.146	A
C-A	220	55			220				
A-B	58	15			58				
A-C	188	47			188				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	101	25	499	0.203	101	0.3	0.3	9.055	A
C-AB	60	15	759	0.079	60	0.1	0.1	5.149	A
C-A	220	55			220				
A-B	58	15			58				
A-C	188	47			188				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	83	21	514	0.161	83	0.3	0.2	8.364	A
C-AB	45	11	740	0.061	45	0.1	0.1	5.189	A
C-A	183	46			183				
A-B	48	12			48				
A-C	154	38			154				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	69	17	524	0.132	69	0.2	0.2	7.921	A
C-AB	36	9	726	0.050	36	0.1	0.1	5.218	A
C-A	155	39			155				
A-B	40	10			40				
A-C	129	32			129				

2031 Base + Committed + ALL Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.92	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	213	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 segment length (min)	Run automatically
D2	2031 Base + Committed + ALL Development	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Hook Lane S		ONE HOUR	✓	207	100.000
B - Site Access		ONE HOUR	✓	40	100.000
C - Hook Lane N		ONE HOUR	✓	402	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Hook Lane S	B - Site Access	C - Hook Lane N
From	A - Hook Lane S	0	17	190
	B - Site Access	17	0	23
	C - Hook Lane N	368	34	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Hook Lane S	B - Site Access	C - Hook Lane N
From	A - Hook Lane S	0	0	0
	B - Site Access	0	0	0
	C - Hook Lane N	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.09	8.07	0.1	A	37	55
C-AB	0.08	4.71	0.1	A	53	80
C-A					316	473
A-B					16	23
A-C					174	262

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	30	8	520	0.058	30	0.0	0.1	7.342	A
C-AB	39	10	804	0.049	39	0.0	0.1	4.701	A
C-A	264	66			264				
A-B	13	3			13				
A-C	143	36			143				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	36	9	507	0.071	36	0.1	0.1	7.634	A
C-AB	51	13	834	0.061	51	0.1	0.1	4.599	A
C-A	311	78			311				
A-B	15	4			15				
A-C	171	43			171				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	44	11	490	0.090	44	0.1	0.1	8.069	A
C-AB	70	17	875	0.080	70	0.1	0.1	4.473	A
C-A	373	93			373				
A-B	19	5			19				
A-C	209	52			209				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	44	11	490	0.090	44	0.1	0.1	8.074	A
C-AB	70	18	875	0.080	70	0.1	0.1	4.475	A
C-A	373	93			373				
A-B	19	5			19				
A-C	209	52			209				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	36	9	507	0.071	36	0.1	0.1	7.638	A
C-AB	51	13	834	0.061	51	0.1	0.1	4.602	A
C-A	310	78			310				

A-B	15	4			15				
A-C	171	43			171				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	30	8	520	0.058	30	0.1	0.1	7.354	A
C-AB	39	10	804	0.049	39	0.1	0.1	4.708	A
C-A	263	66			263				
A-B	13	3			13				
A-C	143	36			143				

Junctions 9															
PICADY 9 - Priority Intersection Module															
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017															
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Filename: AM_PM_Lower Bognor Road & Pagham Road.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\20170207 Revised Traffic Flows\20170207_2031 Base and Committed and ALL Development

Report generation date: 08/02/2017 14:25:10

»2031 Base + Committed + ALL Development, AM
»2031 Base + Committed + ALL Development, PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed + ALL Development																
Stream B-C	1.0	4.2	2719.23	1.11	F			-35 %	0.7	3.3	2691.07	1.32	F			-24 %
Stream B-A	113.7	168.2	1052.76	1.57	F	237.28	F	[Stream B-A]	37.2	63.5	454.19	1.29	F	59.08	F	[Stream B-A]
Stream C-AB	0.0	200.2	3.34	0.01	A				0.0	0.5	6.06	0.03	A			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	(untitled)
Location	
Site number	
Date	19/09/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
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 segment length (min)
D1	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed + ALL Development	PM	ONE HOUR	16:15	17:45	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed + ALL Development, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Lower Bognor Road j/w Pagham Road	T-Junction	Two-way	237.28	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-35	Stream B-A

Arms

Arms

Arm	Name	Description	Arm type
A	Pagham Road North		Major
B	Lower Bognor Road		Minor
C	Pagham Road South		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 - Pagham Road South	7.50			95.0	✓	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	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 - Lower Bognor Road	One lane plus flare	10.00	8.00	5.50	4.25	3.00	✓	2.00	105	85

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	635	0.108	0.273	0.172	0.391
1	B-C	666	0.095	0.241	-	-
1	C-B	629	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 segment length (min)
D1	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:30	09:00	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 - Pagham Road North		✓	513	100.000
B - Lower Bognor Road		✓	453	100.000
C - Pagham Road South		✓	1037	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
	A - Pagham Road North	0	237	276
	B - Lower Bognor Road	451	0	2
	C - Pagham Road South	1036	1	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
	A - Pagham Road North	0	2	4
	B - Lower Bognor Road	1	0	0
	C - Pagham Road South	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	1.11	2719.23	1.0	4.2	F
B-A	1.57	1052.76	113.7	168.2	F
C-AB	0.01	3.34	0.0	200.2	A
C-A					
A-B					
A-C					

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	263	0.006	1	0.0	13.749	B
B-A	340	415	0.818	325	3.6	35.749	E
C-AB	3	1080	0.003	3	0.0	3.339	A
C-A	778			778			
A-B	178			178			
A-C	208			208			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	2	1.109	0.42	0.3	2658.978	F
B-A	405	374	1.085	358	15.4	121.402	F
C-AB	4	1177	0.004	4	0.0	3.066	A
C-A	928			928			
A-B	213			213			
A-C	248			248			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	2	1.079	1	0.6	2709.336	F
B-A	497	316	1.569	316	60.6	453.774	F
C-AB	8	1316	0.006	8	0.0	2.750	A
C-A	1133			1133			
A-B	261			261			
A-C	304			304			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS

B-C	2	2	1.077	1	0.9	2719.228	F
B-A	497	316	1.569	316	105.7	881.305	F
C-AB	8	1316	0.006	8	0.0	2.754	A
C-A	1133			1133			
A-B	261			261			
A-C	304			304			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	2	0.748	1	1.0	2663.274	F
B-A	405	374	1.085	373	113.7	1052.759	F
C-AB	4	1177	0.004	4	0.0	3.074	A
C-A	928			928			
A-B	213			213			
A-C	248			248			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	3	0.537	1	1.0	2540.235	F
B-A	340	415	0.818	412	95.7	916.369	F
C-AB	3	1080	0.003	3	0.0	3.345	A
C-A	778			778			
A-B	178			178			
A-C	208			208			

Queue Variation Results for each time segment**07:30 - 07:45**

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	3.61	0.03	0.31	4.00	16.84			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.35	0.03	0.28	0.52	1.30			N/A	N/A
B-A	15.37	0.20	7.05	40.24	56.55			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.64	0.03	0.32	1.40	2.90			N/A	N/A
B-A	60.60	26.17	56.85	92.91	105.33			N/A	N/A
C-AB	0.01	>199	>199	>199	>199			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.88	0.04	0.37	2.11	3.72			N/A	N/A
B-A	105.67	63.80	102.74	142.23	155.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.97	0.04	0.39	2.38	4.00			N/A	N/A
B-A	113.67	67.68	110.42	154.05	168.22			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.97	0.04	0.38	2.41	4.17			N/A	N/A
B-A	95.65	48.25	91.43	138.96	154.89			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2031 Base + Committed + ALL Development, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Lower Bognor Road j/w Pagham Road	T-Junction	Two-way	59.08	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-24	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 segment length (min)
D2	2031 Base + Committed + ALL Development	PM	ONE HOUR	16:15	17:45	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 - Pagham Road North		✓	1466	100.000
B - Lower Bognor Road		✓	264	100.000
C - Pagham Road South		✓	395	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
	A - Pagham Road North	0	662	804
	B - Lower Bognor Road	262	0	2
	C - Pagham Road South	389	6	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
	A - Pagham Road North	0	1	2
	B - Lower Bognor Road	3	0	0
	C - Pagham Road South	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	1.32	2691.07	0.7	3.3	F
B-A	1.29	454.19	37.2	63.5	F
C-AB	0.03	6.06	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	361	0.004	1	0.0	10.003	B
B-A	197	348	0.567	192	1.2	22.483	C
C-AB	9	604	0.015	9	0.0	6.048	A
C-A	289			289			
A-B	498			498			
A-C	605			605			

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	194	0.009	2	0.0	18.695	C
B-A	236	296	0.796	228	3.1	48.489	E
C-AB	13	609	0.021	13	0.0	6.030	A
C-A	342			342			
A-B	595			595			
A-C	723			723			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	2	1.324	0.51	0.4	2691.068	F
B-A	288	224	1.290	218	20.7	228.384	F
C-AB	21	621	0.034	21	0.0	5.992	A
C-A	414			414			
A-B	729			729			
A-C	885			885			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	2	0.931	1	0.7	2429.246	F
B-A	288	224	1.290	223	37.2	454.186	F
C-AB	21	621	0.034	21	0.0	6.000	A
C-A	414			414			
A-B	729			729			
A-C	885			885			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	3	0.520	2	0.7	922.532	F
B-A	236	296	0.796	288	24.1	378.039	F
C-AB	13	609	0.021	13	0.0	6.051	A
C-A	342			342			
A-B	595			595			
A-C	723			723			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	185	0.008	4	0.0	20.174	C
B-A	197	348	0.567	288	1.5	107.723	F
C-AB	9	604	0.015	9	0.0	6.061	A
C-A	289			289			
A-B	498			498			
A-C	605			605			

Queue Variation Results for each time segment

16:15 - 16:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A

B-A	1.24	0.07	0.93	2.49	3.38			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	3.11	0.08	1.45	7.89	11.38			N/A	N/A
C-AB	0.03	0.03	0.25	0.45	0.48			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.43	0.03	0.26	0.47	0.50			N/A	N/A
B-A	20.74	7.09	18.71	33.45	38.66			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.67	0.03	0.27	0.67	1.07			N/A	N/A
B-A	37.19	16.38	34.82	56.16	63.46			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.71	0.03	0.32	1.55	3.30			N/A	N/A
B-A	24.07	7.85	21.65	39.54	45.90			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	1.48	0.03	0.28	1.48	3.52			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

Junctions 9																
PICADY 9 - Priority Intersection Module																
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Filename: AM_PM_Nyetimber Lane & Pagham Road.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\20170207_2031 Base and Committed and ALL Development

Report generation date: 09/03/2017 10:04:17

»2031 Base + Committed + ALL Development, AM

»2031 Base + Committed + ALL Development, PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed + ALL Development																
Stream B-AC	0.7	3.0	13.16	0.41	B	3.33	A	50 % [Stream B-AC]	0.9	4.0	18.03	0.47	C	2.92	A	19 % [Stream B-AC]
Stream C-AB	0.5	1.4	5.14	0.22	A				0.8	2.9	8.28	0.33	A			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	(untitled)
Location	
Site number	
Date	19/09/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
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 segment length (min)
D1	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:45	09:15	15
D2	2031 Base + Committed + ALL Development	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed + ALL Development, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Nyetimber Lane j/w Pagham Road	T-Junction	Two-way	3.33	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	50	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	Pagham Road North		Major
B	Nyetimber Lane		Minor
C	Pagham Road South		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 - Pagham Road South	7.30			200.0	✓	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 - Nyetimber Lane	One lane	4.00	60	45

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	571	0.098	0.248	0.156	0.354
1	B-C	718	0.104	0.262	-	-
1	C-B	690	0.252	0.252	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:45	09:15	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 - Pagham Road North		✓	240	100.000
B - Nyetimber Lane		✓	170	100.000

C - Pagham Road South		✓	488	100.000
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Origin-Destination Data

Demand (Veh/hr)

From	To		
	A - Pagham Road North	B - Nyetimber Lane	C - Pagham Road South
A - Pagham Road North	0	30	210
B - Nyetimber Lane	99	0	71
C - Pagham Road South	398	90	0

Vehicle Mix

Heavy Vehicle Percentages

From	To		
	A - Pagham Road North	B - Nyetimber Lane	C - Pagham Road South
A - Pagham Road North	0	7	9
B - Nyetimber Lane	1	0	7
C - Pagham Road South	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.41	13.16	0.7	3.0	B
C-AB	0.22	5.14	0.5	1.4	A
C-A					
A-B					
A-C					

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	128	508	0.252	127	0.3	9.398	A
C-AB	106	827	0.129	105	0.2	4.987	A
C-A	261			261			
A-B	23			23			
A-C	158			158			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	153	489	0.313	152	0.4	10.691	B
C-AB	140	856	0.163	139	0.3	5.021	A
C-A	299			299			
A-B	27			27			
A-C	189			189			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	187	461	0.406	186	0.7	13.072	B
C-AB	195	897	0.217	194	0.5	5.121	A
C-A	343			343			
A-B	33			33			
A-C	231			231			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	187	461	0.406	187	0.7	13.157	B

C-AB	195	897	0.217	195	0.5	5.139	A
C-A	342			342			
A-B	33			33			
A-C	231			231			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	153	488	0.313	154	0.5	10.781	B
C-AB	140	856	0.163	140	0.3	5.057	A
C-A	299			299			
A-B	27			27			
A-C	189			189			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	128	508	0.252	128	0.3	9.494	A
C-AB	107	827	0.129	107	0.2	5.016	A
C-A	261			261			
A-B	23			23			
A-C	158			158			

Queue Variation Results for each time segment**07:45 - 08:00**

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.33	0.00	0.00	0.33	0.33			N/A	N/A
C-AB	0.23	0.00	0.00	0.23	0.23			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.45	0.00	0.00	0.45	0.45			N/A	N/A
C-AB	0.31	0.00	0.00	0.31	0.31			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.67	0.03	0.26	0.67	0.67			N/A	N/A
C-AB	0.47	0.03	0.26	0.47	0.50			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.68	0.03	0.29	1.25	3.02			N/A	N/A
C-AB	0.47	0.04	0.41	1.25	1.38			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.46	0.04	0.38	1.21	1.35			N/A	N/A
C-AB	0.33	0.00	0.00	0.33	0.33			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.03	0.27	0.48	0.69			N/A	N/A
C-AB	0.24	0.00	0.00	0.24	0.24			N/A	N/A

2031 Base + Committed + ALL Development, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Nyetimber Lane j/w Pagham Road	T-Junction	Two-way	2.92	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	19	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 segment length (min)
D2	2031 Base + Committed + ALL Development	PM	ONE HOUR	16:45	18:15	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 - Pagham Road North		✓	939	100.000
B - Nyetimber Lane		✓	160	100.000
C - Pagham Road South		✓	380	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Pagham Road North	B - Nyetimber Lane	C - Pagham Road South
From	A - Pagham Road North	0	111	828
	B - Nyetimber Lane	36	0	124
	C - Pagham Road South	275	105	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Pagham Road North	B - Nyetimber Lane	C - Pagham Road South
From	A - Pagham Road North	0	0	2
	B - Nyetimber Lane	0	0	2
	C - Pagham Road South	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.47	18.03	0.9	4.0	C
C-AB	0.33	8.28	0.8	2.9	A
C-A					
A-B					

A-C					
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Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	120	473	0.255	119	0.3	10.126	B
C-AB	116	655	0.177	114	0.3	6.669	A
C-A	170			170			
A-B	84			84			
A-C	623			623			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	144	433	0.332	143	0.5	12.386	B
C-AB	152	653	0.233	152	0.5	7.180	A
C-A	189			189			
A-B	100			100			
A-C	744			744			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	176	376	0.469	175	0.9	17.765	C
C-AB	217	654	0.331	215	0.8	8.213	A
C-A	202			202			
A-B	122			122			
A-C	912			912			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	176	376	0.469	176	0.9	18.025	C
C-AB	217	654	0.332	217	0.8	8.279	A
C-A	201			201			
A-B	122			122			
A-C	912			912			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	144	433	0.332	145	0.5	12.572	B
C-AB	153	654	0.234	154	0.5	7.261	A
C-A	189			189			
A-B	100			100			
A-C	744			744			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	120	473	0.255	121	0.3	10.248	B
C-AB	116	655	0.177	117	0.3	6.716	A
C-A	170			170			
A-B	84			84			
A-C	623			623			

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C-AB	0.30	0.00	0.00	0.30	0.30			N/A	N/A

17:00 - 17:15

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Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.49	0.00	0.00	0.49	0.49			N/A	N/A
C-AB	0.45	0.00	0.00	0.45	0.45			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.85	0.03	0.27	0.85	1.06			N/A	N/A
C-AB	0.78	0.03	0.26	0.78	0.78			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.87	0.03	0.29	1.44	3.96			N/A	N/A
C-AB	0.79	0.04	0.40	1.81	2.88			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.51	0.05	0.46	1.28	1.39			N/A	N/A
C-AB	0.47	0.00	0.00	0.47	0.47			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.35	0.03	0.31	0.96	1.23			N/A	N/A
C-AB	0.31	0.00	0.00	0.31	0.31			N/A	N/A

Junctions 9
PICADY 9 - Priority Intersection Module
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Filename: AM_PM_Pagham Road-Sefter Road.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\20170207_2031 Base and Committed and ALL Development

Report generation date: 09/03/2017 10:31:26

»2031 Base + Committed + ALL Development, AM

»2031 Base + Committed + ALL Development, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed + ALL Development														
Stream B-AC	76.3	713.92	1.35	F	230.05	F	-36 % [Stream B-AC]	0.7	15.86	0.43	C	2.82	A	45 % [Stream B-AC]
Stream C-AB	0.0	3.70	0.01	A				0.0	5.08	0.01	A			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	Pagham Road/Sefter Road
Location	
Site number	
Date	15/06/2016
Version	
Status	Existing Layout
Identifier	
Client	
Jobnumber	JNY8840
Enumerator	EUR\pauline.pettitt
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

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

Demand Set Summary

ID	Scenario name	Time Period	Traffic	Start time	Finish time	Time segment	Run
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		name	profile type	(HH:mm)	(HH:mm)	length (min)	automatically
D7	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:15	08:45	15	✓
D8	2031 Base + Committed + ALL Development	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

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

2031 Base + Committed + ALL Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	230.05	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-36	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	Pagham Road N		Major
B	Sefter Road		Minor
C	Pagham Road 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 - Pagham Road S	6.00			250.0	✓	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 - Sefter Road	One lane	3.20	10	36

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	508	0.093	0.234	0.147	0.334
1	B-C	660	0.101	0.256	-	-
1	C-B	719	0.278	0.278	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:15	08:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pagham Road N		ONE HOUR	✓	219	100.000
B - Sefter Road		ONE HOUR	✓	430	100.000
C - Pagham Road S		ONE HOUR	✓	669	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Pagham Road N	B - Sefter Road	C - Pagham Road S
From	A - Pagham Road N	0	96	123
	B - Sefter Road	428	0	2
	C - Pagham Road S	665	4	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Pagham Road N	B - Sefter Road	C - Pagham Road S
From	A - Pagham Road N	0	0	10
	B - Sefter Road	1	0	0
	C - Pagham Road S	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	1.35	713.92	76.3	F	395	592
C-AB	0.01	3.70	0.0	A	9	14
C-A					605	907
A-B					88	132
A-C					113	169

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	324	81	398	0.813	310	0.0	3.5	36.388	E
C-AB	6	2	981	0.006	6	0.0	0.0	3.692	A
C-A	498	124			498				
A-B	72	18			72				
A-C	93	23			93				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	387	97	378	1.023	355	3.5	11.3	97.849	F
C-AB	9	2	1035	0.008	9	0.0	0.0	3.505	A
C-A	593	148			593				

A-B	86	22			86				
A-C	111	28			111				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	473	118	350	1.354	348	11.3	42.8	301.714	F
C-AB	13	3	1111	0.012	13	0.0	0.0	3.274	A
C-A	724	181			724				
A-B	106	26			106				
A-C	135	34			135				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	473	118	350	1.354	349	42.8	73.8	599.302	F
C-AB	13	3	1111	0.012	13	0.0	0.0	3.277	A
C-A	724	181			724				
A-B	106	26			106				
A-C	135	34			135				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	387	97	378	1.023	377	73.8	76.3	713.919	F
C-AB	9	2	1035	0.008	9	0.0	0.0	3.510	A
C-A	593	148			593				
A-B	86	22			86				
A-C	111	28			111				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	324	81	398	0.813	393	76.3	59.0	621.091	F
C-AB	6	2	981	0.006	6	0.0	0.0	3.698	A
C-A	497	124			497				
A-B	72	18			72				
A-C	93	23			93				

2031 Base + Committed + ALL Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	2.82	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	45	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 segment length (min)	Run automatically
D8	2031 Base + Committed + ALL Development	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pagham Road N		ONE HOUR	✓	509	100.000
B - Sefter Road		ONE HOUR	✓	156	100.000
C - Pagham Road S		ONE HOUR	✓	215	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Pagham Road N	B - Sefter Road	C - Pagham Road S
From	A - Pagham Road N	0	370	139
	B - Sefter Road	149	0	7
	C - Pagham Road S	211	4	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Pagham Road N	B - Sefter Road	C - Pagham Road S
From	A - Pagham Road N	0	0	2
	B - Sefter Road	1	0	0
	C - Pagham Road S	5	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.43	15.86	0.7	C	143	215
C-AB	0.01	5.08	0.0	A	5	8
C-A					192	288
A-B					340	509
A-C					128	191

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	117	29	434	0.271	116	0.0	0.4	11.287	B
C-AB	4	0.97	714	0.005	4	0.0	0.0	5.071	A
C-A	158	39			158				
A-B	279	70			279				
A-C	105	26			105				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	140	35	419	0.335	140	0.4	0.5	12.872	B
C-AB	5	1	715	0.007	5	0.0	0.0	5.064	A
C-A	188	47			188				
A-B	333	83			333				
A-C	125	31			125				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	172	43	399	0.431	171	0.5	0.7	15.732	C
C-AB	7	2	718	0.009	7	0.0	0.0	5.053	A
C-A	230	58			230				
A-B	407	102			407				
A-C	153	38			153				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	172	43	399	0.431	172	0.7	0.7	15.859	C
C-AB	7	2	718	0.009	7	0.0	0.0	5.061	A
C-A	230	58			230				
A-B	407	102			407				
A-C	153	38			153				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	140	35	419	0.335	141	0.7	0.5	13.009	B
C-AB	5	1	715	0.007	5	0.0	0.0	5.080	A
C-A	188	47			188				
A-B	333	83			333				
A-C	125	31			125				

18:15 - 18:30

Stream	Total Demand	Junction	Capacity	RFC	Throughput	Start queue	End queue	Delay (s)	LOS
--------	--------------	----------	----------	-----	------------	-------------	-----------	-----------	-----

	(Veh/hr)	Arrivals (Veh)	(Veh/hr)		(Veh/hr)	(Veh)	(Veh)		
B-AC	117	29	433	0.271	118	0.5	0.4	11.429	B
C-AB	4	0.97	714	0.005	4	0.0	0.0	5.080	A
C-A	158	39			158				
A-B	279	70			279				
A-C	105	26			105				

Junctions 9
PICADY 9 - Priority Intersection Module
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Filename: AM_PM_Pagham Road Site Access.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\20170207

Revised Traffic Flows\20170207_2031 Base and Committed and ALL Development

Report generation date: 08/02/2017 11:50:28

»2031 Base + Committed + ALL Development, AM
»2031 Base + Committed + ALL Development, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed + ALL Development														
Stream B-AC	0.1	9.39	0.12	A	0.57	A	136 %	0.1	7.51	0.07	A	0.69	A	357 %
Stream C-B	0.0	5.10	0.00	A			[Stream B-AC]	0.0	5.12	0.00	A			[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. Junction LOS and Junction Delay are demand-weighted averages. 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	Pagham Road Proposed Site Access
Location	Rose Green, Pagham
Site number	
Date	15/06/2016
Version	
Status	Proposed
Identifier	
Client	Hallam Land Management
Jobnumber	JNY8840
Enumerator	EUR\pauline.pettitt
Description	Based on Drg No 2

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

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

Demand Set Summary

			Time				
--	--	--	------	--	--	--	--

ID	Scenario name	Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:45	09:15	15	✓
D2	2031 Base + Committed + ALL Development	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2031 Base + Committed + ALL Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.57	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	136	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	Pagham Road N		Major
B	Site Access		Minor
C	Pagham Road S		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 - Pagham Road S	6.00		✓	3.00	200.0		-

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 - Site Access	One lane	3.00	120	120

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	578	0.105	0.266	0.167	0.380
1	B-C	699	0.107	0.271	-	-
1	C-B	750	0.291	0.291	-	-

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

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

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

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pagham Road N		ONE HOUR	✓	124	100.000
B - Site Access		ONE HOUR	✓	49	100.000
C - Pagham Road S		ONE HOUR	✓	633	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - Pagham Road N	B - Site Access	C - Pagham Road S
	A - Pagham Road N	0	22	102
	B - Site Access	45	0	4
	C - Pagham Road S	631	2	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - Pagham Road N	B - Site Access	C - Pagham Road S
	A - Pagham Road N	0	0	6
	B - Site Access	0	0	0
	C - Pagham Road S	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.12	9.39	0.1	A	45	67
C-A					579	869
C-B	0.00	5.10	0.0	A	2	3
A-B					20	30
A-C					94	140

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	37	9	485	0.076	37	0.0	0.1	8.025	A
C-A	475	119			475				
C-B	2	0.38	721	0.002	1	0.0	0.0	5.000	A
A-B	17	4			17				
A-C	77	19			77				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	44	11	465	0.095	44	0.1	0.1	8.549	A
C-A	567	142			567				

C-B	2	0.45	716	0.003	2	0.0	0.0	5.041	A
A-B	20	5			20				
A-C	92	23			92				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	54	13	437	0.123	54	0.1	0.1	9.385	A
C-A	695	174			695				
C-B	2	0.55	708	0.003	2	0.0	0.0	5.098	A
A-B	24	6			24				
A-C	112	28			112				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	54	13	437	0.123	54	0.1	0.1	9.391	A
C-A	695	174			695				
C-B	2	0.55	708	0.003	2	0.0	0.0	5.098	A
A-B	24	6			24				
A-C	112	28			112				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	44	11	465	0.095	44	0.1	0.1	8.560	A
C-A	567	142			567				
C-B	2	0.45	716	0.003	2	0.0	0.0	5.041	A
A-B	20	5			20				
A-C	92	23			92				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	37	9	485	0.076	37	0.1	0.1	8.039	A
C-A	475	119			475				
C-B	2	0.38	721	0.002	2	0.0	0.0	5.002	A
A-B	17	4			17				
A-C	77	19			77				

2031 Base + Committed + ALL Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.69	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	357	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 segment length (min)	Run automatically
D2	2031 Base + Committed + ALL Development	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pagham Road N		ONE HOUR	✓	136	100.000
B - Site Access		ONE HOUR	✓	32	100.000
C - Pagham Road S		ONE HOUR	✓	198	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - Pagham Road N	B - Site Access	C - Pagham Road S
	A - Pagham Road N	0	40	96
	B - Site Access	30	0	2
	C - Pagham Road S	195	3	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - Pagham Road N	B - Site Access	C - Pagham Road S
	A - Pagham Road N	0	0	1
	B - Site Access	0	0	0
	C - Pagham Road S	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.07	7.51	0.1	A	29	44
C-A					179	268
C-B	0.00	5.12	0.0	A	3	4
A-B					37	55
A-C					88	132

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	24	6	537	0.045	24	0.0	0.0	7.020	A
C-A	147	37			147				
C-B	2	0.56	720	0.003	2	0.0	0.0	5.016	A
A-B	30	8			30				
A-C	72	18			72				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	29	7	527	0.055	29	0.0	0.1	7.220	A
C-A	175	44			175				
C-B	3	0.67	714	0.004	3	0.0	0.0	5.060	A
A-B	36	9			36				
A-C	86	22			86				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	35	9	514	0.068	35	0.1	0.1	7.511	A
C-A	215	54			215				
C-B	3	0.83	706	0.005	3	0.0	0.0	5.122	A
A-B	44	11			44				
A-C	106	26			106				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	35	9	514	0.068	35	0.1	0.1	7.511	A
C-A	215	54			215				
C-B	3	0.83	706	0.005	3	0.0	0.0	5.122	A
A-B	44	11			44				
A-C	106	26			106				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	29	7	527	0.055	29	0.1	0.1	7.224	A
C-A	175	44			175				
C-B	3	0.67	714	0.004	3	0.0	0.0	5.062	A

A-B	36	9			36				
A-C	86	22			86				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	24	6	537	0.045	24	0.1	0.0	7.027	A
C-A	147	37			147				
C-B	2	0.56	720	0.003	2	0.0	0.0	5.018	A
A-B	30	8			30				
A-C	72	18			72				

Junctions 9
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Filename: AM_PM_Rose Green Road-Carlton Avenue.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\20170207_2031 Base and Committed and ALL Development

Report generation date: 09/03/2017 10:48:38

»2031 Base + Committed + ALL Development, AM

»2031 Base + Committed + ALL Development, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed + ALL Development														
Stream B-ACD	2.2	40.64	0.71	E	65.96	F	-21 % [Stream D-ABC]	1.1	27.82	0.54	D	151.26	F	-28 % [Stream D-ABC]
Stream A-BCD	0.0	6.45	0.01	A				0.0	5.29	0.02	A			
Stream D-ABC	26.5	195.88	1.08	F				60.7	432.52	1.23	F			
Stream C-ABD	0.3	4.90	0.12	A				0.3	5.01	0.13	A			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	Rose Green Road/Carlton Avenue
Location	Rose Green, Pagham
Site number	
Date	15/06/2016
Version	
Status	Existing Junction
Identifier	
Client	
Jobnumber	JNY8840
Enumerator	EUR\pauline.pettitt
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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	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 segment length (min)	Run automatically

D7	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:45	09:15	15	✓
D8	2031 Base + Committed + ALL Development	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

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

2031 Base + Committed + ALL Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way	65.96	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-21	Stream D-ABC

Arms

Arms

Arm	Name	Description	Arm type
A	Grosvenor Gardens		Major
B	Carlton Avenue		Minor
C	Rose Green Road W		Major
D	Rose Green Road N		Minor

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)
A - Grosvenor Gardens	7.00			155.0	✓	0.00
C - Rose Green Road W	7.00			145.0	✓	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 - Carlton Avenue	One lane	3.10	22	50
D - Rose Green Road N	One lane	3.70	80	137

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	664	-	-	-	0.246	0.246	0.246	-	0.246	-	-
1	B-AD	514	0.090	0.226	-	-	-	0.142	0.324	0.142	0.090	0.226
1	B-C	662	0.097	0.245	-	-	-	-	-	-	0.097	0.245
1	C-B	658	0.244	0.244	-	-	-	-	-	-	0.244	0.244
1	D-A	760	-	-	-	0.282	0.111	0.282	-	0.111	-	-
1	D-BC	613	0.170	0.170	0.385	0.270	0.107	0.270	-	0.107	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Grosvenor Gardens		ONE HOUR	✓	262	100.000
B - Carlton Avenue		ONE HOUR	✓	191	100.000
C - Rose Green Road W		ONE HOUR	✓	521	100.000
D - Rose Green Road N		ONE HOUR	✓	428	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - Grosvenor Gardens	B - Carlton Avenue	C - Rose Green Road W	D - Rose Green Road N
From	A - Grosvenor Gardens	0	15	244	3
	B - Carlton Avenue	55	0	53	83
	C - Rose Green Road W	246	35	0	240
	D - Rose Green Road N	38	59	331	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - Grosvenor Gardens	B - Carlton Avenue	C - Rose Green Road W	D - Rose Green Road N
From	A - Grosvenor Gardens	0	0	1	33
	B - Carlton Avenue	0	0	0	1
	C - Rose Green Road W	1	0	0	1
	D - Rose Green Road N	3	0	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.71	40.64	2.2	E	175	263
A-BCD	0.01	6.45	0.0	A	5	7
A-B					14	20
A-C					222	333
D-ABC	1.08	195.88	26.5	F	393	589
C-ABD	0.12	4.90	0.3	A	73	110
C-D					200	300
C-A					205	308

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	144	36	386	0.373	141	0.0	0.6	14.594	B

A-BCD	3	1	561	0.006	3	0.0	0.0	6.451	A
A-B	11	3			11				
A-C	183	46			183				
D-ABC	322	81	493	0.653	315	0.0	1.8	19.509	C
C-ABD	49	12	793	0.062	49	0.0	0.1	4.837	A
C-D	170	42			170				
C-A	174	43			174				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	172	43	353	0.487	170	0.6	0.9	19.605	C
A-BCD	5	1	576	0.008	5	0.0	0.0	6.346	A
A-B	13	3			13				
A-C	218	54			218				
D-ABC	385	96	470	0.819	377	1.8	3.7	35.865	E
C-ABD	67	17	824	0.082	67	0.1	0.2	4.758	A
C-D	198	50			198				
C-A	203	51			203				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	210	53	306	0.687	206	0.9	2.0	34.565	D
A-BCD	6	2	596	0.011	6	0.0	0.0	6.151	A
A-B	16	4			16				
A-C	266	66			266				
D-ABC	471	118	438	1.077	420	3.7	16.5	108.051	F
C-ABD	101	25	870	0.116	100	0.2	0.3	4.679	A
C-D	234	58			234				
C-A	239	60			239				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	210	53	296	0.711	209	2.0	2.2	40.639	E
A-BCD	6	2	596	0.011	6	0.0	0.0	6.105	A
A-B	16	4			16				
A-C	266	66			266				
D-ABC	471	118	437	1.079	431	16.5	26.5	195.881	F
C-ABD	102	26	862	0.119	102	0.3	0.3	4.747	A
C-D	233	58			233				
C-A	239	60			239				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	172	43	333	0.516	176	2.2	1.1	23.601	C
A-BCD	5	1	575	0.008	5	0.0	0.0	6.239	A
A-B	13	3			13				
A-C	218	54			218				
D-ABC	385	96	469	0.821	452	26.5	9.7	152.513	F
C-ABD	69	17	807	0.086	70	0.3	0.2	4.892	A
C-D	197	49			197				
C-A	202	51			202				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	144	36	378	0.380	146	1.1	0.6	15.619	C
A-BCD	3	1	561	0.006	3	0.0	0.0	6.402	A
A-B	11	3			11				
A-C	183	46			183				

D-ABC	322	81	493	0.654	353	9.7	2.0	30.441	D
C-ABD	50	12	786	0.063	50	0.2	0.1	4.897	A
C-D	169	42			169				
C-A	173	43			173				

2031 Base + Committed + ALL Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way	151.26	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-28	Stream D-ABC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2031 Base + Committed + ALL Development	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Grosvenor Gardens		ONE HOUR	✓	272	100.000
B - Carlton Avenue		ONE HOUR	✓	138	100.000
C - Rose Green Road W		ONE HOUR	✓	557	100.000
D - Rose Green Road N		ONE HOUR	✓	504	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - Grosvenor Gardens	B - Carlton Avenue	C - Rose Green Road W	D - Rose Green Road N
From	A - Grosvenor Gardens	0	36	230	6
	B - Carlton Avenue	41	0	44	53
	C - Rose Green Road W	284	36	0	237
	D - Rose Green Road N	93	52	359	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Grosvenor Gardens	B - Carlton Avenue	C - Rose Green Road W	D - Rose Green Road N
From	A - Grosvenor Gardens	0	0	1	0
	B - Carlton Avenue	0	0	0	2
	C - Rose Green Road W	0	0	0	1
	D - Rose Green Road N	0	0	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.54	27.82	1.1	D	127	190
A-BCD	0.02	5.29	0.0	A	9	13
A-B					33	49
A-C					208	313
D-ABC	1.23	432.52	60.7	F	462	694
C-ABD	0.13	5.01	0.3	A	81	121
C-D					196	294
C-A					234	352

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	104	26	385	0.270	102	0.0	0.4	12.683	B
A-BCD	6	2	688	0.009	6	0.0	0.0	5.282	A
A-B	27	7			27				
A-C	172	43			172				
D-ABC	379	95	509	0.746	369	0.0	2.6	24.214	C
C-ABD	53	13	808	0.065	52	0.0	0.1	4.762	A
C-D	167	42			167				
C-A	200	50			200				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	124	31	350	0.355	123	0.4	0.5	15.841	C
A-BCD	8	2	695	0.012	8	0.0	0.0	5.238	A
A-B	32	8			32				
A-C	204	51			204				
D-ABC	453	113	485	0.935	434	2.6	7.3	56.688	F
C-ABD	73	18	842	0.087	73	0.1	0.2	4.681	A
C-D	194	49			194				
C-A	233	58			233				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	152	38	300	0.507	150	0.5	1.0	23.755	C
A-BCD	11	3	707	0.016	11	0.0	0.0	5.170	A
A-B	39	10			39				
A-C	249	62			249				
D-ABC	555	139	451	1.229	446	7.3	34.5	188.709	F
C-ABD	112	28	893	0.125	111	0.2	0.3	4.611	A
C-D	228	57			228				
C-A	273	68			273				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	152	38	280	0.543	151	1.0	1.1	27.825	D
A-BCD	11	3	707	0.016	11	0.0	0.0	5.176	A

A-B	39	10			39				
A-C	249	62			249				
D-ABC	555	139	451	1.230	450	34.5	60.7	388.011	F
C-ABD	115	29	878	0.131	115	0.3	0.3	4.726	A
C-D	227	57			227				
C-A	271	68			271				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	124	31	308	0.403	126	1.1	0.7	19.984	C
A-BCD	8	2	695	0.012	8	0.0	0.0	5.246	A
A-B	32	8			32				
A-C	204	51			204				
D-ABC	453	113	484	0.936	476	60.7	54.9	432.521	F
C-ABD	78	19	808	0.096	78	0.3	0.2	4.938	A
C-D	192	48			192				
C-A	231	58			231				

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	104	26	345	0.301	105	0.7	0.4	15.045	C
A-BCD	6	2	687	0.009	6	0.0	0.0	5.288	A
A-B	27	7			27				
A-C	172	43			172				
D-ABC	379	95	508	0.747	499	54.9	24.9	292.414	F
C-ABD	55	14	774	0.071	56	0.2	0.1	5.015	A
C-D	166	41			166				
C-A	198	50			198				

Junctions 9
PICADY 9 - Priority Intersection Module
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Filename: AM_PM_Sefter Road-Hook Lane.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\20170207_2031 Base and Committed and ALL Development

Report generation date: 09/03/2017 10:36:18

»2031 Base + Committed + ALL Development, AM
»2027 Base + Committed + ALL Development , PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2031 Base + Committed + ALL Development													
Stream B-C	0.0	9.91	0.03	A	5.60	A	19 %							
Stream B-A	1.5	20.47	0.60	C			[Stream B-A]							
Stream C-AB	0.0	7.64	0.03	A										
	2027 Base + Committed + ALL Development													
Stream B-C								0.0	7.94	0.02	A	3.26	A	34 %
Stream B-A								0.9	16.52	0.48	C			[Stream B-A]
Stream C-AB								0.2	5.45	0.10	A			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	Sefter Road/Hook Lane
Location	Rose Green, Pagham
Site number	
Date	15/06/2016
Version	
Status	Existing layout
Identifier	
Client	
Jobnumber	JNY8840
Enumerator	EUR\pauline.pettitt
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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)

5.75			✓	Delay	0.85	36.00	20.00
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Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:45	09:15	15	✓
D8	2027 Base + Committed + ALL Development	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

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

2031 Base + Committed + ALL Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	5.60	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	19	Stream B-A

Arms

Arms

Arm	Name	Description	Arm type
A	Sefter Road SE		Major
B	Hook Lane		Minor
C	Sefter Road NW		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 - Sefter Road NW	7.30			93.0	✓	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	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 - Hook Lane	One lane plus flare	10.00	9.60	6.00	4.20	3.70		1.00	32	25

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	579	0.100	0.252	0.158	0.359
1	B-C	674	0.097	0.246	-	-
1	C-B	628	0.229	0.229	-	-

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	Traffic	Start time	Finish time	Time segment	Run
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		name	profile type	(HH:mm)	(HH:mm)	length (min)	automatically
D7	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sefter Road SE		ONE HOUR	✓	518	100.000
B - Hook Lane		ONE HOUR	✓	249	100.000
C - Sefter Road NW		ONE HOUR	✓	139	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Sefter Road SE	B - Hook Lane	C - Sefter Road NW
	From			
	A - Sefter Road SE	0	220	298
	B - Hook Lane	240	0	9
	C - Sefter Road NW	131	8	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Sefter Road SE	B - Hook Lane	C - Sefter Road NW
	From			
	A - Sefter Road SE	0	2	1
	B - Hook Lane	1	0	0
	C - Sefter Road NW	1	33	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.03	9.91	0.0	A	8	12
B-A	0.60	20.47	1.5	C	220	330
C-AB	0.03	7.64	0.0	A	10	15
C-A					118	176
A-B					202	303
A-C					273	410

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	517	0.013	7	0.0	0.0	7.050	A
B-A	181	45	482	0.375	178	0.0	0.6	11.765	B
C-AB	8	2	480	0.016	8	0.0	0.0	7.618	A
C-A	97	24			97				
A-B	166	41			166				
A-C	224	56			224				

08:00 - 08:15

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Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	466	0.017	8	0.0	0.0	7.854	A
B-A	216	54	464	0.465	215	0.6	0.8	14.367	B
C-AB	10	2	483	0.020	10	0.0	0.0	7.642	A
C-A	115	29			115				
A-B	198	49			198				
A-C	268	67			268				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	2	376	0.026	10	0.0	0.0	9.820	A
B-A	264	66	440	0.601	262	0.8	1.4	19.989	C
C-AB	13	3	487	0.026	13	0.0	0.0	7.639	A
C-A	140	35			140				
A-B	242	61			242				
A-C	328	82			328				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	10	2	373	0.027	10	0.0	0.0	9.914	A
B-A	264	66	440	0.601	264	1.4	1.5	20.472	C
C-AB	13	3	487	0.026	13	0.0	0.0	7.596	A
C-A	140	35			140				
A-B	242	61			242				
A-C	328	82			328				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	463	0.017	8	0.0	0.0	7.919	A
B-A	216	54	464	0.465	218	1.5	0.9	14.757	B
C-AB	10	2	483	0.020	10	0.0	0.0	7.548	A
C-A	115	29			115				
A-B	198	49			198				
A-C	268	67			268				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	515	0.013	7	0.0	0.0	7.091	A
B-A	181	45	482	0.375	182	0.9	0.6	12.036	B
C-AB	8	2	480	0.016	8	0.0	0.0	7.572	A
C-A	97	24			97				
A-B	166	41			166				
A-C	224	56			224				

2027 Base + Committed + ALL Development , PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	3.26	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	34	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 segment length (min)	Run automatically
D8	2027 Base + Committed + ALL Development	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sefter Road SE		ONE HOUR	✓	513	100.000
B - Hook Lane		ONE HOUR	✓	189	100.000
C - Sefter Road NW		ONE HOUR	✓	350	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - Sefter Road SE	B - Hook Lane	C - Sefter Road NW
	A - Sefter Road SE	0	358	155
	B - Hook Lane	182	0	7
	C - Sefter Road NW	313	37	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - Sefter Road SE	B - Hook Lane	C - Sefter Road NW
	A - Sefter Road SE	0	1	2
	B - Hook Lane	2	0	0
	C - Sefter Road NW	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	7.94	0.0	A	6	10
B-A	0.48	16.52	0.9	C	167	251
C-AB	0.10	5.45	0.2	A	58	86
C-A					264	395
A-B					329	493
A-C					142	213

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	558	0.009	5	0.0	0.0	6.508	A
B-A	137	34	466	0.294	135	0.0	0.4	10.848	B
C-AB	42	10	703	0.060	42	0.0	0.1	5.440	A
C-A	222	55			222				
A-B	270	67			270				
A-C	117	29			117				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	2	524	0.012	6	0.0	0.0	6.958	A
B-A	164	41	446	0.367	163	0.4	0.6	12.704	B
C-AB	55	14	721	0.076	55	0.1	0.1	5.408	A
C-A	260	65			260				
A-B	322	80			322				
A-C	139	35			139				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	463	0.017	8	0.0	0.0	7.908	A
B-A	200	50	418	0.479	199	0.6	0.9	16.332	C
C-AB	76	19	746	0.102	76	0.1	0.2	5.372	A
C-A	309	77			309				
A-B	394	99			394				
A-C	171	43			171				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	461	0.017	8	0.0	0.0	7.936	A
B-A	200	50	418	0.479	200	0.9	0.9	16.518	C
C-AB	76	19	746	0.102	76	0.2	0.2	5.379	A
C-A	309	77			309				
A-B	394	99			394				
A-C	171	43			171				

18:00 - 18:15

	Total	Junction							
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Stream	Demand (Veh/hr)	Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	6	2	522	0.012	6	0.0	0.0	6.981	A
B-A	164	41	446	0.367	165	0.9	0.6	12.882	B
C-AB	55	14	721	0.076	55	0.2	0.1	5.413	A
C-A	260	65			260				
A-B	322	80			322				
A-C	139	35			139				

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	557	0.009	5	0.0	0.0	6.529	A
B-A	137	34	466	0.294	138	0.6	0.4	11.005	B
C-AB	42	11	703	0.060	42	0.1	0.1	5.448	A
C-A	221	55			221				
A-B	270	67			270				
A-C	117	29			117				

Junctions 9						
ARCADY 9 - Roundabout Module						
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017						
For sales and distribution information, program advice and maintenance, contact TRL: Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk						
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution						

Filename: AM_PM_Vinnetrow Road & B2166.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\20170207 Revised Traffic Flows\20170207_2031 Base and Committed and ALL Development

Report generation date: 08/02/2017 14:30:04

»2031 Base + Committed + ALL Development, AM

»2031 Base + Committed + ALL Development, PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2031 Base + Committed + ALL Development															
1 - Vinnetrow Road	0.8	3.0	7.46	0.44	A	75.83	F	-11 % [2 - B2166 E]	12.1	50.5	80.00	0.97	F	25.72	D	-7 % [1 - Vinnetrow Road]
2 - B2166 E	58.1	126.8	123.46	1.06	F				1.4	1.7	6.05	0.58	A			
3 - Mill Lane	0.2	0.5	10.09	0.17	B				0.1	0.5	5.04	0.06	A			
4 - B2166 W	0.8	2.3	4.74	0.43	A				4.1	19.5	13.69	0.81	B			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	(untitled)
Location	
Site number	
Date	10/11/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
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 segment length (min)
D1	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed + ALL Development	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed + ALL Development, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	75.83	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-11	2 - B2166 E

Arms

Arms

Arm	Name	Description
1	Vinnetrow Road	
2	B2166 E	
3	Mill Lane	
4	B2166 W	

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 - Vinnetrow Road	3.00	6.00	5.0	30.0	30.0	35.0	
2 - B2166 E	4.00	6.00	12.0	30.0	30.0	42.0	
3 - Mill Lane	3.00	7.00	8.0	20.0	30.0	30.0	
4 - B2166 W	3.50	6.00	6.0	20.0	30.0	30.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Vinnetrow Road	0.559	1219
2 - B2166 E	0.623	1566
3 - Mill Lane	0.591	1375
4 - B2166 W	0.593	1385

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:30	09:00	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 - Vinnetrow Road		✓	340	100.000
2 - B2166 E		✓	1402	100.000
3 - Mill Lane		✓	67	100.000
4 - B2166 W		✓	527	100.000

Origin-Destination Data

Demand (Veh/hr)

	To

From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	196	7	137
	2 - B2166 E	0	0	5	1397
	3 - Mill Lane	0	11	0	56
	4 - B2166 W	0	512	15	0

Vehicle Mix

Heavy Vehicle Percentages

From		To			
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	3	0	2
	2 - B2166 E	3	0	0	0
	3 - Mill Lane	0	0	0	0
	4 - B2166 W	8	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.44	7.46	0.8	3.0	A
2 - B2166 E	1.06	123.46	58.1	126.8	F
3 - Mill Lane	0.17	10.09	0.2	0.5	B
4 - B2166 W	0.43	4.74	0.8	2.3	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	256	403	963	0.266	255	0.4	5.073	A
2 - B2166 E	1055	119	1491	0.708	1046	2.4	7.931	A
3 - Mill Lane	50	1145	697	0.072	50	0.1	5.564	A
4 - B2166 W	397	8	1341	0.296	395	0.4	3.798	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	306	483	918	0.333	305	0.5	5.870	A
2 - B2166 E	1260	143	1476	0.854	1249	5.3	15.098	C
3 - Mill Lane	60	1367	565	0.107	60	0.1	7.127	A
4 - B2166 W	474	10	1340	0.353	473	0.5	4.149	A

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)	LOS
1 - Vinnetrow Road	374	591	857	0.437	373	0.8	7.423	A
2 - B2166 E	1544	175	1456	1.060	1427	34.3	60.869	F
3 - Mill Lane	74	1573	443	0.166	73	0.2	9.726	A
4 - B2166 W	580	12	1339	0.433	579	0.8	4.735	A

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)	LOS
1 - Vinnetrow Road	374	592	857	0.437	374	0.8	7.463	A
2 - B2166 E	1544	175	1456	1.060	1449	58.1	123.464	F
3 - Mill Lane	74	1594	431	0.171	74	0.2	10.089	B
4 - B2166 W	580	12	1339	0.433	580	0.8	4.744	A

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)	LOS
1 - Vinnetrow Road	306	485	917	0.333	307	0.5	5.909	A
2 - B2166 E	1260	143	1476	0.854	1453	9.8	90.652	F
3 - Mill Lane	60	1572	444	0.136	60	0.2	9.387	A
4 - B2166 W	474	10	1340	0.354	475	0.6	4.164	A

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)	LOS
1 - Vinnetrow Road	256	406	961	0.266	257	0.4	5.112	A
2 - B2166 E	1055	120	1491	0.708	1085	2.5	9.484	A
3 - Mill Lane	50	1184	673	0.075	51	0.1	5.783	A
4 - B2166 W	397	8	1341	0.296	397	0.4	3.818	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2 - B2166 E	2.35	0.26	1.44	4.36	5.53			N/A	N/A
3 - Mill Lane	0.08	0.00	0.00	0.08	0.08			N/A	N/A
4 - B2166 W	0.42	0.00	0.00	0.42	0.42			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.49	0.00	0.00	0.49	0.49			N/A	N/A
2 - B2166 E	5.26	0.08	1.22	14.51	21.87			N/A	N/A
3 - Mill Lane	0.12	0.00	0.00	0.12	0.12			N/A	N/A
4 - B2166 W	0.54	0.54	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.76	0.03	0.26	0.76	0.76			N/A	N/A
2 - B2166 E	34.34	6.10	28.67	65.37	79.48			N/A	N/A
3 - Mill Lane	0.20	0.03	0.26	0.47	0.49			N/A	N/A
4 - B2166 W	0.76	0.03	0.25	0.76	0.76			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.77	0.03	0.28	0.90	2.97			N/A	N/A
2 - B2166 E	58.11	13.32	50.34	105.98	126.80			N/A	N/A
3 - Mill Lane	0.20	0.03	0.26	0.46	0.48			N/A	N/A
4 - B2166 W	0.76	0.03	0.28	0.76	2.27			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.50	0.50	1.00	1.40	1.45			N/A	N/A
2 - B2166 E	9.85	0.10	2.78	27.57	41.24			N/A	N/A
3 - Mill Lane	0.16	0.00	0.00	0.16	0.16			N/A	N/A
4 - B2166 W	0.55	0.55	1.00	1.40	1.45			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.37	0.03	0.26	0.47	0.49			N/A	N/A
2 - B2166 E	2.50	0.03	0.30	2.50	10.89			N/A	N/A
3 - Mill Lane	0.08	0.00	0.00	0.08	0.08			N/A	N/A
4 - B2166 W	0.42	0.00	0.00	0.42	0.42			N/A	N/A

2031 Base + Committed + ALL Development, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	25.72	D

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-7	1 - Vinnetrow Road

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2031 Base + Committed + ALL Development	PM	ONE HOUR	16:30	18:00	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 - Vinnetrow Road		✓	514	100.000
2 - B2166 E		✓	743	100.000
3 - Mill Lane		✓	45	100.000
4 - B2166 W		✓	998	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	341	13	160
	2 - B2166 E	0	0	8	735
	3 - Mill Lane	0	17	0	28
	4 - B2166 W	0	985	13	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	0	0	1
	2 - B2166 E	3	0	0	2
	3 - Mill Lane	0	7	0	0
	4 - B2166 W	3	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.97	80.00	12.1	50.5	F
2 - B2166 E	0.58	6.05	1.4	1.7	A
3 - Mill Lane	0.06	5.04	0.1	0.5	A
4 - B2166 W	0.81	13.69	4.1	19.5	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)	LOS
1 - Vinnetrow Road	387	759	787	0.491	383	0.9	8.826	A
2 - B2166 E	559	139	1451	0.386	557	0.6	4.016	A
3 - Mill Lane	34	670	947	0.036	34	0.0	3.944	A
4 - B2166 W	751	13	1364	0.551	747	1.2	5.789	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)	LOS
1 - Vinnetrow Road	462	910	703	0.658	459	1.8	14.535	B
2 - B2166 E	668	166	1434	0.466	667	0.9	4.688	A
3 - Mill Lane	40	803	869	0.047	40	0.0	4.345	A
4 - B2166 W	897	15	1362	0.659	894	1.9	7.655	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)	LOS
1 - Vinnetrow Road	566	1109	590	0.959	537	9.0	51.817	F
2 - B2166 E	818	195	1416	0.578	816	1.3	5.982	A
3 - Mill Lane	50	975	768	0.065	49	0.1	5.010	A
4 - B2166 W	1099	19	1360	0.808	1091	3.9	12.987	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)	LOS
1 - Vinnetrow Road	566	1117	586	0.966	554	12.1	79.998	F
2 - B2166 E	818	201	1413	0.579	818	1.4	6.055	A
3 - Mill Lane	50	982	764	0.065	50	0.1	5.039	A
4 - B2166 W	1099	19	1360	0.808	1098	4.1	13.688	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	462	921	696	0.664	502	2.1	21.977	C
2 - B2166 E	668	181	1425	0.469	670	0.9	4.781	A
3 - Mill Lane	40	819	859	0.047	41	0.0	4.398	A
4 - B2166 W	897	15	1362	0.659	905	2.0	8.023	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	387	767	783	0.494	391	1.0	9.290	A
2 - B2166 E	559	142	1449	0.386	560	0.6	4.056	A
3 - Mill Lane	34	676	943	0.036	34	0.0	3.961	A
4 - B2166 W	751	13	1364	0.551	754	1.2	5.938	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.95	0.52	1.00	1.43	1.49			N/A	N/A
2 - B2166 E	0.62	0.55	1.00	1.40	1.45			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	1.21	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	1.84	0.05	0.69	4.72	7.18			N/A	N/A
2 - B2166 E	0.86	0.09	0.86	1.22	1.67			N/A	N/A
3 - Mill Lane	0.05	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	1.88	0.05	0.72	4.84	7.36			N/A	N/A

17:00 - 17:15

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

1 - Vinnetrow Road	9.02	0.15	3.87	23.52	33.24			N/A	N/A
2 - B2166 E	1.35	0.03	0.26	1.35	1.35			N/A	N/A
3 - Mill Lane	0.07	0.03	0.26	0.47	0.49			N/A	N/A
4 - B2166 W	3.92	0.03	0.32	5.58	19.50			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	12.07	0.11	3.58	33.83	50.46			N/A	N/A
2 - B2166 E	1.36	0.03	0.27	1.36	1.36			N/A	N/A
3 - Mill Lane	0.07	0.00	0.00	0.07	0.07			N/A	N/A
4 - B2166 W	4.06	0.03	0.28	4.06	10.94			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	2.08	0.04	0.37	5.33	10.77			N/A	N/A
2 - B2166 E	0.89	0.22	0.97	1.13	1.13			N/A	N/A
3 - Mill Lane	0.05	0.00	0.00	0.05	0.05			N/A	N/A
4 - B2166 W	1.98	0.05	0.57	5.22	8.17			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	1.00	0.03	0.29	1.13	3.98			N/A	N/A
2 - B2166 E	0.63	0.06	0.69	1.36	1.44			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	1.24	0.04	0.37	3.17	5.85			N/A	N/A

Junctions 9
ARCADY 9 - Roundabout Module
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017
For sales and distribution information, program advice and maintenance, contact TRL: Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk
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Filename: AM_PM_West Meads-Aldwick Fields.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\20170207 Revised Traffic Flows\20170207_2031 Base and Committed and ALL Development

Report generation date: 08/02/2017 14:11:53

»2031 Base + Committed + ALL Development, AM
»2031 Base + Committed + ALL Development, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed + ALL Development														
1 - Hawthorn Road	0.1	2.99	0.11	A	3.17	A	168 % [5 - West Meads Drive]	0.4	3.89	0.27	A	4.06	A	80 % [4 - B2166 Aldwick Road W]
2 - B2166 Aldwick Road E	0.4	2.66	0.27	A				0.4	2.96	0.30	A			
3 - Aldwick Fields	0.0	3.35	0.04	A				0.0	3.52	0.01	A			
4 - B2166 Aldwick Road W	0.4	3.50	0.27	A				0.9	4.95	0.48	A			
5 - West Meads Drive	0.3	3.63	0.24	A				0.4	4.21	0.27	A			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	West Meads/Aldwick Fields
Location	Rose Green, Pagham
Site number	
Date	15/06/2016
Version	
Status	Existing junction
Identifier	
Client	
Jobnumber	JNY8840
Enumerator	EUR\pauline.pettitt
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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	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 segment length (min)	Run automatically
D7	2031 Base + Committed + ALL Development	AM	ONE HOUR	08:00	09:30	15	✓
D8	2031 Base + Committed + ALL Development	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2031 Base + Committed + ALL Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3,4,5	3.17	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	168	5 - West Meads Drive

Arms

Arms

Arm	Name	Description
1	Hawthorn Road	
2	B2166 Aldwick Road E	
3	Aldwick Fields	
4	B2166 Aldwick Road W	
5	West Meads Drive	

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 - Hawthorn Road	4.00	6.10	10.7	23.6	58.6	19.0	
2 - B2166 Aldwick Road E	4.70	7.40	13.5	15.0	58.6	21.0	
3 - Aldwick Fields	3.70	7.10	4.8	18.7	58.6	22.5	
4 - B2166 Aldwick Road W	3.50	6.10	21.6	8.3	58.6	23.5	
5 - West Meads Drive	3.65	6.20	7.5	21.5	58.6	21.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Hawthorn Road	0.573	1676
2 - B2166 Aldwick Road E	0.613	1952
3 - Aldwick Fields	0.530	1469
4 - B2166 Aldwick Road W	0.527	1554
5 - West Meads Drive	0.544	1527

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2031 Base + Committed + ALL Development	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Hawthorn Road		ONE HOUR	✓	139	100.000
2 - B2166 Aldwick Road E		ONE HOUR	✓	448	100.000

3 - Aldwick Fields		ONE HOUR	✓	44	100.000
4 - B2166 Aldwick Road W		ONE HOUR	✓	338	100.000
5 - West Meads Drive		ONE HOUR	✓	278	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - Hawthorn Road	2 - B2166 Aldwick Road E	3 - Aldwick Fields	4 - B2166 Aldwick Road W	5 - West Meads Drive
From	1 - Hawthorn Road	0	36	5	92	6
	2 - B2166 Aldwick Road E	38	0	1	277	132
	3 - Aldwick Fields	24	15	0	3	2
	4 - B2166 Aldwick Road W	156	145	1	0	36
	5 - West Meads Drive	40	192	6	40	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - Hawthorn Road	2 - B2166 Aldwick Road E	3 - Aldwick Fields	4 - B2166 Aldwick Road W	5 - West Meads Drive
From	1 - Hawthorn Road	0	0	0	1	99
	2 - B2166 Aldwick Road E	0	0	0	0	0
	3 - Aldwick Fields	0	0	0	0	0
	4 - B2166 Aldwick Road W	2	2	0	0	0
	5 - West Meads Drive	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Hawthorn Road	0.11	2.99	0.1	A	128	191
2 - B2166 Aldwick Road E	0.27	2.66	0.4	A	411	617
3 - Aldwick Fields	0.04	3.35	0.0	A	40	61
4 - B2166 Aldwick Road W	0.27	3.50	0.4	A	310	465
5 - West Meads Drive	0.24	3.63	0.3	A	255	383

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Hawthorn Road	105	26	299	1433	0.073	104	194	0.0	0.1	2.710	A
2 - B2166 Aldwick Road E	337	84	113	1879	0.179	336	291	0.0	0.2	2.332	A
3 - Aldwick Fields	33	8	439	1233	0.027	33	10	0.0	0.0	2.998	A
4 - B2166 Aldwick Road W	254	64	163	1440	0.177	254	309	0.0	0.2	3.033	A
5 - West Meads Drive	209	52	284	1370	0.153	209	132	0.0	0.2	3.098	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Hawthorn Road	125	31	358	1400	0.089	125	232	0.1	0.1	2.822	A
2 - B2166 Aldwick Road E	403	101	135	1865	0.216	403	349	0.2	0.3	2.461	A
3 - Aldwick Fields	40	10	526	1187	0.033	40	12	0.0	0.0	3.136	A
4 - B2166 Aldwick Road W	304	76	195	1423	0.214	304	370	0.2	0.3	3.216	A
5 - West Meads Drive	250	62	340	1339	0.187	250	158	0.2	0.2	3.304	A

08:30 - 08:45

Arm	Total Demand	Junction Arrivals	Circulating flow	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side)	Start queue	End queue	Delay (s)	LOS
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	(Veh/hr)	(Veh)	(Veh/hr)				(Veh/hr)	(Veh)	(Veh)		
1 - Hawthorn Road	153	38	439	1356	0.113	153	284	0.1	0.1	2.992	A
2 - B2166 Aldwick Road E	493	123	165	1846	0.267	493	427	0.3	0.4	2.660	A
3 - Aldwick Fields	48	12	644	1124	0.043	48	14	0.0	0.0	3.347	A
4 - B2166 Aldwick Road W	372	93	239	1400	0.266	372	453	0.3	0.4	3.503	A
5 - West Meads Drive	306	77	417	1297	0.236	306	194	0.2	0.3	3.632	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Hawthorn Road	153	38	439	1356	0.113	153	284	0.1	0.1	2.992	A
2 - B2166 Aldwick Road E	493	123	165	1846	0.267	493	427	0.4	0.4	2.661	A
3 - Aldwick Fields	48	12	644	1123	0.043	48	14	0.0	0.0	3.348	A
4 - B2166 Aldwick Road W	372	93	239	1399	0.266	372	454	0.4	0.4	3.503	A
5 - West Meads Drive	306	77	417	1297	0.236	306	194	0.3	0.3	3.633	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Hawthorn Road	125	31	359	1400	0.089	125	232	0.1	0.1	2.823	A
2 - B2166 Aldwick Road E	403	101	135	1865	0.216	403	349	0.4	0.3	2.462	A
3 - Aldwick Fields	40	10	526	1187	0.033	40	12	0.0	0.0	3.140	A
4 - B2166 Aldwick Road W	304	76	195	1423	0.214	304	371	0.4	0.3	3.219	A
5 - West Meads Drive	250	62	341	1339	0.187	250	158	0.3	0.2	3.310	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Hawthorn Road	105	26	301	1432	0.073	105	194	0.1	0.1	2.714	A
2 - B2166 Aldwick Road E	337	84	113	1879	0.179	338	292	0.3	0.2	2.336	A
3 - Aldwick Fields	33	8	441	1233	0.027	33	10	0.0	0.0	3.003	A
4 - B2166 Aldwick Road W	254	64	163	1440	0.177	255	310	0.3	0.2	3.040	A
5 - West Meads Drive	209	52	286	1369	0.153	209	133	0.2	0.2	3.103	A

2031 Base + Committed + ALL Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3,4,5	4.06	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	80	4 - B2166 Aldwick Road W

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2031 Base + Committed + ALL Development	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Hawthorn Road		ONE HOUR	✓	305	100.000
2 - B2166 Aldwick Road E		ONE HOUR	✓	485	100.000
3 - Aldwick Fields		ONE HOUR	✓	9	100.000
4 - B2166 Aldwick Road W		ONE HOUR	✓	605	100.000
5 - West Meads Drive		ONE HOUR	✓	285	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
From		1 - Hawthorn Road	2 - B2166 Aldwick Road E	3 - Aldwick Fields	4 - B2166 Aldwick Road W	5 - West Meads Drive
	1 - Hawthorn Road	0	53	15	217	20
	2 - B2166 Aldwick Road E	16	0	9	264	196
	3 - Aldwick Fields	2	3	0	3	1
	4 - B2166 Aldwick Road W	189	377	2	0	37
	5 - West Meads Drive	17	225	6	37	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
From		1 - Hawthorn Road	2 - B2166 Aldwick Road E	3 - Aldwick Fields	4 - B2166 Aldwick Road W	5 - West Meads Drive
	1 - Hawthorn Road	0	0	0	0	0
	2 - B2166 Aldwick Road E	0	0	0	0	0
	3 - Aldwick Fields	0	0	0	0	0
	4 - B2166 Aldwick Road W	1	2	0	0	0
	5 - West Meads Drive	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Hawthorn Road	0.27	3.89	0.4	A	280	420
2 - B2166 Aldwick Road E	0.30	2.96	0.4	A	445	668
3 - Aldwick Fields	0.01	3.52	0.0	A	8	12
4 - B2166 Aldwick Road W	0.48	4.95	0.9	A	555	833
5 - West Meads Drive	0.27	4.21	0.4	A	262	392

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Hawthorn Road	230	57	487	1394	0.165	229	168	0.0	0.2	3.089	A
2 - B2166 Aldwick Road E	365	91	223	1815	0.201	364	493	0.0	0.3	2.480	A
3 - Aldwick Fields	7	2	563	1170	0.006	7	24	0.0	0.0	3.092	A
4 - B2166 Aldwick Road W	455	114	179	1437	0.317	454	391	0.0	0.5	3.654	A
5 - West Meads Drive	215	54	442	1283	0.167	214	191	0.0	0.2	3.365	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Hawthorn Road	274	69	584	1338	0.205	274	201	0.2	0.3	3.383	A
2 - B2166 Aldwick Road E	436	109	267	1788	0.244	436	591	0.3	0.3	2.661	A
3 - Aldwick Fields	8	2	674	1112	0.007	8	29	0.0	0.0	3.261	A
4 - B2166 Aldwick Road W	544	136	214	1419	0.383	543	468	0.5	0.6	4.108	A
5 - West Meads Drive	256	64	529	1235	0.207	256	228	0.2	0.3	3.677	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Hawthorn Road	336	84	715	1262	0.266	335	246	0.3	0.4	3.883	A
2 - B2166 Aldwick Road E	534	133	327	1751	0.305	534	723	0.3	0.4	2.956	A
3 - Aldwick Fields	10	2	825	1032	0.010	10	35	0.0	0.0	3.522	A
4 - B2166 Aldwick Road W	666	167	262	1394	0.478	665	573	0.6	0.9	4.929	A
5 - West Meads Drive	314	78	647	1170	0.268	313	279	0.3	0.4	4.203	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Hawthorn Road	336	84	716	1261	0.266	336	247	0.4	0.4	3.889	A
2 - B2166 Aldwick Road E	534	133	327	1751	0.305	534	724	0.4	0.4	2.956	A
3 - Aldwick Fields	10	2	826	1031	0.010	10	35	0.0	0.0	3.524	A
4 - B2166 Aldwick Road W	666	167	262	1394	0.478	666	574	0.9	0.9	4.946	A
5 - West Meads Drive	314	78	648	1169	0.268	314	280	0.4	0.4	4.209	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Hawthorn Road	274	69	585	1337	0.205	275	202	0.4	0.3	3.389	A
2 - B2166 Aldwick Road E	436	109	267	1788	0.244	436	593	0.4	0.3	2.664	A
3 - Aldwick Fields	8	2	675	1111	0.007	8	29	0.0	0.0	3.263	A
4 - B2166 Aldwick Road W	544	136	214	1419	0.383	545	469	0.9	0.6	4.125	A
5 - West Meads Drive	256	64	531	1234	0.208	257	229	0.4	0.3	3.683	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Hawthorn Road	230	57	490	1392	0.165	230	169	0.3	0.2	3.099	A
2 - B2166 Aldwick Road E	365	91	224	1814	0.201	365	496	0.3	0.3	2.484	A
3 - Aldwick Fields	7	2	565	1169	0.006	7	24	0.0	0.0	3.096	A
4 - B2166 Aldwick Road W	455	114	179	1437	0.317	456	393	0.6	0.5	3.675	A

5 - West Meads Drive	215	54	444	1282	0.167	215	191	0.3	0.2	3.373	A
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Junctions 9
ARCADY 9 - Roundabout Module
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017
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Filename: AM_PM_B2145 & B2166.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\20170207 Revised Traffic Flows\20170207_2031 Base and Committed Development

Report generation date: 08/02/2017 09:39:42

»2031 Base + Committed Development, AM

»2031 Base + Committed Development, PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2031 Base + Committed Development															
1 - B2145 North	0.9	1.9	5.20	0.48	A	20.93	C	1 % [2 - B2166]	10.3	56.7	30.88	0.93	D	18.99	C	1 % [1 - B2145 North]
2 - B2166	10.9	59.4	32.16	0.93	D				4.0	19.5	15.10	0.81	C			
3 - untitled	4.5	22.0	16.87	0.83	C				1.4	1.7	5.92	0.59	A			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	(untitled)
Location	
Site number	
Date	05/12/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
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 segment length (min)
D1	2031 Base + Committed Development	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed Development	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed Development, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2145 jw B2166	Standard Roundabout	20.93	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	1	2 - B2166

Arms

Arms

Arm	Name	Description
1	B2145 North	
2	B2166	
3	untitled	

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 - B2145 North	3.30	7.10	11.4	46.0	15.0	8.0	
2 - B2166	3.20	7.80	16.0	24.0	15.0	37.0	
3 - untitled	4.10	7.70	9.0	65.0	15.0	10.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - B2145 North	0.703	1719
2 - B2166	0.654	1668
3 - untitled	0.740	1898

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 Base + Committed Development	AM	ONE HOUR	07:30	09:00	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 - B2145 North		✓	587	100.000
2 - B2166		✓	1181	100.000
3 - untitled		✓	907	100.000

Origin-Destination Data

Demand (Veh/hr)

	To		
	1 - B2145 North	2 - B2166	3 - untitled

From	1 - B2145 North	0	265	322
	2 - B2166	812	0	369
	3 - untitled	516	391	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - B2145 North	2 - B2166	3 - untitled
	1 - B2145 North	0	4	7
	2 - B2166	2	0	1
	3 - untitled	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - B2145 North	0.48	5.20	0.9	1.9	A
2 - B2166	0.93	32.16	10.9	59.4	D
3 - untitled	0.83	16.87	4.5	22.0	C

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	442	293	1430	0.309	440	0.4	3.629	A
2 - B2166	889	241	1474	0.603	883	1.5	6.031	A
3 - untitled	683	607	1418	0.482	679	0.9	4.847	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	528	350	1392	0.379	527	0.6	4.161	A
2 - B2166	1062	289	1441	0.737	1057	2.7	9.245	A
3 - untitled	815	727	1329	0.613	813	1.6	6.934	A

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)	LOS
1 - B2145 North	646	426	1341	0.482	645	0.9	5.163	A
2 - B2166	1300	354	1397	0.931	1273	9.5	24.933	C
3 - untitled	999	875	1219	0.819	988	4.2	14.970	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)	LOS
1 - B2145 North	646	430	1338	0.483	646	0.9	5.201	A
2 - B2166	1300	355	1396	0.931	1295	10.9	32.161	D
3 - untitled	999	890	1208	0.827	997	4.5	16.871	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)	LOS
1 - B2145 North	528	356	1388	0.380	529	0.6	4.197	A
2 - B2166	1062	290	1441	0.737	1094	2.9	11.249	B
3 - untitled	815	752	1311	0.622	827	1.7	7.601	A

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)	LOS
1 - B2145 North	442	296	1428	0.309	443	0.5	3.653	A
2 - B2166	889	243	1473	0.603	895	1.5	6.279	A
3 - untitled	683	615	1412	0.484	686	0.9	4.976	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.44	0.00	0.00	0.44	0.44			N/A	N/A
2 - B2166	1.49	0.57	1.40	1.89	2.12			N/A	N/A
3 - untitled	0.92	0.55	1.00	1.40	1.45			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.61	0.09	0.82	1.36	1.43			N/A	N/A
2 - B2166	2.69	0.05	0.55	7.44	12.01			N/A	N/A
3 - untitled	1.56	0.05	0.49	3.95	6.16			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.92	0.03	0.26	0.92	0.92			N/A	N/A
2 - B2166	9.49	0.06	1.40	27.76	45.73			N/A	N/A
3 - untitled	4.15	0.03	0.33	7.68	22.03			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.93	0.03	0.27	0.93	1.95			N/A	N/A
2 - B2166	10.88	0.04	0.44	29.39	59.41			N/A	N/A
3 - untitled	4.49	0.03	0.30	4.49	17.82			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.62	0.55	1.00	1.40	1.45			N/A	N/A
2 - B2166	2.92	0.04	0.42	7.99	14.71			N/A	N/A
3 - untitled	1.68	0.05	0.50	4.35	6.77			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.45	0.03	0.34	1.13	1.32			N/A	N/A
2 - B2166	1.55	0.03	0.31	2.53	7.84			N/A	N/A
3 - untitled	0.95	0.03	0.34	2.19	4.58			N/A	N/A

2031 Base + Committed Development, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2145 jw B2166	Standard Roundabout	18.99	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	1	1 - B2145 North

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2031 Base + Committed Development	PM	ONE HOUR	16:30	18:00	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 - B2145 North		✓	1168	100.000
2 - B2166		✓	908	100.000
3 - untitled		✓	796	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2145 North	2 - B2166	3 - untitled
From	1 - B2145 North	0	611	557
	2 - B2166	467	0	441
	3 - untitled	404	392	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - B2145 North	2 - B2166	3 - untitled
From	1 - B2145 North	0	2	2
	2 - B2166	3	0	1
	3 - untitled	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - B2145 North	0.93	30.88	10.3	56.7	D
2 - B2166	0.81	15.10	4.0	19.5	C
3 - untitled	0.59	5.92	1.4	1.7	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)	LOS
1 - B2145 North	879	294	1483	0.593	874	1.4	5.855	A
2 - B2166	684	417	1362	0.502	680	1.0	5.242	A
3 - untitled	599	350	1608	0.373	597	0.6	3.555	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)	LOS
1 - B2145 North	1050	352	1443	0.728	1045	2.6	8.954	A
2 - B2166	816	499	1309	0.624	814	1.6	7.233	A
3 - untitled	716	419	1556	0.460	715	0.8	4.273	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)	LOS
1 - B2145 North	1286	430	1389	0.926	1260	9.1	24.202	C
2 - B2166	1000	601	1242	0.805	991	3.8	13.872	B
3 - untitled	876	510	1488	0.589	874	1.4	5.846	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)	LOS
1 - B2145 North	1286	432	1388	0.927	1281	10.3	30.880	D
2 - B2166	1000	611	1235	0.809	999	4.0	15.096	C
3 - untitled	876	514	1484	0.590	876	1.4	5.919	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	1050	354	1442	0.728	1080	2.8	10.733	B
2 - B2166	816	515	1298	0.629	826	1.7	7.763	A
3 - untitled	716	425	1551	0.461	718	0.9	4.330	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	879	296	1482	0.594	885	1.5	6.082	A
2 - B2166	684	422	1359	0.503	686	1.0	5.375	A
3 - untitled	599	353	1605	0.373	600	0.6	3.588	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.43	0.57	1.33	1.83	1.97			N/A	N/A
2 - B2166	1.00	0.55	1.00	1.40	1.45			N/A	N/A
3 - untitled	0.59	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	2.58	0.05	0.50	7.10	11.56			N/A	N/A
2 - B2166	1.62	0.05	0.60	4.08	6.25			N/A	N/A
3 - untitled	0.84	0.08	0.82	1.26	1.71			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	9.08	0.06	1.20	26.53	44.45			N/A	N/A
2 - B2166	3.83	0.03	0.32	5.93	19.49			N/A	N/A
3 - untitled	1.41	0.03	0.26	1.41	1.41			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
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1 - B2145 North	10.33	0.04	0.42	27.04	56.66			N/A	N/A
2 - B2166	4.05	0.03	0.29	4.05	13.28			N/A	N/A
3 - untitled	1.43	0.03	0.27	1.43	1.43			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	2.78	0.04	0.41	7.63	13.97			N/A	N/A
2 - B2166	1.73	0.05	0.57	4.47	6.87			N/A	N/A
3 - untitled	0.86	0.20	0.95	1.43	1.50			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.48	0.03	0.31	2.42	7.52			N/A	N/A
2 - B2166	1.02	0.04	0.35	2.52	4.82			N/A	N/A
3 - untitled	0.60	0.06	0.62	1.34	1.43			N/A	N/A

Junctions 9															
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The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution															

Filename: AM_PM_B2166-Aldwick Rd-Aldwick Fields.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\20170207 Revised Traffic Flows\20170207_2031 Base and Committed Development

Report generation date: 07/02/2017 16:20:30

»2031 Base + Committed Development, AM

»2031 Base + Committed Development, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed Development														
1 - B2166 Lower Bognor Road	0.2	2.73	0.13	A	3.19	A	192 %	0.6	3.81	0.38	A	3.89	A	99 %
2 - B2166 Aldwick Road	0.4	3.61	0.27	A			[2 - B2166 Aldwick Road]	0.7	4.51	0.40	A			[2 - B2166 Aldwick Road]
3 - Aldwick Fields	0.1	4.15	0.05	A				0.1	4.77	0.06	A			
4 - Aldwick Road	0.2	2.70	0.14	A				0.3	2.94	0.22	A			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	B2166/Aldwick Fields/Aldwick Road
Location	Rose Green, Pagham
Site number	
Date	15/06/2016
Version	
Status	Existing Junction
Identifier	
Client	
Jobnumber	JNY8840
Enumerator	EUR\pauline.pettitt
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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	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 segment length (min)	Run automatically
D7	2031 Base + Committed Development	AM	ONE HOUR	07:45	09:15	15	✓
D8	2031 Base + Committed Development	PM	ONE HOUR	16:30	18:00	15	✓

Analysis Set Details

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

2031 Base + Committed Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3,4	3.19	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	192	2 - B2166 Aldwick Road

Arms

Arms

Arm	Name	Description
1	B2166 Lower Bognor Road	
2	B2166 Aldwick Road	
3	Aldwick Fields	
4	Aldwick Road	

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 - B2166 Lower Bognor Road	3.65	7.60	19.5	8.7	29.8	28.5	
2 - B2166 Aldwick Road	3.70	6.40	7.1	17.5	29.8	20.5	
3 - Aldwick Fields	3.30	5.00	5.9	9.7	29.8	28.5	
4 - Aldwick Road	3.70	6.60	17.5	23.6	29.8	19.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - B2166 Lower Bognor Road	0.645	1725
2 - B2166 Aldwick Road	0.631	1529
3 - Aldwick Fields	0.543	1209
4 - Aldwick Road	0.687	1773

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2031 Base + Committed Development	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2166 Lower Bognor Road		ONE HOUR	✓	185	100.000
2 - B2166 Aldwick Road		ONE HOUR	✓	340	100.000
3 - Aldwick Fields		ONE HOUR	✓	45	100.000
4 - Aldwick Road		ONE HOUR	✓	205	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - B2166 Lower Bognor Road	2 - B2166 Aldwick Road	3 - Aldwick Fields	4 - Aldwick Road
From	1 - B2166 Lower Bognor Road	0	49	4	132
	2 - B2166 Aldwick Road	205	0	1	134
	3 - Aldwick Fields	18	15	0	12
	4 - Aldwick Road	67	132	6	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - B2166 Lower Bognor Road	2 - B2166 Aldwick Road	3 - Aldwick Fields	4 - Aldwick Road
From	1 - B2166 Lower Bognor Road	0	10	33	4
	2 - B2166 Aldwick Road	2	0	0	7
	3 - Aldwick Fields	0	0	0	0
	4 - Aldwick Road	4	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - B2166 Lower Bognor Road	0.13	2.73	0.2	A	170	255
2 - B2166 Aldwick Road	0.27	3.61	0.4	A	312	468
3 - Aldwick Fields	0.05	4.15	0.1	A	41	62
4 - Aldwick Road	0.14	2.70	0.2	A	188	282

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - B2166 Lower Bognor Road	139	35	115	1554	0.090	139	218	0.0	0.1	2.544	A
2 - B2166 Aldwick Road	256	64	107	1403	0.182	255	147	0.0	0.2	3.135	A
3 - Aldwick Fields	34	8	353	1009	0.034	34	8	0.0	0.0	3.690	A
4 - Aldwick Road	154	39	179	1616	0.095	154	209	0.0	0.1	2.461	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - B2166 Lower Bognor Road	166	42	137	1540	0.108	166	261	0.1	0.1	2.620	A
2 - B2166 Aldwick Road	306	76	128	1389	0.220	305	176	0.2	0.3	3.320	A
3 - Aldwick Fields	40	10	423	970	0.042	40	10	0.0	0.0	3.873	A
4 - Aldwick Road	184	46	214	1592	0.116	184	250	0.1	0.1	2.556	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - B2166 Lower Bognor Road	204	51	168	1521	0.134	204	319	0.1	0.2	2.731	A
2 - B2166 Aldwick Road	374	94	156	1371	0.273	374	216	0.3	0.4	3.610	A
3 - Aldwick Fields	50	12	518	916	0.054	49	12	0.0	0.1	4.154	A
4 - Aldwick Road	226	56	262	1559	0.145	226	306	0.1	0.2	2.699	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - B2166 Lower Bognor Road	204	51	168	1521	0.134	204	319	0.2	0.2	2.732	A
2 - B2166 Aldwick Road	374	94	156	1371	0.273	374	216	0.4	0.4	3.610	A

3 - Aldwick Fields	50	12	519	916	0.054	50	12	0.1	0.1	4.155	A
4 - Aldwick Road	226	56	262	1559	0.145	226	306	0.2	0.2	2.699	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - B2166 Lower Bognor Road	166	42	138	1540	0.108	166	261	0.2	0.1	2.622	A
2 - B2166 Aldwick Road	306	76	128	1389	0.220	306	176	0.4	0.3	3.325	A
3 - Aldwick Fields	40	10	424	969	0.042	41	10	0.1	0.0	3.877	A
4 - Aldwick Road	184	46	214	1592	0.116	184	250	0.2	0.1	2.559	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - B2166 Lower Bognor Road	139	35	115	1554	0.090	139	219	0.1	0.1	2.547	A
2 - B2166 Aldwick Road	256	64	107	1403	0.183	256	148	0.3	0.2	3.142	A
3 - Aldwick Fields	34	8	355	1008	0.034	34	8	0.0	0.0	3.693	A
4 - Aldwick Road	154	39	179	1616	0.096	154	209	0.1	0.1	2.465	A

2031 Base + Committed Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3,4	3.89	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	99	2 - B2166 Aldwick Road

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2031 Base + Committed Development	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - B2166 Lower Bognor Road		ONE HOUR	✓	536	100.000
2 - B2166 Aldwick Road		ONE HOUR	✓	492	100.000
3 - Aldwick Fields		ONE HOUR	✓	40	100.000
4 - Aldwick Road		ONE HOUR	✓	308	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
From		1 - B2166 Lower Bognor Road	2 - B2166 Aldwick Road	3 - Aldwick Fields	4 - Aldwick Road
	1 - B2166 Lower Bognor Road	0	308	37	191
	2 - B2166 Aldwick Road	194	0	7	291
	3 - Aldwick Fields	12	11	0	17
	4 - Aldwick Road	92	196	20	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
From		1 - B2166 Lower Bognor Road	2 - B2166 Aldwick Road	3 - Aldwick Fields	4 - Aldwick Road
	1 - B2166 Lower Bognor Road	0	1	0	3
	2 - B2166 Aldwick Road	1	0	0	1
	3 - Aldwick Fields	0	0	0	0
	4 - Aldwick Road	3	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - B2166 Lower Bognor Road	0.38	3.81	0.6	A	492	738
2 - B2166 Aldwick Road	0.40	4.51	0.7	A	451	677

3 - Aldwick Fields	0.06	4.77	0.1	A	37	55
4 - Aldwick Road	0.22	2.94	0.3	A	283	424

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - B2166 Lower Bognor Road	404	101	170	1586	0.254	402	224	0.0	0.3	3.037	A
2 - B2166 Aldwick Road	370	93	186	1395	0.266	369	386	0.0	0.4	3.504	A
3 - Aldwick Fields	30	8	507	929	0.032	30	48	0.0	0.0	4.004	A
4 - Aldwick Road	232	58	163	1615	0.144	231	374	0.0	0.2	2.601	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - B2166 Lower Bognor Road	482	120	204	1565	0.308	481	268	0.3	0.4	3.324	A
2 - B2166 Aldwick Road	442	111	223	1371	0.323	442	463	0.4	0.5	3.871	A
3 - Aldwick Fields	36	9	607	874	0.041	36	57	0.0	0.0	4.296	A
4 - Aldwick Road	277	69	195	1593	0.174	277	448	0.2	0.2	2.735	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - B2166 Lower Bognor Road	590	148	250	1535	0.385	589	328	0.4	0.6	3.807	A
2 - B2166 Aldwick Road	542	135	273	1340	0.404	541	566	0.5	0.7	4.503	A
3 - Aldwick Fields	44	11	743	799	0.055	44	70	0.0	0.1	4.769	A
4 - Aldwick Road	339	85	239	1563	0.217	339	549	0.2	0.3	2.939	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - B2166 Lower Bognor Road	590	148	250	1535	0.385	590	328	0.6	0.6	3.810	A
2 - B2166 Aldwick Road	542	135	273	1339	0.404	542	567	0.7	0.7	4.513	A
3 - Aldwick Fields	44	11	744	798	0.055	44	70	0.1	0.1	4.773	A
4 - Aldwick Road	339	85	239	1563	0.217	339	549	0.3	0.3	2.940	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - B2166 Lower Bognor Road	482	120	204	1564	0.308	483	268	0.6	0.4	3.331	A
2 - B2166 Aldwick Road	442	111	223	1371	0.323	443	464	0.7	0.5	3.883	A
3 - Aldwick Fields	36	9	609	873	0.041	36	58	0.1	0.0	4.303	A
4 - Aldwick Road	277	69	195	1593	0.174	277	449	0.3	0.2	2.739	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - B2166 Lower Bognor Road	404	101	171	1586	0.254	404	225	0.4	0.3	3.048	A
2 - B2166 Aldwick Road	370	93	187	1394	0.266	371	388	0.5	0.4	3.517	A
3 - Aldwick Fields	30	8	510	928	0.032	30	48	0.0	0.0	4.011	A
4 - Aldwick Road	232	58	164	1614	0.144	232	376	0.2	0.2	2.604	A

Junctions 9
ARCADY 9 - Roundabout Module
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017
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Filename: AM_PM_B2166-Hewarts Lane-Chalcraft Lane.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\20170207 Revised Traffic Flows\20170207_2031 Base and Committed Development

Report generation date: 07/02/2017 16:28:17

»2031 Base + Committed Development, AM

»2031 Base + Committed Development, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed Development														
1 - Lower Bognor Road N	0.5	5.70	0.33	A	5.43	A	51 % [4 - Hewarts Lane]	2.4	11.72	0.71	B	8.06	A	20 % [1 - Lower Bognor Road N]
2 - Chalcraft Lane	0.7	4.13	0.40	A				1.6	7.34	0.62	A			
3 - Lower Bognor Road S	0.5	5.14	0.34	A				0.5	5.40	0.33	A			
4 - Hewarts Lane	1.1	6.81	0.52	A				0.6	4.93	0.36	A			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	B2166/Hewarts Lane/Chalcraft Lane
Location	Rose Green, Pagham
Site number	
Date	15/06/2016
Version	
Status	Existing Junction
Identifier	
Client	
Jobnumber	JNY8840
Enumerator	EUR\pauline.pettitt
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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	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 segment length (min)	Run automatically
D7	2031 Base + Committed Development	AM	ONE HOUR	07:45	09:15	15	✓
D8	2031 Base + Committed Development	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2031 Base + Committed Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3,4	5.43	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	51	4 - Hewarts Lane

Arms

Arms

Arm	Name	Description
1	Lower Bognor Road N	
2	Chalcrafft Lane	
3	Lower Bognor Road S	
4	Hewarts Lane	

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 - Lower Bognor Road N	2.90	5.60	7.6	14.4	32.0	0.0	
2 - Chalcraft Lane	3.20	6.60	10.9	74.0	32.0	11.5	
3 - Lower Bognor Road S	3.35	6.20	5.8	30.9	32.0	21.0	
4 - Hewarts Lane	3.40	5.90	7.7	12.1	32.0	24.5	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Lower Bognor Road N	0.614	1369
2 - Chalcraft Lane	0.673	1634
3 - Lower Bognor Road S	0.613	1416
4 - Hewarts Lane	0.587	1384

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2031 Base + Committed Development	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Lower Bognor Road N		ONE HOUR	✓	282	100.000
2 - Chalcraft Lane		ONE HOUR	✓	525	100.000
3 - Lower Bognor Road S		ONE HOUR	✓	333	100.000
4 - Hewarts Lane		ONE HOUR	✓	513	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		1 - Lower Bognor Road N	2 - Chalcraft Lane	3 - Lower Bognor Road S	4 - Hewarts Lane
	1 - Lower Bognor Road N	0	133	137	12
	2 - Chalcraft Lane	169	0	63	293
	3 - Lower Bognor Road S	165	102	0	66
	4 - Hewarts Lane	23	424	66	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - Lower Bognor Road N	2 - Chalcraft Lane	3 - Lower Bognor Road S	4 - Hewarts Lane
	1 - Lower Bognor Road N	0	4	1	0
	2 - Chalcraft Lane	1	0	6	1
	3 - Lower Bognor Road S	1	5	0	2
	4 - Hewarts Lane	0	0	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Lower Bognor Road N	0.33	5.70	0.5	A	259	388
2 - Chalcraft Lane	0.40	4.13	0.7	A	482	723
3 - Lower Bognor Road S	0.34	5.14	0.5	A	306	458
4 - Hewarts Lane	0.52	6.81	1.1	A	471	706

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Lower Bognor Road N	212	53	444	1068	0.199	211	268	0.0	0.2	4.198	A
2 - Chalcraft Lane	395	99	161	1500	0.264	394	494	0.0	0.4	3.251	A
3 - Lower Bognor Road S	251	63	356	1168	0.215	250	199	0.0	0.3	3.914	A
4 - Hewarts Lane	386	97	327	1185	0.326	384	278	0.0	0.5	4.485	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Lower Bognor Road N	254	63	531	1015	0.250	253	321	0.2	0.3	4.724	A
2 - Chalcraft Lane	472	118	193	1478	0.319	472	592	0.4	0.5	3.573	A
3 - Lower Bognor Road S	299	75	426	1126	0.266	299	239	0.3	0.4	4.353	A
4 - Hewarts Lane	461	115	392	1146	0.402	460	333	0.5	0.7	5.242	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Lower Bognor Road N	310	78	650	943	0.329	310	392	0.3	0.5	5.682	A
2 - Chalcraft Lane	578	145	236	1449	0.399	577	724	0.5	0.7	4.124	A
3 - Lower Bognor Road S	367	92	521	1068	0.343	366	292	0.4	0.5	5.125	A
4 - Hewarts Lane	565	141	479	1094	0.516	563	408	0.7	1.1	6.764	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

1 - Lower Bognor Road N	310	78	652	942	0.330	310	393	0.5	0.5	5.702	A
2 - Chalcraft Lane	578	145	237	1449	0.399	578	726	0.7	0.7	4.132	A
3 - Lower Bognor Road S	367	92	522	1067	0.343	367	293	0.5	0.5	5.136	A
4 - Hewarts Lane	565	141	480	1094	0.517	565	408	1.1	1.1	6.807	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Lower Bognor Road N	254	63	534	1013	0.250	254	322	0.5	0.3	4.745	A
2 - Chalcraft Lane	472	118	194	1478	0.319	473	594	0.7	0.5	3.586	A
3 - Lower Bognor Road S	299	75	427	1125	0.266	300	240	0.5	0.4	4.368	A
4 - Hewarts Lane	461	115	393	1146	0.403	463	334	1.1	0.7	5.284	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Lower Bognor Road N	212	53	447	1066	0.199	213	269	0.3	0.3	4.218	A
2 - Chalcraft Lane	395	99	162	1499	0.264	396	497	0.5	0.4	3.263	A
3 - Lower Bognor Road S	251	63	357	1167	0.215	251	201	0.4	0.3	3.932	A
4 - Hewarts Lane	386	97	329	1184	0.326	387	280	0.7	0.5	4.523	A

2031 Base + Committed Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3,4	8.06	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	20	1 - Lower Bognor Road N

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2031 Base + Committed Development	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Lower Bognor Road N		ONE HOUR	✓	688	100.000
2 - Chalcraft Lane		ONE HOUR	✓	723	100.000
3 - Lower Bognor Road S		ONE HOUR	✓	305	100.000
4 - Hewarts Lane		ONE HOUR	✓	380	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		1 - Lower Bognor Road N	2 - Chalcraft Lane	3 - Lower Bognor Road S	4 - Hewarts Lane
	1 - Lower Bognor Road N	0	312	334	42
	2 - Chalcraft Lane	137	0	163	423
	3 - Lower Bognor Road S	132	77	0	96
	4 - Hewarts Lane	17	281	82	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
From		1 - Lower Bognor Road N	2 - Chalcraft Lane	3 - Lower Bognor Road S	4 - Hewarts Lane
	1 - Lower Bognor Road N	0	1	0	0
	2 - Chalcraft Lane	0	0	0	1
	3 - Lower Bognor Road S	1	0	0	0
	4 - Hewarts Lane	0	1	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)

1 - Lower Bognor Road N	0.71	11.72	2.4	B	631	947
2 - Chalcraft Lane	0.62	7.34	1.6	A	663	995
3 - Lower Bognor Road S	0.33	5.40	0.5	A	280	420
4 - Hewarts Lane	0.36	4.93	0.6	A	349	523

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Lower Bognor Road N	518	129	330	1159	0.447	515	214	0.0	0.8	5.560	A
2 - Chalcraft Lane	544	136	343	1394	0.390	542	502	0.0	0.6	4.210	A
3 - Lower Bognor Road S	230	57	451	1133	0.203	229	434	0.0	0.3	3.977	A
4 - Hewarts Lane	286	72	259	1219	0.235	285	420	0.0	0.3	3.848	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Lower Bognor Road N	619	155	395	1119	0.553	617	257	0.8	1.2	7.143	A
2 - Chalcraft Lane	650	162	411	1349	0.482	649	601	0.6	0.9	5.135	A
3 - Lower Bognor Road S	274	69	540	1078	0.254	274	519	0.3	0.3	4.473	A
4 - Hewarts Lane	342	85	311	1189	0.287	341	503	0.3	0.4	4.243	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Lower Bognor Road N	758	189	484	1064	0.712	753	314	1.2	2.4	11.386	B
2 - Chalcraft Lane	796	199	502	1288	0.618	793	735	0.9	1.6	7.242	A
3 - Lower Bognor Road S	336	84	660	1004	0.334	335	635	0.3	0.5	5.376	A
4 - Hewarts Lane	418	105	380	1149	0.364	418	616	0.4	0.6	4.920	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Lower Bognor Road N	758	189	484	1064	0.712	757	315	2.4	2.4	11.719	B
2 - Chalcraft Lane	796	199	504	1286	0.619	796	738	1.6	1.6	7.342	A
3 - Lower Bognor Road S	336	84	663	1003	0.335	336	637	0.5	0.5	5.395	A
4 - Hewarts Lane	418	105	381	1148	0.364	418	618	0.6	0.6	4.932	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Lower Bognor Road N	619	155	396	1118	0.553	623	258	2.4	1.3	7.338	A
2 - Chalcraft Lane	650	162	414	1346	0.483	653	605	1.6	0.9	5.211	A
3 - Lower Bognor Road S	274	69	544	1076	0.255	275	523	0.5	0.3	4.497	A
4 - Hewarts Lane	342	85	312	1188	0.287	342	506	0.6	0.4	4.259	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Lower Bognor Road N	518	129	332	1158	0.447	520	216	1.3	0.8	5.656	A
2 - Chalcraft Lane	544	136	346	1392	0.391	545	506	0.9	0.6	4.257	A
3 - Lower Bognor Road S	230	57	454	1131	0.203	230	437	0.3	0.3	3.998	A
4 - Hewarts Lane	286	72	261	1218	0.235	286	423	0.4	0.3	3.864	A

Junctions 9														
ARCADY 9 - Roundabout Module														
Version: 9.0.1.4646 © Copyright TRL Limited, 2017														
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Filename: AM_PM_Gossamer Lane-Aldwick Road-Barrack Lane.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\20170207 Revised Traffic Flows\20170207_2031 Base and Committed Development

Report generation date: 07/02/2017 15:57:33

»2031 Base + Committed Development, AM
»2031 Base + Committed Development, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed Development														
1 - Aldwick Road	0.2	4.33	0.19	A	4.19	A	175 % [3 - Barrack Lane]	1.7	9.67	0.63	A	7.89	A	33 % [1 - Aldwick Road]
2 - Aldwick Street	0.3	3.72	0.21	A				1.3	8.41	0.57	A			
3 - Barrack Lane	0.2	4.78	0.19	A				0.4	7.05	0.28	A			
4 - Gossamer Lane	0.4	4.16	0.28	A				0.7	5.33	0.42	A			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	Gossamer Lane/Aldwick Road/Barrack Lane
Location	Rose Green, Pagham
Site number	
Date	15/06/2016
Version	
Status	Existing junction
Identifier	
Client	
Jobnumber	JNY8840
Enumerator	EUR\pauline.pettitt
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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	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 segment length (min)	Run automatically
D7	2031 Base + Committed Development	AM	ONE HOUR	08:00	09:30	15	✓

D8	2031 Base + Committed Development	PM	ONE HOUR	16:30	18:00	15	✓
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Analysis Set Details

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

2031 Base + Committed Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3,4	4.19	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	175	3 - Barrack Lane

Arms

Arms

Arm	Name	Description
1	Aldwick Road	
2	Aldwick Street	
3	Barrack Lane	
4	Gossamer Lane	

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 - Aldwick Road	3.70	4.50	8.1	8.8	24.0	28.5	
2 - Aldwick Street	4.10	5.50	1.3	16.9	24.0	18.5	
3 - Barrack Lane	3.50	5.10	1.7	12.2	24.0	25.5	
4 - Gossamer Lane	3.70	5.60	1.8	20.9	24.0	17.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Aldwick Road	0.548	1231
2 - Aldwick Street	0.606	1379
3 - Barrack Lane	0.547	1163
4 - Gossamer Lane	0.597	1312

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2031 Base + Committed Development	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Aldwick Road		ONE HOUR	✓	174	100.000
2 - Aldwick Street		ONE HOUR	✓	235	100.000

3 - Barrack Lane		ONE HOUR	✓	162	100.000
4 - Gossamer Lane		ONE HOUR	✓	307	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Aldwick Road	2 - Aldwick Street	3 - Barrack Lane	4 - Gossamer Lane
From	1 - Aldwick Road	0	21	35	118
	2 - Aldwick Street	27	0	29	179
	3 - Barrack Lane	59	48	0	55
	4 - Gossamer Lane	106	192	9	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Aldwick Road	2 - Aldwick Street	3 - Barrack Lane	4 - Gossamer Lane
From	1 - Aldwick Road	0	12	3	5
	2 - Aldwick Street	5	0	4	3
	3 - Barrack Lane	6	3	0	0
	4 - Gossamer Lane	2	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Aldwick Road	0.19	4.33	0.2	A	160	239
2 - Aldwick Street	0.21	3.72	0.3	A	216	323
3 - Barrack Lane	0.19	4.78	0.2	A	149	223
4 - Gossamer Lane	0.28	4.16	0.4	A	282	423

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	131	33	187	1069	0.123	130	144	0.0	0.1	3.834	A
2 - Aldwick Street	177	44	121	1260	0.140	176	196	0.0	0.2	3.320	A
3 - Barrack Lane	122	30	243	994	0.123	121	55	0.0	0.1	4.122	A
4 - Gossamer Lane	231	58	100	1233	0.188	230	264	0.0	0.2	3.587	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	156	39	224	1050	0.149	156	172	0.1	0.2	4.030	A
2 - Aldwick Street	211	53	146	1245	0.170	211	234	0.2	0.2	3.480	A
3 - Barrack Lane	146	36	291	968	0.150	145	66	0.1	0.2	4.378	A
4 - Gossamer Lane	276	69	120	1220	0.226	276	316	0.2	0.3	3.810	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	192	48	274	1023	0.187	191	211	0.2	0.2	4.327	A
2 - Aldwick Street	259	65	178	1225	0.211	258	287	0.2	0.3	3.723	A
3 - Barrack Lane	178	45	356	932	0.191	178	80	0.2	0.2	4.776	A
4 - Gossamer Lane	338	85	147	1204	0.281	338	387	0.3	0.4	4.154	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	192	48	274	1023	0.187	192	211	0.2	0.2	4.330	A
2 - Aldwick Street	259	65	178	1225	0.211	259	287	0.3	0.3	3.723	A
3 - Barrack Lane	178	45	357	932	0.191	178	80	0.2	0.2	4.779	A
4 - Gossamer Lane	338	85	148	1204	0.281	338	388	0.4	0.4	4.158	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	156	39	224	1049	0.149	157	173	0.2	0.2	4.033	A
2 - Aldwick Street	211	53	146	1245	0.170	212	235	0.3	0.2	3.485	A
3 - Barrack Lane	146	36	292	967	0.151	146	66	0.2	0.2	4.384	A
4 - Gossamer Lane	276	69	121	1220	0.226	276	317	0.4	0.3	3.817	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	131	33	188	1068	0.123	131	145	0.2	0.1	3.842	A
2 - Aldwick Street	177	44	122	1260	0.140	177	197	0.2	0.2	3.327	A
3 - Barrack Lane	122	30	244	994	0.123	122	55	0.2	0.1	4.131	A
4 - Gossamer Lane	231	58	101	1232	0.188	231	265	0.3	0.2	3.596	A

2031 Base + Committed Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3,4	7.89	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	33	1 - Aldwick Road

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2031 Base + Committed Development	PM	ONE HOUR	16:30	18:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Aldwick Road		ONE HOUR	✓	572	100.000
2 - Aldwick Street		ONE HOUR	✓	510	100.000
3 - Barrack Lane		ONE HOUR	✓	176	100.000
4 - Gossamer Lane		ONE HOUR	✓	452	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Aldwick Road	2 - Aldwick Street	3 - Barrack Lane	4 - Gossamer Lane
From	1 - Aldwick Road	0	49	245	278
	2 - Aldwick Street	54	0	71	385
	3 - Barrack Lane	97	43	0	36
	4 - Gossamer Lane	147	270	35	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Aldwick Road	2 - Aldwick Street	3 - Barrack Lane	4 - Gossamer Lane
From	1 - Aldwick Road	0	5	1	2
	2 - Aldwick Street	2	0	2	1
	3 - Barrack Lane	4	3	0	0
	4 - Gossamer Lane	2	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Aldwick Road	0.63	9.67	1.7	A	525	787
2 - Aldwick Street	0.57	8.41	1.3	A	468	702
3 - Barrack Lane	0.28	7.05	0.4	A	161	242
4 - Gossamer Lane	0.42	5.33	0.7	A	415	622

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	431	108	261	1068	0.403	428	223	0.0	0.7	5.602	A
2 - Aldwick Street	384	96	418	1109	0.346	382	271	0.0	0.5	4.940	A
3 - Barrack Lane	133	33	537	840	0.158	132	263	0.0	0.2	5.075	A
4 - Gossamer Lane	340	85	145	1214	0.280	339	523	0.0	0.4	4.105	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	514	129	312	1040	0.494	513	267	0.7	1.0	6.817	A
2 - Aldwick Street	458	115	501	1058	0.433	458	325	0.5	0.8	5.985	A
3 - Barrack Lane	158	40	643	783	0.202	158	315	0.2	0.3	5.757	A
4 - Gossamer Lane	406	102	174	1197	0.340	406	627	0.4	0.5	4.549	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	630	157	382	1002	0.628	627	327	1.0	1.6	9.527	A
2 - Aldwick Street	562	140	612	991	0.567	559	398	0.8	1.3	8.306	A
3 - Barrack Lane	194	48	786	706	0.275	193	385	0.3	0.4	7.019	A
4 - Gossamer Lane	498	124	213	1173	0.424	497	767	0.5	0.7	5.319	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	630	157	383	1002	0.629	630	328	1.6	1.7	9.669	A
2 - Aldwick Street	562	140	614	989	0.568	561	399	1.3	1.3	8.415	A
3 - Barrack Lane	194	48	789	704	0.275	194	386	0.4	0.4	7.053	A
4 - Gossamer Lane	498	124	214	1172	0.424	498	770	0.7	0.7	5.334	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	514	129	314	1039	0.495	517	269	1.7	1.0	6.927	A
2 - Aldwick Street	458	115	504	1056	0.434	461	326	1.3	0.8	6.068	A
3 - Barrack Lane	158	40	648	780	0.203	159	317	0.4	0.3	5.793	A
4 - Gossamer Lane	406	102	175	1196	0.340	407	631	0.7	0.5	4.568	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Aldwick Road	431	108	262	1067	0.404	432	225	1.0	0.7	5.680	A
2 - Aldwick Street	384	96	421	1106	0.347	385	273	0.8	0.5	4.998	A
3 - Barrack Lane	133	33	541	838	0.158	133	265	0.3	0.2	5.109	A
4 - Gossamer Lane	340	85	146	1214	0.280	341	528	0.5	0.4	4.128	A

Junctions 9
PICADY 9 - Priority Intersection Module
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Filename: AM_PMHook Lane Site Access.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\20170207

Revised Traffic Flows: 20170207_2031 Base and Committed Development

Report generation date: 07/02/2017 15:31:58

»2031 Base + Committed Development, AM
»2031 Base + Committed Development, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed Development														
Stream B-AC	0.0	0.00	0.00	A	0.00	F	900 %	0.0	0.00	0.00	A	0.00	F	900 %
Stream C-AB	0.0	0.00	0.00	A				0.0	0.00	0.00	A			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	Hook Lane Proposed Site Access
Location	Rose Green, Pagham
Site number	
Date	15/06/2016
Version	
Status	Proposed
Identifier	
Client	Hallam Land Management
Jobnumber	JNY8840
Enumerator	EUR\pauline.pettitt
Description	Based on Drg No 5

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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	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 segment length (min)	Run automatically
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D1	2031 Base + Committed Development	AM	ONE HOUR	07:45	09:15	15	✓
D2	2031 Base + Committed Development	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2031 Base + Committed Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	900	

Arms

Arms

Arm	Name	Description	Arm type
A	Hook Lane S		Major
B	Site Access		Minor
C	Hook Lane 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 - Hook Lane N	7.30			150.0	✓	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 - Site Access	One lane	3.00	40	40

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	510	0.088	0.222	0.139	0.317
1	B-C	649	0.094	0.237	-	-
1	C-B	661	0.242	0.242	-	-

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

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

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

Traffic Demand

Demand Set Details

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

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

✓	✓	HV Percentages	2.00
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Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Hook Lane S		ONE HOUR	✓	0	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - Hook Lane N		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Hook Lane S	B - Site Access	C - Hook Lane N
From	A - Hook Lane S	0	0	0
	B - Site Access	0	0	0
	C - Hook Lane N	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Hook Lane S	B - Site Access	C - Hook Lane N
From	A - Hook Lane S	0	0	1
	B - Site Access	0	0	0
	C - Hook Lane N	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					0	0
A-C					0	0

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	571	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	658	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	0	0			0				
A-C	0	0			0				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	571	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	658	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	0	0			0				

A-C	0	0			0				
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08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	571	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	658	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	0	0			0				
A-C	0	0			0				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	571	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	658	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	0	0			0				
A-C	0	0			0				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	571	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	658	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	0	0			0				
A-C	0	0			0				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	571	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	658	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	0	0			0				
A-C	0	0			0				

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					0	0
A-C					0	0

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	571	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	661	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	0	0			0				
A-C	0	0			0				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	571	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	661	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	0	0			0				
A-C	0	0			0				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	571	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	661	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	0	0			0				
A-C	0	0			0				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	571	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	661	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	0	0			0				
A-C	0	0			0				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	571	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	661	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	0	0			0				
A-C	0	0			0				

18:00 - 18:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
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	(Veh/hr)	(Veh)							
B-AC	0	0	571	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	661	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	0	0			0				
A-C	0	0			0				

Junctions 9
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Filename: AM_PM_Lower Bognor Road & Pagham Road.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\20170207 Revised Traffic Flows\20170207_2031 Base and Committed Development

Report generation date: 07/02/2017 16:42:02

»2031 Base + Committed Development, AM

»2031 Base + Committed Development, PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2031 Base + Committed Development															
Stream B-C	0.9	3.9	2602.93	1.09	F	237.36	F	-34 %	0.7	200.0	2503.46	1.23	F	53.75	F	-23 %
Stream B-A	108.7	163.4	894.80	1.48	F			[Stream B-A]	32.6	60.2	358.63	1.21	F			
Stream C-AB	0.0	200.2	3.58	0.00	A			[Stream B-A]	0.0	0.5	6.81	0.03	A			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	(untitled)
Location	
Site number	
Date	19/09/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
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 segment length (min)
D1	2031 Base + Committed Development	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed Development	PM	ONE HOUR	16:15	17:45	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed Development, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Lower Bognor Road j/w Pagham Road	T-Junction	Two-way	237.36	F

Junction Network Options

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

Arms

Arms

Arm	Name	Description	Arm type
A	Pagham Road North		Major
B	Lower Bognor Road		Minor
C	Pagham Road South		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 - Pagham Road South	7.50			95.0	✓	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	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 - Lower Bognor Road	One lane plus flare	10.00	8.00	5.50	4.25	3.00	✓	2.00	105	85

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	635	0.108	0.273	0.172	0.391
1	B-C	666	0.095	0.241	-	-
1	C-B	629	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 segment length (min)
D1	2031 Base + Committed Development	AM	ONE HOUR	07:30	09:00	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 - Pagham Road North		✓	462	100.000
B - Lower Bognor Road		✓	490	100.000
C - Pagham Road South		✓	892	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
	A - Pagham Road North	0	256	206
	B - Lower Bognor Road	488	0	2
	C - Pagham Road South	891	1	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
	A - Pagham Road North	0	2	4
	B - Lower Bognor Road	1	0	0
	C - Pagham Road South	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	1.09	2602.93	0.9	3.9	F
B-A	1.48	894.80	108.7	163.4	F
C-AB	0.00	3.58	0.0	200.2	A
C-A					
A-B					
A-C					

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	265	0.006	1	0.0	13.677	B
B-A	367	447	0.821	353	3.7	33.995	D
C-AB	2	1010	0.002	2	0.0	3.570	A
C-A	669			669			
A-B	193			193			
A-C	155			155			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	2	1.087	0.43	0.3	2602.926	F
B-A	439	412	1.064	394	14.8	108.243	F
C-AB	3	1091	0.003	3	0.0	3.306	A
C-A	799			799			
A-B	230			230			
A-C	185			185			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	2	1.006	1	0.6	2514.012	F
B-A	537	364	1.478	363	58.5	383.485	F
C-AB	6	1207	0.005	6	0.0	2.993	A
C-A	976			976			
A-B	282			282			
A-C	227			227			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS

B-C	2	2	0.992	1	0.8	2562.718	F
B-A	537	364	1.478	363	102.0	763.570	F
C-AB	6	1207	0.005	6	0.0	2.997	A
C-A	976			976			
A-B	282			282			
A-C	227			227			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	3	0.712	1	0.9	2519.147	F
B-A	439	412	1.064	412	108.7	894.796	F
C-AB	3	1091	0.003	3	0.0	3.314	A
C-A	798			798			
A-B	230			230			
A-C	185			185			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	3	0.519	1	0.9	2404.379	F
B-A	367	447	0.821	443	89.7	806.806	F
C-AB	2	1010	0.002	2	0.0	3.576	A
C-A	669			669			
A-B	193			193			
A-C	155			155			

Queue Variation Results for each time segment**07:30 - 07:45**

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	3.71	0.03	0.32	6.14	19.20			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.35	0.03	0.28	0.76	1.43			N/A	N/A
B-A	14.83	0.22	7.19	38.28	53.33			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.63	0.03	0.33	1.40	2.76			N/A	N/A
B-A	58.53	25.29	54.89	89.63	101.57			N/A	N/A
C-AB	0.01	>199	>199	>199	>199			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.85	0.04	0.38	1.98	3.48			N/A	N/A
B-A	102.01	60.77	99.04	138.09	150.76			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.92	0.04	0.39	2.24	3.79			N/A	N/A
B-A	108.74	62.97	105.34	149.14	163.41			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.93	0.04	0.38	2.27	3.91			N/A	N/A
B-A	89.74	42.69	85.24	133.26	149.50			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2031 Base + Committed Development, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Lower Bognor Road j/w Pagham Road	T-Junction	Two-way	53.75	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-23	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 segment length (min)
D2	2031 Base + Committed Development	PM	ONE HOUR	16:15	17:45	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 - Pagham Road North		✓	1432	100.000
B - Lower Bognor Road		✓	289	100.000
C - Pagham Road South		✓	307	100.000

Origin-Destination Data

Demand (Veh/hr)

	To		
	A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
From A - Pagham Road North	0	725	707
From B - Lower Bognor Road	287	0	2
From C - Pagham Road South	301	6	0

Vehicle Mix

Heavy Vehicle Percentages

	To		
	A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
From A - Pagham Road North	0	1	2
From B - Lower Bognor Road	3	0	0
From C - Pagham Road South	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	1.23	2503.46	0.7	200.0	F
B-A	1.21	358.63	32.6	60.2	F
C-AB	0.03	6.81	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	367	0.004	1	0.0	9.843	A
B-A	216	374	0.578	211	1.3	21.445	C
C-AB	8	557	0.014	8	0.0	6.550	A
C-A	224			224			
A-B	546			546			
A-C	532			532			

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	208	0.009	2	0.0	17.444	C
B-A	258	327	0.789	251	3.1	43.691	E
C-AB	11	551	0.019	11	0.0	6.658	A
C-A	265			265			
A-B	652			652			
A-C	636			636			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	2	1.234	0.54	0.4	2503.465	F
B-A	316	262	1.207	254	18.6	182.760	F
C-AB	17	546	0.031	17	0.0	6.797	A
C-A	321			321			
A-B	798			798			
A-C	778			778			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	3	0.842	1	0.6	2174.812	F
B-A	316	262	1.207	260	32.6	358.626	F
C-AB	17	546	0.031	17	0.0	6.807	A
C-A	321			321			
A-B	798			798			
A-C	778			778			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	4	0.488	2	0.7	914.251	F
B-A	258	327	0.789	317	17.8	288.039	F
C-AB	11	551	0.019	11	0.0	6.684	A
C-A	265			265			
A-B	652			652			
A-C	636			636			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	2	256	0.006	4	0.0	14.407	B
B-A	216	374	0.578	281	1.5	61.233	F
C-AB	8	557	0.014	8	0.0	6.561	A
C-A	223			223			
A-B	546			546			
A-C	532			532			

Queue Variation Results for each time segment

16:15 - 16:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	>199	>199	>199	>199			N/A	N/A

B-A	1.29	0.11	1.10	2.26	2.90			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.01	0.25	0.45	0.48			N/A	N/A
B-A	3.06	0.09	1.03	7.61	10.81			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.42	0.03	0.26	0.47	0.50			N/A	N/A
B-A	18.62	5.20	16.37	31.56	37.05			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.64	0.03	0.27	0.64	1.12			N/A	N/A
B-A	32.57	11.77	29.77	52.31	60.23			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.67	0.03	0.34	1.54	2.88			N/A	N/A
B-A	17.77	3.48	14.93	32.46	39.05			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	1.49	0.03	0.28	1.49	4.46			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017
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Filename: AM_PM_Nyetimber Lane & Pagham Road.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\20170207 Revised Traffic Flows\20170207_2031 Base and Committed Development

Report generation date: 07/02/2017 15:08:15

»2031 Base and Committed Development, AM

»2031 Base and Committed Development, PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base and Committed Development																
Stream B-AC	0.5	2.3	11.28	0.34	B	2.83	A	79 % [Stream B-AC]	0.6	2.8	15.27	0.37	C	2.14	A	29 % [Stream B-AC]
Stream C-AB	0.2	1.1	4.86	0.10	A				0.5	1.4	7.72	0.24	A			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	(untitled)
Location	
Site number	
Date	19/09/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
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 segment length (min)
D1	2031 Base and Committed Development	AM	ONE HOUR	07:45	09:15	15
D2	2031 Base and Committed Development	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base and Committed Development, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Nyetimber Lane j/w Pagham Road	T-Junction	Two-way	2.83	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	79	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	Pagham Road North		Major
B	Nyetimber Lane		Minor
C	Pagham Road South		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 - Pagham Road South	7.30			200.0	✓	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 - Nyetimber Lane	One lane	4.00	60	45

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	571	0.098	0.248	0.156	0.354
1	B-C	718	0.104	0.262	-	-
1	C-B	690	0.252	0.252	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 Base and Committed Development	AM	ONE HOUR	07:45	09:15	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 - Pagham Road North		✓	190	100.000
B - Nyetimber Lane		✓	147	100.000
C - Pagham Road South		✓	346	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Pagham Road North	B - Nyetimber Lane	C - Pagham Road South
From	A - Pagham Road North	0	33	157
	B - Nyetimber Lane	107	0	40
	C - Pagham Road South	301	45	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Pagham Road North	B - Nyetimber Lane	C - Pagham Road South
From	A - Pagham Road North	0	7	9
	B - Nyetimber Lane	1	0	7
	C - Pagham Road South	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.34	11.28	0.5	2.3	B
C-AB	0.10	4.86	0.2	1.1	A
C-A					
A-B					
A-C					

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	111	516	0.214	110	0.3	8.827	A
C-AB	47	790	0.060	47	0.1	4.843	A
C-A	213			213			
A-B	25			25			
A-C	118			118			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	132	502	0.263	132	0.4	9.726	A
C-AB	61	811	0.075	61	0.1	4.794	A
C-A	250			250			
A-B	30			30			
A-C	141			141			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	162	481	0.336	161	0.5	11.235	B
C-AB	82	840	0.098	82	0.2	4.739	A
C-A	299			299			
A-B	36			36			
A-C	173			173			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	162	481	0.336	162	0.5	11.276	B
C-AB	82	841	0.098	82	0.2	4.749	A

C-A	299			299			
A-B	36			36			
A-C	173			173			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	132	502	0.264	133	0.4	9.775	A
C-AB	61	811	0.075	61	0.1	4.815	A
C-A	250			250			
A-B	30			30			
A-C	141			141			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	111	516	0.214	111	0.3	8.890	A
C-AB	48	790	0.060	48	0.1	4.858	A
C-A	213			213			
A-B	25			25			
A-C	118			118			

Queue Variation Results for each time segment**07:45 - 08:00**

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.27	0.00	0.00	0.27	0.27			N/A	N/A
C-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.35	0.00	0.00	0.35	0.35			N/A	N/A
C-AB	0.13	0.03	0.26	0.47	0.52			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.50	0.03	0.26	0.50	0.50			N/A	N/A
C-AB	0.18	0.03	0.27	0.49	1.07			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.50	0.03	0.30	1.34	2.29			N/A	N/A
C-AB	0.19	0.00	0.00	0.19	0.19			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.36	0.00	0.00	0.36	0.36			N/A	N/A
C-AB	0.14	0.00	0.00	0.14	0.14			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.28	0.00	0.00	0.28	0.28			N/A	N/A
C-AB	0.10	0.00	0.00	0.10	0.10			N/A	N/A

2031 Base and Committed Development, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Nyetimber Lane j/w Pagham Road	T-Junction	Two-way	2.14	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	29	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 segment length (min)
D2	2031 Base and Committed Development	PM	ONE HOUR	16:45	18:15	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 - Pagham Road North		✓	915	100.000
B - Nyetimber Lane		✓	128	100.000
C - Pagham Road South		✓	300	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Pagham Road North	B - Nyetimber Lane	C - Pagham Road South
From	A - Pagham Road North	0	121	794
	B - Nyetimber Lane	39	0	89
	C - Pagham Road South	220	80	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Pagham Road North	B - Nyetimber Lane	C - Pagham Road South
From	A - Pagham Road North	0	0	2
	B - Nyetimber Lane	0	0	2
	C - Pagham Road South	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.37	15.27	0.6	2.8	C
C-AB	0.24	7.72	0.5	1.4	A
C-A					
A-B					
A-C					

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	96	469	0.206	95	0.3	9.617	A
C-AB	82	630	0.130	81	0.2	6.557	A
C-A	144			144			
A-B	91			91			
A-C	598			598			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	115	431	0.267	115	0.4	11.378	B
C-AB	106	622	0.170	105	0.3	6.964	A
C-A	164			164			
A-B	109			109			
A-C	714			714			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	141	377	0.374	140	0.6	15.151	C
C-AB	146	613	0.238	145	0.5	7.688	A
C-A	184			184			
A-B	133			133			
A-C	874			874			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	141	377	0.374	141	0.6	15.268	C
C-AB	146	614	0.238	146	0.5	7.723	A
C-A	184			184			
A-B	133			133			
A-C	874			874			

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	115	430	0.267	116	0.4	11.478	B
C-AB	106	622	0.170	107	0.3	7.015	A
C-A	164			164			
A-B	109			109			
A-C	714			714			

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-AC	96	469	0.206	97	0.3	9.695	A
C-AB	82	630	0.130	82	0.2	6.597	A
C-A	144			144			
A-B	91			91			
A-C	598			598			

Queue Variation Results for each time segment

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.26	0.00	0.00	0.26	0.26			N/A	N/A
C-AB	0.20	0.00	0.00	0.20	0.20			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
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B-AC	0.36	0.00	0.00	0.36	0.36			N/A	N/A
C-AB	0.29	0.00	0.00	0.29	0.29			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.58	0.03	0.26	0.58	0.58			N/A	N/A
C-AB	0.47	0.03	0.26	0.47	0.50			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.59	0.03	0.30	1.46	2.78			N/A	N/A
C-AB	0.48	0.04	0.39	1.30	1.45			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.37	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	0.30	0.00	0.00	0.30	0.30			N/A	N/A

18:00 - 18:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.26	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.21	0.00	0.00	0.21	0.21			N/A	N/A

Junctions 9
PICADY 9 - Priority Intersection Module
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Filename: AM_PM_Pagham Road-Hook Lane.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\20170207

Revised Traffic Flows: 20170207_2031 Base and Committed Development

Report generation date: 07/02/2017 15:11:09

»2031 Base + Committed Development, AM

»2031 Base + Committed Development, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed Development														
Stream B-C	0.2	11.32	0.20	B	6.59	A	23 % [Stream B-A]	0.9	11.36	0.47	B	4.49	A	46 % [Stream B-A]
Stream B-A	1.2	18.92	0.54	C				0.1	14.42	0.08	B			
Stream C-AB	0.5	5.30	0.26	A				0.4	7.45	0.26	A			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	Pagham Road/Hook Lane
Location	Rose Green, Pagham
Site number	
Date	15/06/2016
Version	
Status	Existing Layout
Identifier	
Client	
Jobnumber	JNY8840
Enumerator	EUR\pauline.pettitt
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

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

Demand Set Summary

	Time Period	Traffic	Start time	Finish time	Time segment	Run
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ID	Scenario name	name	profile type	(HH:mm)	(HH:mm)	length (min)	automatically
D7	2031 Base + Committed Development	AM	ONE HOUR	07:45	09:15	15	✓
D8	2031 Base + Committed Development	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2031 Base + Committed Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	6.59	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	23	Stream B-A

Arms

Arms

Arm	Name	Description	Arm type
A	Pagham Road NE		Major
B	Hook Lane		Minor
C	Pagham Road SW		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 - Pagham Road SW	6.70			200.0	✓	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	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 - Hook Lane	One lane plus flare	10.00	6.70	5.70	4.40	3.50		1.00	26	28

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	565	0.100	0.252	0.159	0.360
1	B-C	603	0.090	0.226	-	-
1	C-B	690	0.259	0.259	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2031 Base + Committed Development	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pagham Road NE		ONE HOUR	✓	87	100.000
B - Hook Lane		ONE HOUR	✓	276	100.000
C - Pagham Road SW		ONE HOUR	✓	486	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - Pagham Road NE	B - Hook Lane	C - Pagham Road SW
	A - Pagham Road NE	0	10	77
	B - Hook Lane	204	0	72
	C - Pagham Road SW	369	117	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - Pagham Road NE	B - Hook Lane	C - Pagham Road SW
	A - Pagham Road NE	0	13	18
	B - Hook Lane	1	0	7
	C - Pagham Road SW	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.20	11.32	0.2	B	66	99
B-A	0.54	18.92	1.2	C	187	281
C-AB	0.26	5.30	0.5	A	178	268
C-A					268	401
A-B					9	14
A-C					71	106

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	54	14	485	0.112	54	0.0	0.1	8.331	A
B-A	154	38	463	0.331	152	0.0	0.5	11.477	B
C-AB	132	33	841	0.156	130	0.0	0.3	5.062	A
C-A	234	59			234				
A-B	8	2			8				
A-C	58	14			58				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-C	65	16	455	0.142	65	0.1	0.2	9.208	A
B-A	183	46	443	0.414	183	0.5	0.7	13.760	B
C-AB	170	43	871	0.195	170	0.3	0.4	5.132	A
C-A	267	67			267				
A-B	9	2			9				
A-C	69	17			69				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	79	20	399	0.198	79	0.2	0.2	11.222	B
B-A	225	56	415	0.542	223	0.7	1.1	18.584	C
C-AB	233	58	914	0.255	232	0.4	0.5	5.282	A
C-A	302	76			302				
A-B	11	3			11				
A-C	85	21			85				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	79	20	397	0.200	79	0.2	0.2	11.322	B
B-A	225	56	415	0.542	225	1.1	1.2	18.919	C
C-AB	233	58	914	0.255	233	0.5	0.5	5.298	A
C-A	302	76			302				
A-B	11	3			11				
A-C	85	21			85				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	65	16	453	0.143	65	0.2	0.2	9.291	A
B-A	183	46	443	0.414	185	1.2	0.7	14.042	B
C-AB	171	43	872	0.196	171	0.5	0.4	5.159	A
C-A	266	67			266				
A-B	9	2			9				
A-C	69	17			69				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	54	14	483	0.112	54	0.2	0.1	8.396	A
B-A	154	38	463	0.332	154	0.7	0.5	11.697	B
C-AB	132	33	841	0.157	132	0.4	0.3	5.091	A
C-A	234	58			234				
A-B	8	2			8				
A-C	58	14			58				

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.47	11.36	0.9	B	230	345
B-A	0.08	14.42	0.1	B	18	28
C-AB	0.26	7.45	0.4	A	136	205
C-A					99	148
A-B					39	59
A-C					331	497

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	189	47	636	0.297	187	0.0	0.4	7.994	A
B-A	15	4	338	0.045	15	0.0	0.0	11.125	B
C-AB	106	27	657	0.162	105	0.0	0.2	6.521	A
C-A	86	22			86				
A-B	32	8			32				
A-C	272	68			272				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	226	56	618	0.365	225	0.4	0.6	9.143	A
B-A	18	4	312	0.058	18	0.0	0.1	12.227	B
C-AB	132	33	655	0.201	132	0.2	0.3	6.868	A
C-A	98	25			98				
A-B	39	10			39				
A-C	325	81			325				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	276	69	593	0.466	275	0.6	0.9	11.282	B
B-A	22	6	272	0.081	22	0.1	0.1	14.383	B
C-AB	171	43	654	0.261	170	0.3	0.4	7.430	A
C-A	111	28			111				
A-B	47	12			47				
A-C	397	99			397				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	276	69	593	0.466	276	0.9	0.9	11.363	B
B-A	22	6	272	0.081	22	0.1	0.1	14.421	B
C-AB	171	43	654	0.261	171	0.4	0.4	7.455	A
C-A	111	28			111				
A-B	47	12			47				
A-C	397	99			397				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	226	56	618	0.365	227	0.9	0.6	9.227	A
B-A	18	4	312	0.058	18	0.1	0.1	12.267	B
C-AB	132	33	656	0.201	133	0.4	0.3	6.902	A
C-A	98	25			98				

A-B	39	10			39				
A-C	325	81			325				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	189	47	636	0.297	190	0.6	0.4	8.078	A
B-A	15	4	338	0.045	15	0.1	0.0	11.163	B
C-AB	106	27	657	0.162	107	0.3	0.2	6.558	A
C-A	86	22			86				
A-B	32	8			32				
A-C	272	68			272				

Junctions 9
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Filename: AM_PM_Pagham Road-Sefter Road.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\20170207

Revised Traffic Flows\20170207_2031 Base and Committed Development

Report generation date: 07/02/2017 15:39:57

»2031 Base + Committed Development, AM

»2031 Base + Committed Development, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed Development														
Stream B-AC	45.0	383.69	1.19	F	136.08	F	-30 % [Stream B-AC]	0.5	12.71	0.36	B	2.66	A	82 % [Stream B-AC]
Stream C-AB	0.0	3.81	0.01	A				0.0	5.12	0.00	A			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	Pagham Road/Sefter Road
Location	
Site number	
Date	15/06/2016
Version	
Status	Existing Layout
Identifier	
Client	
Jobnumber	JNY8840
Enumerator	EUR\pauline.pettitt
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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	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 segment length (min)	Run automatically
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D7	2031 Base + Committed Development	AM	ONE HOUR	07:15	08:45	15	✓
D8	2031 Base + Committed Development	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

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

2031 Base + Committed Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	136.08	F

Junction Network Options

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

Arms

Arms

Arm	Name	Description	Arm type
A	Pagham Road N		Major
B	Sefter Road		Minor
C	Pagham Road 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 - Pagham Road S	6.00			250.0	✓	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 - Sefter Road	One lane	3.20	10	36

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	508	0.093	0.234	0.147	0.334
1	B-C	660	0.101	0.256	-	-
1	C-B	719	0.278	0.278	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2031 Base + Committed Development	AM	ONE HOUR	07:15	08:45	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pagham Road N		ONE HOUR	✓	153	100.000
B - Sefter Road		ONE HOUR	✓	411	100.000
C - Pagham Road S		ONE HOUR	✓	584	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Pagham Road N	B - Sefter Road	C - Pagham Road S
From	A - Pagham Road N	0	83	70
	B - Sefter Road	411	0	0
	C - Pagham Road S	580	4	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Pagham Road N	B - Sefter Road	C - Pagham Road S
From	A - Pagham Road N	0	0	10
	B - Sefter Road	1	0	0
	C - Pagham Road S	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	1.19	383.69	45.0	F	377	566
C-AB	0.01	3.81	0.0	A	8	12
C-A					528	792
A-B					76	114
A-C					64	96

Main Results for each time segment

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	309	77	418	0.740	299	0.0	2.5	28.301	D
C-AB	6	1	952	0.006	6	0.0	0.0	3.801	A
C-A	434	109			434				
A-B	62	16			62				
A-C	53	13			53				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	369	92	402	0.920	354	2.5	6.3	61.197	F
C-AB	8	2	1000	0.008	8	0.0	0.0	3.626	A
C-A	517	129			517				
A-B	75	19			75				
A-C	63	16			63				

07:45 - 08:00

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Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	453	113	379	1.194	373	6.3	26.3	180.614	F
C-AB	11	3	1066	0.010	11	0.0	0.0	3.409	A
C-A	632	158			632				
A-B	91	23			91				
A-C	77	19			77				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	453	113	379	1.194	378	26.3	45.0	353.180	F
C-AB	11	3	1066	0.010	11	0.0	0.0	3.414	A
C-A	632	158			632				
A-B	91	23			91				
A-C	77	19			77				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	369	92	402	0.920	393	45.0	39.1	383.693	F
C-AB	8	2	1000	0.008	8	0.0	0.0	3.634	A
C-A	517	129			517				
A-B	75	19			75				
A-C	63	16			63				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	309	77	418	0.740	408	39.1	14.5	244.107	F
C-AB	6	1	952	0.006	6	0.0	0.0	3.807	A
C-A	434	109			434				
A-B	62	16			62				
A-C	53	13			53				

2031 Base + Committed Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	2.66	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	82	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 segment length (min)	Run automatically
D8	2031 Base + Committed Development	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pagham Road N		ONE HOUR	✓	388	100.000
B - Sefter Road		ONE HOUR	✓	142	100.000
C - Pagham Road S		ONE HOUR	✓	150	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Pagham Road N	B - Sefter Road	C - Pagham Road S
From	A - Pagham Road N	0	360	28
	B - Sefter Road	136	0	6
	C - Pagham Road S	148	2	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Pagham Road N	B - Sefter Road	C - Pagham Road S
From	A - Pagham Road N	0	0	2
	B - Sefter Road	1	0	0
	C - Pagham Road S	5	0	0

Results

Results Summary for whole modelled period

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Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.36	12.71	0.5	B	130	195
C-AB	0.00	5.12	0.0	A	2	3
C-A					135	203
A-B					330	496
A-C					26	39

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	107	27	461	0.232	106	0.0	0.3	10.091	B
C-AB	2	0.45	707	0.003	2	0.0	0.0	5.102	A
C-A	111	28			111				
A-B	271	68			271				
A-C	21	5			21				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	128	32	452	0.282	127	0.3	0.4	11.068	B
C-AB	2	0.55	706	0.003	2	0.0	0.0	5.109	A
C-A	133	33			133				
A-B	324	81			324				
A-C	25	6			25				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	156	39	439	0.356	156	0.4	0.5	12.658	B
C-AB	3	0.72	706	0.004	3	0.0	0.0	5.118	A
C-A	162	41			162				
A-B	396	99			396				
A-C	31	8			31				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	156	39	439	0.356	156	0.5	0.5	12.710	B
C-AB	3	0.72	706	0.004	3	0.0	0.0	5.122	A
C-A	162	41			162				
A-B	396	99			396				
A-C	31	8			31				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	128	32	452	0.282	128	0.5	0.4	11.135	B
C-AB	2	0.55	706	0.003	2	0.0	0.0	5.121	A
C-A	133	33			133				
A-B	324	81			324				
A-C	25	6			25				

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-AC	107	27	461	0.232	107	0.4	0.3	10.178	B
C-AB	2	0.45	707	0.003	2	0.0	0.0	5.106	A
C-A	111	28			111				
A-B	271	68			271				
A-C	21	5			21				

Junctions 9
PICADY 9 - Priority Intersection Module
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Filename: AM_PM_Pagham Road Site Access.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\20170207

Revised Traffic Flows: 20170207_2031 Base and Committed Development

Report generation date: 07/02/2017 15:29:37

»2031 Base + Committed Development, AM
»2031 Base + Committed Development, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed Development														
Stream B-AC	0.0	0.00	0.00	A	0.00	A	900 %	0.0	0.00	0.00	A	0.00	A	900 %
Stream C-B	0.0	0.00	0.00	A				0.0	0.00	0.00	A			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	Pagham Road Proposed Site Access
Location	Rose Green, Pagham
Site number	
Date	15/06/2016
Version	
Status	Proposed
Identifier	
Client	Hallam Land Management
Jobnumber	JNY8840
Enumerator	EUR\pauline.pettitt
Description	Based on Drg No 2

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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	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 segment length (min)	Run automatically
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D1	2031 Base + Committed Development	AM	ONE HOUR	07:45	09:15	15	✓
D2	2031 Base + Committed Development	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2031 Base + Committed Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.00	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	900	

Arms

Arms

Arm	Name	Description	Arm type
A	Pagham Road N		Major
B	Site Access		Minor
C	Pagham Road S		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 - Pagham Road S	6.00		✓	3.00	200.0		-

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 - Site Access	One lane	3.00	120	120

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	578	0.105	0.266	0.167	0.380
1	B-C	699	0.107	0.271	-	-
1	C-B	750	0.291	0.291	-	-

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

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

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

Traffic Demand

Demand Set Details

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

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

✓	✓	HV Percentages	2.00
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Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pagham Road N		ONE HOUR	✓	9	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - Pagham Road S		ONE HOUR	✓	21	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Pagham Road N	B - Site Access	C - Pagham Road S
From	A - Pagham Road N	0	0	9
	B - Site Access	0	0	0
	C - Pagham Road S	21	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Pagham Road N	B - Site Access	C - Pagham Road S
From	A - Pagham Road N	0	0	6
	B - Site Access	0	0	0
	C - Pagham Road S	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.00	0.00	0.0	A	0	0
C-A					19	29
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					8	12

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	629	0.000	0	0.0	0.0	0.000	A
C-A	16	4			16				
C-B	0	0	748	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	7	2			7				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	629	0.000	0	0.0	0.0	0.000	A
C-A	19	5			19				
C-B	0	0	747	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				

A-C	8	2			8				
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08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	628	0.000	0	0.0	0.0	0.000	A
C-A	23	6			23				
C-B	0	0	747	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	10	2			10				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	628	0.000	0	0.0	0.0	0.000	A
C-A	23	6			23				
C-B	0	0	747	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	10	2			10				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	629	0.000	0	0.0	0.0	0.000	A
C-A	19	5			19				
C-B	0	0	747	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	8	2			8				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	629	0.000	0	0.0	0.0	0.000	A
C-A	16	4			16				
C-B	0	0	748	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	7	2			7				

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.00	0.00	0.0	A	0	0
C-A					11	17
C-B	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					20	30

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	628	0.000	0	0.0	0.0	0.000	A
C-A	9	2			9				
C-B	0	0	745	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	17	4			17				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	626	0.000	0	0.0	0.0	0.000	A
C-A	11	3			11				
C-B	0	0	744	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	20	5			20				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	625	0.000	0	0.0	0.0	0.000	A
C-A	13	3			13				
C-B	0	0	743	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	24	6			24				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	625	0.000	0	0.0	0.0	0.000	A
C-A	13	3			13				
C-B	0	0	743	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	24	6			24				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	0	0	626	0.000	0	0.0	0.0	0.000	A
C-A	11	3			11				
C-B	0	0	744	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	20	5			20				

18:00 - 18:15

Stream	Total Demand	Junction Arrivals	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
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	(Veh/hr)	(Veh)							
B-AC	0	0	628	0.000	0	0.0	0.0	0.000	A
C-A	9	2			9				
C-B	0	0	745	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	17	4			17				

Junctions 9
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Filename: AM_PM_Rose Green Road-Carlton Avenue.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\20170207 Revised Traffic Flows\20170207_2031 Base and Committed Development

Report generation date: 07/02/2017 15:51:01

»2031 Base + Committed Development, AM

»2031 Base + Committed Development, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed Development														
Stream B-ACD	2.6	43.90	0.74	E	69.61	F	-21 % [Stream D-ABC]	1.2	28.00	0.57	D	142.58	F	-27 % [Stream D-ABC]
Stream A-BCD	0.0	6.40	0.01	A				0.0	5.40	0.02	A			
Stream D-ABC	26.6	190.89	1.08	F				57.5	400.81	1.21	F			
Stream C-ABD	0.3	5.24	0.12	A				0.4	5.02	0.14	A			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	Rose Green Road/Carlton Avenue
Location	Rose Green, Pagham
Site number	
Date	15/06/2016
Version	
Status	Existing Junction
Identifier	
Client	
Jobnumber	JNY8840
Enumerator	EUR\pauline.pettitt
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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	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 segment length (min)	Run automatically

D7	2031 Base + Committed Development	AM	ONE HOUR	07:45	09:15	15	✓
D8	2031 Base + Committed Development	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

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

2031 Base + Committed Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way	69.61	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-21	Stream D-ABC

Arms

Arms

Arm	Name	Description	Arm type
A	Grosvenor Gardens		Major
B	Carlton Avenue		Minor
C	Rose Green Road W		Major
D	Rose Green Road N		Minor

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)
A - Grosvenor Gardens	7.00			155.0	✓	0.00
C - Rose Green Road W	7.00			145.0	✓	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 - Carlton Avenue	One lane	3.10	22	50
D - Rose Green Road N	One lane	3.70	80	137

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	664	-	-	-	0.246	0.246	0.246	-	0.246	-	-
1	B-AD	514	0.090	0.226	-	-	-	0.142	0.324	0.142	0.090	0.226
1	B-C	662	0.097	0.245	-	-	-	-	-	-	0.097	0.245
1	C-B	658	0.244	0.244	-	-	-	-	-	-	0.244	0.244
1	D-A	760	-	-	-	0.282	0.111	0.282	-	0.111	-	-
1	D-BC	613	0.170	0.170	0.385	0.270	0.107	0.270	-	0.107	-	-

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

	Time Period	Traffic	Start time	Finish time	Time segment	Run
--	-------------	---------	------------	-------------	--------------	-----

ID	Scenario name	name	profile type	(HH:mm)	(HH:mm)	length (min)	automatically
D7	2031 Base + Committed Development	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Grosvenor Gardens		ONE HOUR	✓	259	100.000
B - Carlton Avenue		ONE HOUR	✓	207	100.000
C - Rose Green Road W		ONE HOUR	✓	447	100.000
D - Rose Green Road N		ONE HOUR	✓	442	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - Grosvenor Gardens	B - Carlton Avenue	C - Rose Green Road W	D - Rose Green Road N
From	A - Grosvenor Gardens	0	16	239	4
	B - Carlton Avenue	59	0	58	90
	C - Rose Green Road W	204	38	0	205
	D - Rose Green Road N	42	64	336	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - Grosvenor Gardens	B - Carlton Avenue	C - Rose Green Road W	D - Rose Green Road N
From	A - Grosvenor Gardens	0	0	1	33
	B - Carlton Avenue	0	0	0	1
	C - Rose Green Road W	1	0	0	1
	D - Rose Green Road N	3	0	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.74	43.90	2.6	E	190	285
A-BCD	0.01	6.40	0.0	A	6	9
A-B					15	22
A-C					217	325
D-ABC	1.08	190.89	26.6	F	406	608
C-ABD	0.12	5.24	0.3	A	70	105
C-D					170	256
C-A					170	254

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	156	39	393	0.397	153	0.0	0.6	14.886	B
A-BCD	5	1	567	0.008	5	0.0	0.0	6.395	A
A-B	12	3			12				

A-C	178	45			178				
D-ABC	333	83	504	0.660	325	0.0	1.8	19.420	C
C-ABD	48	12	751	0.065	48	0.0	0.1	5.120	A
C-D	144	36			144				
C-A	144	36			144				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	186	47	361	0.516	185	0.6	1.0	20.256	C
A-BCD	6	1	582	0.010	6	0.0	0.0	6.285	A
A-B	14	4			14				
A-C	213	53			213				
D-ABC	397	99	483	0.823	389	1.8	3.8	35.612	E
C-ABD	65	16	773	0.085	65	0.1	0.2	5.085	A
C-D	169	42			169				
C-A	168	42			168				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	228	57	316	0.720	223	1.0	2.3	36.698	E
A-BCD	8	2	604	0.014	8	0.0	0.0	6.087	A
A-B	17	4			17				
A-C	260	65			260				
D-ABC	487	122	453	1.074	436	3.8	16.6	105.601	F
C-ABD	95	24	806	0.118	95	0.2	0.3	5.061	A
C-D	199	50			199				
C-A	198	49			198				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	228	57	306	0.744	227	2.3	2.6	43.900	E
A-BCD	8	2	604	0.014	8	0.0	0.0	6.046	A
A-B	17	4			17				
A-C	260	65			260				
D-ABC	487	122	453	1.075	447	16.6	26.6	190.887	F
C-ABD	97	24	798	0.121	97	0.3	0.3	5.142	A
C-D	198	50			198				
C-A	197	49			197				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	186	47	341	0.546	191	2.6	1.3	24.850	C
A-BCD	6	1	582	0.010	6	0.0	0.0	6.184	A
A-B	14	4			14				
A-C	213	53			213				
D-ABC	397	99	482	0.825	464	26.6	9.9	149.898	F
C-ABD	67	17	756	0.089	67	0.3	0.2	5.242	A
C-D	168	42			168				
C-A	167	42			167				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	156	39	385	0.405	158	1.3	0.7	16.032	C
A-BCD	5	1	567	0.008	5	0.0	0.0	6.349	A
A-B	12	3			12				
A-C	178	45			178				
D-ABC	333	83	504	0.661	364	9.9	2.1	30.536	D
C-ABD	49	12	744	0.066	49	0.2	0.1	5.187	A

C-D	144	36			144				
C-A	143	36			143				

2031 Base + Committed Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	Right-Left Stagger	Two-way	142.58	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-27	Stream D-ABC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2031 Base + Committed Development	PM	ONE HOUR	17:00	18:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Grosvenor Gardens		ONE HOUR	✓	245	100.000
B - Carlton Avenue		ONE HOUR	✓	151	100.000
C - Rose Green Road W		ONE HOUR	✓	553	100.000
D - Rose Green Road N		ONE HOUR	✓	505	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		A - Grosvenor Gardens	B - Carlton Avenue	C - Rose Green Road W	D - Rose Green Road N
From	A - Grosvenor Gardens	0	40	199	6
	B - Carlton Avenue	45	0	48	58
	C - Rose Green Road W	281	40	0	232
	D - Rose Green Road N	102	57	346	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A - Grosvenor Gardens	B - Carlton Avenue	C - Rose Green Road W	D - Rose Green Road N
From	A - Grosvenor Gardens	0	0	1	0
	B - Carlton Avenue	0	0	0	2
	C - Rose Green Road W	0	0	0	1
	D - Rose Green Road N	0	0	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.57	28.00	1.2	D	139	208
A-BCD	0.02	5.40	0.0	A	8	12
A-B					36	54
A-C					180	270
D-ABC	1.21	400.81	57.5	F	463	695
C-ABD	0.14	5.02	0.4	A	88	132
C-D					190	285
C-A					230	345

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	114	28	392	0.290	112	0.0	0.4	12.793	B
A-BCD	6	2	674	0.009	6	0.0	0.0	5.393	A
A-B	30	7			30				
A-C	148	37			148				
D-ABC	380	95	514	0.739	370	0.0	2.6	23.533	C
C-ABD	58	14	809	0.071	57	0.0	0.1	4.786	A
C-D	162	41			162				
C-A	196	49			196				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	136	34	358	0.379	135	0.4	0.6	16.048	C
A-BCD	8	2	678	0.012	8	0.0	0.0	5.371	A
A-B	36	9			36				
A-C	177	44			177				
D-ABC	454	113	491	0.925	437	2.6	6.9	53.779	F
C-ABD	80	20	843	0.095	79	0.1	0.2	4.717	A
C-D	189	47			189				
C-A	229	57			229				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	166	42	311	0.535	164	0.6	1.1	24.213	C
A-BCD	11	3	686	0.016	11	0.0	0.0	5.332	A
A-B	43	11			43				
A-C	216	54			216				
D-ABC	556	139	458	1.213	453	6.9	32.8	177.948	F
C-ABD	121	30	893	0.135	120	0.2	0.3	4.663	A
C-D	221	55			221				
C-A	267	67			267				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	166	42	292	0.569	166	1.1	1.2	27.995	D
A-BCD	11	3	685	0.016	11	0.0	0.0	5.339	A

A-B	43	11			43				
A-C	216	54			216				
D-ABC	556	139	458	1.214	457	32.8	57.5	364.490	F
C-ABD	124	31	879	0.141	124	0.3	0.4	4.777	A
C-D	219	55			219				
C-A	265	66			265				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	136	34	320	0.425	138	1.2	0.8	19.988	C
A-BCD	8	2	677	0.012	8	0.0	0.0	5.380	A
A-B	36	9			36				
A-C	177	44			177				
D-ABC	454	113	490	0.926	482	57.5	50.6	400.806	F
C-ABD	84	21	812	0.104	85	0.4	0.2	4.963	A
C-D	187	47			187				
C-A	226	57			226				

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-ACD	114	28	356	0.319	115	0.8	0.5	14.965	B
A-BCD	6	2	673	0.009	6	0.0	0.0	5.399	A
A-B	30	7			30				
A-C	148	37			148				
D-ABC	380	95	514	0.740	504	50.6	19.6	256.500	F
C-ABD	60	15	778	0.077	61	0.2	0.1	5.023	A
C-D	161	40			161				
C-A	195	49			195				

Junctions 9
PICADY 9 - Priority Intersection Module
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Filename: AM_PM_Sefter Road-Hook Lane.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\20170207

Revised Traffic Flows\20170207_2031 Base and Committed Development

Report generation date: 07/02/2017 15:44:36

»2031 Base + Committed Development, AM
»2031 Base + Committed Development, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed Development														
Stream B-C	0.0	8.07	0.02	A	3.46	A	44 % [Stream B-A]	0.0	7.27	0.01	A	2.70	A	48 % [Stream B-A]
Stream B-A	0.8	14.70	0.45	B				0.7	14.30	0.41	B			
Stream C-AB	0.0	7.99	0.02	A				0.2	5.36	0.11	A			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	Sefter Road/Hook Lane
Location	Rose Green, Pagham
Site number	
Date	15/06/2016
Version	
Status	Existing layout
Identifier	
Client	
Jobnumber	JNY8840
Enumerator	EUR\pauline.pettitt
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

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

Demand Set Summary

		Time Period	Traffic	Start time	Finish time	Time segment	Run
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ID	Scenario name	name	profile type	(HH:mm)	(HH:mm)	length (min)	automatically
D7	2031 Base + Committed Development	AM	ONE HOUR	07:45	09:15	15	✓
D8	2031 Base + Committed Development	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

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

2031 Base + Committed Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	3.46	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	44	Stream B-A

Arms

Arms

Arm	Name	Description	Arm type
A	Sefter Road SE		Major
B	Hook Lane		Minor
C	Sefter Road NW		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 - Sefter Road NW	7.30			93.0	✓	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	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 - Hook Lane	One lane plus flare	10.00	9.60	6.00	4.20	3.70		1.00	32	25

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	579	0.100	0.252	0.158	0.359
1	B-C	674	0.097	0.246	-	-
1	C-B	628	0.229	0.229	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2031 Base + Committed Development	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Sefter Road SE		ONE HOUR	✓	512	100.000
B - Hook Lane		ONE HOUR	✓	191	100.000
C - Sefter Road NW		ONE HOUR	✓	110	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A - Sefter Road SE	B - Hook Lane	C - Sefter Road NW
	A - Sefter Road SE	0	204	308
	B - Hook Lane	181	0	10
	C - Sefter Road NW	103	7	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A - Sefter Road SE	B - Hook Lane	C - Sefter Road NW
	A - Sefter Road SE	0	2	1
	B - Hook Lane	1	0	0
	C - Sefter Road NW	1	33	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.02	8.07	0.0	A	9	14
B-A	0.45	14.70	0.8	B	166	249
C-AB	0.02	7.99	0.0	A	8	12
C-A					93	139
A-B					187	281
A-C					283	424

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	547	0.014	7	0.0	0.0	6.674	A
B-A	136	34	485	0.281	135	0.0	0.4	10.232	B
C-AB	6	2	465	0.014	6	0.0	0.0	7.854	A
C-A	76	19			76				
A-B	154	38			154				
A-C	232	58			232				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS

B-C	9	2	513	0.018	9	0.0	0.0	7.141	A
B-A	163	41	468	0.348	162	0.4	0.5	11.755	B
C-AB	8	2	464	0.017	8	0.0	0.0	7.924	A
C-A	91	23			91				
A-B	183	46			183				
A-C	277	69			277				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	11	3	458	0.024	11	0.0	0.0	8.054	A
B-A	199	50	444	0.449	198	0.5	0.8	14.581	B
C-AB	10	3	463	0.022	10	0.0	0.0	7.987	A
C-A	111	28			111				
A-B	225	56			225				
A-C	339	85			339				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	11	3	457	0.024	11	0.0	0.0	8.073	A
B-A	199	50	444	0.449	199	0.8	0.8	14.702	B
C-AB	10	3	463	0.022	10	0.0	0.0	7.946	A
C-A	111	28			111				
A-B	225	56			225				
A-C	339	85			339				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	9	2	512	0.018	9	0.0	0.0	7.159	A
B-A	163	41	468	0.348	164	0.8	0.5	11.880	B
C-AB	8	2	464	0.017	8	0.0	0.0	7.841	A
C-A	91	23			91				
A-B	183	46			183				
A-C	277	69			277				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	8	2	546	0.014	8	0.0	0.0	6.690	A
B-A	136	34	485	0.281	137	0.5	0.4	10.357	B
C-AB	6	2	465	0.014	6	0.0	0.0	7.817	A
C-A	76	19			76				
A-B	154	38			154				
A-C	232	58			232				

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.01	7.27	0.0	A	6	8
B-A	0.41	14.30	0.7	B	144	216
C-AB	0.11	5.36	0.2	A	61	92
C-A					271	407
A-B					298	447
A-C					125	187

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	576	0.008	4	0.0	0.0	6.301	A
B-A	118	30	470	0.251	117	0.0	0.3	10.157	B
C-AB	44	11	716	0.062	44	0.0	0.1	5.355	A
C-A	228	57			228				
A-B	245	61			245				
A-C	102	26			102				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	548	0.010	5	0.0	0.0	6.627	A
B-A	141	35	451	0.313	141	0.3	0.4	11.587	B
C-AB	58	15	736	0.079	58	0.1	0.1	5.311	A
C-A	267	67			267				
A-B	292	73			292				
A-C	122	31			122				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	503	0.013	7	0.0	0.0	7.256	A
B-A	173	43	425	0.407	172	0.4	0.7	14.202	B
C-AB	81	20	765	0.105	80	0.1	0.2	5.263	A
C-A	318	79			318				
A-B	358	89			358				
A-C	150	37			150				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	7	2	502	0.013	7	0.0	0.0	7.268	A
B-A	173	43	424	0.407	173	0.7	0.7	14.301	B
C-AB	81	20	765	0.105	81	0.2	0.2	5.268	A
C-A	318	79			318				
A-B	358	89			358				
A-C	150	37			150				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	547	0.010	5	0.0	0.0	6.643	A
B-A	141	35	451	0.313	142	0.7	0.5	11.692	B
C-AB	58	15	736	0.079	59	0.2	0.1	5.316	A
C-A	267	67			267				

A-B	292	73			292				
A-C	122	31			122				

18:15 - 18:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-C	5	1	575	0.008	5	0.0	0.0	6.315	A
B-A	118	30	470	0.252	119	0.5	0.3	10.267	B
C-AB	45	11	717	0.062	45	0.1	0.1	5.362	A
C-A	228	57			228				
A-B	245	61			245				
A-C	102	26			102				

Junctions 9																
ARCADY 9 - Roundabout Module																
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017																
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The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution																

Filename: AM_PM_Vinnetrow Road & B2166.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\20170207 Revised Traffic Flows\20170207_2031 Base and Committed Development

Report generation date: 08/02/2017 09:35:37

»2031 Base + Committed Development, AM

»2031 Base + Committed Development, PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed Development																
1 - Vinnetrow Road	0.8	2.9	7.28	0.43	A	32.82	D	-4 % [2 - B2166 E]	9.7	45.6	65.60	0.94	F	22.27	C	-5 % [1 - Vinnetrow Road]
2 - B2166 E	19.9	85.5	52.44	0.98	F				1.2	1.5	5.62	0.54	A			
3 - Mill Lane	0.2	0.5	9.66	0.18	A				0.1	0.5	4.89	0.07	A			
4 - B2166 W	0.7	2.5	4.59	0.41	A				3.5	15.6	12.21	0.78	B			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	(untitled)
Location	
Site number	
Date	10/11/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
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 segment length (min)
D1	2031 Base + Committed Development	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed Development	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed Development, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	32.82	D

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-4	2 - B2166 E

Arms

Arms

Arm	Name	Description
1	Vinnetrow Road	
2	B2166 E	
3	Mill Lane	
4	B2166 W	

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 - Vinnetrow Road	3.00	6.00	5.0	30.0	30.0	35.0	
2 - B2166 E	4.00	6.00	12.0	30.0	30.0	42.0	
3 - Mill Lane	3.00	7.00	8.0	20.0	30.0	30.0	
4 - B2166 W	3.50	6.00	6.0	20.0	30.0	30.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Vinnetrow Road	0.559	1219
2 - B2166 E	0.623	1566
3 - Mill Lane	0.591	1375
4 - B2166 W	0.593	1385

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 Base + Committed Development	AM	ONE HOUR	07:30	09:00	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 - Vinnetrow Road		✓	342	100.000
2 - B2166 E		✓	1287	100.000
3 - Mill Lane		✓	73	100.000
4 - B2166 W		✓	503	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
From		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	187	7	148
	2 - B2166 E	0	0	5	1282
	3 - Mill Lane	0	12	0	61
	4 - B2166 W	0	487	16	0

Vehicle Mix

Heavy Vehicle Percentages

From	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
	1 - Vinnetrow Road	0	3	0	2
	2 - B2166 E	3	0	0	0
	3 - Mill Lane	0	0	0	0
	4 - B2166 W	8	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.43	7.28	0.8	2.9	A
2 - B2166 E	0.98	52.44	19.9	85.5	F
3 - Mill Lane	0.18	9.66	0.2	0.5	A
4 - B2166 W	0.41	4.59	0.7	2.5	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	257	386	973	0.265	256	0.4	5.013	A
2 - B2166 E	969	128	1485	0.652	962	1.8	6.781	A
3 - Mill Lane	55	1069	742	0.074	55	0.1	5.236	A
4 - B2166 W	379	9	1341	0.282	377	0.4	3.728	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	307	462	930	0.331	307	0.5	5.775	A
2 - B2166 E	1157	153	1469	0.787	1150	3.5	11.054	B
3 - Mill Lane	66	1279	617	0.106	65	0.1	6.521	A
4 - B2166 W	452	11	1340	0.337	452	0.5	4.052	A

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)	LOS
1 - Vinnetrow Road	377	566	872	0.432	376	0.8	7.242	A
2 - B2166 E	1417	188	1448	0.979	1370	15.3	34.328	D
3 - Mill Lane	80	1527	470	0.171	80	0.2	9.220	A
4 - B2166 W	554	13	1338	0.414	553	0.7	4.578	A

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)	LOS
1 - Vinnetrow Road	377	567	871	0.432	377	0.8	7.277	A
2 - B2166 E	1417	188	1447	0.979	1399	19.9	52.440	F
3 - Mill Lane	80	1556	453	0.177	80	0.2	9.659	A
4 - B2166 W	554	13	1338	0.414	554	0.7	4.587	A

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)	LOS
1 - Vinnetrow Road	307	464	929	0.331	308	0.5	5.810	A
2 - B2166 E	1157	154	1469	0.788	1221	4.0	17.775	C
3 - Mill Lane	66	1350	575	0.114	66	0.1	7.069	A

4 - B2166 W	452	11	1340	0.338	453	0.5	4.062	A
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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)	LOS
1 - Vinnetrow Road	257	388	971	0.265	258	0.4	5.051	A
2 - B2166 E	969	129	1485	0.653	977	1.9	7.202	A
3 - Mill Lane	55	1085	732	0.075	55	0.1	5.318	A
4 - B2166 W	379	9	1341	0.282	379	0.4	3.747	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2 - B2166 E	1.84	0.54	1.21	2.76	3.28			N/A	N/A
3 - Mill Lane	0.08	0.00	0.00	0.08	0.08			N/A	N/A
4 - B2166 W	0.39	0.00	0.00	0.39	0.39			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.49	0.00	0.00	0.49	0.49			N/A	N/A
2 - B2166 E	3.51	0.06	0.88	9.79	15.53			N/A	N/A
3 - Mill Lane	0.12	0.00	0.00	0.12	0.12			N/A	N/A
4 - B2166 W	0.51	0.51	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.75	0.03	0.26	0.75	0.75			N/A	N/A
2 - B2166 E	15.29	0.18	6.60	40.66	57.74			N/A	N/A
3 - Mill Lane	0.20	0.03	0.26	0.46	0.49			N/A	N/A
4 - B2166 W	0.70	0.03	0.25	0.70	0.70			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.76	0.03	0.28	0.91	2.94			N/A	N/A
2 - B2166 E	19.91	0.12	5.58	56.72	85.48			N/A	N/A
3 - Mill Lane	0.21	0.03	0.26	0.46	0.49			N/A	N/A
4 - B2166 W	0.70	0.03	0.28	0.70	2.49			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.50	0.00	0.00	0.50	0.50			N/A	N/A
2 - B2166 E	3.96	0.04	0.42	10.87	20.43			N/A	N/A
3 - Mill Lane	0.13	0.00	0.00	0.13	0.13			N/A	N/A
4 - B2166 W	0.51	0.51	1.00	1.40	1.45			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.36	0.03	0.26	0.46	0.49			N/A	N/A
2 - B2166 E	1.92	0.03	0.30	2.53	9.30			N/A	N/A
3 - Mill Lane	0.08	0.00	0.00	0.08	0.08			N/A	N/A
4 - B2166 W	0.40	0.00	0.00	0.40	0.40			N/A	N/A

2031 Base + Committed Development, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	22.27	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-5	1 - Vinnetrow Road

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2031 Base + Committed Development	PM	ONE HOUR	16:30	18:00	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 - Vinnetrow Road		✓	515	100.000
2 - B2166 E		✓	689	100.000
3 - Mill Lane		✓	49	100.000
4 - B2166 W		✓	968	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	325	15	175
	2 - B2166 E	0	0	9	680
	3 - Mill Lane	0	18	0	31
	4 - B2166 W	0	953	15	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	0	0	1
	2 - B2166 E	3	0	0	2
	3 - Mill Lane	0	7	0	0
	4 - B2166 W	3	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.94	65.60	9.7	45.6	F
2 - B2166 E	0.54	5.62	1.2	1.5	A
3 - Mill Lane	0.07	4.89	0.1	0.5	A
4 - B2166 W	0.78	12.21	3.5	15.6	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)	LOS
1 - Vinnetrow Road	388	738	799	0.485	384	0.9	8.596	A
2 - B2166 E	519	153	1442	0.360	516	0.6	3.880	A
3 - Mill Lane	37	640	965	0.038	37	0.0	3.879	A
4 - B2166 W	729	13	1363	0.535	724	1.1	5.596	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)	LOS
1 - Vinnetrow Road	463	884	717	0.646	460	1.7	13.820	B
2 - B2166 E	619	183	1423	0.435	619	0.8	4.468	A
3 - Mill Lane	44	767	891	0.049	44	0.1	4.251	A
4 - B2166 W	870	16	1361	0.639	868	1.7	7.255	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)	LOS
1 - Vinnetrow Road	567	1079	607	0.934	543	7.7	45.371	E
2 - B2166 E	759	217	1403	0.541	757	1.2	5.562	A
3 - Mill Lane	54	932	794	0.068	54	0.1	4.865	A
4 - B2166 W	1066	20	1359	0.784	1059	3.4	11.727	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)	LOS
1 - Vinnetrow Road	567	1085	604	0.940	559	9.7	65.604	F
2 - B2166 E	759	223	1399	0.542	759	1.2	5.621	A
3 - Mill Lane	54	939	790	0.068	54	0.1	4.892	A
4 - B2166 W	1066	20	1359	0.784	1065	3.5	12.212	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	463	893	712	0.651	494	2.0	18.676	C
2 - B2166 E	619	196	1416	0.438	621	0.8	4.539	A
3 - Mill Lane	44	781	883	0.050	44	0.1	4.294	A
4 - B2166 W	870	16	1361	0.639	877	1.8	7.536	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	388	745	795	0.488	392	1.0	9.005	A
2 - B2166 E	519	156	1440	0.360	520	0.6	3.913	A
3 - Mill Lane	37	646	962	0.038	37	0.0	3.894	A
4 - B2166 W	729	14	1363	0.535	731	1.2	5.720	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.92	0.54	1.00	1.41	1.46			N/A	N/A
2 - B2166 E	0.56	0.55	1.00	1.40	1.45			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	1.13	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	1.75	0.05	0.70	4.43	6.69			N/A	N/A
2 - B2166 E	0.76	0.10	0.85	1.42	1.49			N/A	N/A
3 - Mill Lane	0.05	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	1.73	0.06	0.74	4.35	6.53			N/A	N/A

17:00 - 17:15

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Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	7.70	0.10	2.30	21.15	31.28			N/A	N/A
2 - B2166 E	1.16	0.03	0.26	1.16	1.16			N/A	N/A
3 - Mill Lane	0.07	0.03	0.26	0.47	0.49			N/A	N/A
4 - B2166 W	3.43	0.03	0.30	3.43	15.57			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	9.68	0.07	1.16	28.19	45.61			N/A	N/A
2 - B2166 E	1.18	0.03	0.27	1.18	1.44			N/A	N/A
3 - Mill Lane	0.07	0.00	0.00	0.07	0.07			N/A	N/A
4 - B2166 W	3.53	0.03	0.28	3.53	7.06			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	1.95	0.04	0.37	5.04	9.92			N/A	N/A
2 - B2166 E	0.78	0.31	0.96	1.40	1.45			N/A	N/A
3 - Mill Lane	0.05	0.00	0.00	0.05	0.05			N/A	N/A
4 - B2166 W	1.81	0.05	0.72	4.61	6.94			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.97	0.03	0.29	1.33	4.20			N/A	N/A
2 - B2166 E	0.57	0.06	0.65	1.33	1.42			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	1.16	0.04	0.39	2.94	5.14			N/A	N/A

Junctions 9
ARCADY 9 - Roundabout Module
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017
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Filename: AM_PM_West Meads-Aldwick Fields.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\20170207 Revised Traffic Flows\20170207_2031 Base and Committed Development

Report generation date: 07/02/2017 16:25:21

»2031 Base + Committed Development, AM
»2031 Base + Committed Development, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed Development														
1 - Hawthorn Road	0.1	3.04	0.12	A	3.25	A	153 % [5 - West Meads Drive]	0.4	4.17	0.29	A	4.38	A	66 % [4 - B2166 Aldwick Road W]
2 - B2166 Aldwick Road E	0.4	2.74	0.29	A				0.5	3.09	0.33	A			
3 - Aldwick Fields	0.1	3.43	0.05	A				0.0	3.65	0.01	A			
4 - B2166 Aldwick Road W	0.4	3.57	0.27	A				1.1	5.44	0.52	A			
5 - West Meads Drive	0.3	3.75	0.26	A				0.4	4.52	0.30	A			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	West Meads/Aldwick Fields
Location	Rose Green, Pagham
Site number	
Date	15/06/2016
Version	
Status	Existing junction
Identifier	
Client	
Jobnumber	JNY8840
Enumerator	EUR\pauline.pettitt
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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	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 segment length (min)	Run automatically
D7	2031 Base + Committed Development	AM	ONE HOUR	08:00	09:30	15	✓
D8	2031 Base + Committed Development	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2031 Base + Committed Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3,4,5	3.25	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	153	5 - West Meads Drive

Arms

Arms

Arm	Name	Description
1	Hawthorn Road	
2	B2166 Aldwick Road E	
3	Aldwick Fields	
4	B2166 Aldwick Road W	
5	West Meads Drive	

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 - Hawthorn Road	4.00	6.10	10.7	23.6	58.6	19.0	
2 - B2166 Aldwick Road E	4.70	7.40	13.5	15.0	58.6	21.0	
3 - Aldwick Fields	3.70	7.10	4.8	18.7	58.6	22.5	
4 - B2166 Aldwick Road W	3.50	6.10	21.6	8.3	58.6	23.5	
5 - West Meads Drive	3.65	6.20	7.5	21.5	58.6	21.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Hawthorn Road	0.573	1676
2 - B2166 Aldwick Road E	0.613	1952
3 - Aldwick Fields	0.530	1469
4 - B2166 Aldwick Road W	0.527	1554
5 - West Meads Drive	0.544	1527

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2031 Base + Committed Development	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Hawthorn Road		ONE HOUR	✓	146	100.000
2 - B2166 Aldwick Road E		ONE HOUR	✓	480	100.000

3 - Aldwick Fields		ONE HOUR	✓	48	100.000
4 - B2166 Aldwick Road W		ONE HOUR	✓	346	100.000
5 - West Meads Drive		ONE HOUR	✓	299	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - Hawthorn Road	2 - B2166 Aldwick Road E	3 - Aldwick Fields	4 - B2166 Aldwick Road W	5 - West Meads Drive
From	1 - Hawthorn Road	0	39	5	96	6
	2 - B2166 Aldwick Road E	41	0	1	295	143
	3 - Aldwick Fields	26	16	0	4	2
	4 - B2166 Aldwick Road W	157	151	1	0	37
	5 - West Meads Drive	43	207	6	43	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - Hawthorn Road	2 - B2166 Aldwick Road E	3 - Aldwick Fields	4 - B2166 Aldwick Road W	5 - West Meads Drive
From	1 - Hawthorn Road	0	0	0	1	99
	2 - B2166 Aldwick Road E	0	0	0	0	0
	3 - Aldwick Fields	0	0	0	0	0
	4 - B2166 Aldwick Road W	2	2	0	0	0
	5 - West Meads Drive	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Hawthorn Road	0.12	3.04	0.1	A	134	201
2 - B2166 Aldwick Road E	0.29	2.74	0.4	A	440	661
3 - Aldwick Fields	0.05	3.43	0.1	A	44	66
4 - B2166 Aldwick Road W	0.27	3.57	0.4	A	317	476
5 - West Meads Drive	0.26	3.75	0.3	A	274	412

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Hawthorn Road	110	27	318	1425	0.077	110	200	0.0	0.1	2.736	A
2 - B2166 Aldwick Road E	361	90	118	1876	0.193	360	310	0.0	0.2	2.374	A
3 - Aldwick Fields	36	9	468	1218	0.030	36	10	0.0	0.0	3.045	A
4 - B2166 Aldwick Road W	260	65	176	1433	0.182	260	329	0.0	0.2	3.066	A
5 - West Meads Drive	225	56	294	1365	0.165	224	141	0.0	0.2	3.155	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Hawthorn Road	131	33	381	1391	0.094	131	240	0.1	0.1	2.858	A
2 - B2166 Aldwick Road E	432	108	141	1861	0.232	431	371	0.2	0.3	2.517	A
3 - Aldwick Fields	43	11	561	1168	0.037	43	12	0.0	0.0	3.198	A
4 - B2166 Aldwick Road W	311	78	210	1415	0.220	311	394	0.2	0.3	3.260	A
5 - West Meads Drive	269	67	352	1333	0.202	269	169	0.2	0.3	3.383	A

08:30 - 08:45

Arm	Total Demand	Junction Arrivals	Circulating flow	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side)	Start queue	End queue	Delay (s)	LOS
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	(Veh/hr)	(Veh)	(Veh/hr)				(Veh/hr)	(Veh)	(Veh)		
1 - Hawthorn Road	161	40	466	1343	0.120	161	294	0.1	0.1	3.043	A
2 - B2166 Aldwick Road E	528	132	173	1841	0.287	528	454	0.3	0.4	2.742	A
3 - Aldwick Fields	53	13	686	1101	0.048	53	14	0.0	0.1	3.434	A
4 - B2166 Aldwick Road W	381	95	257	1390	0.274	381	482	0.3	0.4	3.567	A
5 - West Meads Drive	329	82	431	1289	0.255	329	207	0.3	0.3	3.749	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Hawthorn Road	161	40	467	1343	0.120	161	294	0.1	0.1	3.043	A
2 - B2166 Aldwick Road E	528	132	173	1841	0.287	528	455	0.4	0.4	2.742	A
3 - Aldwick Fields	53	13	687	1101	0.048	53	14	0.1	0.1	3.435	A
4 - B2166 Aldwick Road W	381	95	258	1390	0.274	381	482	0.4	0.4	3.567	A
5 - West Meads Drive	329	82	432	1289	0.255	329	207	0.3	0.3	3.750	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Hawthorn Road	131	33	382	1390	0.094	131	240	0.1	0.1	2.861	A
2 - B2166 Aldwick Road E	432	108	141	1861	0.232	432	372	0.4	0.3	2.520	A
3 - Aldwick Fields	43	11	561	1168	0.037	43	12	0.1	0.0	3.202	A
4 - B2166 Aldwick Road W	311	78	211	1415	0.220	311	394	0.4	0.3	3.263	A
5 - West Meads Drive	269	67	353	1332	0.202	269	169	0.3	0.3	3.389	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Hawthorn Road	110	27	320	1424	0.077	110	201	0.1	0.1	2.738	A
2 - B2166 Aldwick Road E	361	90	118	1876	0.193	362	311	0.3	0.2	2.379	A
3 - Aldwick Fields	36	9	470	1217	0.030	36	10	0.0	0.0	3.048	A
4 - B2166 Aldwick Road W	260	65	176	1433	0.182	261	330	0.3	0.2	3.073	A
5 - West Meads Drive	225	56	295	1364	0.165	225	142	0.3	0.2	3.161	A

2031 Base + Committed Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1,2,3,4,5	4.38	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	66	4 - B2166 Aldwick Road W

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2031 Base + Committed Development	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Hawthorn Road		ONE HOUR	✓	328	100.000
2 - B2166 Aldwick Road E		ONE HOUR	✓	521	100.000
3 - Aldwick Fields		ONE HOUR	✓	11	100.000
4 - B2166 Aldwick Road W		ONE HOUR	✓	653	100.000
5 - West Meads Drive		ONE HOUR	✓	312	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
From		1 - Hawthorn Road	2 - B2166 Aldwick Road E	3 - Aldwick Fields	4 - B2166 Aldwick Road W	5 - West Meads Drive
	1 - Hawthorn Road	0	58	16	232	22
	2 - B2166 Aldwick Road E	17	0	10	279	215
	3 - Aldwick Fields	2	4	0	4	1
	4 - B2166 Aldwick Road W	202	409	2	0	40
	5 - West Meads Drive	19	247	6	40	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
From		1 - Hawthorn Road	2 - B2166 Aldwick Road E	3 - Aldwick Fields	4 - B2166 Aldwick Road W	5 - West Meads Drive
	1 - Hawthorn Road	0	0	0	0	0
	2 - B2166 Aldwick Road E	0	0	0	0	0
	3 - Aldwick Fields	0	0	0	0	0
	4 - B2166 Aldwick Road W	1	2	0	0	0
	5 - West Meads Drive	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Hawthorn Road	0.29	4.17	0.4	A	301	451
2 - B2166 Aldwick Road E	0.33	3.09	0.5	A	478	717
3 - Aldwick Fields	0.01	3.65	0.0	A	10	15
4 - B2166 Aldwick Road W	0.52	5.44	1.1	A	599	899
5 - West Meads Drive	0.30	4.52	0.4	A	286	429

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Hawthorn Road	247	62	531	1368	0.180	246	180	0.0	0.2	3.208	A
2 - B2166 Aldwick Road E	392	98	239	1805	0.217	391	538	0.0	0.3	2.545	A
3 - Aldwick Fields	8	2	604	1149	0.007	8	26	0.0	0.0	3.156	A
4 - B2166 Aldwick Road W	492	123	196	1428	0.344	490	416	0.0	0.5	3.827	A
5 - West Meads Drive	235	59	477	1264	0.186	234	209	0.0	0.2	3.492	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Hawthorn Road	295	74	636	1308	0.225	295	215	0.2	0.3	3.553	A
2 - B2166 Aldwick Road E	468	117	286	1777	0.264	468	645	0.3	0.4	2.751	A
3 - Aldwick Fields	10	2	723	1086	0.009	10	31	0.0	0.0	3.346	A
4 - B2166 Aldwick Road W	587	147	234	1408	0.417	586	499	0.5	0.7	4.376	A
5 - West Meads Drive	280	70	571	1212	0.231	280	250	0.2	0.3	3.864	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Hawthorn Road	361	90	778	1225	0.295	361	264	0.3	0.4	4.163	A
2 - B2166 Aldwick Road E	574	143	350	1737	0.330	573	789	0.4	0.5	3.090	A
3 - Aldwick Fields	12	3	885	999	0.012	12	37	0.0	0.0	3.645	A
4 - B2166 Aldwick Road W	719	180	287	1381	0.521	718	610	0.7	1.1	5.414	A
5 - West Meads Drive	344	86	699	1141	0.301	343	306	0.3	0.4	4.508	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Hawthorn Road	361	90	780	1224	0.295	361	264	0.4	0.4	4.170	A
2 - B2166 Aldwick Road E	574	143	350	1737	0.330	574	791	0.5	0.5	3.093	A
3 - Aldwick Fields	12	3	886	999	0.012	12	37	0.0	0.0	3.646	A
4 - B2166 Aldwick Road W	719	180	287	1381	0.521	719	611	1.1	1.1	5.439	A
5 - West Meads Drive	344	86	700	1140	0.301	344	306	0.4	0.4	4.517	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Hawthorn Road	295	74	638	1306	0.226	295	216	0.4	0.3	3.564	A
2 - B2166 Aldwick Road E	468	117	286	1776	0.264	469	647	0.5	0.4	2.756	A
3 - Aldwick Fields	10	2	725	1085	0.009	10	31	0.0	0.0	3.351	A
4 - B2166 Aldwick Road W	587	147	235	1408	0.417	588	500	1.1	0.7	4.402	A
5 - West Meads Drive	280	70	573	1211	0.232	281	250	0.4	0.3	3.874	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1 - Hawthorn Road	247	62	534	1367	0.181	247	181	0.3	0.2	3.218	A
2 - B2166 Aldwick Road E	392	98	240	1805	0.217	393	541	0.4	0.3	2.551	A
3 - Aldwick Fields	8	2	607	1147	0.007	8	26	0.0	0.0	3.159	A
4 - B2166 Aldwick Road W	492	123	197	1428	0.344	492	418	0.7	0.5	3.853	A

5 - West Meads Drive	235	59	480	1262	0.186	235	209	0.3	0.2	3.505	A
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Junctions 9							
ARCADY 9 - Roundabout Module							
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Filename: A27 and A259.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031

SATURN No Mitigation - With Development

Report generation date: 15/03/2017 15:09:55

»A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), AM

»A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Junction LOS	Queue (PCU)	Delay (s)	RFC	LOS	Junction LOS
A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS)										
1 - A27 North	1.4	3.01	0.56	A	A	0.6	2.31	0.37	A	A
2 - A259 Bognor Rd East	1.0	3.80	0.47	A		0.6	2.68	0.37	A	
4 - A27 South	1.2	2.97	0.52	A		1.5	3.06	0.58	A	
5 - A259 Bognor Road West	0.8	4.42	0.41	A		1.1	6.38	0.50	A	

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

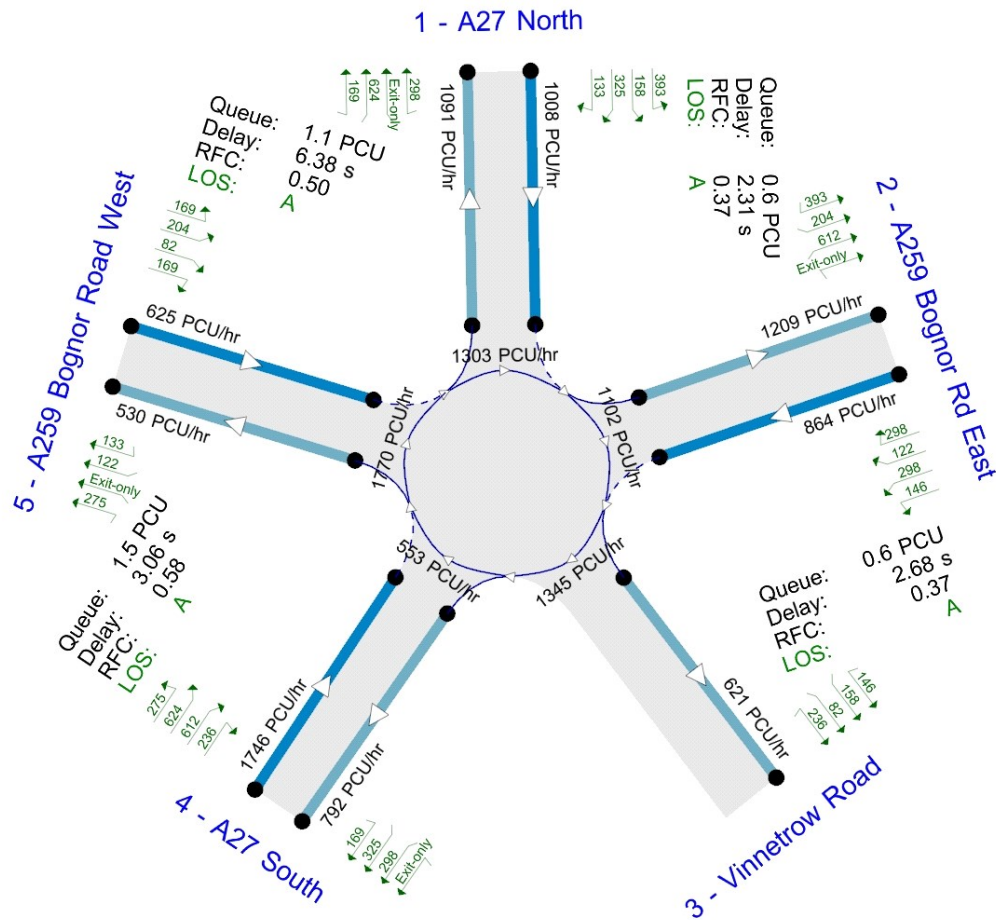
File summary

File Description

Title	A27 Bognor RBT
Location	
Site number	
Date	30/03/2015
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	UKNAW004
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	PCU	perHour	s	-Min	perMin



Flows show modelled flow through junction (PCU/hr).
Time Segment: 17:00-17:15

The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D7	2031 Base + Committed (SATURN FLOWS)	AM	FLAT	08:00	09:00	60	15	✓
D8	2031 Base + Committed (SATURN FLOWS)	PM	FLAT	17:00	18:00	60	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	A27 Bognor RBT	✓	100.000	100.000

A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A259 Bognor Rd East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A27 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	5 - A259 Bognor Road West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Bognor Bridge Road - WSP Mitigation	Standard Roundabout	1,2,3,4,5	3.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A27 North	
2	A259 Bognor Rd East	
3	Vinnetrow Road	
4	A27 South	
5	A259 Bognor Road West	

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 - A27 North	8.80	12.37	112.7	43.7	84.0	32.0	
2 - A259 Bognor Rd East	7.00	11.18	63.0	30.5	84.0	44.0	
3 - Vinnetrow Road							✓
4 - A27 South	9.36	11.09	44.0	44.2	84.0	25.0	
5 - A259 Bognor Road West	4.02	8.11	55.7	27.5	84.0	37.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A27 North	0.760	3720
2 - A259 Bognor Rd East	0.654	3065
3 - Vinnetrow Road		
4 - A27 South	0.726	3447
5 - A259 Bognor Road West	0.534	2197

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)	Run automatically
D7	2031 Base + Committed (SATURN FLOWS)	AM	FLAT	08:00	09:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A27 North		FLAT	✓	1531	100.000
2 - A259 Bognor Rd East		FLAT	✓	831	100.000
3 - Vinnetrow Road					
4 - A27 South		FLAT	✓	1322	100.000
5 - A259 Bognor Road West		FLAT	✓	573	100.000

Origin-Destination Data

Demand (Veh/hr)

	To					
From		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
	1 - A27 North	0	375	131	630	395
	2 - A259 Bognor Rd East	222	0	69	332	208
	3 - Vinnetrow Road	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 South	476	338	106	0	402
	5 - A259 Bognor Road West	155	138	48	232	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
From		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
	1 - A27 North	10	10	10	10	10
	2 - A259 Bognor Rd East	10	10	10	10	10
	3 - Vinnetrow Road	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 South	10	10	10	10	10
	5 - A259 Bognor Road West	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 North	0.56	3.01	1.4	A	1684	1684
2 - A259 Bognor Rd East	0.47	3.80	1.0	A	914	914
3 - Vinnetrow Road						
4 - A27 South	0.52	2.97	1.2	A	1454	1454
5 - A259 Bognor Road West	0.41	4.42	0.8	A	630	630

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1684	421	944	3002	0.561	1679	935	0.0	1.4	2.980	A
2 - A259 Bognor Rd East	914	229	1690	1959	0.467	910	933	0.0	1.0	3.761	A
3 - Vinnetrow Road			2212				388				
4 - A27 South	1454	364	904	2791	0.521	1449	1308	0.0	1.2	2.943	A
5 - A259 Bognor Road West	630	158	1252	1529	0.412	627	1102	0.0	0.8	4.375	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1684	421	948	2999	0.562	1684	938	1.4	1.4	3.010	A
2 - A259 Bognor Rd East	914	229	1696	1955	0.467	914	936	1.0	1.0	3.802	A
3 - Vinnetrow Road			2221				389				
4 - A27 South	1454	364	907	2788	0.522	1454	1313	1.2	1.2	2.967	A
5 - A259 Bognor Road West	630	158	1256	1527	0.413	630	1105	0.8	0.8	4.415	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1684	421	948	2999	0.562	1684	938	1.4	1.4	3.010	A
2 - A259 Bognor Rd East	914	229	1696	1955	0.467	914	936	1.0	1.0	3.802	A
3 - Vinnetrow Road			2221				389				
4 - A27 South	1454	364	907	2788	0.522	1454	1313	1.2	1.2	2.967	A
5 - A259 Bognor Road West	630	158	1256	1527	0.413	630	1105	0.8	0.8	4.415	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1684	421	948	2999	0.562	1684	938	1.4	1.4	3.010	A
2 - A259 Bognor Rd East	914	229	1696	1955	0.467	914	936	1.0	1.0	3.802	A
3 - Vinnetrow Road			2221				389				
4 - A27 South	1454	364	907	2788	0.522	1454	1313	1.2	1.2	2.967	A
5 - A259 Bognor Road West	630	158	1256	1527	0.413	630	1105	0.8	0.8	4.415	A

A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A259 Bognor Rd East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A27 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	5 - A259 Bognor Road West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Bognor Bridge Road - WSP Mitigation	Standard Roundabout	1,2,3,4,5	3.30	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D8	2031 Base + Committed (SATURN FLOWS)	PM	FLAT	17:00	18:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A27 North		FLAT	✓	919	100.000
2 - A259 Bognor Rd East		FLAT	✓	788	100.000
3 - Vinnetrow Road					
4 - A27 South		FLAT	✓	1593	100.000
5 - A259 Bognor Road West		FLAT	✓	572	100.000

Origin-Destination Data

Demand (Veh/hr)

	To					
		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
From	1 - A27 North	0	358	144	296	121
	2 - A259 Bognor Rd East	272	0	133	272	111
	3 - Vinnetrow Road	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 South	569	558	215	0	251
	5 - A259 Bognor Road West	155	187	75	155	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
From	1 - A27 North	10	10	10	10	10
	2 - A259 Bognor Rd East	10	10	10	10	10
	3 - Vinnetrow Road	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 South	10	10	10	10	10
	5 - A259 Bognor Road West	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 North	0.37	2.31	0.6	A	1011	1011
2 - A259 Bognor Rd East	0.37	2.68	0.6	A	867	867
3 - Vinnetrow Road						
4 - A27 South	0.58	3.06	1.5	A	1752	1752
5 - A259 Bognor Road West	0.50	6.38	1.1	A	629	629

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1011	253	1303	2730	0.370	1008	1091	0.0	0.6	2.298	A
2 - A259 Bognor Rd East	867	217	1102	2344	0.370	864	1209	0.0	0.6	2.672	A
3 - Vinnetrow Road			1345				621				
4 - A27 South	1752	438	553	3046	0.575	1746	792	0.0	1.5	3.034	A
5 - A259 Bognor Road West	629	157	1770	1253	0.502	625	530	0.0	1.1	6.262	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1011	253	1309	2725	0.371	1011	1096	0.6	0.6	2.309	A
2 - A259 Bognor Rd East	867	217	1107	2341	0.370	867	1213	0.6	0.6	2.685	A
3 - Vinnetrow Road			1350				624				
4 - A27 South	1752	438	554	3045	0.576	1752	795	1.5	1.5	3.063	A
5 - A259 Bognor Road West	629	157	1775	1250	0.503	629	531	1.1	1.1	6.378	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1011	253	1309	2725	0.371	1011	1096	0.6	0.6	2.309	A
2 - A259 Bognor Rd East	867	217	1107	2341	0.370	867	1213	0.6	0.6	2.685	A
3 - Vinnetrow Road			1350				624				
4 - A27 South	1752	438	554	3045	0.576	1752	795	1.5	1.5	3.063	A
5 - A259 Bognor Road West	629	157	1775	1250	0.503	629	531	1.1	1.1	6.378	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1011	253	1309	2725	0.371	1011	1096	0.6	0.6	2.309	A
2 - A259 Bognor Rd East	867	217	1107	2341	0.370	867	1213	0.6	0.6	2.685	A
3 - Vinnetrow Road			1350				624				
4 - A27 South	1752	438	554	3045	0.576	1752	795	1.5	1.5	3.063	A
5 - A259 Bognor Road West	629	157	1775	1250	0.503	629	531	1.1	1.1	6.378	A

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Filename: A27 and A259.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031

SATURN No Mitigation - No Development

Report generation date: 15/03/2017 15:12:39

»A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), AM

»A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Junction LOS	Queue (PCU)	Delay (s)	RFC	LOS	Junction LOS
A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS)										
1 - A27 North	1.4	2.96	0.56	A	A	0.6	2.26	0.36	A	A
2 - A259 Bognor Rd East	0.9	3.73	0.46	A		0.6	2.62	0.36	A	
4 - A27 South	1.2	2.97	0.52	A		1.5	3.06	0.58	A	
5 - A259 Bognor Road West	0.7	4.33	0.40	A		1.0	6.07	0.48	A	

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

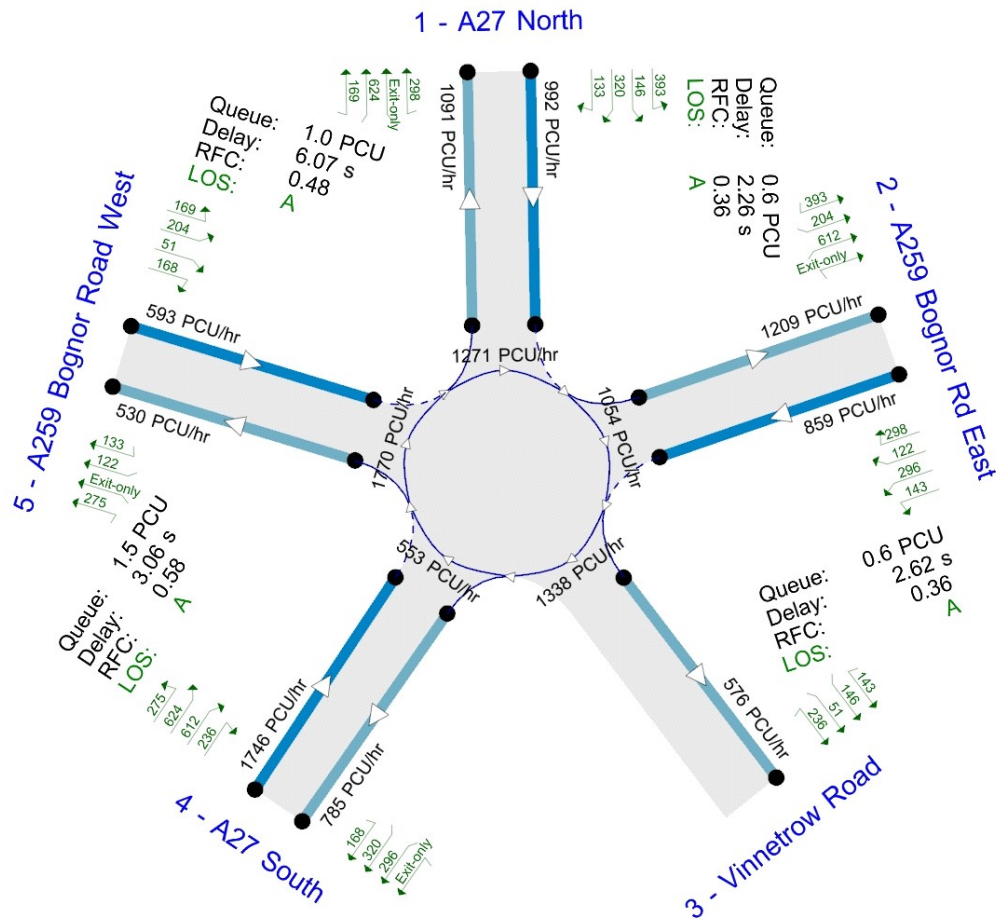
File summary

File Description

Title	A27 Bognor RBT
Location	
Site number	
Date	30/03/2015
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	UKNAW004
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	PCU	perHour	s	-Min	perMin



Flows show modelled flow through junction (PCU/hr).
Time Segment: 17:00-17:15

The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D7	2031 Base + Committed (SATURN FLOWS)	AM	FLAT	08:00	09:00	60	15	✓
D8	2031 Base + Committed (SATURN FLOWS)	PM	FLAT	17:00	18:00	60	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	A27 Bognor RBT	✓	100.000	100.000

A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A259 Bognor Rd East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A27 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	5 - A259 Bognor Road West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Bognor Bridge Road - WSP Mitigation	Standard Roundabout	1,2,3,4,5	3.29	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A27 North	
2	A259 Bognor Rd East	
3	Vinnetrow Road	
4	A27 South	
5	A259 Bognor Road West	

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 - A27 North	8.80	12.37	112.7	43.7	84.0	32.0	
2 - A259 Bognor Rd East	7.00	11.18	63.0	30.5	84.0	44.0	
3 - Vinnetrow Road							✓
4 - A27 South	9.36	11.09	44.0	44.2	84.0	25.0	
5 - A259 Bognor Road West	4.02	8.11	55.7	27.5	84.0	37.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A27 North	0.760	3720
2 - A259 Bognor Rd East	0.654	3065
3 - Vinnetrow Road		
4 - A27 South	0.726	3447
5 - A259 Bognor Road West	0.534	2197

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)	Run automatically
D7	2031 Base + Committed (SATURN FLOWS)	AM	FLAT	08:00	09:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A27 North		FLAT	✓	1523	100.000
2 - A259 Bognor Rd East		FLAT	✓	829	100.000
3 - Vinnetrow Road					
4 - A27 South		FLAT	✓	1322	100.000
5 - A259 Bognor Road West		FLAT	✓	557	100.000

Origin-Destination Data

Demand (Veh/hr)

	To					
		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
From	1 - A27 North	0	375	126	627	395
	2 - A259 Bognor Rd East	222	0	68	331	208
	3 - Vinnetrow Road	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 South	476	338	106	0	402
	5 - A259 Bognor Road West	155	138	33	231	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
From	1 - A27 North	10	10	10	10	10
	2 - A259 Bognor Rd East	10	10	10	10	10
	3 - Vinnetrow Road	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 South	10	10	10	10	10
	5 - A259 Bognor Road West	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 North	0.56	2.96	1.4	A	1675	1675
2 - A259 Bognor Rd East	0.46	3.73	0.9	A	912	912
3 - Vinnetrow Road						
4 - A27 South	0.52	2.97	1.2	A	1454	1454
5 - A259 Bognor Road West	0.40	4.33	0.7	A	613	613

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1675	419	927	3015	0.556	1670	935	0.0	1.4	2.931	A
2 - A259 Bognor Rd East	912	228	1664	1976	0.461	908	933	0.0	0.9	3.695	A
3 - Vinnetrow Road			2207				365				
4 - A27 South	1454	364	904	2791	0.521	1449	1303	0.0	1.2	2.943	A
5 - A259 Bognor Road West	613	153	1252	1529	0.401	610	1102	0.0	0.7	4.293	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1675	419	931	3013	0.556	1675	938	1.4	1.4	2.960	A
2 - A259 Bognor Rd East	912	228	1670	1973	0.462	912	936	0.9	0.9	3.732	A
3 - Vinnetrow Road			2215				366				
4 - A27 South	1454	364	907	2788	0.522	1454	1308	1.2	1.2	2.967	A
5 - A259 Bognor Road West	613	153	1256	1527	0.401	613	1105	0.7	0.7	4.330	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1675	419	931	3013	0.556	1675	938	1.4	1.4	2.960	A
2 - A259 Bognor Rd East	912	228	1670	1973	0.462	912	936	0.9	0.9	3.732	A
3 - Vinnetrow Road			2215				366				
4 - A27 South	1454	364	907	2788	0.522	1454	1308	1.2	1.2	2.967	A
5 - A259 Bognor Road West	613	153	1256	1527	0.401	613	1105	0.7	0.7	4.330	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1675	419	931	3013	0.556	1675	938	1.4	1.4	2.960	A
2 - A259 Bognor Rd East	912	228	1670	1973	0.462	912	936	0.9	0.9	3.732	A
3 - Vinnetrow Road			2215				366				
4 - A27 South	1454	364	907	2788	0.522	1454	1308	1.2	1.2	2.967	A
5 - A259 Bognor Road West	613	153	1256	1527	0.401	613	1105	0.7	0.7	4.330	A

A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A259 Bognor Rd East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A27 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	5 - A259 Bognor Road West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Bognor Bridge Road - WSP Mitigation	Standard Roundabout	1,2,3,4,5	3.21	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D8	2031 Base + Committed (SATURN FLOWS)	PM	FLAT	17:00	18:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A27 North		FLAT	✓	904	100.000
2 - A259 Bognor Rd East		FLAT	✓	783	100.000
3 - Vinnetrow Road					
4 - A27 South		FLAT	✓	1593	100.000
5 - A259 Bognor Road West		FLAT	✓	543	100.000

Origin-Destination Data

Demand (Veh/hr)

	To					
		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
From	1 - A27 North	0	358	133	292	121
	2 - A259 Bognor Rd East	272	0	130	270	111
	3 - Vinnetrow Road	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 South	569	558	215	0	251
	5 - A259 Bognor Road West	155	187	47	154	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
From	1 - A27 North	10	10	10	10	10
	2 - A259 Bognor Rd East	10	10	10	10	10
	3 - Vinnetrow Road	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 South	10	10	10	10	10
	5 - A259 Bognor Road West	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 North	0.36	2.26	0.6	A	994	994
2 - A259 Bognor Rd East	0.36	2.62	0.6	A	861	861
3 - Vinnetrow Road						
4 - A27 South	0.58	3.06	1.5	A	1752	1752
5 - A259 Bognor Road West	0.48	6.07	1.0	A	597	597

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	994	249	1271	2754	0.361	992	1091	0.0	0.6	2.245	A
2 - A259 Bognor Rd East	861	215	1054	2375	0.363	859	1209	0.0	0.6	2.606	A
3 - Vinnetrow Road			1338				576				
4 - A27 South	1752	438	553	3046	0.575	1746	785	0.0	1.5	3.034	A
5 - A259 Bognor Road West	597	149	1770	1253	0.477	593	530	0.0	1.0	5.967	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	994	249	1277	2749	0.362	994	1096	0.6	0.6	2.256	A
2 - A259 Bognor Rd East	861	215	1058	2373	0.363	861	1213	0.6	0.6	2.619	A
3 - Vinnetrow Road			1342				577				
4 - A27 South	1752	438	554	3045	0.576	1752	788	1.5	1.5	3.063	A
5 - A259 Bognor Road West	597	149	1775	1250	0.478	597	531	1.0	1.0	6.066	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	994	249	1277	2749	0.362	994	1096	0.6	0.6	2.256	A
2 - A259 Bognor Rd East	861	215	1058	2373	0.363	861	1213	0.6	0.6	2.619	A
3 - Vinnetrow Road			1342				577				
4 - A27 South	1752	438	554	3045	0.576	1752	788	1.5	1.5	3.063	A
5 - A259 Bognor Road West	597	149	1775	1250	0.478	597	531	1.0	1.0	6.066	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	994	249	1277	2749	0.362	994	1096	0.6	0.6	2.256	A
2 - A259 Bognor Rd East	861	215	1058	2373	0.363	861	1213	0.6	0.6	2.619	A
3 - Vinnetrow Road			1342				577				
4 - A27 South	1752	438	554	3045	0.576	1752	788	1.5	1.5	3.063	A
5 - A259 Bognor Road West	597	149	1775	1250	0.478	597	531	1.0	1.0	6.066	A

Junctions 9															
ARCADY 9 - Roundabout Module															
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Filename: B2145 B2166.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031

SATURN No Mitigation - No Development

Report generation date: 15/03/2017 09:55:30

»2031 Base + Committed (SATURN FLOWS), AM

»2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed (SATURN FLOWS)																
1 - B2145 North	1.0	2.0	6.05	0.51	A	18.38	C	2 %	8.6	47.1	27.85	0.91	D	15.09	C	2 %
2 - B2166	9.2	50.9	27.41	0.92	D			[2 - B2166]	2.2	4.2	8.54	0.69	A			[1 - B2145 North]
3 - untitled	4.0	18.8	14.66	0.81	B				1.5	1.9	5.68	0.60	A			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	(untitled)
Location	
Site number	
Date	05/12/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
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 segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2145 jvw B2166	Standard Roundabout	18.38	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	2	2 - B2166

Arms

Arms

Arm	Name	Description
1	B2145 North	
2	B2166	
3	untitled	

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 - B2145 North	3.30	7.10	11.4	46.0	30.0	18.0	
2 - B2166	3.20	7.80	16.0	24.0	30.0	37.0	
3 - untitled	4.10	7.70	9.0	65.0	30.0	10.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - B2145 North	0.672	1665
2 - B2166	0.646	1668
3 - untitled	0.731	1898

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	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 - B2145 North		✓	558	100.000
2 - B2166		✓	1171	100.000
3 - untitled		✓	925	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2145 North	2 - B2166	3 - untitled
From	1 - B2145 North	0	248	310
	2 - B2166	757	0	414
	3 - untitled	407	518	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - B2145 North	2 - B2166	3 - untitled
From	1 - B2145 North	0	4	7
	2 - B2166	2	0	1
	3 - untitled	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - B2145 North	0.51	6.05	1.0	2.0	A
2 - B2166	0.92	27.41	9.2	50.9	D
3 - untitled	0.81	14.66	4.0	18.8	B

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	420	388	1326	0.317	418	0.5	3.956	A
2 - B2166	882	232	1483	0.594	876	1.4	5.874	A
3 - untitled	696	566	1456	0.478	693	0.9	4.697	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	502	464	1277	0.393	501	0.6	4.633	A
2 - B2166	1053	278	1452	0.725	1048	2.5	8.809	A
3 - untitled	832	678	1374	0.605	829	1.5	6.582	A

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)	LOS
1 - B2145 North	614	565	1212	0.507	613	1.0	5.990	A
2 - B2166	1289	340	1409	0.915	1266	8.3	22.281	C
3 - untitled	1018	819	1270	0.802	1009	3.8	13.366	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)	LOS
1 - B2145 North	614	570	1210	0.508	614	1.0	6.048	A
2 - B2166	1289	341	1409	0.915	1285	9.2	27.414	D
3 - untitled	1018	831	1261	0.808	1018	4.0	14.662	B

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)	LOS
1 - B2145 North	502	471	1273	0.394	503	0.7	4.686	A
2 - B2166	1053	280	1451	0.726	1079	2.7	10.293	B
3 - untitled	832	697	1359	0.612	841	1.6	7.073	A

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)	LOS
1 - B2145 North	420	391	1324	0.317	421	0.5	3.990	A
2 - B2166	882	234	1482	0.595	887	1.5	6.096	A
3 - untitled	696	573	1450	0.480	699	0.9	4.807	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.46	0.00	0.00	0.46	0.46			N/A	N/A
2 - B2166	1.44	0.58	1.35	1.82	1.95			N/A	N/A
3 - untitled	0.91	0.55	1.00	1.40	1.45			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.64	0.10	0.83	1.37	1.43			N/A	N/A
2 - B2166	2.55	0.05	0.51	6.99	11.33			N/A	N/A
3 - untitled	1.51	0.05	0.50	3.81	5.87			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.01	0.03	0.26	1.01	1.01			N/A	N/A
2 - B2166	8.27	0.05	0.67	23.93	42.15			N/A	N/A
3 - untitled	3.77	0.03	0.32	5.47	18.83			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.02	0.03	0.27	1.02	1.96			N/A	N/A
2 - B2166	9.22	0.04	0.38	21.69	50.87			N/A	N/A
3 - untitled	4.00	0.03	0.29	4.00	13.08			N/A	N/A

08:30 - 08:45

Am	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.66	0.19	0.93	1.39	1.44			N/A	N/A
2 - B2166	2.74	0.04	0.42	7.56	13.62			N/A	N/A
3 - untitled	1.61	0.05	0.60	4.01	6.14			N/A	N/A

08:45 - 09:00

Am	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.47	0.04	0.40	1.23	1.36			N/A	N/A
2 - B2166	1.49	0.03	0.31	2.70	7.69			N/A	N/A
3 - untitled	0.93	0.03	0.35	2.25	4.34			N/A	N/A

2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2145 jvw B2166	Standard Roundabout	15.09	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	2	1 - B2145 North

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	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 - B2145 North		✓	1069	100.000
2 - B2166		✓	861	100.000
3 - untitled		✓	858	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2145 North	2 - B2166	3 - untitled
From	1 - B2145 North	0	690	379
	2 - B2166	360	0	501
	3 - untitled	394	464	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - B2145 North	2 - B2166	3 - untitled
From	1 - B2145 North	0	2	2
	2 - B2166	3	0	1
	3 - untitled	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - B2145 North	0.91	27.85	8.6	47.1	D
2 - B2166	0.69	8.54	2.2	4.2	A
3 - untitled	0.60	5.68	1.5	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)	LOS
1 - B2145 North	805	348	1403	0.574	799	1.3	5.916	A
2 - B2166	648	283	1455	0.446	645	0.8	4.430	A
3 - untitled	646	270	1672	0.386	643	0.6	3.489	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)	LOS
1 - B2145 North	961	417	1358	0.708	957	2.3	8.897	A
2 - B2166	774	339	1418	0.546	772	1.2	5.559	A
3 - untitled	771	323	1633	0.472	770	0.9	4.168	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)	LOS
1 - B2145 North	1177	510	1296	0.908	1156	7.7	22.756	C
2 - B2166	948	410	1373	0.691	944	2.2	8.319	A
3 - untitled	945	395	1580	0.598	942	1.5	5.629	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)	LOS
1 - B2145 North	1177	511	1296	0.908	1174	8.6	27.851	D
2 - B2166	948	416	1369	0.693	948	2.2	8.544	A
3 - untitled	945	396	1578	0.598	945	1.5	5.679	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	961	418	1357	0.708	985	2.5	10.281	B
2 - B2166	774	349	1412	0.548	778	1.2	5.714	A
3 - untitled	771	325	1631	0.473	774	0.9	4.208	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	805	350	1402	0.574	809	1.4	6.125	A
2 - B2166	648	287	1452	0.446	650	0.8	4.497	A
3 - untitled	646	272	1671	0.387	647	0.6	3.521	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.32	0.57	1.22	1.69	1.86			N/A	N/A
2 - B2166	0.80	0.55	1.00	1.40	1.45			N/A	N/A
3 - untitled	0.63	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	2.35	0.05	0.50	6.40	10.27			N/A	N/A
2 - B2166	1.19	0.06	0.80	2.52	3.54			N/A	N/A
3 - untitled	0.89	0.07	0.82	1.47	1.86			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	7.69	0.05	0.53	22.17	39.41			N/A	N/A
2 - B2166	2.17	0.03	0.27	2.17	4.24			N/A	N/A
3 - untitled	1.47	0.03	0.26	1.47	1.47			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	8.55	0.04	0.37	19.67	47.15			N/A	N/A
2 - B2166	2.21	0.03	0.27	2.21	2.21			N/A	N/A
3 - untitled	1.48	0.03	0.27	1.48	1.48			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	2.51	0.04	0.42	6.89	12.42			N/A	N/A
2 - B2166	1.23	0.09	1.01	2.28	2.97			N/A	N/A
3 - untitled	0.90	0.21	0.97	1.28	1.28			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.37	0.03	0.31	2.42	6.99			N/A	N/A
2 - B2166	0.81	0.05	0.48	1.68	2.41			N/A	N/A
3 - untitled	0.63	0.06	0.67	1.36	1.45			N/A	N/A

Junctions 9															
ARCADY 9 - Roundabout Module															
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017															
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The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution															

Filename: B2145 B2166.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031

SATURN No Mitigation - With Development

Report generation date: 15/03/2017 10:01:16

»2031 Base + Committed (SATURN FLOWS), AM

»2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed (SATURN FLOWS)																
1 - B2145 North	1.2	1.6	6.76	0.56	A	80.58	F	-12 % [2 - B2166]	25.7	89.5	71.80	1.00	F	33.63	D	-6 % [1 - B2145 North]
2 - B2166	71.7	138.9	151.85	1.09	F				3.5	15.0	12.08	0.78	B			
3 - untitled	6.7	35.5	24.72	0.88	C				1.8	2.6	6.76	0.64	A			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	(untitled)
Location	
Site number	
Date	05/12/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
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 segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2145 jvw B2166	Standard Roundabout	80.58	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-12	2 - B2166

Arms

Arms

Arm	Name	Description
1	B2145 North	
2	B2166	
3	untitled	

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 - B2145 North	3.30	7.10	11.4	46.0	30.0	18.0	
2 - B2166	3.20	7.80	16.0	24.0	30.0	37.0	
3 - untitled	4.10	7.70	9.0	65.0	30.0	10.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - B2145 North	0.672	1665
2 - B2166	0.646	1668
3 - untitled	0.731	1898

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	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 - B2145 North		✓	609	100.000
2 - B2166		✓	1388	100.000
3 - untitled		✓	938	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2145 North	2 - B2166	3 - untitled
From				
	1 - B2145 North	0	299	310
	2 - B2166	944	0	444
	3 - untitled	407	531	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - B2145 North	2 - B2166	3 - untitled
From				
	1 - B2145 North	0	4	7
	2 - B2166	2	0	1
	3 - untitled	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - B2145 North	0.56	6.76	1.2	1.6	A
2 - B2166	1.09	151.85	71.7	138.9	F
3 - untitled	0.88	24.72	6.7	35.5	C

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	458	397	1322	0.347	456	0.5	4.148	A
2 - B2166	1045	232	1483	0.705	1036	2.3	7.901	A
3 - untitled	706	704	1354	0.522	702	1.1	5.483	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	547	475	1272	0.430	547	0.7	4.957	A
2 - B2166	1248	278	1451	0.860	1235	5.5	15.792	C
3 - untitled	843	840	1254	0.672	840	2.0	8.600	A

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)	LOS
1 - B2145 North	671	576	1207	0.555	669	1.2	6.657	A
2 - B2166	1528	340	1409	1.085	1387	40.7	70.790	F
3 - untitled	1033	943	1178	0.876	1017	6.0	20.513	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)	LOS
1 - B2145 North	671	583	1203	0.558	670	1.2	6.762	A
2 - B2166	1528	341	1408	1.085	1404	71.7	151.847	F
3 - untitled	1033	955	1170	0.883	1030	6.7	24.722	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)	LOS
1 - B2145 North	547	486	1265	0.433	549	0.8	5.045	A
2 - B2166	1248	280	1450	0.860	1430	26.0	126.283	F
3 - untitled	843	973	1157	0.729	859	2.8	12.647	B

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)	LOS
1 - B2145 North	458	403	1318	0.348	459	0.5	4.198	A
2 - B2166	1045	234	1482	0.705	1139	2.5	13.573	B
3 - untitled	706	775	1302	0.542	713	1.2	6.169	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.53	0.53	1.00	1.40	1.45			N/A	N/A
2 - B2166	2.32	0.18	1.31	4.55	5.85			N/A	N/A
3 - untitled	1.08	0.55	1.03	1.16	1.16			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.75	0.09	0.83	1.41	1.48			N/A	N/A
2 - B2166	5.46	0.08	1.30	15.08	22.73			N/A	N/A
3 - untitled	1.99	0.05	0.52	5.30	8.36			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.23	0.03	0.26	1.23	1.23			N/A	N/A
2 - B2166	40.70	10.48	35.74	71.91	85.25			N/A	N/A
3 - untitled	5.98	0.04	0.42	16.14	32.14			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.25	0.03	0.27	1.25	1.62			N/A	N/A
2 - B2166	71.67	23.82	65.25	119.48	138.87			N/A	N/A
3 - untitled	6.69	0.03	0.34	12.04	35.46			N/A	N/A

08:30 - 08:45

Am	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.77	0.17	0.92	1.40	1.45			N/A	N/A
2 - B2166	26.01	5.00	21.89	48.42	58.50			N/A	N/A
3 - untitled	2.81	0.06	0.98	7.54	11.50			N/A	N/A

08:45 - 09:00

Am	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.54	0.05	0.50	1.30	1.40			N/A	N/A
2 - B2166	2.48	0.03	0.29	2.48	9.78			N/A	N/A
3 - untitled	1.20	0.03	0.32	2.42	6.14			N/A	N/A

2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2145 jvw B2166	Standard Roundabout	33.63	D

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-6	1 - B2145 North

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	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 - B2145 North		✓	1166	100.000
2 - B2166		✓	978	100.000
3 - untitled		✓	878	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2145 North	2 - B2166	3 - untitled
From	1 - B2145 North	0	787	379
	2 - B2166	458	0	520
	3 - untitled	394	484	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - B2145 North	2 - B2166	3 - untitled
From	1 - B2145 North	0	2	2
	2 - B2166	3	0	1
	3 - untitled	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - B2145 North	1.00	71.80	25.7	89.5	F
2 - B2166	0.78	12.08	3.5	15.0	B
3 - untitled	0.64	6.76	1.8	2.6	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)	LOS
1 - B2145 North	878	363	1393	0.630	871	1.7	6.813	A
2 - B2166	736	283	1453	0.507	732	1.0	4.965	A
3 - untitled	661	343	1619	0.408	658	0.7	3.737	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)	LOS
1 - B2145 North	1048	434	1346	0.779	1042	3.3	11.574	B
2 - B2166	879	339	1418	0.620	877	1.6	6.629	A
3 - untitled	789	411	1568	0.503	788	1.0	4.606	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)	LOS
1 - B2145 North	1284	531	1282	1.001	1225	18.0	42.474	E
2 - B2166	1077	398	1379	0.781	1070	3.4	11.386	B
3 - untitled	967	501	1501	0.644	964	1.8	6.657	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)	LOS
1 - B2145 North	1284	533	1281	1.002	1253	25.7	71.804	F
2 - B2166	1077	407	1373	0.784	1076	3.5	12.077	B
3 - untitled	967	504	1499	0.645	967	1.8	6.759	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	1048	437	1344	0.780	1136	3.8	23.543	C
2 - B2166	879	369	1398	0.629	886	1.7	7.136	A
3 - untitled	789	415	1565	0.504	792	1.0	4.677	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	878	365	1392	0.631	886	1.7	7.232	A
2 - B2166	736	288	1450	0.508	739	1.0	5.083	A
3 - untitled	661	346	1616	0.409	662	0.7	3.781	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.67	0.39	1.49	2.61	3.03			N/A	N/A
2 - B2166	1.02	0.55	1.00	1.40	1.45			N/A	N/A
3 - untitled	0.69	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	3.33	0.05	0.77	9.31	14.88			N/A	N/A
2 - B2166	1.60	0.05	0.63	3.98	6.05			N/A	N/A
3 - untitled	1.00	0.07	0.80	1.86	2.59			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	18.02	0.47	10.70	43.56	58.43			N/A	N/A
2 - B2166	3.37	0.03	0.30	3.37	14.96			N/A	N/A
3 - untitled	1.77	0.03	0.27	1.77	1.77			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	25.70	0.38	13.75	65.20	89.48			N/A	N/A
2 - B2166	3.51	0.03	0.28	3.51	7.36			N/A	N/A
3 - untitled	1.80	0.03	0.27	1.80	1.80			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	3.81	0.04	0.40	10.30	19.99			N/A	N/A
2 - B2166	1.73	0.06	0.84	4.24	6.26			N/A	N/A
3 - untitled	1.03	0.13	1.00	1.57	1.87			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.74	0.03	0.29	1.74	7.58			N/A	N/A
2 - B2166	1.04	0.04	0.38	2.63	4.58			N/A	N/A
3 - untitled	0.70	0.05	0.59	1.48	1.53			N/A	N/A

Junctions 9															
PICADY 9 - Priority Intersection Module															
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017															
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Filename: Lower Bognor Road Pagham Road.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031

SATURN No Mitigation - With Development

Report generation date: 01/03/2017 10:34:43

»2031 Base + Committed (SATURN FLOWS), AM

»2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed (SATURN FLOWS)																
Stream B-C	0.0	~1	0.00	0.00	A	55.10	F	-21 %	0.0	~1	0.00	0.00	A	157.09	F	-30 %
Stream B-A	28.6	63.0	219.96	1.10	F			[Stream B-A]	71.0	113.4	610.78	1.34	F			[Stream B-A]
Stream C-AB	0.0	~1	0.00	0.00	A				0.2	1.2	8.28	0.11	A			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	(untitled)
Location	
Site number	
Date	19/09/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
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 segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:15	17:45	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Lower Bognor Road j/w Pagham Road	T-Junction	Two-way	55.10	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-21	Stream B-A

Arms

Arms

Arm	Name	Description	Arm type
A	Pagham Road North		Major
B	Lower Bognor Road		Minor
C	Pagham Road South		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 - Pagham Road South	7.50			95.0	✓	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	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 - Lower Bognor Road	One lane plus flare	10.00	8.00	5.50	4.25	3.00	✓	2.00	105	85

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	635	0.108	0.273	0.172	0.391
1	B-C	666	0.095	0.241	-	-
1	C-B	629	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 segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	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 - Pagham Road North		✓	554	100.000
B - Lower Bognor Road		✓	409	100.000
C - Pagham Road South		✓	655	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
	From			
	A - Pagham Road North	0	412	142
	B - Lower Bognor Road	409	0	0
	C - Pagham Road South	655	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
	From			
	A - Pagham Road North	0	2	4
	B - Lower Bognor Road	1	0	0
	C - Pagham Road South	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	0.00	0.00	0.0	~1	A
B-A	1.10	219.96	28.6	63.0	F
C-AB	0.00	0.00	0.0	~1	A
C-A					
A-B					
A-C					

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	511	0.000	0	0.0	0.000	A
B-A	308	479	0.642	301	1.7	19.545	C
C-AB	0	526	0.000	0	0.0	0.000	A
C-A	493			493			
A-B	310			310			
A-C	107			107			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	474	0.000	0	0.0	0.000	A
B-A	368	450	0.816	360	3.7	36.763	E
C-AB	0	508	0.000	0	0.0	0.000	A
C-A	589			589			
A-B	370			370			
A-C	128			128			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	437	0.000	0	0.0	0.000	A
B-A	450	410	1.098	395	17.4	118.435	F
C-AB	0	482	0.000	0	0.0	0.000	A
C-A	721			721			
A-B	454			454			
A-C	156			156			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	437	0.000	0	0.0	0.000	A
B-A	450	410	1.098	406	28.6	219.959	F
C-AB	0	482	0.000	0	0.0	0.000	A
C-A	721			721			
A-B	454			454			
A-C	156			156			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	449	0.000	0	0.0	0.000	A
B-A	368	450	0.816	435	11.7	173.916	F
C-AB	0	508	0.000	0	0.0	0.000	A
C-A	589			589			
A-B	370			370			
A-C	128			128			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	496	0.000	0	0.0	0.000	A
B-A	308	479	0.642	347	1.9	33.967	D
C-AB	0	526	0.000	0	0.0	0.000	A
C-A	493			493			
A-B	310			310			
A-C	107			107			

Queue Variation Results for each time segment

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	1.69	0.37	1.50	2.66	3.16			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	3.68	0.12	1.63	8.84	12.22			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	17.40	2.93	14.34	32.71	39.76			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	28.56	5.97	24.33	52.43	63.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	11.71	0.46	7.27	27.17	35.91			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	1.93	0.03	0.30	1.93	8.73			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Lower Bognor Road j/w Pagham Road	T-Junction	Two-way	157.09	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-30	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 segment length (min)
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:15	17:45	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 - Pagham Road North		✓	1101	100.000
B - Lower Bognor Road		✓	441	100.000
C - Pagham Road South		✓	193	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
From	A - Pagham Road North	0	648	453
	B - Lower Bognor Road	441	0	0
	C - Pagham Road South	161	32	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
From	A - Pagham Road North	0	1	2
	B - Lower Bognor Road	3	0	0
	C - Pagham Road South	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	0.00	0.00	0.0	~1	A
B-A	1.34	610.78	71.0	113.4	F
C-AB	0.11	8.28	0.2	1.2	A
C-A					
A-B					
A-C					

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	435	0.000	0	0.0	0.000	A
B-A	332	443	0.750	321	2.6	27.697	D
C-AB	31	528	0.059	31	0.1	7.235	A
C-A	114			114			
A-B	488			488			
A-C	341			341			

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	383	0.000	0	0.0	0.000	A
B-A	396	409	0.970	373	8.5	73.358	F
C-AB	40	512	0.079	40	0.1	7.625	A
C-A	133			133			
A-B	583			583			
A-C	407			407			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	356	0.000	0	0.0	0.000	A
B-A	486	362	1.341	359	40.0	264.727	F
C-AB	55	491	0.113	55	0.2	8.256	A
C-A	157			157			
A-B	713			713			
A-C	499			499			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	356	0.000	0	0.0	0.000	A
B-A	486	362	1.341	362	71.0	544.798	F
C-AB	55	491	0.113	55	0.2	8.278	A
C-A	157			157			
A-B	713			713			
A-C	499			499			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	382	0.000	0	0.0	0.000	A
B-A	396	409	0.970	403	69.4	610.783	F
C-AB	40	512	0.079	41	0.1	7.659	A
C-A	133			133			
A-B	583			583			
A-C	407			407			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	401	0.000	0	0.0	0.000	A
B-A	332	443	0.750	436	43.3	467.897	F
C-AB	31	528	0.059	32	0.1	7.259	A
C-A	114			114			
A-B	488			488			
A-C	341			341			

Queue Variation Results for each time segment

16:15 - 16:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	2.65	0.05	0.45	7.35	12.59			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	8.49	0.20	4.34	21.02	28.84			N/A	N/A
C-AB	0.13	0.03	0.25	0.45	0.48			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	40.02	17.34	37.43	60.86	68.89			N/A	N/A
C-AB	0.21	0.03	0.27	0.49	1.18			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	71.02	39.54	68.43	98.79	108.79			N/A	N/A
C-AB	0.21	0.00	0.00	0.21	0.21			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	69.38	34.17	66.05	101.50	113.44			N/A	N/A
C-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	43.31	12.40	38.58	74.65	87.79			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

Junctions 9															
PICADY 9 - Priority Intersection Module															
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017															
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Filename: Lower Bognor Road Pagham Road.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031

SATURN No Mitigation - No Development

Report generation date: 01/03/2017 10:31:29

»2031 Base + Committed (SATURN FLOWS), AM

»2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed (SATURN FLOWS)																
Stream B-C	0.0	~1	0.00	0.00	A	24.50	C	-12 %	0.0	~1	0.00	0.00	A	75.65	F	-23 %
Stream B-A	9.3	42.3	79.19	0.94	F			[Stream B-A]	34.6	70.3	246.08	1.12	F			[Stream B-A]
Stream C-AB	0.0	~1	0.00	0.00	A				0.1	0.5	9.27	0.09	A			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	(untitled)
Location	
Site number	
Date	19/09/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
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 segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:15	17:45	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Lower Bognor Road j/w Pagham Road	T-Junction	Two-way	24.50	C

Junction Network Options

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

Arms

Arms

Arm	Name	Description	Arm type
A	Pagham Road North		Major
B	Lower Bognor Road		Minor
C	Pagham Road South		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 - Pagham Road South	7.50			95.0	✓	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	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 - Lower Bognor Road	One lane plus flare	10.00	8.00	5.50	4.25	3.00	✓	2.00	105	85

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	635	0.108	0.273	0.172	0.391
1	B-C	666	0.095	0.241	-	-
1	C-B	629	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 segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	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 - Pagham Road North		✓	466	100.000
B - Lower Bognor Road		✓	409	100.000
C - Pagham Road South		✓	437	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
From	A - Pagham Road North	0	412	54
	B - Lower Bognor Road	409	0	0
	C - Pagham Road South	437	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
From	A - Pagham Road North	0	2	4
	B - Lower Bognor Road	1	0	0
	C - Pagham Road South	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	0.00	0.00	0.0	~1	A
B-A	0.94	79.19	9.3	42.3	F
C-AB	0.00	0.00	0.0	~1	A
C-A					
A-B					
A-C					

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	534	0.000	0	0.0	0.000	A
B-A	308	527	0.585	303	1.4	15.720	C
C-AB	0	542	0.000	0	0.0	0.000	A
C-A	329			329			
A-B	310			310			
A-C	41			41			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	504	0.000	0	0.0	0.000	A
B-A	368	507	0.726	363	2.4	24.388	C
C-AB	0	526	0.000	0	0.0	0.000	A
C-A	393			393			
A-B	370			370			
A-C	49			49			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	461	0.000	0	0.0	0.000	A
B-A	450	479	0.940	430	7.5	57.474	F
C-AB	0	504	0.000	0	0.0	0.000	A
C-A	481			481			
A-B	454			454			
A-C	59			59			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	455	0.000	0	0.0	0.000	A
B-A	450	479	0.940	443	9.3	79.189	F
C-AB	0	504	0.000	0	0.0	0.000	A
C-A	481			481			
A-B	454			454			
A-C	59			59			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	494	0.000	0	0.0	0.000	A
B-A	368	507	0.726	393	2.9	36.713	E
C-AB	0	526	0.000	0	0.0	0.000	A
C-A	393			393			
A-B	370			370			
A-C	49			49			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	531	0.000	0	0.0	0.000	A
B-A	308	527	0.585	314	1.5	17.349	C
C-AB	0	542	0.000	0	0.0	0.000	A
C-A	329			329			
A-B	310			310			
A-C	41			41			

Queue Variation Results for each time segment

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	1.35	0.57	1.22	1.68	1.84			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	2.42	0.09	1.42	5.64	7.82			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	7.50	0.12	2.78	19.95	28.73			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	9.28	0.07	1.57	26.82	42.26			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	2.93	0.04	0.41	7.95	14.85			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	1.47	0.03	0.31	2.49	7.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Lower Bognor Road j/w Pagham Road	T-Junction	Two-way	75.65	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-23	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 segment length (min)
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:15	17:45	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 - Pagham Road North		✓	938	100.000
B - Lower Bognor Road		✓	441	100.000
C - Pagham Road South		✓	76	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
From	A - Pagham Road North	0	648	290
	B - Lower Bognor Road	441	0	0
	C - Pagham Road South	44	32	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
From	A - Pagham Road North	0	1	2
	B - Lower Bognor Road	3	0	0
	C - Pagham Road South	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	0.00	0.00	0.0	~1	A
B-A	1.12	246.08	34.6	70.3	F
C-AB	0.09	9.27	0.1	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	470	0.000	0	0.0	0.000	A
B-A	332	491	0.676	324	1.9	20.724	C
C-AB	26	490	0.053	26	0.1	7.744	A
C-A	31			31			
A-B	488			488			
A-C	218			218			

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	428	0.000	0	0.0	0.000	A
B-A	396	467	0.850	387	4.4	40.581	E
C-AB	31	464	0.068	31	0.1	8.316	A
C-A	37			37			
A-B	583			583			
A-C	261			261			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	389	0.000	0	0.0	0.000	A
B-A	486	433	1.122	421	20.6	128.767	F
C-AB	40	428	0.093	40	0.1	9.258	A
C-A	44			44			
A-B	713			713			
A-C	319			319			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	389	0.000	0	0.0	0.000	A
B-A	486	433	1.122	430	34.6	246.085	F
C-AB	40	428	0.093	40	0.1	9.268	A
C-A	44			44			
A-B	713			713			
A-C	319			319			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	409	0.000	0	0.0	0.000	A
B-A	396	467	0.850	453	20.3	221.732	F
C-AB	31	464	0.068	32	0.1	8.333	A
C-A	37			37			
A-B	583			583			
A-C	261			261			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	446	0.000	0	0.0	0.000	A
B-A	332	491	0.676	404	2.3	63.072	F
C-AB	26	490	0.053	26	0.1	7.756	A
C-A	31			31			
A-B	488			488			
A-C	218			218			

Queue Variation Results for each time segment

16:15 - 16:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	1.94	0.33	1.20	3.24	3.96			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	4.40	0.15	2.17	10.42	14.19			N/A	N/A
C-AB	0.08	0.03	0.25	0.46	0.48			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	20.59	4.56	17.62	36.91	44.09			N/A	N/A
C-AB	0.12	0.03	0.26	0.47	0.50			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	34.59	9.67	30.66	59.72	70.32			N/A	N/A
C-AB	0.12	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	20.34	3.13	16.60	39.06	47.76			N/A	N/A
C-AB	0.08	0.00	0.00	0.08	0.08			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	2.34	0.03	0.31	3.00	11.30			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

Junctions 9															
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Filename: Vinnetrow Road B2166.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031

SATURN No Mitigation - No Development

Report generation date: 15/03/2017 09:14:10

»2031 Base + Committed (SATURN FLOWS), AM

»2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed (SATURN FLOWS)																
1 - Vinnetrow Road	0.5	2.3	6.63	0.34	A	7.07	A	47 % [2 - B2166 E]	1.0	3.7	11.68	0.50	B	83.22	F	-14 % [4 - B2166 W]
2 - B2166 E	1.5	1.9	6.06	0.60	A				0.5	2.5	3.56	0.35	A			
3 - Mill Lane	0.1	0.5	5.45	0.11	A				0.1	0.5	3.77	0.05	A			
4 - B2166 W	1.4	1.7	9.05	0.59	A				48.1	104.9	146.85	1.07	F			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	(untitled)
Location	
Site number	
Date	10/11/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
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 segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	7.07	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	47	2 - B2166 E

Arms

Arms

Arm	Name	Description
1	Vinnetrow Road	
2	B2166 E	
3	Mill Lane	
4	B2166 W	

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 - Vinnetrow Road	3.00	5.50	3.0	17.0	30.0	24.0	
2 - B2166 E	3.50	6.00	25.0	30.0	30.0	25.0	
3 - Mill Lane	3.00	6.00	12.0	20.0	30.0	23.0	
4 - B2166 W	3.00	4.00	4.0	18.0	30.0	28.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Vinnetrow Road	0.545	1129
2 - B2166 E	0.666	1689
3 - Mill Lane	0.614	1448
4 - B2166 W	0.531	1079

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	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 - Vinnetrow Road		✓	251	100.000
2 - B2166 E		✓	822	100.000
3 - Mill Lane		✓	72	100.000
4 - B2166 W		✓	524	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	19	7	225
	2 - B2166 E	87	0	5	730
	3 - Mill Lane	19	12	0	41
	4 - B2166 W	60	448	16	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	3	0	2
	2 - B2166 E	3	0	0	0
	3 - Mill Lane	0	0	0	0
	4 - B2166 W	8	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.34	6.63	0.5	2.3	A
2 - B2166 E	0.60	6.06	1.5	1.9	A
3 - Mill Lane	0.11	5.45	0.1	0.5	A
4 - B2166 W	0.59	9.05	1.4	1.7	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	189	356	911	0.207	188	0.3	4.969	A
2 - B2166 E	619	186	1558	0.397	616	0.7	3.809	A
3 - Mill Lane	54	781	966	0.056	54	0.1	3.948	A
4 - B2166 W	394	88	996	0.396	392	0.6	5.932	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	226	427	872	0.259	225	0.3	5.561	A
2 - B2166 E	739	223	1534	0.482	738	0.9	4.519	A
3 - Mill Lane	65	935	870	0.074	65	0.1	4.469	A
4 - B2166 W	471	106	987	0.477	470	0.9	6.948	A

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)	LOS
1 - Vinnetrow Road	276	522	820	0.337	276	0.5	6.608	A
2 - B2166 E	905	272	1500	0.603	903	1.5	6.006	A
3 - Mill Lane	79	1144	741	0.107	79	0.1	5.437	A
4 - B2166 W	577	130	975	0.592	575	1.4	8.957	A

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)	LOS
1 - Vinnetrow Road	276	524	819	0.337	276	0.5	6.632	A
2 - B2166 E	905	273	1499	0.604	905	1.5	6.056	A
3 - Mill Lane	79	1147	739	0.107	79	0.1	5.454	A
4 - B2166 W	577	130	974	0.592	577	1.4	9.049	A

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)	LOS
1 - Vinnetrow Road	226	430	871	0.259	226	0.4	5.591	A
2 - B2166 E	739	224	1533	0.482	741	0.9	4.560	A
3 - Mill Lane	65	940	868	0.075	65	0.1	4.485	A
4 - B2166 W	471	106	987	0.477	473	0.9	7.034	A

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)	LOS
1 - Vinnetrow Road	189	359	910	0.208	189	0.3	5.000	A
2 - B2166 E	619	187	1558	0.397	620	0.7	3.843	A
3 - Mill Lane	54	786	963	0.056	54	0.1	3.963	A
4 - B2166 W	394	89	996	0.396	396	0.7	6.005	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.26	0.00	0.00	0.26	0.26			N/A	N/A
2 - B2166 E	0.65	0.55	1.00	1.40	1.45			N/A	N/A
3 - Mill Lane	0.06	0.00	0.00	0.06	0.06			N/A	N/A
4 - B2166 W	0.65	0.55	1.00	1.40	1.45			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.35	0.00	0.00	0.35	0.35			N/A	N/A
2 - B2166 E	0.92	0.08	0.85	1.55	1.91			N/A	N/A
3 - Mill Lane	0.08	0.03	0.26	0.47	0.50			N/A	N/A
4 - B2166 W	0.90	0.11	0.92	1.21	1.65			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.50	0.03	0.25	0.50	0.50			N/A	N/A
2 - B2166 E	1.50	0.03	0.26	1.50	1.50			N/A	N/A
3 - Mill Lane	0.12	0.03	0.26	0.47	0.49			N/A	N/A
4 - B2166 W	1.42	0.03	0.27	1.42	1.42			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.51	0.03	0.30	1.38	2.30			N/A	N/A
2 - B2166 E	1.51	0.03	0.27	1.51	1.51			N/A	N/A
3 - Mill Lane	0.12	0.00	0.00	0.12	0.12			N/A	N/A
4 - B2166 W	1.43	0.03	0.27	1.43	1.73			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.35	0.00	0.00	0.35	0.35			N/A	N/A
2 - B2166 E	0.94	0.18	0.98	1.05	1.55			N/A	N/A
3 - Mill Lane	0.08	0.00	0.00	0.08	0.08			N/A	N/A
4 - B2166 W	0.93	0.10	0.92	1.35	1.74			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.26	0.00	0.00	0.26	0.26			N/A	N/A
2 - B2166 E	0.66	0.06	0.68	1.39	1.48			N/A	N/A
3 - Mill Lane	0.06	0.00	0.00	0.06	0.06			N/A	N/A
4 - B2166 W	0.66	0.05	0.59	1.28	1.28			N/A	N/A

2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	83.22	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-14	4 - B2166 W

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	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 - Vinnetrow Road		✓	282	100.000
2 - B2166 E		✓	489	100.000
3 - Mill Lane		✓	49	100.000
4 - B2166 W		✓	994	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	149	14	119
	2 - B2166 E	46	0	8	435
	3 - Mill Lane	6	19	0	24
	4 - B2166 W	113	867	14	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	0	0	1
	2 - B2166 E	3	0	0	2
	3 - Mill Lane	0	7	0	0
	4 - B2166 W	3	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.50	11.68	1.0	3.7	B
2 - B2166 E	0.35	3.56	0.5	2.5	A
3 - Mill Lane	0.05	3.77	0.1	0.5	A
4 - B2166 W	1.07	146.85	48.1	104.9	F

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)	LOS
1 - Vinnetrow Road	212	669	758	0.280	211	0.4	6.565	A
2 - B2166 E	368	110	1583	0.233	367	0.3	2.958	A
3 - Mill Lane	37	450	1136	0.032	37	0.0	3.274	A
4 - B2166 W	748	53	1037	0.722	738	2.5	11.703	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)	LOS
1 - Vinnetrow Road	254	798	686	0.369	253	0.6	8.285	A
2 - B2166 E	440	132	1569	0.280	439	0.4	3.187	A
3 - Mill Lane	44	539	1082	0.041	44	0.0	3.467	A
4 - B2166 W	894	64	1031	0.866	881	5.5	22.346	C

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)	LOS
1 - Vinnetrow Road	310	908	626	0.496	309	1.0	11.294	B
2 - B2166 E	538	160	1550	0.347	538	0.5	3.554	A
3 - Mill Lane	54	659	1009	0.053	54	0.1	3.770	A
4 - B2166 W	1094	78	1023	1.069	1001	28.8	75.153	F

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)	LOS
1 - Vinnetrow Road	310	923	618	0.502	310	1.0	11.682	B
2 - B2166 E	538	161	1549	0.347	538	0.5	3.559	A
3 - Mill Lane	54	661	1008	0.054	54	0.1	3.773	A
4 - B2166 W	1094	78	1023	1.069	1017	48.1	146.855	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	254	912	624	0.406	255	0.7	9.780	A
2 - B2166 E	440	134	1567	0.281	440	0.4	3.196	A
3 - Mill Lane	44	540	1081	0.041	44	0.0	3.473	A
4 - B2166 W	894	64	1031	0.867	1010	19.0	124.073	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	212	735	721	0.294	213	0.4	7.103	A
2 - B2166 E	368	112	1581	0.233	368	0.3	2.970	A
3 - Mill Lane	37	453	1135	0.033	37	0.0	3.281	A
4 - B2166 W	748	54	1037	0.722	813	2.7	20.459	C

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.39	0.00	0.00	0.39	0.39			N/A	N/A
2 - B2166 E	0.30	0.00	0.00	0.30	0.30			N/A	N/A
3 - Mill Lane	0.03	0.00	0.00	0.03	0.03			N/A	N/A
4 - B2166 W	2.47	0.44	1.63	4.32	5.35			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.58	0.10	0.84	1.37	1.43			N/A	N/A
2 - B2166 E	0.39	0.00	0.00	0.39	0.39			N/A	N/A
3 - Mill Lane	0.04	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	5.51	0.11	2.18	14.18	20.11			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.96	0.03	0.26	0.96	0.96			N/A	N/A
2 - B2166 E	0.53	0.03	0.25	0.53	0.53			N/A	N/A
3 - Mill Lane	0.06	0.03	0.26	0.46	0.49			N/A	N/A
4 - B2166 W	28.85	5.20	24.10	54.52	66.16			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.99	0.03	0.28	0.99	3.70			N/A	N/A
2 - B2166 E	0.53	0.03	0.30	1.35	2.47			N/A	N/A
3 - Mill Lane	0.06	0.00	0.00	0.06	0.06			N/A	N/A
4 - B2166 W	48.12	10.94	41.60	87.68	104.92			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.70	0.14	0.89	1.38	1.44			N/A	N/A
2 - B2166 E	0.39	0.00	0.00	0.39	0.39			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	18.97	1.08	13.70	40.91	52.22			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.42	0.04	0.36	1.16	1.33			N/A	N/A
2 - B2166 E	0.30	0.00	0.00	0.30	0.30			N/A	N/A
3 - Mill Lane	0.03	0.00	0.00	0.03	0.03			N/A	N/A
4 - B2166 W	2.75	0.03	0.31	3.53	13.24			N/A	N/A

Junctions 9															
ARCADY 9 - Roundabout Module															
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Filename: Vinnetrow Road B2166.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031

SATURN No Mitigation - With Development

Report generation date: 15/03/2017 09:16:13

»2031 Base + Committed (SATURN FLOWS), AM

»2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed (SATURN FLOWS)																
1 - Vinnetrow Road	0.6	2.9	7.54	0.39	A	9.88	A	20 % [2 - B2166 E]	1.4	3.8	14.42	0.59	B	209.62	F	-23 % [4 - B2166 W]
2 - B2166 E	3.1	11.5	10.10	0.76	B				0.8	2.3	4.07	0.43	A			
3 - Mill Lane	0.2	0.5	7.02	0.13	A				0.1	0.5	4.11	0.06	A			
4 - B2166 W	1.9	4.9	10.94	0.66	B				113.5	178.0	388.87	1.19	F			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	(untitled)
Location	
Site number	
Date	10/11/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
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 segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	9.88	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	20	2 - B2166 E

Arms

Arms

Arm	Name	Description
1	Vinnetrow Road	
2	B2166 E	
3	Mill Lane	
4	B2166 W	

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 - Vinnetrow Road	3.00	5.50	3.0	17.0	30.0	24.0	
2 - B2166 E	3.50	6.00	25.0	30.0	30.0	25.0	
3 - Mill Lane	3.00	6.00	12.0	20.0	30.0	23.0	
4 - B2166 W	3.00	4.00	4.0	18.0	30.0	28.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Vinnetrow Road	0.545	1129
2 - B2166 E	0.666	1689
3 - Mill Lane	0.614	1448
4 - B2166 W	0.531	1079

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	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 - Vinnetrow Road		✓	275	100.000
2 - B2166 E		✓	1040	100.000
3 - Mill Lane		✓	72	100.000
4 - B2166 W		✓	587	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	43	7	225
	2 - B2166 E	87	0	5	948
	3 - Mill Lane	19	12	0	41
	4 - B2166 W	60	511	16	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	3	0	2
	2 - B2166 E	3	0	0	0
	3 - Mill Lane	0	0	0	0
	4 - B2166 W	8	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.39	7.54	0.6	2.9	A
2 - B2166 E	0.76	10.10	3.1	11.5	B
3 - Mill Lane	0.13	7.02	0.2	0.5	A
4 - B2166 W	0.66	10.94	1.9	4.9	B

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	207	403	885	0.234	206	0.3	5.292	A
2 - B2166 E	783	186	1560	0.502	779	1.0	4.589	A
3 - Mill Lane	54	944	866	0.063	54	0.1	4.433	A
4 - B2166 W	442	88	997	0.443	439	0.8	6.416	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	247	483	841	0.294	247	0.4	6.058	A
2 - B2166 E	935	223	1535	0.609	933	1.5	5.960	A
3 - Mill Lane	65	1130	751	0.086	65	0.1	5.248	A
4 - B2166 W	528	106	988	0.534	526	1.1	7.781	A

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)	LOS
1 - Vinnetrow Road	303	591	782	0.387	302	0.6	7.488	A
2 - B2166 E	1145	272	1501	0.763	1139	3.1	9.777	A
3 - Mill Lane	79	1380	596	0.133	79	0.2	6.959	A
4 - B2166 W	646	129	975	0.663	643	1.9	10.738	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)	LOS
1 - Vinnetrow Road	303	593	780	0.388	303	0.6	7.538	A
2 - B2166 E	1145	273	1500	0.763	1145	3.1	10.102	B
3 - Mill Lane	79	1387	592	0.134	79	0.2	7.020	A
4 - B2166 W	646	130	975	0.663	646	1.9	10.937	B

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)	LOS
1 - Vinnetrow Road	247	487	838	0.295	248	0.4	6.105	A
2 - B2166 E	935	224	1534	0.610	941	1.6	6.136	A
3 - Mill Lane	65	1140	745	0.087	65	0.1	5.296	A
4 - B2166 W	528	107	987	0.535	531	1.2	7.940	A

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)	LOS
1 - Vinnetrow Road	207	407	882	0.235	207	0.3	5.336	A
2 - B2166 E	783	187	1559	0.502	785	1.0	4.670	A
3 - Mill Lane	54	951	861	0.063	54	0.1	4.462	A
4 - B2166 W	442	89	996	0.444	443	0.8	6.528	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.30	0.00	0.00	0.30	0.30			N/A	N/A
2 - B2166 E	1.00	0.55	1.00	1.40	1.45			N/A	N/A
3 - Mill Lane	0.07	0.00	0.00	0.07	0.07			N/A	N/A
4 - B2166 W	0.79	0.55	1.00	1.40	1.45			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.41	0.00	0.00	0.41	0.41			N/A	N/A
2 - B2166 E	1.53	0.05	0.61	3.81	5.77			N/A	N/A
3 - Mill Lane	0.09	0.00	0.00	0.09	0.09			N/A	N/A
4 - B2166 W	1.13	0.08	0.97	1.94	2.66			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.62	0.03	0.26	0.62	0.62			N/A	N/A
2 - B2166 E	3.08	0.03	0.29	3.08	11.51			N/A	N/A
3 - Mill Lane	0.15	0.03	0.26	0.47	0.49			N/A	N/A
4 - B2166 W	1.90	0.03	0.28	1.90	4.88			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.63	0.03	0.29	1.27	2.87			N/A	N/A
2 - B2166 E	3.15	0.03	0.27	3.15	4.01			N/A	N/A
3 - Mill Lane	0.15	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	1.93	0.03	0.27	1.93	2.59			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.42	0.00	0.00	0.42	0.42			N/A	N/A
2 - B2166 E	1.59	0.06	0.88	3.74	5.40			N/A	N/A
3 - Mill Lane	0.10	0.00	0.00	0.10	0.10			N/A	N/A
4 - B2166 W	1.17	0.07	0.93	2.22	2.96			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.31	0.00	0.00	0.31	0.31			N/A	N/A
2 - B2166 E	1.02	0.04	0.41	2.52	4.08			N/A	N/A
3 - Mill Lane	0.07	0.00	0.00	0.07	0.07			N/A	N/A
4 - B2166 W	0.81	0.05	0.48	1.66	2.37			N/A	N/A

2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	209.62	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-23	4 - B2166 W

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	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 - Vinnetrow Road		✓	327	100.000
2 - B2166 E		✓	606	100.000
3 - Mill Lane		✓	49	100.000
4 - B2166 W		✓	1111	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	194	14	119
	2 - B2166 E	46	0	8	552
	3 - Mill Lane	6	19	0	24
	4 - B2166 W	113	984	14	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	0	0	1
	2 - B2166 E	3	0	0	2
	3 - Mill Lane	0	7	0	0
	4 - B2166 W	3	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.59	14.42	1.4	3.8	B
2 - B2166 E	0.43	4.07	0.8	2.3	A
3 - Mill Lane	0.06	4.11	0.1	0.5	A
4 - B2166 W	1.19	388.87	113.5	178.0	F

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)	LOS
1 - Vinnetrow Road	246	752	712	0.346	244	0.5	7.655	A
2 - B2166 E	456	110	1583	0.288	455	0.4	3.185	A
3 - Mill Lane	37	537	1083	0.034	37	0.0	3.441	A
4 - B2166 W	836	53	1037	0.806	821	3.8	15.717	C

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)	LOS
1 - Vinnetrow Road	294	884	640	0.459	293	0.8	10.330	B
2 - B2166 E	545	131	1569	0.347	544	0.5	3.510	A
3 - Mill Lane	44	644	1018	0.043	44	0.0	3.695	A
4 - B2166 W	999	64	1031	0.968	965	12.2	40.887	E

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)	LOS
1 - Vinnetrow Road	360	936	611	0.589	358	1.4	14.078	B
2 - B2166 E	667	158	1551	0.430	666	0.7	4.064	A
3 - Mill Lane	54	788	930	0.058	54	0.1	4.107	A
4 - B2166 W	1223	78	1024	1.195	1019	63.4	145.167	F

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)	LOS
1 - Vinnetrow Road	360	940	609	0.591	360	1.4	14.422	B
2 - B2166 E	667	159	1551	0.430	667	0.8	4.074	A
3 - Mill Lane	54	789	929	0.058	54	0.1	4.112	A
4 - B2166 W	1223	78	1024	1.195	1023	113.5	318.533	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	294	936	612	0.481	296	0.9	11.466	B
2 - B2166 E	545	133	1568	0.347	546	0.5	3.526	A
3 - Mill Lane	44	646	1017	0.043	44	0.0	3.701	A
4 - B2166 W	999	64	1031	0.968	1022	107.6	388.872	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	246	937	611	0.403	247	0.7	9.931	A
2 - B2166 E	456	113	1581	0.289	457	0.4	3.206	A
3 - Mill Lane	37	541	1081	0.034	37	0.0	3.448	A
4 - B2166 W	836	54	1037	0.807	1028	59.8	295.047	F

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.52	0.52	1.00	1.40	1.45			N/A	N/A
2 - B2166 E	0.40	0.00	0.00	0.40	0.40			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	3.80	0.07	1.22	10.41	15.88			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.83	0.15	0.92	1.43	1.50			N/A	N/A
2 - B2166 E	0.53	0.53	1.00	1.40	1.45			N/A	N/A
3 - Mill Lane	0.05	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	12.24	0.34	7.03	29.56	39.79			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	1.38	0.03	0.28	1.38	3.29			N/A	N/A
2 - B2166 E	0.75	0.03	0.25	0.75	0.75			N/A	N/A
3 - Mill Lane	0.06	0.03	0.26	0.47	0.49			N/A	N/A
4 - B2166 W	63.38	28.88	59.82	95.34	107.44			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	1.42	0.03	0.28	1.42	3.83			N/A	N/A
2 - B2166 E	0.75	0.03	0.28	0.75	2.35			N/A	N/A
3 - Mill Lane	0.06	0.00	0.00	0.06	0.06			N/A	N/A
4 - B2166 W	113.47	63.19	109.58	158.49	174.62			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.95	0.08	0.88	1.57	1.92			N/A	N/A
2 - B2166 E	0.54	0.54	1.00	1.40	1.45			N/A	N/A
3 - Mill Lane	0.05	0.00	0.00	0.05	0.05			N/A	N/A
4 - B2166 W	107.56	52.08	102.44	158.91	177.98			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.69	0.05	0.55	1.49	1.56			N/A	N/A
2 - B2166 E	0.41	0.00	0.00	0.41	0.41			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	59.78	19.45	54.23	100.05	116.48			N/A	N/A

Junctions 9							
ARCADY 9 - Roundabout Module							
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017							
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Filename: A27 A259.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031

SATURN With Mitigation - With Development

Report generation date: 01/03/2017 10:49:35

»A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), AM

»A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Junction LOS	Queue (PCU)	Delay (s)	RFC	LOS	Junction LOS
A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS)										
1 - A27 North	1.6	3.08	0.59	A	A	0.9	2.58	0.44	A	A
2 - A259 Bognor Rd East	3.7	8.68	0.78	A		1.1	3.47	0.50	A	
4 - A27 South	1.4	3.78	0.56	A		1.3	2.90	0.53	A	
5 - A259 Bognor Road West	1.1	5.74	0.50	A		1.7	7.83	0.61	A	

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

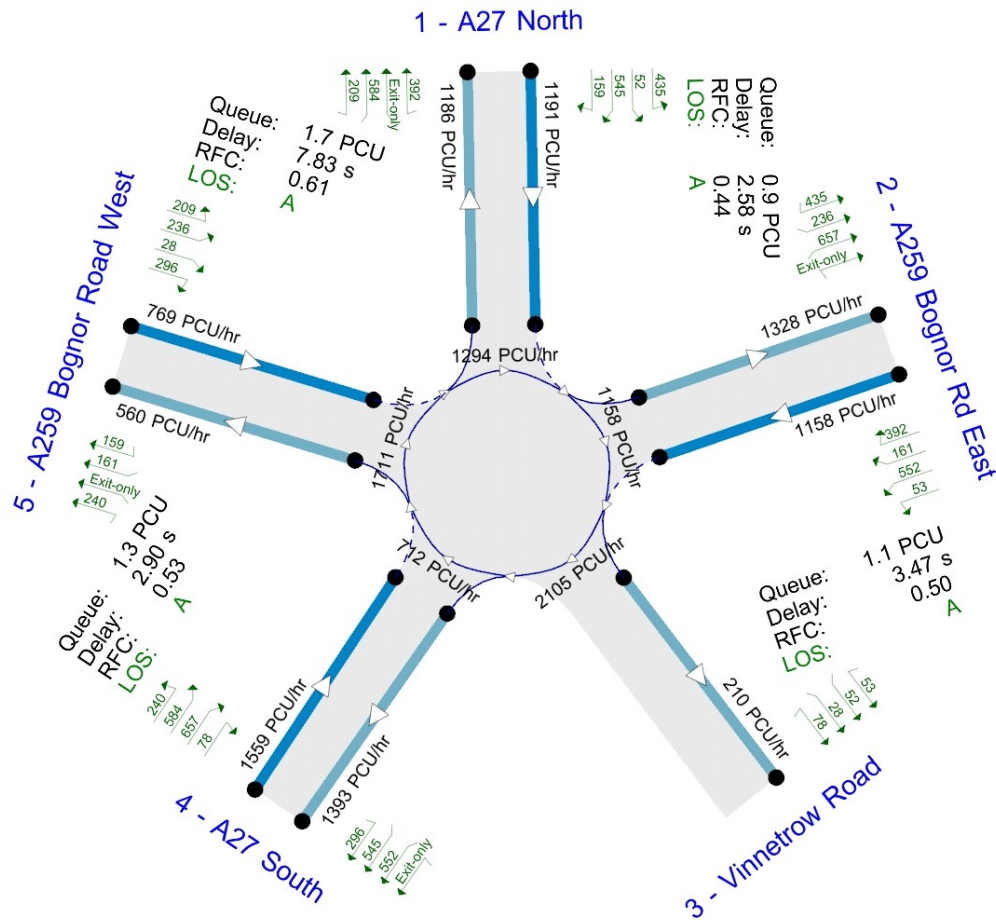
File summary

File Description

Title	A27 Bognor RBT
Location	
Site number	
Date	30/03/2015
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	UKNAW004
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	PCU	perHour	s	-Min	perMin



Flows show modelled flow through junction (PCU/hr).
Time Segment: 17:00-17:15

The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D7	2031 Base + Committed (SATURN FLOWS)	AM	FLAT	08:00	09:00	60	15	✓
D8	2031 Base + Committed (SATURN FLOWS)	PM	FLAT	17:00	18:00	60	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	A27 Bognor RBT	✓	100.000	100.000

A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A259 Bognor Rd East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A27 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	5 - A259 Bognor Road West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Bognor Bridge Road - WSP Mitigation	Standard Roundabout	1,2,3,4,5	5.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A27 North	
2	A259 Bognor Rd East	
3	Vinnetrow Road	
4	A27 South	
5	A259 Bognor Road West	

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 - A27 North	8.80	12.37	112.7	43.7	84.0	32.0	
2 - A259 Bognor Rd East	7.00	11.18	63.0	30.5	84.0	44.0	
3 - Vinnetrow Road							✓
4 - A27 South	9.36	11.09	44.0	44.2	84.0	25.0	
5 - A259 Bognor Road West	4.02	8.11	55.7	27.5	84.0	37.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A27 North	0.760	3720
2 - A259 Bognor Rd East	0.654	3065
3 - Vinnetrow Road		
4 - A27 South	0.726	3447
5 - A259 Bognor Road West	0.534	2197

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)	Run automatically
D7	2031 Base + Committed (SATURN FLOWS)	AM	FLAT	08:00	09:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A27 North		FLAT	✓	1652	100.000
2 - A259 Bognor Rd East		FLAT	✓	1428	100.000
3 - Vinnetrow Road					
4 - A27 South		FLAT	✓	1190	100.000
5 - A259 Bognor Road West		FLAT	✓	620	100.000

Origin-Destination Data

Demand (Veh/hr)

	To					
		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
From	1 - A27 North	0	470	44	668	470
	2 - A259 Bognor Rd East	543	0	33	500	352
	3 - Vinnetrow Road	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 South	506	327	30	0	327
	5 - A259 Bognor Road West	236	153	14	217	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
From	1 - A27 North	10	10	10	10	10
	2 - A259 Bognor Rd East	10	10	10	10	10
	3 - Vinnetrow Road	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 South	10	10	10	10	10
	5 - A259 Bognor Road West	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 North	0.59	3.08	1.6	A	1817	1817
2 - A259 Bognor Rd East	0.78	8.68	3.7	A	1571	1571
3 - Vinnetrow Road						
4 - A27 South	0.56	3.78	1.4	A	1309	1309
5 - A259 Bognor Road West	0.50	5.74	1.1	A	682	682

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1817	454	811	3104	0.586	1811	1404	0.0	1.5	3.048	A
2 - A259 Bognor Rd East	1571	393	1581	2031	0.774	1556	1041	0.0	3.6	8.120	A
3 - Vinnetrow Road			3005				132				
4 - A27 South	1309	327	1491	2365	0.554	1304	1514	0.0	1.4	3.714	A
5 - A259 Bognor Road West	682	171	1537	1377	0.495	678	1257	0.0	1.1	5.629	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1817	454	815	3100	0.586	1817	1413	1.5	1.6	3.085	A
2 - A259 Bognor Rd East	1571	393	1587	2027	0.775	1570	1045	3.6	3.7	8.663	A
3 - Vinnetrow Road			3025				133				
4 - A27 South	1309	327	1501	2357	0.555	1309	1523	1.4	1.4	3.776	A
5 - A259 Bognor Road West	682	171	1546	1372	0.497	682	1264	1.1	1.1	5.737	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1817	454	815	3100	0.586	1817	1413	1.6	1.6	3.085	A
2 - A259 Bognor Rd East	1571	393	1587	2027	0.775	1571	1045	3.7	3.7	8.675	A
3 - Vinnetrow Road			3025				133				
4 - A27 South	1309	327	1501	2357	0.555	1309	1523	1.4	1.4	3.777	A
5 - A259 Bognor Road West	682	171	1547	1372	0.497	682	1264	1.1	1.1	5.737	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1817	454	815	3100	0.586	1817	1413	1.6	1.6	3.085	A
2 - A259 Bognor Rd East	1571	393	1587	2027	0.775	1571	1045	3.7	3.7	8.680	A
3 - Vinnetrow Road			3025				133				
4 - A27 South	1309	327	1501	2357	0.555	1309	1523	1.4	1.4	3.777	A
5 - A259 Bognor Road West	682	171	1547	1372	0.497	682	1264	1.1	1.1	5.738	A

A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A259 Bognor Rd East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A27 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	5 - A259 Bognor Road West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Bognor Bridge Road - WSP Mitigation	Standard Roundabout	1,2,3,4,5	3.77	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D8	2031 Base + Committed (SATURN FLOWS)	PM	FLAT	17:00	18:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A27 North		FLAT	✓	1086	100.000
2 - A259 Bognor Rd East		FLAT	✓	1057	100.000
3 - Vinnetrow Road					
4 - A27 South		FLAT	✓	1422	100.000
5 - A259 Bognor Road West		FLAT	✓	705	100.000

Origin-Destination Data

Demand (Veh/hr)

	To					
		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
From	1 - A27 North	0	397	47	497	145
	2 - A259 Bognor Rd East	358	0	48	504	147
	3 - Vinnetrow Road	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 South	533	599	71	0	219
	5 - A259 Bognor Road West	192	216	26	271	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
From	1 - A27 North	10	10	10	10	10
	2 - A259 Bognor Rd East	10	10	10	10	10
	3 - Vinnetrow Road	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 South	10	10	10	10	10
	5 - A259 Bognor Road West	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 North	0.44	2.58	0.9	A	1195	1195
2 - A259 Bognor Rd East	0.50	3.47	1.1	A	1163	1163
3 - Vinnetrow Road						
4 - A27 South	0.53	2.90	1.3	A	1564	1564
5 - A259 Bognor Road West	0.61	7.83	1.7	A	776	776

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1195	299	1294	2736	0.437	1191	1186	0.0	0.8	2.558	A
2 - A259 Bognor Rd East	1163	291	1158	2308	0.504	1158	1328	0.0	1.1	3.433	A
3 - Vinnetrow Road			2105				210				
4 - A27 South	1564	391	712	2930	0.534	1559	1393	0.0	1.3	2.878	A
5 - A259 Bognor Road West	776	194	1711	1284	0.604	769	560	0.0	1.6	7.593	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1195	299	1301	2731	0.437	1195	1191	0.8	0.9	2.577	A
2 - A259 Bognor Rd East	1163	291	1163	2304	0.505	1163	1333	1.1	1.1	3.467	A
3 - Vinnetrow Road			2114				211				
4 - A27 South	1564	391	715	2928	0.534	1564	1399	1.3	1.3	2.902	A
5 - A259 Bognor Road West	776	194	1717	1281	0.605	775	562	1.6	1.7	7.827	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1195	299	1301	2731	0.437	1195	1191	0.9	0.9	2.577	A
2 - A259 Bognor Rd East	1163	291	1163	2304	0.505	1163	1333	1.1	1.1	3.467	A
3 - Vinnetrow Road			2114				211				
4 - A27 South	1564	391	715	2928	0.534	1564	1399	1.3	1.3	2.902	A
5 - A259 Bognor Road West	776	194	1717	1281	0.605	775	562	1.7	1.7	7.830	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1195	299	1301	2731	0.437	1195	1191	0.9	0.9	2.577	A
2 - A259 Bognor Rd East	1163	291	1163	2304	0.505	1163	1333	1.1	1.1	3.467	A
3 - Vinnetrow Road			2114				211				
4 - A27 South	1564	391	715	2928	0.534	1564	1399	1.3	1.3	2.902	A
5 - A259 Bognor Road West	776	194	1717	1281	0.605	775	562	1.7	1.7	7.831	A

Junctions 9							
ARCADY 9 - Roundabout Module							
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017							
For sales and distribution information, program advice and maintenance, contact TRL: Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk							
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution							

Filename: A27 and A259.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031

SATURN With Mitigation - No Development

Report generation date: 01/03/2017 10:53:46

»A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), AM

»A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Junction LOS	Queue (PCU)	Delay (s)	RFC	LOS	Junction LOS
A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS)										
1 - A27 North	1.5	3.04	0.58	A	A	0.8	2.51	0.43	A	A
2 - A259 Bognor Rd East	3.6	8.33	0.77	A		1.1	3.36	0.50	A	
4 - A27 South	1.4	3.78	0.56	A		1.3	2.90	0.53	A	
5 - A259 Bognor Road West	1.0	5.61	0.49	A		1.5	7.40	0.58	A	

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

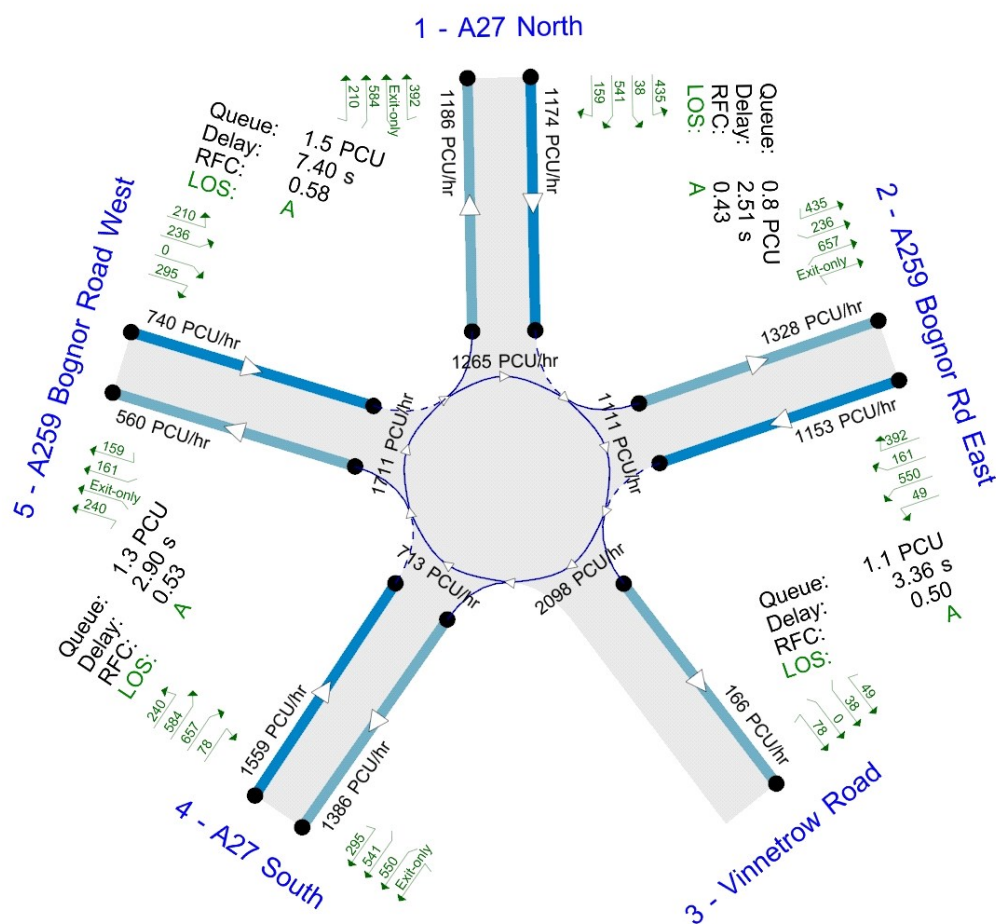
File summary

File Description

Title	A27 Bognor RBT
Location	
Site number	
Date	30/03/2015
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	UKNAW004
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	PCU	perHour	s	-Min	perMin



Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D7	2031 Base + Committed (SATURN FLOWS)	AM	FLAT	08:00	09:00	60	15	✓
D8	2031 Base + Committed (SATURN FLOWS)	PM	FLAT	17:00	18:00	60	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	A27 Bognor RBT	✓	100.000	100.000

A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A259 Bognor Rd East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A27 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	5 - A259 Bognor Road West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Bognor Bridge Road - WSP Mitigation	Standard Roundabout	1,2,3,4,5	5.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A27 North	
2	A259 Bognor Rd East	
3	Vinnetrow Road	
4	A27 South	
5	A259 Bognor Road West	

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 - A27 North	8.80	12.37	112.7	43.7	84.0	32.0	
2 - A259 Bognor Rd East	7.00	11.18	63.0	30.5	84.0	44.0	
3 - Vinnetrow Road							✓
4 - A27 South	9.36	11.09	44.0	44.2	84.0	25.0	
5 - A259 Bognor Road West	4.02	8.11	55.7	27.5	84.0	37.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A27 North	0.760	3720
2 - A259 Bognor Rd East	0.654	3065
3 - Vinnetrow Road		
4 - A27 South	0.726	3447
5 - A259 Bognor Road West	0.534	2197

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)	Run automatically
D7	2031 Base + Committed (SATURN FLOWS)	AM	FLAT	08:00	09:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A27 North		FLAT	✓	1644	100.000
2 - A259 Bognor Rd East		FLAT	✓	1425	100.000
3 - Vinnetrow Road					
4 - A27 South		FLAT	✓	1190	100.000
5 - A259 Bognor Road West		FLAT	✓	606	100.000

Origin-Destination Data

Demand (Veh/hr)

	To					
		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
From	1 - A27 North	0	470	39	665	470
	2 - A259 Bognor Rd East	543	0	31	499	352
	3 - Vinnetrow Road	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 South	506	327	30	0	327
	5 - A259 Bognor Road West	236	153	0	217	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
From	1 - A27 North	10	10	10	10	10
	2 - A259 Bognor Rd East	10	10	10	10	10
	3 - Vinnetrow Road	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 South	10	10	10	10	10
	5 - A259 Bognor Road West	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 North	0.58	3.04	1.5	A	1808	1808
2 - A259 Bognor Rd East	0.77	8.33	3.6	A	1568	1568
3 - Vinnetrow Road						
4 - A27 South	0.56	3.78	1.4	A	1309	1309
5 - A259 Bognor Road West	0.49	5.61	1.0	A	667	667

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1808	452	796	3115	0.581	1802	1404	0.0	1.5	3.003	A
2 - A259 Bognor Rd East	1568	392	1557	2046	0.766	1554	1041	0.0	3.5	7.832	A
3 - Vinnetrow Road			3001				109				
4 - A27 South	1309	327	1491	2365	0.554	1304	1510	0.0	1.4	3.715	A
5 - A259 Bognor Road West	667	167	1537	1377	0.484	663	1257	0.0	1.0	5.513	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1808	452	800	3112	0.581	1808	1413	1.5	1.5	3.036	A
2 - A259 Bognor Rd East	1568	392	1563	2042	0.767	1567	1045	3.5	3.6	8.317	A
3 - Vinnetrow Road			3020				110				
4 - A27 South	1309	327	1501	2357	0.555	1309	1519	1.4	1.4	3.776	A
5 - A259 Bognor Road West	667	167	1546	1372	0.486	667	1264	1.0	1.0	5.612	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1808	452	800	3112	0.581	1808	1413	1.5	1.5	3.036	A
2 - A259 Bognor Rd East	1568	392	1563	2042	0.767	1567	1045	3.6	3.6	8.327	A
3 - Vinnetrow Road			3020				110				
4 - A27 South	1309	327	1501	2357	0.555	1309	1519	1.4	1.4	3.777	A
5 - A259 Bognor Road West	667	167	1547	1372	0.486	667	1264	1.0	1.0	5.612	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1808	452	800	3112	0.581	1808	1413	1.5	1.5	3.036	A
2 - A259 Bognor Rd East	1568	392	1563	2042	0.767	1567	1045	3.6	3.6	8.335	A
3 - Vinnetrow Road			3021				110				
4 - A27 South	1309	327	1501	2357	0.555	1309	1519	1.4	1.4	3.777	A
5 - A259 Bognor Road West	667	167	1547	1372	0.486	667	1264	1.0	1.0	5.612	A

A27 Bognor RBT - 2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A27 North - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A259 Bognor Rd East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A27 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	5 - A259 Bognor Road West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Bognor Bridge Road - WSP Mitigation	Standard Roundabout	1,2,3,4,5	3.64	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D8	2031 Base + Committed (SATURN FLOWS)	PM	FLAT	17:00	18:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - A27 North		FLAT	✓	1070	100.000
2 - A259 Bognor Rd East		FLAT	✓	1052	100.000
3 - Vinnetrow Road					
4 - A27 South		FLAT	✓	1422	100.000
5 - A259 Bognor Road West		FLAT	✓	678	100.000

Origin-Destination Data

Demand (Veh/hr)

	To					
		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
From	1 - A27 North	0	397	35	493	145
	2 - A259 Bognor Rd East	358	0	45	502	147
	3 - Vinnetrow Road	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 South	533	599	71	0	219
	5 - A259 Bognor Road West	192	216	0	270	0

Vehicle Mix

Heavy Vehicle Percentages

	To					
		1 - A27 North	2 - A259 Bognor Rd East	3 - Vinnetrow Road	4 - A27 South	5 - A259 Bognor Road West
From	1 - A27 North	10	10	10	10	10
	2 - A259 Bognor Rd East	10	10	10	10	10
	3 - Vinnetrow Road	Exit-only	Exit-only	Exit-only	Exit-only	Exit-only
	4 - A27 South	10	10	10	10	10
	5 - A259 Bognor Road West	10	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A27 North	0.43	2.51	0.8	A	1177	1177
2 - A259 Bognor Rd East	0.50	3.36	1.1	A	1157	1157
3 - Vinnetrow Road						
4 - A27 South	0.53	2.90	1.3	A	1564	1564
5 - A259 Bognor Road West	0.58	7.40	1.5	A	746	746

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1177	294	1265	2758	0.427	1174	1186	0.0	0.8	2.493	A
2 - A259 Bognor Rd East	1157	289	1111	2338	0.495	1153	1328	0.0	1.1	3.328	A
3 - Vinnetrow Road			2098				166				
4 - A27 South	1564	391	713	2930	0.534	1559	1386	0.0	1.3	2.878	A
5 - A259 Bognor Road West	746	186	1711	1284	0.581	740	560	0.0	1.5	7.200	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1177	294	1272	2753	0.427	1177	1191	0.8	0.8	2.511	A
2 - A259 Bognor Rd East	1157	289	1115	2335	0.496	1157	1333	1.1	1.1	3.360	A
3 - Vinnetrow Road			2106				166				
4 - A27 South	1564	391	715	2928	0.534	1564	1391	1.3	1.3	2.902	A
5 - A259 Bognor Road West	746	186	1717	1281	0.582	746	562	1.5	1.5	7.394	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1177	294	1272	2753	0.427	1177	1191	0.8	0.8	2.511	A
2 - A259 Bognor Rd East	1157	289	1115	2335	0.496	1157	1333	1.1	1.1	3.360	A
3 - Vinnetrow Road			2106				166				
4 - A27 South	1564	391	715	2928	0.534	1564	1391	1.3	1.3	2.902	A
5 - A259 Bognor Road West	746	186	1717	1281	0.582	746	562	1.5	1.5	7.397	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - A27 North	1177	294	1272	2753	0.427	1177	1191	0.8	0.8	2.511	A
2 - A259 Bognor Rd East	1157	289	1115	2335	0.496	1157	1333	1.1	1.1	3.360	A
3 - Vinnetrow Road			2106				166				
4 - A27 South	1564	391	715	2928	0.534	1564	1391	1.3	1.3	2.902	A
5 - A259 Bognor Road West	746	186	1717	1281	0.582	746	562	1.5	1.5	7.397	A

Junctions 9															
ARCADY 9 - Roundabout Module															
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017															
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Filename: B2145 and B2166.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031

SATURN With Mitigation - No Development

Report generation date: 15/03/2017 09:57:03

»2031 Base + Committed (SATURN FLOWS), AM

»2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed (SATURN FLOWS)																
1 - B2145 North	1.7	2.0	8.08	0.63	A	11.20	B	14 %	37.1	100.8	97.62	1.03	F	46.02	E	-8 %
2 - B2166	3.7	17.1	13.06	0.79	B			[2 - B2166]	1.2	1.5	6.22	0.55	A			[1 - B2145 North]
3 - untitled	3.5	14.8	11.69	0.78	B				1.3	1.5	4.82	0.56	A			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	(untitled)
Location	
Site number	
Date	05/12/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
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 segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2145 jvw B2166	Standard Roundabout	11.20	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	14	2 - B2166

Arms

Arms

Arm	Name	Description
1	B2145 North	
2	B2166	
3	untitled	

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 - B2145 North	3.30	7.10	11.4	46.0	30.0	18.0	
2 - B2166	3.20	7.80	16.0	24.0	30.0	37.0	
3 - untitled	4.10	7.70	9.0	65.0	30.0	10.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - B2145 North	0.672	1665
2 - B2166	0.646	1668
3 - untitled	0.731	1898

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	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 - B2145 North		✓	695	100.000
2 - B2166		✓	958	100.000
3 - untitled		✓	1001	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2145 North	2 - B2166	3 - untitled
From				
	1 - B2145 North	0	277	418
	2 - B2166	572	0	386
	3 - untitled	487	514	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - B2145 North	2 - B2166	3 - untitled
From				
	1 - B2145 North	0	4	7
	2 - B2166	2	0	1
	3 - untitled	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - B2145 North	0.63	8.08	1.7	2.0	A
2 - B2166	0.79	13.06	3.7	17.1	B
3 - untitled	0.78	11.69	3.5	14.8	B

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	523	385	1326	0.394	521	0.6	4.453	A
2 - B2166	721	313	1429	0.505	717	1.0	5.031	A
3 - untitled	754	428	1556	0.484	750	0.9	4.444	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	625	461	1278	0.489	624	0.9	5.492	A
2 - B2166	861	375	1387	0.621	859	1.6	6.789	A
3 - untitled	900	513	1494	0.602	898	1.5	6.012	A

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)	LOS
1 - B2145 North	765	562	1213	0.631	762	1.7	7.938	A
2 - B2166	1055	458	1330	0.793	1047	3.6	12.381	B
3 - untitled	1102	625	1412	0.781	1095	3.4	11.097	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)	LOS
1 - B2145 North	765	566	1211	0.632	765	1.7	8.076	A
2 - B2166	1055	460	1329	0.794	1054	3.7	13.060	B
3 - untitled	1102	629	1408	0.783	1102	3.5	11.693	B

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)	LOS
1 - B2145 North	625	466	1275	0.490	628	1.0	5.591	A
2 - B2166	861	378	1385	0.622	869	1.7	7.088	A
3 - untitled	900	519	1489	0.604	908	1.6	6.266	A

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)	LOS
1 - B2145 North	523	388	1324	0.395	524	0.7	4.506	A
2 - B2166	721	315	1427	0.505	724	1.0	5.138	A
3 - untitled	754	432	1553	0.485	756	1.0	4.528	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.65	0.55	1.00	1.40	1.45			N/A	N/A
2 - B2166	1.01	0.55	1.00	1.40	1.45			N/A	N/A
3 - untitled	0.93	0.55	1.00	1.40	1.45			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.95	0.07	0.85	1.63	1.98			N/A	N/A
2 - B2166	1.61	0.05	0.59	4.03	6.18			N/A	N/A
3 - untitled	1.49	0.05	0.51	3.75	5.75			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.67	0.03	0.27	1.67	1.67			N/A	N/A
2 - B2166	3.60	0.03	0.31	4.32	17.12			N/A	N/A
3 - untitled	3.37	0.03	0.30	3.37	14.77			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.70	0.03	0.27	1.70	1.70			N/A	N/A
2 - B2166	3.72	0.03	0.28	3.72	9.41			N/A	N/A
3 - untitled	3.49	0.03	0.28	3.49	7.28			N/A	N/A

08:30 - 08:45

Am	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.97	0.11	0.95	1.50	1.84			N/A	N/A
2 - B2166	1.68	0.05	0.64	4.24	6.46			N/A	N/A
3 - untitled	1.55	0.06	0.75	3.76	5.56			N/A	N/A

08:45 - 09:00

Am	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.66	0.05	0.52	1.46	1.47			N/A	N/A
2 - B2166	1.03	0.04	0.37	2.59	4.69			N/A	N/A
3 - untitled	0.95	0.04	0.38	2.35	4.09			N/A	N/A

2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2145 jvw B2166	Standard Roundabout	46.02	E

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-8	1 - B2145 North

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	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 - B2145 North		✓	1178	100.000
2 - B2166		✓	640	100.000
3 - untitled		✓	866	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2145 North	2 - B2166	3 - untitled
From	1 - B2145 North	0	655	523
	2 - B2166	215	0	425
	3 - untitled	349	517	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - B2145 North	2 - B2166	3 - untitled
From	1 - B2145 North	0	2	2
	2 - B2166	3	0	1
	3 - untitled	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - B2145 North	1.03	97.62	37.1	100.8	F
2 - B2166	0.55	6.22	1.2	1.5	A
3 - untitled	0.56	4.82	1.3	1.5	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)	LOS
1 - B2145 North	887	388	1377	0.644	880	1.8	7.147	A
2 - B2166	482	391	1387	0.347	480	0.5	3.957	A
3 - untitled	652	161	1756	0.371	650	0.6	3.247	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)	LOS
1 - B2145 North	1059	464	1326	0.798	1051	3.7	12.735	B
2 - B2166	575	467	1338	0.430	574	0.7	4.710	A
3 - untitled	779	193	1732	0.449	778	0.8	3.767	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)	LOS
1 - B2145 North	1297	568	1258	1.031	1217	23.6	52.175	F
2 - B2166	705	540	1290	0.546	703	1.2	6.110	A
3 - untitled	953	236	1700	0.561	952	1.3	4.798	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)	LOS
1 - B2145 North	1297	569	1257	1.032	1243	37.1	97.616	F
2 - B2166	705	552	1283	0.549	705	1.2	6.222	A
3 - untitled	953	237	1700	0.561	953	1.3	4.823	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	1059	466	1325	0.799	1190	4.5	42.191	E
2 - B2166	575	528	1298	0.443	577	0.8	5.004	A
3 - untitled	779	194	1732	0.450	780	0.8	3.790	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	887	390	1375	0.645	897	1.9	7.687	A
2 - B2166	482	398	1382	0.349	483	0.5	4.008	A
3 - untitled	652	162	1755	0.371	653	0.6	3.268	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.77	0.26	1.01	2.92	3.70			N/A	N/A
2 - B2166	0.53	0.53	1.00	1.40	1.45			N/A	N/A
3 - untitled	0.59	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	3.71	0.06	0.93	10.38	16.43			N/A	N/A
2 - B2166	0.75	0.10	0.84	1.41	1.48			N/A	N/A
3 - untitled	0.81	0.08	0.82	1.49	1.52			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	23.64	1.63	17.42	50.60	64.27			N/A	N/A
2 - B2166	1.19	0.03	0.26	1.19	1.19			N/A	N/A
3 - untitled	1.26	0.03	0.26	1.26	1.26			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	37.15	2.97	27.80	79.50	100.79			N/A	N/A
2 - B2166	1.21	0.03	0.27	1.21	1.38			N/A	N/A
3 - untitled	1.27	0.03	0.26	1.27	1.27			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	4.45	0.04	0.42	12.19	23.36			N/A	N/A
2 - B2166	0.80	0.31	0.96	1.40	1.45			N/A	N/A
3 - untitled	0.82	0.43	0.97	1.40	1.45			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.86	0.03	0.29	1.86	7.42			N/A	N/A
2 - B2166	0.54	0.05	0.54	1.31	1.41			N/A	N/A
3 - untitled	0.59	0.07	0.72	1.35	1.42			N/A	N/A

Junctions 9															
ARCADY 9 - Roundabout Module															
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017															
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The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution															

Filename: B2145 B2166.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031

SATURN With Mitigation - With Development

Report generation date: 15/03/2017 09:57:50

»2031 Base + Committed (SATURN FLOWS), AM

»2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed (SATURN FLOWS)																
1 - B2145 North	2.1	4.5	9.40	0.68	A	30.94	D	-3 % [2 - B2166]	90.2	153.1	208.70	1.13	F	95.11	F	-14 % [1 - B2145 North]
2 - B2166	18.0	79.6	52.09	0.97	F				1.7	2.4	7.57	0.64	A			
3 - untitled	6.7	34.9	22.89	0.88	C				1.5	1.9	5.58	0.60	A			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	(untitled)
Location	
Site number	
Date	05/12/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
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 segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2145 jvw B2166	Standard Roundabout	30.94	D

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-3	2 - B2166

Arms

Arms

Arm	Name	Description
1	B2145 North	
2	B2166	
3	untitled	

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 - B2145 North	3.30	7.10	11.4	46.0	30.0	18.0	
2 - B2166	3.20	7.80	16.0	24.0	30.0	37.0	
3 - untitled	4.10	7.70	9.0	65.0	30.0	10.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - B2145 North	0.672	1665
2 - B2166	0.646	1668
3 - untitled	0.731	1898

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	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 - B2145 North		✓	746	100.000
2 - B2166		✓	1175	100.000
3 - untitled		✓	1014	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2145 North	2 - B2166	3 - untitled
From	1 - B2145 North	0	328	418
	2 - B2166	759	0	416
	3 - untitled	487	527	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - B2145 North	2 - B2166	3 - untitled
From	1 - B2145 North	0	4	7
	2 - B2166	2	0	1
	3 - untitled	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - B2145 North	0.68	9.40	2.1	4.5	A
2 - B2166	0.97	52.09	18.0	79.6	F
3 - untitled	0.88	22.89	6.7	34.9	C

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	562	394	1322	0.425	559	0.7	4.699	A
2 - B2166	885	313	1428	0.619	878	1.6	6.474	A
3 - untitled	763	567	1454	0.525	759	1.1	5.147	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	671	472	1272	0.527	669	1.1	5.956	A
2 - B2166	1056	375	1386	0.762	1050	3.1	10.544	B
3 - untitled	912	679	1372	0.664	908	1.9	7.699	A

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)	LOS
1 - B2145 North	821	572	1208	0.680	818	2.1	9.128	A
2 - B2166	1294	458	1329	0.973	1250	13.9	34.349	D
3 - untitled	1116	808	1278	0.874	1100	5.9	18.822	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)	LOS
1 - B2145 North	821	579	1204	0.682	821	2.1	9.401	A
2 - B2166	1294	460	1328	0.974	1277	18.0	52.090	F
3 - untitled	1116	825	1265	0.883	1113	6.7	22.892	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)	LOS
1 - B2145 North	671	483	1265	0.530	674	1.1	6.134	A
2 - B2166	1056	378	1384	0.763	1115	3.4	15.990	C
3 - untitled	912	720	1342	0.679	930	2.2	9.090	A

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)	LOS
1 - B2145 North	562	399	1319	0.426	563	0.7	4.773	A
2 - B2166	885	316	1426	0.620	892	1.7	6.817	A
3 - untitled	763	576	1448	0.527	768	1.1	5.323	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.73	0.55	1.00	1.40	1.45			N/A	N/A
2 - B2166	1.60	0.52	1.46	2.28	2.76			N/A	N/A
3 - untitled	1.09	0.55	1.03	1.17	1.17			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.10	0.07	0.83	2.12	2.92			N/A	N/A
2 - B2166	3.06	0.05	0.66	8.51	13.70			N/A	N/A
3 - untitled	1.93	0.05	0.48	5.16	8.34			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	2.06	0.03	0.28	2.06	4.46			N/A	N/A
2 - B2166	13.91	0.15	5.57	37.48	53.81			N/A	N/A
3 - untitled	5.93	0.04	0.40	15.51	32.17			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	2.11	0.03	0.27	2.11	2.38			N/A	N/A
2 - B2166	17.97	0.10	4.30	51.84	79.58			N/A	N/A
3 - untitled	6.70	0.03	0.33	11.19	34.89			N/A	N/A

08:30 - 08:45

Am	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.14	0.08	0.96	1.99	2.77			N/A	N/A
2 - B2166	3.41	0.04	0.41	9.22	17.66			N/A	N/A
3 - untitled	2.18	0.05	0.46	5.92	9.81			N/A	N/A

08:45 - 09:00

Am	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.75	0.05	0.46	1.52	2.11			N/A	N/A
2 - B2166	1.66	0.03	0.30	1.86	7.74			N/A	N/A
3 - untitled	1.13	0.03	0.32	2.19	5.75			N/A	N/A

2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2145 jvw B2166	Standard Roundabout	95.11	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-14	1 - B2145 North

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	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 - B2145 North		✓	1275	100.000
2 - B2166		✓	757	100.000
3 - untitled		✓	886	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1 - B2145 North	2 - B2166	3 - untitled
	1 - B2145 North	0	752	523
	2 - B2166	313	0	444
	3 - untitled	349	537	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1 - B2145 North	2 - B2166	3 - untitled
	1 - B2145 North	0	2	2
	2 - B2166	3	0	1
	3 - untitled	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - B2145 North	1.13	208.70	90.2	153.1	F
2 - B2166	0.64	7.57	1.7	2.4	A
3 - untitled	0.60	5.58	1.5	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)	LOS
1 - B2145 North	960	403	1367	0.702	951	2.3	8.477	A
2 - B2166	570	390	1386	0.411	567	0.7	4.383	A
3 - untitled	667	234	1702	0.392	664	0.6	3.461	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)	LOS
1 - B2145 North	1146	482	1315	0.872	1132	5.9	18.387	C
2 - B2166	681	464	1338	0.509	679	1.0	5.456	A
3 - untitled	796	281	1667	0.478	795	0.9	4.123	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)	LOS
1 - B2145 North	1404	590	1244	1.129	1230	49.4	92.075	F
2 - B2166	833	504	1312	0.635	831	1.7	7.442	A
3 - untitled	976	343	1621	0.602	973	1.5	5.539	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)	LOS
1 - B2145 North	1404	591	1243	1.130	1241	90.2	208.704	F
2 - B2166	833	509	1309	0.637	833	1.7	7.572	A
3 - untitled	976	345	1620	0.602	975	1.5	5.585	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	1146	484	1313	0.873	1299	52.0	198.452	F
2 - B2166	681	533	1293	0.526	683	1.1	5.923	A
3 - untitled	796	282	1666	0.478	799	0.9	4.160	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	960	405	1365	0.703	1158	2.5	37.686	E
2 - B2166	570	475	1331	0.428	571	0.8	4.750	A
3 - untitled	667	236	1701	0.392	668	0.6	3.492	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	2.28	0.13	1.09	4.82	6.44			N/A	N/A
2 - B2166	0.69	0.55	1.00	1.40	1.45			N/A	N/A
3 - untitled	0.64	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	5.88	0.09	1.66	16.02	23.75			N/A	N/A
2 - B2166	1.02	0.07	0.88	1.81	2.42			N/A	N/A
3 - untitled	0.91	0.07	0.82	1.54	1.92			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	49.42	18.10	45.42	79.70	91.77			N/A	N/A
2 - B2166	1.71	0.03	0.27	1.71	1.71			N/A	N/A
3 - untitled	1.49	0.03	0.26	1.49	1.49			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	90.19	41.29	85.32	135.88	153.09			N/A	N/A
2 - B2166	1.73	0.03	0.27	1.73	1.73			N/A	N/A
3 - untitled	1.50	0.03	0.26	1.50	1.50			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	52.04	25.00	49.31	76.56	85.75			N/A	N/A
2 - B2166	1.13	0.14	1.06	1.73	1.99			N/A	N/A
3 - untitled	0.92	0.21	0.98	1.39	1.39			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	2.51	0.03	0.28	2.51	8.39			N/A	N/A
2 - B2166	0.76	0.06	0.66	1.16	1.69			N/A	N/A
3 - untitled	0.65	0.06	0.69	1.37	1.46			N/A	N/A

Junctions 9															
PICADY 9 - Priority Intersection Module															
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Filename: Lower Bognor Road and Pagham Road.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031

SATURN With Mitigation - No Development

Report generation date: 01/03/2017 10:56:46

»2031 Base + Committed (SATURN FLOWS), AM

»2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed (SATURN FLOWS)																
Stream B-C	0.0	~1	0.00	0.00	A	21.44	C	-11 %	0.0	0.5	15.75	0.04	C	9.28	A	-1 %
Stream B-A	8.5	39.8	75.52	0.93	F			[Stream B-A]	3.4	17.6	37.31	0.79	E			[Stream B-A]
Stream C-AB	0.0	~1	0.00	0.00	A				0.1	0.5	9.17	0.09	A			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	(untitled)
Location	
Site number	
Date	19/09/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
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 segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:15	17:45	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Lower Bognor Road j/w Pagham Road	T-Junction	Two-way	21.44	C

Junction Network Options

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

Arms

Arms

Arm	Name	Description	Arm type
A	Pagham Road North		Major
B	Lower Bognor Road		Minor
C	Pagham Road South		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 - Pagham Road South	7.50			95.0	✓	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	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 - Lower Bognor Road	One lane plus flare	10.00	8.00	5.50	4.25	3.00	✓	2.00	105	85

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	635	0.108	0.273	0.172	0.391
1	B-C	666	0.095	0.241	-	-
1	C-B	629	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 segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	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 - Pagham Road North		✓	529	100.000
B - Lower Bognor Road		✓	394	100.000
C - Pagham Road South		✓	454	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
	From			
	A - Pagham Road North	0	467	62
	B - Lower Bognor Road	394	0	0
	C - Pagham Road South	454	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
	From			
	A - Pagham Road North	0	2	4
	B - Lower Bognor Road	1	0	0
	C - Pagham Road South	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	0.00	0.00	0.0	~1	A
B-A	0.93	75.52	8.5	39.8	F
C-AB	0.00	0.00	0.0	~1	A
C-A					
A-B					
A-C					

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	531	0.000	0	0.0	0.000	A
B-A	297	518	0.573	291	1.3	15.559	C
C-AB	0	531	0.000	0	0.0	0.000	A
C-A	342			342			
A-B	352			352			
A-C	47			47			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	501	0.000	0	0.0	0.000	A
B-A	354	497	0.713	350	2.3	23.925	C
C-AB	0	513	0.000	0	0.0	0.000	A
C-A	408			408			
A-B	420			420			
A-C	56			56			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	457	0.000	0	0.0	0.000	A
B-A	434	467	0.929	415	7.0	55.781	F
C-AB	0	488	0.000	0	0.0	0.000	A
C-A	500			500			
A-B	514			514			
A-C	68			68			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	451	0.000	0	0.0	0.000	A
B-A	434	467	0.929	428	8.5	75.516	F
C-AB	0	488	0.000	0	0.0	0.000	A
C-A	500			500			
A-B	514			514			
A-C	68			68			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	492	0.000	0	0.0	0.000	A
B-A	354	497	0.713	377	2.7	34.433	D
C-AB	0	513	0.000	0	0.0	0.000	A
C-A	408			408			
A-B	420			420			
A-C	56			56			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	528	0.000	0	0.0	0.000	A
B-A	297	518	0.573	302	1.4	17.041	C
C-AB	0	531	0.000	0	0.0	0.000	A
C-A	342			342			
A-B	352			352			
A-C	47			47			

Queue Variation Results for each time segment

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	1.29	0.56	1.14	1.55	1.78			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	2.29	0.09	1.37	5.27	7.31			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	6.96	0.10	2.28	18.81	27.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	8.48	0.06	1.45	24.60	39.83			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	2.73	0.04	0.40	7.41	13.82			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	1.39	0.03	0.31	2.38	7.09			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Lower Bognor Road j/w Pagham Road	T-Junction	Two-way	9.28	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-1	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 segment length (min)
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:15	17:45	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 - Pagham Road North		✓	921	100.000
B - Lower Bognor Road		✓	320	100.000
C - Pagham Road South		✓	76	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
From	A - Pagham Road North	0	643	278
	B - Lower Bognor Road	312	0	8
	C - Pagham Road South	44	32	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
From	A - Pagham Road North	0	1	2
	B - Lower Bognor Road	3	0	0
	C - Pagham Road South	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	0.04	15.75	0.0	0.5	C
B-A	0.79	37.31	3.4	17.6	E
C-AB	0.09	9.17	0.1	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	6	476	0.013	6	0.0	7.666	A
B-A	235	494	0.476	231	0.9	13.537	B
C-AB	26	493	0.052	26	0.1	7.696	A
C-A	31			31			
A-B	484			484			
A-C	209			209			

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	7	405	0.018	7	0.0	9.038	A
B-A	280	470	0.597	278	1.4	18.568	C
C-AB	31	468	0.067	31	0.1	8.250	A
C-A	37			37			
A-B	578			578			
A-C	250			250			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	9	252	0.035	9	0.0	14.777	B
B-A	344	437	0.786	337	3.1	33.664	D
C-AB	40	432	0.092	40	0.1	9.157	A
C-A	44			44			
A-B	708			708			
A-C	306			306			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	9	237	0.037	9	0.0	15.745	C
B-A	344	437	0.786	343	3.4	37.307	E
C-AB	40	432	0.092	40	0.1	9.167	A
C-A	44			44			
A-B	708			708			
A-C	306			306			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	7	394	0.018	7	0.0	9.312	A
B-A	280	470	0.597	288	1.6	20.467	C
C-AB	31	468	0.067	32	0.1	8.264	A
C-A	37			37			
A-B	578			578			
A-C	250			250			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	6	471	0.013	6	0.0	7.743	A
B-A	235	494	0.476	237	0.9	14.168	B
C-AB	26	493	0.052	26	0.1	7.709	A
C-A	31			31			
A-B	484			484			
A-C	209			209			

Queue Variation Results for each time segment

16:15 - 16:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.88	0.55	1.00	1.40	1.45			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-A	1.41	0.10	1.13	2.68	3.54			N/A	N/A
C-AB	0.08	0.03	0.25	0.45	0.48			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	3.15	0.04	0.39	8.34	16.55			N/A	N/A
C-AB	0.12	0.03	0.26	0.47	0.50			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.04	0.00	0.00	0.04	0.04			N/A	N/A
B-A	3.37	0.03	0.32	5.90	17.64			N/A	N/A
C-AB	0.12	0.03	0.25	0.45	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.00	0.00	0.02	0.02			N/A	N/A
B-A	1.55	0.04	0.43	4.07	6.84			N/A	N/A
C-AB	0.08	0.00	0.00	0.08	0.08			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	0.93	0.03	0.34	2.15	4.50			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

Junctions 9															
PICADY 9 - Priority Intersection Module															
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Filename: Lower Bognor Road Pagham Road.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031

SATURN With Mitigation - With Development

Report generation date: 01/03/2017 10:50:47

»2031 Base + Committed (SATURN FLOWS), AM

»2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed (SATURN FLOWS)																
Stream B-C	0.0	~1	0.00	0.00	A	49.44	E	-21 %	1.1	1.5	405.14	0.95	F	20.82	C	-13 %
Stream B-A	26.6	60.4	213.16	1.09	F			[Stream B-A]	8.4	36.9	94.11	0.94	F			[Stream B-A]
Stream C-AB	0.0	~1	0.00	0.00	A				0.2	1.2	8.20	0.11	A			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	(untitled)
Location	
Site number	
Date	19/09/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
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 segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:15	17:45	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Lower Bognor Road j/w Pagham Road	T-Junction	Two-way	49.44	E

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-21	Stream B-A

Arms

Arms

Arm	Name	Description	Arm type
A	Pagham Road North		Major
B	Lower Bognor Road		Minor
C	Pagham Road South		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 - Pagham Road South	7.50			95.0	✓	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	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 - Lower Bognor Road	One lane plus flare	10.00	8.00	5.50	4.25	3.00	✓	2.00	105	85

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	635	0.108	0.273	0.172	0.391
1	B-C	666	0.095	0.241	-	-
1	C-B	629	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 segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	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 - Pagham Road North		✓	617	100.000
B - Lower Bognor Road		✓	394	100.000
C - Pagham Road South		✓	672	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
From	A - Pagham Road North	0	467	150
	B - Lower Bognor Road	394	0	0
	C - Pagham Road South	672	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
From	A - Pagham Road North	0	2	4
	B - Lower Bognor Road	1	0	0
	C - Pagham Road South	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	0.00	0.00	0.0	~1	A
B-A	1.09	213.16	26.6	60.4	F
C-AB	0.00	0.00	0.0	~1	A
C-A					
A-B					
A-C					

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	509	0.000	0	0.0	0.000	A
B-A	297	471	0.630	290	1.6	19.303	C
C-AB	0	515	0.000	0	0.0	0.000	A
C-A	506			506			
A-B	352			352			
A-C	113			113			

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	470	0.000	0	0.0	0.000	A
B-A	354	440	0.805	347	3.5	35.887	E
C-AB	0	495	0.000	0	0.0	0.000	A
C-A	604			604			
A-B	420			420			
A-C	135			135			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	431	0.000	0	0.0	0.000	A
B-A	434	398	1.090	382	16.3	116.063	F
C-AB	0	466	0.000	0	0.0	0.000	A
C-A	740			740			
A-B	514			514			
A-C	165			165			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	431	0.000	0	0.0	0.000	A
B-A	434	398	1.090	393	26.6	213.157	F
C-AB	0	466	0.000	0	0.0	0.000	A
C-A	740			740			
A-B	514			514			
A-C	165			165			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	444	0.000	0	0.0	0.000	A
B-A	354	440	0.805	424	9.1	160.182	F
C-AB	0	495	0.000	0	0.0	0.000	A
C-A	604			604			
A-B	420			420			
A-C	135			135			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	0	497	0.000	0	0.0	0.000	A
B-A	297	471	0.630	326	1.8	28.994	D
C-AB	0	515	0.000	0	0.0	0.000	A
C-A	506			506			
A-B	352			352			
A-C	113			113			

Queue Variation Results for each time segment

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	1.61	0.39	1.44	2.47	2.91			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	3.45	0.11	1.48	8.31	11.54			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	16.35	2.44	13.27	31.23	38.18			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	26.58	4.92	22.26	49.85	60.36			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	9.06	0.18	4.29	23.03	32.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.00	0.00	0.00	0.00	0.00			N/A	N/A
B-A	1.82	0.03	0.29	1.82	8.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	Lower Bognor Road j/w Pagham Road	T-Junction	Two-way	20.82	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-13	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 segment length (min)
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:15	17:45	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 - Pagham Road North		✓	1084	100.000
B - Lower Bognor Road		✓	320	100.000
C - Pagham Road South		✓	193	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
From	A - Pagham Road North	0	643	441
	B - Lower Bognor Road	312	0	8
	C - Pagham Road South	161	32	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Pagham Road North	B - Lower Bognor Road	C - Pagham Road South
From	A - Pagham Road North	0	1	2
	B - Lower Bognor Road	3	0	0
	C - Pagham Road South	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-C	0.95	405.14	1.1	1.5	F
B-A	0.94	94.11	8.4	36.9	F
C-AB	0.11	8.20	0.2	1.2	A
C-A					
A-B					
A-C					

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	6	432	0.014	6	0.0	8.454	A
B-A	235	446	0.527	231	1.1	16.440	C
C-AB	31	531	0.059	31	0.1	7.194	A
C-A	114			114			
A-B	484			484			
A-C	332			332			

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	7	330	0.022	7	0.0	11.147	B
B-A	280	412	0.680	277	2.0	25.917	D
C-AB	40	515	0.078	40	0.1	7.574	A
C-A	133			133			
A-B	578			578			
A-C	396			396			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	9	63	0.139	8	0.1	64.754	F
B-A	344	366	0.938	325	6.7	67.116	F
C-AB	55	495	0.111	55	0.2	8.180	A
C-A	157			157			
A-B	708			708			
A-C	486			486			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	9	9	0.947	5	1.1	405.144	F
B-A	344	366	0.938	337	8.4	94.112	F
C-AB	55	495	0.112	55	0.2	8.200	A
C-A	157			157			
A-B	708			708			
A-C	486			486			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	7	280	0.026	11	0.0	13.602	B
B-A	280	412	0.681	305	2.3	39.107	E
C-AB	40	515	0.078	41	0.1	7.602	A
C-A	133			133			
A-B	578			578			
A-C	396			396			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
B-C	6	423	0.014	6	0.0	8.634	A
B-A	235	445	0.527	240	1.2	17.867	C
C-AB	31	531	0.059	31	0.1	7.215	A
C-A	114			114			
A-B	484			484			
A-C	332			332			

Queue Variation Results for each time segment

16:15 - 16:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	1.07	0.55	1.02	1.44	1.49			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.02	0.02	0.25	0.45	0.48			N/A	N/A
B-A	1.96	0.09	1.25	4.41	6.05			N/A	N/A
C-AB	0.13	0.03	0.25	0.45	0.48			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.15	0.03	0.27	0.49	0.99			N/A	N/A
B-A	6.70	0.12	2.72	17.42	24.72			N/A	N/A
C-AB	0.20	0.03	0.27	0.49	1.17			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	1.08	0.55	1.00	1.40	1.45			N/A	N/A
B-A	8.42	0.08	1.79	23.97	36.87			N/A	N/A
C-AB	0.21	0.00	0.00	0.21	0.21			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.03	0.00	0.00	0.03	0.03			N/A	N/A
B-A	2.34	0.04	0.39	6.21	11.85			N/A	N/A
C-AB	0.13	0.00	0.00	0.13	0.13			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-C	0.01	0.00	0.00	0.01	0.01			N/A	N/A
B-A	1.16	0.03	0.30	1.57	5.60			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

Junctions 9															
ARCADY 9 - Roundabout Module															
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017															
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Filename: Vinnetrow Road and B2166.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031

SATURN With Mitigation - No Development

Report generation date: 15/03/2017 09:17:57

»2031 Base + Committed (SATURN FLOWS), AM

»2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed (SATURN FLOWS)																
1 - Vinnetrow Road	0.3	1.2	5.70	0.22	A	7.40	A	31 % [4 - B2166 W]	0.3	1.4	7.75	0.25	A	83.73	F	-13 % [4 - B2166 W]
2 - B2166 E	1.3	1.7	5.28	0.57	A				0.3	1.3	2.92	0.25	A			
3 - Mill Lane	0.1	0.5	4.82	0.10	A				0.0	0.5	3.23	0.05	A			
4 - B2166 W	1.9	4.9	11.26	0.66	B				41.0	97.7	129.38	1.05	F			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	(untitled)
Location	
Site number	
Date	10/11/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
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 segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	7.40	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	31	4 - B2166 W

Arms

Arms

Arm	Name	Description
1	Vinnetrow Road	
2	B2166 E	
3	Mill Lane	
4	B2166 W	

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 - Vinnetrow Road	3.00	5.50	3.0	17.0	30.0	24.0	
2 - B2166 E	3.50	6.00	25.0	30.0	30.0	25.0	
3 - Mill Lane	3.00	6.00	12.0	20.0	30.0	23.0	
4 - B2166 W	3.00	4.00	4.0	18.0	30.0	28.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Vinnetrow Road	0.545	1129
2 - B2166 E	0.666	1689
3 - Mill Lane	0.614	1448
4 - B2166 W	0.531	1079

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	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 - Vinnetrow Road		✓	160	100.000
2 - B2166 E		✓	833	100.000
3 - Mill Lane		✓	72	100.000
4 - B2166 W		✓	560	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	66	7	87
	2 - B2166 E	151	0	5	677
	3 - Mill Lane	19	12	0	41
	4 - B2166 W	81	463	16	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	3	0	2
	2 - B2166 E	3	0	0	0
	3 - Mill Lane	0	0	0	0
	4 - B2166 W	8	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.22	5.70	0.3	1.2	A
2 - B2166 E	0.57	5.28	1.3	1.7	A
3 - Mill Lane	0.10	4.82	0.1	0.5	A
4 - B2166 W	0.66	11.26	1.9	4.9	B

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	120	367	903	0.133	120	0.2	4.599	A
2 - B2166 E	627	82	1625	0.386	625	0.6	3.590	A
3 - Mill Lane	54	686	1024	0.053	54	0.1	3.710	A
4 - B2166 W	422	136	969	0.435	419	0.8	6.501	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	144	440	862	0.167	144	0.2	5.007	A
2 - B2166 E	749	99	1614	0.464	748	0.9	4.153	A
3 - Mill Lane	65	822	941	0.069	65	0.1	4.110	A
4 - B2166 W	503	163	955	0.527	502	1.1	7.921	A

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)	LOS
1 - Vinnetrow Road	176	538	809	0.218	176	0.3	5.683	A
2 - B2166 E	917	121	1599	0.574	915	1.3	5.251	A
3 - Mill Lane	79	1005	827	0.096	79	0.1	4.814	A
4 - B2166 W	617	200	936	0.659	613	1.9	11.052	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)	LOS
1 - Vinnetrow Road	176	540	808	0.218	176	0.3	5.700	A
2 - B2166 E	917	121	1599	0.574	917	1.3	5.281	A
3 - Mill Lane	79	1007	826	0.096	79	0.1	4.822	A
4 - B2166 W	617	200	936	0.659	616	1.9	11.260	B

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)	LOS
1 - Vinnetrow Road	144	444	860	0.167	144	0.2	5.027	A
2 - B2166 E	749	99	1613	0.464	751	0.9	4.182	A
3 - Mill Lane	65	825	939	0.069	65	0.1	4.121	A
4 - B2166 W	503	164	955	0.527	506	1.1	8.081	A

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)	LOS
1 - Vinnetrow Road	120	371	900	0.134	121	0.2	4.619	A
2 - B2166 E	627	83	1624	0.386	628	0.6	3.618	A
3 - Mill Lane	54	690	1022	0.053	54	0.1	3.722	A
4 - B2166 W	422	137	969	0.435	423	0.8	6.610	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.15	0.00	0.00	0.15	0.15			N/A	N/A
2 - B2166 E	0.62	0.55	1.00	1.40	1.45			N/A	N/A
3 - Mill Lane	0.06	0.00	0.00	0.06	0.06			N/A	N/A
4 - B2166 W	0.76	0.55	1.00	1.40	1.45			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.20	0.00	0.00	0.20	0.20			N/A	N/A
2 - B2166 E	0.86	0.08	0.85	1.25	1.69			N/A	N/A
3 - Mill Lane	0.07	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	1.09	0.09	0.96	1.87	2.49			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.28	0.03	0.25	0.46	0.48			N/A	N/A
2 - B2166 E	1.33	0.03	0.26	1.33	1.33			N/A	N/A
3 - Mill Lane	0.11	0.03	0.26	0.47	0.49			N/A	N/A
4 - B2166 W	1.87	0.03	0.28	1.87	4.88			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.28	0.03	0.30	0.93	1.23			N/A	N/A
2 - B2166 E	1.34	0.03	0.26	1.34	1.34			N/A	N/A
3 - Mill Lane	0.11	0.00	0.00	0.11	0.11			N/A	N/A
4 - B2166 W	1.90	0.03	0.27	1.90	2.81			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.20	0.00	0.00	0.20	0.20			N/A	N/A
2 - B2166 E	0.87	0.30	0.97	1.42	1.48			N/A	N/A
3 - Mill Lane	0.07	0.00	0.00	0.07	0.07			N/A	N/A
4 - B2166 W	1.14	0.07	0.91	2.09	2.87			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.16	0.00	0.00	0.16	0.16			N/A	N/A
2 - B2166 E	0.63	0.07	0.73	1.35	1.43			N/A	N/A
3 - Mill Lane	0.06	0.00	0.00	0.06	0.06			N/A	N/A
4 - B2166 W	0.78	0.05	0.47	1.59	2.24			N/A	N/A

2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	83.73	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-13	4 - B2166 W

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	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 - Vinnetrow Road		✓	143	100.000
2 - B2166 E		✓	364	100.000
3 - Mill Lane		✓	49	100.000
4 - B2166 W		✓	973	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	127	14	2
	2 - B2166 E	57	0	8	299
	3 - Mill Lane	6	19	0	24
	4 - B2166 W	105	854	14	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	0	0	1
	2 - B2166 E	3	0	0	2
	3 - Mill Lane	0	7	0	0
	4 - B2166 W	3	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.25	7.75	0.3	1.4	A
2 - B2166 E	0.25	2.92	0.3	1.3	A
3 - Mill Lane	0.05	3.23	0.0	0.5	A
4 - B2166 W	1.05	129.38	41.0	97.7	F

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)	LOS
1 - Vinnetrow Road	108	659	766	0.141	107	0.2	5.458	A
2 - B2166 E	274	22	1640	0.167	273	0.2	2.633	A
3 - Mill Lane	37	269	1246	0.030	37	0.0	2.976	A
4 - B2166 W	733	62	1033	0.709	723	2.3	11.317	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)	LOS
1 - Vinnetrow Road	129	788	695	0.185	128	0.2	6.348	A
2 - B2166 E	327	27	1637	0.200	327	0.2	2.748	A
3 - Mill Lane	44	322	1214	0.036	44	0.0	3.077	A
4 - B2166 W	875	74	1026	0.853	864	5.0	20.895	C

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)	LOS
1 - Vinnetrow Road	157	904	631	0.250	157	0.3	7.590	A
2 - B2166 E	401	32	1634	0.245	400	0.3	2.919	A
3 - Mill Lane	54	394	1170	0.046	54	0.0	3.226	A
4 - B2166 W	1071	90	1017	1.053	990	25.3	68.568	F

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)	LOS
1 - Vinnetrow Road	157	921	622	0.253	157	0.3	7.751	A
2 - B2166 E	401	32	1633	0.245	401	0.3	2.919	A
3 - Mill Lane	54	394	1169	0.046	54	0.0	3.226	A
4 - B2166 W	1071	90	1017	1.053	1009	41.0	129.380	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	129	911	627	0.205	129	0.3	7.230	A
2 - B2166 E	327	29	1636	0.200	328	0.3	2.754	A
3 - Mill Lane	44	322	1213	0.036	44	0.0	3.080	A
4 - B2166 W	875	74	1026	0.853	1003	9.1	97.290	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	108	691	748	0.144	108	0.2	5.626	A
2 - B2166 E	274	23	1639	0.167	274	0.2	2.638	A
3 - Mill Lane	37	270	1245	0.030	37	0.0	2.980	A
4 - B2166 W	733	62	1033	0.709	759	2.6	14.270	B

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.16	0.00	0.00	0.16	0.16			N/A	N/A
2 - B2166 E	0.20	0.00	0.00	0.20	0.20			N/A	N/A
3 - Mill Lane	0.03	0.00	0.00	0.03	0.03			N/A	N/A
4 - B2166 W	2.34	0.51	1.56	3.90	4.82			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.23	0.00	0.00	0.23	0.23			N/A	N/A
2 - B2166 E	0.25	0.00	0.00	0.25	0.25			N/A	N/A
3 - Mill Lane	0.04	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	5.03	0.10	1.81	13.05	18.72			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.33	0.03	0.26	0.46	0.48			N/A	N/A
2 - B2166 E	0.32	0.03	0.25	0.45	0.48			N/A	N/A
3 - Mill Lane	0.05	0.03	0.25	0.46	0.48			N/A	N/A
4 - B2166 W	25.32	3.28	20.22	50.29	62.12			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.34	0.03	0.32	1.15	1.43			N/A	N/A
2 - B2166 E	0.32	0.03	0.32	1.09	1.34			N/A	N/A
3 - Mill Lane	0.05	0.00	0.00	0.05	0.05			N/A	N/A
4 - B2166 W	41.01	6.53	33.75	79.81	97.68			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.26	0.00	0.00	0.26	0.26			N/A	N/A
2 - B2166 E	0.25	0.00	0.00	0.25	0.25			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	9.05	0.09	2.11	25.66	39.11			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.17	0.00	0.00	0.17	0.17			N/A	N/A
2 - B2166 E	0.20	0.00	0.00	0.20	0.20			N/A	N/A
3 - Mill Lane	0.03	0.00	0.00	0.03	0.03			N/A	N/A
4 - B2166 W	2.55	0.03	0.31	3.21	12.25			N/A	N/A

Junctions 9															
ARCADY 9 - Roundabout Module															
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017															
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Filename: Vinnetrow Road B2166.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031

SATURN With Mitigation - With Development

Report generation date: 15/03/2017 09:19:55

»2031 Base + Committed (SATURN FLOWS), AM

»2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed (SATURN FLOWS)																
1 - Vinnetrow Road	0.4	1.0	6.36	0.26	A	9.90	A	20 %	0.5	2.3	8.89	0.34	A	213.95	F	-22 %
2 - B2166 E	2.6	5.8	8.11	0.72	A			[4 - B2166 W]	0.5	2.1	3.26	0.32	A			[4 - B2166 W]
3 - Mill Lane	0.1	0.5	6.01	0.12	A				0.1	0.5	3.47	0.05	A			
4 - B2166 W	2.7	11.4	14.31	0.73	B				104.1	163.6	352.32	1.18	F			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	(untitled)
Location	
Site number	
Date	10/11/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
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 segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	9.90	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	20	4 - B2166 W

Arms

Arms

Arm	Name	Description
1	Vinnetrow Road	
2	B2166 E	
3	Mill Lane	
4	B2166 W	

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 - Vinnetrow Road	3.00	5.50	3.0	17.0	30.0	24.0	
2 - B2166 E	3.50	6.00	25.0	30.0	30.0	25.0	
3 - Mill Lane	3.00	6.00	12.0	20.0	30.0	23.0	
4 - B2166 W	3.00	4.00	4.0	18.0	30.0	28.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Vinnetrow Road	0.545	1129
2 - B2166 E	0.666	1689
3 - Mill Lane	0.614	1448
4 - B2166 W	0.531	1079

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	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 - Vinnetrow Road		✓	184	100.000
2 - B2166 E		✓	1051	100.000
3 - Mill Lane		✓	72	100.000
4 - B2166 W		✓	623	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	90	7	87
	2 - B2166 E	151	0	5	895
	3 - Mill Lane	19	12	0	41
	4 - B2166 W	81	526	16	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	3	0	2
	2 - B2166 E	3	0	0	0
	3 - Mill Lane	0	0	0	0
	4 - B2166 W	8	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.26	6.36	0.4	1.0	A
2 - B2166 E	0.72	8.11	2.6	5.8	A
3 - Mill Lane	0.12	6.01	0.1	0.5	A
4 - B2166 W	0.73	14.31	2.7	11.4	B

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	139	414	876	0.158	138	0.2	4.870	A
2 - B2166 E	791	82	1627	0.486	787	0.9	4.272	A
3 - Mill Lane	54	849	924	0.059	54	0.1	4.135	A
4 - B2166 W	469	136	970	0.484	465	0.9	7.083	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	165	496	831	0.199	165	0.2	5.406	A
2 - B2166 E	945	99	1616	0.585	943	1.4	5.339	A
3 - Mill Lane	65	1017	821	0.079	65	0.1	4.761	A
4 - B2166 W	560	163	956	0.586	558	1.4	9.009	A

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)	LOS
1 - Vinnetrow Road	203	606	771	0.263	202	0.4	6.323	A
2 - B2166 E	1157	121	1601	0.723	1153	2.5	7.952	A
3 - Mill Lane	79	1243	681	0.116	79	0.1	5.977	A
4 - B2166 W	686	200	937	0.732	681	2.6	13.818	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)	LOS
1 - Vinnetrow Road	203	610	769	0.263	203	0.4	6.355	A
2 - B2166 E	1157	121	1601	0.723	1157	2.6	8.110	A
3 - Mill Lane	79	1247	678	0.117	79	0.1	6.008	A
4 - B2166 W	686	200	936	0.733	686	2.7	14.313	B

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)	LOS
1 - Vinnetrow Road	165	502	828	0.200	166	0.3	5.443	A
2 - B2166 E	945	99	1615	0.585	949	1.4	5.442	A
3 - Mill Lane	65	1023	817	0.079	65	0.1	4.791	A
4 - B2166 W	560	164	955	0.586	565	1.5	9.331	A

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)	LOS
1 - Vinnetrow Road	139	419	873	0.159	139	0.2	4.901	A
2 - B2166 E	791	83	1626	0.487	793	1.0	4.332	A
3 - Mill Lane	54	855	921	0.059	54	0.1	4.156	A
4 - B2166 W	469	137	970	0.484	471	1.0	7.252	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.19	0.00	0.00	0.19	0.19			N/A	N/A
2 - B2166 E	0.94	0.55	1.00	1.40	1.45			N/A	N/A
3 - Mill Lane	0.06	0.00	0.00	0.06	0.06			N/A	N/A
4 - B2166 W	0.92	0.55	1.00	1.40	1.45			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.25	0.00	0.00	0.25	0.25			N/A	N/A
2 - B2166 E	1.39	0.06	0.69	3.29	4.84			N/A	N/A
3 - Mill Lane	0.09	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	1.38	0.07	0.97	2.88	3.96			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.35	0.03	0.25	0.46	0.48			N/A	N/A
2 - B2166 E	2.53	0.03	0.28	2.53	5.80			N/A	N/A
3 - Mill Lane	0.13	0.03	0.26	0.47	0.49			N/A	N/A
4 - B2166 W	2.59	0.03	0.30	2.59	11.42			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.36	0.03	0.32	1.02	1.02			N/A	N/A
2 - B2166 E	2.57	0.03	0.27	2.57	2.57			N/A	N/A
3 - Mill Lane	0.13	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	2.66	0.03	0.28	2.66	6.22			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.25	0.00	0.00	0.25	0.25			N/A	N/A
2 - B2166 E	1.43	0.08	1.04	2.92	3.97			N/A	N/A
3 - Mill Lane	0.09	0.00	0.00	0.09	0.09			N/A	N/A
4 - B2166 W	1.45	0.06	0.73	3.46	5.02			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.19	0.00	0.00	0.19	0.19			N/A	N/A
2 - B2166 E	0.96	0.05	0.47	2.09	3.16			N/A	N/A
3 - Mill Lane	0.06	0.00	0.00	0.06	0.06			N/A	N/A
4 - B2166 W	0.95	0.04	0.40	2.30	3.78			N/A	N/A

2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	213.95	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-22	4 - B2166 W

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	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 - Vinnetrow Road		✓	188	100.000
2 - B2166 E		✓	481	100.000
3 - Mill Lane		✓	49	100.000
4 - B2166 W		✓	1090	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	172	14	2
	2 - B2166 E	57	0	8	416
	3 - Mill Lane	6	19	0	24
	4 - B2166 W	105	971	14	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	0	0	1
	2 - B2166 E	3	0	0	2
	3 - Mill Lane	0	7	0	0
	4 - B2166 W	3	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.34	8.89	0.5	2.3	A
2 - B2166 E	0.32	3.26	0.5	2.1	A
3 - Mill Lane	0.05	3.47	0.1	0.5	A
4 - B2166 W	1.18	352.32	104.1	163.6	F

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)	LOS
1 - Vinnetrow Road	142	743	720	0.197	141	0.2	6.204	A
2 - B2166 E	362	22	1640	0.221	361	0.3	2.811	A
3 - Mill Lane	37	356	1192	0.031	37	0.0	3.114	A
4 - B2166 W	821	62	1033	0.795	806	3.6	15.072	C

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)	LOS
1 - Vinnetrow Road	169	876	646	0.261	169	0.4	7.527	A
2 - B2166 E	432	27	1638	0.264	432	0.4	2.986	A
3 - Mill Lane	44	427	1150	0.038	44	0.0	3.255	A
4 - B2166 W	980	74	1026	0.955	951	10.9	37.619	E

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)	LOS
1 - Vinnetrow Road	207	935	614	0.337	206	0.5	8.815	A
2 - B2166 E	530	31	1635	0.324	529	0.5	3.253	A
3 - Mill Lane	54	523	1091	0.049	54	0.1	3.470	A
4 - B2166 W	1200	90	1017	1.180	1011	58.1	134.664	F

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)	LOS
1 - Vinnetrow Road	207	939	612	0.338	207	0.5	8.895	A
2 - B2166 E	530	31	1635	0.324	530	0.5	3.256	A
3 - Mill Lane	54	523	1091	0.049	54	0.1	3.470	A
4 - B2166 W	1200	90	1017	1.180	1016	104.1	294.876	F

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	169	936	614	0.275	169	0.4	8.112	A
2 - B2166 E	432	27	1637	0.264	433	0.4	2.990	A
3 - Mill Lane	44	427	1149	0.038	44	0.0	3.257	A
4 - B2166 W	980	74	1026	0.955	1016	94.9	352.322	F

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	142	938	613	0.231	142	0.3	7.654	A
2 - B2166 E	362	25	1638	0.221	362	0.3	2.823	A
3 - Mill Lane	37	358	1192	0.031	37	0.0	3.119	A
4 - B2166 W	821	62	1033	0.795	1022	44.6	248.277	F

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.24	0.00	0.00	0.24	0.24			N/A	N/A
2 - B2166 E	0.28	0.00	0.00	0.28	0.28			N/A	N/A
3 - Mill Lane	0.03	0.00	0.00	0.03	0.03			N/A	N/A
4 - B2166 W	3.56	0.08	1.07	9.21	13.35			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.35	0.00	0.00	0.35	0.35			N/A	N/A
2 - B2166 E	0.36	0.00	0.00	0.36	0.36			N/A	N/A
3 - Mill Lane	0.04	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	10.85	0.30	6.15	26.21	35.34			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.50	0.03	0.26	0.50	0.50			N/A	N/A
2 - B2166 E	0.48	0.03	0.25	0.48	0.48			N/A	N/A
3 - Mill Lane	0.05	0.03	0.26	0.46	0.49			N/A	N/A
4 - B2166 W	58.10	25.45	54.57	88.55	100.20			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.51	0.03	0.30	1.35	2.32			N/A	N/A
2 - B2166 E	0.48	0.03	0.31	1.39	2.08			N/A	N/A
3 - Mill Lane	0.05	0.00	0.00	0.05	0.05			N/A	N/A
4 - B2166 W	104.06	55.54	100.04	147.78	163.58			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.38	0.00	0.00	0.38	0.38			N/A	N/A
2 - B2166 E	0.36	0.00	0.00	0.36	0.36			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	94.93	43.06	89.74	143.58	161.96			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.30	0.00	0.00	0.30	0.30			N/A	N/A
2 - B2166 E	0.28	0.00	0.00	0.28	0.28			N/A	N/A
3 - Mill Lane	0.03	0.00	0.00	0.03	0.03			N/A	N/A
4 - B2166 W	44.59	15.29	40.63	73.24	84.84			N/A	N/A



Hook Lane, Pagham – Design Audit – Mini Roundabout Rose Green Road/ Grosvenor Gardens junction

Standards – DMRB Vol6 Section 2, TD54/07 Design of Mini Roundabouts	
DMRB	Proposed Layout – JNY8840/14
ICD. Ref 6.1 Max = 28m	Proposed ICD = 19.6m
Entry Width Ref: 6.32 Min 3m Single Lane Entry Max 4m Single Lane Entry	Proposed single Lane entries all 4m wide
Approach Near Side Lateral Shift – Figure 6/1 1 in 12.5 Min 0.8m from nearside Kerb	Gradient = 1 in 12.5 Distance from nearside Kerb = 1.7m



Hook Lane, Pagham – Design Audit – Mini Roundabout Rose Green Road/ Grosvenor Gardens junction

Visibility – assume 85th percentile speed = 30mph

Ref Table 6/1

Visibility from Rose Green Road

'D' distance = 35m – 50m

'F' distance = min 9m suggested Max 15m

The visibility distance 'D', is the minimum sight distance required by a road user approaching the roundabout at a distance 'F' from the give way line.

Stopping Sight Distance – Table 6/2

'E' 30mph 85th Percentile Speed = 70m (min)

6.22 - The Stopping Sight Distance 'E' in accordance with Table 6/2 and Figure 6/5 must be provided within the whole of an envelope between eye heights of 1.05m and 2.0m at the centre of the path of an approaching vehicle to object heights of 0.26m to 2.0m at the give way line.

'D' distance = 50m from 9m set back

'D' distance = 70m from 15m set back

Grosvenor Road

'E' distance = 70m (min)

Rose Green Road (W)

'E' distance = 70m (min)

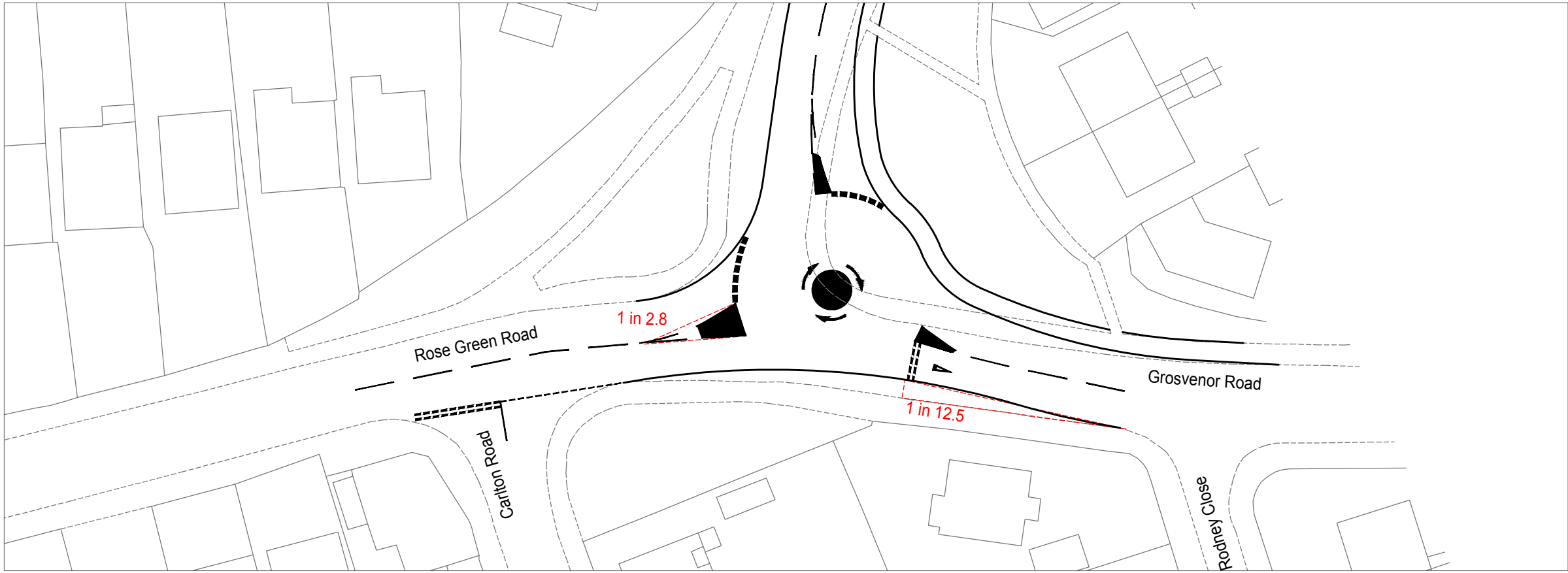
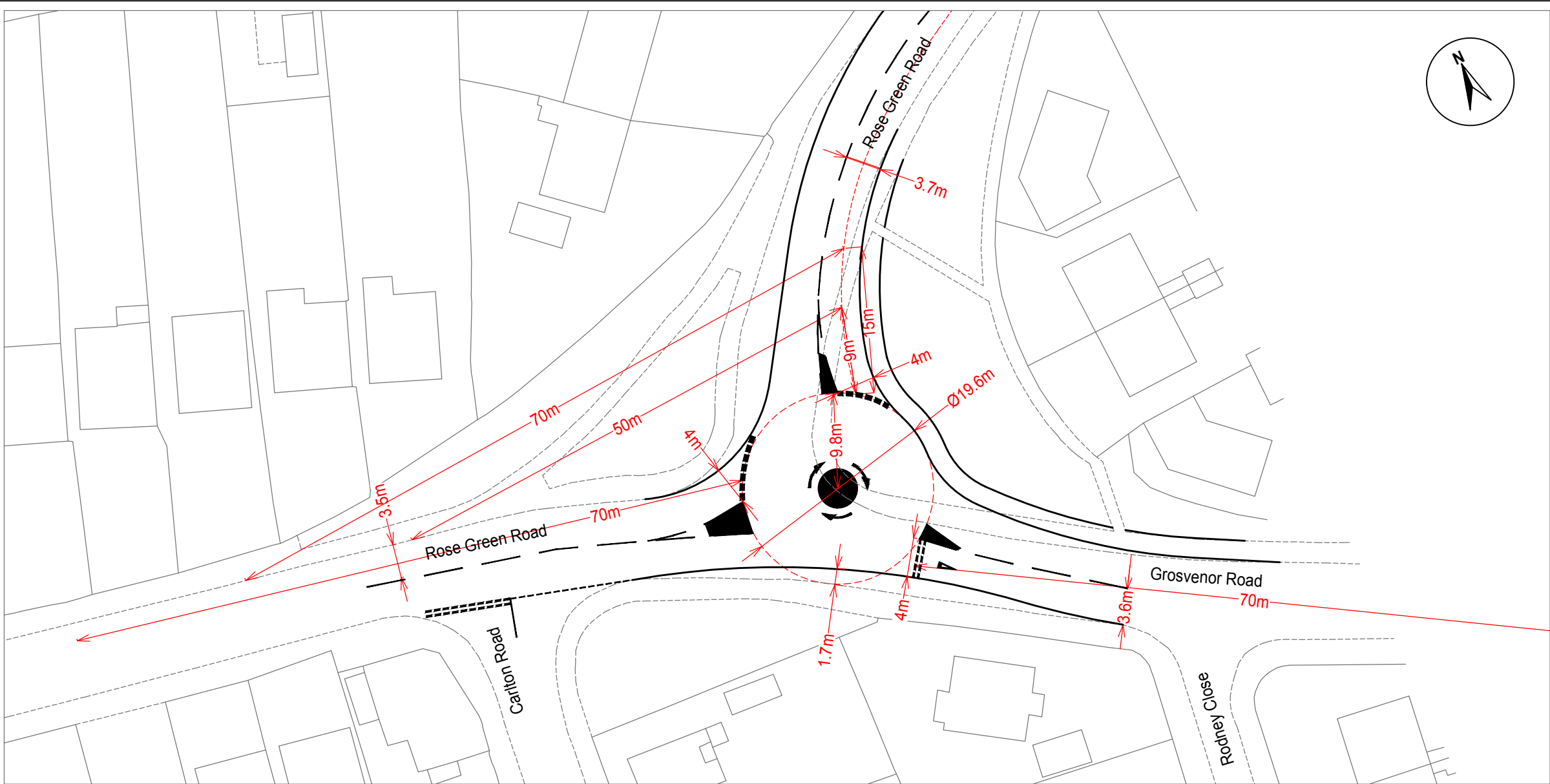


Hook Lane, Pagham – Design Audit – Mini Roundabout Rose Green Road/ Grosvenor Gardens junction

Central Island Markings Ref 6.8 The following requirements together determine the location of the white circle as illustrated in Figures 6/2 and 6/3: (i) It must be as large as practicable up to a maximum of four meters diameter and positioned using the inside of the swept path of cars. (ii) The centre of the design vehicle path must be at least 1 meter from the Kerbs, the perimeter of the white circle and from any road marking separating opposing traffic.	Centre Island = 4m Circulatory width = 5m outside any white lining
Vehicle Path	Swept Paths of a Light Goods Vehicle (7.5ton Box Van) and a 16m Max Legal Artic have been carried out on Drawing No. JNY8840_14 LGV Track & JNY8840_14 HGV Track.

Project Ref: JNY8840

Drawing Ref: P-JNY8840 - LAND WEST OF HOOK LANE, PAGHAM, NEAR BOGNOR REGIS HIGHWAYS DRAWINGS JNY8840_14.DWG Plotted Date: 3/17/2017 3:39 PM



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Rev	Description	Date	Initial	Checked
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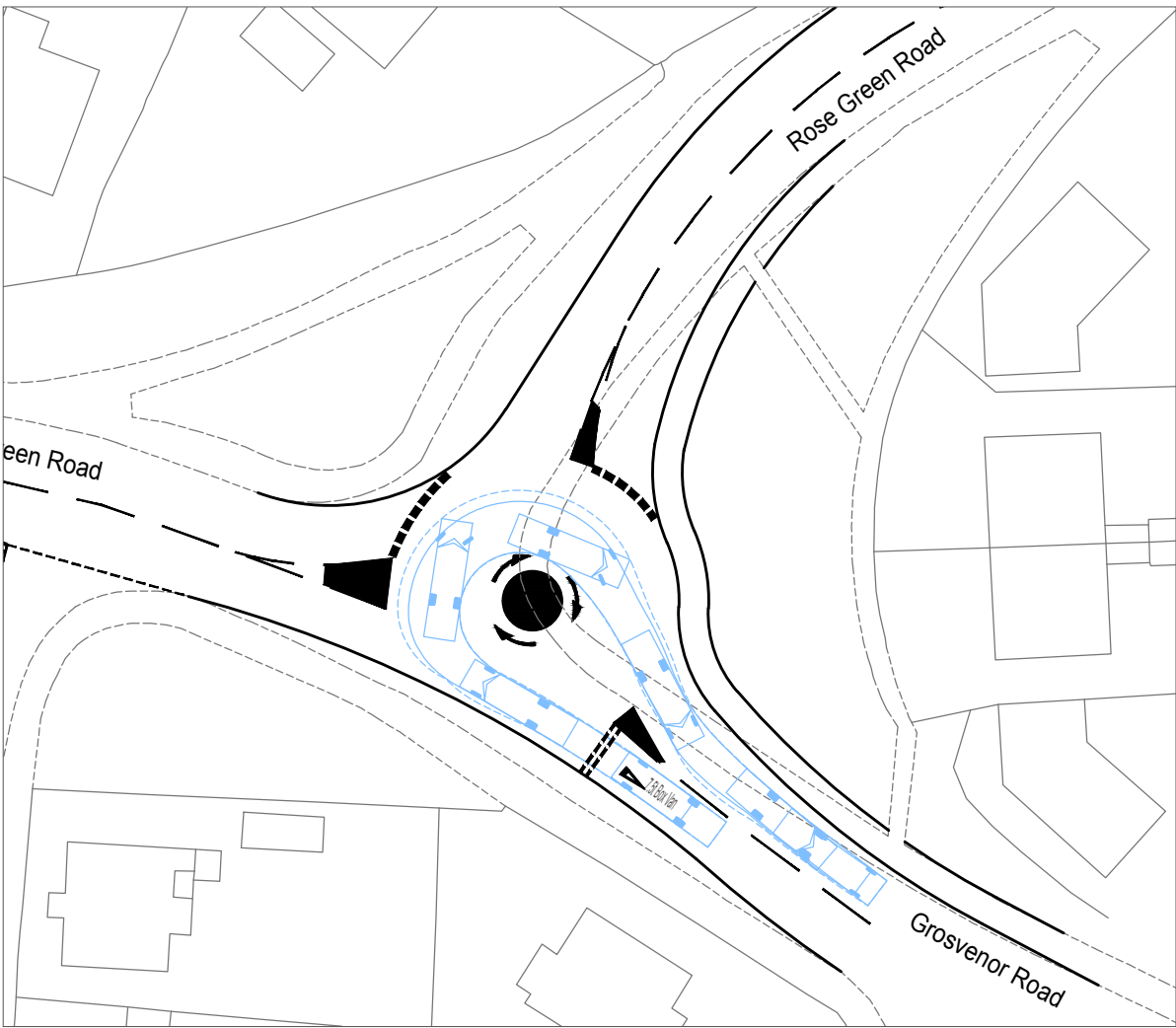
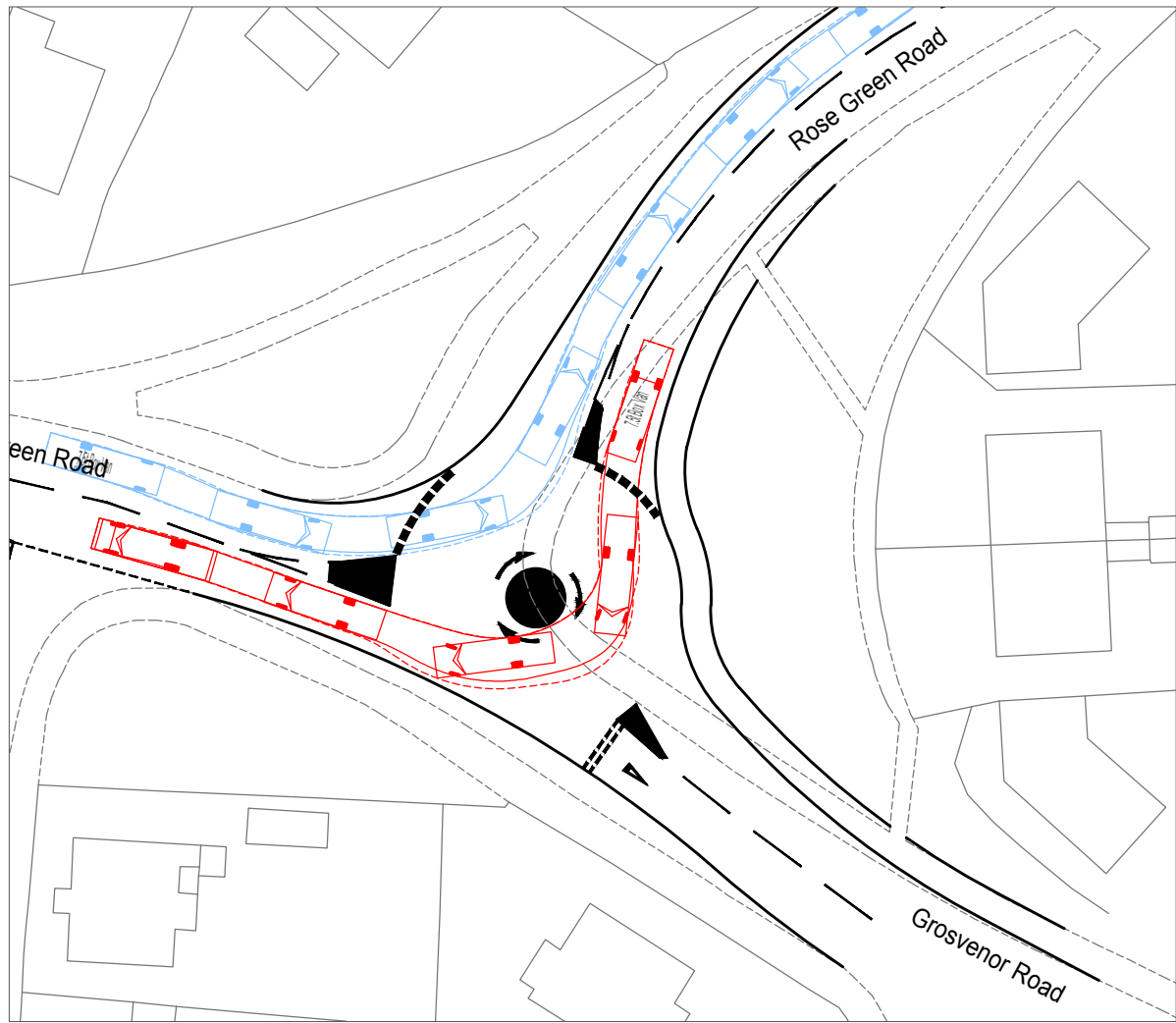
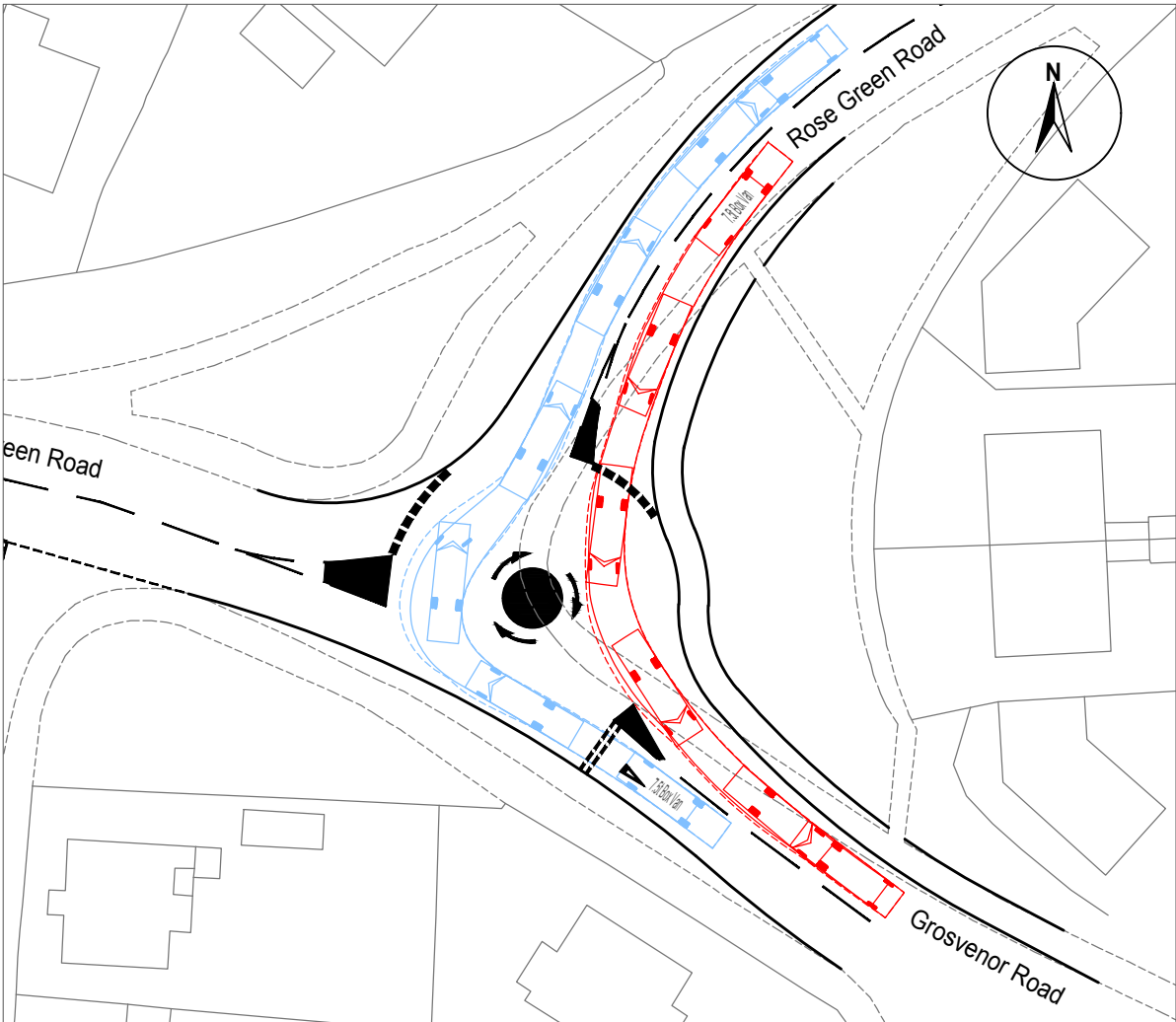
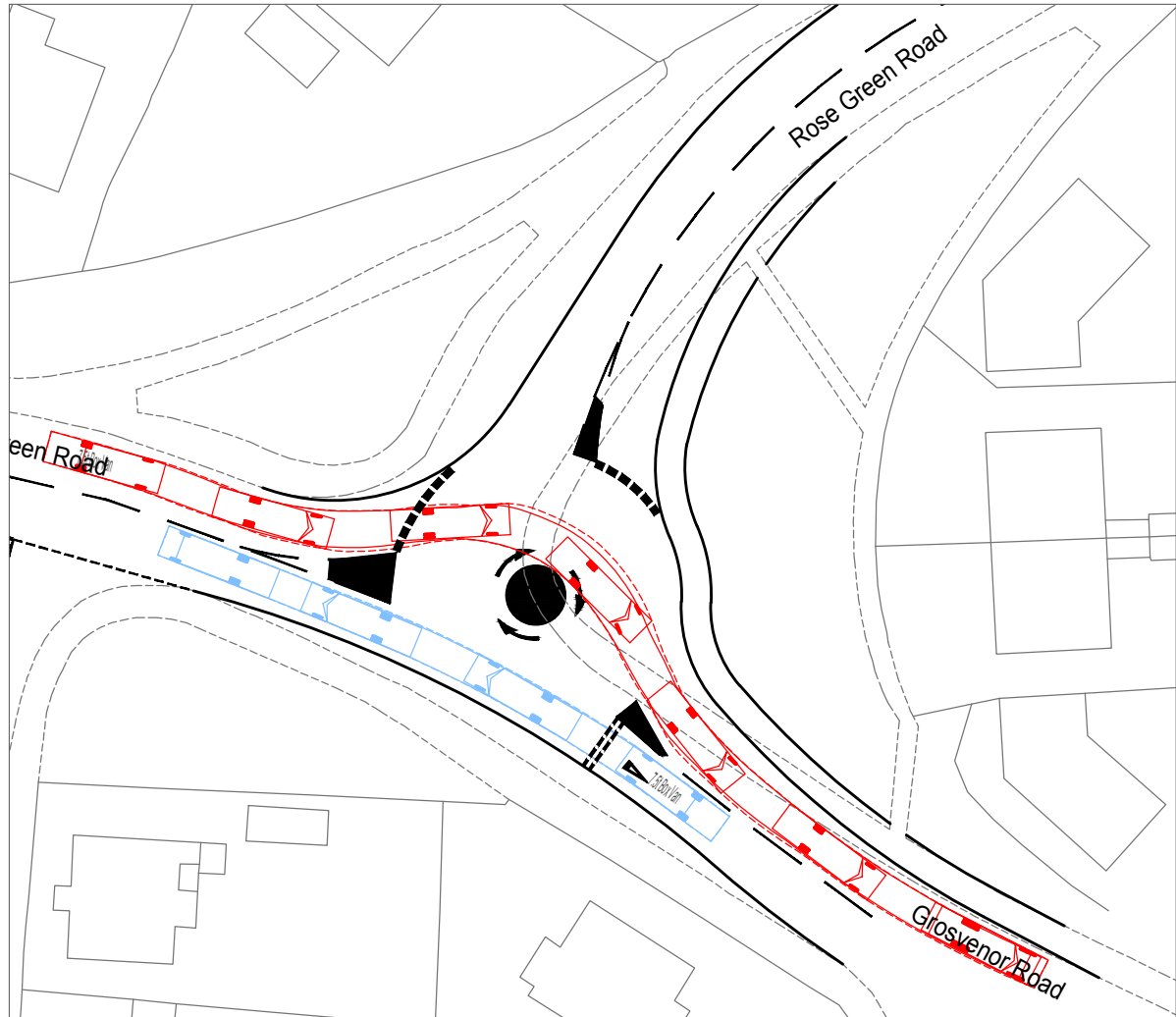
Client Hallam Land Management

Project Land West of Hook Lane, Pagham,
near Bognor Regis

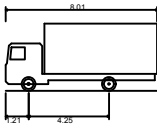
Title Proposed Mini Roundabout
arrangement at Rose Green Road /
Grosvenor Road junction
Junction Dimensions

Status Information	Drawn By BD	Checked by MAL
Project Number JNY8840	Scale @ A3 1:500	Date Created 10/03/2017

Drawing Number JNY8840-14	Rev
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7.5t Box Van
Overall Length 8.01m
Overall Width 2.10m
Overall Body Height 3.65m
Min Body Ground Clearance 0.351m
Track Width 2.064m
Lock-to-lock time 4.00s
Curb to Curb Turning Radius 7.400m

Rev	Description	Date	Initial	Checked
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Client Hallam Land Management

Project Land West of Hook Lane, Pagham,
near Bognor Regis

Title Proposed Mini Roundabout
arrangement at Rose Green Road /
Grosvenor Road junction
LGV Swept Paths

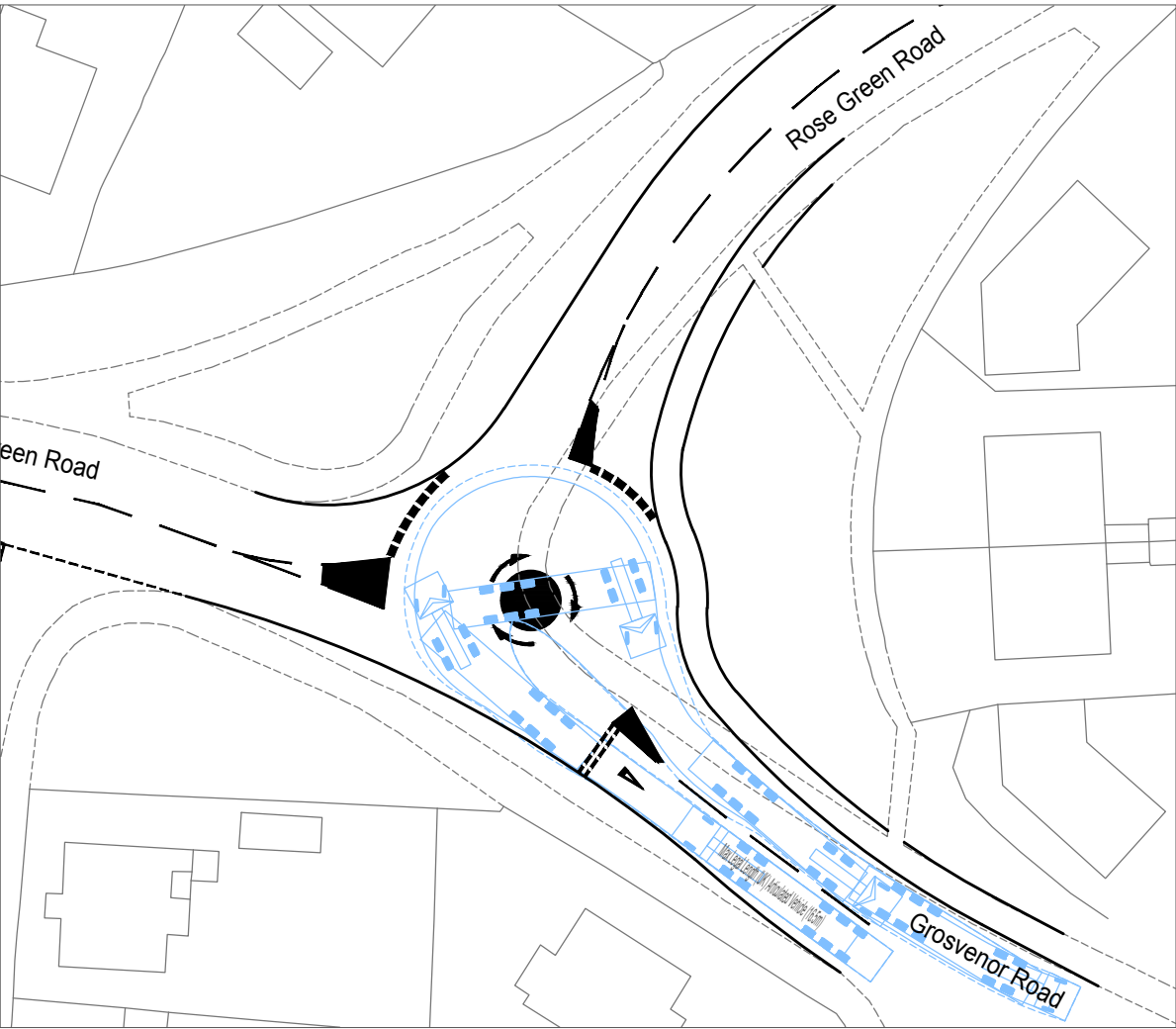
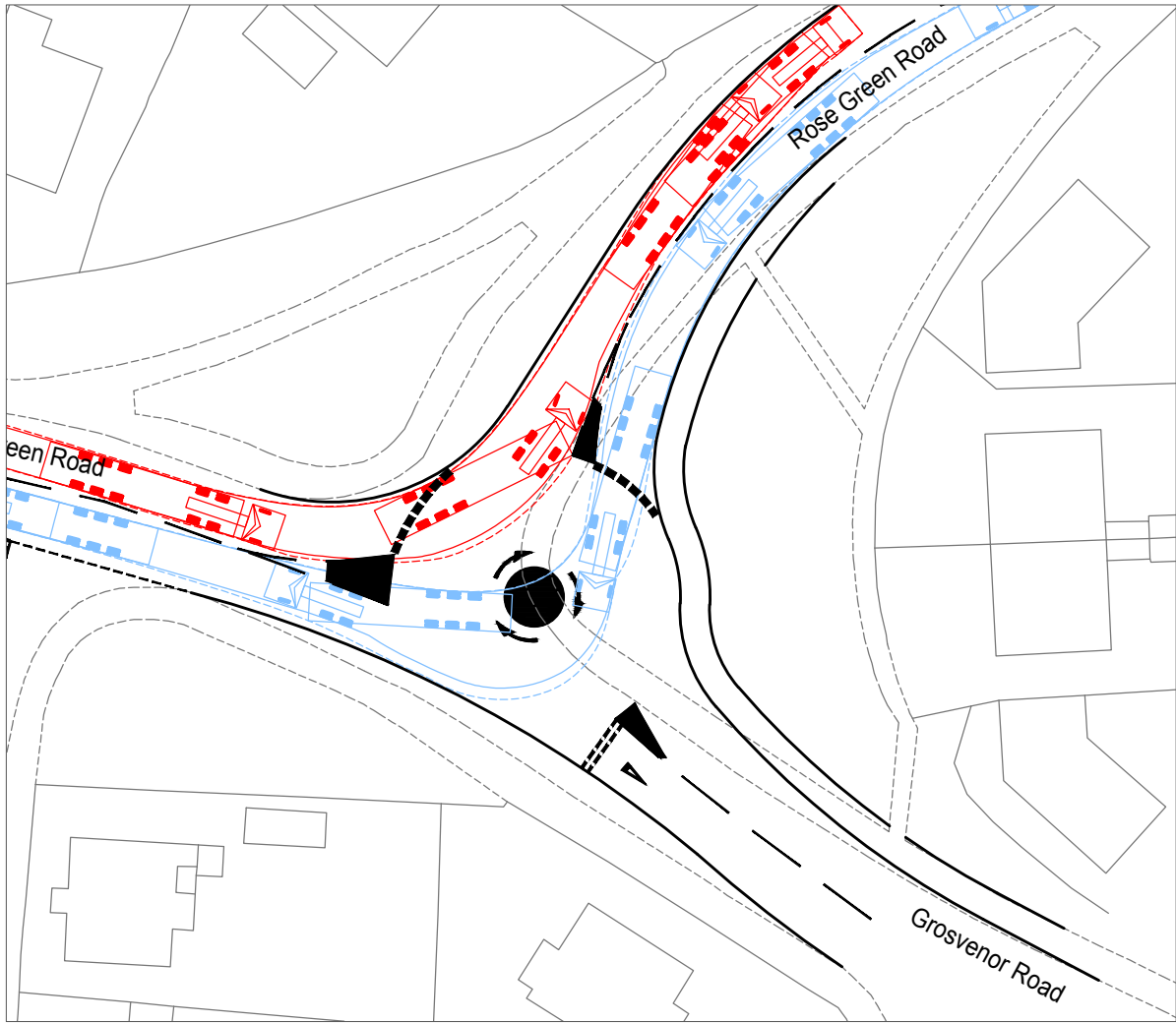
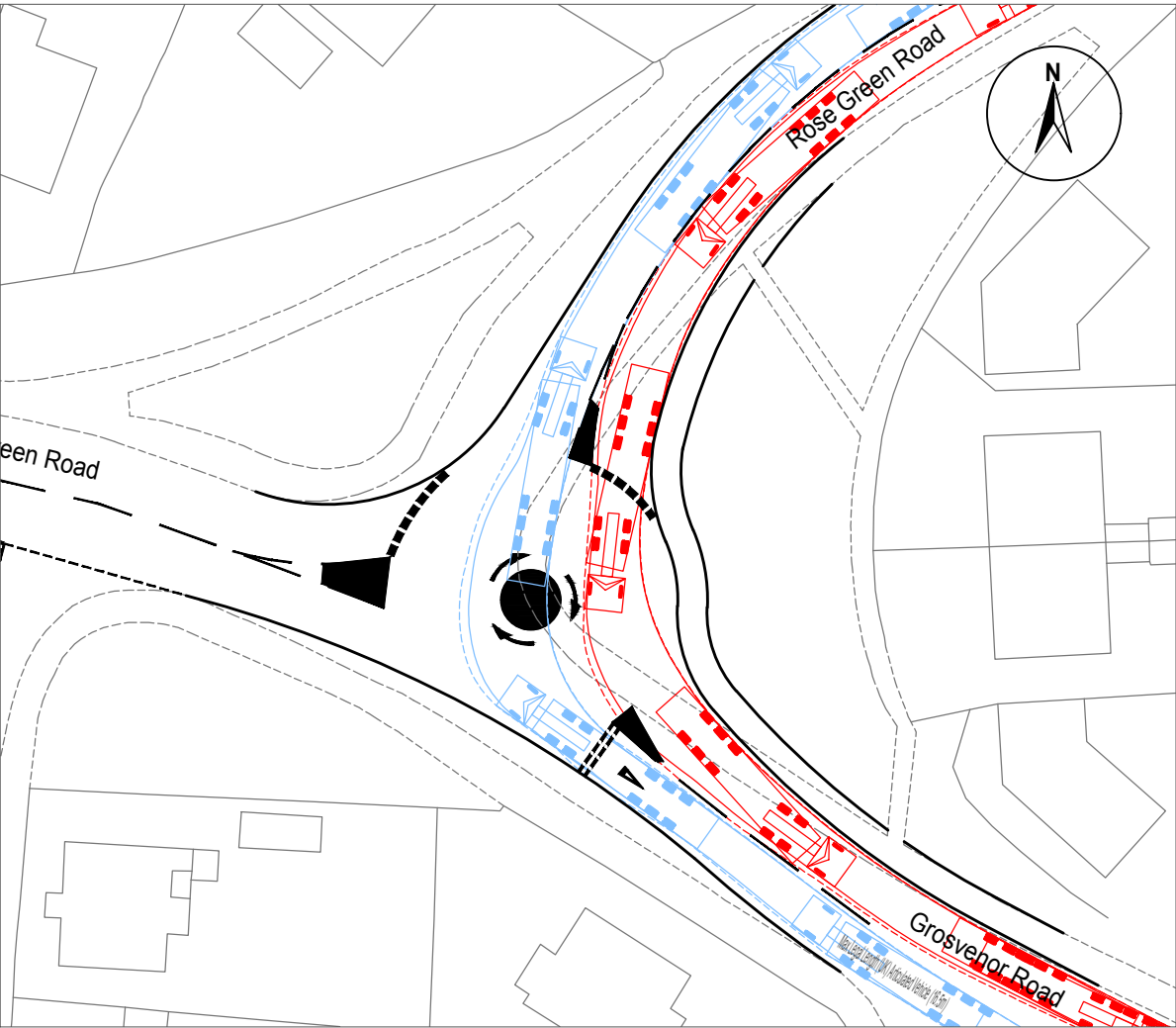
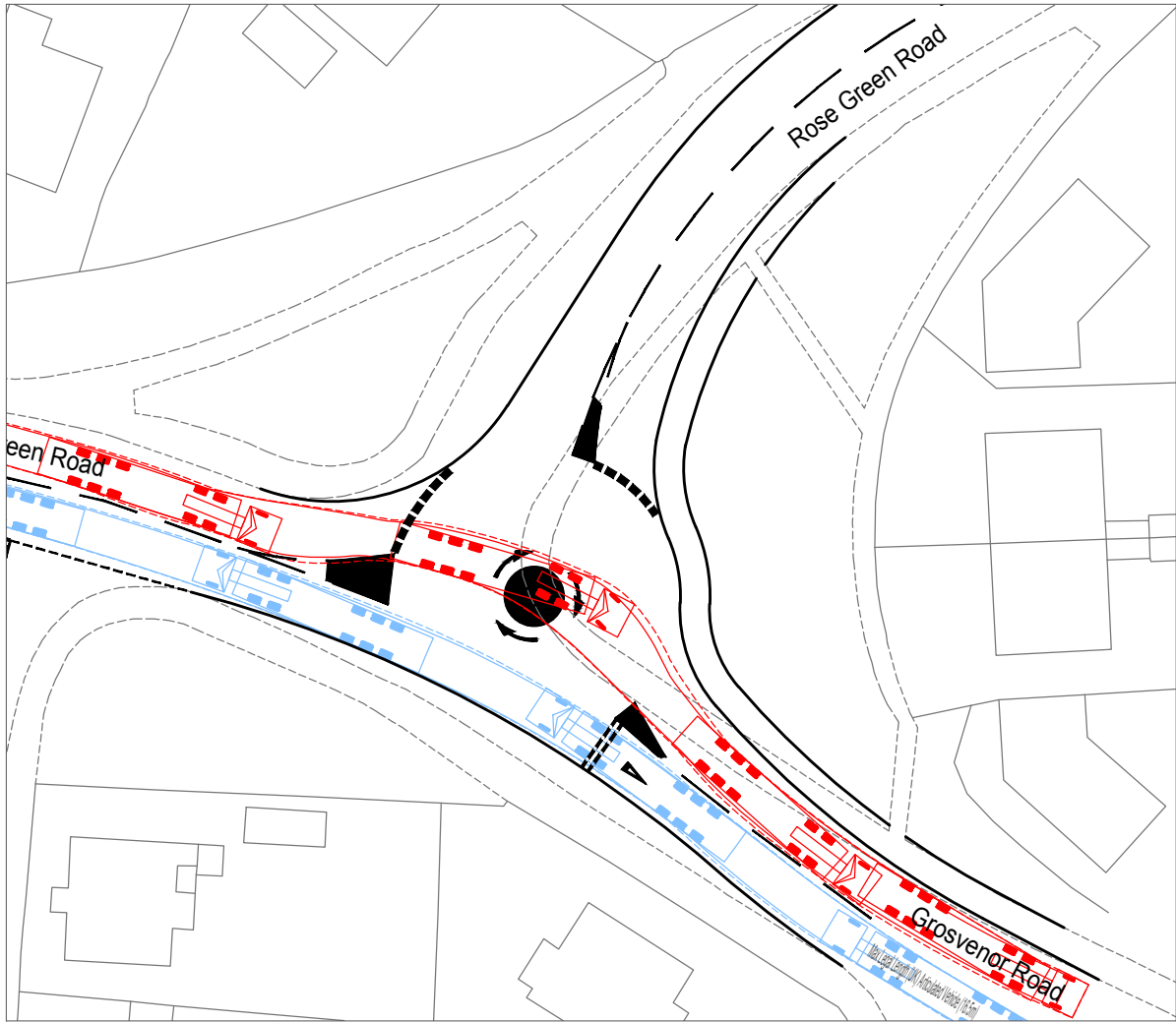
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Information	BD	MAL
Project Number	Scale @ A3	Date Created
JNY8840	1:500	10/03/2017

Drawing Number
JNY8840-14

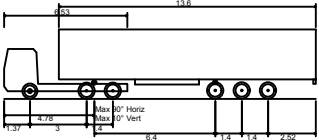
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Max Legal Length (UK) Articulated Vehicle (16.5m)
Overall Length 16.500m
Overall Width 2.550m
Overall Body Height 3.681m
Min Body Ground Clearance 0.411m
Max Track Width 2.500m
Lock-to-lock time 6.00s
Curb to Curb Turning Radius 6.530m

Rev	Description	Date	Initial	Checked
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Client Hallam Land Management

Project Land West of Hook Lane, Pagham,
near Bognor Regis

Title Proposed Mini Roundabout
arrangement at Rose Green Road /
Grosvenor Road junction
HGV Swept Paths

Status	Drawn By	Checked by
Information	BD	MAL
Project Number	Scale @ A3	Date Created
JNY8840	1:500	10/03/2017

Drawing Number
JNY8840-14

Rev

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Drawing Ref: P:\JNY8840 - LAND WEST OF HOOK LANE, PAGHAM, NEAR BOGNOR REGIS\HIGHWAYS\DRAWINGS\JNY8840_14 - A.DWG Plotted Date: 31/3/2017 12:24 PM



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Rev	Description	Date	Initial	Checked



140 London Wall
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T: +44(0)20 7280 3300 E: transport@rpsgroup.com

Client

Project Land West of Hook Lane, Pagham,
near Bognor Regis

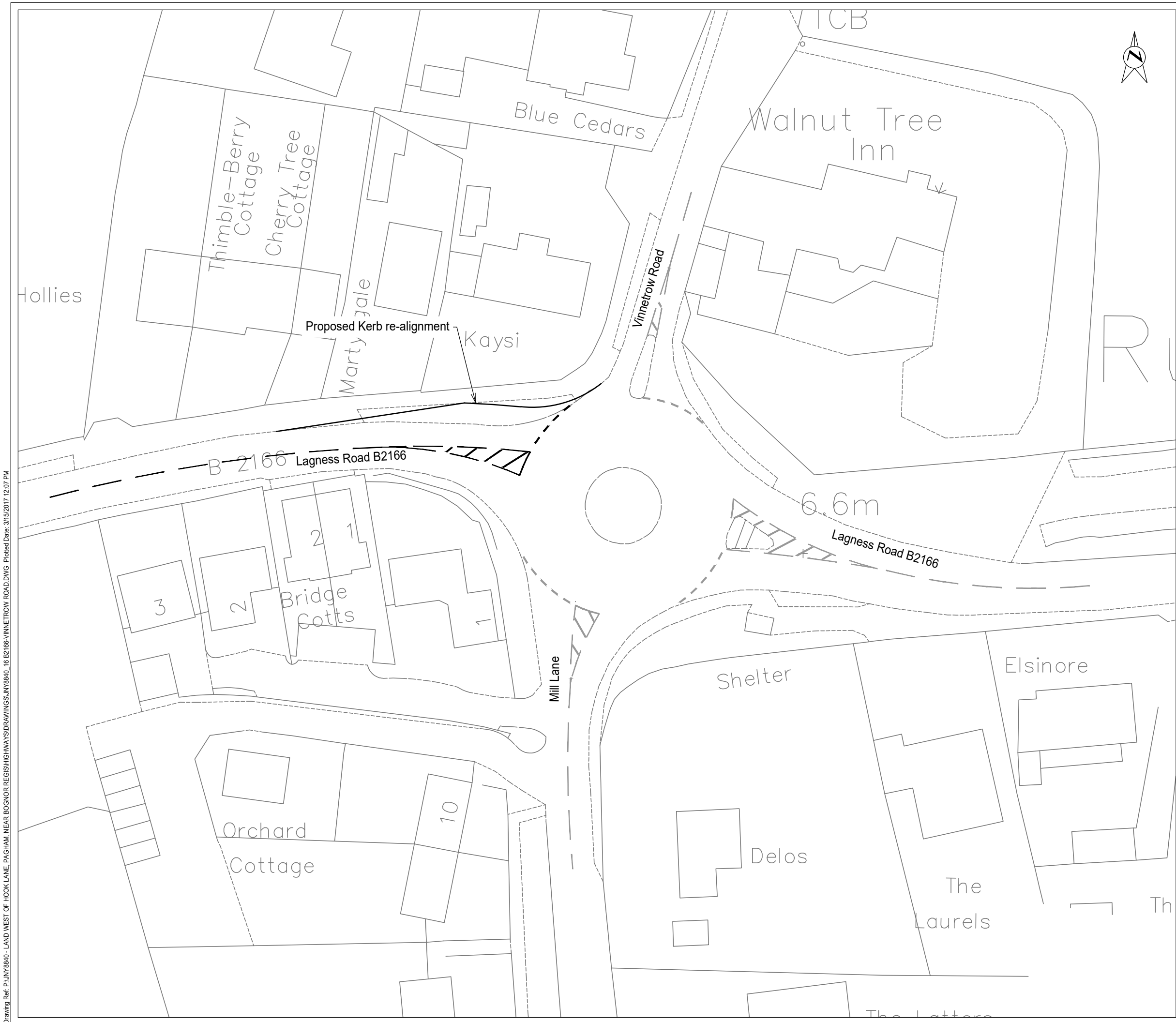
Title Proposed Mini Roundabout
arrangement at Rose Green Road /
Grosvenor Road junction

Status	Drawn By	Checked by
Information	BD	MAL
Project Number	Scale @ A3	Date Created
JNY8840	1:500	10/03/2017

Drawing Number	Rev
JNY8840-14	

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Rev	Description	Date	Initial	Checked
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Client Hallam Land Management

Project Land West of Hook Lane
Pagham

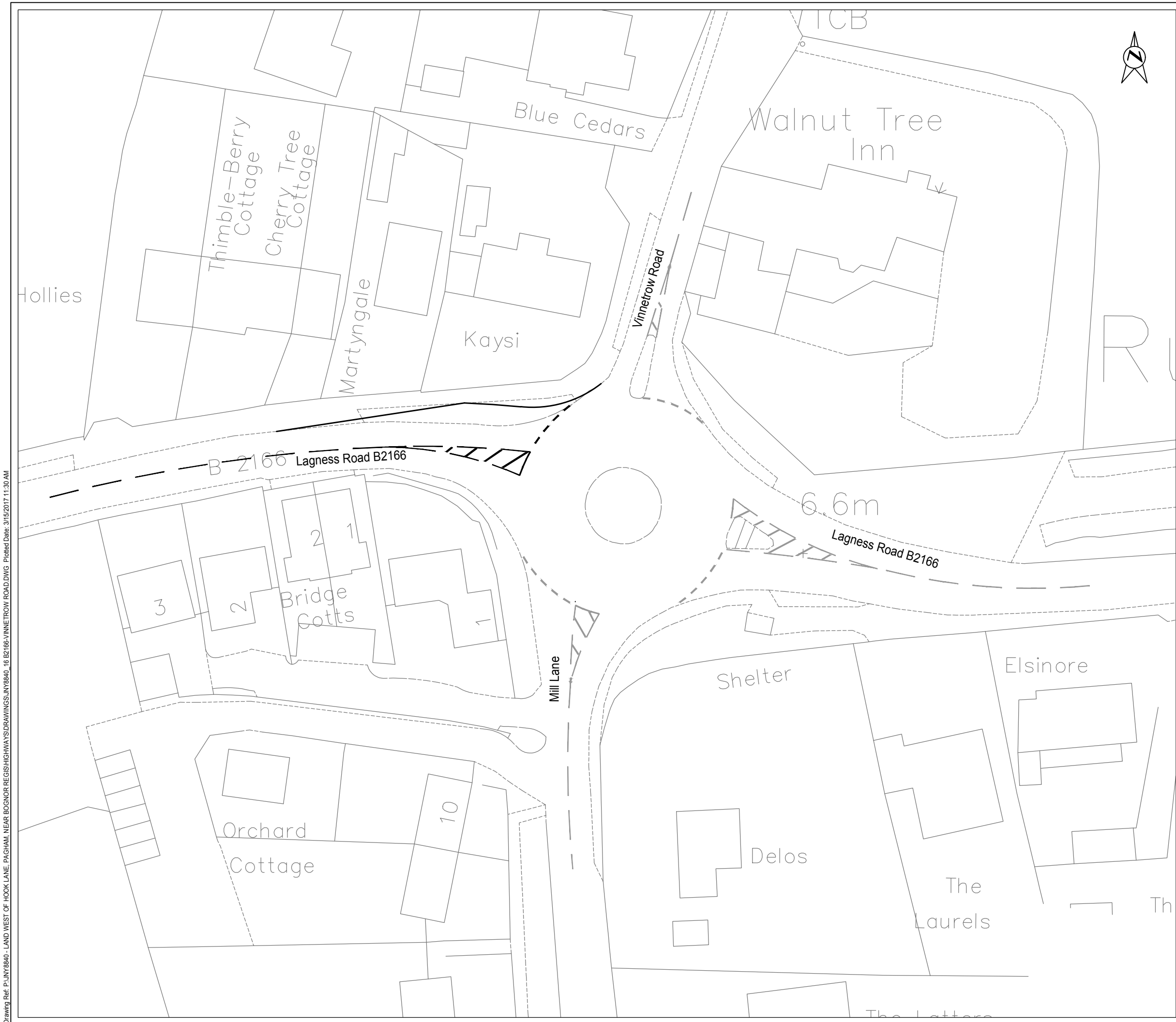
Title Proposed Improvements to the
B2166/ Vinnetrow Road junction

Status	Drawn By	Checked by
Preliminary	MRA	
Project Number	Scale @ A3	Date Created
JNY8840	1:500	15.03.17

Drawing Number	Rev
JNY8840-16	

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Drawing Ref: P-JNY8840 - LAND WEST OF HOOK LANE, PAGHAM, NEAR BOGNOR REGIS HIGHWAYS DRAWINGS JNY8840_16 B2166-VINNETROW ROAD.DWG. Plotted Date: 31/5/2017 12:07 PM



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Rev	Description	Date	Initial	Checked
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Client Hallam Land Management

Project Land West of Hook Lane
Pagham

Title Proposed Improvements to the
B2166/ Vinnetrow Road junction

Status	Drawn By	Checked by
Preliminary	MRA	
Project Number	Scale @ A3	Date Created
JNY8840	1:500	15.03.17

Drawing Number	Rev
JNY8840-16	

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Drawing Ref: P-JNY8840 - LAND WEST OF HOOK LANE, PAGHAM, NEAR BOGNOR REGIS HIGHWAYS DRAWINGS JNY8840_16 B2166-VINNETROW ROAD.DWG. Plotted Date: 31/5/2017 11:30 AM

Junctions 9															
ARCADY 9 - Roundabout Module															
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017															
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Filename: B2145 B2166.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031 SATURN No Mitigation - With Development\Proposed Improvements

Report generation date: 14/03/2017 15:49:38

»2031 Base + Committed (SATURN FLOWS), AM
»2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed (SATURN FLOWS)																
1 - B2145 North	1.0	2.0	5.19	0.49	A	80.29	F	-12 % [2 - B2166]	7.1	35.8	20.89	0.89	C	14.03	B	5 % [1 - B2145 North]
2 - B2166	71.7	138.9	151.95	1.09	F				3.6	15.8	12.33	0.79	B			
3 - untitled	6.7	35.5	24.72	0.88	C				1.8	2.6	6.76	0.64	A			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	(untitled)
Location	
Site number	
Date	05/12/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
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 segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2145 jw B2166	Standard Roundabout	80.29	F

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-12	2 - B2166

Arms

Arms

Arm	Name	Description
1	B2145 North	
2	B2166	
3	untitled	

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 - B2145 North	3.30	7.10	25.0	30.0	30.0	22.0	
2 - B2166	3.20	7.80	16.0	24.0	30.0	37.0	
3 - untitled	4.10	7.70	9.0	65.0	30.0	10.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - B2145 North	0.703	1853
2 - B2166	0.646	1668
3 - untitled	0.731	1898

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	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 - B2145 North		✓	609	100.000
2 - B2166		✓	1388	100.000
3 - untitled		✓	938	100.000

Origin-Destination Data

Demand (Veh/hr)

From	To			
		1 - B2145 North	2 - B2166	3 - untitled
1 - B2145 North		0	299	310

	2 - B2166	944	0	444
	3 - untitled	407	531	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - B2145 North	2 - B2166	3 - untitled
	1 - B2145 North	0	4	7
	2 - B2166	2	0	1
	3 - untitled	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - B2145 North	0.49	5.19	1.0	2.0	A
2 - B2166	1.09	151.95	71.7	138.9	F
3 - untitled	0.88	24.72	6.7	35.5	C

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	458	397	1488	0.308	457	0.4	3.483	A
2 - B2166	1045	232	1482	0.705	1036	2.3	7.903	A
3 - untitled	706	704	1354	0.522	702	1.1	5.483	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	547	475	1436	0.381	547	0.6	4.046	A
2 - B2166	1248	278	1451	0.860	1235	5.5	15.796	C
3 - untitled	843	840	1254	0.672	840	2.0	8.600	A

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)	LOS
1 - B2145 North	671	576	1368	0.490	669	1.0	5.140	A
2 - B2166	1528	341	1409	1.085	1387	40.7	70.853	F
3 - untitled	1033	943	1179	0.876	1017	6.0	20.507	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)	LOS
1 - B2145 North	671	583	1363	0.492	670	1.0	5.194	A
2 - B2166	1528	341	1408	1.085	1404	71.7	151.952	F
3 - untitled	1033	955	1170	0.883	1030	6.7	24.719	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)	LOS
1 - B2145 North	547	486	1429	0.383	549	0.6	4.097	A
2 - B2166	1248	279	1451	0.860	1431	26.0	126.311	F
3 - untitled	843	973	1157	0.729	859	2.8	12.649	B

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)	LOS
1 - B2145 North	458	403	1484	0.309	459	0.4	3.513	A
2 - B2166	1045	234	1482	0.705	1139	2.5	13.569	B
3 - untitled	706	775	1302	0.542	713	1.2	6.166	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.44	0.00	0.00	0.44	0.44			N/A	N/A
2 - B2166	2.32	0.18	1.31	4.55	5.85			N/A	N/A
3 - untitled	1.08	0.55	1.03	1.16	1.16			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.61	0.09	0.81	1.36	1.43			N/A	N/A
2 - B2166	5.46	0.08	1.30	15.08	22.73			N/A	N/A
3 - untitled	1.99	0.05	0.52	5.30	8.36			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.95	0.03	0.26	0.95	0.95			N/A	N/A
2 - B2166	40.74	10.51	35.79	71.96	85.30			N/A	N/A
3 - untitled	5.98	0.04	0.42	16.13	32.13			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.96	0.03	0.27	0.96	1.95			N/A	N/A
2 - B2166	71.71	23.86	65.30	119.53	138.92			N/A	N/A
3 - untitled	6.69	0.03	0.34	12.04	35.46			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.63	0.55	1.00	1.40	1.45			N/A	N/A
2 - B2166	26.00	4.99	21.88	48.41	58.50			N/A	N/A
3 - untitled	2.81	0.06	0.98	7.54	11.50			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.45	0.03	0.34	1.13	1.32			N/A	N/A
2 - B2166	2.48	0.03	0.29	2.48	9.76			N/A	N/A
3 - untitled	1.20	0.03	0.32	2.42	6.14			N/A	N/A

2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2145 jw B2166	Standard Roundabout	14.03	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	5	1 - B2145 North

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	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 - B2145 North		✓	1166	100.000
2 - B2166		✓	978	100.000
3 - untitled		✓	878	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2145 North	2 - B2166	3 - untitled
From	1 - B2145 North	0	787	379
	2 - B2166	458	0	520
	3 - untitled	394	484	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - B2145 North	2 - B2166	3 - untitled
From	1 - B2145 North	0	2	2
	2 - B2166	3	0	1
	3 - untitled	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - B2145 North	0.89	20.89	7.1	35.8	C
2 - B2166	0.79	12.33	3.6	15.8	B
3 - untitled	0.64	6.76	1.8	2.6	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)	LOS
1 - B2145 North	878	363	1566	0.560	873	1.3	5.154	A
2 - B2166	736	284	1453	0.507	732	1.0	4.967	A
3 - untitled	661	343	1619	0.408	658	0.7	3.737	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)	LOS
1 - B2145 North	1048	434	1517	0.691	1045	2.2	7.560	A
2 - B2166	879	340	1417	0.621	877	1.6	6.637	A
3 - untitled	789	411	1568	0.503	788	1.0	4.606	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)	LOS
1 - B2145 North	1284	531	1450	0.885	1266	6.6	18.058	C
2 - B2166	1077	412	1370	0.786	1069	3.5	11.681	B
3 - untitled	967	501	1501	0.644	964	1.8	6.655	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)	LOS
1 - B2145 North	1284	533	1449	0.886	1282	7.1	20.893	C
2 - B2166	1077	417	1367	0.788	1076	3.6	12.330	B
3 - untitled	967	504	1499	0.645	967	1.8	6.760	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	1048	437	1515	0.692	1067	2.3	8.357	A
2 - B2166	879	347	1412	0.623	887	1.7	6.951	A
3 - untitled	789	415	1565	0.504	792	1.0	4.678	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	878	365	1565	0.561	882	1.3	5.303	A
2 - B2166	736	287	1451	0.507	739	1.0	5.072	A
3 - untitled	661	346	1616	0.409	662	0.7	3.780	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.26	0.56	1.14	1.56	1.78			N/A	N/A
2 - B2166	1.02	0.55	1.00	1.40	1.45			N/A	N/A
3 - untitled	0.69	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	2.18	0.05	0.47	5.91	9.69			N/A	N/A
2 - B2166	1.60	0.05	0.61	4.00	6.12			N/A	N/A
3 - untitled	1.00	0.07	0.80	1.86	2.59			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	6.55	0.04	0.41	17.35	35.55			N/A	N/A
2 - B2166	3.46	0.03	0.30	3.52	15.79			N/A	N/A
3 - untitled	1.77	0.03	0.27	1.77	1.77			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	7.07	0.03	0.33	10.70	35.84			N/A	N/A
2 - B2166	3.59	0.03	0.28	3.59	7.96			N/A	N/A

3 - untitled	1.80	0.03	0.27	1.80	1.80			N/A	N/A
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17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	2.31	0.04	0.44	6.33	10.90			N/A	N/A
2 - B2166	1.68	0.06	0.72	4.19	6.29			N/A	N/A
3 - untitled	1.03	0.13	1.00	1.57	1.87			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.29	0.03	0.32	2.62	6.67			N/A	N/A
2 - B2166	1.04	0.04	0.38	2.62	4.63			N/A	N/A
3 - untitled	0.70	0.05	0.59	1.48	1.53			N/A	N/A

Junctions 9
ARCADY 9 - Roundabout Module
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017
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Filename: B2145 B2166.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031 SATURN With Mitigation - With Development\Proposed Improvements

Report generation date: 14/03/2017 15:47:27

»2031 Base + Committed (SATURN FLOWS), AM
»2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2031 Base + Committed (SATURN FLOWS)															
1 - B2145 North	1.5	1.8	6.62	0.60	A	30.26	D	-3 % [2 - B2166]	24.9	91.8	64.21	1.00	F	31.95	D	-5 % [1 - B2145 North]
2 - B2166	18.0	79.6	52.20	0.97	F				1.9	2.6	8.18	0.65	A			
3 - untitled	6.7	34.9	22.89	0.88	C				1.5	1.9	5.58	0.60	A			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	(untitled)
Location	
Site number	
Date	05/12/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
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 segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2145 jw B2166	Standard Roundabout	30.26	D

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-3	2 - B2166

Arms

Arms

Arm	Name	Description
1	B2145 North	
2	B2166	
3	untitled	

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 - B2145 North	3.30	7.10	25.0	30.0	30.0	22.0	
2 - B2166	3.20	7.80	16.0	24.0	30.0	37.0	
3 - untitled	4.10	7.70	9.0	65.0	30.0	10.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - B2145 North	0.703	1853
2 - B2166	0.646	1668
3 - untitled	0.731	1898

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	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 - B2145 North		✓	746	100.000
2 - B2166		✓	1175	100.000
3 - untitled		✓	1014	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2145 North	2 - B2166	3 - untitled

From	1 - B2145 North	0	328	418
	2 - B2166	759	0	416
	3 - untitled	487	527	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - B2145 North	2 - B2166	3 - untitled
	1 - B2145 North	0	4	7
	2 - B2166	2	0	1
	3 - untitled	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - B2145 North	0.60	6.62	1.5	1.8	A
2 - B2166	0.97	52.20	18.0	79.6	F
3 - untitled	0.88	22.89	6.7	34.9	C

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	562	394	1488	0.377	559	0.6	3.865	A
2 - B2166	885	313	1428	0.619	878	1.6	6.477	A
3 - untitled	763	567	1454	0.525	759	1.1	5.147	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	671	472	1436	0.467	670	0.9	4.689	A
2 - B2166	1056	375	1386	0.762	1050	3.1	10.549	B
3 - untitled	912	679	1372	0.664	908	1.9	7.699	A

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)	LOS
1 - B2145 North	821	572	1369	0.600	819	1.5	6.516	A
2 - B2166	1294	459	1329	0.973	1250	14.0	34.451	D
3 - untitled	1116	808	1278	0.874	1100	5.9	18.815	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)	LOS
1 - B2145 North	821	579	1364	0.602	821	1.5	6.625	A
2 - B2166	1294	460	1328	0.974	1278	18.0	52.197	F
3 - untitled	1116	825	1265	0.883	1113	6.7	22.893	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)	LOS
1 - B2145 North	671	483	1429	0.469	673	0.9	4.781	A
2 - B2166	1056	377	1385	0.763	1115	3.4	15.972	C
3 - untitled	912	720	1342	0.679	930	2.2	9.092	A

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)	LOS
1 - B2145 North	562	399	1485	0.378	563	0.6	3.908	A
2 - B2166	885	315	1427	0.620	892	1.7	6.814	A
3 - untitled	763	576	1448	0.527	768	1.1	5.323	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.60	0.55	1.00	1.40	1.45			N/A	N/A
2 - B2166	1.60	0.52	1.46	2.29	2.76			N/A	N/A
3 - untitled	1.09	0.55	1.03	1.16	1.16			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.87	0.08	0.83	1.35	1.77			N/A	N/A
2 - B2166	3.06	0.05	0.66	8.52	13.71			N/A	N/A
3 - untitled	1.93	0.05	0.48	5.16	8.34			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.47	0.03	0.26	1.47	1.47			N/A	N/A
2 - B2166	13.96	0.16	5.63	37.57	53.87			N/A	N/A
3 - untitled	5.93	0.04	0.40	15.50	32.15			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.50	0.03	0.27	1.50	1.50			N/A	N/A
2 - B2166	18.00	0.10	4.34	51.92	79.65			N/A	N/A
3 - untitled	6.70	0.03	0.33	11.19	34.90			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.89	0.16	0.95	1.40	1.40			N/A	N/A
2 - B2166	3.40	0.04	0.40	9.20	17.65			N/A	N/A
3 - untitled	2.18	0.05	0.46	5.92	9.81			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	0.61	0.06	0.59	1.36	1.46			N/A	N/A
2 - B2166	1.66	0.03	0.30	1.85	7.73			N/A	N/A
3 - untitled	1.13	0.03	0.32	2.19	5.75			N/A	N/A

2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2145 jw B2166	Standard Roundabout	31.95	D

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-5	1 - B2145 North

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	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 - B2145 North		✓	1275	100.000
2 - B2166		✓	757	100.000
3 - untitled		✓	886	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1 - B2145 North	2 - B2166	3 - untitled
From	1 - B2145 North	0	752	523
	2 - B2166	313	0	444
	3 - untitled	349	537	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - B2145 North	2 - B2166	3 - untitled
From	1 - B2145 North	0	2	2
	2 - B2166	3	0	1
	3 - untitled	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - B2145 North	1.00	64.21	24.9	91.8	F
2 - B2166	0.65	8.18	1.9	2.6	A
3 - untitled	0.60	5.58	1.5	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)	LOS
1 - B2145 North	960	403	1539	0.624	953	1.6	6.083	A
2 - B2166	570	391	1385	0.411	567	0.7	4.386	A
3 - untitled	667	234	1702	0.392	664	0.6	3.461	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)	LOS
1 - B2145 North	1146	482	1484	0.772	1140	3.2	10.261	B
2 - B2166	681	468	1336	0.510	679	1.0	5.474	A
3 - untitled	796	281	1667	0.478	795	0.9	4.123	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)	LOS
1 - B2145 North	1404	590	1410	0.996	1345	17.8	38.605	E
2 - B2166	833	552	1281	0.651	830	1.8	7.933	A
3 - untitled	976	343	1621	0.602	973	1.5	5.537	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)	LOS
1 - B2145 North	1404	591	1409	0.996	1376	24.9	64.212	F
2 - B2166	833	564	1273	0.655	833	1.9	8.182	A
3 - untitled	976	345	1620	0.602	975	1.5	5.585	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	1146	484	1483	0.773	1231	3.6	18.817	C
2 - B2166	681	505	1311	0.519	684	1.1	5.765	A
3 - untitled	796	283	1666	0.478	799	0.9	4.163	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - B2145 North	960	405	1537	0.624	968	1.7	6.400	A
2 - B2166	570	397	1381	0.413	571	0.7	4.453	A
3 - untitled	667	236	1701	0.392	668	0.6	3.489	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.63	0.35	1.45	2.56	2.98			N/A	N/A
2 - B2166	0.69	0.55	1.00	1.40	1.45			N/A	N/A
3 - untitled	0.64	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	3.23	0.05	0.55	9.05	14.85			N/A	N/A
2 - B2166	1.03	0.07	0.85	1.86	2.56			N/A	N/A
3 - untitled	0.91	0.07	0.82	1.54	1.92			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	17.84	0.36	9.90	44.28	60.20			N/A	N/A
2 - B2166	1.82	0.03	0.27	1.82	2.08			N/A	N/A
3 - untitled	1.49	0.03	0.26	1.49	1.49			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	17.84	0.36	9.90	44.28	60.20			N/A	N/A
2 - B2166	1.82	0.03	0.27	1.82	2.08			N/A	N/A
3 - untitled	1.49	0.03	0.26	1.49	1.49			N/A	N/A

1 - B2145 North	24.91	0.27	11.81	65.45	91.77			N/A	N/A
2 - B2166	1.87	0.03	0.27	1.87	1.87			N/A	N/A
3 - untitled	1.50	0.03	0.26	1.50	1.50			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	3.62	0.04	0.40	9.72	19.02			N/A	N/A
2 - B2166	1.09	0.11	1.01	1.76	2.13			N/A	N/A
3 - untitled	0.92	0.21	0.98	1.39	1.39			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - B2145 North	1.69	0.03	0.29	1.69	7.32			N/A	N/A
2 - B2166	0.71	0.05	0.51	1.19	1.74			N/A	N/A
3 - untitled	0.65	0.06	0.69	1.37	1.46			N/A	N/A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.1.4646 []
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Filename: Grosvenor Avenue and Rose Green Road N-W Mini Roundabout.j9
Path: \\eur-mpfs-02\tr_projects\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picadyl\Revised Traffic Flows\20170207_2031 Base and Committed and ALL Development
Report generation date: 13/03/2017 11:40:43

»2031 Base + Committed + ALL Development, AM
»2031 Base + Committed + ALL Development, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2031 Base + Committed + ALL Development							
1 - Rose Green Road N	2.2	17.33	0.70	C	4.7	32.50	0.84	D
2 - Grosvenor Gardens	0.7	8.88	0.42	A	0.8	9.49	0.44	A
3 - Rose Green Road W	3.7	20.41	0.80	C	3.5	19.57	0.79	C

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	06/02/2017
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	EUR\ben.dance
Description	

Units

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

Analysis Options

Mini-roundabout model	Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9			0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 Base + Committed + ALL Development	AM	ONE HOUR	08:00	09:30	15
D2	2031 Base + Committed + ALL Development	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed + ALL Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	17.11	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Name	Description
1	Rose Green Road N	
2	Grosvenor Gardens	
3	Rose Green Road W	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1 - Rose Green Road N	4.27	4.00	4.34	0.5	16.50	15.00	0.0	
2 - Grosvenor Gardens	4.00	4.00	4.00	0.0	16.77	16.10	0.0	
3 - Rose Green Road W	4.30	4.00	4.34	0.5	14.17	11.10	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Rose Green Road N	0.657	896
2 - Grosvenor Gardens	0.671	982
3 - Rose Green Road W	0.636	863

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 Base + Committed + ALL Development	AM	ONE HOUR	08:00	09:30	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 (PCU/hr)	Scaling Factor (%)
1 - Rose Green Road N		✓	428	100.000
2 - Grosvenor Gardens		✓	262	100.000
3 - Rose Green Road W		✓	624	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
		1 - Rose Green Road N	2 - Grosvenor Gardens	3 - Rose Green Road W
1 - Rose Green Road N		0	38	390
2 - Grosvenor Gardens		3	0	259
3 - Rose Green Road W		323	301	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1 - Rose Green Road N	2 - Grosvenor Gardens	3 - Rose Green Road W
1 - Rose Green Road N		0	0	0
2 - Grosvenor Gardens		0	0	0
3 - Rose Green Road W		0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Rose Green Road N	0.70	17.33	2.2	C
2 - Grosvenor Gardens	0.42	8.88	0.7	A
3 - Rose Green Road W	0.80	20.41	3.7	C

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Rose Green Road N	322	224	748	0.431	319	0.7	8.338	A
2 - Grosvenor Gardens	197	291	786	0.251	196	0.3	6.082	A
3 - Rose Green Road W	470	2	862	0.545	465	1.2	8.973	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Rose Green Road N	385	269	719	0.535	383	1.1	10.686	B
2 - Grosvenor Gardens	236	349	747	0.315	235	0.5	7.019	A
3 - Rose Green Road W	561	3	861	0.651	558	1.8	11.776	B

08:30 - 08:45

Arm	Total Demand	Circulating	Capacity	RFC	Throughput	End queue	Delay (s)	LOS
-----	--------------	-------------	----------	-----	------------	-----------	-----------	-----

	(PCU/hr)	flow (PCU/hr)	(PCU/hr)		(PCU/hr)	(PCU)		
1 - Rose Green Road N	471	328	680	0.693	467	2.1	16.599	C
2 - Grosvenor Gardens	288	426	696	0.414	288	0.7	8.792	A
3 - Rose Green Road W	687	3	861	0.798	680	3.6	19.122	C

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Rose Green Road N	471	331	678	0.695	471	2.2	17.327	C
2 - Grosvenor Gardens	288	429	694	0.416	288	0.7	8.882	A
3 - Rose Green Road W	687	3	861	0.798	686	3.7	20.406	C

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Rose Green Road N	385	274	715	0.538	389	1.2	11.153	B
2 - Grosvenor Gardens	236	354	744	0.317	236	0.5	7.109	A
3 - Rose Green Road W	561	3	861	0.651	568	1.9	12.560	B

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Rose Green Road N	322	228	746	0.432	324	0.8	8.569	A
2 - Grosvenor Gardens	197	295	784	0.252	198	0.3	6.149	A
3 - Rose Green Road W	470	2	862	0.545	473	1.2	9.319	A

2031 Base + Committed + ALL Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	22.28	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2031 Base + Committed + ALL Development	PM	ONE HOUR	17:00	18:30	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 (PCU/hr)	Scaling Factor (%)
1 - Rose Green Road N		✓	504	100.000
2 - Grosvenor Gardens		✓	272	100.000
3 - Rose Green Road W		✓	615	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Rose Green Road N	2 - Grosvenor Gardens	3 - Rose Green Road W
From	1 - Rose Green Road N	0	93	411
	2 - Grosvenor Gardens	6	0	266
	3 - Rose Green Road W	290	325	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1 - Rose Green Road N	2 - Grosvenor Gardens	3 - Rose Green Road W
From	1 - Rose Green Road N	0	0	0
	2 - Grosvenor Gardens	0	0	0
	3 - Rose Green Road W	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
1 - Rose Green Road N	0.84	32.50	4.7	D
2 - Grosvenor Gardens	0.44	9.49	0.8	A
3 - Rose Green Road W	0.79	19.57	3.5	C

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Rose Green Road N	379	242	736	0.515	375	1.0	9.861	A
2 - Grosvenor Gardens	205	306	776	0.264	203	0.4	6.268	A
3 - Rose Green Road W	463	4	860	0.538	458	1.1	8.861	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Rose Green Road N	453	291	704	0.643	450	1.7	14.013	B
2 - Grosvenor Gardens	245	367	735	0.333	244	0.5	7.321	A
3 - Rose Green Road W	553	5	860	0.643	550	1.7	11.545	B

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Rose Green Road N	555	354	663	0.837	545	4.3	28.226	D
2 - Grosvenor Gardens	299	444	684	0.438	298	0.8	9.316	A
3 - Rose Green Road W	677	7	859	0.788	670	3.4	18.445	C

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Rose Green Road N	555	358	661	0.840	553	4.7	32.504	D
2 - Grosvenor Gardens	299	451	679	0.441	299	0.8	9.485	A
3 - Rose Green Road W	677	7	859	0.788	677	3.5	19.568	C

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Rose Green Road N	453	296	701	0.646	464	1.9	15.856	C
2 - Grosvenor Gardens	245	379	728	0.336	246	0.5	7.485	A
3 - Rose Green Road W	553	5	860	0.643	560	1.9	12.250	B

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
1 - Rose Green Road N	379	246	734	0.517	383	1.1	10.346	B
2 - Grosvenor Gardens	205	312	772	0.265	205	0.4	6.359	A
3 - Rose Green Road W	463	5	860	0.538	466	1.2	9.183	A

Junctions 9																
ARCADY 9 - Roundabout Module																
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017																
For sales and distribution information, program advice and maintenance, contact TRL: Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk																
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution																

Filename: Vinnetrow Road B2166.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031

SATURN No Mitigation - With Development\Proposed Improvements

Report generation date: 15/03/2017 09:21:55

»2031 Base + Committed (SATURN FLOWS), AM

»2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed (SATURN FLOWS)																
1 - Vinnetrow Road	0.6	2.9	7.54	0.39	A	8.17	A	20 % [2 - B2166 E]	2.3	10.4	23.51	0.70	C	15.96	C	5 % [1 - Vinnetrow Road]
2 - B2166 E	3.1	11.5	10.10	0.76	B				0.8	2.4	4.08	0.43	A			
3 - Mill Lane	0.2	0.5	7.02	0.13	A				0.1	0.5	4.11	0.06	A			
4 - B2166 W	0.9	1.6	5.26	0.49	A				6.7	34.1	20.82	0.88	C			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	(untitled)
Location	
Site number	
Date	10/11/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
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 segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	8.17	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	20	2 - B2166 E

Arms

Arms

Arm	Name	Description
1	Vinnetrow Road	
2	B2166 E	
3	Mill Lane	
4	B2166 W	

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 - Vinnetrow Road	3.00	5.50	3.0	17.0	30.0	24.0	
2 - B2166 E	3.50	6.00	25.0	30.0	30.0	25.0	
3 - Mill Lane	3.00	6.00	12.0	20.0	30.0	23.0	
4 - B2166 W	3.00	6.00	17.0	15.0	30.0	32.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Vinnetrow Road	0.545	1129
2 - B2166 E	0.666	1689
3 - Mill Lane	0.614	1448
4 - B2166 W	0.601	1455

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	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 - Vinnetrow Road		✓	275	100.000
2 - B2166 E		✓	1040	100.000
3 - Mill Lane		✓	72	100.000
4 - B2166 W		✓	587	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	43	7	225
	2 - B2166 E	87	0	5	948
	3 - Mill Lane	19	12	0	41
	4 - B2166 W	60	511	16	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	3	0	2
	2 - B2166 E	3	0	0	0
	3 - Mill Lane	0	0	0	0
	4 - B2166 W	8	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.39	7.54	0.6	2.9	A
2 - B2166 E	0.76	10.10	3.1	11.5	B
3 - Mill Lane	0.13	7.02	0.2	0.5	A
4 - B2166 W	0.49	5.26	0.9	1.6	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	207	404	884	0.234	206	0.3	5.297	A
2 - B2166 E	783	186	1560	0.502	779	1.0	4.590	A
3 - Mill Lane	54	944	866	0.063	54	0.1	4.433	A
4 - B2166 W	442	88	1355	0.326	440	0.5	3.928	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	247	484	840	0.294	247	0.4	6.062	A
2 - B2166 E	935	223	1535	0.609	933	1.5	5.960	A
3 - Mill Lane	65	1130	751	0.086	65	0.1	5.248	A
4 - B2166 W	528	106	1344	0.393	527	0.6	4.401	A

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)	LOS
1 - Vinnetrow Road	303	592	781	0.388	302	0.6	7.503	A
2 - B2166 E	1145	272	1501	0.763	1139	3.1	9.778	A
3 - Mill Lane	79	1380	596	0.133	79	0.2	6.959	A
4 - B2166 W	646	129	1330	0.486	645	0.9	5.246	A

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)	LOS
1 - Vinnetrow Road	303	593	780	0.388	303	0.6	7.539	A
2 - B2166 E	1145	273	1500	0.763	1145	3.1	10.102	B
3 - Mill Lane	79	1387	592	0.134	79	0.2	7.020	A
4 - B2166 W	646	130	1330	0.486	646	0.9	5.265	A

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)	LOS
1 - Vinnetrow Road	247	486	839	0.295	248	0.4	6.095	A
2 - B2166 E	935	224	1534	0.610	941	1.6	6.136	A
3 - Mill Lane	65	1140	745	0.087	65	0.1	5.298	A
4 - B2166 W	528	107	1344	0.393	529	0.7	4.425	A

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)	LOS
1 - Vinnetrow Road	207	406	883	0.235	207	0.3	5.333	A
2 - B2166 E	783	187	1559	0.502	785	1.0	4.668	A
3 - Mill Lane	54	951	861	0.063	54	0.1	4.464	A
4 - B2166 W	442	89	1354	0.326	443	0.5	3.953	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.30	0.00	0.00	0.30	0.30			N/A	N/A
2 - B2166 E	1.00	0.55	1.00	1.40	1.45			N/A	N/A
3 - Mill Lane	0.07	0.00	0.00	0.07	0.07			N/A	N/A
4 - B2166 W	0.48	0.00	0.00	0.48	0.48			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.41	0.00	0.00	0.41	0.41			N/A	N/A
2 - B2166 E	1.53	0.05	0.61	3.81	5.77			N/A	N/A
3 - Mill Lane	0.09	0.00	0.00	0.09	0.09			N/A	N/A
4 - B2166 W	0.64	0.11	0.86	1.37	1.44			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.63	0.03	0.26	0.63	0.63			N/A	N/A
2 - B2166 E	3.08	0.03	0.29	3.08	11.51			N/A	N/A
3 - Mill Lane	0.15	0.03	0.26	0.47	0.49			N/A	N/A
4 - B2166 W	0.93	0.03	0.26	0.93	0.93			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.63	0.03	0.29	1.27	2.87			N/A	N/A
2 - B2166 E	3.15	0.03	0.27	3.15	4.01			N/A	N/A
3 - Mill Lane	0.15	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	0.94	0.03	0.27	0.94	1.64			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.42	0.00	0.00	0.42	0.42			N/A	N/A
2 - B2166 E	1.59	0.06	0.88	3.74	5.40			N/A	N/A
3 - Mill Lane	0.10	0.00	0.00	0.10	0.10			N/A	N/A
4 - B2166 W	0.65	0.55	1.00	1.40	1.45			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.31	0.00	0.00	0.31	0.31			N/A	N/A
2 - B2166 E	1.02	0.04	0.41	2.52	4.08			N/A	N/A
3 - Mill Lane	0.07	0.00	0.00	0.07	0.07			N/A	N/A
4 - B2166 W	0.49	0.04	0.43	1.26	1.38			N/A	N/A

2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	15.96	C

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	5	1 - Vinnetrow Road

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	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 - Vinnetrow Road		✓	327	100.000
2 - B2166 E		✓	606	100.000
3 - Mill Lane		✓	49	100.000
4 - B2166 W		✓	1111	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	194	14	119
	2 - B2166 E	46	0	8	552
	3 - Mill Lane	6	19	0	24
	4 - B2166 W	113	984	14	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	0	0	1
	2 - B2166 E	3	0	0	2
	3 - Mill Lane	0	7	0	0
	4 - B2166 W	3	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.70	23.51	2.3	10.4	C
2 - B2166 E	0.43	4.08	0.8	2.4	A
3 - Mill Lane	0.06	4.11	0.1	0.5	A
4 - B2166 W	0.88	20.82	6.7	34.1	C

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)	LOS
1 - Vinnetrow Road	246	760	708	0.348	244	0.5	7.730	A
2 - B2166 E	456	110	1583	0.288	455	0.4	3.186	A
3 - Mill Lane	37	537	1083	0.034	37	0.0	3.441	A
4 - B2166 W	836	53	1405	0.595	831	1.4	6.203	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)	LOS
1 - Vinnetrow Road	294	911	625	0.470	293	0.9	10.778	B
2 - B2166 E	545	132	1569	0.347	544	0.5	3.511	A
3 - Mill Lane	44	644	1018	0.043	44	0.0	3.694	A
4 - B2166 W	999	64	1399	0.714	995	2.4	8.824	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)	LOS
1 - Vinnetrow Road	360	1106	518	0.695	355	2.1	21.447	C
2 - B2166 E	667	160	1550	0.430	666	0.7	4.067	A
3 - Mill Lane	54	787	931	0.058	54	0.1	4.104	A
4 - B2166 W	1223	78	1390	0.880	1208	6.3	18.350	C

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)	LOS
1 - Vinnetrow Road	360	1118	511	0.704	359	2.3	23.506	C
2 - B2166 E	667	162	1549	0.431	667	0.8	4.081	A
3 - Mill Lane	54	789	929	0.058	54	0.1	4.111	A
4 - B2166 W	1223	78	1390	0.880	1221	6.7	20.823	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	294	929	615	0.478	299	0.9	11.578	B
2 - B2166 E	545	135	1567	0.348	546	0.5	3.529	A
3 - Mill Lane	44	647	1016	0.043	44	0.0	3.707	A
4 - B2166 W	999	64	1399	0.714	1015	2.6	9.766	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	246	770	703	0.350	248	0.5	7.939	A
2 - B2166 E	456	111	1582	0.288	457	0.4	3.199	A
3 - Mill Lane	37	541	1081	0.034	37	0.0	3.448	A
4 - B2166 W	836	54	1405	0.595	841	1.5	6.427	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.53	0.53	1.00	1.40	1.45			N/A	N/A
2 - B2166 E	0.40	0.00	0.00	0.40	0.40			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	1.45	0.58	1.35	1.77	1.90			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.87	0.08	0.84	1.34	1.76			N/A	N/A
2 - B2166 E	0.53	0.53	1.00	1.40	1.45			N/A	N/A
3 - Mill Lane	0.05	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	2.42	0.05	0.67	6.54	10.26			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	2.12	0.03	0.31	2.96	10.45			N/A	N/A
2 - B2166 E	0.75	0.03	0.25	0.75	0.75			N/A	N/A
3 - Mill Lane	0.06	0.03	0.26	0.47	0.49			N/A	N/A
4 - B2166 W	6.28	0.04	0.40	16.38	34.11			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	2.26	0.03	0.30	2.26	10.27			N/A	N/A
2 - B2166 E	0.75	0.03	0.28	0.75	2.35			N/A	N/A
3 - Mill Lane	0.06	0.00	0.00	0.06	0.06			N/A	N/A
4 - B2166 W	6.72	0.03	0.32	9.36	33.28			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.94	0.05	0.53	1.92	2.83			N/A	N/A
2 - B2166 E	0.54	0.54	1.00	1.40	1.45			N/A	N/A
3 - Mill Lane	0.05	0.00	0.00	0.05	0.05			N/A	N/A
4 - B2166 W	2.58	0.04	0.45	7.13	12.29			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.55	0.03	0.35	1.13	1.98			N/A	N/A
2 - B2166 E	0.41	0.00	0.00	0.41	0.41			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	1.50	0.03	0.33	3.32	7.71			N/A	N/A

Junctions 9															
ARCADY 9 - Roundabout Module															
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017															
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The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution															

Filename: Vinnetrow Road B2166.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\2031

SATURN With Mitigation - With Development\Proposed Improvements

Report generation date: 15/03/2017 09:24:05

»2031 Base + Committed (SATURN FLOWS), AM

»2031 Base + Committed (SATURN FLOWS), PM

Summary of junction performance

	AM								PM							
	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed (SATURN FLOWS)																
1 - Vinnetrow Road	0.4	1.0	6.36	0.26	A	7.17	A	29 % [2 - B2166 E]	0.7	3.1	11.46	0.40	B	13.70	B	8 % [4 - B2166 W]
2 - B2166 E	2.6	5.8	8.11	0.72	A				0.5	2.1	3.26	0.32	A			
3 - Mill Lane	0.1	0.5	6.01	0.12	A				0.1	0.5	3.47	0.05	A			
4 - B2166 W	1.1	1.5	6.00	0.53	A				6.1	31.3	19.19	0.87	C			

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	(untitled)
Location	
Site number	
Date	10/11/2016
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-MD9GBJC\Fiona
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 segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	15
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Base + Committed (SATURN FLOWS), AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	7.17	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	29	2 - B2166 E

Arms

Arms

Arm	Name	Description
1	Vinnetrow Road	
2	B2166 E	
3	Mill Lane	
4	B2166 W	

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 - Vinnetrow Road	3.00	5.50	3.0	17.0	30.0	24.0	
2 - B2166 E	3.50	6.00	25.0	30.0	30.0	25.0	
3 - Mill Lane	3.00	6.00	12.0	20.0	30.0	23.0	
4 - B2166 W	3.00	6.00	17.0	15.0	30.0	32.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Vinnetrow Road	0.545	1129
2 - B2166 E	0.666	1689
3 - Mill Lane	0.614	1448
4 - B2166 W	0.601	1455

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 Base + Committed (SATURN FLOWS)	AM	ONE HOUR	07:30	09:00	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 - Vinnetrow Road		✓	184	100.000
2 - B2166 E		✓	1051	100.000
3 - Mill Lane		✓	72	100.000
4 - B2166 W		✓	623	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	90	7	87
	2 - B2166 E	151	0	5	895
	3 - Mill Lane	19	12	0	41
	4 - B2166 W	81	526	16	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	3	0	2
	2 - B2166 E	3	0	0	0
	3 - Mill Lane	0	0	0	0
	4 - B2166 W	8	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.26	6.36	0.4	1.0	A
2 - B2166 E	0.72	8.11	2.6	5.8	A
3 - Mill Lane	0.12	6.01	0.1	0.5	A
4 - B2166 W	0.53	6.00	1.1	1.5	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	139	415	875	0.158	138	0.2	4.875	A
2 - B2166 E	791	82	1627	0.486	787	0.9	4.272	A
3 - Mill Lane	54	849	924	0.059	54	0.1	4.135	A
4 - B2166 W	469	136	1324	0.354	467	0.5	4.190	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	165	497	830	0.199	165	0.2	5.410	A
2 - B2166 E	945	99	1616	0.585	943	1.4	5.339	A
3 - Mill Lane	65	1017	821	0.079	65	0.1	4.761	A
4 - B2166 W	560	163	1308	0.428	559	0.7	4.803	A

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)	LOS
1 - Vinnetrow Road	203	609	770	0.263	202	0.4	6.341	A
2 - B2166 E	1157	121	1601	0.723	1153	2.5	7.953	A
3 - Mill Lane	79	1243	681	0.116	79	0.1	5.977	A
4 - B2166 W	686	200	1286	0.533	684	1.1	5.963	A

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)	LOS
1 - Vinnetrow Road	203	610	769	0.264	203	0.4	6.356	A
2 - B2166 E	1157	121	1601	0.723	1157	2.6	8.110	A
3 - Mill Lane	79	1247	678	0.117	79	0.1	6.008	A
4 - B2166 W	686	200	1286	0.533	686	1.1	5.998	A

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)	LOS
1 - Vinnetrow Road	165	499	829	0.199	166	0.3	5.428	A
2 - B2166 E	945	99	1615	0.585	949	1.4	5.441	A
3 - Mill Lane	65	1023	817	0.079	65	0.1	4.791	A
4 - B2166 W	560	164	1307	0.428	562	0.8	4.836	A

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)	LOS
1 - Vinnetrow Road	139	418	874	0.159	139	0.2	4.897	A
2 - B2166 E	791	83	1626	0.487	793	1.0	4.332	A
3 - Mill Lane	54	855	921	0.059	54	0.1	4.156	A
4 - B2166 W	469	137	1323	0.354	470	0.6	4.220	A

Queue Variation Results for each time segment

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.19	0.00	0.00	0.19	0.19			N/A	N/A
2 - B2166 E	0.94	0.55	1.00	1.40	1.45			N/A	N/A
3 - Mill Lane	0.06	0.00	0.00	0.06	0.06			N/A	N/A
4 - B2166 W	0.54	0.54	1.00	1.40	1.45			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.25	0.00	0.00	0.25	0.25			N/A	N/A
2 - B2166 E	1.39	0.06	0.69	3.29	4.84			N/A	N/A
3 - Mill Lane	0.09	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	0.74	0.11	0.86	1.40	1.46			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.35	0.03	0.25	0.46	0.48			N/A	N/A
2 - B2166 E	2.53	0.03	0.28	2.53	5.80			N/A	N/A
3 - Mill Lane	0.13	0.03	0.26	0.47	0.49			N/A	N/A
4 - B2166 W	1.13	0.03	0.26	1.13	1.13			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.36	0.03	0.32	1.03	1.03			N/A	N/A
2 - B2166 E	2.57	0.03	0.27	2.57	2.57			N/A	N/A
3 - Mill Lane	0.13	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	1.13	0.03	0.27	1.13	1.17			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.25	0.00	0.00	0.25	0.25			N/A	N/A
2 - B2166 E	1.43	0.08	1.03	2.92	3.97			N/A	N/A
3 - Mill Lane	0.09	0.00	0.00	0.09	0.09			N/A	N/A
4 - B2166 W	0.76	0.24	0.94	1.39	1.45			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.19	0.00	0.00	0.19	0.19			N/A	N/A
2 - B2166 E	0.96	0.05	0.47	2.09	3.16			N/A	N/A
3 - Mill Lane	0.06	0.00	0.00	0.06	0.06			N/A	N/A
4 - B2166 W	0.55	0.06	0.61	1.32	1.41			N/A	N/A

2031 Base + Committed (SATURN FLOWS), PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction Type	Junction Delay (s)	Junction LOS
1	B2166 jw Vinnetrow Road	Standard Roundabout	13.70	B

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	8	4 - B2166 W

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2031 Base + Committed (SATURN FLOWS)	PM	ONE HOUR	16:30	18:00	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 - Vinnetrow Road		✓	188	100.000
2 - B2166 E		✓	481	100.000
3 - Mill Lane		✓	49	100.000
4 - B2166 W		✓	1090	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	172	14	2
	2 - B2166 E	57	0	8	416
	3 - Mill Lane	6	19	0	24
	4 - B2166 W	105	971	14	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1 - Vinnetrow Road	2 - B2166 E	3 - Mill Lane	4 - B2166 W
From	1 - Vinnetrow Road	0	0	0	1
	2 - B2166 E	3	0	0	2
	3 - Mill Lane	0	7	0	0
	4 - B2166 W	3	1	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1 - Vinnetrow Road	0.40	11.46	0.7	3.1	B
2 - B2166 E	0.32	3.26	0.5	2.1	A
3 - Mill Lane	0.05	3.47	0.1	0.5	A
4 - B2166 W	0.87	19.19	6.1	31.3	C

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)	LOS
1 - Vinnetrow Road	142	751	716	0.198	141	0.2	6.251	A
2 - B2166 E	362	22	1640	0.221	361	0.3	2.811	A
3 - Mill Lane	37	356	1192	0.031	37	0.0	3.114	A
4 - B2166 W	821	62	1400	0.586	815	1.4	6.093	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)	LOS
1 - Vinnetrow Road	169	899	634	0.267	169	0.4	7.730	A
2 - B2166 E	432	27	1637	0.264	432	0.4	2.987	A
3 - Mill Lane	44	427	1150	0.038	44	0.0	3.255	A
4 - B2166 W	980	74	1393	0.703	976	2.3	8.562	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)	LOS
1 - Vinnetrow Road	207	1093	527	0.393	206	0.6	11.169	B
2 - B2166 E	530	33	1633	0.324	529	0.5	3.257	A
3 - Mill Lane	54	523	1091	0.049	54	0.1	3.469	A
4 - B2166 W	1200	90	1383	0.868	1186	5.8	17.210	C

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)	LOS
1 - Vinnetrow Road	207	1104	521	0.397	207	0.7	11.460	B
2 - B2166 E	530	33	1633	0.324	530	0.5	3.260	A
3 - Mill Lane	54	523	1091	0.049	54	0.1	3.470	A
4 - B2166 W	1200	90	1383	0.868	1199	6.1	19.189	C

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	169	916	625	0.271	170	0.4	7.938	A
2 - B2166 E	432	27	1637	0.264	433	0.4	2.990	A
3 - Mill Lane	44	427	1149	0.038	44	0.0	3.259	A
4 - B2166 W	980	74	1393	0.703	995	2.4	9.349	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1 - Vinnetrow Road	142	760	711	0.199	142	0.3	6.335	A
2 - B2166 E	362	23	1640	0.221	362	0.3	2.817	A
3 - Mill Lane	37	358	1192	0.031	37	0.0	3.117	A
4 - B2166 W	821	62	1400	0.586	825	1.4	6.298	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.24	0.00	0.00	0.24	0.24			N/A	N/A
2 - B2166 E	0.28	0.00	0.00	0.28	0.28			N/A	N/A
3 - Mill Lane	0.03	0.00	0.00	0.03	0.03			N/A	N/A
4 - B2166 W	1.39	0.58	1.26	1.71	1.86			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2 - B2166 E	0.36	0.00	0.00	0.36	0.36			N/A	N/A
3 - Mill Lane	0.04	0.03	0.25	0.45	0.48			N/A	N/A
4 - B2166 W	2.30	0.05	0.66	6.18	9.69			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.63	0.03	0.26	0.63	0.63			N/A	N/A
2 - B2166 E	0.48	0.03	0.25	0.48	0.48			N/A	N/A
3 - Mill Lane	0.05	0.03	0.26	0.46	0.49			N/A	N/A
4 - B2166 W	5.75	0.04	0.38	14.05	31.30			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.65	0.03	0.30	1.08	3.09			N/A	N/A
2 - B2166 E	0.48	0.03	0.31	1.39	2.09			N/A	N/A
3 - Mill Lane	0.05	0.00	0.00	0.05	0.05			N/A	N/A
4 - B2166 W	6.10	0.03	0.31	6.69	28.39			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.38	0.00	0.00	0.38	0.38			N/A	N/A
2 - B2166 E	0.36	0.00	0.00	0.36	0.36			N/A	N/A
3 - Mill Lane	0.04	0.00	0.00	0.04	0.04			N/A	N/A
4 - B2166 W	2.45	0.05	0.45	6.76	11.47			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Vinnetrow Road	0.25	0.03	0.25	0.45	0.48			N/A	N/A
2 - B2166 E	0.28	0.00	0.00	0.28	0.28			N/A	N/A
3 - Mill Lane	0.03	0.00	0.00	0.03	0.03			N/A	N/A
4 - B2166 W	1.44	0.03	0.34	3.31	7.40			N/A	N/A

Junctions 9														
PICADY 9 - Priority Intersection Module														
Version: 9.0.1.4646 [] © Copyright TRL Limited, 2017														
For sales and distribution information, program advice and maintenance, contact TRL: Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk														
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Filename: AM_PM_Pagham Road Site Access_No Right Turn Lane.j9

Path: P:\JNY8840 - Land West of Hook Lane, Pagham, near Bognor Regis\Transport\Picady\Revised Traffic Flows\20170207_2031 Base and Committed and ALL Development

Report generation date: 15/03/2017 10:42:29

»2031 Base + Committed + ALL Development, AM

»2031 Base + Committed + ALL Development, PM

Summary of junction performance

	AM							PM						
	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
2031 Base + Committed + ALL Development														
Stream B-AC	0.2	9.61	0.15	A	0.75	A	127 % [Stream B-AC]	0.1	7.61	0.08	A	0.83	A	328 % [Stream B-AC]
Stream C-AB	0.0	5.53	0.00	A				0.0	5.60	0.01	A			

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. 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	Pagham Road Proposed Site Access
Location	Rose Green, Pagham
Site number	
Date	15/06/2016
Version	
Status	Proposed
Identifier	
Client	Hallam Land Management
Jobnumber	JNY8840
Enumerator	EUR\pauline.pettitt
Description	Based on Drg No 2

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

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
5.75			✓	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 segment length (min)	Run automatically
D1	2031 Base + Committed + ALL Development	AM	ONE HOUR	07:45	09:15	15	✓
D2	2031 Base + Committed + ALL Development	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2031 Base + Committed + ALL Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.75	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	127	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	Pagham Road N		Major
B	Site Access		Minor
C	Pagham Road 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 - Pagham Road S	6.00			200.0	✓	1.00

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 - Site Access	One lane	3.00	120	120

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	578	0.105	0.266	0.167	0.380
1	B-C	699	0.107	0.271	-	-
1	C-B	690	0.267	0.267	-	-

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

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

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

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pagham Road N		ONE HOUR	✓	126	100.000
B - Site Access		ONE HOUR	✓	62	100.000
C - Pagham Road S		ONE HOUR	✓	604	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Pagham Road N	B - Site Access	C - Pagham Road S
From	A - Pagham Road N	0	27	99
	B - Site Access	57	0	5
	C - Pagham Road S	602	2	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Pagham Road N	B - Site Access	C - Pagham Road S
From	A - Pagham Road N	0	0	6
	B - Site Access	0	0	0
	C - Pagham Road S	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.15	9.61	0.2	A	57	85
C-AB	0.00	5.53	0.0	A	2	3
C-A					552	829
A-B					25	37
A-C					91	136

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	47	12	489	0.096	46	0.0	0.1	8.132	A
C-AB	2	0.38	664	0.002	1	0.0	0.0	5.431	A
C-A	453	113			453				
A-B	20	5			20				
A-C	75	19			75				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	56	14	469	0.119	56	0.1	0.1	8.699	A
C-AB	2	0.45	660	0.003	2	0.0	0.0	5.472	A
C-A	541	135			541				
A-B	24	6			24				
A-C	89	22			89				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	68	17	443	0.154	68	0.1	0.2	9.602	A
C-AB	2	0.55	653	0.003	2	0.0	0.0	5.529	A
C-A	663	166			663				
A-B	30	7			30				
A-C	109	27			109				

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	68	17	443	0.154	68	0.2	0.2	9.611	A
C-AB	2	0.55	653	0.003	2	0.0	0.0	5.529	A
C-A	663	166			663				
A-B	30	7			30				
A-C	109	27			109				

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	56	14	469	0.119	56	0.2	0.1	8.710	A
C-AB	2	0.45	660	0.003	2	0.0	0.0	5.472	A
C-A	541	135			541				
A-B	24	6			24				
A-C	89	22			89				

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	47	12	489	0.096	47	0.1	0.1	8.151	A
C-AB	2	0.38	664	0.002	2	0.0	0.0	5.431	A
C-A	453	113			453				
A-B	20	5			20				
A-C	75	19			75				

2031 Base + Committed + ALL Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.83	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	328	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 segment length (min)	Run automatically
D2	2031 Base + Committed + ALL Development	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Pagham Road N		ONE HOUR	✓	148	100.000
B - Site Access		ONE HOUR	✓	39	100.000
C - Pagham Road S		ONE HOUR	✓	189	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A - Pagham Road N	B - Site Access	C - Pagham Road S
From	A - Pagham Road N	0	51	97
	B - Site Access	36	0	3
	C - Pagham Road S	185	4	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A - Pagham Road N	B - Site Access	C - Pagham Road S
From	A - Pagham Road N	0	0	1
	B - Site Access	0	0	0
	C - Pagham Road S	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.08	7.61	0.1	A	36	54
C-AB	0.01	5.60	0.0	A	4	6
C-A					170	255
A-B					47	70
A-C					89	134

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	29	7	538	0.055	29	0.0	0.1	7.068	A
C-AB	3	0.75	660	0.005	3	0.0	0.0	5.475	A
C-A	139	35			139				
A-B	38	10			38				
A-C	73	18			73				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	35	9	529	0.066	35	0.1	0.1	7.288	A
C-AB	4	0.90	655	0.006	4	0.0	0.0	5.526	A
C-A	166	42			166				
A-B	46	11			46				
A-C	87	22			87				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	43	11	516	0.083	43	0.1	0.1	7.607	A
C-AB	4	1	647	0.007	4	0.0	0.0	5.598	A
C-A	204	51			204				
A-B	56	14			56				
A-C	107	27			107				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	43	11	516	0.083	43	0.1	0.1	7.607	A
C-AB	4	1	647	0.007	4	0.0	0.0	5.598	A
C-A	204	51			204				
A-B	56	14			56				
A-C	107	27			107				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	35	9	529	0.066	35	0.1	0.1	7.293	A
C-AB	4	0.90	655	0.006	4	0.0	0.0	5.529	A
C-A	166	42			166				
A-B	46	11			46				
A-C	87	22			87				

18:00 - 18:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
B-AC	29	7	538	0.055	29	0.1	0.1	7.078	A
C-AB	3	0.75	660	0.005	3	0.0	0.0	5.477	A
C-A	139	35			139				
A-B	38	10			38				
A-C	73	18			73				

1 INTRODUCTION

1.1 Design Manual for Roads & Bridges - HD 19/15 Road Safety Audit

The Terms of Reference for the undertaking of Road Safety Audits are as described in the Highways Agency's Design Manual for Roads and Bridges (DMRB) document HD 19/15 - Road Safety Audit. This Standard sets out the procedures that are required to implement Road Safety Audits - defining the relevant schemes and stages in the design and construction process at which audits shall be undertaken. It is the Standard generally adopted by most Highway Authorities for highway improvement schemes.

2 DESIGN CONSIDERATIONS

2.1 Introduction

Firstly, it is important to reiterate that the Road Safety Audit process is to identify any aspects of the proposed scheme that may give rise to road safety concerns and, where possible, to suggest modifications that would improve the road safety of the resultant scheme. It is not for the purposes of technical audit. As such, it is the responsibility of the Design Organisation to ensure that the proposed scheme meets the relevant Design Standards.

The terms of reference of this Audit (Addendum Note) are as described in HD 19/15. The Audit Team has examined and reported only on the road safety implications of the scheme as presented and, has not examined or verified the compliance of the designs to any other criteria.

2.2 Design Changes

RPS has submitted an updated drawing (Drawing No. JNY8840-12) which shows a revised road layout for the proposed junction on the eastern side of Pagham Road. Previous proposals included a ghosted right-turn lane facility accommodated by localised carriageway widening on the eastern side. This revised drawing shows the proposed junction without a ghosted right-turn facility.

Additional measures include the addition of a footway along the western side of Pagham Road with associated dropped kerbs and tactile paving indicated at its northern extent.

No Departures from Design Standards have been reported by the Design Organisation RPS.

3 PREVIOUS SAFETY AUDITS - TIMELINE

3.1 Stage 1 Road Safety Audit - October 2013

The safety aspects of the Proposed Access Arrangements & Potential Traffic Calming on land to the west of Hook Lane, Pagham, West Sussex were the subject of comment in the June 2016 Stage 1 Road Safety Audit undertaken by Taylor Bowie Ltd.

A Designers Response to the June 2016 Stage 1 Road Safety Audit was not supplied to the Audit Team.

3.2 RSA Addendum Note - December 2016

Minor changes to the scheme proposals were the subject of comment in a RSA Addendum Note in December 2016 undertaken by Taylor Bowie Ltd.

These consisted of the relocation of a proposed traffic calming feature in Hook Lane.

4 ROAD SAFETY AUDIT ADDENDUM NOTE (2)

4.1 Safety Implications of Proposed Design Changes

Taylor Bowie Ltd has been instructed to review Drawing No. JNY8840-12 - Proposed Access Arrangement Pagham Road without Right Turn Lane with regard to the revised layout, which excludes a right-turn facility.

The Stage 1 Road Safety Audit raised concerns that the proposed right-turn facility with localised carriageway widening could potentially encourage impatient westbound drivers to utilise the facility area to overtake a slower moving vehicle. This could result in an increased risk of westbound vehicular traffic being in conflict with motorists waiting in the ghosted right-turn facility, whereby head-on vehicular conflicts could occur.

To negate this scenario it was recommended that a small traffic island(s) should be provided on the westbound approach.

The revised proposals, without the right-turn facility and localised widening would remove this road safety concern.

Furthermore, the revised scheme drawing appears to indicate the addition of a new footway provision along the western side of Pagham Road, which was not shown on the original drawings put forward for Stage 1 Road Safety Audit. This length of proposed footway provides a link from the existing, which currently terminates opposite Hook Lane, to the proposed bus layby on the eastern side of Pagham Road for users of the western footway.

The drawing indicates that at its northern extent that dropped kerbs and tactile paving is to be provided.

Whilst this may be a drafting error at this preliminary design stage, the proposed dropped kerbs and tactile paving appear to be misaligned with the eastern dropped kerbs/tactile paving shown within the bus stop taper. Consequently, concern arises that this situation could result in a slight detriment to the operational safety for pedestrians, particularly for those pedestrians who may be blind or visually impaired

It is recommended that the dropped kerbs and tactile paving should be located and aligned such that they are to the north of the bus layby and where possible in-line with DETR Guidance on the Use of Tactile Paving.

5 Conclusion

The Audit Team are satisfied that, if the highlighted safety implication detailed in Section 4.1 is taken into account together with the items raised in the June 2016 Stage 1 Road Safety Audit and subsequent RSA Addendum Note - December 2016, that the revised proposals do not raise any additional road safety concerns.

1 INTRODUCTION

1.1 Design Manual for Roads & Bridges - HD 19/15 Road Safety Audit

The Terms of Reference for the undertaking of Road Safety Audits are as described in the Highways Agency's Design Manual for Roads and Bridges (DMRB) document HD 19/15 - Road Safety Audit. This Standard sets out the procedures that are required to implement Road Safety Audits - defining the relevant schemes and stages in the design and construction process at which audits shall be undertaken. It is the Standard generally adopted by most Highway Authorities for highway improvement schemes.

2 DESIGN CONSIDERATIONS

2.1 Introduction

Firstly, it is important to reiterate that the Road Safety Audit process is to identify any aspects of the proposed scheme that may give rise to road safety concerns and, where possible, to suggest modifications that would improve the road safety of the resultant scheme. It is not for the purposes of technical audit. As such, it is the responsibility of the Design Organisation to ensure that the proposed scheme meets the relevant Design Standards.

The terms of reference of this Audit (Addendum Note) are as described in HD 19/15. The Audit Team has examined and reported only on the road safety implications of the scheme as presented and, has not examined or verified the compliance of the designs to any other criteria.

2.2 Design Changes

RPS has submitted an updated drawing (Drawing No. JNY8840-12) which shows a revised road layout for the proposed junction on the eastern side of Pagham Road. Previous proposals included a ghosted right-turn lane facility accommodated by localised carriageway widening on the eastern side. This revised drawing shows the proposed junction without a ghosted right-turn facility.

Additional measures include the addition of a footway along the western side of Pagham Road with associated dropped kerbs and tactile paving indicated at its northern extent.

No Departures from Design Standards have been reported by the Design Organisation RPS.

3 PREVIOUS SAFETY AUDITS - TIMELINE

3.1 Stage 1 Road Safety Audit - October 2013

The safety aspects of the Proposed Access Arrangements & Potential Traffic Calming on land to the west of Hook Lane, Pagham, West Sussex were the subject of comment in the June 2016 Stage 1 Road Safety Audit undertaken by Taylor Bowie Ltd.

A Designers Response to the June 2016 Stage 1 Road Safety Audit was not supplied to the Audit Team.

3.2 RSA Addendum Note - December 2016

Minor changes to the scheme proposals were the subject of comment in a RSA Addendum Note in December 2016 undertaken by Taylor Bowie Ltd.

These consisted of the relocation of a proposed traffic calming feature in Hook Lane.

4 ROAD SAFETY AUDIT ADDENDUM NOTE (2)

4.1 Safety Implications of Proposed Design Changes

Taylor Bowie Ltd has been instructed to review Drawing No. JNY8840-12 - Proposed Access Arrangement Pagham Road without Right Turn Lane with regard to the revised layout, which excludes a right-turn facility.

The Stage 1 Road Safety Audit raised concerns that the proposed right-turn facility with localised carriageway widening could potentially encourage impatient westbound drivers to utilise the facility area to overtake a slower moving vehicle. This could result in an increased risk of westbound vehicular traffic being in conflict with motorists waiting in the ghosted right-turn facility, whereby head-on vehicular conflicts could occur.

To negate this scenario it was recommended that a small traffic island(s) should be provided on the westbound approach.

The revised proposals, without the right-turn facility and localised widening would remove this road safety concern.

Furthermore, the revised scheme drawing appears to indicate the addition of a new footway provision along the western side of Pagham Road, which was not shown on the original drawings put forward for Stage 1 Road Safety Audit. This length of proposed footway provides a link from the existing, which currently terminates opposite Hook Lane, to the proposed bus layby on the eastern side of Pagham Road for users of the western footway.

The drawing indicates that at its northern extent that dropped kerbs and tactile paving is to be provided.

Whilst this may be a drafting error at this preliminary design stage, the proposed dropped kerbs and tactile paving appear to be misaligned with the eastern dropped kerbs/tactile paving shown within the bus stop taper. Consequently, concern arises that this situation could result in a slight detriment to the operational safety for pedestrians, particularly for those pedestrians who may be blind or visually impaired

It is recommended that the dropped kerbs and tactile paving should be located and aligned such that they are to the north of the bus layby and where possible in-line with DETR Guidance on the Use of Tactile Paving.

5 Conclusion

The Audit Team are satisfied that, if the highlighted safety implication detailed in Section 4.1 is taken into account together with the items raised in the June 2016 Stage 1 Road Safety Audit and subsequent RSA Addendum Note - December 2016, that the revised proposals do not raise any additional road safety concerns.