Accidents between dates **01/01/2012** **and** **30/09/2017** (69) months

Selection:
Selected using Manual Selection

Notes:

Saturday 17/03/2012 Time 1116 Slight at A4421 NEUNKIRCHEN WAY RBT J/W PEREGRINE WAY BICESTER

E: 459446 N: 221338 Junction Detail: Roundabout Control: Give way or controlled
Fine without high winds Road surface Dry Daylight:street lights present
Vehicle Reference 1 Car Moving from W to NE Going ahead left bend On main carriageway

Casualty Reference: 1 Age: 24 Female Driver/rider Severity: Slight Injured by vehicle: 1

Friday 06/07/2012 Time 1418 Slight at A4421 NEUNKIRCHEN WAY RBT J/W PEREGRINE WAY BICESTER

E: 459439 N: 221335 Junction Detail: Roundabout Control: Give way or controlled
Raining without high winds Road surface Flood Daylight:street lights present
Vehicle Reference 1 Car Moving from S to NE Going ahead other On main carriageway

Casualty Reference: 1 Age: 22 Male Driver/rider Severity: Slight Injured by vehicle: 1

Tuesday 31/07/2012 Time 0304 Slight at A4421 NEUNKIRCHEN WAY RBT J/W PEREGRINE WAY BICESTER

E: 459396 N: 221311 Junction Detail: Roundabout Control: Give way or controlled
Raining without high winds Road surface Wet/Damp Darkness: street lights present and lit
Vehicle Reference 1 Motorcycle over 500 Moving from W to NE Going ahead left bend On main carriageway

Casualty Reference: 1 Age: 37 Male Driver/rider Severity: Slight Injured by vehicle: 1

Accidents between dates **01/01/2012** **and** **30/09/2017** (69) months

Selection:
Selected using Manual Selection

Notes:

Tuesday 04/12/2012 Time 1800 Fatal at A41 AT RODNEY HOUSE RBT J/W A4421 NEUNKIRCHEN WAY BICESTER

E: 459163 N: 221234 Junction Detail: Roundabout Control: Give way or controlled
Fine without high winds Road surface Dry Darkness: street lights present and lit
Vehicle Reference 1 Car Moving from N to E Turning left On main carriageway
Vehicle Reference 2 Pedal Cycle Moving from S to N Going ahead other On main carriageway
Casualty Reference: 1 Age: 48 Male Driver/rider Severity: Fatal Injured by vehicle: 2

Saturday 01/06/2013 Time 1115 Serious at A41 RODNEY HOUSE RBT J/W GRAVEN HILL RD & A4421 SEELSCHEID WAY AMBROSDEN

E: 459128 N: 221194 Junction Detail: Roundabout Control: Give way or controlled
Fine without high winds Road surface Dry Daylight
Vehicle Reference 1 Car Moving from SE to N Going ahead other On main carriageway
Casualty Reference: 1 Age: 80 Female Passenger Severity: Serious Injured by vehicle: 1

Monday 10/06/2013 Time 1632 Slight at A4421 WRETCHWICK WAY AT J/W PEREGRINE WAY BICESTER

E: 459835 N: 221662 Junction Detail: T or staggered junct Control: Give way or controlled
Fine without high winds Road surface Dry Daylight
Vehicle Reference 1 Car Moving from NE to N Turning right On main carriageway
Vehicle Reference 2 Car Moving from S to NE Going ahead other On main carriageway
Casualty Reference: 1 Age: 46 Male Driver/rider Severity: Slight Injured by vehicle: 2

Accidents between dates **01/01/2012** **and** **30/09/2017** (69) months

Selection:

Selected using Manual Selection

Notes:

Sunday 30/06/2013 Time 1815 Slight at PEREGRINE WAY J/W RAVENCROFT BICESTER

E: 459316 N: 221425 Junction Detail: T or staggered junct Control: Give way or controlled
Fine without high winds Road surface Dry Daylight

Vehicle Reference 1	Car	Moving from	SE	to	NE	Turning right	On main carriageway
Vehicle Reference 2	Car	Moving from	N	to	SE	Going ahead other	On main carriageway

Casualty Reference:	1	Age:	21	Male	Driver/rider	Severity:	Slight	Injured by vehicle: 2

Monday 22/07/2013 Time 1520 Slight at A4421 WRETCHWICK WAY AT J/W PEREGRINE WAY BICESTER

E: 459840 N: 221674 Junction Detail: T or staggered junct Control: Give way or controlled
Fine without high winds Road surface Dry Daylight

Vehicle Reference 1	Car	Moving from	N	to	SE	Going ahead other	On main carriageway
Vehicle Reference 2	Car	Moving from	N	to	NE	Waiting to turn left	On main carriageway

Casualty Reference:	1	Age:	48	Male	Driver/rider	Severity:	Slight	Injured by vehicle: 2
Casualty Reference:	2	Age:	47	Male	Passenger	Severity:	Slight	Injured by vehicle: 2

Accidents between dates **01/01/2012** **and** **30/09/2017** (69) months
Selection: **Notes:**
Selected using Manual Selection

Tuesday 15/10/2013 Time 0835 Slight at A4421 CHARBRIDGE LANE APPROX 50M N OF RBT J/W GAVRAY DRIVE AMBROSDEN

E: 460054 N: 221929 Junction Detail: Not within 20m of j Control:
Fine without high winds Road surface Wet/Damp Daylight

Vehicle Reference 1 Van or Goods 3.5 to Moving from N to S Stopping On main carriageway

Casualty Reference: 1 Age: 39 Male Driver/rider Severity: Slight Injured by vehicle: 1

Vehicle Reference 2 Car Moving from N to S Starting On main carriageway

Casualty Reference: 2 Age: 14 Female Passenger Severity: Slight Injured by vehicle: 2

Tuesday 29/10/2013 Time 1750 Slight at A41 BICESTER BYPASS APPROX 150M W OF J/W A4421 / B4100 RODNEY HOUSE RBT BICESTER

E: 458981 N: 221346 Junction Detail: Not within 20m of j Control:
Fine without high winds Road surface Dry Darkness: no street lighting

Vehicle Reference 1 Car Moving from N to SE Going ahead other On main carriageway

Casualty Reference: 1 Age: 23 Male Driver/rider Severity: Slight Injured by vehicle: 1

Vehicle Reference 2 Car Moving from N to SE Going ahead other On main carriageway

Vehicle Reference 3 Car Moving from N to SE Going ahead other On main carriageway

Casualty Reference: 2 Age: 22 Male Driver/rider Severity: Slight Injured by vehicle: 3

Casualty Reference: 3 Age: 3 Male Passenger Severity: Slight Injured by vehicle: 3

Casualty Reference: 4 Age: 5 Female Passenger Severity: Slight Injured by vehicle: 3

Accidents between dates **01/01/2012** **and** **30/09/2017** (69) months
Selection: **Notes:**
Selected using Manual Selection

Thursday 30/01/2014 Time 0645 Slight at A4421 NEUNKIRCHEN WAY RBT J/W PEREGRINE WAY BICESTER

E: 459413 N: 221336 Junction Detail: Roundabout Control: Give way or controlled
Raining without high winds Road surface Wet/Damp Darkness: street lights present and lit
Vehicle Reference 1 Pedal Cycle Moving from S to NE Going ahead other On main carriageway

Casualty Reference: 1 Age: 38 Male Driver/rider Severity: Slight Injured by vehicle: 1

Vehicle Reference 2 Car Moving from N to S Turning right On main carriageway

Thursday 06/03/2014 Time 1743 Slight at A4421 WRETCHWICK WAY AT J/W PEREGRINE WAY BICESTER

E: 459838 N: 221668 Junction Detail: T or staggered junct Control: Give way or controlled
Fine without high winds Road surface Dry Daylight
Vehicle Reference 1 Car Moving from N to S Turning right On main carriageway

Casualty Reference: 1 Age: 51 Female Driver/rider Severity: Slight Injured by vehicle: 1

Vehicle Reference 2 Van or Goods 3.5 to Moving from S to NE Going ahead other On main carriageway

Accidents between dates **01/01/2012** **and** **30/09/2017** (69) months
Selection: **Notes:**
Selected using Manual Selection

Tuesday 25/03/2014 Time 1813 Slight at A41 AT RODNEY HOUSE RBT J/W B4100 & A4421 BICESTER

E: 459119 N: 221254 Junction Detail: Roundabout Control: Give way or controlled
Fine without high winds Road surface Wet/Damp Daylight
Vehicle Reference 1 Goods 7.5 tonnes mg Moving from N to N Turning left On main carriageway
Vehicle Reference 2 Pedal Cycle Moving from N to N Turning left On main carriageway
Casualty Reference: 1 Age: 61 Male Driver/rider Severity: Slight Injured by vehicle: 2

Wednesday 19/11/2014 Time 0750 Slight at B4100 LONDON ROAD RBT J/W A41 RODNEY HOUSE BICESTER

E: 459142 N: 221255 Junction Detail: Roundabout Control: Give way or controlled
Fine without high winds Road surface Wet/Damp Daylight
Vehicle Reference 1 Car Moving from N to S Going ahead other On main carriageway
Vehicle Reference 2 Pedal Cycle Moving from N to S Going ahead but held up On main carriageway
Casualty Reference: 1 Age: 46 Female Driver/rider Severity: Slight Injured by vehicle: 2

Accidents between dates **01/01/2012** **and** **30/09/2017** (69) months
Selection: **Notes:**
Selected using Manual Selection

Friday 23/01/2015 Time 0826 Slight at A41 AT RODNEY HOUSE RBT J/W B4100 & A4421 BICESTER

E: 459104 N: 221246 Junction Detail: Roundabout Control: Give way or controlled
Fine without high winds Road surface Dry Daylight
Vehicle Reference 1 Car Moving from N to SE Going ahead but held up On main carriageway
Vehicle Reference 2 Pedal Cycle Moving from SE to N Turning right On main carriageway
Casualty Reference: 1 Age: 30 Male Driver/rider Severity: Slight Injured by vehicle: 2

Wednesday 25/03/2015 Time 0630 Slight at A4421 NEUNKIRCHEN WAY RBT J/W PEREGRINE WAY BICESTER

E: 459396 N: 221337 Junction Detail: Roundabout Control: Give way or controlled
Fine without high winds Road surface Frost/Ice Daylight
Vehicle Reference 1 Car Moving from S to N Turning left On main carriageway
Casualty Reference: 1 Age: 30 Female Pedestrian Severity: Slight Injured by vehicle: 1

Accidents between dates **01/01/2012** **and** **30/09/2017** (69) months
Selection: **Notes:**
Selected using Manual Selection

Wednesday 17/06/2015 Time 2044 Slight at A4421 WRETCHWICK WAYJ/W PEREGRINE WAY BICESTER

E: 459830 N: 221658 Junction Detail: T or staggered junct Control: Give way or controlled
Raining without high winds Road surface Wet/Damp Daylight
Vehicle Reference 1 Car Moving from NE to N Turning right On main carriageway
Casualty Reference: 2 Age: 38 Female Driver/rider Severity: Slight Injured by vehicle: 1
Vehicle Reference 2 Car Moving from S to NE Going ahead other On main carriageway
Casualty Reference: 1 Age: 60 Male Driver/rider Severity: Slight Injured by vehicle: 2

Thursday 22/10/2015 Time 1926 Serious at A4421 WRETCHWICK WAY AT J/W PEREGRINE WAY BICESTER

E: 459840 N: 221670 Junction Detail: T or staggered junct Control: Give way or controlled
Fine without high winds Road surface Dry Darkness: street lights present and lit
Vehicle Reference 1 Car Moving from N to S Turning right On main carriageway
Vehicle Reference 2 Motor Cycle over 50 Moving from S to NE Going ahead other On main carriageway
Casualty Reference: 1 Age: 19 Male Driver/rider Severity: Serious Injured by vehicle: 2

Accidents between dates **01/01/2012** **and** **30/09/2017** (69) months
Selection: **Notes:**
Selected using Manual Selection

Wednesday 24/02/2016 Time 1600 Slight at B4100 LONDON ROAD APPROX 80M N OF A41 RODNEY HOUSE RBT BICESTER

E: 459120 N: 221330 Junction Detail: Not within 20m of j Control:
Fine without high winds Road surface Dry Daylight
Vehicle Reference 1 Car Moving from W to SE Going ahead right bend On main carriageway

Casualty Reference: 1 Age: 12 Male Passenger Severity: Slight Injured by vehicle: 1
Casualty Reference: 2 Age: 40 Female Passenger Severity: Slight Injured by vehicle: 1
Casualty Reference: 3 Age: 11 Female Passenger Severity: Slight Injured by vehicle: 1

Tuesday 04/07/2017 Time 1005 Slight at A41 BICETSR BYPASS APPROX 100M NW OF A41 / A4421 RODNEY HOUSE RBT BICESTER

E: 459041 N: 221296 Junction Detail: Not within 20m of j Control:
Fine without high winds Road surface Dry Daylight
Vehicle Reference 1 Van or Goods 3.5 to Moving from SE to SE U-turn On main carriageway
Vehicle Reference 2 Motor Cycle over 50 Moving from SE to N Going ahead other On main carriageway

Casualty Reference: 1 Age: 21 Male Driver/rider Severity: Slight Injured by vehicle: 2

Accidents between dates **01/01/2012** **and** **30/09/2017** (69) months

Selection:
Selected using Manual Selection

Notes:

Accidents involving:

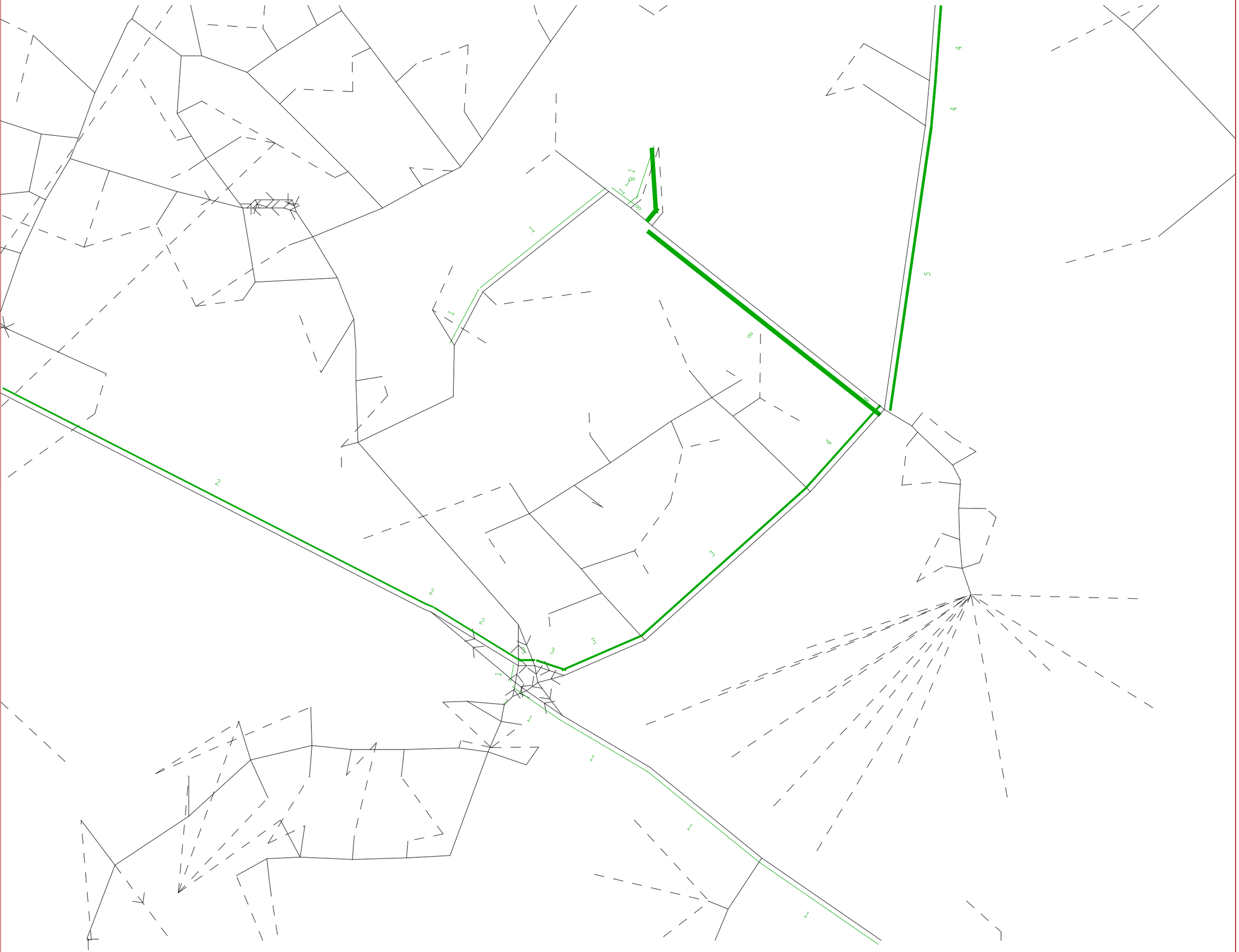
	Fatal	Serious	Slight	Total
Motor vehicles only (excluding 2-wheels)	0	1	11	12
2-wheeled motor vehicles	0	1	2	3
Pedal cycles	1	0	4	5
Horses & other	0	0	0	0
Total	1	2	17	20

Casualties:

	Fatal	Serious	Slight	Total
Vehicle driver	0	0	11	11
Passenger	0	1	7	8
Motorcycle rider	0	1	2	3
Cyclist	1	0	4	5
Pedestrian	0	0	1	1
Other	0	0	0	0
Total	1	2	25	28

Number of casualties meeting the criteria: **28**

APPENDIX C –
OCC SATURN OUTPUT



SATURN

Atkins Ltd /
DVV / ITS

etwork.UFS
2021_DM_AM_N

Scale 11825

Link Annot:

S.L.A.

Bandwidths =
10./mm

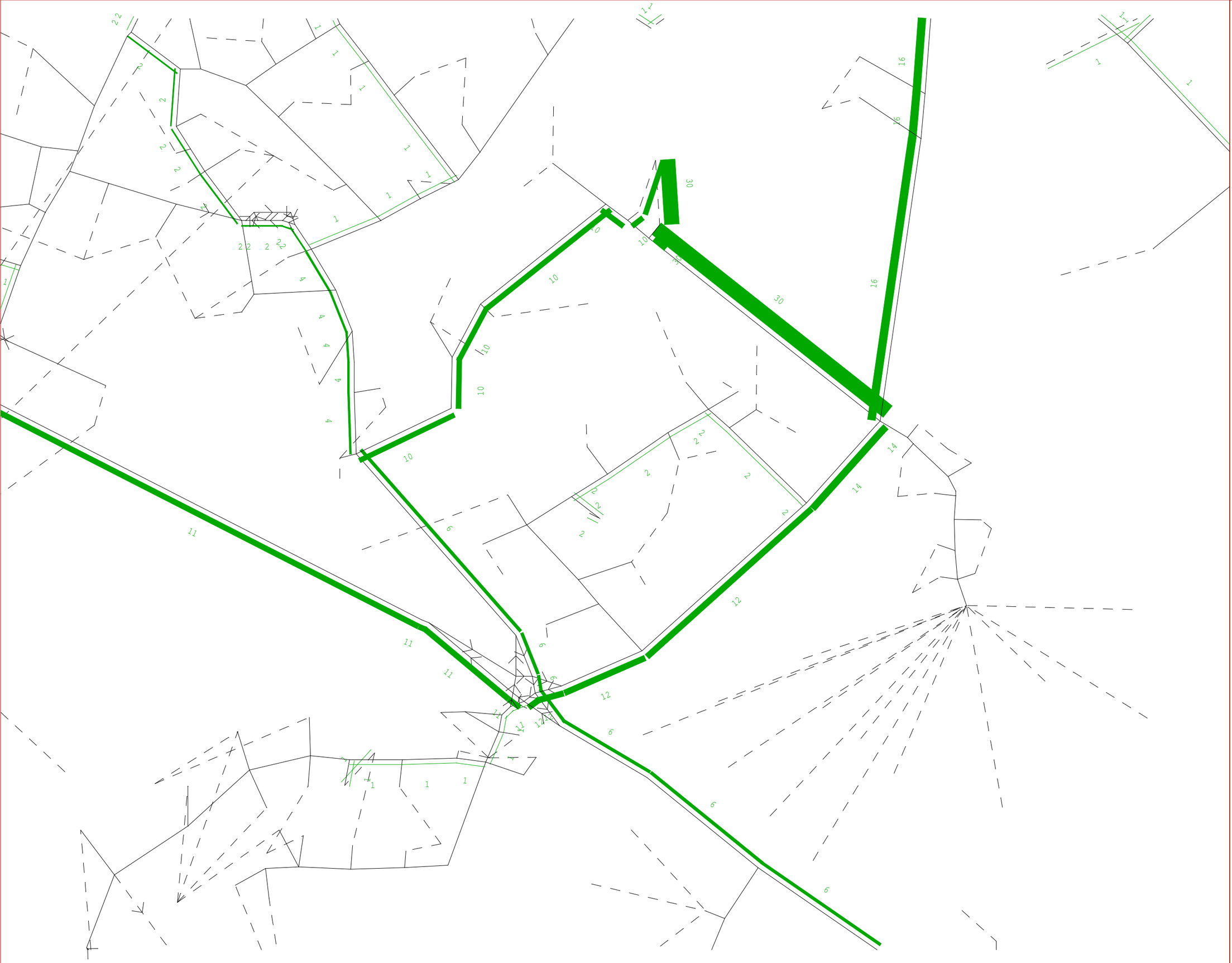
Selected
Link
Assignment
Thru destin.
Zone 1276

Total Demand
Flow = 8.92

All User Cls

21-12-17

WHITE YOUNG



SATURN

Atkins Ltd /
DVV / ITS

etwork.UFS
2021_DM_AM_N

Scale 11825

Link Annot:

S.L.A.

Bandwidths =
10./mm

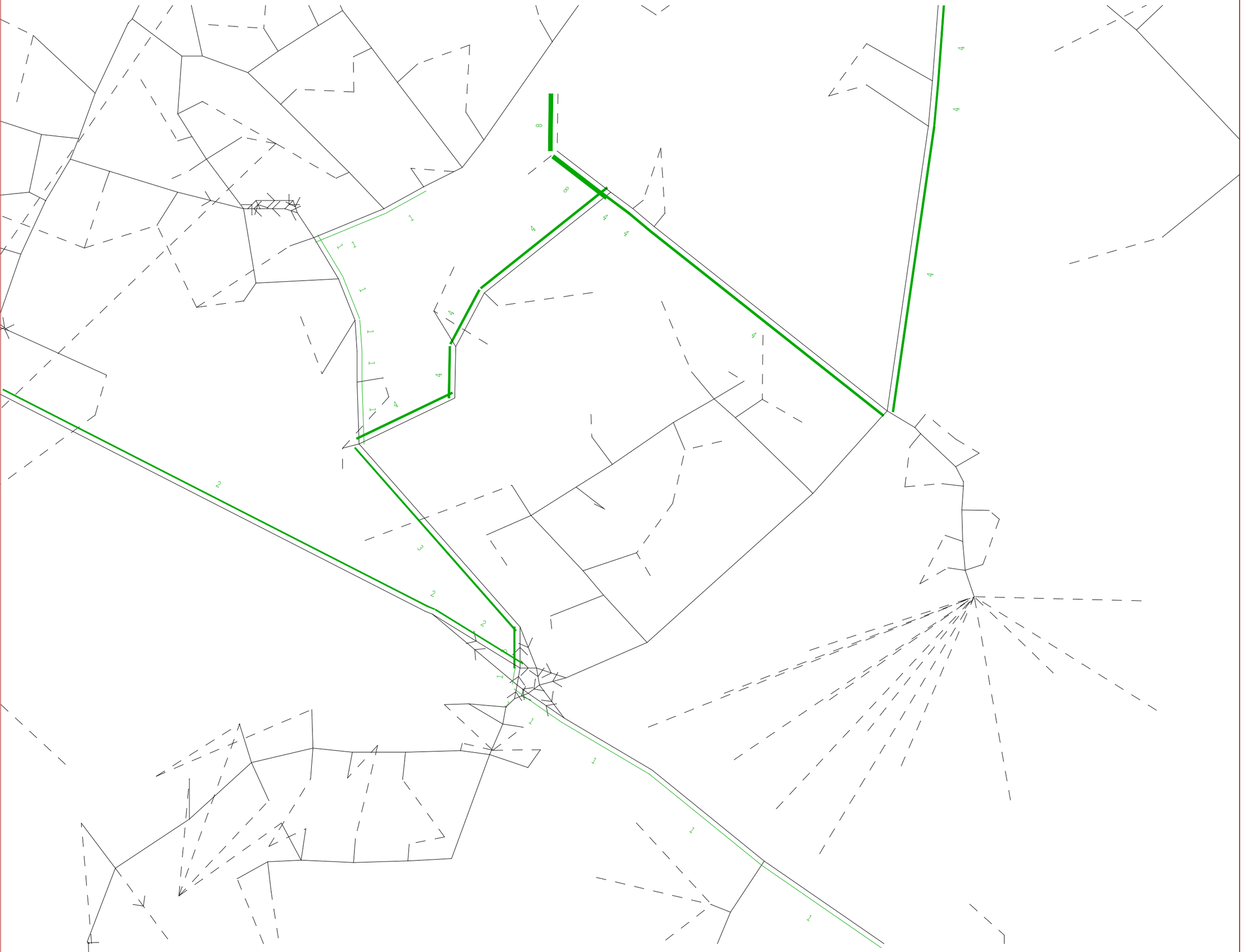
Selected
Link
Assignment
Thru origin
Zone 1276

Total Demand
Flow = 41

All User Cls

21-12-17

WHITE YOUNG



SATURN

Atkins Ltd /
DVV / ITS

etwork.UFS
2021_DM_AM_N

Scale 11825

Link Annot:

S.L.A.

Bandwidths =
10./mm

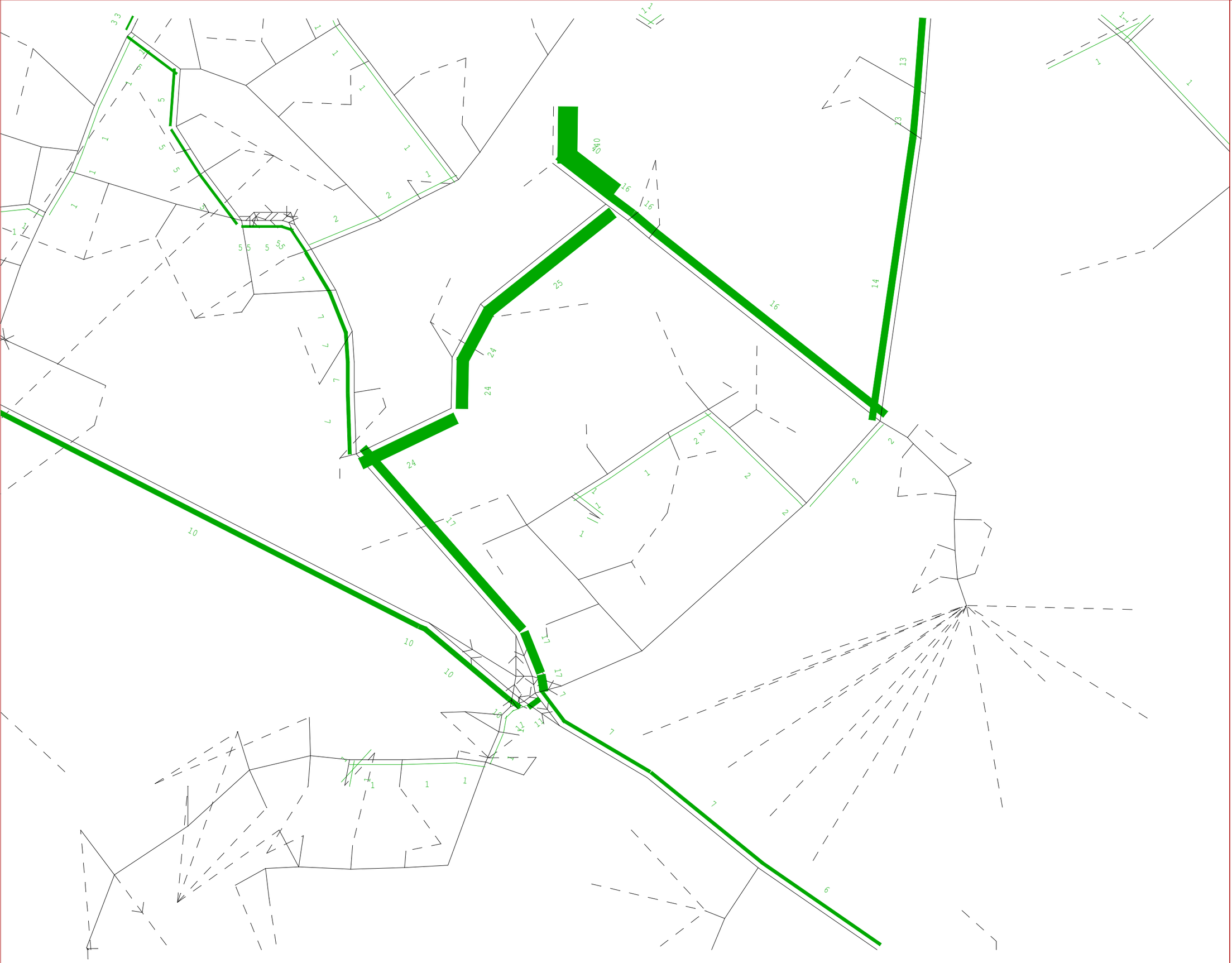
Selected
Link
Assignment
Thru destin.
Zone 1277

Total Demand
Flow = 8.44

All User Cls

21-12-17

WHITE YOUNG



SATURN

Atkins Ltd /
DVV / ITS

etwork.UFS
2021_DM_AM_N

Scale 11825

Link Annot:

S.L.A.

Bandwidths =
10./mm

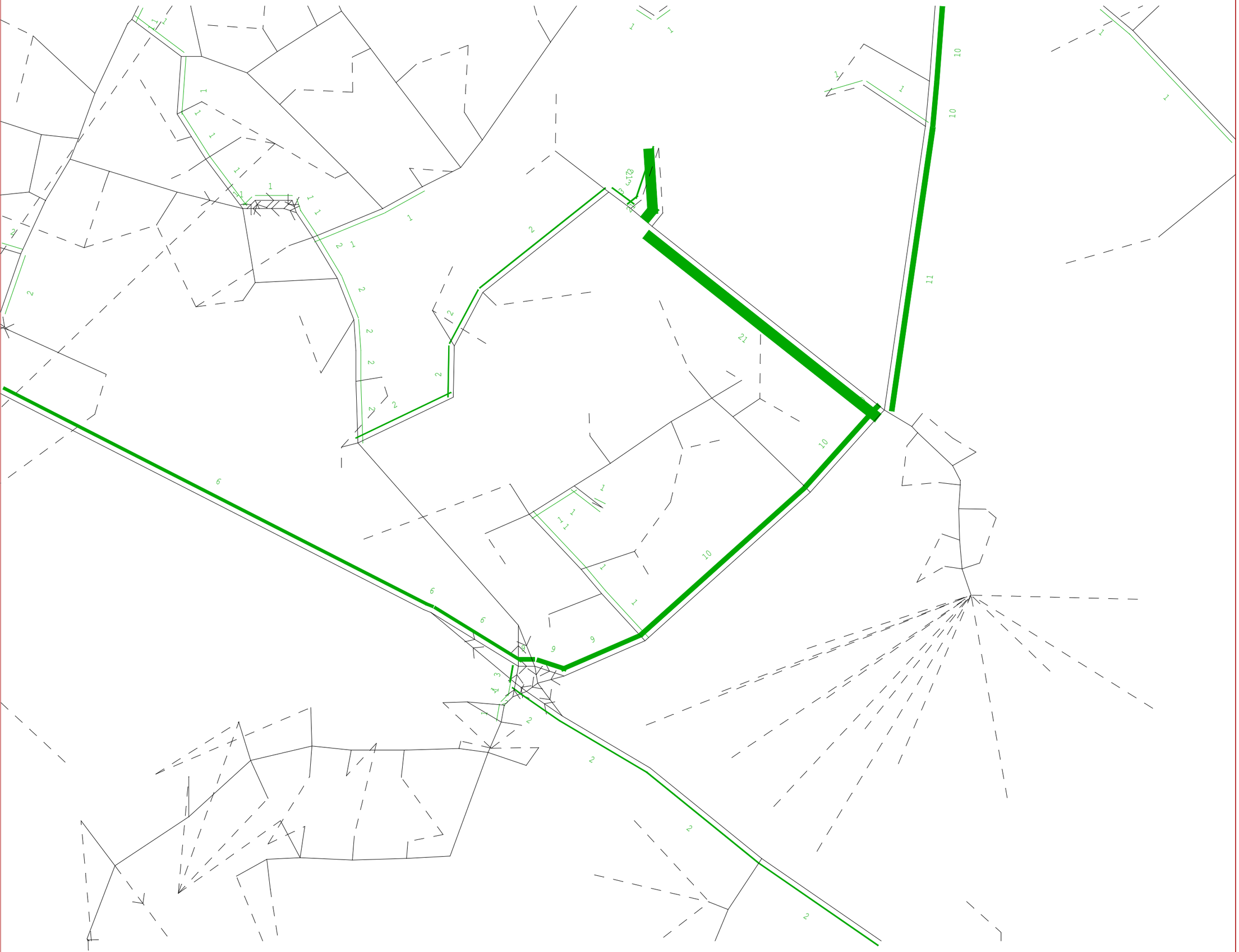
Selected
Link
Assignment
Thru origin
Zone 1277

Total Demand
Flow = 40

All User Cls

21-12-17

WHITE YOUNG



SATURN

Atkins Ltd /
DVV / ITS

etwork.UFS
2021_DM_IP_N

Scale 11825

Link Annot:

S.L.A.

Bandwidths =
10./mm

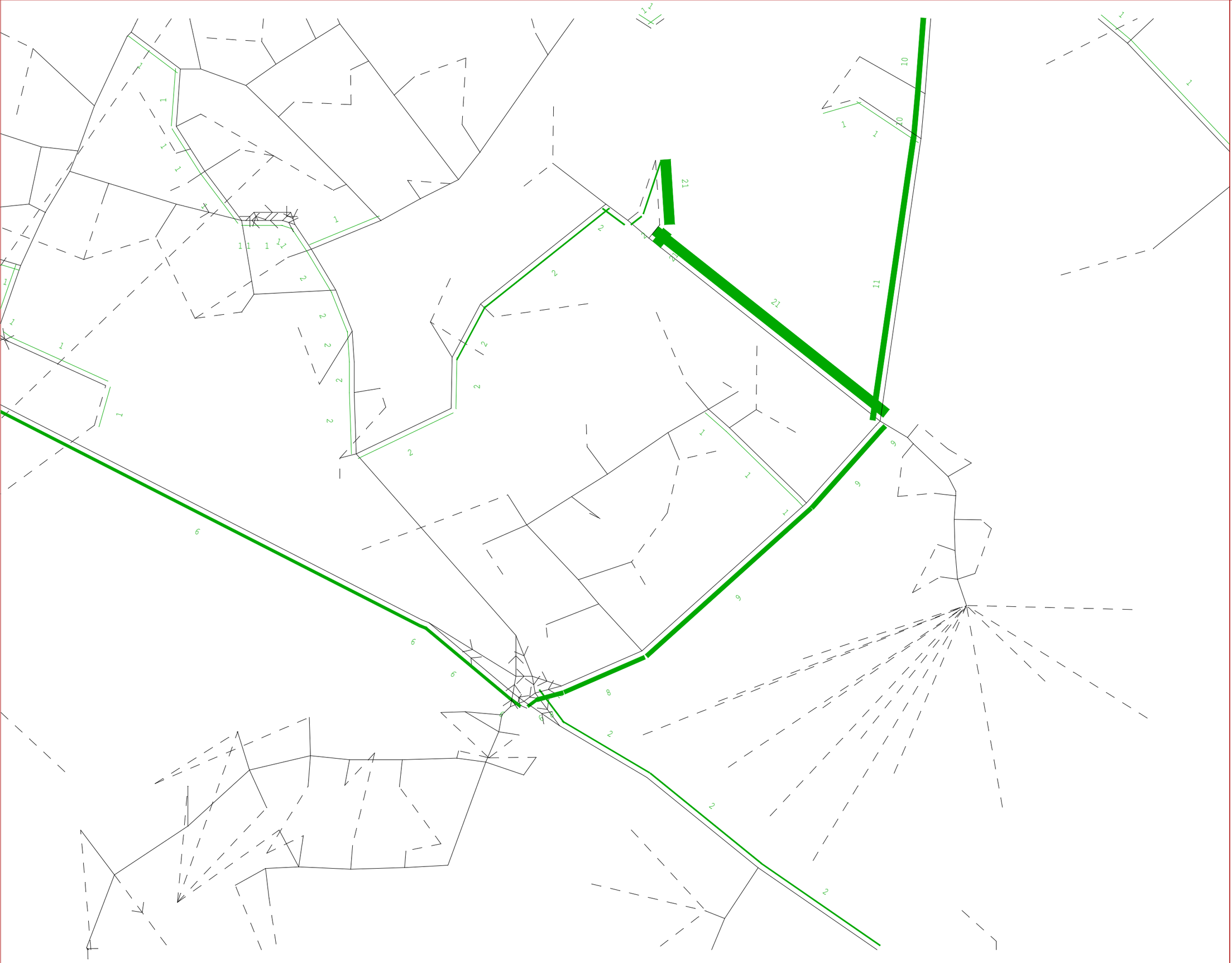
Selected
Link

Link
Assignment
Thru destin.
Zone 1276

Total Demand
Flow = 24

All User Cls

21-12-17
WHITE YOUNG



SATURN

Atkins Ltd /
DVV / ITS

etwork.UFS
2021_DM_IP_N

Scale 11825

Link Annot:

S.L.A.

Bandwidths =
10./mm

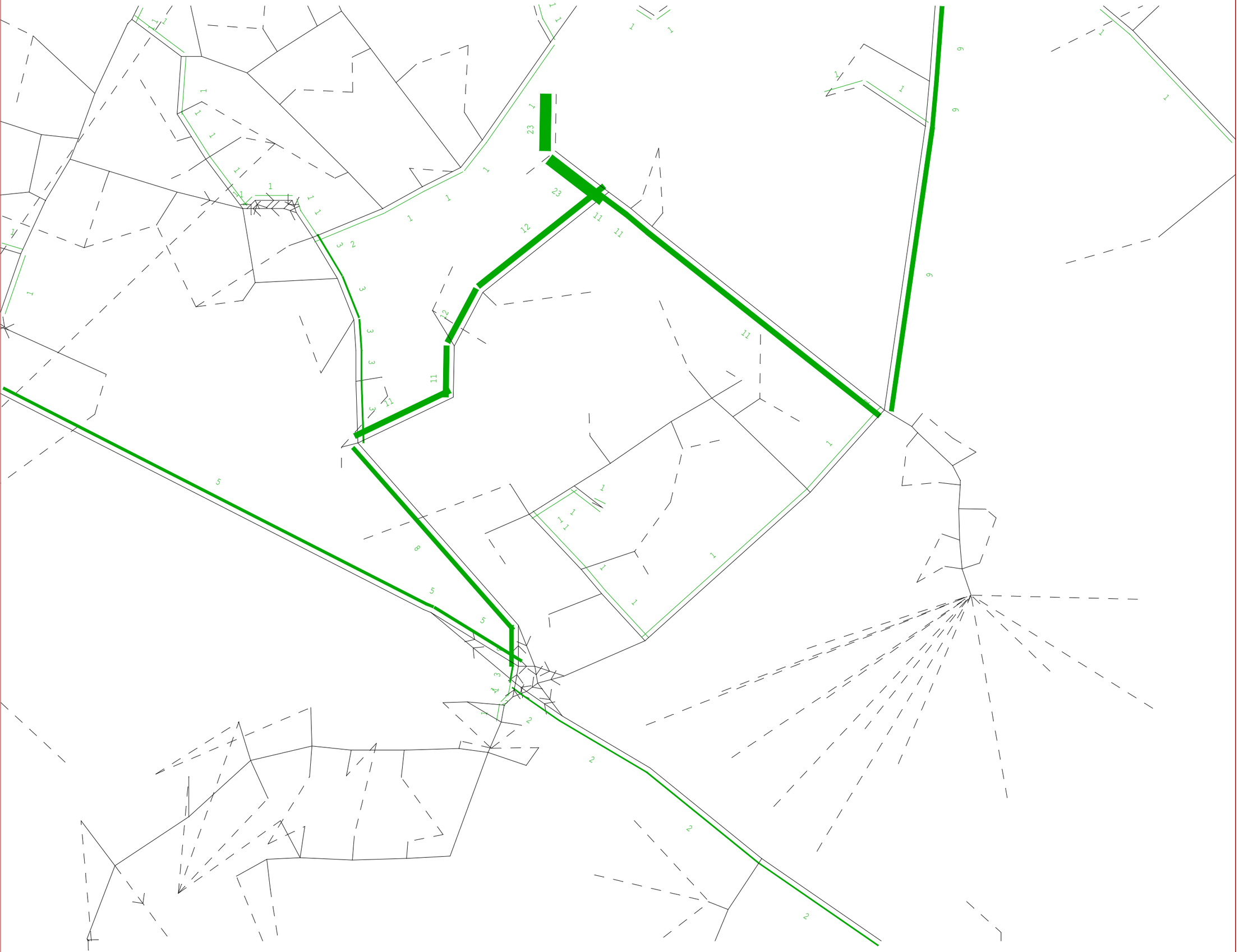
Selected
Link
Assignment
Thru origin
Zone 1276

Total Demand
Flow = 24

All User Cls

21-12-17

WHITE YOUNG



SATURN

Atkins Ltd /
DVV / ITS

etwork.UFS
2021_DM_IP_N

Scale 11825

Link Annot:

S.L.A.

Bandwidths =
10./mm

Selected
Link

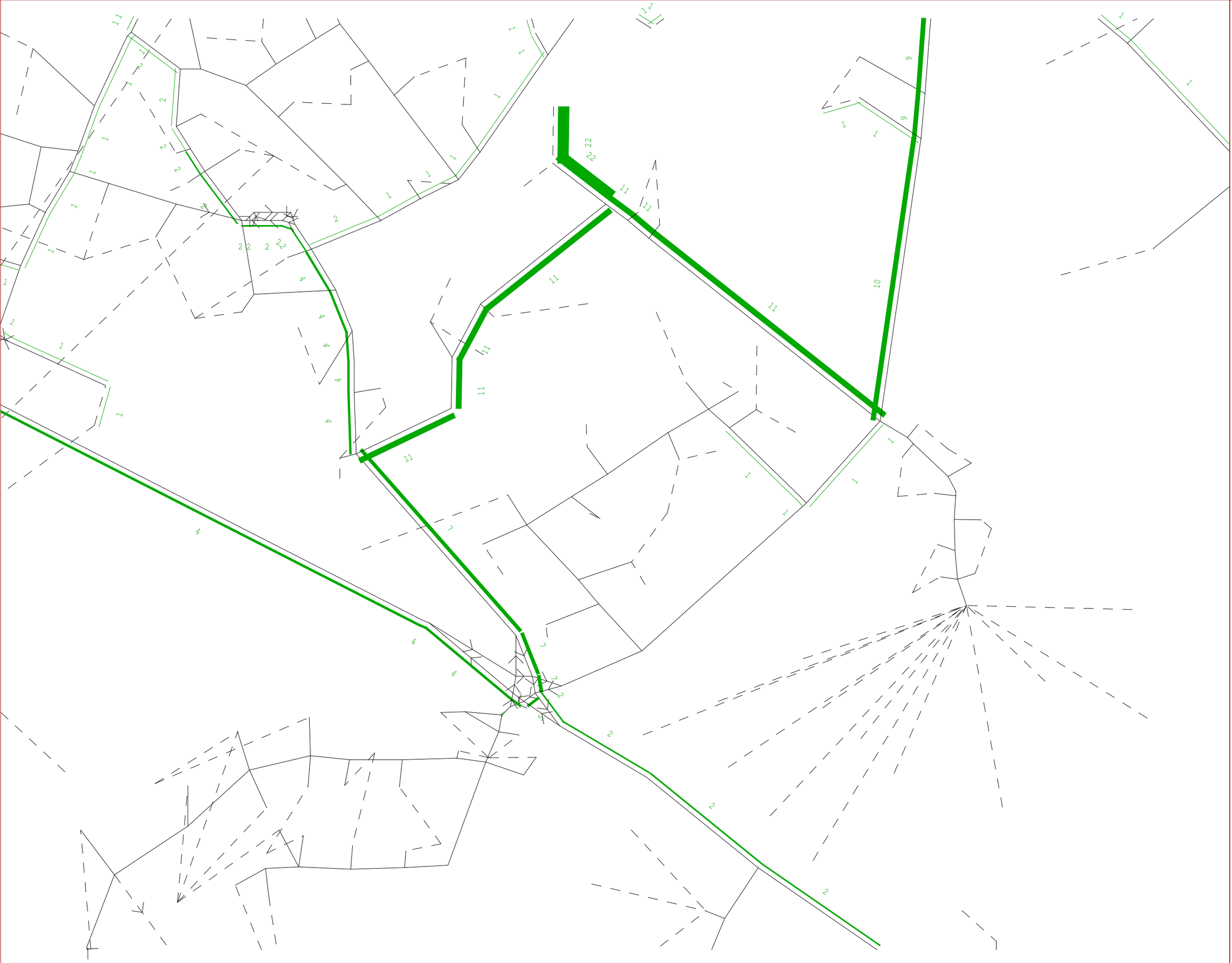
Link
Assignment
Thru destin.
Zone 1277

Total Demand
Flow = 23

All User Cls

21-12-17

WHITE YOUNG



SATURN

Atkins Ltd /
DVV / ITS

etwork.UFS
2021_DM_IP_N

Scale 11825

Link Annot:

S.L.A.

Bandwidths =
10./mm

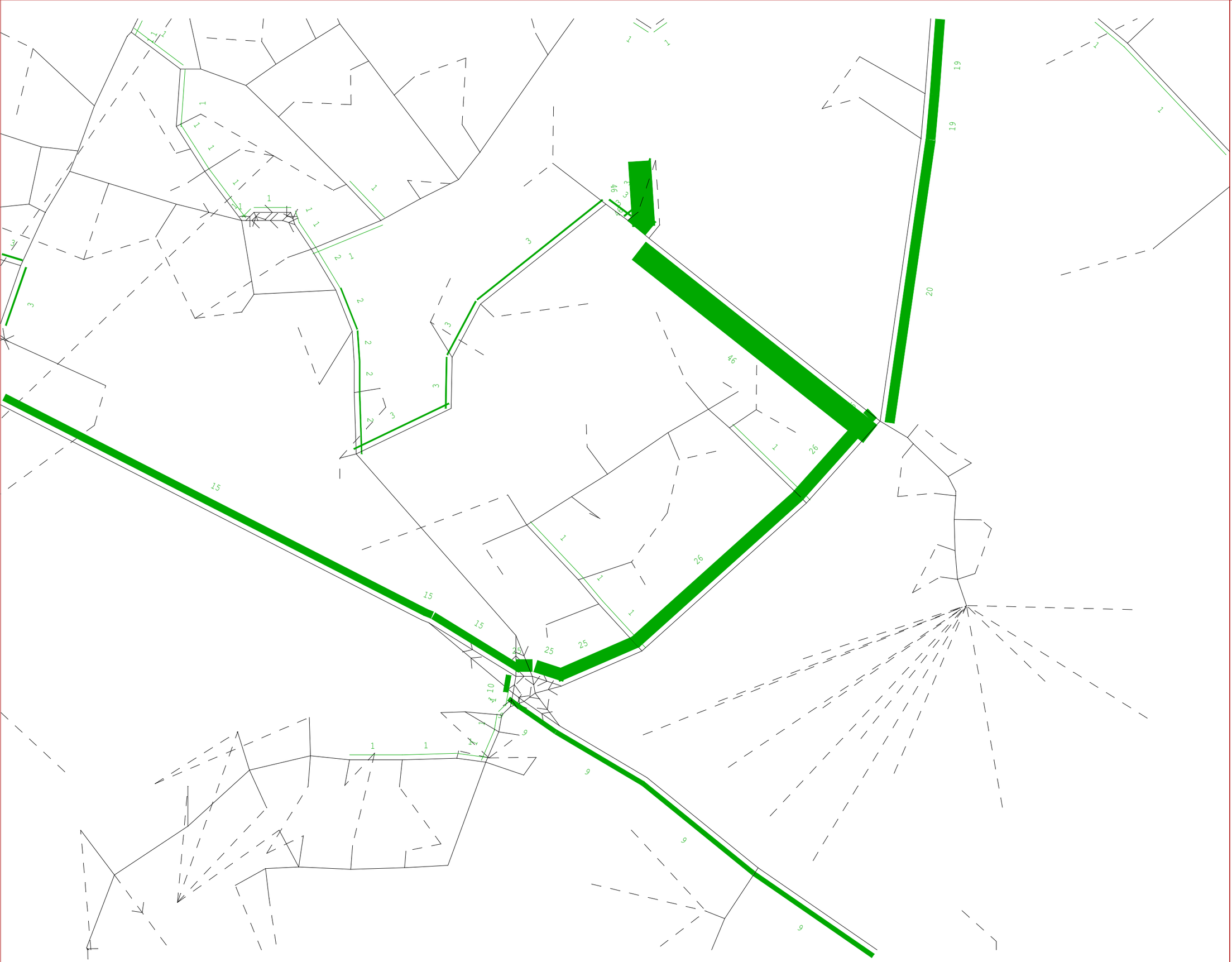
Selected
Link
Assignment
Thru origin
Zone 1277

Total Demand
Flow = 22

All User Cls

21-12-17

WHITE YOUNG



SATURN

Atkins Ltd /
DVV / ITS

etwork.UFS
2021_DM_PM_N

Scale 11825

Link Annot:

S.L.A.

Bandwidths =
10./mm

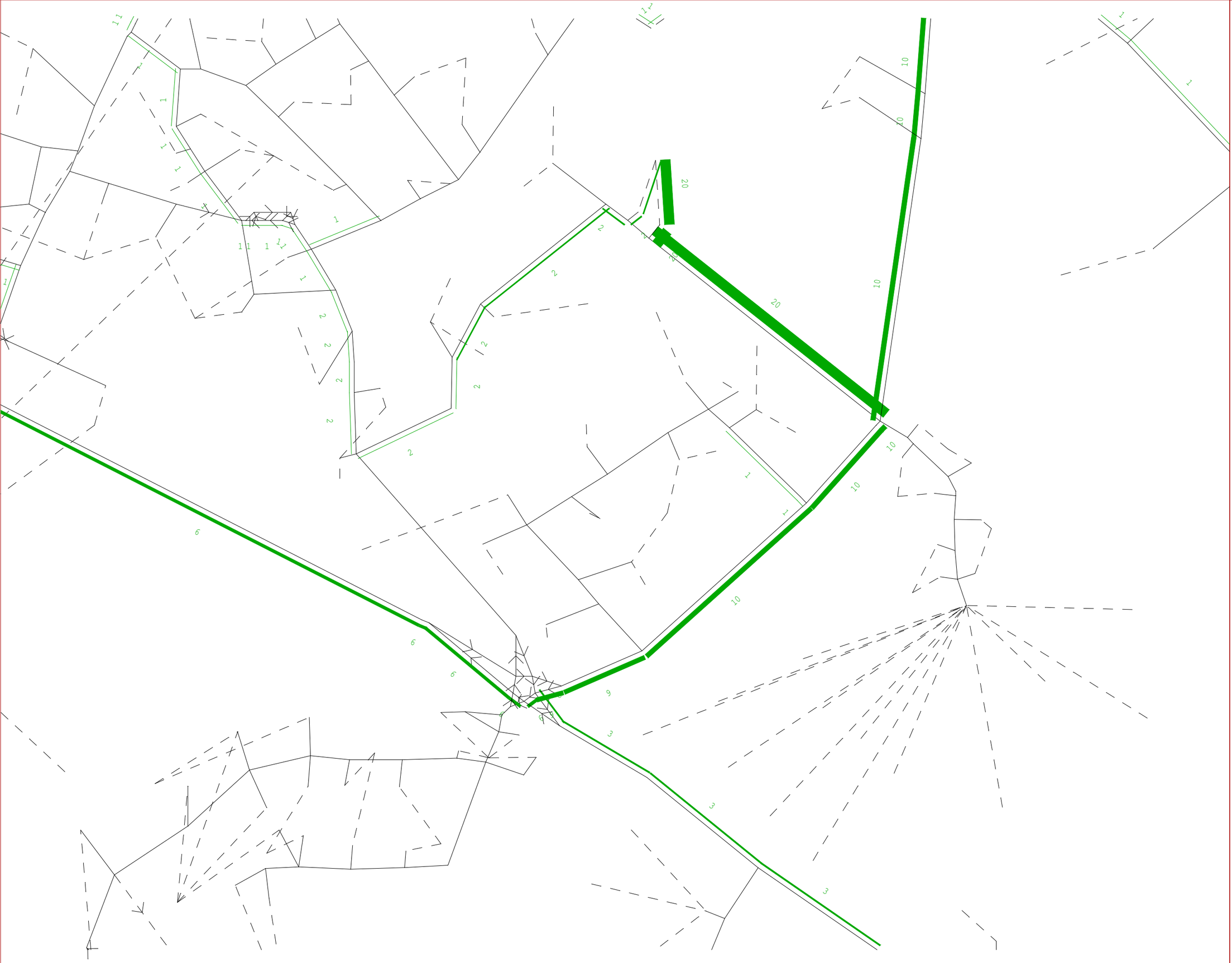
Selected
Link
Assignment
Thru destin.
Zone 1276

Total Demand
Flow = 49

All User Cls

21-12-17

WHITE YOUNG



SATURN

Atkins Ltd /
DVV / ITS

etwork.UFS
2021_DM_PM_N

Scale 11825

Link Annot:

S.L.A.

Bandwidths =
10./mm

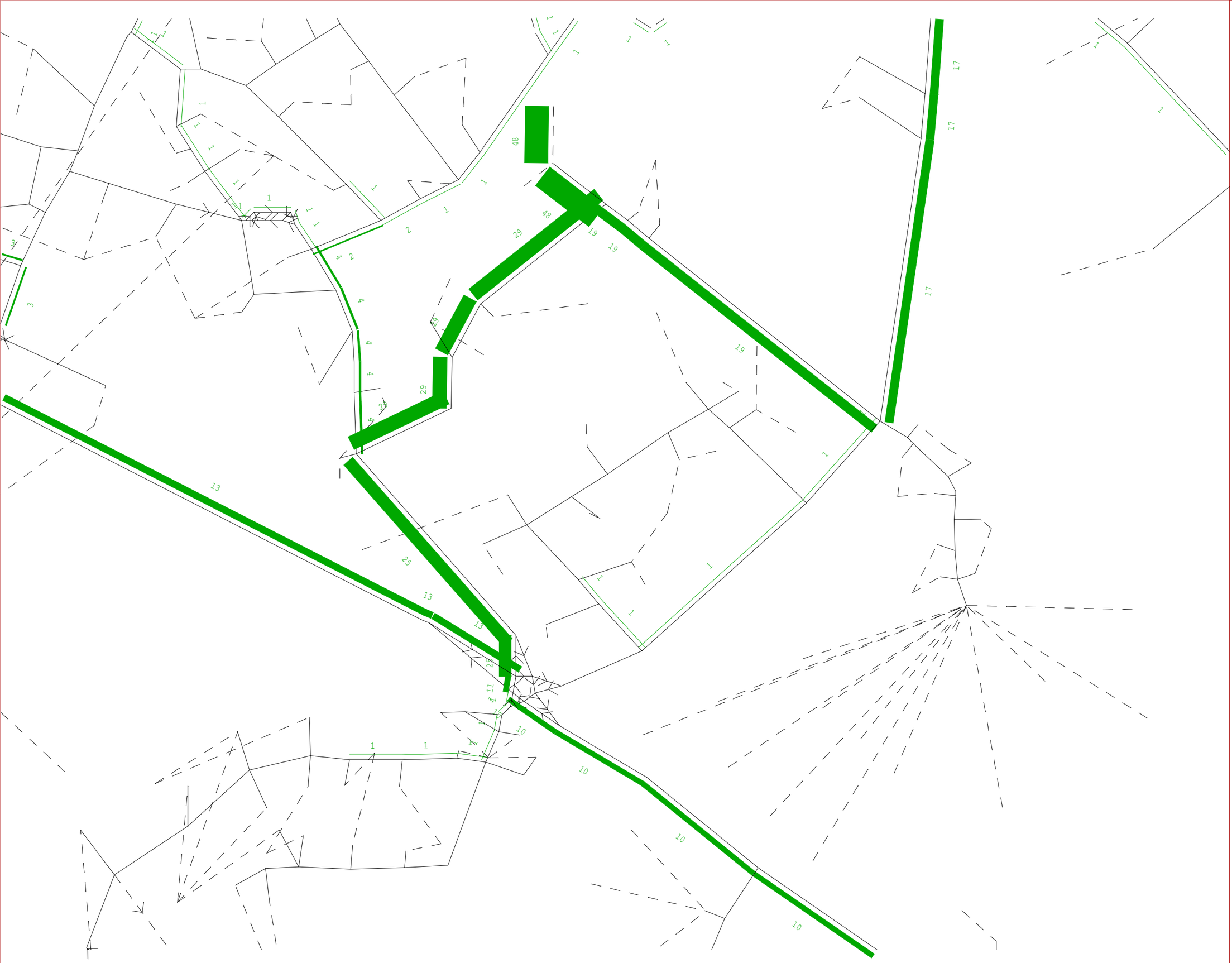
Selected
Link
Assignment
Thru origin
Zone 1276

Total Demand
Flow = 23

All User Cls

21-12-17

WHITE YOUNG



SATURN

Atkins Ltd /
DVV / ITS

etwork.UFS
2021_DM_PM_N

Scale 11825

Link Annot:

S.L.A.

Bandwidths =
10./mm

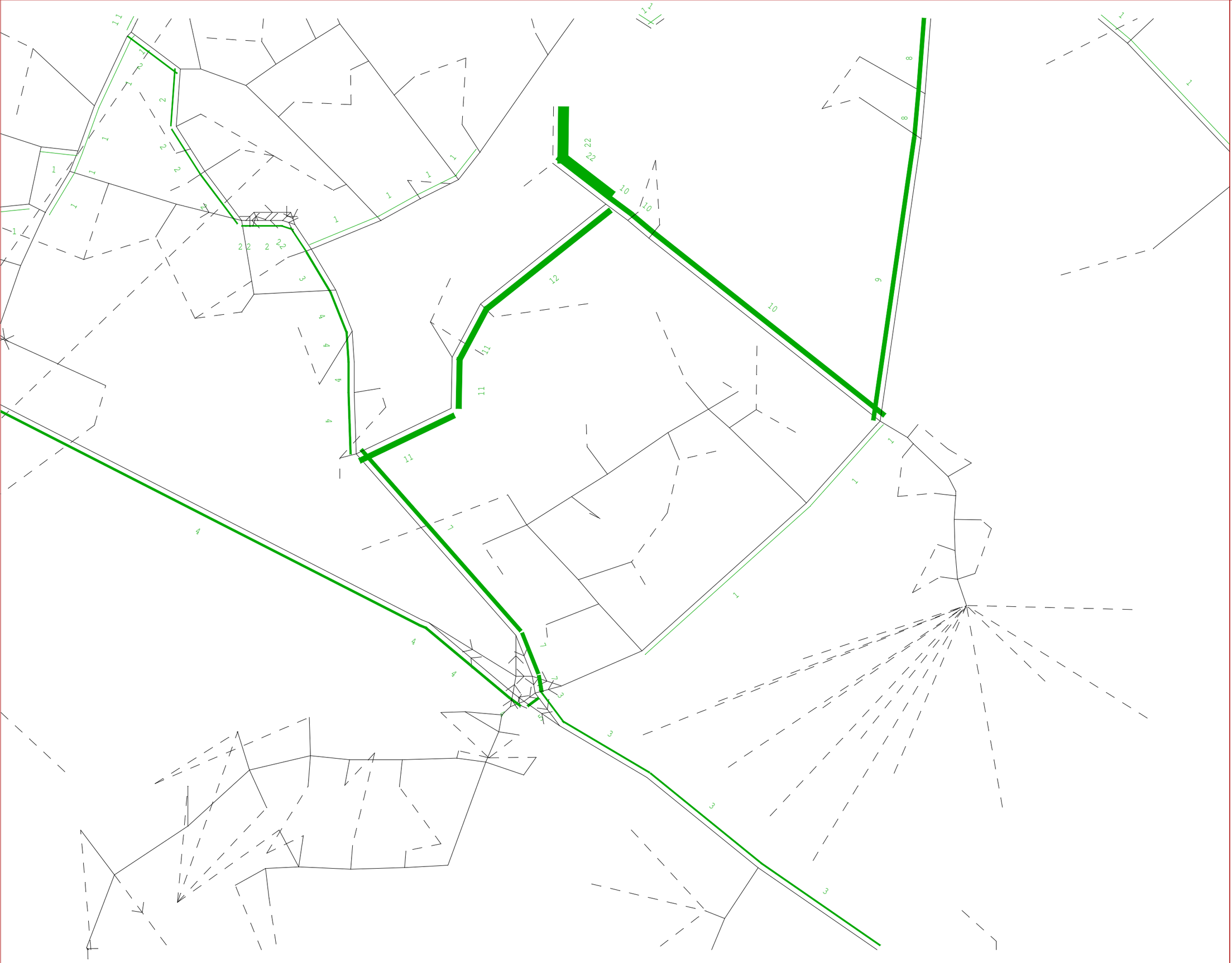
Selected
Link
Assignment
Thru destin.
Zone 1277

Total Demand
Flow = 48

All User Cls

21-12-17

WHITE YOUNG



SATURN

Atkins Ltd /
DVV / ITS

etwork.UFS
2021_DM_PM_N

Scale 11825

Link Annot:

S.L.A.

Bandwidths =
10./mm

Selected
Link
Assignment
Thru origin
Zone 1277

Total Demand
Flow = 22

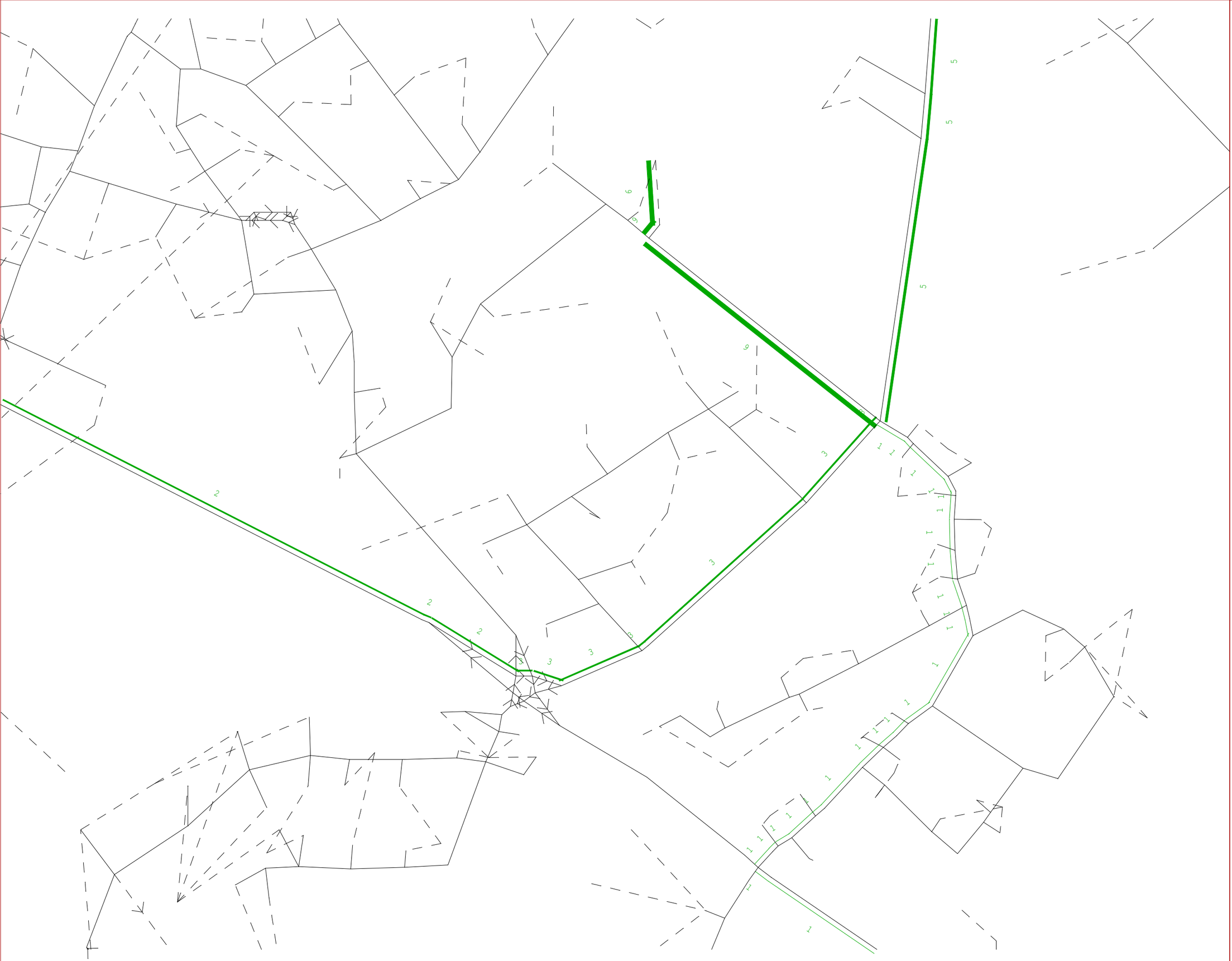
All User Cls

21-12-17

WHITE YOUNG

2021	AM Peak							Inter Peak							PM Peak						
To Arm	Car	LGV	HGV (PCU)	HGV (Veh)	Bus (Veh)	Total Veh	PCUs	Car	LGV	HGV (PCU)	HGV (Veh)	Bus (Veh)	Total Veh	PCUs	Car	LGV	HGV (PCU)	HGV (Veh)	Bus (Veh)	Total Veh	PCUs
Arm B: Gavray Drive (South)	51	2	0	0	0	53	53	26	1	0	0	0	27	27	31	1	0	0	0	31	31
Arm C: Mallards Way	45	2	0	0	0	47	47	28	1	0	0	0	29	30	32	13	0	0	0	45	45
Arm A: Gavray Drive (North)	11	1	0	0	0	12	13	25	1	0	0	0	26	26	44	1	0	0	0	45	45
Arm C: Mallards Way	37	1	0	0	0	38	38	21	3	3	2	0	26	28	41	0	0	0	0	41	41
Arm A: Gavray Drive (North)	13	8	0	0	0	21	21	26	1	0	0	0	27	27	60	1	0	0	0	61	61
Arm B: Gavray Drive (South)	28	0	0	0	0	28	28	19	0	1	1	0	20	20	22	0	0	0	0	22	22
Arm A: Gavray Drive	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arm B: A4421 Charbridge Lane	80	4	0	0	0	84	84	42	2	2	1	0	44	45	48	1	0	0	0	49	49
Arm C: Wretchwick Avenue	0	0	0	0	0	0	0	2	0	0	0	0	2	2	2	0	0	0	0	2	2
Arm D: A4421 Wretchwick Way	25	2	0	0	0	27	27	18	1	0	0	0	19	19	19	1	0	0	0	19	19
Arm A: Gavray Drive	29	2	1	0	0	31	31	38	5	4	2	0	45	46	84	2	0	0	0	86	86
Arm B: A4421 Charbridge Lane	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arm C: Wretchwick Avenue	15	3	1	0	2	20	23	39	3	1	0	2	44	46	72	3	0	0	2	77	79
Arm D: A4421 Wretchwick Way	391	50	58	32	1	474	501	333	75	95	53	1	462	505	587	62	29	16	1	666	680
Arm A: Gavray Drive	5	0	0	0	0	6	6	3	0	0	0	0	3	3	4	0	0	0	0	4	4
Arm B: A4421 Charbridge Lane	55	7	1	0	2	65	67	40	4	1	1	2	47	49	38	2	0	0	2	42	45
Arm C: Wretchwick Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arm D: A4421 Wretchwick Way	61	7	1	0	0	69	69	32	3	1	0	0	35	36	37	2	0	0	0	39	39
Arm A: Gavray Drive	10	1	0	0	0	11	11	21	1	0	0	0	22	22	39	1	0	0	0	40	41
Arm B: A4421 Charbridge Lane	573	78	32	18	1	670	685	315	70	114	63	1	450	501	683	54	11	6	1	744	750
Arm C: Wretchwick Avenue	11	2	1	0	0	14	14	36	3	1	0	0	40	40	96	4	0	0	0	100	100
Arm D: A4421 Wretchwick Way	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	0	0	0	1	1
Arm B: A4421 Wretchwick Way (Southwest)	365	58	59	33	0	456	483	307	78	92	51	0	436	477	516	45	29	16	0	577	590
Arm C: Peregrine Way	112	0	0	0	1	113	114	77	1	4	2	1	80	83	127	20	0	0	1	148	149
Arm A: A4421 Wretchwick Way (Northeast)	482	81	33	18	0	581	596	326	70	115	64	0	460	511	740	59	12	7	0	806	811
Arm C: Peregrine Way	18	21	0	0	0	39	39	38	0	0	0	0	38	38	118	4	0	0	0	122	122
Arm A: A4421 Wretchwick Way (Northeast)	113	0	0	0	1	114	115	46	5	0	0	1	52	53	78	0	0	0	1	79	80
Arm B: A4421 Wretchwick Way (Southwest)	34	8	0	0	0	42	42	20	0	0	0	0	21	21	29	13	0	0	0	42	42
Arm A: A4421 Wretchwick Way (Northeast)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arm B: A4421 Neunkirchen Way	384	55	59	33	0	472	498	300	78	92	51	0	429	470	482	57	29	16	0	556	568
Arm C: Peregrine Way	14	11	0	0	0	26	26	27	0	0	0	0	28	28	63	0	0	0	0	63	63
Arm A: A4421 Wretchwick Way (Northeast)	323	75	33	18	0	417	431	309	69	106	59	0	437	484	765	55	12	7	0	827	832
Arm B: A4421 Neunkirchen Way	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arm C: Peregrine Way	113	1	0	0	0	114	114	107	13	0	0	0	120	120	339	27	0	0	0	366	366
Arm A: A4421 Wretchwick Way (Northeast)	176	27	0	0	0	203	203	56	0	9	5	0	61	65	93	8	0	0	0	101	101
Arm B: A4421 Neunkirchen Way	232	26	0	0	0	258	258	91	17	0	0	0	108	108	149	12	0	0	0	161	161
Arm C: Peregrine Way	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ARM A: London Rd (North)	0	0	0	0		0	0	0	0	0	0		0	0	0	0	0	0		0	0
ARM B: A4421 (East)	28	0	0	0		28	28	51	0	0	0		51	51	107	0	0	0		107	107
ARM C: A41 (South)	189	16	0	0	1	205	207	104	7	6	3	1	115	119	209	19	2	1	1	230	232
ARM D: Gravenhill Rd (West)	35	0	0	0	2	37	39	16	0	0	0	2	19	21	26	0	0	0	2	29	31
ARM E: A41 (North)	72	17	0	0		89	89	56	21	19	10		88	96	118	13	33	19		149	164
ARM A: London Rd (North)	17	0	0	0		17	17	16	0	0	0		16	16	16	0	0	0		16	16
ARM B: A4421 (East)	0	0	0	0		0	0	0	0	0	0		0	0	0	0	0	0		0	0
ARM C: A41 (South)	241	15	41	23		279	297	174	56	47	26		256	277	206	23	28	16		245	257
ARM D: Gravenhill Rd (West)	69	15	16	9		93	100	48	3	2	1		52	53	88	2	0	0		90	90
ARM E: A41 (North)	288	52	2	1		342	343	153	36	43	24		214	233	321	45	1	1		366	367
ARM A: London Rd (North)	162	18	9	5	1	186	191	98	13	18	10	1	123	132	264	26	0	0	1	291	292
ARM B: A4421 (East)	141	34	31	18		192	206	102	36	29	16		154	168	370	36	5	3		408	410
ARM C: A41 (South)	0	0	0	0		0	0	0	0	0	0		0	0	0	0	0	0		0	0
ARM D: Gravenhill Rd (West)	36	1	0	0		37	37	32	1	0	0		33	33	72	1	0	0		73	73
ARM E: A41 (North)	627	86	92	51		764	804	396	86	70	39		521	553	605	81	63	36		721	749
ARM A: London Rd (North)	25	1	0	0	2	28	30	22	1	0	0	2	25	27	39	1	0	0	2	42	44
ARM B: A4421 (East)	54	4	1	0		58	58	46	9	5	3		57	59	148	5	8	4		157	161

ARM C: A41 (South)	41	2	0	0	43	43	27	1	0	0	28	29	120	6	0	0	126	126
ARM D: Gravenhill Rd (West)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ARM E: A41 (North)	98	11	54	30	138	162	76	9	42	23	108	126	270	8	4	2	279	281
ARM A: London Rd (North)	81	14	40	22	117	135	63	19	15	9	91	98	131	15	0	0	146	146
ARM B: A4421 (East)	213	38	1	0	252	252	217	38	72	40	295	327	469	45	0	0	515	515
ARM C: A41 (South)	675	141	125	70	886	942	333	68	107	59	460	507	717	64	67	38	819	848
ARM D: Gravenhill Rd (West)	110	4	1	0	114	115	57	4	6	4	64	67	127	6	0	0	134	134
ARM E: A41 (North)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



SATURN

Atkins Ltd /
DVV / ITS

etwork.UFS
2026_DM_AM_N

Scale 11825

Link Annot:

S.L.A.

Bandwidths =
10./mm

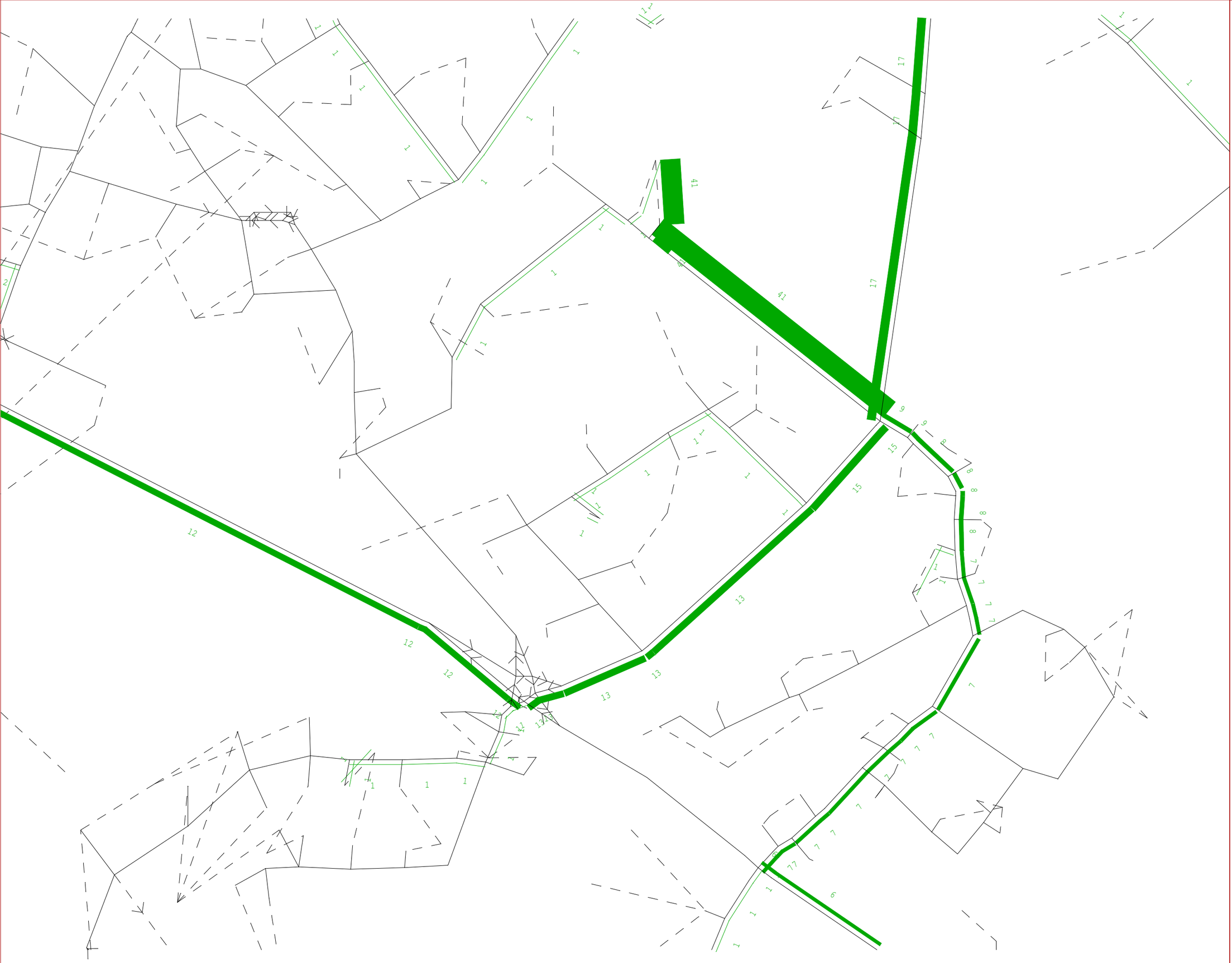
Selected
Link
Assignment
Thru destin.
Zone 1276

Total Demand
Flow = 9.11

All User Cls

21-12-17

WHITE YOUNG



SATURN

Atkins Ltd /
DVV / ITS

etwork.UFS
2026_DM_AM_N

Scale 11825

Link Annot:

S.L.A.

Bandwidths =
10./mm

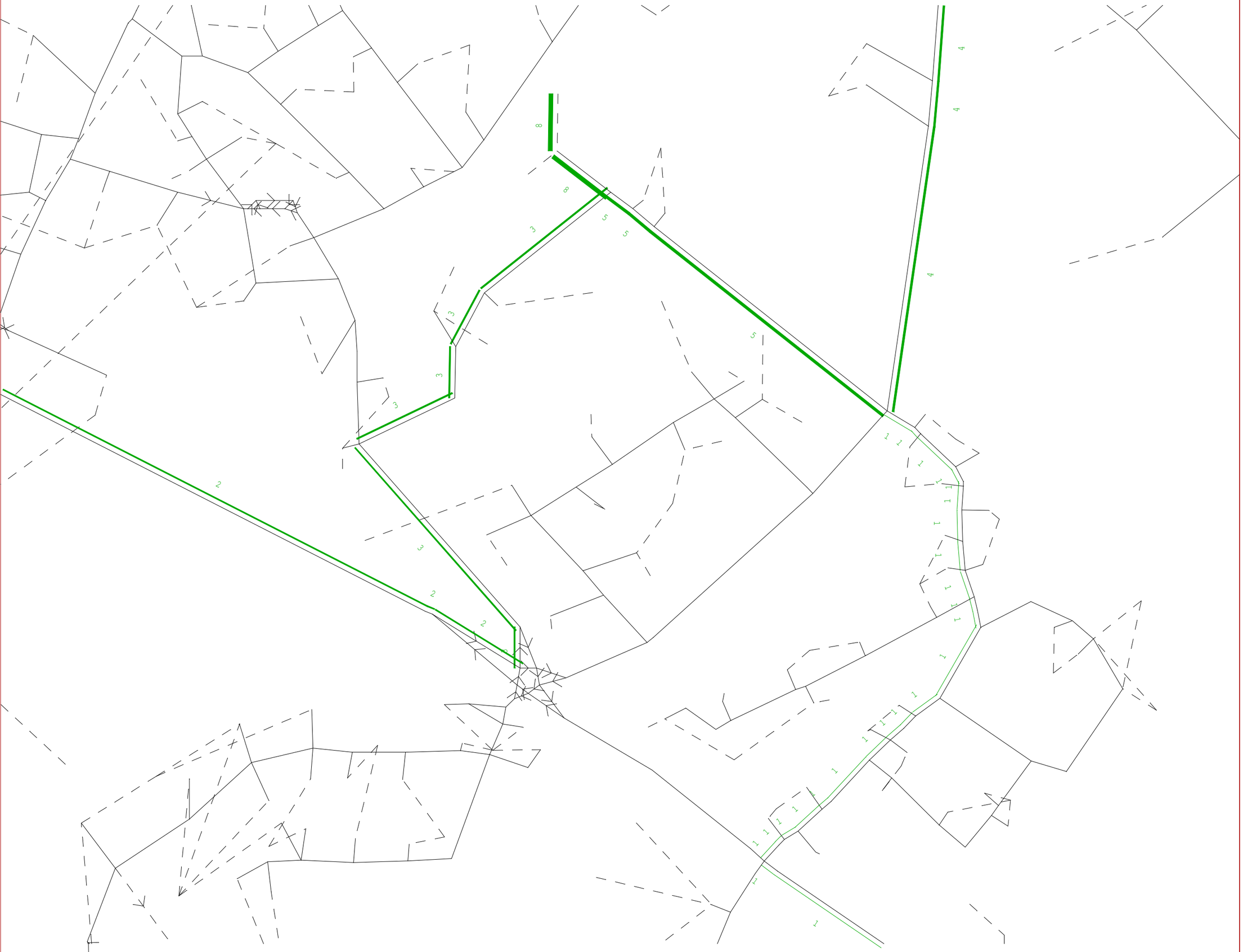
Selected
Link
Assignment
Thru origin
Zone 1276

Total Demand
Flow = 41

All User Cls

21-12-17

WHITE YOUNG



SATURN

Atkins Ltd /
DVV / ITS

etwork.UFS
2026_DM_AM_N

Scale 11825

Link Annot:

S.L.A.

Bandwidths =
10./mm

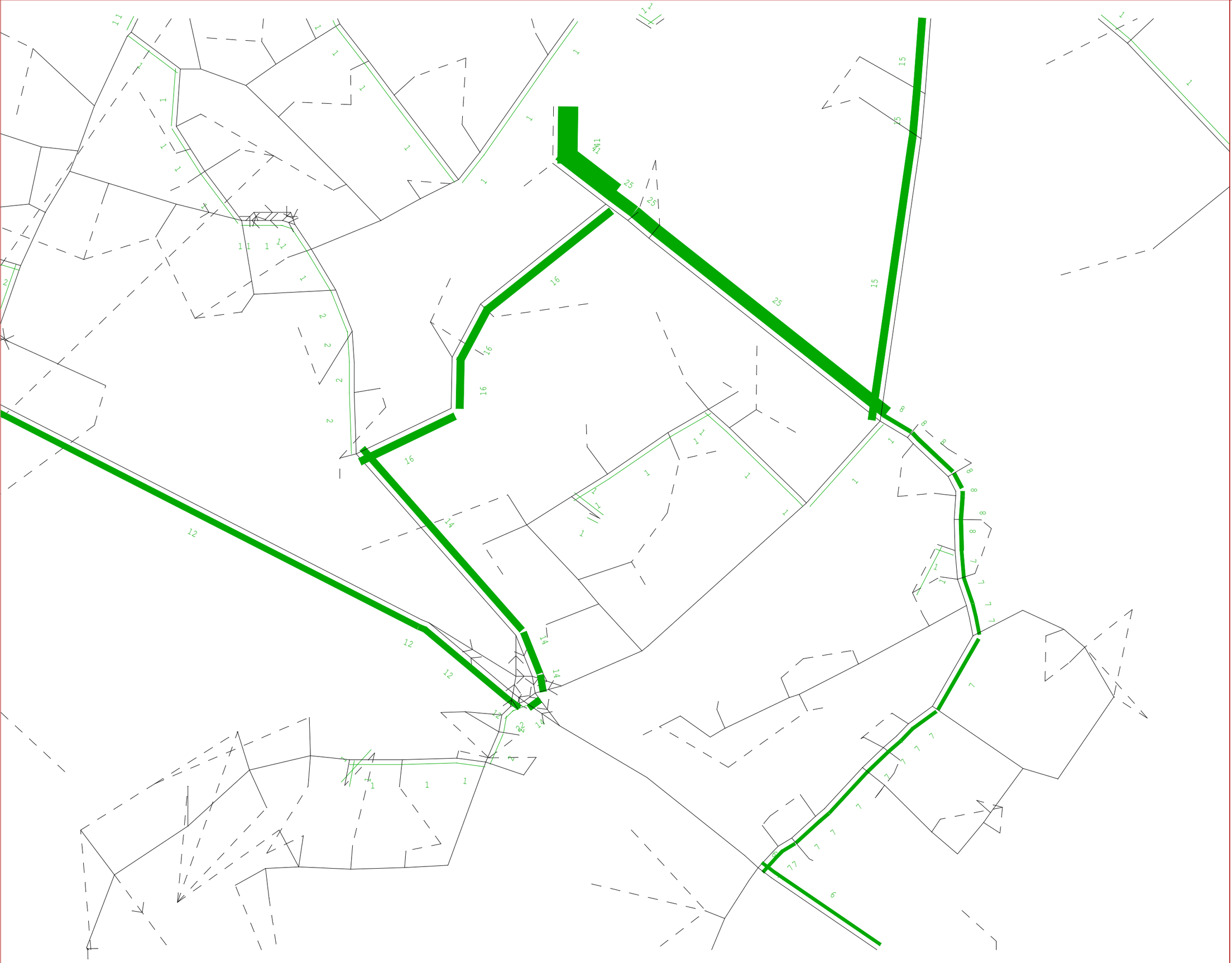
Selected
Link
Assignment
Thru destin.
Zone 1277

Total Demand
Flow = 8.47

All User Cls

21-12-17

WHITE YOUNG



SATURN

Atkins Ltd /

DVV / ITS

etwork.UFS

2026_DM_AM_N

Scale 11825

Link Annot:

S.L.A.

Bandwidths =

10./mm

Selected

Link

Assignment

Thru origin

Zone 1277

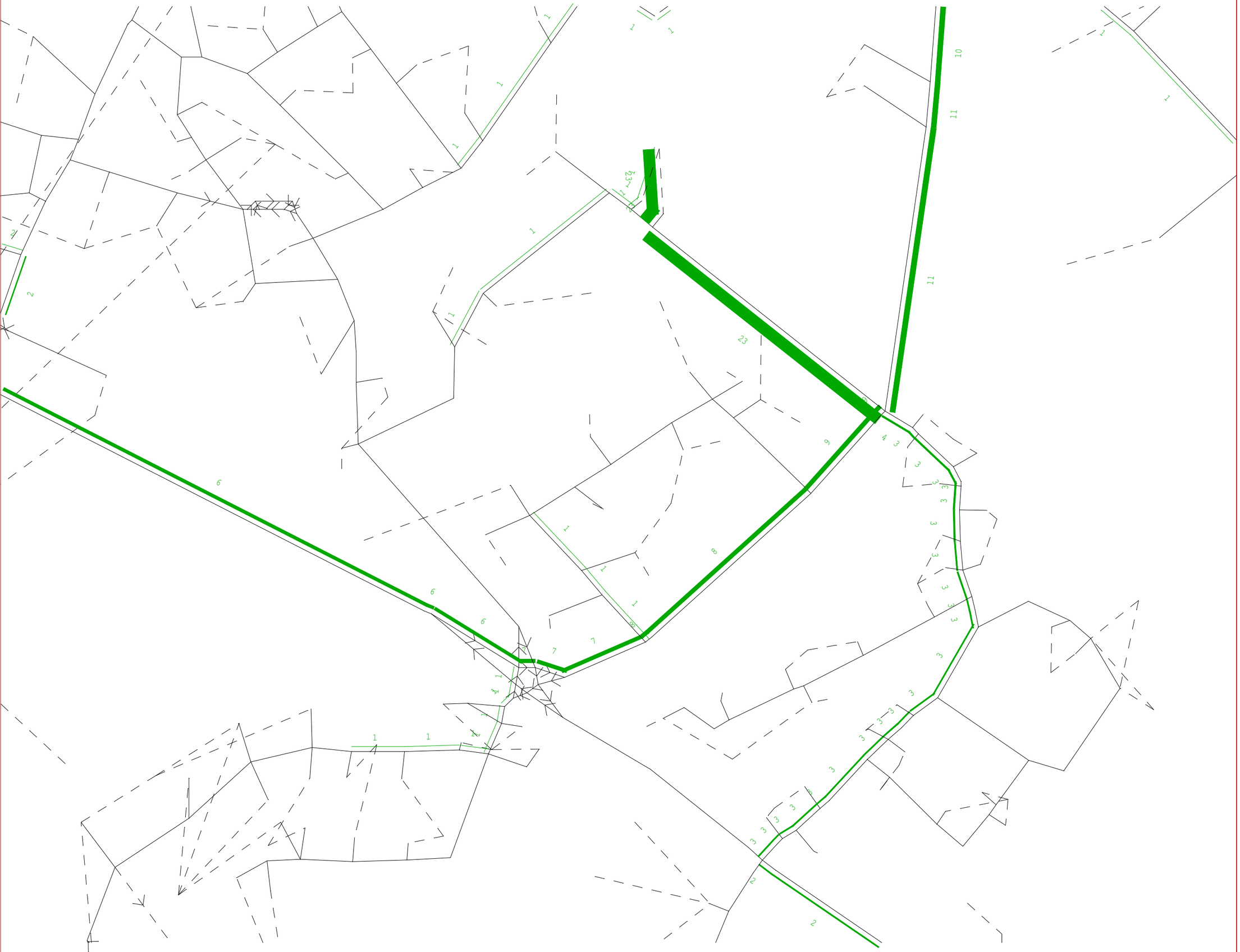
Total Demand

Flow = 41

All User Cls

21-12-17

WHITE YOUNG



SATURN

Atkins Ltd /
DVV / ITS

etwork.UFS
2026_DM_IP_N

Scale 11825

Link Annot:

S.L.A.

Bandwidths =
10./mm

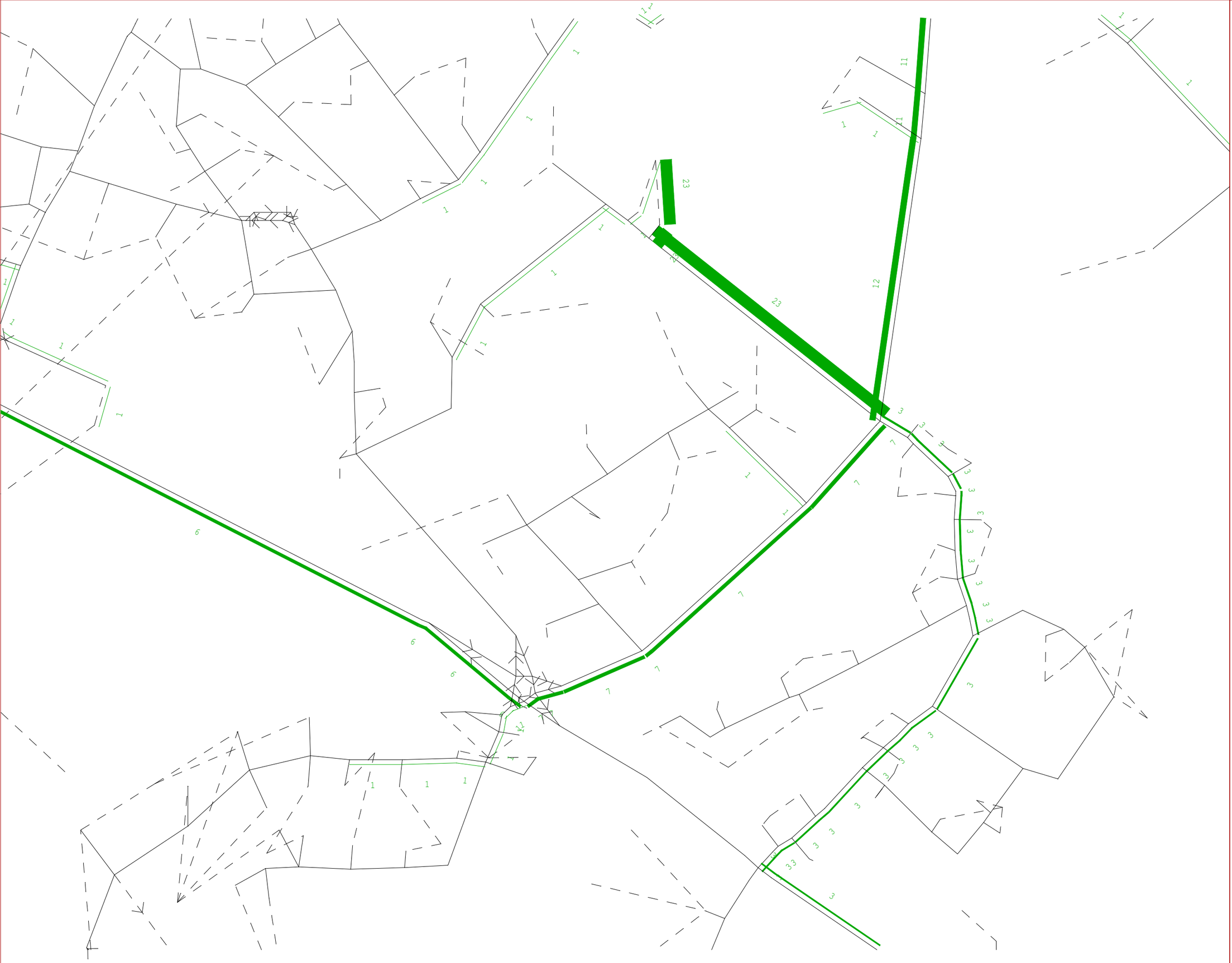
Selected
Link
Assignment
Thru destin.
Zone 1276

Total Demand
Flow = 24

All User Cls

21-12-17

WHITE YOUNG



SATURN

Atkins Ltd /
DVV / ITS

etwork.UFS
2026_DM_IP_N

Scale 11825

Link Annot:

S.L.A.

Bandwidths =
10./mm

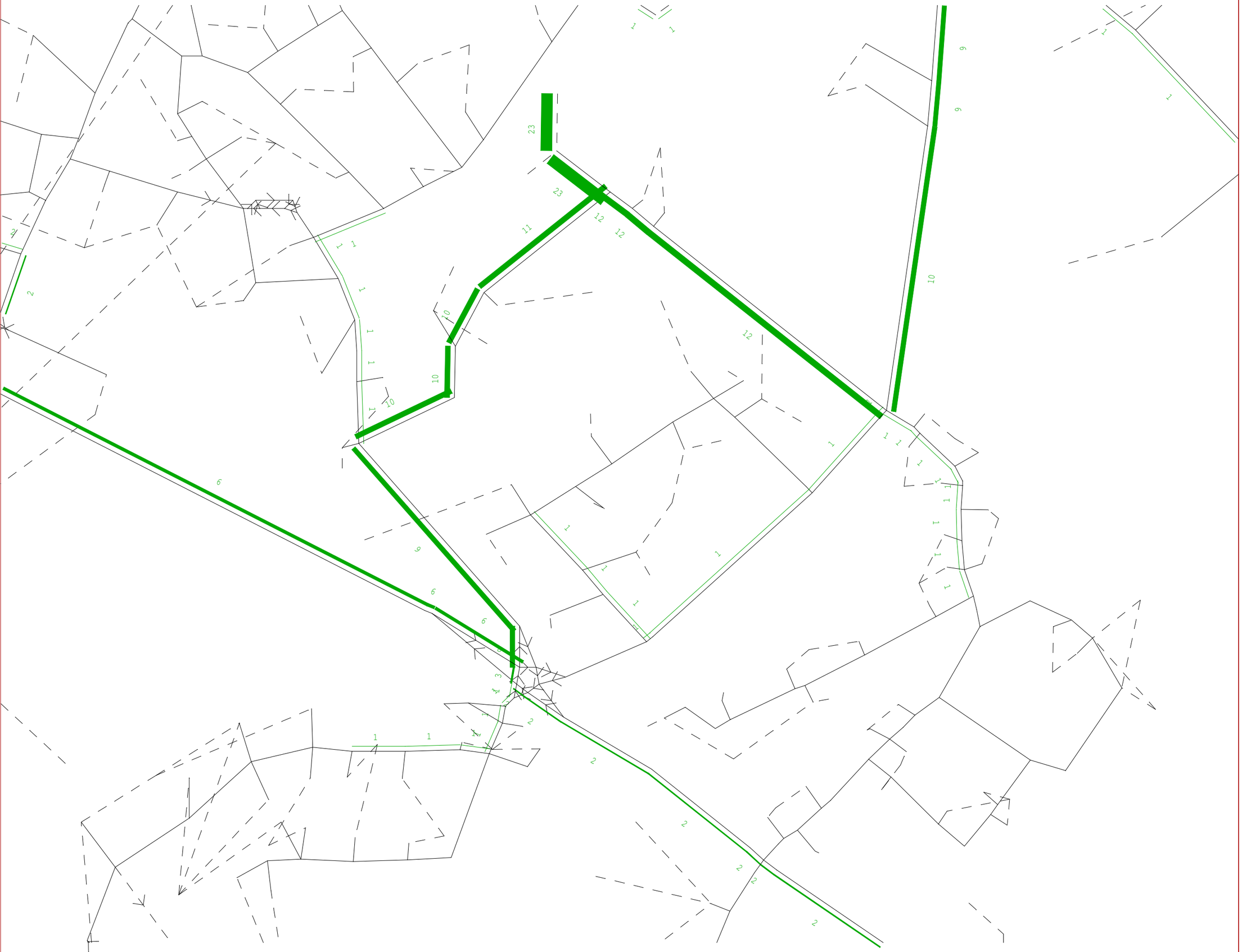
Selected
Link
Assignment
Thru origin
Zone 1276

Total Demand
Flow = 24

All User Cls

21-12-17

WHITE YOUNG



SATURN

Atkins Ltd /
DVV / ITS

etwork.UFS
2026_DM_IP_N

Scale 11825

Link Annot:

S.L.A.

Bandwidths =
10./mm

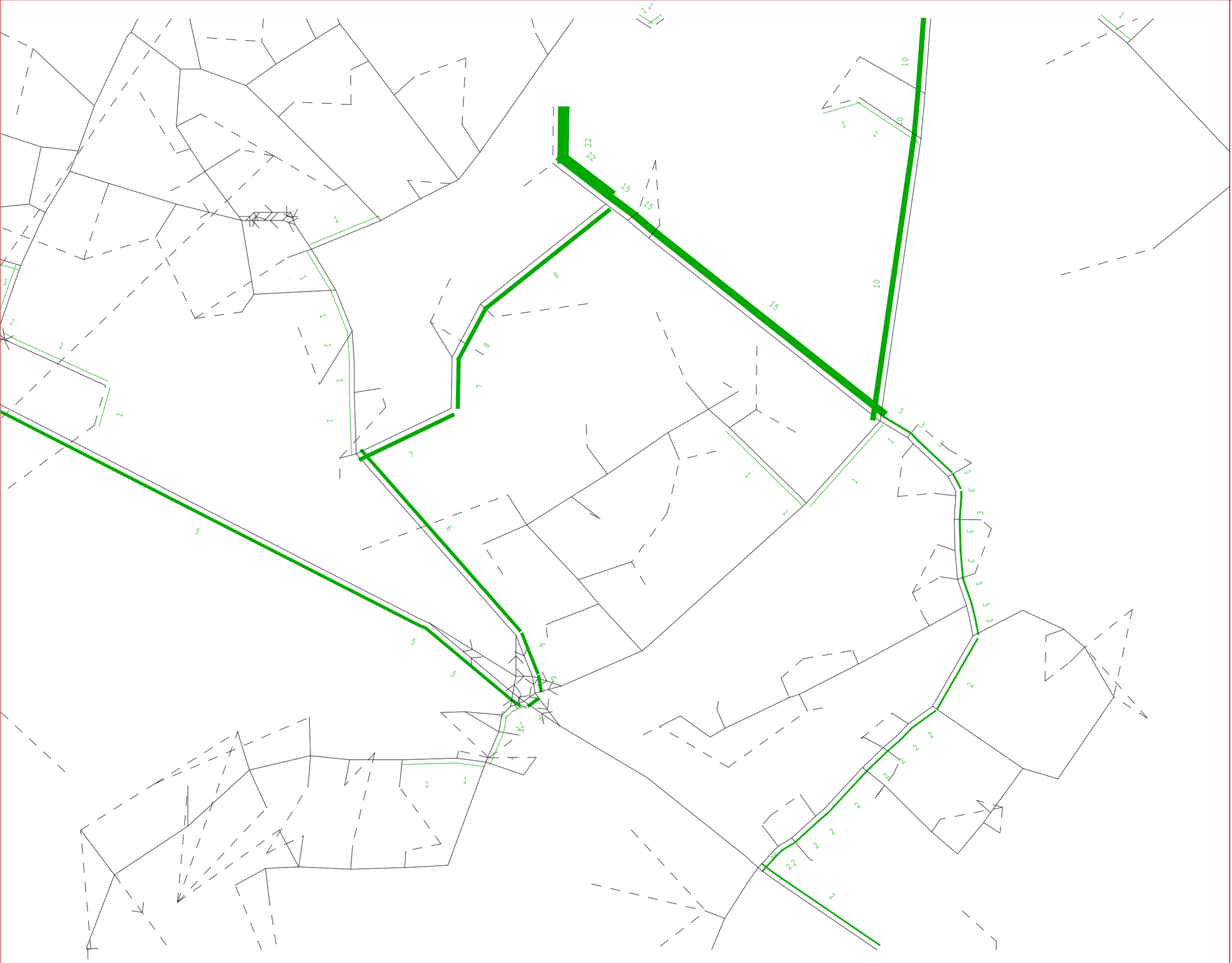
Selected
Link
Assignment
Thru destin.
Zone 1277

Total Demand
Flow = 23

All User Cls

21-12-17

WHITE YOUNG



SATURN

Atkins Ltd /
DVV / ITS

etwork.UFS
2026_DM_IP_N

Scale 11825

Link Annot:

S.L.A.

Bandwidths =
10./mm

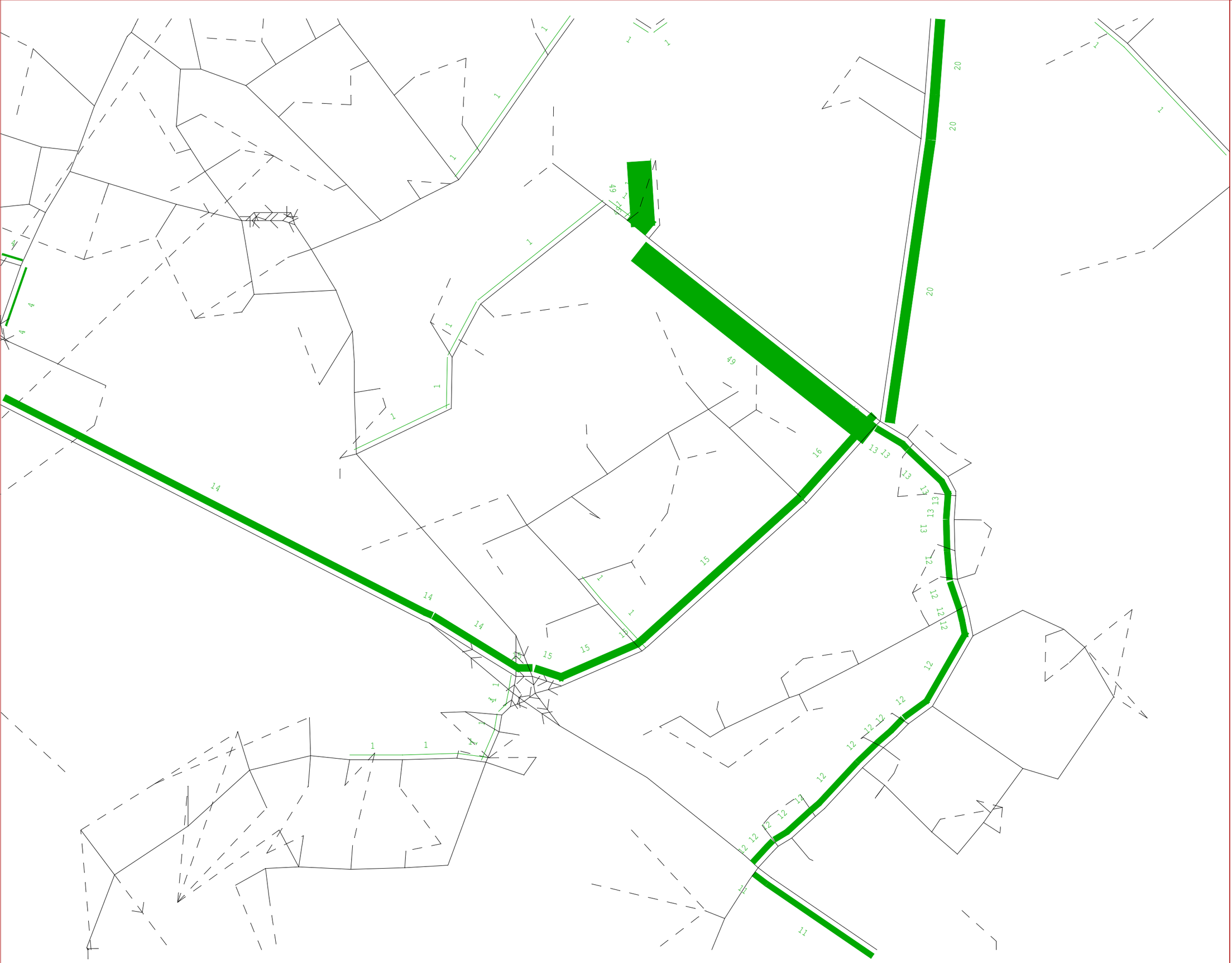
Selected
Link
Assignment
Thru origin
Zone 1277

Total Demand
Flow = 22

All User Cls

21-12-17

WHITE YOUNG



SATURN

Atkins Ltd /
DVV / ITS

1\2026_DM_PM
_Network.UFS

Scale 11827

Link Annot:

S.L.A.

Bandwidths =
10./mm

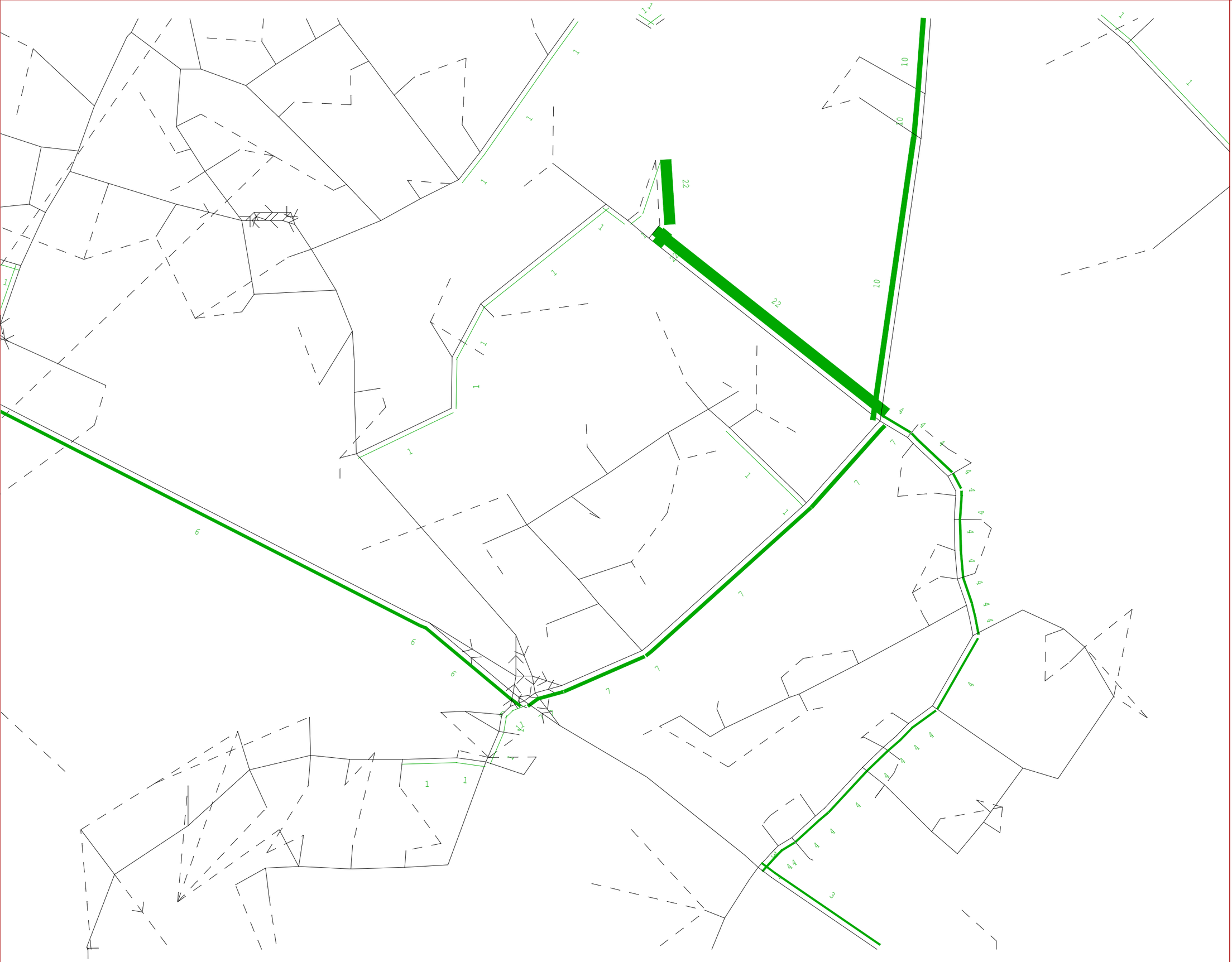
Selected
Link
Assignment
Thru destin.
Zone 1276

Total Demand
Flow = 50

All User Cls

21-12-17

WHITE YOUNG



SATURN

Atkins Ltd /
DVV / ITS

1\2026_DM_PM
_Network.UFS

Scale 11827

Link Annot:

S.L.A.

Bandwidths =
10./mm

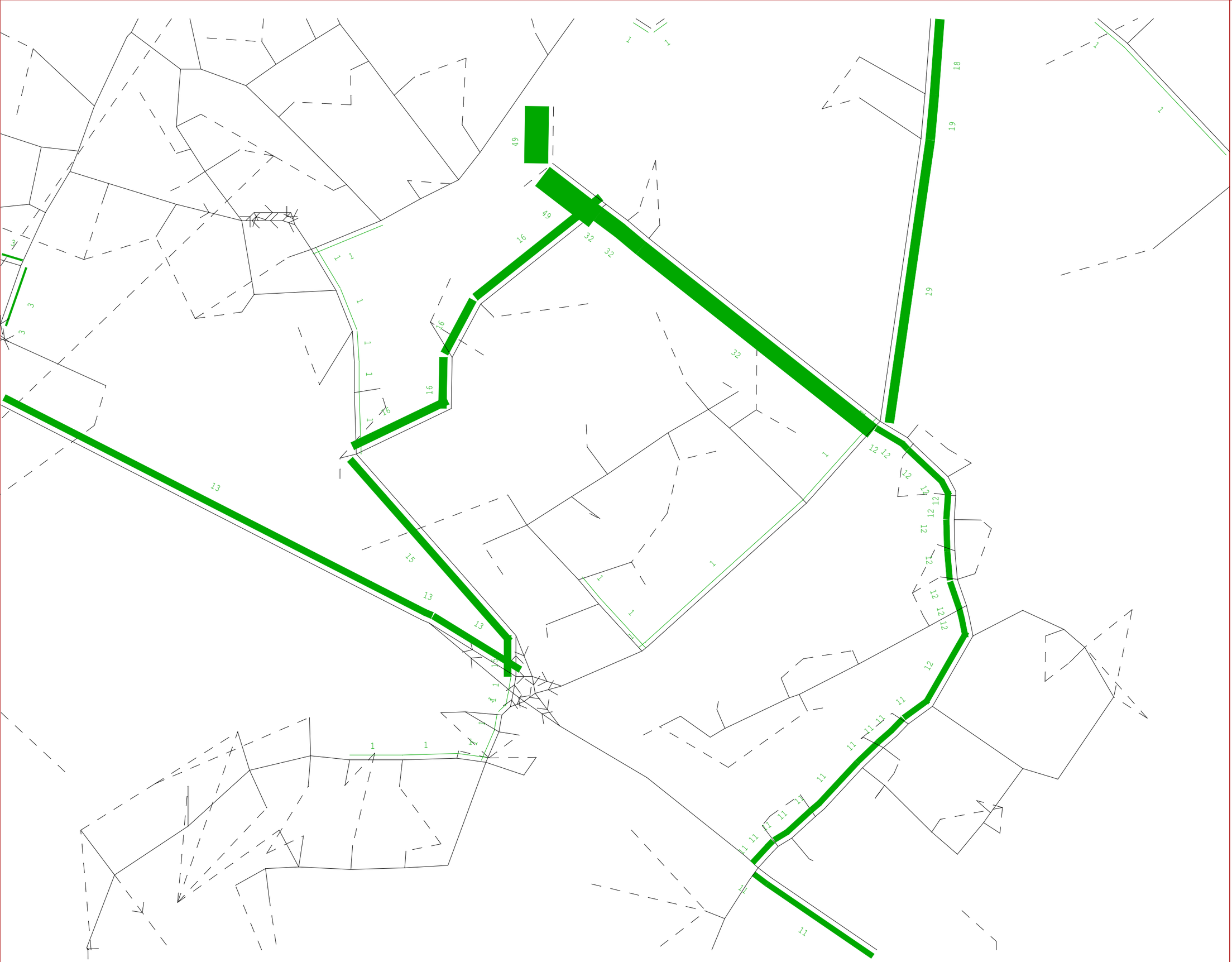
Selected
Link
Assignment
Thru origin
Zone 1276

Total Demand
Flow = 23

All User Cls

21-12-17

WHITE YOUNG



SATURN

Atkins Ltd /
DVV / ITS

1\2026_DM_PM
_Network.UFS

Scale 11827

Link Annot:

S.L.A.

Bandwidths =
10./mm

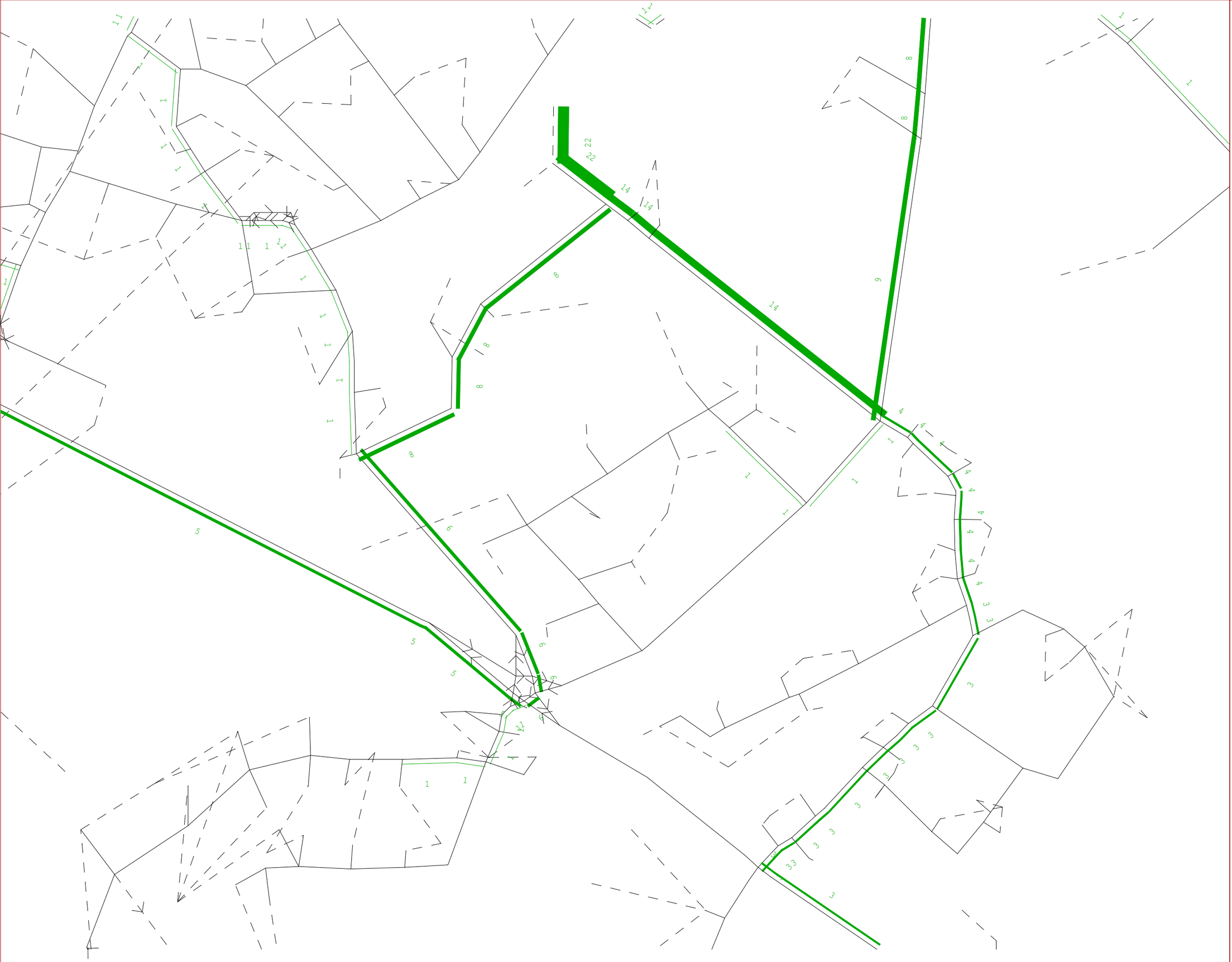
Selected
Link
Assignment
Thru destin.
Zone 1277

Total Demand
Flow = 49

All User Cls

21-12-17

WHITE YOUNG



SATURN

Atkins Ltd /
DVV / ITS

1\2026_DM_PM
_Network.UFS

Scale 11827

Link Annot:

S.L.A.

Bandwidths =
10./mm

Selected
Link
Assignment
Thru origin
Zone 1277

Total Demand
Flow = 22

All User Cls

21-12-17

WHITE YOUNG

2026				AM Peak							Inter Peak							PM Peak						
Jn Ref	Description	From Arm	To Arm	Car	LGV	HGV (PCU)	HGV (Veh)	Bus (Veh)	Total Veh	PCUs	Car	LGV	HGV (PCU)	HGV (Veh)	Bus (Veh)	Total Veh	PCUs	Car	LGV	HGV (PCU)	HGV (Veh)	Bus (Veh)	Total Veh	PCUs
1	Gavray Drive/ Mallards Way	Arm A: Gavray Drive (North)	Arm B: Gavray Drive (South)	68	2	0	0	0	70	70	34	1	0	0	0	35	35	39	14	0	0	0	53	53
		Arm A: Gavray Drive (North)	Arm C: Mallards Way	30	2	0	0	0	32	32	21	1	0	0	0	22	22	24	1	0	0	0	25	25
		Arm B: Gavray Drive (South)	Arm A: Gavray Drive (North)	15	1	0	0	0	17	17	27	1	0	0	0	28	28	69	1	0	0	0	71	71
		Arm B: Gavray Drive (South)	Arm C: Mallards Way	57	1	0	0	0	58	58	64	4	3	2	0	69	71	87	0	0	0	0	87	87
		Arm C: Mallards Way	Arm A: Gavray Drive (North)	10	9	0	0	0	19	19	25	1	0	0	0	26	26	36	1	0	0	0	37	37
		Arm C: Mallards Way	Arm B: Gavray Drive (South)	48	0	0	0	0	48	48	34	0	1	1	0	35	35	37	0	0	0	0	37	37
2	Gavray Drive/A4421 Wretchwick Way Roundabout	Arm A: Gavray Drive	Arm A: Gavray Drive	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Arm A: Gavray Drive	Arm B: A4421 Charbridge Lane	101	4	0	0	0	106	106	61	2	2	1	0	64	64	64	1	0	0	0	65	65
		Arm A: Gavray Drive	Arm C: Wretchwick Avenue	25	1	0	0	0	26	26	11	0	0	0	0	11	11	15	14	0	0	0	29	29
		Arm B: Gavray Drive	Arm D: A4421 Wretchwick Way	25	2	0	0	0	27	27	16	1	0	0	0	17	17	16	1	0	0	0	17	17
		Arm B: A4421 Charbridge Lane	Arm A: Gavray Drive	66	2	1	0	0	69	69	83	5	4	2	0	90	92	135	2	0	0	0	138	138
		Arm B: A4421 Charbridge Lane	Arm B: A4421 Charbridge Lane	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Arm B: A4421 Charbridge Lane	Arm C: Wretchwick Avenue	544	115	47	26	2	687	710	285	69	54	30	2	386	411	508	47	31	17	2	574	589
		Arm B: A4421 Charbridge Lane	Arm D: A4421 Wretchwick Way	331	27	20	11	1	369	379	239	28	50	28	1	296	319	521	43	1	0	1	565	566
		Arm C: Wretchwick Avenue	Arm A: Gavray Drive	6	1	0	0	0	7	7	9	1	0	0	0	9	9	38	1	0	0	0	39	39
		Arm C: Wretchwick Avenue	Arm B: A4421 Charbridge Lane	352	64	43	24	2	442	463	277	64	52	29	2	372	397	583	79	19	11	2	675	686
		Arm C: Wretchwick Avenue	Arm C: Wretchwick Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Arm C: Wretchwick Avenue	Arm D: A4421 Wretchwick Way	37	4	1	0	0	41	41	22	1	0	0	0	23	24	22	1	0	0	0	23	23
		Arm D: A4421 Wretchwick Way	Arm A: Gavray Drive	6	1	0	0	0	7	7	19	1	0	0	0	20	20	29	1	0	0	0	30	30
		Arm D: A4421 Wretchwick Way	Arm B: A4421 Charbridge Lane	539	61	2	1	1	602	604	296	42	87	49	1	388	427	448	23	3	2	1	474	476
		Arm D: A4421 Wretchwick Way	Arm C: Wretchwick Avenue	93	4	1	0	0	97	98	58	5	1	1	0	64	64	80	4	0	0	0	83	84
		Arm D: A4421 Wretchwick Way	Arm D: A4421 Wretchwick Way	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	0	0	0	1	1
3	A4421 Wretchwick Way/ Peregrine Way Priority Junction	Arm A: A4421 Wretchwick Way (Northeast)	Arm B: A4421 Wretchwick Way (Southwest)	284	32	20	11	0	327	336	193	29	47	26	0	248	269	382	22	1	1	0	405	406
		Arm A: A4421 Wretchwick Way (Northeast)	Arm C: Peregrine Way	108	1	0	0	1	110	111	84	1	4	2	1	88	91	177	22	0	0	1	200	201
		Arm B: A4421 Wretchwick Way (Southwest)	Arm A: A4421 Wretchwick Way (Northeast)	521	66	3	2	0	588	589	325	43	79	44	0	412	447	479	27	3	2	0	508	509
		Arm B: A4421 Wretchwick Way (Southwest)	Arm C: Peregrine Way	17	24	0	0	0	41	41	36	0	0	0	0	36	36	107	5	0	0	0	112	112
		Arm C: Peregrine Way	Arm A: A4421 Wretchwick Way (Northeast)	118	0	0	0	1	119	120	48	5	9	5	1	60	65	78	0	0	0	1	80	81
		Arm C: Peregrine Way	Arm B: A4421 Wretchwick Way (Southwest)	38	9	0	0	0	46	46	20	0	0	0	0	21	21	29	14	0	0	0	44	44
4	A4421 Wretchwick Way/ Peregrine Way/ A4421 Neunkirchen Way Roundabout	Arm A: A4421 Wretchwick Way (Northeast)	Arm A: A4421 Wretchwick Way (Northeast)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Arm A: A4421 Wretchwick Way (Northeast)	Arm B: A4421 Neunkirchen Way	309	28	20	11	0	348	357	184	29	47	26	0	239	259	342	36	1	1	0	378	379
		Arm A: A4421 Wretchwick Way (Northeast)	Arm C: Peregrine Way	13	13	0	0	0	26	26	30	0	0	0	0	30	30	70	0	0	0	0	70	70
		Arm B: A4421 Neunkirchen Way	Arm A: A4421 Wretchwick Way (Northeast)	365	59	3	2	0	427	428	305	42	79	44	0	392	427	503	23	3	2	0	528	529
		Arm B: A4421 Neunkirchen Way	Arm B: A4421 Neunkirchen Way	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Arm B: A4421 Neunkirchen Way	Arm C: Peregrine Way	121	1	0	0	0	122	122	108	15	0	0	0	123	123	308	30	0	0	0	338	338
		Arm C: Peregrine Way	Arm A: A4421 Wretchwick Way (Northeast)	172	30	0	0	0	202	202	56	0	0	0	0	56	56	83	9	0	0	0	92	92
		Arm C: Peregrine Way	Arm B: A4421 Neunkirchen Way	250	30	0	0	0	280	280	91	19	0	0	0	110	110	164	14	0	0	0	178	178
		Arm C: Peregrine Way	Arm C: Peregrine Way	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	A4421 Seelscheid Way / A41 / London Road / Graven Hill Road north "Rodney House" Roundabout	ARM A: London Rd (North)	ARM A: London Rd (North)	0	0	0	0		0	0	0	0	0	0		0	0	0	0	0	0		0	0
		ARM A: London Rd (North)	ARM B: A4421 (East)	38	0	0	0		38	38	50	0	0	0		51	51	103	0	0	0		104	104
		ARM A: London Rd (North)	ARM C: A41 (South)	64	4	0	0	1	68	70	103	7	6	3	1	114	118	100	19	3	2	1	122	125
		ARM A: London Rd (North)	ARM D: Gravenhill Rd (West)	33	1	0	0	2	36	38	16	0	0	0	2	18	20	20	1	0	0	2	23	25
		ARM A: London Rd (North)	ARM E: A41 (North)	94	19	0	0		113	113	56	21	19	10		87	95	159	3	35	19		181	196
		ARM B: A4421 (East)	ARM A: London Rd (North)	9	0	0	0		9	9	16	0	0	0		16	16	7	0	0	0		7	7
		ARM B: A4421 (East)	ARM B: A4421 (East)	0	0	0	0		0	0	0	0	0	0		0	0	0	0	0	0		0	0
		ARM B: A4421 (East)	ARM C: A41 (South)	91	1	0	0		91	91	174	56	47	26		256	277	34	0	0	0		34	34
		ARM B: A4421 (East)	ARM D: Gravenhill Rd (West)	127	5	18	10		142	150	48	3	2	1		52	53	138	10	1	0		148	148
		ARM B: A4421 (East)	ARM E: A41 (North)	332	53	2	1		386	387	153	36	43	24		214	233	326	41	0	0		367	367
		ARM C: A41 (South)	ARM A: London Rd (North)	55	18	3	2	1	75	78	98	13	18	10	1	123	132	108	5	0	0	1	114	115
		ARM C: A41 (South)	ARM B: A4421 (East)	26	0	0	0		26	26	102	36	29	16		154	168	134	14	0	0		148	148
		ARM C: A41 (South)	ARM C: A41 (South)	0	0	0	0		0	0	0	0	0	0		0	0	0	0	0	0		0	0
		ARM C: A41 (South)	ARM D: Gravenhill Rd (West)	95	2	0	0		97	97	32	1	0	0		33	33	169	8	0	0		177	177
		ARM C: A41 (South)	ARM E: A41 (North)	714	93	94	52		860	901	396	86	70	39		521	553	878	93	57	32		1003	1028
		ARM D: Gravenhill Rd (West)	ARM A: London Rd (North)	20	1	0	0	2	23	25	22	1	0	0	2	25	27	17	1	0	0	2	19	22
		ARM D: Gravenhill Rd (West)	ARM B: A4421 (East)	151	20	2	1		172	172	46	9	5	3		57	59	105	6	3	2		113	115
		ARM D: Gravenhill Rd (West)	ARM C: A41 (South)	83	4	0	0		87	88	27	1	0	0		28	29	48	2	0	0		49	49
		ARM D: Gravenhill Rd (West)	ARM D: Gravenhill Rd (West)	0	0	0	0		0	0	0	0	0	0		0	0	0	0	0	0		0	0
		ARM D: Gravenhill Rd (West)	ARM E: A41 (North)	171	19	57	32		222	248	76	9	42	23		108	126	170	9	1	0		179	179
		ARM E: A41 (North)	ARM A: London Rd (North)	109	16	42	24		149	168	65	20	16	9		94	101	153	16	0	0		168	168
		ARM E: A41 (North)	ARM B: A4421 (East)	270	41	1	1		311	312	222	39	74	41		302	334	459	37	0	0		497	497
		ARM E: A41 (North)	ARM C: A41 (South)	680	124	130	73		877	935	341	69	109	61		471	519	708	71	72	40		819	851
		ARM E: A41 (North)	ARM D: Gravenhill Rd (West)	203	11	2	1		215	216	60	4	6	4		67	70	244	7	1	0		252	252
		ARM E: A41 (North)	ARM E: A41 (North)	0	0	0	0		0	0	0	0	0	0		0	0	0	0	0	0		0	0

APPENDIX D –

JUNCTION CAPACITY MODELS

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 770558 software@trl.co.uk www.trlsoftware.co.uk

Filename: Gavray Drive - Mallards Junction-v1.j9
Path: M:\Projects\17167-00 - Gavray Drive, Bicester\Technical\Picady\Rev A
Report generation date: 28/03/2018 14:46:51

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	BASELINE 2021							
Stream B-C	0.0	4.89	0.03	A	0.1	5.11	0.09	A
Stream B-A	0.0	7.48	0.01	A	0.0	0.00	0.00	A
Stream C-B	0.1	6.06	0.08	A	0.1	6.13	0.08	A
	BASELINE 2026							
Stream B-C	0.0	5.68	0.03	A	0.1	5.33	0.06	A
Stream B-A	0.1	6.78	0.06	A	0.0	7.56	0.04	A
Stream C-B	0.1	5.98	0.05	A	0.0	6.12	0.05	A
	BASELINE 2021+DEV 180							
Stream B-C	0.0	5.33	0.03	A	0.1	5.19	0.09	A
Stream B-A	0.0	7.00	0.04	A	0.0	7.89	0.01	A
Stream C-B	0.1	6.13	0.08	A	0.1	6.18	0.08	A
	BASELINE 2026+DEV 180							
Stream B-C	0.0	5.83	0.03	A	0.1	5.61	0.06	A
Stream B-A	0.1	6.80	0.08	A	0.1	7.44	0.06	A
Stream C-B	0.1	6.01	0.06	A	0.0	6.15	0.05	A
	BASELINE 2021+DEV 300							
Stream B-C	0.0	5.55	0.04	A	0.1	5.39	0.09	A
Stream B-A	0.1	6.90	0.06	A	0.1	7.68	0.05	A
Stream C-B	0.1	6.15	0.08	A	0.1	6.21	0.08	A
	BASELINE 2026+DEV 300							
Stream B-C	0.0	5.92	0.03	A	0.1	5.77	0.06	A
Stream B-A	0.1	6.83	0.09	A	0.1	7.38	0.08	A
Stream C-B	0.1	6.03	0.06	A	0.0	6.17	0.05	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.

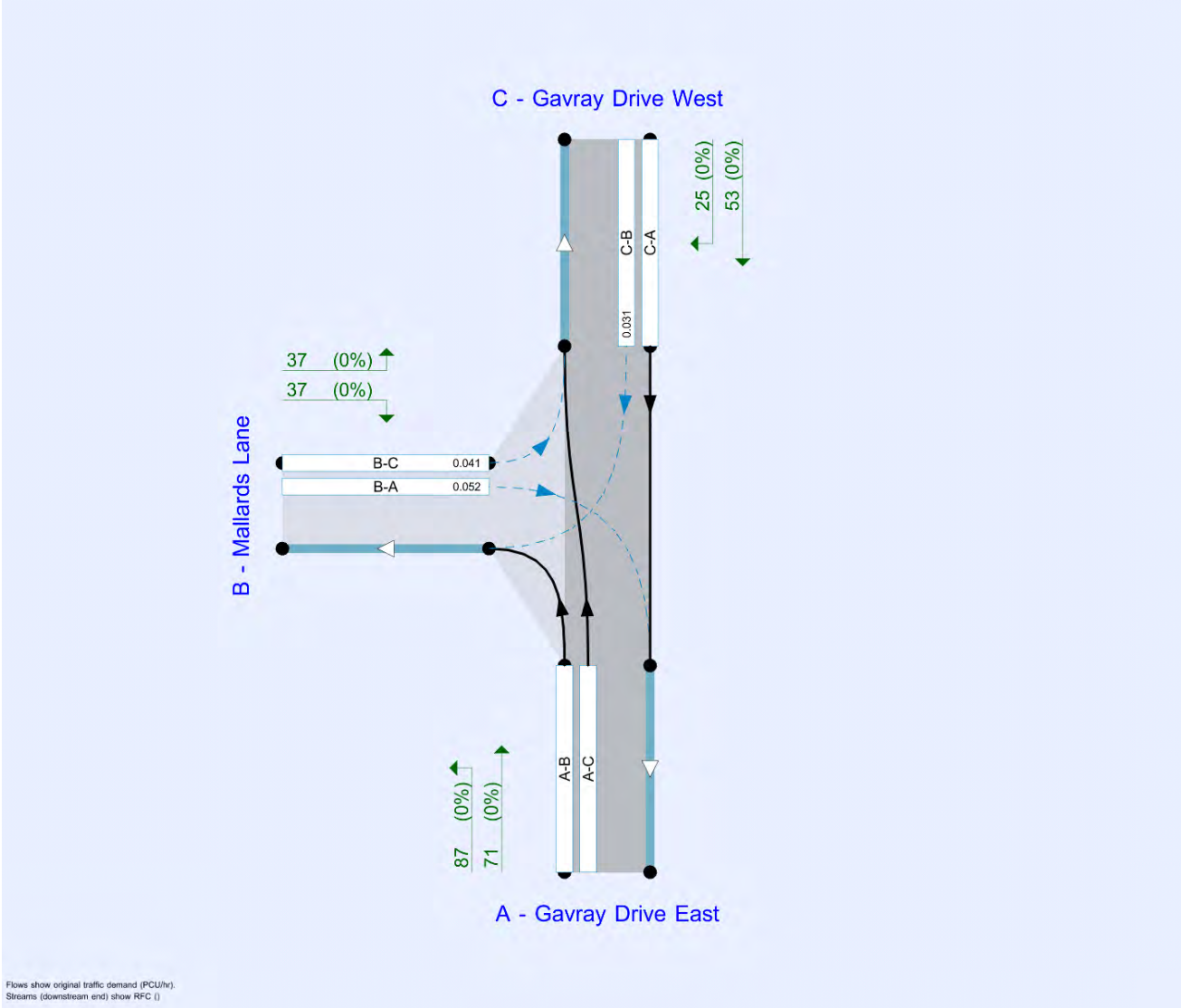
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	24/01/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	KONSTANTINA-SOL\Konstantina Solomou
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	BASELINE 2021	AM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV	ONE HOUR	07:45	09:15	15	✓
D2	BASELINE 2021	PM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV	ONE HOUR	16:45	18:15	15	✓
D3	BASELINE 2026	AM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV	ONE HOUR	07:45	09:15	15	✓
D4	BASELINE 2026	PM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV	ONE HOUR	16:45	18:15	15	✓
D5	BASELINE 2021+DEV 180	AM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV+180 DEV	ONE HOUR	07:45	09:15	15	✓
D6	BASELINE 2021+DEV 180	PM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV+180 DEV	ONE HOUR	16:45	18:15	15	✓
D7	BASELINE 2026+DEV 180	AM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV+180 DEV	ONE HOUR	07:45	09:15	15	✓
D8	BASELINE 2026+DEV 180	PM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV+180 DEV	ONE HOUR	16:45	18:15	15	✓
D9	BASELINE 2021+DEV 300	AM	SATURN WITH DEV TURNING FLOWS 2021	ONE HOUR	07:45	09:15	15	✓
D10	BASELINE 2021+DEV 300	PM	SATURN WITH DEV TURNING FLOWS 2021	ONE HOUR	16:45	18:15	15	✓
D11	BASELINE 2026+DEV 300	AM	SATURN WITH DEV TURNING FLOWS 2026	ONE HOUR	07:45	09:15	15	✓
D12	BASELINE 2026+DEV 300	PM	SATURN WITH DEV TURNING FLOWS 2026	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

BASELINE 2021, 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	3.06	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Gavray Drive East		Major
B	Mallards Lane		Minor
C	Gavray Drive West		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 - Gavray Drive West	9.10			130.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Mallards Lane	One lane plus flare	10.00	5.50	5.00	4.00	4.00		1.00	90	85

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	512	0.081	0.204	0.128	0.291
1	B-C	766	0.102	0.257	-	-
1	C-B	649	0.218	0.218	-	-

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	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	BASELINE 2021	AM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Gavray Drive East		ONE HOUR	✓	13	100.000
B - Mallards Lane		ONE HOUR	✓	26	100.000
C - Gavray Drive West		ONE HOUR	✓	101	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Gavray Drive East	B - Mallards Lane	C - Gavray Drive West
From	A - Gavray Drive East	0	0	13
	B - Mallards Lane	5	0	21
	C - Gavray Drive West	53	47	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Gavray Drive East	B - Mallards Lane	C - Gavray Drive West
From	A - Gavray Drive East	0	0	1
	B - Mallards Lane	0	0	0
	C - Gavray Drive West	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.03	4.89	0.0	A	20	29
B-A	0.01	7.48	0.0	A	5	7
C-A					49	74
C-B	0.08	6.06	0.1	A	43	65
A-B					0	0
A-C					12	17

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	16	4	762	0.021	16	0.0	0.0	4.824	A
B-A	4	0.93	495	0.007	4	0.0	0.0	7.330	A
C-A	40	10			40				
C-B	36	9	647	0.055	35	0.0	0.1	5.883	A
A-B	0	0			0				
A-C	9	2			9				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	19	5	761	0.025	19	0.0	0.0	4.850	A
B-A	4	1	491	0.009	4	0.0	0.0	7.392	A
C-A	48	12			48				
C-B	43	11	647	0.066	43	0.1	0.1	5.957	A
A-B	0	0			0				
A-C	11	3			11				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	24	6	760	0.031	24	0.0	0.0	4.885	A
B-A	5	1	487	0.011	5	0.0	0.0	7.479	A
C-A	59	15			59				
C-B	52	13	646	0.081	52	0.1	0.1	6.058	A
A-B	0	0			0				
A-C	14	3			14				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	24	6	760	0.031	24	0.0	0.0	4.885	A
B-A	5	1	487	0.011	5	0.0	0.0	7.479	A
C-A	59	15			59				
C-B	52	13	646	0.081	52	0.1	0.1	6.058	A
A-B	0	0			0				
A-C	14	3			14				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	19	5	761	0.025	19	0.0	0.0	4.852	A
B-A	4	1	491	0.009	4	0.0	0.0	7.395	A
C-A	48	12			48				
C-B	43	11	647	0.066	43	0.1	0.1	5.961	A
A-B	0	0			0				
A-C	11	3			11				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	16	4	762	0.021	16	0.0	0.0	4.827	A
B-A	4	0.93	495	0.007	4	0.0	0.0	7.330	A
C-A	40	10			40				
C-B	36	9	647	0.055	36	0.1	0.1	5.889	A
A-B	0	0			0				
A-C	9	2			9				

BASELINE 2021, 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	3.06	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	BASELINE 2021	PM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV	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 (PCU/hr)	Scaling Factor (%)
A - Gavray Drive East		ONE HOUR	✓	54	100.000
B - Mallards Lane		ONE HOUR	✓	61	100.000
C - Gavray Drive West		ONE HOUR	✓	76	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Gavray Drive East	B - Mallards Lane	C - Gavray Drive West
From	A - Gavray Drive East	0	9	45
	B - Mallards Lane	0	0	61
	C - Gavray Drive West	31	45	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Gavray Drive East	B - Mallards Lane	C - Gavray Drive West
From	A - Gavray Drive East	0	0	0
	B - Mallards Lane	0	0	0
	C - Gavray Drive West	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.09	5.11	0.1	A	56	85
B-A	0.00	0.00	0.0	A	0	0
C-A					29	43
C-B	0.08	6.13	0.1	A	41	62
A-B					9	13
A-C					41	62

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	46	12	776	0.060	46	0.0	0.1	4.929	A
B-A	0	0	466	0.000	0	0.0	0.0	0.000	A
C-A	24	6			24				
C-B	34	8	640	0.053	33	0.0	0.1	5.931	A
A-B	7	2			7				
A-C	34	8			34				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	55	14	774	0.071	55	0.1	0.1	5.005	A
B-A	0	0	462	0.000	0	0.0	0.0	0.000	A
C-A	28	7			28				
C-B	40	10	639	0.063	40	0.1	0.1	6.015	A
A-B	8	2			8				
A-C	41	10			41				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	68	17	772	0.088	68	0.1	0.1	5.112	A
B-A	0	0	457	0.000	0	0.0	0.0	0.000	A
C-A	35	9			35				
C-B	49	12	636	0.077	49	0.1	0.1	6.132	A
A-B	10	3			10				
A-C	50	12			50				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	68	17	772	0.088	68	0.1	0.1	5.112	A
B-A	0	0	457	0.000	0	0.0	0.0	0.000	A
C-A	35	9			35				
C-B	49	12	636	0.077	49	0.1	0.1	6.132	A
A-B	10	3			10				
A-C	50	12			50				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	55	14	774	0.071	55	0.1	0.1	5.006	A
B-A	0	0	462	0.000	0	0.0	0.0	0.000	A
C-A	28	7			28				
C-B	40	10	639	0.063	40	0.1	0.1	6.019	A
A-B	8	2			8				
A-C	41	10			41				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	46	12	776	0.060	46	0.1	0.1	4.933	A
B-A	0	0	466	0.000	0	0.0	0.0	0.000	A
C-A	24	6			24				
C-B	34	8	640	0.053	34	0.1	0.1	5.936	A
A-B	7	2			7				
A-C	34	8			34				

BASELINE 2026, 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	2.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	BASELINE 2026	AM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Gavray Drive East		ONE HOUR	✓	51	100.000
B - Mallards Lane		ONE HOUR	✓	52	100.000
C - Gavray Drive West		ONE HOUR	✓	102	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Gavray Drive East	B - Mallards Lane	C - Gavray Drive West
From	A - Gavray Drive East	0	34	17
	B - Mallards Lane	33	0	19
	C - Gavray Drive West	70	32	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Gavray Drive East	B - Mallards Lane	C - Gavray Drive West
From	A - Gavray Drive East	0	0	1
	B - Mallards Lane	0	0	0
	C - Gavray Drive West	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.03	5.68	0.0	A	17	26
B-A	0.06	6.78	0.1	A	30	45
C-A					64	96
C-B	0.05	5.98	0.1	A	29	44
A-B					31	47
A-C					15	23

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	14	4	661	0.021	14	0.0	0.0	5.567	A
B-A	25	6	578	0.043	25	0.0	0.0	6.510	A
C-A	53	13			53				
C-B	24	6	641	0.037	24	0.0	0.0	5.831	A
A-B	25	6			25				
A-C	13	3			13				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	17	4	658	0.026	17	0.0	0.0	5.613	A
B-A	30	7	573	0.052	30	0.0	0.1	6.620	A
C-A	63	16			63				
C-B	29	7	639	0.045	28	0.0	0.0	5.892	A
A-B	30	8			30				
A-C	15	4			15				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	21	5	655	0.032	21	0.0	0.0	5.677	A
B-A	36	9	568	0.064	36	0.1	0.1	6.776	A
C-A	77	19			77				
C-B	35	9	637	0.055	35	0.0	0.1	5.977	A
A-B	37	9			37				
A-C	18	5			18				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	21	5	655	0.032	21	0.0	0.0	5.678	A
B-A	36	9	568	0.064	36	0.1	0.1	6.776	A
C-A	77	19			77				
C-B	35	9	637	0.055	35	0.1	0.1	5.977	A
A-B	37	9			37				
A-C	18	5			18				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	17	4	658	0.026	17	0.0	0.0	5.616	A
B-A	30	7	573	0.052	30	0.1	0.1	6.624	A
C-A	63	16			63				
C-B	29	7	639	0.045	29	0.1	0.0	5.896	A
A-B	30	8			30				
A-C	15	4			15				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	14	4	661	0.021	14	0.0	0.0	5.570	A
B-A	25	6	578	0.043	25	0.1	0.0	6.516	A
C-A	53	13			53				
C-B	24	6	641	0.037	24	0.0	0.0	5.836	A
A-B	25	6			25				
A-C	13	3			13				

BASELINE 2026, 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	1.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	BASELINE 2026	PM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV	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 (PCU/hr)	Scaling Factor (%)
A - Gavray Drive East		ONE HOUR	✓	137	100.000
B - Mallards Lane		ONE HOUR	✓	54	100.000
C - Gavray Drive West		ONE HOUR	✓	96	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Gavray Drive East	B - Mallards Lane	C - Gavray Drive West
From	A - Gavray Drive East	0	66	71
	B - Mallards Lane	17	0	37
	C - Gavray Drive West	70	25	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Gavray Drive East	B - Mallards Lane	C - Gavray Drive West
From	A - Gavray Drive East	0	0	0
	B - Mallards Lane	0	0	0
	C - Gavray Drive West	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.06	5.33	0.1	A	34	51
B-A	0.04	7.56	0.0	A	15	23
C-A					64	96
C-B	0.05	6.12	0.0	A	23	35
A-B					61	91
A-C					65	97

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	28	7	728	0.038	28	0.0	0.0	5.142	A
B-A	13	3	508	0.025	13	0.0	0.0	7.269	A
C-A	53	13			53				
C-B	19	5	627	0.031	19	0.0	0.0	5.921	A
A-B	50	13			50				
A-C	53	13			53				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	33	8	723	0.046	33	0.0	0.0	5.219	A
B-A	15	4	502	0.030	15	0.0	0.0	7.391	A
C-A	63	16			63				
C-B	23	6	622	0.037	23	0.0	0.0	6.003	A
A-B	60	15			60				
A-C	64	16			64				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	41	10	717	0.057	41	0.0	0.1	5.325	A
B-A	18	5	494	0.037	18	0.0	0.0	7.563	A
C-A	77	19			77				
C-B	28	7	616	0.045	28	0.0	0.0	6.117	A
A-B	73	18			73				
A-C	78	19			78				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	41	10	717	0.057	41	0.1	0.1	5.325	A
B-A	18	5	494	0.037	18	0.0	0.0	7.563	A
C-A	77	19			77				
C-B	28	7	616	0.045	28	0.0	0.0	6.117	A
A-B	73	18			73				
A-C	78	19			78				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	33	8	723	0.046	33	0.1	0.0	5.220	A
B-A	15	4	502	0.030	15	0.0	0.0	7.392	A
C-A	63	16			63				
C-B	23	6	622	0.037	23	0.0	0.0	6.006	A
A-B	60	15			60				
A-C	64	16			64				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	28	7	728	0.038	28	0.0	0.0	5.145	A
B-A	13	3	508	0.025	13	0.0	0.0	7.275	A
C-A	53	13			53				
C-B	19	5	627	0.031	19	0.0	0.0	5.924	A
A-B	50	13			50				
A-C	53	13			53				

BASELINE 2021+DEV 180, 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	2.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	BASELINE 2021+DEV 180	AM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV+180 DEV	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Gavray Drive East		ONE HOUR	✓	42	100.000
B - Mallards Lane		ONE HOUR	✓	40	100.000
C - Gavray Drive West		ONE HOUR	✓	101	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Gavray Drive East	B - Mallards Lane	C - Gavray Drive West
From	A - Gavray Drive East	0	30	13
	B - Mallards Lane	19	0	21
	C - Gavray Drive West	53	47	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Gavray Drive East	B - Mallards Lane	C - Gavray Drive West
From	A - Gavray Drive East	0	0	1
	B - Mallards Lane	0	0	0
	C - Gavray Drive West	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.03	5.33	0.0	A	20	29
B-A	0.04	7.00	0.0	A	17	26
C-A					49	74
C-B	0.08	6.13	0.1	A	43	65
A-B					27	41
A-C					12	17

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	16	4	704	0.023	16	0.0	0.0	5.233	A
B-A	14	4	545	0.026	14	0.0	0.0	6.775	A
C-A	40	10			40				
C-B	36	9	642	0.056	35	0.0	0.1	5.932	A
A-B	22	6			22				
A-C	9	2			9				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	19	5	702	0.027	19	0.0	0.0	5.272	A
B-A	17	4	541	0.031	17	0.0	0.0	6.867	A
C-A	48	12			48				
C-B	43	11	641	0.066	43	0.1	0.1	6.015	A
A-B	27	7			27				
A-C	11	3			11				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	24	6	699	0.034	24	0.0	0.0	5.325	A
B-A	21	5	535	0.039	21	0.0	0.0	6.995	A
C-A	59	15			59				
C-B	52	13	639	0.082	52	0.1	0.1	6.132	A
A-B	33	8			33				
A-C	14	3			14				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	24	6	699	0.034	24	0.0	0.0	5.325	A
B-A	21	5	535	0.039	21	0.0	0.0	6.995	A
C-A	59	15			59				
C-B	52	13	639	0.082	52	0.1	0.1	6.132	A
A-B	33	8			33				
A-C	14	3			14				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	19	5	702	0.027	19	0.0	0.0	5.275	A
B-A	17	4	541	0.031	17	0.0	0.0	6.871	A
C-A	48	12			48				
C-B	43	11	641	0.066	43	0.1	0.1	6.016	A
A-B	27	7			27				
A-C	11	3			11				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	16	4	704	0.023	16	0.0	0.0	5.235	A
B-A	14	4	545	0.026	14	0.0	0.0	6.778	A
C-A	40	10			40				
C-B	36	9	642	0.056	36	0.1	0.1	5.934	A
A-B	22	6			22				
A-C	9	2			9				

BASELINE 2021+DEV 180 , 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	2.96	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	BASELINE 2021+DEV 180	PM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV+180 DEV	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 (PCU/hr)	Scaling Factor (%)
A - Gavray Drive East		ONE HOUR	✓	74	100.000
B - Mallards Lane		ONE HOUR	✓	68	100.000
C - Gavray Drive West		ONE HOUR	✓	76	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Gavray Drive East	B - Mallards Lane	C - Gavray Drive West
From	A - Gavray Drive East	0	28	45
	B - Mallards Lane	6	0	61
	C - Gavray Drive West	31	45	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Gavray Drive East	B - Mallards Lane	C - Gavray Drive West
From	A - Gavray Drive East	0	0	0
	B - Mallards Lane	0	0	0
	C - Gavray Drive West	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.09	5.19	0.1	A	56	85
B-A	0.01	7.89	0.0	A	6	8
C-A					29	43
C-B	0.08	6.18	0.1	A	41	62
A-B					26	39
A-C					41	62

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	46	12	767	0.060	46	0.0	0.1	4.994	A
B-A	5	1	473	0.010	5	0.0	0.0	7.686	A
C-A	24	6			24				
C-B	34	8	637	0.053	33	0.0	0.1	5.961	A
A-B	21	5			21				
A-C	34	8			34				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	55	14	764	0.072	55	0.1	0.1	5.077	A
B-A	6	1	469	0.012	6	0.0	0.0	7.769	A
C-A	28	7			28				
C-B	40	10	635	0.063	40	0.1	0.1	6.053	A
A-B	26	6			26				
A-C	41	10			41				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	68	17	761	0.089	68	0.1	0.1	5.194	A
B-A	7	2	463	0.015	7	0.0	0.0	7.888	A
C-A	35	9			35				
C-B	49	12	632	0.078	49	0.1	0.1	6.180	A
A-B	31	8			31				
A-C	50	12			50				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	68	17	761	0.089	68	0.1	0.1	5.194	A
B-A	7	2	463	0.015	7	0.0	0.0	7.888	A
C-A	35	9			35				
C-B	49	12	632	0.078	49	0.1	0.1	6.180	A
A-B	31	8			31				
A-C	50	12			50				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	55	14	764	0.072	55	0.1	0.1	5.078	A
B-A	6	1	469	0.012	6	0.0	0.0	7.772	A
C-A	28	7			28				
C-B	40	10	635	0.063	40	0.1	0.1	6.054	A
A-B	26	6			26				
A-C	41	10			41				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	46	12	767	0.060	46	0.1	0.1	4.997	A
B-A	5	1	473	0.010	5	0.0	0.0	7.687	A
C-A	24	6			24				
C-B	34	8	637	0.053	34	0.1	0.1	5.965	A
A-B	21	5			21				
A-C	34	8			34				

BASELINE 2026+DEV 180, 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	2.57	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	BASELINE 2026+DEV 180	AM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV+180 DEV	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Gavray Drive East		ONE HOUR	✓	65	100.000
B - Mallards Lane		ONE HOUR	✓	61	100.000
C - Gavray Drive West		ONE HOUR	✓	102	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Gavray Drive East	B - Mallards Lane	C - Gavray Drive West
From	A - Gavray Drive East	0	48	17
	B - Mallards Lane	42	0	19
	C - Gavray Drive West	70	32	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Gavray Drive East	B - Mallards Lane	C - Gavray Drive West
From	A - Gavray Drive East	0	0	1
	B - Mallards Lane	0	0	0
	C - Gavray Drive West	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.03	5.83	0.0	A	17	26
B-A	0.08	6.80	0.1	A	38	58
C-A					64	96
C-B	0.06	6.01	0.1	A	29	44
A-B					44	66
A-C					15	23

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	14	4	646	0.022	14	0.0	0.0	5.700	A
B-A	32	8	586	0.054	31	0.0	0.1	6.482	A
C-A	53	13			53				
C-B	24	6	639	0.037	24	0.0	0.0	5.853	A
A-B	36	9			36				
A-C	13	3			13				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	17	4	642	0.026	17	0.0	0.0	5.753	A
B-A	38	9	582	0.065	38	0.1	0.1	6.614	A
C-A	63	16			63				
C-B	29	7	637	0.045	28	0.0	0.0	5.920	A
A-B	43	11			43				
A-C	15	4			15				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	21	5	638	0.032	21	0.0	0.0	5.828	A
B-A	46	12	576	0.080	46	0.1	0.1	6.797	A
C-A	77	19			77				
C-B	35	9	634	0.055	35	0.0	0.1	6.011	A
A-B	53	13			53				
A-C	18	5			18				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	21	5	638	0.032	21	0.0	0.0	5.828	A
B-A	46	12	576	0.080	46	0.1	0.1	6.797	A
C-A	77	19			77				
C-B	35	9	634	0.055	35	0.1	0.1	6.011	A
A-B	53	13			53				
A-C	18	5			18				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	17	4	642	0.026	17	0.0	0.0	5.757	A
B-A	38	9	582	0.065	38	0.1	0.1	6.615	A
C-A	63	16			63				
C-B	29	7	637	0.045	29	0.1	0.0	5.920	A
A-B	43	11			43				
A-C	15	4			15				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	14	4	645	0.022	14	0.0	0.0	5.704	A
B-A	32	8	586	0.054	32	0.1	0.1	6.491	A
C-A	53	13			53				
C-B	24	6	639	0.037	24	0.0	0.0	5.858	A
A-B	36	9			36				
A-C	13	3			13				

BASELINE 2026+DEV 180, 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	1.87	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	BASELINE 2026+DEV 180	PM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV+180 DEV	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 (PCU/hr)	Scaling Factor (%)
A - Gavray Drive East		ONE HOUR	✓	149	100.000
B - Mallards Lane		ONE HOUR	✓	66	100.000
C - Gavray Drive West		ONE HOUR	✓	96	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Gavray Drive East	B - Mallards Lane	C - Gavray Drive West
From	A - Gavray Drive East	0	79	71
	B - Mallards Lane	29	0	37
	C - Gavray Drive West	70	25	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Gavray Drive East	B - Mallards Lane	C - Gavray Drive West
From	A - Gavray Drive East	0	0	0
	B - Mallards Lane	0	0	0
	C - Gavray Drive West	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.06	5.61	0.1	A	34	51
B-A	0.06	7.44	0.1	A	27	40
C-A					64	96
C-B	0.05	6.15	0.0	A	23	35
A-B					72	108
A-C					65	97

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	28	7	694	0.040	28	0.0	0.0	5.399	A
B-A	22	5	530	0.041	22	0.0	0.0	7.079	A
C-A	53	13			53				
C-B	19	5	625	0.031	19	0.0	0.0	5.941	A
A-B	59	15			59				
A-C	53	13			53				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	33	8	689	0.048	33	0.0	0.1	5.489	A
B-A	26	7	524	0.050	26	0.0	0.1	7.227	A
C-A	63	16			63				
C-B	23	6	620	0.037	23	0.0	0.0	6.027	A
A-B	71	18			71				
A-C	64	16			64				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	41	10	682	0.060	41	0.1	0.1	5.615	A
B-A	32	8	516	0.062	32	0.1	0.1	7.438	A
C-A	77	19			77				
C-B	28	7	613	0.046	28	0.0	0.0	6.148	A
A-B	87	22			87				
A-C	78	19			78				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	41	10	682	0.060	41	0.1	0.1	5.615	A
B-A	32	8	516	0.062	32	0.1	0.1	7.438	A
C-A	77	19			77				
C-B	28	7	613	0.046	28	0.0	0.0	6.148	A
A-B	87	22			87				
A-C	78	19			78				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	33	8	689	0.048	33	0.1	0.1	5.491	A
B-A	26	7	524	0.050	26	0.1	0.1	7.231	A
C-A	63	16			63				
C-B	23	6	620	0.037	23	0.0	0.0	6.028	A
A-B	71	18			71				
A-C	64	16			64				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	28	7	694	0.040	28	0.1	0.0	5.406	A
B-A	22	5	530	0.041	22	0.1	0.0	7.085	A
C-A	53	13			53				
C-B	19	5	625	0.031	19	0.0	0.0	5.944	A
A-B	59	15			59				
A-C	53	13			53				

BASELINE 2021+DEV 300, 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	3.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	BASELINE 2021+DEV 300	AM	SATURN WITH DEV TURNING FLOWS 2021	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Gavray Drive East		ONE HOUR	✓	50	100.000
B - Mallards Lane		ONE HOUR	✓	50	100.000
C - Gavray Drive West		ONE HOUR	✓	101	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Gavray Drive East	B - Mallards Lane	C - Gavray Drive West
From	A - Gavray Drive East	0	38	13
	B - Mallards Lane	28	0	21
	C - Gavray Drive West	53	47	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Gavray Drive East	B - Mallards Lane	C - Gavray Drive West
From	A - Gavray Drive East	0	0	1
	B - Mallards Lane	0	0	0
	C - Gavray Drive West	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.04	5.55	0.0	A	20	29
B-A	0.06	6.90	0.1	A	26	39
C-A					49	74
C-B	0.08	6.15	0.1	A	43	65
A-B					35	52
A-C					12	17

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	16	4	678	0.024	16	0.0	0.0	5.438	A
B-A	21	5	563	0.038	21	0.0	0.0	6.639	A
C-A	40	10			40				
C-B	36	9	641	0.056	35	0.0	0.1	5.945	A
A-B	28	7			28				
A-C	9	2			9				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	19	5	676	0.028	19	0.0	0.0	5.484	A
B-A	25	6	559	0.045	25	0.0	0.0	6.748	A
C-A	48	12			48				
C-B	43	11	639	0.067	43	0.1	0.1	6.031	A
A-B	34	8			34				
A-C	11	3			11				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	24	6	672	0.035	24	0.0	0.0	5.547	A
B-A	31	8	553	0.056	31	0.0	0.1	6.901	A
C-A	59	15			59				
C-B	52	13	637	0.082	52	0.1	0.1	6.152	A
A-B	42	10			42				
A-C	14	3			14				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	24	6	672	0.035	24	0.0	0.0	5.547	A
B-A	31	8	553	0.056	31	0.1	0.1	6.901	A
C-A	59	15			59				
C-B	52	13	637	0.082	52	0.1	0.1	6.152	A
A-B	42	10			42				
A-C	14	3			14				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	19	5	676	0.028	19	0.0	0.0	5.485	A
B-A	25	6	559	0.045	25	0.1	0.0	6.752	A
C-A	48	12			48				
C-B	43	11	639	0.067	43	0.1	0.1	6.032	A
A-B	34	8			34				
A-C	11	3			11				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	16	4	678	0.024	16	0.0	0.0	5.442	A
B-A	21	5	563	0.038	21	0.0	0.0	6.645	A
C-A	40	10			40				
C-B	36	9	641	0.056	36	0.1	0.1	5.947	A
A-B	28	7			28				
A-C	9	2			9				

BASELINE 2021+DEV 300, 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	3.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	BASELINE 2021+DEV 300	PM	SATURN WITH DEV TURNING FLOWS 2021	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 (PCU/hr)	Scaling Factor (%)
A - Gavray Drive East		ONE HOUR	✓	86	100.000
B - Mallards Lane		ONE HOUR	✓	83	100.000
C - Gavray Drive West		ONE HOUR	✓	76	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Gavray Drive East	B - Mallards Lane	C - Gavray Drive West
From	A - Gavray Drive East	0	41	45
	B - Mallards Lane	22	0	61
	C - Gavray Drive West	31	45	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Gavray Drive East	B - Mallards Lane	C - Gavray Drive West
From	A - Gavray Drive East	0	0	0
	B - Mallards Lane	0	0	0
	C - Gavray Drive West	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.09	5.39	0.1	A	56	85
B-A	0.05	7.68	0.1	A	20	30
C-A					29	43
C-B	0.08	6.21	0.1	A	41	62
A-B					38	57
A-C					41	62

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	46	12	744	0.062	46	0.0	0.1	5.158	A
B-A	17	4	504	0.033	16	0.0	0.0	7.382	A
C-A	24	6			24				
C-B	34	8	635	0.053	33	0.0	0.1	5.982	A
A-B	31	8			31				
A-C	34	8			34				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	55	14	740	0.075	55	0.1	0.1	5.256	A
B-A	20	5	499	0.040	20	0.0	0.0	7.504	A
C-A	28	7			28				
C-B	40	10	632	0.064	40	0.1	0.1	6.078	A
A-B	37	9			37				
A-C	41	10			41				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	68	17	735	0.092	68	0.1	0.1	5.393	A
B-A	24	6	493	0.049	24	0.0	0.1	7.676	A
C-A	35	9			35				
C-B	49	12	629	0.078	49	0.1	0.1	6.213	A
A-B	45	11			45				
A-C	50	12			50				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	68	17	735	0.092	68	0.1	0.1	5.393	A
B-A	24	6	493	0.049	24	0.1	0.1	7.676	A
C-A	35	9			35				
C-B	49	12	629	0.078	49	0.1	0.1	6.213	A
A-B	45	11			45				
A-C	50	12			50				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	55	14	740	0.075	55	0.1	0.1	5.257	A
B-A	20	5	499	0.040	20	0.1	0.0	7.508	A
C-A	28	7			28				
C-B	40	10	632	0.064	40	0.1	0.1	6.080	A
A-B	37	9			37				
A-C	41	10			41				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	46	12	744	0.062	46	0.1	0.1	5.164	A
B-A	17	4	504	0.033	17	0.0	0.0	7.388	A
C-A	24	6			24				
C-B	34	8	635	0.053	34	0.1	0.1	5.988	A
A-B	31	8			31				
A-C	34	8			34				

BASELINE 2026+DEV 300, 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	2.59	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	BASELINE 2026+DEV 300	AM	SATURN WITH DEV TURNING FLOWS 2026	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Gavray Drive East		ONE HOUR	✓	74	100.000
B - Mallards Lane		ONE HOUR	✓	67	100.000
C - Gavray Drive West		ONE HOUR	✓	102	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Gavray Drive East	B - Mallards Lane	C - Gavray Drive West
From	A - Gavray Drive East	0	58	17
	B - Mallards Lane	48	0	19
	C - Gavray Drive West	70	32	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Gavray Drive East	B - Mallards Lane	C - Gavray Drive West
From	A - Gavray Drive East	0	0	1
	B - Mallards Lane	0	0	0
	C - Gavray Drive West	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.03	5.92	0.0	A	17	26
B-A	0.09	6.83	0.1	A	44	66
C-A					64	96
C-B	0.06	6.03	0.1	A	29	44
A-B					53	79
A-C					15	23

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	14	4	637	0.022	14	0.0	0.0	5.775	A
B-A	36	9	591	0.061	36	0.0	0.1	6.483	A
C-A	53	13			53				
C-B	24	6	637	0.038	24	0.0	0.0	5.868	A
A-B	43	11			43				
A-C	13	3			13				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	17	4	634	0.027	17	0.0	0.0	5.833	A
B-A	43	11	586	0.073	43	0.1	0.1	6.627	A
C-A	63	16			63				
C-B	29	7	635	0.045	28	0.0	0.0	5.938	A
A-B	52	13			52				
A-C	15	4			15				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	21	5	629	0.033	21	0.0	0.0	5.915	A
B-A	53	13	580	0.091	53	0.1	0.1	6.829	A
C-A	77	19			77				
C-B	35	9	631	0.055	35	0.0	0.1	6.034	A
A-B	63	16			63				
A-C	18	5			18				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	21	5	629	0.033	21	0.0	0.0	5.915	A
B-A	53	13	580	0.091	53	0.1	0.1	6.829	A
C-A	77	19			77				
C-B	35	9	631	0.055	35	0.1	0.1	6.034	A
A-B	63	16			63				
A-C	18	5			18				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	17	4	634	0.027	17	0.0	0.0	5.834	A
B-A	43	11	586	0.073	43	0.1	0.1	6.632	A
C-A	63	16			63				
C-B	29	7	635	0.045	29	0.1	0.0	5.939	A
A-B	52	13			52				
A-C	15	4			15				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	14	4	637	0.022	14	0.0	0.0	5.779	A
B-A	36	9	591	0.061	36	0.1	0.1	6.490	A
C-A	53	13			53				
C-B	24	6	637	0.038	24	0.0	0.0	5.871	A
A-B	43	11			43				
A-C	13	3			13				

BASELINE 2026+DEV 300, 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	2.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	BASELINE 2026+DEV 300	PM	SATURN WITH DEV TURNING FLOWS 2026	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 (PCU/hr)	Scaling Factor (%)
A - Gavray Drive East		ONE HOUR	✓	158	100.000
B - Mallards Lane		ONE HOUR	✓	75	100.000
C - Gavray Drive West		ONE HOUR	✓	78	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Gavray Drive East	B - Mallards Lane	C - Gavray Drive West
From	A - Gavray Drive East	0	87	71
	B - Mallards Lane	37	0	37
	C - Gavray Drive West	53	25	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Gavray Drive East	B - Mallards Lane	C - Gavray Drive West
From	A - Gavray Drive East	0	0	0
	B - Mallards Lane	0	0	0
	C - Gavray Drive West	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.06	5.77	0.1	A	34	51
B-A	0.08	7.38	0.1	A	34	51
C-A					49	73
C-B	0.05	6.17	0.0	A	23	35
A-B					80	120
A-C					65	97

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	28	7	678	0.041	28	0.0	0.0	5.537	A
B-A	28	7	543	0.052	28	0.0	0.1	6.988	A
C-A	40	10			40				
C-B	19	5	623	0.031	19	0.0	0.0	5.954	A
A-B	65	16			65				
A-C	53	13			53				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	33	8	672	0.050	33	0.0	0.1	5.636	A
B-A	34	8	537	0.063	34	0.1	0.1	7.151	A
C-A	48	12			48				
C-B	23	6	618	0.037	23	0.0	0.0	6.044	A
A-B	78	20			78				
A-C	64	16			64				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	41	10	664	0.062	41	0.1	0.1	5.773	A
B-A	41	10	529	0.078	41	0.1	0.1	7.381	A
C-A	58	15			58				
C-B	28	7	611	0.046	28	0.0	0.0	6.168	A
A-B	96	24			96				
A-C	78	19			78				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	41	10	664	0.062	41	0.1	0.1	5.773	A
B-A	41	10	529	0.078	41	0.1	0.1	7.381	A
C-A	58	15			58				
C-B	28	7	611	0.046	28	0.0	0.0	6.168	A
A-B	96	24			96				
A-C	78	19			78				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	33	8	672	0.050	33	0.1	0.1	5.639	A
B-A	34	8	537	0.063	34	0.1	0.1	7.155	A
C-A	48	12			48				
C-B	23	6	618	0.037	23	0.0	0.0	6.047	A
A-B	78	20			78				
A-C	64	16			64				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	28	7	678	0.041	28	0.1	0.0	5.542	A
B-A	28	7	543	0.052	28	0.1	0.1	6.997	A
C-A	40	10			40				
C-B	19	5	623	0.031	19	0.0	0.0	5.957	A
A-B	65	16			65				
A-C	53	13			53				

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.2.5947

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 770558 software@trl.co.uk www.trlsoftware.co.uk

Filename: Wretchwick - Gavray Drive - Charbridge.j9
Path: M:\Projects\17167-00 - Gavray Drive, Bicester\Technical\Arcady\Rev A
Report generation date: 27/03/2018 17:48:29

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (min)	RFC	LOS	Queue (PCU)	Delay (min)	RFC	LOS
	A1 - BASELINE 2021							
A - Wretchwick	0.6	0.05	0.38	A	0.9	0.06	0.47	A
B - Gavray Drive	0.1	0.06	0.05	A	0.0	0.07	0.01	A
C - Charbridge	0.4	0.04	0.29	A	0.8	0.06	0.45	A
D - Wretchwick Avenue	0.2	0.06	0.13	A	0.1	0.07	0.09	A
	A1 - BASELINE 2026							
A - Wretchwick	0.8	0.06	0.45	A	0.7	0.07	0.42	A
B - Gavray Drive	0.2	0.09	0.13	A	0.1	0.09	0.05	A
C - Charbridge	1.7	0.09	0.64	A	2.3	0.10	0.70	A
D - Wretchwick Avenue	0.8	0.09	0.46	A	2.7	0.21	0.74	B
	A1 - BASELINE 2021+DEV 180							
A - Wretchwick	0.6	0.05	0.39	A	0.9	0.06	0.48	A
B - Gavray Drive	0.1	0.07	0.09	A	0.1	0.07	0.06	A
C - Charbridge	0.4	0.04	0.30	A	0.9	0.06	0.47	A
D - Wretchwick Avenue	0.2	0.06	0.14	A	0.1	0.07	0.10	A
	A1 - BASELINE 2026+DEV 180							
A - Wretchwick	0.8	0.07	0.46	A	0.8	0.07	0.44	A
B - Gavray Drive	0.3	0.10	0.21	A	0.1	0.10	0.13	A
C - Charbridge	1.9	0.09	0.66	A	2.6	0.11	0.72	A
D - Wretchwick Avenue	0.9	0.10	0.47	A	3.3	0.25	0.77	C
	A1 - BASELINE 2021+DEV 300							
A - Wretchwick	0.6	0.05	0.39	A	1.0	0.06	0.49	A
B - Gavray Drive	0.1	0.07	0.12	A	0.1	0.07	0.08	A
C - Charbridge	0.4	0.04	0.31	A	0.9	0.06	0.48	A
D - Wretchwick Avenue	0.2	0.07	0.14	A	0.1	0.07	0.10	A
	A1 - BASELINE 2026+DEV 300							
A - Wretchwick	0.9	0.07	0.46	A	0.8	0.08	0.45	A
B - Gavray Drive	0.3	0.10	0.23	A	0.2	0.10	0.17	A
C - Charbridge	2.0	0.09	0.67	A	2.8	0.12	0.74	A
D - Wretchwick Avenue	0.9	0.10	0.47	A	3.8	0.29	0.80	C

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

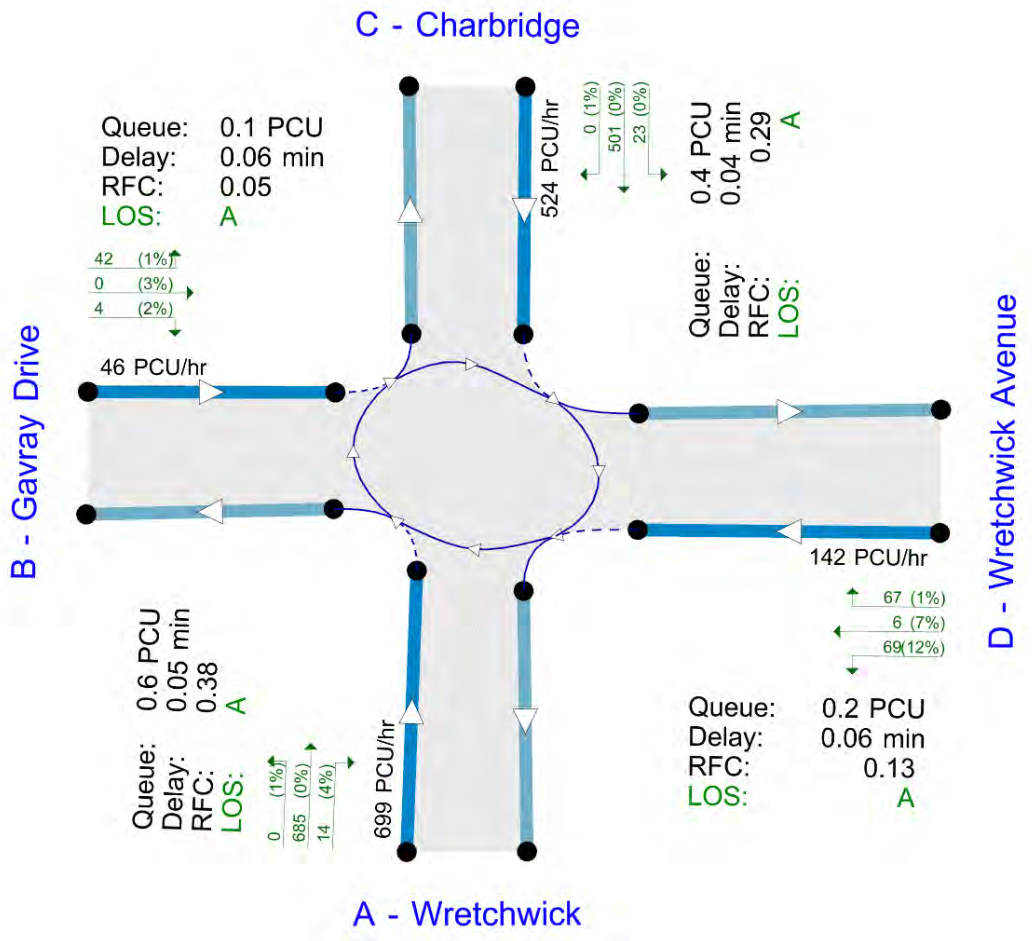
File summary

File Description

Title	Wretchwick - Gavray Drive - Charbridge AM Peak
Location	Bicester
Site number	
Date	13/07/2010
Version	
Status	
Identifier	
Client	JJ Gallagher
Jobnumber	18578-01-1
Enumerator	Alexanders [CS5DG3J]
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	min	-Min	perMin



Flows show original traffic demand (PCU/hr).

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 (min)	Queue threshold (PCU)
5.75				0.85	0.60	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	BASELINE 2021	AM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV	ONE HOUR	07:45	09:15	15	✓
D2	BASELINE 2021	PM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV	ONE HOUR	16:45	18:15	15	✓
D3	BASELINE 2026	AM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV	ONE HOUR	07:45	09:15	15	✓
D4	BASELINE 2026	PM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV	ONE HOUR	16:45	18:15	15	✓
D5	BASELINE 2021+DEV 180	AM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV+180 DEV	ONE HOUR	07:45	09:15	15	✓
D6	BASELINE 2021+DEV 180	PM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV+180 DEV	ONE HOUR	16:45	18:15	15	✓
D7	BASELINE 2026+DEV 180	AM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV+180 DEV	ONE HOUR	07:45	09:15	15	✓
D8	BASELINE 2026+DEV 180	PM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV+180 DEV	ONE HOUR	16:45	18:15	15	✓
D9	BASELINE 2021+DEV 300	AM	SATURN WITH DEV TURNING FLOWS 2021	ONE HOUR	07:45	09:15	15	✓
D10	BASELINE 2021+DEV 300	PM	SATURN WITH DEV TURNING FLOWS 2021	ONE HOUR	16:45	18:15	15	✓
D11	BASELINE 2026+DEV 300	AM	SATURN WITH DEV TURNING FLOWS 2026	ONE HOUR	07:45	09:15	15	✓
D12	BASELINE 2026+DEV 300	PM	SATURN WITH DEV TURNING FLOWS 2026	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	(Default Analysis Set)	✓	100.000	100.000

(Default Analysis Set) - BASELINE 2021, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	(untitled)	Standard Roundabout	A, B, C, D	0.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	Wretchwick	
B	Gavray Drive	
C	Charbridge	
D	Wretchwick Avenue	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - Wretchwick	6.00	8.00	15.0	20.0	45.0	49.0	
B - Gavray Drive	3.50	7.00	10.0	20.0	45.0	44.0	
C - Charbridge	5.75	7.00	10.0	35.0	45.0	34.0	
D - Wretchwick Avenue	3.50	7.00	10.0	20.0	45.0	44.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - Wretchwick	0.685	2095
B - Gavray Drive	0.571	1485
C - Charbridge	0.694	2027
D - Wretchwick Avenue	0.571	1485

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	BASELINE 2021	AM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Wretchwick		ONE HOUR	✓	699	100.000
B - Gavray Drive		ONE HOUR	✓	46	100.000
C - Charbridge		ONE HOUR	✓	524	100.000
D - Wretchwick Avenue		ONE HOUR	✓	142	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Wretchwick	B - Gavray Drive	C - Charbridge	D - Wretchwick Avenue
From	A - Wretchwick	0	0	685	14
	B - Gavray Drive	4	0	42	0.45
	C - Charbridge	501	0	0	23
	D - Wretchwick Avenue	69	6	67	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Wretchwick	B - Gavray Drive	C - Charbridge	D - Wretchwick Avenue
From	A - Wretchwick	0	1	0	4
	B - Gavray Drive	2	0	1	3
	C - Charbridge	0	1	0	0
	D - Wretchwick Avenue	12	7	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Wretchwick	0.38	0.05	0.6	A	641	962
B - Gavray Drive	0.05	0.06	0.1	A	43	64
C - Charbridge	0.29	0.04	0.4	A	481	721
D - Wretchwick Avenue	0.13	0.06	0.2	A	130	195

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Wretchwick	526	132	55	2057	0.256	525	431	0.0	0.3	0.039	A
B - Gavray Drive	35	9	575	1156	0.030	35	5	0.0	0.0	0.054	A
C - Charbridge	394	99	14	2017	0.196	394	596	0.0	0.2	0.037	A
D - Wretchwick Avenue	107	27	379	1268	0.084	107	28	0.0	0.1	0.055	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Wretchwick	628	157	66	2050	0.307	628	516	0.3	0.4	0.042	A
B - Gavray Drive	42	10	688	1092	0.038	42	5	0.0	0.0	0.058	A
C - Charbridge	471	118	17	2016	0.234	471	713	0.2	0.3	0.039	A
D - Wretchwick Avenue	128	32	454	1226	0.104	128	34	0.1	0.1	0.058	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 (min)	LOS
A - Wretchwick	770	192	80	2040	0.377	769	632	0.4	0.6	0.047	A
B - Gavray Drive	51	13	843	1003	0.051	51	7	0.0	0.1	0.064	A
C - Charbridge	577	144	20	2013	0.287	577	873	0.3	0.4	0.042	A
D - Wretchwick Avenue	156	39	556	1167	0.134	156	41	0.1	0.2	0.063	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 (min)	LOS
A - Wretchwick	770	192	80	2040	0.377	770	632	0.6	0.6	0.047	A
B - Gavray Drive	51	13	843	1003	0.051	51	7	0.1	0.1	0.064	A
C - Charbridge	577	144	20	2013	0.287	577	874	0.4	0.4	0.042	A
D - Wretchwick Avenue	156	39	556	1167	0.134	156	41	0.2	0.2	0.063	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 (min)	LOS
A - Wretchwick	628	157	66	2050	0.307	629	516	0.6	0.4	0.042	A
B - Gavray Drive	42	10	689	1091	0.038	42	5	0.1	0.0	0.058	A
C - Charbridge	471	118	17	2016	0.234	471	715	0.4	0.3	0.039	A
D - Wretchwick Avenue	128	32	454	1225	0.104	128	34	0.2	0.1	0.058	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Wretchwick	526	132	55	2057	0.256	527	432	0.4	0.3	0.039	A
B - Gavray Drive	35	9	577	1155	0.030	35	5	0.0	0.0	0.054	A
C - Charbridge	394	99	14	2017	0.196	395	598	0.3	0.2	0.037	A
D - Wretchwick Avenue	107	27	380	1268	0.084	107	28	0.1	0.1	0.055	A

(Default Analysis Set) - BASELINE 2021, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	(untitled)	Standard Roundabout	A, B, C, D	0.06	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	BASELINE 2021	PM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV	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 (PCU/hr)	Scaling Factor (%)
A - Wretchwick		ONE HOUR	✓	857	100.000
B - Gavray Drive		ONE HOUR	✓	8	100.000
C - Charbridge		ONE HOUR	✓	799	100.000
D - Wretchwick Avenue		ONE HOUR	✓	87	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Wretchwick	B - Gavray Drive	C - Charbridge	D - Wretchwick Avenue
From	A - Wretchwick	0	7	750	100
	B - Gavray Drive	0	0	6	2
	C - Charbridge	680	41	0	79
	D - Wretchwick Avenue	39	4	45	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Wretchwick	B - Gavray Drive	C - Charbridge	D - Wretchwick Avenue
From	A - Wretchwick	0	0	0	5
	B - Gavray Drive	0	0	0	1
	C - Charbridge	0	0	0	0
	D - Wretchwick Avenue	3	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Wretchwick	0.47	0.06	0.9	A	787	1180
B - Gavray Drive	0.01	0.07	0.0	A	8	11
C - Charbridge	0.45	0.06	0.8	A	734	1100
D - Wretchwick Avenue	0.09	0.07	0.1	A	80	120

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Wretchwick	645	161	67	2049	0.315	644	539	0.0	0.5	0.043	A
B - Gavray Drive	6	2	672	1101	0.006	6	39	0.0	0.0	0.055	A
C - Charbridge	602	150	76	1974	0.305	600	601	0.0	0.4	0.044	A
D - Wretchwick Avenue	66	16	541	1176	0.056	66	136	0.0	0.1	0.055	A

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 (min)	LOS
A - Wretchwick	771	193	80	2040	0.378	770	646	0.5	0.6	0.047	A
B - Gavray Drive	7	2	804	1026	0.007	7	46	0.0	0.0	0.059	A
C - Charbridge	719	180	91	1964	0.366	718	720	0.4	0.6	0.048	A
D - Wretchwick Avenue	79	20	647	1115	0.070	78	163	0.1	0.1	0.059	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 (min)	LOS
A - Wretchwick	944	236	98	2028	0.465	943	790	0.6	0.9	0.056	A
B - Gavray Drive	9	2	984	923	0.010	9	57	0.0	0.0	0.066	A
C - Charbridge	880	220	112	1949	0.452	879	881	0.6	0.8	0.056	A
D - Wretchwick Avenue	96	24	792	1032	0.093	96	199	0.1	0.1	0.065	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 (min)	LOS
A - Wretchwick	944	236	98	2028	0.466	944	791	0.9	0.9	0.056	A
B - Gavray Drive	9	2	985	922	0.010	9	57	0.0	0.0	0.066	A
C - Charbridge	880	220	112	1949	0.452	880	882	0.8	0.8	0.056	A
D - Wretchwick Avenue	96	24	793	1032	0.093	96	199	0.1	0.1	0.065	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 (min)	LOS
A - Wretchwick	771	193	80	2040	0.378	772	647	0.9	0.6	0.048	A
B - Gavray Drive	7	2	805	1025	0.007	7	46	0.0	0.0	0.059	A
C - Charbridge	719	180	92	1963	0.366	720	721	0.8	0.6	0.048	A
D - Wretchwick Avenue	79	20	648	1114	0.070	79	163	0.1	0.1	0.059	A

18:00 - 18:15

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 (min)	LOS
A - Wretchwick	645	161	67	2049	0.315	646	542	0.6	0.5	0.043	A
B - Gavray Drive	6	2	674	1100	0.006	6	39	0.0	0.0	0.055	A
C - Charbridge	602	150	77	1974	0.305	602	604	0.6	0.4	0.044	A
D - Wretchwick Avenue	66	16	543	1175	0.056	66	136	0.1	0.1	0.055	A

(Default Analysis Set) - BASELINE 2026, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	(untitled)	Standard Roundabout	A, B, C, D	0.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	BASELINE 2026	AM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Wretchwick		ONE HOUR	✓	702	100.000
B - Gavray Drive		ONE HOUR	✓	91	100.000
C - Charbridge		ONE HOUR	✓	1113	100.000
D - Wretchwick Avenue		ONE HOUR	✓	511	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Wretchwick	B - Gavray Drive	C - Charbridge	D - Wretchwick Avenue
From	A - Wretchwick	0	0	604	98
	B - Gavray Drive	4	0	61	26
	C - Charbridge	379	24	0	710
	D - Wretchwick Avenue	41	7	463	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Wretchwick	B - Gavray Drive	C - Charbridge	D - Wretchwick Avenue
From	A - Wretchwick	0	1	1	6
	B - Gavray Drive	0	0	1	0
	C - Charbridge	0	0	0	0
	D - Wretchwick Avenue	4	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Wretchwick	0.45	0.06	0.8	A	644	966
B - Gavray Drive	0.13	0.09	0.2	A	84	125
C - Charbridge	0.64	0.09	1.7	A	1021	1532
D - Wretchwick Avenue	0.46	0.09	0.8	A	469	704

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Wretchwick	528	132	370	1841	0.287	527	319	0.0	0.4	0.046	A
B - Gavray Drive	69	17	874	986	0.070	68	23	0.0	0.1	0.066	A
C - Charbridge	838	210	96	1961	0.427	835	846	0.0	0.7	0.053	A
D - Wretchwick Avenue	385	96	306	1310	0.294	383	625	0.0	0.4	0.065	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Wretchwick	631	158	444	1791	0.352	630	381	0.4	0.6	0.053	A
B - Gavray Drive	82	20	1046	887	0.092	82	28	0.1	0.1	0.075	A
C - Charbridge	1001	250	115	1948	0.514	1000	1013	0.7	1.0	0.063	A
D - Wretchwick Avenue	460	115	366	1276	0.360	459	748	0.4	0.6	0.074	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 (min)	LOS
A - Wretchwick	773	193	543	1723	0.449	772	467	0.6	0.8	0.064	A
B - Gavray Drive	100	25	1281	753	0.133	100	34	0.1	0.2	0.092	A
C - Charbridge	1226	306	140	1930	0.635	1223	1240	1.0	1.7	0.085	A
D - Wretchwick Avenue	563	141	448	1229	0.458	562	915	0.6	0.8	0.090	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 (min)	LOS
A - Wretchwick	773	193	544	1722	0.449	773	468	0.8	0.8	0.064	A
B - Gavray Drive	100	25	1283	752	0.133	100	34	0.2	0.2	0.093	A
C - Charbridge	1226	306	140	1930	0.635	1226	1242	1.7	1.7	0.085	A
D - Wretchwick Avenue	563	141	449	1228	0.458	563	917	0.8	0.8	0.090	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 (min)	LOS
A - Wretchwick	631	158	445	1790	0.353	632	383	0.8	0.6	0.053	A
B - Gavray Drive	82	20	1049	885	0.092	82	28	0.2	0.1	0.075	A
C - Charbridge	1001	250	115	1947	0.514	1003	1017	1.7	1.1	0.064	A
D - Wretchwick Avenue	460	115	368	1275	0.360	461	751	0.8	0.6	0.074	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Wretchwick	528	132	373	1839	0.287	529	320	0.6	0.4	0.047	A
B - Gavray Drive	69	17	878	983	0.070	69	24	0.1	0.1	0.066	A
C - Charbridge	838	210	96	1960	0.428	839	851	1.1	0.8	0.054	A
D - Wretchwick Avenue	385	96	307	1309	0.294	385	628	0.6	0.4	0.065	A

(Default Analysis Set) - BASELINE 2026, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	(untitled)	Standard Roundabout	A, B, C, D	0.13	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	BASELINE 2026	PM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV	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 (PCU/hr)	Scaling Factor (%)
A - Wretchwick		ONE HOUR	✓	569	100.000
B - Gavray Drive		ONE HOUR	✓	33	100.000
C - Charbridge		ONE HOUR	✓	1246	100.000
D - Wretchwick Avenue		ONE HOUR	✓	717	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Wretchwick	B - Gavray Drive	C - Charbridge	D - Wretchwick Avenue
From	A - Wretchwick	0	9	476	84
	B - Gavray Drive	0	0	22	10
	C - Charbridge	566	90	0	589
	D - Wretchwick Avenue	23	9	686	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Wretchwick	B - Gavray Drive	C - Charbridge	D - Wretchwick Avenue
From	A - Wretchwick	0	0	0	2
	B - Gavray Drive	0	0	0	1
	C - Charbridge	0	0	0	0
	D - Wretchwick Avenue	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Wretchwick	0.42	0.07	0.7	A	522	783
B - Gavray Drive	0.05	0.09	0.1	A	30	45
C - Charbridge	0.70	0.10	2.3	A	1143	1714
D - Wretchwick Avenue	0.74	0.21	2.7	B	658	987

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Wretchwick	428	107	587	1692	0.253	427	442	0.0	0.3	0.048	A
B - Gavray Drive	25	6	933	952	0.026	25	81	0.0	0.0	0.065	A
C - Charbridge	938	234	71	1978	0.474	934	887	0.0	0.9	0.057	A
D - Wretchwick Avenue	540	135	492	1204	0.449	537	512	0.0	0.8	0.090	A

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 (min)	LOS
A - Wretchwick	511	128	704	1613	0.317	511	529	0.3	0.5	0.055	A
B - Gavray Drive	29	7	1118	846	0.035	29	97	0.0	0.0	0.074	A
C - Charbridge	1120	280	84	1968	0.569	1118	1063	0.9	1.3	0.070	A
D - Wretchwick Avenue	645	161	589	1148	0.562	643	613	0.8	1.3	0.118	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 (min)	LOS
A - Wretchwick	626	157	858	1507	0.416	625	647	0.5	0.7	0.068	A
B - Gavray Drive	36	9	1365	705	0.051	36	119	0.0	0.1	0.090	A
C - Charbridge	1371	343	103	1955	0.701	1367	1298	1.3	2.3	0.101	A
D - Wretchwick Avenue	790	197	721	1073	0.736	784	750	1.3	2.7	0.204	B

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 (min)	LOS
A - Wretchwick	626	157	864	1503	0.417	626	649	0.7	0.7	0.069	A
B - Gavray Drive	36	9	1371	701	0.051	36	119	0.1	0.1	0.090	A
C - Charbridge	1371	343	103	1955	0.701	1371	1304	2.3	2.3	0.103	A
D - Wretchwick Avenue	790	197	723	1072	0.737	790	752	2.7	2.7	0.212	B

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 (min)	LOS
A - Wretchwick	511	128	711	1607	0.318	512	532	0.7	0.5	0.055	A
B - Gavray Drive	29	7	1126	841	0.035	29	98	0.1	0.0	0.074	A
C - Charbridge	1120	280	85	1968	0.569	1124	1071	2.3	1.3	0.071	A
D - Wretchwick Avenue	645	161	592	1146	0.563	651	616	2.7	1.3	0.122	A

18:00 - 18:15

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 (min)	LOS
A - Wretchwick	428	107	593	1689	0.254	429	444	0.5	0.3	0.048	A
B - Gavray Drive	25	6	940	948	0.026	25	82	0.0	0.0	0.065	A
C - Charbridge	938	234	71	1978	0.474	939	894	1.3	0.9	0.058	A
D - Wretchwick Avenue	540	135	495	1202	0.449	542	515	1.3	0.8	0.091	A

(Default Analysis Set) - BASELINE 2021+DEV 180, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	(untitled)	Standard Roundabout	A, B, C, D	0.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	BASELINE 2021+DEV 180	AM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV+180 DEV	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Wretchwick		ONE HOUR	✓	711	100.000
B - Gavray Drive		ONE HOUR	✓	85	100.000
C - Charbridge		ONE HOUR	✓	549	100.000
D - Wretchwick Avenue		ONE HOUR	✓	141	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Wretchwick	B - Gavray Drive	C - Charbridge	D - Wretchwick Avenue
From	A - Wretchwick	0	11	685	14
	B - Gavray Drive	18	0	67	0.45
	C - Charbridge	501	25	0	23
	D - Wretchwick Avenue	69	6	67	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Wretchwick	B - Gavray Drive	C - Charbridge	D - Wretchwick Avenue
From	A - Wretchwick	0	1	0	4
	B - Gavray Drive	2	0	1	3
	C - Charbridge	0	1	0	0
	D - Wretchwick Avenue	12	7	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Wretchwick	0.39	0.05	0.6	A	652	978
B - Gavray Drive	0.09	0.07	0.1	A	78	117
C - Charbridge	0.30	0.04	0.4	A	504	755
D - Wretchwick Avenue	0.14	0.06	0.2	A	130	194

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Wretchwick	535	134	73	2045	0.262	534	441	0.0	0.4	0.040	A
B - Gavray Drive	64	16	575	1156	0.055	64	32	0.0	0.1	0.056	A
C - Charbridge	413	103	24	2010	0.206	412	615	0.0	0.3	0.038	A
D - Wretchwick Avenue	106	27	408	1252	0.085	106	28	0.0	0.1	0.056	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Wretchwick	639	160	88	2035	0.314	638	528	0.4	0.5	0.043	A
B - Gavray Drive	77	19	688	1092	0.070	77	38	0.1	0.1	0.060	A
C - Charbridge	493	123	29	2007	0.246	493	736	0.3	0.3	0.040	A
D - Wretchwick Avenue	127	32	488	1206	0.105	127	33	0.1	0.1	0.059	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 (min)	LOS
A - Wretchwick	782	196	107	2021	0.387	782	646	0.5	0.6	0.048	A
B - Gavray Drive	94	23	843	1003	0.094	94	46	0.1	0.1	0.067	A
C - Charbridge	604	151	35	2003	0.302	604	901	0.3	0.4	0.043	A
D - Wretchwick Avenue	156	39	598	1143	0.136	155	41	0.1	0.2	0.065	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 (min)	LOS
A - Wretchwick	782	196	107	2021	0.387	782	647	0.6	0.6	0.048	A
B - Gavray Drive	94	23	844	1003	0.094	94	46	0.1	0.1	0.067	A
C - Charbridge	604	151	35	2002	0.302	604	902	0.4	0.4	0.043	A
D - Wretchwick Avenue	156	39	599	1143	0.136	156	41	0.2	0.2	0.065	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 (min)	LOS
A - Wretchwick	639	160	88	2035	0.314	640	529	0.6	0.5	0.043	A
B - Gavray Drive	77	19	690	1091	0.070	77	38	0.1	0.1	0.060	A
C - Charbridge	493	123	29	2007	0.246	494	737	0.4	0.3	0.040	A
D - Wretchwick Avenue	127	32	489	1205	0.105	127	34	0.2	0.1	0.059	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Wretchwick	535	134	74	2044	0.262	535	443	0.5	0.4	0.040	A
B - Gavray Drive	64	16	577	1155	0.056	64	32	0.1	0.1	0.056	A
C - Charbridge	413	103	24	2010	0.206	413	617	0.3	0.3	0.038	A
D - Wretchwick Avenue	106	27	410	1251	0.085	106	28	0.1	0.1	0.056	A

(Default Analysis Set) - BASELINE 2021+DEV 180, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	(untitled)	Standard Roundabout	A, B, C, D	0.06	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	BASELINE 2021+DEV 180	PM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV+180 DEV	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 (PCU/hr)	Scaling Factor (%)
A - Wretchwick		ONE HOUR	✓	877	100.000
B - Gavray Drive		ONE HOUR	✓	49	100.000
C - Charbridge		ONE HOUR	✓	827	100.000
D - Wretchwick Avenue		ONE HOUR	✓	87	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Wretchwick	B - Gavray Drive	C - Charbridge	D - Wretchwick Avenue
From	A - Wretchwick	0	27	750	100
	B - Gavray Drive	15	0	32	2
	C - Charbridge	680	68	0	79
	D - Wretchwick Avenue	39	4	45	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Wretchwick	B - Gavray Drive	C - Charbridge	D - Wretchwick Avenue
From	A - Wretchwick	0	0	0	5
	B - Gavray Drive	0	0	0	1
	C - Charbridge	0	0	0	0
	D - Wretchwick Avenue	3	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Wretchwick	0.48	0.06	0.9	A	805	1208
B - Gavray Drive	0.06	0.07	0.1	A	45	68
C - Charbridge	0.47	0.06	0.9	A	759	1138
D - Wretchwick Avenue	0.10	0.07	0.1	A	80	120

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Wretchwick	661	165	87	2035	0.325	659	551	0.0	0.5	0.044	A
B - Gavray Drive	37	9	672	1101	0.034	37	74	0.0	0.0	0.056	A
C - Charbridge	623	156	88	1966	0.317	621	621	0.0	0.5	0.045	A
D - Wretchwick Avenue	66	16	572	1158	0.057	66	136	0.0	0.1	0.056	A

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 (min)	LOS
A - Wretchwick	789	197	105	2023	0.390	788	659	0.5	0.6	0.049	A
B - Gavray Drive	44	11	804	1026	0.043	44	89	0.0	0.0	0.061	A
C - Charbridge	743	186	105	1954	0.380	743	743	0.5	0.6	0.049	A
D - Wretchwick Avenue	79	20	685	1093	0.072	78	163	0.1	0.1	0.060	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 (min)	LOS
A - Wretchwick	966	242	128	2007	0.481	965	807	0.6	0.9	0.058	A
B - Gavray Drive	54	14	984	923	0.059	54	109	0.0	0.1	0.069	A
C - Charbridge	910	228	128	1938	0.470	909	910	0.6	0.9	0.058	A
D - Wretchwick Avenue	96	24	839	1006	0.096	96	199	0.1	0.1	0.067	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 (min)	LOS
A - Wretchwick	966	242	128	2007	0.481	966	808	0.9	0.9	0.058	A
B - Gavray Drive	54	14	985	922	0.059	54	109	0.1	0.1	0.069	A
C - Charbridge	910	228	129	1938	0.470	910	911	0.9	0.9	0.058	A
D - Wretchwick Avenue	96	24	840	1005	0.096	96	199	0.1	0.1	0.067	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 (min)	LOS
A - Wretchwick	789	197	105	2023	0.390	790	660	0.9	0.6	0.049	A
B - Gavray Drive	44	11	806	1025	0.043	44	89	0.1	0.0	0.061	A
C - Charbridge	743	186	105	1954	0.380	744	745	0.9	0.6	0.050	A
D - Wretchwick Avenue	79	20	687	1093	0.072	79	163	0.1	0.1	0.060	A

18:00 - 18:15

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 (min)	LOS
A - Wretchwick	661	165	88	2035	0.325	661	553	0.6	0.5	0.044	A
B - Gavray Drive	37	9	674	1100	0.034	37	75	0.0	0.0	0.056	A
C - Charbridge	623	156	88	1966	0.317	623	623	0.6	0.5	0.045	A
D - Wretchwick Avenue	66	16	575	1156	0.057	66	136	0.1	0.1	0.056	A

(Default Analysis Set) - BASELINE 2026+DEV 180, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	(untitled)	Standard Roundabout	A, B, C, D	0.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	BASELINE 2026+DEV 180	AM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV+180 DEV	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Wretchwick		ONE HOUR	✓	703	100.000
B - Gavray Drive		ONE HOUR	✓	146	100.000
C - Charbridge		ONE HOUR	✓	1140	100.000
D - Wretchwick Avenue		ONE HOUR	✓	517	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Wretchwick	B - Gavray Drive	C - Charbridge	D - Wretchwick Avenue
From	A - Wretchwick	0	1	604	98
	B - Gavray Drive	18	0	88	40
	C - Charbridge	379	51	0	710
	D - Wretchwick Avenue	41	13	463	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Wretchwick	B - Gavray Drive	C - Charbridge	D - Wretchwick Avenue
From	A - Wretchwick	0	1	1	6
	B - Gavray Drive	0	0	1	0
	C - Charbridge	0	0	0	0
	D - Wretchwick Avenue	4	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Wretchwick	0.46	0.07	0.8	A	645	968
B - Gavray Drive	0.21	0.10	0.3	A	134	201
C - Charbridge	0.66	0.09	1.9	A	1046	1569
D - Wretchwick Avenue	0.47	0.10	0.9	A	475	712

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Wretchwick	529	132	395	1824	0.290	528	329	0.0	0.4	0.047	A
B - Gavray Drive	110	27	874	986	0.111	109	49	0.0	0.1	0.069	A
C - Charbridge	858	215	116	1946	0.441	855	867	0.0	0.8	0.055	A
D - Wretchwick Avenue	389	97	336	1293	0.301	388	636	0.0	0.4	0.066	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Wretchwick	632	158	473	1771	0.357	631	393	0.4	0.6	0.054	A
B - Gavray Drive	131	33	1046	887	0.148	131	58	0.1	0.2	0.080	A
C - Charbridge	1025	256	139	1930	0.531	1023	1037	0.8	1.1	0.066	A
D - Wretchwick Avenue	465	116	402	1255	0.370	464	761	0.4	0.6	0.076	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 (min)	LOS
A - Wretchwick	774	193	579	1698	0.456	773	481	0.6	0.8	0.066	A
B - Gavray Drive	160	40	1280	753	0.213	160	71	0.2	0.3	0.102	A
C - Charbridge	1255	314	171	1909	0.658	1252	1270	1.1	1.9	0.091	A
D - Wretchwick Avenue	569	142	492	1204	0.473	568	931	0.6	0.9	0.095	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 (min)	LOS
A - Wretchwick	774	193	580	1697	0.456	774	483	0.8	0.8	0.066	A
B - Gavray Drive	160	40	1283	752	0.213	160	71	0.3	0.3	0.102	A
C - Charbridge	1255	314	171	1908	0.658	1255	1272	1.9	1.9	0.092	A
D - Wretchwick Avenue	569	142	493	1203	0.473	569	933	0.9	0.9	0.095	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 (min)	LOS
A - Wretchwick	632	158	475	1769	0.357	633	395	0.8	0.6	0.054	A
B - Gavray Drive	131	33	1049	885	0.148	131	58	0.3	0.2	0.080	A
C - Charbridge	1025	256	140	1930	0.531	1028	1041	1.9	1.1	0.067	A
D - Wretchwick Avenue	465	116	404	1254	0.371	466	764	0.9	0.6	0.077	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Wretchwick	529	132	397	1823	0.290	530	330	0.6	0.4	0.047	A
B - Gavray Drive	110	27	878	983	0.112	110	49	0.2	0.1	0.069	A
C - Charbridge	858	215	117	1946	0.441	860	871	1.1	0.8	0.055	A
D - Wretchwick Avenue	389	97	338	1292	0.301	390	639	0.6	0.4	0.067	A

(Default Analysis Set) - BASELINE 2026+DEV 180, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	(untitled)	Standard Roundabout	A, B, C, D	0.14	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	BASELINE 2026+DEV 180	PM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV+180 DEV	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 (PCU/hr)	Scaling Factor (%)
A - Wretchwick		ONE HOUR	✓	581	100.000
B - Gavray Drive		ONE HOUR	✓	80	100.000
C - Charbridge		ONE HOUR	✓	1274	100.000
D - Wretchwick Avenue		ONE HOUR	✓	736	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Wretchwick	B - Gavray Drive	C - Charbridge	D - Wretchwick Avenue
From	A - Wretchwick	0	21	476	84
	B - Gavray Drive	11	0	48	21
	C - Charbridge	566	119	0	589
	D - Wretchwick Avenue	23	27	686	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Wretchwick	B - Gavray Drive	C - Charbridge	D - Wretchwick Avenue
From	A - Wretchwick	0	0	0	2
	B - Gavray Drive	0	0	0	1
	C - Charbridge	0	0	0	0
	D - Wretchwick Avenue	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Wretchwick	0.44	0.07	0.8	A	533	800
B - Gavray Drive	0.13	0.10	0.1	A	74	111
C - Charbridge	0.72	0.11	2.6	A	1169	1754
D - Wretchwick Avenue	0.77	0.25	3.3	C	675	1012

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Wretchwick	438	109	622	1668	0.262	436	450	0.0	0.4	0.049	A
B - Gavray Drive	61	15	933	952	0.064	60	125	0.0	0.1	0.067	A
C - Charbridge	959	240	87	1967	0.488	955	907	0.0	0.9	0.059	A
D - Wretchwick Avenue	554	138	522	1187	0.467	550	520	0.0	0.9	0.094	A

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 (min)	LOS
A - Wretchwick	523	131	745	1584	0.330	522	539	0.4	0.5	0.057	A
B - Gavray Drive	72	18	1117	846	0.085	72	150	0.1	0.1	0.078	A
C - Charbridge	1145	286	104	1955	0.586	1143	1086	0.9	1.4	0.074	A
D - Wretchwick Avenue	661	165	625	1128	0.586	659	623	0.9	1.4	0.127	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 (min)	LOS
A - Wretchwick	640	160	908	1473	0.435	639	658	0.5	0.8	0.072	A
B - Gavray Drive	89	22	1364	706	0.126	88	183	0.1	0.1	0.097	A
C - Charbridge	1403	351	127	1939	0.724	1398	1325	1.4	2.6	0.110	A
D - Wretchwick Avenue	810	202	764	1049	0.772	803	762	1.4	3.2	0.238	B

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 (min)	LOS
A - Wretchwick	640	160	915	1468	0.436	640	661	0.8	0.8	0.073	A
B - Gavray Drive	89	22	1371	701	0.126	89	184	0.1	0.1	0.098	A
C - Charbridge	1403	351	127	1939	0.724	1403	1332	2.6	2.6	0.112	A
D - Wretchwick Avenue	810	202	766	1047	0.773	809	764	3.2	3.3	0.251	C

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 (min)	LOS
A - Wretchwick	523	131	755	1577	0.331	524	542	0.8	0.5	0.057	A
B - Gavray Drive	72	18	1128	841	0.086	73	151	0.1	0.1	0.078	A
C - Charbridge	1145	286	104	1955	0.586	1150	1096	2.6	1.4	0.075	A
D - Wretchwick Avenue	661	165	628	1126	0.587	669	626	3.3	1.5	0.133	A

18:00 - 18:15

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 (min)	LOS
A - Wretchwick	438	109	628	1664	0.263	438	453	0.5	0.4	0.049	A
B - Gavray Drive	61	15	940	948	0.064	61	126	0.1	0.1	0.068	A
C - Charbridge	959	240	87	1966	0.488	961	914	1.4	1.0	0.060	A
D - Wretchwick Avenue	554	138	525	1185	0.467	556	523	1.5	0.9	0.096	A

(Default Analysis Set) - BASELINE 2021+DEV 300, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	(untitled)	Standard Roundabout	A, B, C, D	0.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	BASELINE 2021+DEV 300	AM	SATURN WITH DEV TURNING FLOWS 2021	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Wretchwick		ONE HOUR	✓	711	100.000
B - Gavray Drive		ONE HOUR	✓	111	100.000
C - Charbridge		ONE HOUR	✓	555	100.000
D - Wretchwick Avenue		ONE HOUR	✓	141	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Wretchwick	B - Gavray Drive	C - Charbridge	D - Wretchwick Avenue
From	A - Wretchwick	0	11	685	14
	B - Gavray Drive	27	0	84	0.45
	C - Charbridge	501	31	0	23
	D - Wretchwick Avenue	69	6	67	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Wretchwick	B - Gavray Drive	C - Charbridge	D - Wretchwick Avenue
From	A - Wretchwick	0	1	0	4
	B - Gavray Drive	2	0	1	3
	C - Charbridge	0	1	0	0
	D - Wretchwick Avenue	12	7	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Wretchwick	0.39	0.05	0.6	A	652	978
B - Gavray Drive	0.12	0.07	0.1	A	102	153
C - Charbridge	0.31	0.04	0.4	A	509	764
D - Wretchwick Avenue	0.14	0.07	0.2	A	130	194

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Wretchwick	535	134	78	2042	0.262	534	448	0.0	0.4	0.040	A
B - Gavray Drive	84	21	575	1156	0.072	83	36	0.0	0.1	0.057	A
C - Charbridge	418	104	31	2006	0.208	417	628	0.0	0.3	0.038	A
D - Wretchwick Avenue	106	27	420	1245	0.085	106	28	0.0	0.1	0.056	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Wretchwick	639	160	93	2031	0.315	638	536	0.4	0.5	0.043	A
B - Gavray Drive	100	25	688	1092	0.092	100	43	0.1	0.1	0.061	A
C - Charbridge	499	125	37	2001	0.249	499	751	0.3	0.3	0.040	A
D - Wretchwick Avenue	127	32	502	1198	0.106	127	33	0.1	0.1	0.060	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 (min)	LOS
A - Wretchwick	782	196	114	2017	0.388	782	656	0.5	0.6	0.049	A
B - Gavray Drive	123	31	843	1003	0.122	122	53	0.1	0.1	0.069	A
C - Charbridge	611	153	45	1996	0.306	611	920	0.3	0.4	0.043	A
D - Wretchwick Avenue	156	39	615	1133	0.137	155	41	0.1	0.2	0.065	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 (min)	LOS
A - Wretchwick	782	196	114	2017	0.388	782	657	0.6	0.6	0.049	A
B - Gavray Drive	123	31	844	1003	0.122	123	53	0.1	0.1	0.069	A
C - Charbridge	611	153	45	1996	0.306	611	921	0.4	0.4	0.043	A
D - Wretchwick Avenue	156	39	615	1133	0.137	156	41	0.2	0.2	0.065	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 (min)	LOS
A - Wretchwick	639	160	93	2031	0.315	640	537	0.6	0.5	0.043	A
B - Gavray Drive	100	25	690	1091	0.092	100	43	0.1	0.1	0.061	A
C - Charbridge	499	125	37	2001	0.249	499	753	0.4	0.3	0.040	A
D - Wretchwick Avenue	127	32	503	1197	0.106	127	34	0.2	0.1	0.060	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Wretchwick	535	134	78	2041	0.262	535	449	0.5	0.4	0.040	A
B - Gavray Drive	84	21	577	1155	0.073	84	36	0.1	0.1	0.057	A
C - Charbridge	418	104	31	2005	0.208	418	630	0.3	0.3	0.038	A
D - Wretchwick Avenue	106	27	421	1244	0.086	106	28	0.1	0.1	0.056	A

(Default Analysis Set) - BASELINE 2021+DEV 300, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	(untitled)	Standard Roundabout	A, B, C, D	0.06	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	BASELINE 2021+DEV 300	PM	SATURN WITH DEV TURNING FLOWS 2021	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 (PCU/hr)	Scaling Factor (%)
A - Wretchwick		ONE HOUR	✓	891	100.000
B - Gavray Drive		ONE HOUR	✓	71	100.000
C - Charbridge		ONE HOUR	✓	845	100.000
D - Wretchwick Avenue		ONE HOUR	✓	87	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Wretchwick	B - Gavray Drive	C - Charbridge	D - Wretchwick Avenue
From	A - Wretchwick	0	41	750	100
	B - Gavray Drive	19	0	49	2
	C - Charbridge	680	86	0	79
	D - Wretchwick Avenue	39	4	45	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Wretchwick	B - Gavray Drive	C - Charbridge	D - Wretchwick Avenue
From	A - Wretchwick	0	0	0	5
	B - Gavray Drive	0	0	0	1
	C - Charbridge	0	0	0	0
	D - Wretchwick Avenue	3	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Wretchwick	0.49	0.06	1.0	A	817	1226
B - Gavray Drive	0.08	0.07	0.1	A	65	97
C - Charbridge	0.48	0.06	0.9	A	776	1163
D - Wretchwick Avenue	0.10	0.07	0.1	A	80	120

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Wretchwick	671	168	101	2026	0.331	669	554	0.0	0.5	0.044	A
B - Gavray Drive	53	13	672	1101	0.048	53	98	0.0	0.1	0.057	A
C - Charbridge	636	159	91	1964	0.324	634	634	0.0	0.5	0.045	A
D - Wretchwick Avenue	66	16	589	1148	0.057	66	136	0.0	0.1	0.056	A

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 (min)	LOS
A - Wretchwick	801	200	121	2012	0.398	800	663	0.5	0.7	0.050	A
B - Gavray Drive	63	16	804	1026	0.062	63	117	0.1	0.1	0.062	A
C - Charbridge	760	190	109	1952	0.389	759	758	0.5	0.6	0.050	A
D - Wretchwick Avenue	79	20	705	1082	0.073	78	163	0.1	0.1	0.061	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 (min)	LOS
A - Wretchwick	981	245	148	1993	0.492	980	811	0.7	1.0	0.059	A
B - Gavray Drive	78	19	984	923	0.084	78	144	0.1	0.1	0.071	A
C - Charbridge	931	233	133	1935	0.481	929	929	0.6	0.9	0.060	A
D - Wretchwick Avenue	96	24	863	992	0.097	96	199	0.1	0.1	0.068	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 (min)	LOS
A - Wretchwick	981	245	148	1993	0.492	981	812	1.0	1.0	0.060	A
B - Gavray Drive	78	19	985	922	0.084	78	144	0.1	0.1	0.071	A
C - Charbridge	931	233	133	1935	0.481	931	930	0.9	0.9	0.060	A
D - Wretchwick Avenue	96	24	864	991	0.097	96	199	0.1	0.1	0.068	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 (min)	LOS
A - Wretchwick	801	200	121	2012	0.398	802	664	1.0	0.7	0.050	A
B - Gavray Drive	63	16	806	1025	0.062	64	118	0.1	0.1	0.062	A
C - Charbridge	760	190	109	1951	0.389	761	760	0.9	0.6	0.050	A
D - Wretchwick Avenue	79	20	707	1081	0.073	79	163	0.1	0.1	0.061	A

18:00 - 18:15

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 (min)	LOS
A - Wretchwick	671	168	102	2025	0.331	671	556	0.7	0.5	0.045	A
B - Gavray Drive	53	13	674	1100	0.048	53	98	0.1	0.1	0.057	A
C - Charbridge	636	159	91	1964	0.324	637	636	0.6	0.5	0.045	A
D - Wretchwick Avenue	66	16	592	1147	0.057	66	136	0.1	0.1	0.056	A

(Default Analysis Set) - BASELINE 2026+DEV 300, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	(untitled)	Standard Roundabout	A, B, C, D	0.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	BASELINE 2026+DEV 300	AM	SATURN WITH DEV TURNING FLOWS 2026	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Wretchwick		ONE HOUR	✓	709	100.000
B - Gavray Drive		ONE HOUR	✓	158	100.000
C - Charbridge		ONE HOUR	✓	1158	100.000
D - Wretchwick Avenue		ONE HOUR	✓	511	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Wretchwick	B - Gavray Drive	C - Charbridge	D - Wretchwick Avenue
From	A - Wretchwick	0	7	604	98
	B - Gavray Drive	27	0	106	26
	C - Charbridge	379	69	0	710
	D - Wretchwick Avenue	41	7	463	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Wretchwick	B - Gavray Drive	C - Charbridge	D - Wretchwick Avenue
From	A - Wretchwick	0	1	1	6
	B - Gavray Drive	0	0	1	0
	C - Charbridge	0	0	0	0
	D - Wretchwick Avenue	4	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Wretchwick	0.46	0.07	0.9	A	650	976
B - Gavray Drive	0.23	0.10	0.3	A	145	218
C - Charbridge	0.67	0.09	2.0	A	1062	1593
D - Wretchwick Avenue	0.47	0.10	0.9	A	469	704

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Wretchwick	534	133	404	1818	0.294	532	335	0.0	0.4	0.047	A
B - Gavray Drive	119	30	874	986	0.121	119	62	0.0	0.1	0.070	A
C - Charbridge	872	218	112	1949	0.447	868	880	0.0	0.8	0.055	A
D - Wretchwick Avenue	385	96	356	1281	0.300	383	625	0.0	0.4	0.067	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Wretchwick	637	159	484	1763	0.361	637	402	0.4	0.6	0.054	A
B - Gavray Drive	142	36	1046	887	0.160	142	74	0.1	0.2	0.081	A
C - Charbridge	1041	260	135	1934	0.538	1039	1054	0.8	1.2	0.067	A
D - Wretchwick Avenue	460	115	426	1241	0.370	459	748	0.4	0.6	0.077	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 (min)	LOS
A - Wretchwick	780	195	592	1689	0.462	779	491	0.6	0.9	0.067	A
B - Gavray Drive	174	44	1280	753	0.231	174	91	0.2	0.3	0.104	A
C - Charbridge	1275	319	165	1913	0.666	1271	1289	1.2	2.0	0.093	A
D - Wretchwick Avenue	563	141	521	1187	0.474	562	915	0.6	0.9	0.096	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 (min)	LOS
A - Wretchwick	780	195	593	1688	0.462	780	492	0.9	0.9	0.067	A
B - Gavray Drive	174	44	1283	752	0.232	174	91	0.3	0.3	0.105	A
C - Charbridge	1275	319	165	1912	0.666	1275	1292	2.0	2.0	0.094	A
D - Wretchwick Avenue	563	141	523	1186	0.474	563	917	0.9	0.9	0.097	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 (min)	LOS
A - Wretchwick	637	159	486	1762	0.362	638	403	0.9	0.6	0.054	A
B - Gavray Drive	142	36	1050	885	0.161	143	75	0.3	0.2	0.081	A
C - Charbridge	1041	260	135	1933	0.538	1044	1057	2.0	1.2	0.068	A
D - Wretchwick Avenue	460	115	428	1240	0.371	461	751	0.9	0.6	0.077	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Wretchwick	534	133	406	1816	0.294	534	337	0.6	0.4	0.048	A
B - Gavray Drive	119	30	878	983	0.121	119	62	0.2	0.1	0.070	A
C - Charbridge	872	218	113	1949	0.447	873	885	1.2	0.8	0.056	A
D - Wretchwick Avenue	385	96	358	1280	0.301	386	628	0.6	0.4	0.067	A

(Default Analysis Set) - BASELINE 2026+DEV 300, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	(untitled)	Standard Roundabout	A, B, C, D	0.15	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	BASELINE 2026+DEV 300	PM	SATURN WITH DEV TURNING FLOWS 2026	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 (PCU/hr)	Scaling Factor (%)
A - Wretchwick		ONE HOUR	✓	590	100.000
B - Gavray Drive		ONE HOUR	✓	111	100.000
C - Charbridge		ONE HOUR	✓	1293	100.000
D - Wretchwick Avenue		ONE HOUR	✓	748	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Wretchwick	B - Gavray Drive	C - Charbridge	D - Wretchwick Avenue
From	A - Wretchwick	0	30	476	84
	B - Gavray Drive	17	0	65	29
	C - Charbridge	566	138	0	589
	D - Wretchwick Avenue	23	39	686	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A - Wretchwick	B - Gavray Drive	C - Charbridge	D - Wretchwick Avenue
From	A - Wretchwick	0	0	0	2
	B - Gavray Drive	0	0	0	1
	C - Charbridge	0	0	0	0
	D - Wretchwick Avenue	3	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Wretchwick	0.45	0.08	0.8	A	541	811
B - Gavray Drive	0.17	0.10	0.2	A	102	153
C - Charbridge	0.74	0.12	2.8	A	1186	1780
D - Wretchwick Avenue	0.80	0.29	3.8	C	686	1029

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Wretchwick	444	111	645	1653	0.269	442	454	0.0	0.4	0.050	A
B - Gavray Drive	84	21	933	952	0.088	83	155	0.0	0.1	0.069	A
C - Charbridge	973	243	97	1960	0.497	969	919	0.0	1.0	0.060	A
D - Wretchwick Avenue	563	141	541	1176	0.479	559	526	0.0	0.9	0.097	A

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 (min)	LOS
A - Wretchwick	530	132	773	1565	0.339	529	544	0.4	0.5	0.058	A
B - Gavray Drive	100	25	1117	847	0.118	100	185	0.1	0.1	0.081	A
C - Charbridge	1162	291	116	1947	0.597	1160	1101	1.0	1.5	0.076	A
D - Wretchwick Avenue	672	168	647	1115	0.603	670	629	0.9	1.5	0.134	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 (min)	LOS
A - Wretchwick	649	162	941	1450	0.448	648	665	0.5	0.8	0.075	A
B - Gavray Drive	122	31	1363	706	0.173	122	226	0.1	0.2	0.103	A
C - Charbridge	1423	356	142	1929	0.738	1418	1343	1.5	2.7	0.116	A
D - Wretchwick Avenue	823	206	791	1033	0.797	815	770	1.5	3.6	0.265	C

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 (min)	LOS
A - Wretchwick	649	162	949	1445	0.449	649	667	0.8	0.8	0.076	A
B - Gavray Drive	122	31	1371	702	0.174	122	227	0.2	0.2	0.104	A
C - Charbridge	1423	356	142	1928	0.738	1423	1351	2.7	2.8	0.119	A
D - Wretchwick Avenue	823	206	794	1031	0.798	823	772	3.6	3.8	0.285	C

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 (min)	LOS
A - Wretchwick	530	132	784	1557	0.340	531	548	0.8	0.5	0.059	A
B - Gavray Drive	100	25	1129	840	0.119	100	187	0.2	0.1	0.081	A
C - Charbridge	1162	291	116	1946	0.597	1167	1113	2.8	1.5	0.078	A
D - Wretchwick Avenue	672	168	651	1113	0.604	681	633	3.8	1.6	0.142	A

18:00 - 18:15

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 (min)	LOS
A - Wretchwick	444	111	652	1648	0.269	444	457	0.5	0.4	0.050	A
B - Gavray Drive	84	21	941	947	0.088	84	156	0.1	0.1	0.070	A
C - Charbridge	973	243	97	1959	0.497	975	927	1.5	1.0	0.061	A
D - Wretchwick Avenue	563	141	544	1174	0.479	565	529	1.6	0.9	0.099	A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 770558 software@trl.co.uk www.trlsoftware.co.uk

Filename: Wretchwick Way -Pergrine Way Junction-v1.j9
Path: M:\Projects\17167-00 - Gavray Drive, Bicester\Technical\Picady\Rev A
Report generation date: 28/03/2018 14:43:55

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	BASELINE 2021							
Stream B-C	0.2	7.10	0.20	A	0.2	7.67	0.16	A
Stream B-A	0.2	12.68	0.14	B	0.2	16.23	0.17	C
Stream C-B	0.3	8.00	0.21	A	0.5	10.39	0.32	B
	BASELINE 2026							
Stream B-C	0.3	7.20	0.21	A	0.2	6.62	0.14	A
Stream B-A	0.2	11.97	0.15	B	0.2	12.41	0.14	B
Stream C-B	0.3	7.95	0.20	A	0.6	10.02	0.38	B
	BASELINE 2021+DEV 180							
Stream B-C	0.3	7.16	0.20	A	0.2	7.76	0.16	A
Stream B-A	0.2	12.90	0.14	B	0.2	16.72	0.18	C
Stream C-B	0.3	8.10	0.22	A	0.5	10.57	0.32	B
	BASELINE 2026+DEV 180							
Stream B-C	0.3	7.24	0.21	A	0.2	6.66	0.14	A
Stream B-A	0.2	12.13	0.15	B	0.2	12.58	0.14	B
Stream C-B	0.3	8.03	0.21	A	0.6	10.13	0.38	B
	BASELINE 2021+DEV 300							
Stream B-C	0.3	7.15	0.20	A	0.2	7.82	0.16	A
Stream B-A	0.2	12.99	0.14	B	0.2	17.06	0.18	C
Stream C-B	0.3	8.17	0.22	A	0.5	10.69	0.32	B
	BASELINE 2026+DEV 300							
Stream B-C	0.3	7.26	0.21	A	0.2	6.69	0.14	A
Stream B-A	0.2	12.24	0.15	B	0.2	12.72	0.14	B
Stream C-B	0.3	8.09	0.21	A	0.6	10.22	0.39	B

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

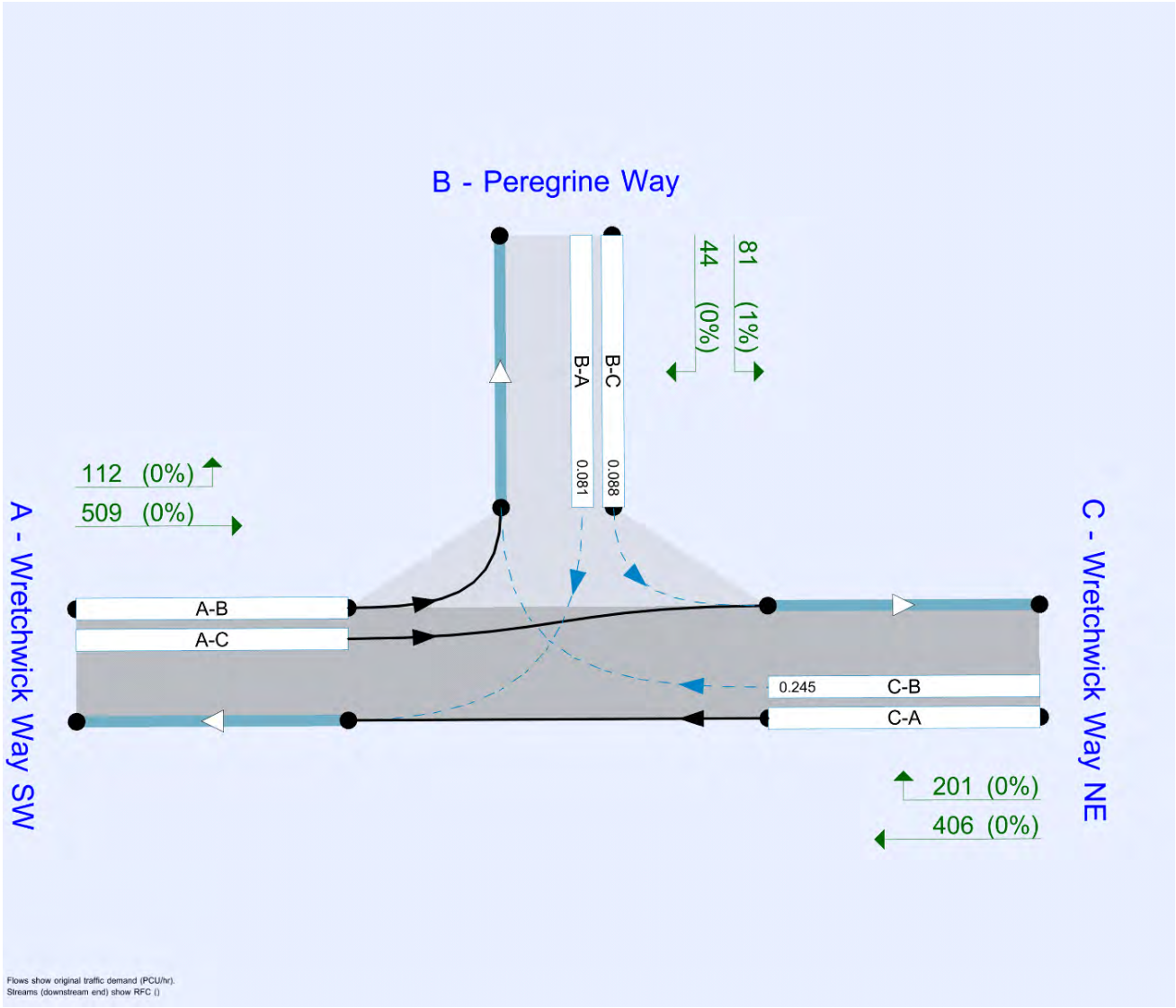
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	24/01/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	KONSTANTINA-SOL\Konstantina Solomou
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	BASELINE 2021	AM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV	ONE HOUR	07:45	09:15	15	✓
D2	BASELINE 2021	PM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV	ONE HOUR	16:45	18:15	15	✓
D3	BASELINE 2026	AM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV	ONE HOUR	07:45	09:15	15	✓
D4	BASELINE 2026	PM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV	ONE HOUR	16:45	18:15	15	✓
D5	BASELINE 2021+DEV 180	AM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV+180 DEV	ONE HOUR	07:45	09:15	15	✓
D6	BASELINE 2021+DEV 180	PM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV+180 DEV	ONE HOUR	16:45	18:15	15	✓
D7	BASELINE 2026+DEV 180	AM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV+180 DEV	ONE HOUR	07:45	09:15	15	✓
D8	BASELINE 2026+DEV 180	PM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV+180 DEV	ONE HOUR	16:45	18:15	15	✓
D9	BASELINE 2021+DEV 300	AM	SATURN WITH DEV TURNING FLOWS 2021	ONE HOUR	07:45	09:15	15	✓
D10	BASELINE 2021+DEV 300	PM	SATURN WITH DEV TURNING FLOWS 2021	ONE HOUR	16:45	18:15	15	✓
D11	BASELINE 2026+DEV 300	AM	SATURN WITH DEV TURNING FLOWS 2026	ONE HOUR	07:45	09:15	15	✓
D12	BASELINE 2026+DEV 300	PM	SATURN WITH DEV TURNING FLOWS 2026	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

BASELINE 2021, 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	1.64	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Wretchwick Way SW		Major
B	Peregrine Way		Minor
C	Wretchwick Way NE		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 - Wretchwick Way NE	12.00		✓	3.20	120.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Peregrine Way	One lane plus flare	10.00	9.00	6.50	6.00	6.00		1.00	65	120

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	547	0.074	0.186	0.117	0.266
1	B-C	820	0.093	0.235	-	-
1	C-B	713	0.204	0.204	-	-

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	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	BASELINE 2021	AM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Wretchwick Way SW		ONE HOUR	✓	621	100.000
B - Peregrine Way		ONE HOUR	✓	157	100.000
C - Wretchwick Way NE		ONE HOUR	✓	574	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Wretchwick Way SW	B - Peregrine Way	C - Wretchwick Way NE
From	A - Wretchwick Way SW	0	39	582
	B - Peregrine Way	42	0	115
	C - Wretchwick Way NE	466	108	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Wretchwick Way SW	B - Peregrine Way	C - Wretchwick Way NE
From	A - Wretchwick Way SW	0	0	3
	B - Peregrine Way	0	0	1
	C - Wretchwick Way NE	7	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.20	7.10	0.2	A	106	159
B-A	0.14	12.68	0.2	B	38	57
C-A					427	641
C-B	0.21	8.00	0.3	A	99	149
A-B					36	54
A-C					534	800

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	87	22	700	0.124	86	0.0	0.1	5.923	A
B-A	31	8	400	0.079	31	0.0	0.1	9.761	A
C-A	351	88			351				
C-B	82	20	618	0.132	81	0.0	0.2	6.764	A
A-B	29	7			29				
A-C	438	109			438				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	104	26	675	0.154	104	0.1	0.2	6.362	A
B-A	38	9	371	0.101	37	0.1	0.1	10.804	B
C-A	419	105			419				
C-B	97	24	600	0.163	97	0.2	0.2	7.238	A
A-B	35	9			35				
A-C	523	131			523				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	127	32	640	0.199	127	0.2	0.2	7.087	A
B-A	46	11	330	0.139	46	0.1	0.2	12.659	B
C-A	513	128			513				
C-B	119	30	574	0.208	119	0.2	0.3	7.989	A
A-B	43	11			43				
A-C	640	160			640				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	127	32	639	0.199	127	0.2	0.2	7.095	A
B-A	46	11	330	0.139	46	0.2	0.2	12.678	B
C-A	513	128			513				
C-B	119	30	574	0.208	119	0.3	0.3	7.998	A
A-B	43	11			43				
A-C	640	160			640				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	104	26	675	0.154	104	0.2	0.2	6.377	A
B-A	38	9	370	0.101	38	0.2	0.1	10.826	B
C-A	419	105			419				
C-B	97	24	600	0.163	98	0.3	0.2	7.248	A
A-B	35	9			35				
A-C	523	131			523				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	87	22	699	0.124	87	0.2	0.1	5.940	A
B-A	31	8	400	0.079	32	0.1	0.1	9.786	A
C-A	351	88			351				
C-B	82	20	618	0.132	82	0.2	0.2	6.784	A
A-B	29	7			29				
A-C	438	109			438				

BASELINE 2021, 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	1.62	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	BASELINE 2021	PM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV	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 (PCU/hr)	Scaling Factor (%)
A - Wretchwick Way SW		ONE HOUR	✓	900	100.000
B - Peregrine Way		ONE HOUR	✓	122	100.000
C - Wretchwick Way NE		ONE HOUR	✓	714	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Wretchwick Way SW	B - Peregrine Way	C - Wretchwick Way NE
From	A - Wretchwick Way SW	0	122	778
	B - Peregrine Way	42	0	80
	C - Wretchwick Way NE	567	146	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Wretchwick Way SW	B - Peregrine Way	C - Wretchwick Way NE
From	A - Wretchwick Way SW	0	0	1
	B - Peregrine Way	0	0	1
	C - Wretchwick Way NE	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.16	7.67	0.2	A	74	110
B-A	0.17	16.23	0.2	C	38	57
C-A					521	781
C-B	0.32	10.39	0.5	B	134	201
A-B					112	168
A-C					714	1070

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	60	15	643	0.094	60	0.0	0.1	6.234	A
B-A	31	8	361	0.087	31	0.0	0.1	10.880	B
C-A	427	107			427				
C-B	110	28	575	0.191	109	0.0	0.2	7.789	A
A-B	92	23			92				
A-C	585	146			585				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	72	18	610	0.118	72	0.1	0.1	6.753	A
B-A	37	9	322	0.116	37	0.1	0.1	12.630	B
C-A	510	128			510				
C-B	131	33	548	0.240	131	0.2	0.3	8.712	A
A-B	110	27			110				
A-C	699	175			699				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	88	22	563	0.157	88	0.1	0.2	7.655	A
B-A	46	11	268	0.171	46	0.1	0.2	16.186	C
C-A	625	156			625				
C-B	161	40	511	0.315	160	0.3	0.5	10.354	B
A-B	135	34			135				
A-C	856	214			856				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	88	22	562	0.157	88	0.2	0.2	7.667	A
B-A	46	11	268	0.171	46	0.2	0.2	16.233	C
C-A	625	156			625				
C-B	161	40	511	0.315	161	0.5	0.5	10.386	B
A-B	135	34			135				
A-C	856	214			856				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	72	18	610	0.118	72	0.2	0.1	6.768	A
B-A	37	9	322	0.116	38	0.2	0.1	12.673	B
C-A	510	128			510				
C-B	131	33	548	0.240	132	0.5	0.3	8.749	A
A-B	110	27			110				
A-C	699	175			699				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	60	15	642	0.094	61	0.1	0.1	6.253	A
B-A	31	8	361	0.087	31	0.1	0.1	10.918	B
C-A	427	107			427				
C-B	110	28	575	0.191	110	0.3	0.2	7.832	A
A-B	92	23			92				
A-C	585	146			585				

BASELINE 2026, 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	1.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	BASELINE 2026	AM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Wretchwick Way SW		ONE HOUR	✓	615	100.000
B - Peregrine Way		ONE HOUR	✓	166	100.000
C - Wretchwick Way NE		ONE HOUR	✓	425	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Wretchwick Way SW	B - Peregrine Way	C - Wretchwick Way NE
From	A - Wretchwick Way SW	0	41	574
	B - Peregrine Way	46	0	120
	C - Wretchwick Way NE	318	107	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Wretchwick Way SW	B - Peregrine Way	C - Wretchwick Way NE
From	A - Wretchwick Way SW	0	0	0
	B - Peregrine Way	0	0	1
	C - Wretchwick Way NE	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.21	7.20	0.3	A	110	165
B-A	0.15	11.97	0.2	B	43	64
C-A					292	438
C-B	0.20	7.95	0.3	A	98	147
A-B					38	56
A-C					527	791

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	90	23	697	0.130	90	0.0	0.1	5.985	A
B-A	35	9	416	0.084	35	0.0	0.1	9.438	A
C-A	240	60			240				
C-B	80	20	619	0.130	80	0.0	0.1	6.739	A
A-B	31	8			31				
A-C	432	108			432				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	108	27	672	0.160	108	0.1	0.2	6.439	A
B-A	42	10	389	0.107	42	0.1	0.1	10.355	B
C-A	286	72			286				
C-B	96	24	600	0.160	96	0.1	0.2	7.205	A
A-B	37	9			37				
A-C	516	129			516				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	132	33	637	0.207	132	0.2	0.3	7.190	A
B-A	51	13	352	0.145	51	0.1	0.2	11.953	B
C-A	350	88			350				
C-B	118	29	575	0.205	117	0.2	0.3	7.939	A
A-B	45	11			45				
A-C	632	158			632				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	132	33	637	0.207	132	0.3	0.3	7.199	A
B-A	51	13	352	0.145	51	0.2	0.2	11.969	B
C-A	350	88			350				
C-B	118	29	575	0.205	118	0.3	0.3	7.949	A
A-B	45	11			45				
A-C	632	158			632				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	108	27	672	0.160	108	0.3	0.2	6.451	A
B-A	42	10	389	0.107	42	0.2	0.1	10.376	B
C-A	286	72			286				
C-B	96	24	600	0.160	96	0.3	0.2	7.218	A
A-B	37	9			37				
A-C	516	129			516				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	90	23	696	0.130	90	0.2	0.2	6.002	A
B-A	35	9	416	0.084	35	0.1	0.1	9.463	A
C-A	240	60			240				
C-B	80	20	619	0.130	81	0.2	0.2	6.759	A
A-B	31	8			31				
A-C	432	108			432				

BASELINE 2026, 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	2.34	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	BASELINE 2026	PM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV	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 (PCU/hr)	Scaling Factor (%)
A - Wretchwick Way SW		ONE HOUR	✓	601	100.000
B - Peregrine Way		ONE HOUR	✓	124	100.000
C - Wretchwick Way NE		ONE HOUR	✓	589	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Wretchwick Way SW	B - Peregrine Way	C - Wretchwick Way NE
From	A - Wretchwick Way SW	0	112	489
	B - Peregrine Way	44	0	81
	C - Wretchwick Way NE	390	199	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Wretchwick Way SW	B - Peregrine Way	C - Wretchwick Way NE
From	A - Wretchwick Way SW	0	0	0
	B - Peregrine Way	0	0	1
	C - Wretchwick Way NE	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.14	6.62	0.2	A	74	111
B-A	0.14	12.41	0.2	B	40	60
C-A					358	536
C-B	0.38	10.02	0.6	B	183	274
A-B					103	154
A-C					449	673

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	61	15	692	0.088	60	0.0	0.1	5.755	A
B-A	33	8	410	0.080	32	0.0	0.1	9.519	A
C-A	293	73			293				
C-B	150	37	621	0.241	149	0.0	0.3	7.599	A
A-B	84	21			84				
A-C	368	92			368				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	72	18	669	0.108	72	0.1	0.1	6.090	A
B-A	39	10	380	0.103	39	0.1	0.1	10.554	B
C-A	350	88			350				
C-B	179	45	603	0.297	179	0.3	0.4	8.468	A
A-B	101	25			101				
A-C	439	110			439				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	89	22	638	0.139	89	0.1	0.2	6.619	A
B-A	48	12	338	0.142	48	0.1	0.2	12.385	B
C-A	429	107			429				
C-B	219	55	578	0.379	218	0.4	0.6	9.980	A
A-B	123	31			123				
A-C	538	135			538				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	89	22	638	0.139	89	0.2	0.2	6.625	A
B-A	48	12	338	0.142	48	0.2	0.2	12.408	B
C-A	429	107			429				
C-B	219	55	578	0.379	219	0.6	0.6	10.020	B
A-B	123	31			123				
A-C	538	135			538				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	72	18	669	0.108	73	0.2	0.1	6.099	A
B-A	39	10	380	0.103	39	0.2	0.1	10.580	B
C-A	350	88			350				
C-B	179	45	603	0.297	180	0.6	0.4	8.514	A
A-B	101	25			101				
A-C	439	110			439				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	61	15	691	0.088	61	0.1	0.1	5.769	A
B-A	33	8	410	0.080	33	0.1	0.1	9.550	A
C-A	293	73			293				
C-B	150	37	621	0.241	150	0.4	0.3	7.652	A
A-B	84	21			84				
A-C	368	92			368				

BASELINE 2021+DEV 180, 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	1.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	BASELINE 2021+DEV 180	AM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV+180 DEV	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Wretchwick Way SW		ONE HOUR	✓	629	100.000
B - Peregrine Way		ONE HOUR	✓	160	100.000
C - Wretchwick Way NE		ONE HOUR	✓	588	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Wretchwick Way SW	B - Peregrine Way	C - Wretchwick Way NE
From	A - Wretchwick Way SW	0	39	590
	B - Peregrine Way	42	0	118
	C - Wretchwick Way NE	476	112	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Wretchwick Way SW	B - Peregrine Way	C - Wretchwick Way NE
From	A - Wretchwick Way SW	0	0	3
	B - Peregrine Way	0	0	1
	C - Wretchwick Way NE	7	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.20	7.16	0.3	A	108	163
B-A	0.14	12.90	0.2	B	38	57
C-A					437	655
C-B	0.22	8.10	0.3	A	103	154
A-B					36	54
A-C					541	812

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	89	22	699	0.127	88	0.0	0.1	5.949	A
B-A	31	8	396	0.079	31	0.0	0.1	9.855	A
C-A	358	90			358				
C-B	84	21	617	0.136	84	0.0	0.2	6.809	A
A-B	29	7			29				
A-C	444	111			444				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	106	27	674	0.158	106	0.1	0.2	6.401	A
B-A	38	9	366	0.102	37	0.1	0.1	10.937	B
C-A	428	107			428				
C-B	101	25	598	0.168	100	0.2	0.2	7.305	A
A-B	35	9			35				
A-C	530	133			530				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	130	33	638	0.204	130	0.2	0.3	7.152	A
B-A	46	11	325	0.141	46	0.1	0.2	12.876	B
C-A	524	131			524				
C-B	123	31	572	0.215	123	0.2	0.3	8.089	A
A-B	43	11			43				
A-C	650	162			650				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	130	33	638	0.204	130	0.3	0.3	7.161	A
B-A	46	11	325	0.141	46	0.2	0.2	12.895	B
C-A	524	131			524				
C-B	123	31	572	0.215	123	0.3	0.3	8.099	A
A-B	43	11			43				
A-C	650	162			650				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	106	27	674	0.158	106	0.3	0.2	6.414	A
B-A	38	9	366	0.102	38	0.2	0.1	10.957	B
C-A	428	107			428				
C-B	101	25	598	0.168	101	0.3	0.2	7.316	A
A-B	35	9			35				
A-C	530	133			530				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	89	22	699	0.127	89	0.2	0.1	5.966	A
B-A	31	8	396	0.079	32	0.1	0.1	9.880	A
C-A	358	90			358				
C-B	84	21	617	0.136	84	0.2	0.2	6.831	A
A-B	29	7			29				
A-C	444	111			444				

BASELINE 2021+DEV 180, 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	1.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	BASELINE 2021+DEV 180	PM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV+180 DEV	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 (PCU/hr)	Scaling Factor (%)
A - Wretchwick Way SW		ONE HOUR	✓	920	100.000
B - Peregrine Way		ONE HOUR	✓	122	100.000
C - Wretchwick Way NE		ONE HOUR	✓	729	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Wretchwick Way SW	B - Peregrine Way	C - Wretchwick Way NE
From	A - Wretchwick Way SW	0	122	798
	B - Peregrine Way	42	0	80
	C - Wretchwick Way NE	581	148	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Wretchwick Way SW	B - Peregrine Way	C - Wretchwick Way NE
From	A - Wretchwick Way SW	0	0	1
	B - Peregrine Way	0	0	1
	C - Wretchwick Way NE	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.16	7.76	0.2	A	74	110
B-A	0.18	16.72	0.2	C	38	57
C-A					533	800
C-B	0.32	10.57	0.5	B	135	203
A-B					112	168
A-C					732	1098

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	60	15	639	0.094	60	0.0	0.1	6.272	A
B-A	31	8	357	0.088	31	0.0	0.1	11.027	B
C-A	437	109			437				
C-B	111	28	572	0.194	110	0.0	0.2	7.856	A
A-B	92	23			92				
A-C	601	150			601				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	72	18	606	0.119	72	0.1	0.1	6.808	A
B-A	37	9	317	0.118	37	0.1	0.1	12.868	B
C-A	522	131			522				
C-B	133	33	545	0.244	132	0.2	0.3	8.814	A
A-B	110	27			110				
A-C	717	179			717				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	88	22	557	0.159	88	0.1	0.2	7.748	A
B-A	46	11	261	0.175	45	0.1	0.2	16.669	C
C-A	640	160			640				
C-B	163	41	507	0.321	162	0.3	0.5	10.533	B
A-B	135	34			135				
A-C	878	220			878				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	88	22	557	0.159	88	0.2	0.2	7.761	A
B-A	46	11	261	0.175	46	0.2	0.2	16.721	C
C-A	640	160			640				
C-B	163	41	507	0.321	163	0.5	0.5	10.568	B
A-B	135	34			135				
A-C	878	220			878				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	72	18	605	0.119	72	0.2	0.1	6.824	A
B-A	37	9	317	0.118	38	0.2	0.1	12.911	B
C-A	522	131			522				
C-B	133	33	545	0.244	133	0.5	0.3	8.855	A
A-B	110	27			110				
A-C	717	179			717				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	60	15	639	0.095	61	0.1	0.1	6.289	A
B-A	31	8	357	0.088	31	0.1	0.1	11.068	B
C-A	437	109			437				
C-B	111	28	572	0.194	111	0.3	0.2	7.900	A
A-B	92	23			92				
A-C	601	150			601				

BASELINE 2026+DEV 180, 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	1.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	BASELINE 2026+DEV 180	AM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV+180 DEV	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Wretchwick Way SW		ONE HOUR	✓	624	100.000
B - Peregrine Way		ONE HOUR	✓	166	100.000
C - Wretchwick Way NE		ONE HOUR	✓	439	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Wretchwick Way SW	B - Peregrine Way	C - Wretchwick Way NE
From	A - Wretchwick Way SW	0	41	583
	B - Peregrine Way	46	0	120
	C - Wretchwick Way NE	329	109	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Wretchwick Way SW	B - Peregrine Way	C - Wretchwick Way NE
From	A - Wretchwick Way SW	0	0	0
	B - Peregrine Way	0	0	1
	C - Wretchwick Way NE	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.21	7.24	0.3	A	110	165
B-A	0.15	12.13	0.2	B	43	64
C-A					302	453
C-B	0.21	8.03	0.3	A	100	151
A-B					38	56
A-C					535	803

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	90	23	695	0.130	90	0.0	0.1	5.999	A
B-A	35	9	413	0.085	35	0.0	0.1	9.506	A
C-A	248	62			248				
C-B	82	21	617	0.133	82	0.0	0.2	6.780	A
A-B	31	8			31				
A-C	439	110			439				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	108	27	670	0.161	108	0.1	0.2	6.462	A
B-A	42	10	386	0.108	42	0.1	0.1	10.454	B
C-A	296	74			296				
C-B	98	25	599	0.164	98	0.2	0.2	7.261	A
A-B	37	9			37				
A-C	524	131			524				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	132	33	635	0.208	132	0.2	0.3	7.227	A
B-A	51	13	348	0.147	51	0.1	0.2	12.112	B
C-A	362	91			362				
C-B	120	30	573	0.210	120	0.2	0.3	8.023	A
A-B	45	11			45				
A-C	642	161			642				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	132	33	634	0.208	132	0.3	0.3	7.235	A
B-A	51	13	348	0.147	51	0.2	0.2	12.130	B
C-A	362	91			362				
C-B	120	30	573	0.210	120	0.3	0.3	8.033	A
A-B	45	11			45				
A-C	642	161			642				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	108	27	670	0.161	108	0.3	0.2	6.477	A
B-A	42	10	386	0.108	42	0.2	0.1	10.475	B
C-A	296	74			296				
C-B	98	25	599	0.164	99	0.3	0.2	7.274	A
A-B	37	9			37				
A-C	524	131			524				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	90	23	695	0.130	90	0.2	0.2	6.021	A
B-A	35	9	413	0.085	35	0.1	0.1	9.532	A
C-A	248	62			248				
C-B	82	21	617	0.133	83	0.2	0.2	6.801	A
A-B	31	8			31				
A-C	439	110			439				

BASELINE 2026+DEV 180 , 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	2.33	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	BASELINE 2026+DEV 180	PM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV+180 DEV	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 (PCU/hr)	Scaling Factor (%)
A - Wretchwick Way SW		ONE HOUR	✓	611	100.000
B - Peregrine Way		ONE HOUR	✓	124	100.000
C - Wretchwick Way NE		ONE HOUR	✓	600	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Wretchwick Way SW	B - Peregrine Way	C - Wretchwick Way NE
From	A - Wretchwick Way SW	0	112	499
	B - Peregrine Way	44	0	81
	C - Wretchwick Way NE	399	200	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Wretchwick Way SW	B - Peregrine Way	C - Wretchwick Way NE
From	A - Wretchwick Way SW	0	0	0
	B - Peregrine Way	0	0	1
	C - Wretchwick Way NE	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.14	6.66	0.2	A	74	111
B-A	0.14	12.58	0.2	B	40	60
C-A					366	550
C-B	0.38	10.13	0.6	B	184	276
A-B					103	154
A-C					458	687

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	61	15	690	0.088	60	0.0	0.1	5.772	A
B-A	33	8	408	0.080	32	0.0	0.1	9.586	A
C-A	301	75			301				
C-B	151	38	620	0.244	150	0.0	0.3	7.641	A
A-B	84	21			84				
A-C	376	94			376				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	72	18	667	0.109	72	0.1	0.1	6.113	A
B-A	39	10	377	0.104	39	0.1	0.1	10.653	B
C-A	359	90			359				
C-B	180	45	601	0.300	180	0.3	0.4	8.532	A
A-B	101	25			101				
A-C	449	112			449				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	89	22	635	0.140	89	0.1	0.2	6.654	A
B-A	48	12	334	0.143	48	0.1	0.2	12.553	B
C-A	440	110			440				
C-B	221	55	576	0.383	220	0.4	0.6	10.089	B
A-B	123	31			123				
A-C	550	137			550				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	89	22	635	0.140	89	0.2	0.2	6.659	A
B-A	48	12	334	0.143	48	0.2	0.2	12.577	B
C-A	440	110			440				
C-B	221	55	576	0.383	221	0.6	0.6	10.128	B
A-B	123	31			123				
A-C	550	137			550				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	72	18	667	0.109	73	0.2	0.1	6.123	A
B-A	39	10	377	0.104	39	0.2	0.1	10.678	B
C-A	359	90			359				
C-B	180	45	601	0.300	181	0.6	0.4	8.579	A
A-B	101	25			101				
A-C	449	112			449				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	61	15	689	0.088	61	0.1	0.1	5.788	A
B-A	33	8	407	0.080	33	0.1	0.1	9.618	A
C-A	301	75			301				
C-B	151	38	620	0.244	151	0.4	0.3	7.696	A
A-B	84	21			84				
A-C	376	94			376				

BASELINE 2021+DEV 300, 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	1.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	BASELINE 2021+DEV 300	AM	SATURN WITH DEV TURNING FLOWS 2021	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Wretchwick Way SW		ONE HOUR	✓	635	100.000
B - Peregrine Way		ONE HOUR	✓	157	100.000
C - Wretchwick Way NE		ONE HOUR	✓	597	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Wretchwick Way SW	B - Peregrine Way	C - Wretchwick Way NE
From	A - Wretchwick Way SW	0	39	596
	B - Peregrine Way	42	0	115
	C - Wretchwick Way NE	483	114	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Wretchwick Way SW	B - Peregrine Way	C - Wretchwick Way NE
From	A - Wretchwick Way SW	0	0	3
	B - Peregrine Way	0	0	1
	C - Wretchwick Way NE	7	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.20	7.15	0.3	A	106	159
B-A	0.14	12.99	0.2	B	38	57
C-A					443	664
C-B	0.22	8.17	0.3	A	105	157
A-B					36	54
A-C					547	820

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	87	22	697	0.125	86	0.0	0.1	5.948	A
B-A	31	8	395	0.080	31	0.0	0.1	9.885	A
C-A	363	91			363				
C-B	86	21	616	0.139	85	0.0	0.2	6.843	A
A-B	29	7			29				
A-C	448	112			448				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	104	26	672	0.154	104	0.1	0.2	6.398	A
B-A	38	9	365	0.103	37	0.1	0.1	10.986	B
C-A	434	108			434				
C-B	103	26	597	0.172	102	0.2	0.2	7.350	A
A-B	35	9			35				
A-C	535	134			535				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	127	32	635	0.200	127	0.2	0.2	7.144	A
B-A	46	11	323	0.142	46	0.1	0.2	12.967	B
C-A	531	133			531				
C-B	126	31	571	0.220	125	0.2	0.3	8.158	A
A-B	43	11			43				
A-C	656	164			656				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	127	32	635	0.200	127	0.2	0.3	7.152	A
B-A	46	11	323	0.142	46	0.2	0.2	12.986	B
C-A	531	133			531				
C-B	126	31	571	0.220	126	0.3	0.3	8.167	A
A-B	43	11			43				
A-C	656	164			656				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	104	26	671	0.154	104	0.3	0.2	6.413	A
B-A	38	9	365	0.103	38	0.2	0.1	11.006	B
C-A	434	108			434				
C-B	103	26	597	0.172	103	0.3	0.2	7.362	A
A-B	35	9			35				
A-C	535	134			535				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	87	22	697	0.125	87	0.2	0.1	5.965	A
B-A	31	8	395	0.080	32	0.1	0.1	9.912	A
C-A	363	91			363				
C-B	86	21	616	0.139	86	0.2	0.2	6.864	A
A-B	29	7			29				
A-C	448	112			448				

BASELINE 2021+DEV 300, 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	1.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	BASELINE 2021+DEV 300	PM	SATURN WITH DEV TURNING FLOWS 2021	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 (PCU/hr)	Scaling Factor (%)
A - Wretchwick Way SW		ONE HOUR	✓	933	100.000
B - Peregrine Way		ONE HOUR	✓	122	100.000
C - Wretchwick Way NE		ONE HOUR	✓	739	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Wretchwick Way SW	B - Peregrine Way	C - Wretchwick Way NE
From	A - Wretchwick Way SW	0	122	811
	B - Peregrine Way	42	0	80
	C - Wretchwick Way NE	590	149	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Wretchwick Way SW	B - Peregrine Way	C - Wretchwick Way NE
From	A - Wretchwick Way SW	0	0	1
	B - Peregrine Way	0	0	1
	C - Wretchwick Way NE	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.16	7.82	0.2	A	74	110
B-A	0.18	17.06	0.2	C	38	57
C-A					541	812
C-B	0.32	10.69	0.5	B	136	204
A-B					112	168
A-C					744	1116

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	60	15	637	0.095	60	0.0	0.1	6.298	A
B-A	31	8	354	0.088	31	0.0	0.1	11.131	B
C-A	444	111			444				
C-B	112	28	570	0.196	111	0.0	0.2	7.903	A
A-B	92	23			92				
A-C	611	153			611				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	72	18	603	0.120	72	0.1	0.1	6.846	A
B-A	37	9	313	0.119	37	0.1	0.1	13.032	B
C-A	530	133			530				
C-B	134	33	542	0.246	133	0.2	0.3	8.885	A
A-B	110	27			110				
A-C	729	182			729				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	88	22	553	0.160	88	0.1	0.2	7.811	A
B-A	46	11	257	0.178	45	0.1	0.2	17.007	C
C-A	650	162			650				
C-B	164	41	504	0.325	163	0.3	0.5	10.655	B
A-B	135	34			135				
A-C	893	223			893				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	88	22	553	0.160	88	0.2	0.2	7.824	A
B-A	46	11	257	0.178	46	0.2	0.2	17.062	C
C-A	650	162			650				
C-B	164	41	504	0.325	164	0.5	0.5	10.692	B
A-B	135	34			135				
A-C	893	223			893				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	72	18	602	0.120	72	0.2	0.1	6.862	A
B-A	37	9	313	0.119	38	0.2	0.1	13.080	B
C-A	530	133			530				
C-B	134	33	542	0.246	134	0.5	0.3	8.926	A
A-B	110	27			110				
A-C	729	182			729				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	60	15	636	0.095	61	0.1	0.1	6.318	A
B-A	31	8	354	0.088	31	0.1	0.1	11.169	B
C-A	444	111			444				
C-B	112	28	570	0.196	112	0.3	0.2	7.949	A
A-B	92	23			92				
A-C	611	153			611				

BASELINE 2026+DEV 300, 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	1.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	BASELINE 2026+DEV 300	AM	SATURN WITH DEV TURNING FLOWS 2026	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Wretchwick Way SW		ONE HOUR	✓	630	100.000
B - Peregrine Way		ONE HOUR	✓	166	100.000
C - Wretchwick Way NE		ONE HOUR	✓	448	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Wretchwick Way SW	B - Peregrine Way	C - Wretchwick Way NE
From	A - Wretchwick Way SW	0	41	589
	B - Peregrine Way	46	0	120
	C - Wretchwick Way NE	336	111	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Wretchwick Way SW	B - Peregrine Way	C - Wretchwick Way NE
From	A - Wretchwick Way SW	0	0	0
	B - Peregrine Way	0	0	1
	C - Wretchwick Way NE	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.21	7.26	0.3	A	110	165
B-A	0.15	12.24	0.2	B	43	64
C-A					309	463
C-B	0.21	8.09	0.3	A	102	153
A-B					38	56
A-C					541	811

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	90	23	694	0.130	90	0.0	0.1	6.010	A
B-A	35	9	411	0.085	35	0.0	0.1	9.552	A
C-A	253	63			253				
C-B	84	21	617	0.136	83	0.0	0.2	6.809	A
A-B	31	8			31				
A-C	444	111			444				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	108	27	669	0.161	108	0.1	0.2	6.478	A
B-A	42	10	384	0.109	42	0.1	0.1	10.520	B
C-A	302	76			302				
C-B	100	25	598	0.167	100	0.2	0.2	7.299	A
A-B	37	9			37				
A-C	530	132			530				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	132	33	633	0.208	132	0.2	0.3	7.252	A
B-A	51	13	345	0.148	51	0.1	0.2	12.222	B
C-A	370	93			370				
C-B	122	31	572	0.214	122	0.2	0.3	8.080	A
A-B	45	11			45				
A-C	649	162			649				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	132	33	633	0.209	132	0.3	0.3	7.260	A
B-A	51	13	345	0.148	51	0.2	0.2	12.241	B
C-A	370	93			370				
C-B	122	31	572	0.214	122	0.3	0.3	8.090	A
A-B	45	11			45				
A-C	649	162			649				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	108	27	668	0.161	108	0.3	0.2	6.490	A
B-A	42	10	384	0.109	42	0.2	0.1	10.540	B
C-A	302	76			302				
C-B	100	25	598	0.167	100	0.3	0.2	7.313	A
A-B	37	9			37				
A-C	530	132			530				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	90	23	693	0.130	90	0.2	0.2	6.032	A
B-A	35	9	411	0.085	35	0.1	0.1	9.578	A
C-A	253	63			253				
C-B	84	21	617	0.136	84	0.2	0.2	6.826	A
A-B	31	8			31				
A-C	444	111			444				

BASELINE 2026+DEV 300, 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	2.33	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	BASELINE 2026+DEV 300	PM	SATURN WITH DEV TURNING FLOWS 2026	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 (PCU/hr)	Scaling Factor (%)
A - Wretchwick Way SW		ONE HOUR	✓	621	100.000
B - Peregrine Way		ONE HOUR	✓	124	100.000
C - Wretchwick Way NE		ONE HOUR	✓	607	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Wretchwick Way SW	B - Peregrine Way	C - Wretchwick Way NE
From	A - Wretchwick Way SW	0	112	509
	B - Peregrine Way	44	0	81
	C - Wretchwick Way NE	406	201	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Wretchwick Way SW	B - Peregrine Way	C - Wretchwick Way NE
From	A - Wretchwick Way SW	0	0	0
	B - Peregrine Way	0	0	1
	C - Wretchwick Way NE	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.14	6.69	0.2	A	74	111
B-A	0.14	12.72	0.2	B	40	60
C-A					372	558
C-B	0.39	10.22	0.6	B	185	277
A-B					103	154
A-C					467	701

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	61	15	688	0.088	60	0.0	0.1	5.789	A
B-A	33	8	405	0.081	32	0.0	0.1	9.644	A
C-A	305	76			305				
C-B	152	38	618	0.245	150	0.0	0.3	7.678	A
A-B	84	21			84				
A-C	384	96			384				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	72	18	665	0.109	72	0.1	0.1	6.136	A
B-A	39	10	374	0.105	39	0.1	0.1	10.739	B
C-A	365	91			365				
C-B	181	45	599	0.302	181	0.3	0.4	8.587	A
A-B	101	25			101				
A-C	458	114			458				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	89	22	632	0.140	89	0.1	0.2	6.688	A
B-A	48	12	331	0.145	48	0.1	0.2	12.699	B
C-A	447	112			447				
C-B	222	55	574	0.386	221	0.4	0.6	10.181	B
A-B	123	31			123				
A-C	561	140			561				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	89	22	632	0.140	89	0.2	0.2	6.693	A
B-A	48	12	331	0.145	48	0.2	0.2	12.723	B
C-A	447	112			447				
C-B	222	55	574	0.386	222	0.6	0.6	10.223	B
A-B	123	31			123				
A-C	561	140			561				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	72	18	665	0.109	73	0.2	0.1	6.145	A
B-A	39	10	374	0.105	39	0.2	0.1	10.764	B
C-A	365	91			365				
C-B	181	45	599	0.302	182	0.6	0.4	8.636	A
A-B	101	25			101				
A-C	458	114			458				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-C	61	15	687	0.088	61	0.1	0.1	5.803	A
B-A	33	8	405	0.081	33	0.1	0.1	9.676	A
C-A	305	76			305				
C-B	152	38	618	0.245	152	0.4	0.3	7.734	A
A-B	84	21			84				
A-C	384	96			384				

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.2.5947

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 770558 software@trl.co.uk www.trlsoftware.co.uk

Filename: Peregrine Way - Wretchwick Way roundaboout-V1.j9
Path: M:\Projects\17167-00 - Gavray Drive, Bicester\Technical\Arcady\Rev A
Report generation date: 27/03/2018 17:24:32

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	BASELINE 2021							
A - Neunkirchen Way	0.3	1.61	0.20	A	0.8	2.31	0.45	A
2 - Peregine Way	0.6	4.45	0.39	A	0.4	4.66	0.27	A
3 - Wretchwick Way North	0.4	2.37	0.26	A	0.4	2.33	0.30	A
	BASELINE 2026							
A - Neunkirchen Way	0.3	1.56	0.20	A	0.5	1.88	0.33	A
2 - Peregine Way	0.7	4.57	0.40	A	0.3	3.75	0.23	A
3 - Wretchwick Way North	0.2	2.11	0.19	A	0.3	2.03	0.21	A
	BASELINE 2021+DEV 180							
A - Neunkirchen Way	0.3	1.62	0.21	A	0.8	2.34	0.46	A
2 - Peregine Way	0.6	4.49	0.39	A	0.4	4.74	0.27	A
3 - Wretchwick Way North	0.4	2.39	0.26	A	0.4	2.35	0.30	A
	BASELINE 2026+DEV 180							
A - Neunkirchen Way	0.3	1.57	0.21	A	0.5	1.89	0.33	A
2 - Peregine Way	0.7	4.61	0.40	A	0.3	3.79	0.24	A
3 - Wretchwick Way North	0.2	2.12	0.19	A	0.3	2.05	0.22	A
	BASELINE 2021+DEV 300							
A - Neunkirchen Way	0.3	1.62	0.21	A	0.9	2.36	0.46	A
2 - Peregine Way	0.6	4.51	0.39	A	0.4	4.80	0.28	A
3 - Wretchwick Way North	0.4	2.40	0.26	A	0.5	2.36	0.31	A
	BASELINE 2026+DEV 300							
A - Neunkirchen Way	0.3	1.58	0.21	A	0.5	1.90	0.34	A
2 - Peregine Way	0.7	4.63	0.41	A	0.3	3.81	0.24	A
3 - Wretchwick Way North	0.2	2.13	0.20	A	0.3	2.06	0.22	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.

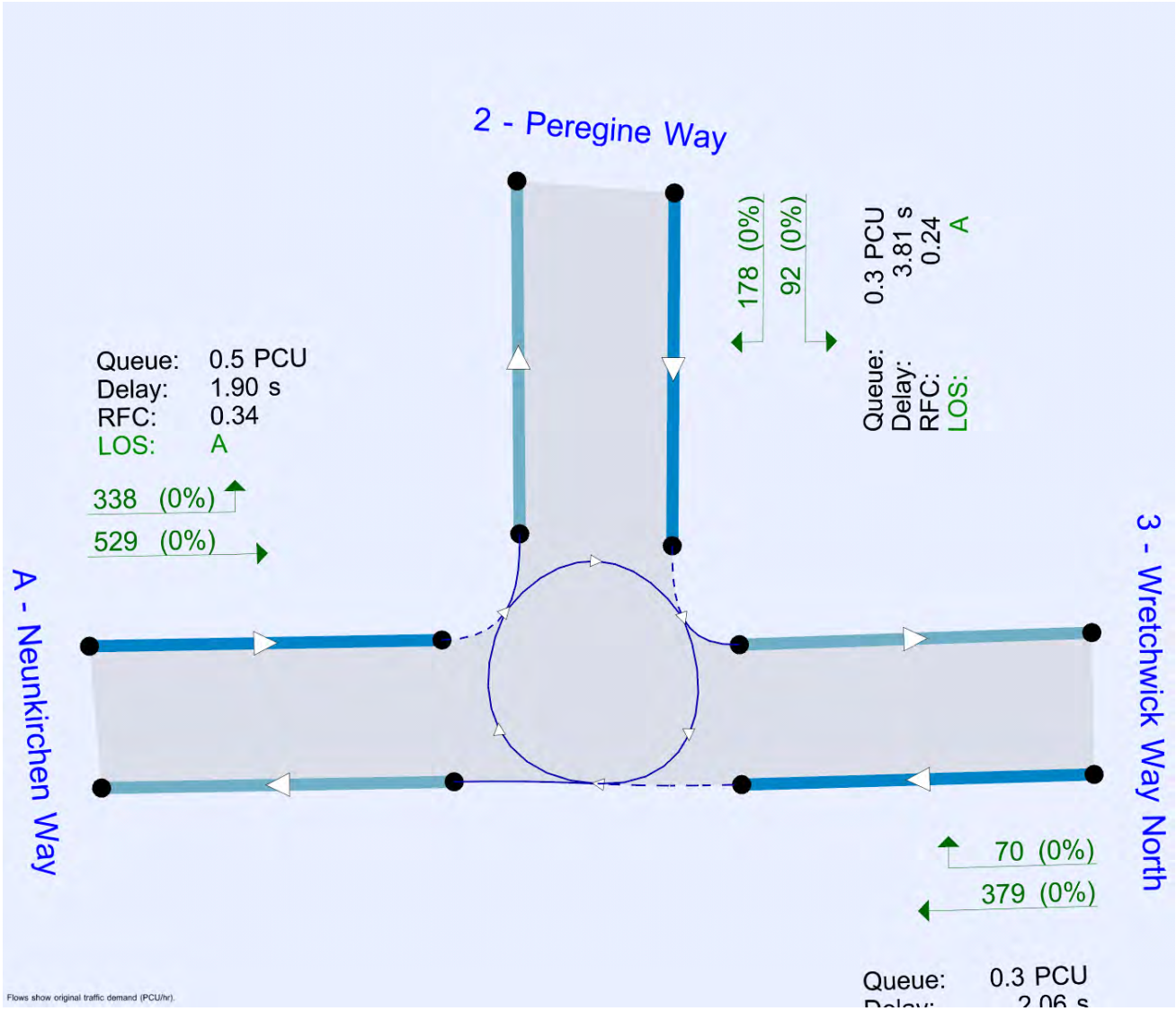
File summary

File Description

Title	(untitled)
Location	
Site number	
Date	24/01/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	KONSTANTINA-SOL\Konstantina Solomou
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	BASELINE 2021	AM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV	ONE HOUR	07:45	09:15	15	✓
D2	BASELINE 2021	PM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV	ONE HOUR	16:45	18:15	15	✓
D3	BASELINE 2026	AM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV	ONE HOUR	07:45	09:15	15	✓
D4	BASELINE 2026	PM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV	ONE HOUR	16:45	18:15	15	✓
D5	BASELINE 2021+DEV 180	AM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV+180 DEV	ONE HOUR	07:45	09:15	15	✓
D6	BASELINE 2021+DEV 180	PM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV+180 DEV	ONE HOUR	16:45	18:15	15	✓
D7	BASELINE 2026+DEV 180	AM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV+180 DEV	ONE HOUR	07:45	09:15	15	✓
D8	BASELINE 2026+DEV 180	PM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV+180 DEV	ONE HOUR	16:45	18:15	15	✓
D9	BASELINE 2021+DEV 300	AM	SATURN WITH DEV TURNING FLOWS 2021	ONE HOUR	07:45	09:15	15	✓
D10	BASELINE 2021+DEV 300	PM	SATURN WITH DEV TURNING FLOWS 2021	ONE HOUR	16:45	18:15	15	✓
D11	BASELINE 2026+DEV 300	AM	SATURN WITH DEV TURNING FLOWS 2026	ONE HOUR	07:45	09:15	15	✓
D12	BASELINE 2026+DEV 300	PM	SATURN WITH DEV TURNING FLOWS 2026	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

BASELINE 2021, 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	A, 2, 3	2.74	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	Neunkirchen Way	
2	Peregine Way	
3	Wretchwick Way North	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - Neunkirchen Way	7.00	10.00	25.0	40.0	49.0	23.0	
2 - Peregine Way	3.00	6.50	15.0	60.0	49.0	24.5	
3 - Wretchwick Way North	5.50	8.00	19.0	45.0	49.0	12.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - Neunkirchen Way	0.858	2913
2 - Peregine Way	0.608	1595
3 - Wretchwick Way North	0.772	2397

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	BASELINE 2021	AM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Neunkirchen Way		ONE HOUR	✓	531	100.000
2 - Peregine Way		ONE HOUR	✓	461	100.000
3 - Wretchwick Way North		ONE HOUR	✓	507	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Neunkirchen Way	2 - Peregine Way	3 - Wretchwick Way North
From	A - Neunkirchen Way	0	114	417
	2 - Peregine Way	258	0	203
	3 - Wretchwick Way North	481	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Neunkirchen Way	2 - Peregine Way	3 - Wretchwick Way North
From	A - Neunkirchen Way	0	0	4
	2 - Peregine Way	0	0	0
	3 - Wretchwick Way North	7	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Neunkirchen Way	0.20	1.61	0.3	A	487	731
2 - Peregine Way	0.39	4.45	0.6	A	423	635
3 - Wretchwick Way North	0.26	2.37	0.4	A	465	698

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Neunkirchen Way	400	100	20	2896	0.138	399	555	0.0	0.2	1.486	A
2 - Peregine Way	347	87	313	1404	0.247	346	105	0.0	0.3	3.397	A
3 - Wretchwick Way North	382	95	194	2247	0.170	381	466	0.0	0.2	2.055	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Neunkirchen Way	477	119	23	2893	0.165	477	664	0.2	0.2	1.535	A
2 - Peregine Way	414	104	375	1367	0.303	414	126	0.3	0.4	3.776	A
3 - Wretchwick Way North	456	114	232	2218	0.206	456	557	0.2	0.3	2.177	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
A - Neunkirchen Way	585	146	29	2889	0.202	584	813	0.2	0.3	1.610	A
2 - Peregine Way	508	127	459	1316	0.386	507	154	0.4	0.6	4.447	A
3 - Wretchwick Way North	558	140	284	2178	0.256	558	682	0.3	0.4	2.369	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
A - Neunkirchen Way	585	146	29	2889	0.202	585	814	0.3	0.3	1.610	A
2 - Peregine Way	508	127	459	1316	0.386	508	154	0.6	0.6	4.455	A
3 - Wretchwick Way North	558	140	284	2178	0.256	558	683	0.4	0.4	2.369	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
A - Neunkirchen Way	477	119	23	2893	0.165	478	665	0.3	0.2	1.536	A
2 - Peregine Way	414	104	375	1367	0.303	415	126	0.6	0.4	3.785	A
3 - Wretchwick Way North	456	114	232	2217	0.206	456	558	0.4	0.3	2.181	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Neunkirchen Way	400	100	20	2896	0.138	400	557	0.2	0.2	1.488	A
2 - Peregine Way	347	87	314	1404	0.247	347	105	0.4	0.3	3.409	A
3 - Wretchwick Way North	382	95	194	2247	0.170	382	467	0.3	0.2	2.058	A

BASELINE 2021, 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	A, 2, 3	2.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	BASELINE 2021	PM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV	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 (PCU/hr)	Scaling Factor (%)
A - Neunkirchen Way		ONE HOUR	✓	1167	100.000
2 - Peregine Way		ONE HOUR	✓	259	100.000
3 - Wretchwick Way North		ONE HOUR	✓	611	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Neunkirchen Way	2 - Peregine Way	3 - Wretchwick Way North
From	A - Neunkirchen Way	0	366	801
	2 - Peregine Way	161	0	98
	3 - Wretchwick Way North	548	63	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Neunkirchen Way	2 - Peregine Way	3 - Wretchwick Way North
From	A - Neunkirchen Way	0	0	1
	2 - Peregine Way	0	0	0
	3 - Wretchwick Way North	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Neunkirchen Way	0.45	2.31	0.8	A	1071	1606
2 - Peregine Way	0.27	4.66	0.4	A	238	357
3 - Wretchwick Way North	0.30	2.33	0.4	A	560	841

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Neunkirchen Way	879	220	47	2873	0.306	877	532	0.0	0.4	1.814	A
2 - Peregine Way	195	49	602	1229	0.159	194	322	0.0	0.2	3.479	A
3 - Wretchwick Way North	460	115	121	2303	0.200	459	675	0.0	0.3	2.003	A

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
A - Neunkirchen Way	1049	262	57	2865	0.366	1049	637	0.4	0.6	1.996	A
2 - Peregine Way	233	58	720	1157	0.201	233	385	0.2	0.3	3.893	A
3 - Wretchwick Way North	549	137	145	2285	0.240	549	808	0.3	0.3	2.129	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
A - Neunkirchen Way	1285	321	69	2854	0.450	1284	780	0.6	0.8	2.308	A
2 - Peregine Way	285	71	881	1059	0.270	285	472	0.3	0.4	4.648	A
3 - Wretchwick Way North	672	168	177	2260	0.298	672	989	0.3	0.4	2.328	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
A - Neunkirchen Way	1285	321	69	2854	0.450	1285	781	0.8	0.8	2.310	A
2 - Peregine Way	285	71	882	1059	0.270	285	472	0.4	0.4	4.655	A
3 - Wretchwick Way North	672	168	178	2260	0.298	672	990	0.4	0.4	2.328	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
A - Neunkirchen Way	1049	262	57	2865	0.366	1050	638	0.8	0.6	1.999	A
2 - Peregine Way	233	58	721	1157	0.202	234	386	0.4	0.3	3.903	A
3 - Wretchwick Way North	549	137	145	2285	0.240	550	809	0.4	0.3	2.132	A

18:00 - 18:15

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
A - Neunkirchen Way	879	220	47	2872	0.306	879	534	0.6	0.4	1.817	A
2 - Peregine Way	195	49	603	1228	0.159	195	323	0.3	0.2	3.489	A
3 - Wretchwick Way North	460	115	122	2303	0.200	460	677	0.3	0.3	2.007	A

BASELINE 2026, 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	A, 2, 3	2.76	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	BASELINE 2026	AM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Neunkirchen Way		ONE HOUR	✓	535	100.000
2 - Peregine Way		ONE HOUR	✓	482	100.000
3 - Wretchwick Way North		ONE HOUR	✓	365	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Neunkirchen Way	2 - Peregine Way	3 - Wretchwick Way North
From	A - Neunkirchen Way	0	122	413
	2 - Peregine Way	280	0	202
	3 - Wretchwick Way North	339	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Neunkirchen Way	2 - Peregine Way	3 - Wretchwick Way North
From	A - Neunkirchen Way	0	0	0
	2 - Peregine Way	0	0	0
	3 - Wretchwick Way North	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Neunkirchen Way	0.20	1.56	0.3	A	491	736
2 - Peregine Way	0.40	4.57	0.7	A	442	663
3 - Wretchwick Way North	0.19	2.11	0.2	A	335	502

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Neunkirchen Way	403	101	20	2896	0.139	402	465	0.0	0.2	1.443	A
2 - Peregine Way	363	91	310	1406	0.258	361	111	0.0	0.3	3.442	A
3 - Wretchwick Way North	275	69	210	2235	0.123	274	462	0.0	0.1	1.886	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Neunkirchen Way	481	120	23	2893	0.166	481	556	0.2	0.2	1.491	A
2 - Peregine Way	433	108	371	1369	0.317	433	133	0.3	0.5	3.844	A
3 - Wretchwick Way North	328	82	251	2203	0.149	328	553	0.1	0.2	1.973	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
A - Neunkirchen Way	589	147	29	2889	0.204	589	681	0.2	0.3	1.564	A
2 - Peregine Way	531	133	455	1318	0.403	530	163	0.5	0.7	4.561	A
3 - Wretchwick Way North	402	100	308	2159	0.186	402	677	0.2	0.2	2.105	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
A - Neunkirchen Way	589	147	29	2889	0.204	589	682	0.3	0.3	1.564	A
2 - Peregine Way	531	133	455	1318	0.403	531	163	0.7	0.7	4.570	A
3 - Wretchwick Way North	402	100	308	2159	0.186	402	677	0.2	0.2	2.105	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
A - Neunkirchen Way	481	120	23	2893	0.166	481	557	0.3	0.2	1.492	A
2 - Peregine Way	433	108	371	1369	0.317	434	133	0.7	0.5	3.856	A
3 - Wretchwick Way North	328	82	252	2202	0.149	328	553	0.2	0.2	1.976	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Neunkirchen Way	403	101	20	2896	0.139	403	466	0.2	0.2	1.443	A
2 - Peregine Way	363	91	311	1406	0.258	363	111	0.5	0.3	3.455	A
3 - Wretchwick Way North	275	69	211	2234	0.123	275	463	0.2	0.1	1.890	A

BASELINE 2026, 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	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A, 2, 3	2.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	BASELINE 2026	PM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV	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 (PCU/hr)	Scaling Factor (%)
A - Neunkirchen Way		ONE HOUR	✓	849	100.000
2 - Peregine Way		ONE HOUR	✓	267	100.000
3 - Wretchwick Way North		ONE HOUR	✓	433	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Neunkirchen Way	2 - Peregine Way	3 - Wretchwick Way North
From	A - Neunkirchen Way	0	338	511
	2 - Peregine Way	178	0	89
	3 - Wretchwick Way North	363	70	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Neunkirchen Way	2 - Peregine Way	3 - Wretchwick Way North
From	A - Neunkirchen Way	0	0	0
	2 - Peregine Way	0	0	0
	3 - Wretchwick Way North	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Neunkirchen Way	0.33	1.88	0.5	A	779	1169
2 - Peregine Way	0.23	3.75	0.3	A	245	368
3 - Wretchwick Way North	0.21	2.03	0.3	A	397	596

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Neunkirchen Way	639	160	53	2868	0.223	638	406	0.0	0.3	1.614	A
2 - Peregine Way	201	50	384	1361	0.148	200	307	0.0	0.2	3.099	A
3 - Wretchwick Way North	326	81	134	2294	0.142	325	451	0.0	0.2	1.828	A

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
A - Neunkirchen Way	763	191	63	2859	0.267	763	486	0.3	0.4	1.716	A
2 - Peregine Way	240	60	459	1315	0.182	240	367	0.2	0.2	3.346	A
3 - Wretchwick Way North	389	97	160	2273	0.171	389	539	0.2	0.2	1.909	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
A - Neunkirchen Way	935	234	77	2847	0.328	934	595	0.4	0.5	1.881	A
2 - Peregine Way	294	73	562	1253	0.235	294	449	0.2	0.3	3.753	A
3 - Wretchwick Way North	477	119	196	2246	0.212	476	660	0.2	0.3	2.034	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
A - Neunkirchen Way	935	234	77	2847	0.328	935	596	0.5	0.5	1.881	A
2 - Peregine Way	294	73	563	1253	0.235	294	449	0.3	0.3	3.754	A
3 - Wretchwick Way North	477	119	196	2245	0.212	477	661	0.3	0.3	2.035	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
A - Neunkirchen Way	763	191	63	2859	0.267	764	487	0.5	0.4	1.720	A
2 - Peregine Way	240	60	460	1315	0.183	240	367	0.3	0.2	3.352	A
3 - Wretchwick Way North	389	97	160	2273	0.171	390	540	0.3	0.2	1.910	A

18:00 - 18:15

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
A - Neunkirchen Way	639	160	53	2868	0.223	639	408	0.4	0.3	1.617	A
2 - Peregine Way	201	50	385	1361	0.148	201	307	0.2	0.2	3.104	A
3 - Wretchwick Way North	326	81	134	2293	0.142	326	452	0.2	0.2	1.832	A

BASELINE 2021+DEV 180, 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	A, 2, 3	2.75	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	BASELINE 2021+DEV 180	AM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV+180 DEV	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Neunkirchen Way		ONE HOUR	✓	539	100.000
2 - Peregine Way		ONE HOUR	✓	461	100.000
3 - Wretchwick Way North		ONE HOUR	✓	518	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Neunkirchen Way	2 - Peregine Way	3 - Wretchwick Way North
From	A - Neunkirchen Way	0	114	426
	2 - Peregine Way	258	0	203
	3 - Wretchwick Way North	492	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Neunkirchen Way	2 - Peregine Way	3 - Wretchwick Way North
From	A - Neunkirchen Way	0	0	4
	2 - Peregine Way	0	0	0
	3 - Wretchwick Way North	7	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Neunkirchen Way	0.21	1.62	0.3	A	495	742
2 - Peregine Way	0.39	4.49	0.6	A	423	635
3 - Wretchwick Way North	0.26	2.39	0.4	A	475	712

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Neunkirchen Way	406	102	19	2896	0.140	405	563	0.0	0.2	1.490	A
2 - Peregine Way	347	87	320	1400	0.248	346	105	0.0	0.3	3.410	A
3 - Wretchwick Way North	390	97	194	2247	0.173	389	472	0.0	0.2	2.064	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Neunkirchen Way	485	121	23	2893	0.168	485	674	0.2	0.2	1.540	A
2 - Peregine Way	415	104	382	1362	0.305	414	126	0.3	0.4	3.796	A
3 - Wretchwick Way North	465	116	232	2218	0.210	465	565	0.2	0.3	2.189	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
A - Neunkirchen Way	594	148	29	2889	0.206	594	825	0.2	0.3	1.617	A
2 - Peregine Way	508	127	468	1310	0.388	507	154	0.4	0.6	4.482	A
3 - Wretchwick Way North	570	142	284	2178	0.262	569	692	0.3	0.4	2.386	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
A - Neunkirchen Way	594	148	29	2889	0.206	594	825	0.3	0.3	1.617	A
2 - Peregine Way	508	127	469	1310	0.388	508	154	0.6	0.6	4.489	A
3 - Wretchwick Way North	570	142	284	2177	0.262	570	692	0.4	0.4	2.387	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
A - Neunkirchen Way	485	121	23	2893	0.168	485	675	0.3	0.2	1.543	A
2 - Peregine Way	415	104	383	1362	0.305	416	126	0.6	0.4	3.806	A
3 - Wretchwick Way North	465	116	232	2217	0.210	466	566	0.4	0.3	2.191	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Neunkirchen Way	406	102	20	2896	0.140	406	565	0.2	0.2	1.492	A
2 - Peregine Way	347	87	321	1400	0.248	348	105	0.4	0.3	3.425	A
3 - Wretchwick Way North	390	97	195	2247	0.173	390	474	0.3	0.2	2.068	A

BASELINE 2021+DEV 180, 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	A, 2, 3	2.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	BASELINE 2021+DEV 180	PM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV+180 DEV	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 (PCU/hr)	Scaling Factor (%)
A - Neunkirchen Way		ONE HOUR	✓	1186	100.000
2 - Peregine Way		ONE HOUR	✓	261	100.000
3 - Wretchwick Way North		ONE HOUR	✓	623	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Neunkirchen Way	2 - Peregine Way	3 - Wretchwick Way North
From	A - Neunkirchen Way	0	366	820
	2 - Peregine Way	161	0	100
	3 - Wretchwick Way North	560	63	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Neunkirchen Way	2 - Peregine Way	3 - Wretchwick Way North
From	A - Neunkirchen Way	0	0	1
	2 - Peregine Way	0	0	0
	3 - Wretchwick Way North	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Neunkirchen Way	0.46	2.34	0.8	A	1088	1632
2 - Peregine Way	0.27	4.74	0.4	A	239	359
3 - Wretchwick Way North	0.30	2.35	0.4	A	572	858

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Neunkirchen Way	893	223	48	2872	0.311	891	542	0.0	0.5	1.827	A
2 - Peregine Way	196	49	616	1220	0.161	196	322	0.0	0.2	3.512	A
3 - Wretchwick Way North	469	117	121	2303	0.204	468	691	0.0	0.3	2.013	A

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
A - Neunkirchen Way	1066	266	57	2864	0.372	1065	648	0.5	0.6	2.015	A
2 - Peregine Way	234	59	737	1147	0.204	234	385	0.2	0.3	3.944	A
3 - Wretchwick Way North	560	140	145	2285	0.245	560	826	0.3	0.3	2.143	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
A - Neunkirchen Way	1305	326	70	2853	0.457	1304	794	0.6	0.8	2.339	A
2 - Peregine Way	287	72	902	1046	0.274	287	472	0.3	0.4	4.736	A
3 - Wretchwick Way North	686	172	177	2260	0.304	686	1012	0.3	0.4	2.348	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
A - Neunkirchen Way	1305	326	70	2853	0.457	1305	794	0.8	0.8	2.341	A
2 - Peregine Way	287	72	903	1046	0.275	287	472	0.4	0.4	4.744	A
3 - Wretchwick Way North	686	172	178	2260	0.304	686	1012	0.4	0.4	2.349	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
A - Neunkirchen Way	1066	266	57	2864	0.372	1067	649	0.8	0.6	2.019	A
2 - Peregine Way	234	59	738	1146	0.205	235	386	0.4	0.3	3.952	A
3 - Wretchwick Way North	560	140	145	2285	0.245	561	828	0.4	0.3	2.144	A

18:00 - 18:15

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
A - Neunkirchen Way	893	223	48	2872	0.311	893	543	0.6	0.5	1.834	A
2 - Peregine Way	196	49	618	1219	0.161	197	323	0.3	0.2	3.520	A
3 - Wretchwick Way North	469	117	122	2303	0.204	470	693	0.3	0.3	2.018	A

BASELINE 2026+DEV 180, 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	A, 2, 3	2.76	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	BASELINE 2026+DEV 180	AM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV+180 DEV	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Neunkirchen Way		ONE HOUR	✓	544	100.000
2 - Peregine Way		ONE HOUR	✓	482	100.000
3 - Wretchwick Way North		ONE HOUR	✓	376	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Neunkirchen Way	2 - Peregine Way	3 - Wretchwick Way North
From	A - Neunkirchen Way	0	122	422
	2 - Peregine Way	280	0	202
	3 - Wretchwick Way North	350	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Neunkirchen Way	2 - Peregine Way	3 - Wretchwick Way North
From	A - Neunkirchen Way	0	0	0
	2 - Peregine Way	0	0	0
	3 - Wretchwick Way North	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Neunkirchen Way	0.21	1.57	0.3	A	499	749
2 - Peregine Way	0.40	4.61	0.7	A	442	663
3 - Wretchwick Way North	0.19	2.12	0.2	A	345	518

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Neunkirchen Way	410	102	20	2896	0.141	409	473	0.0	0.2	1.446	A
2 - Peregine Way	363	91	317	1402	0.259	361	111	0.0	0.3	3.456	A
3 - Wretchwick Way North	283	71	210	2235	0.127	282	469	0.0	0.1	1.895	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Neunkirchen Way	489	122	23	2893	0.169	489	566	0.2	0.2	1.496	A
2 - Peregine Way	433	108	379	1364	0.318	433	133	0.3	0.5	3.864	A
3 - Wretchwick Way North	338	85	251	2203	0.153	338	561	0.1	0.2	1.984	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
A - Neunkirchen Way	599	150	29	2889	0.207	599	693	0.2	0.3	1.571	A
2 - Peregine Way	531	133	464	1312	0.404	530	163	0.5	0.7	4.596	A
3 - Wretchwick Way North	414	103	308	2159	0.192	414	687	0.2	0.2	2.119	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
A - Neunkirchen Way	599	150	29	2889	0.207	599	694	0.3	0.3	1.571	A
2 - Peregine Way	531	133	465	1312	0.404	531	163	0.7	0.7	4.606	A
3 - Wretchwick Way North	414	103	308	2159	0.192	414	687	0.2	0.2	2.120	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
A - Neunkirchen Way	489	122	23	2893	0.169	489	567	0.3	0.2	1.499	A
2 - Peregine Way	433	108	380	1364	0.318	434	133	0.7	0.5	3.875	A
3 - Wretchwick Way North	338	85	252	2202	0.154	338	561	0.2	0.2	1.985	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Neunkirchen Way	410	102	20	2896	0.141	410	475	0.2	0.2	1.447	A
2 - Peregine Way	363	91	318	1401	0.259	363	111	0.5	0.4	3.468	A
3 - Wretchwick Way North	283	71	211	2234	0.127	283	470	0.2	0.1	1.899	A

BASELINE 2026+DEV 180, 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	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A, 2, 3	2.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	BASELINE 2026+DEV 180	PM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV+180 DEV	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 (PCU/hr)	Scaling Factor (%)
A - Neunkirchen Way		ONE HOUR	✓	860	100.000
2 - Peregine Way		ONE HOUR	✓	269	100.000
3 - Wretchwick Way North		ONE HOUR	✓	442	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Neunkirchen Way	2 - Peregine Way	3 - Wretchwick Way North
From	A - Neunkirchen Way	0	338	522
	2 - Peregine Way	178	0	91
	3 - Wretchwick Way North	372	70	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Neunkirchen Way	2 - Peregine Way	3 - Wretchwick Way North
From	A - Neunkirchen Way	0	0	0
	2 - Peregine Way	0	0	0
	3 - Wretchwick Way North	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Neunkirchen Way	0.33	1.89	0.5	A	789	1184
2 - Peregine Way	0.24	3.79	0.3	A	247	370
3 - Wretchwick Way North	0.22	2.05	0.3	A	406	608

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Neunkirchen Way	647	162	53	2868	0.226	646	413	0.0	0.3	1.620	A
2 - Peregine Way	203	51	392	1356	0.149	202	307	0.0	0.2	3.117	A
3 - Wretchwick Way North	333	83	134	2294	0.145	332	461	0.0	0.2	1.834	A

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
A - Neunkirchen Way	773	193	63	2859	0.270	773	494	0.3	0.4	1.724	A
2 - Peregine Way	242	60	469	1309	0.185	242	367	0.2	0.2	3.371	A
3 - Wretchwick Way North	397	99	160	2273	0.175	397	551	0.2	0.2	1.917	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
A - Neunkirchen Way	947	237	77	2847	0.333	946	605	0.4	0.5	1.893	A
2 - Peregine Way	296	74	574	1245	0.238	296	449	0.2	0.3	3.791	A
3 - Wretchwick Way North	487	122	196	2246	0.217	486	675	0.2	0.3	2.046	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
A - Neunkirchen Way	947	237	77	2847	0.333	947	606	0.5	0.5	1.893	A
2 - Peregine Way	296	74	575	1245	0.238	296	449	0.3	0.3	3.792	A
3 - Wretchwick Way North	487	122	196	2245	0.217	487	675	0.3	0.3	2.046	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
A - Neunkirchen Way	773	193	63	2859	0.270	774	495	0.5	0.4	1.728	A
2 - Peregine Way	242	60	470	1309	0.185	242	367	0.3	0.2	3.376	A
3 - Wretchwick Way North	397	99	160	2273	0.175	398	551	0.3	0.2	1.918	A

18:00 - 18:15

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
A - Neunkirchen Way	647	162	53	2868	0.226	648	414	0.4	0.3	1.620	A
2 - Peregine Way	203	51	393	1356	0.149	203	307	0.2	0.2	3.122	A
3 - Wretchwick Way North	333	83	134	2293	0.145	333	462	0.2	0.2	1.838	A

BASELINE 2021+DEV 300, 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	A, 2, 3	2.76	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	BASELINE 2021+DEV 300	AM	SATURN WITH DEV TURNING FLOWS 2021	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Neunkirchen Way		ONE HOUR	✓	545	100.000
2 - Peregine Way		ONE HOUR	✓	461	100.000
3 - Wretchwick Way North		ONE HOUR	✓	524	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Neunkirchen Way	2 - Peregine Way	3 - Wretchwick Way North
From	A - Neunkirchen Way	0	114	431
	2 - Peregine Way	258	0	203
	3 - Wretchwick Way North	498	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Neunkirchen Way	2 - Peregine Way	3 - Wretchwick Way North
From	A - Neunkirchen Way	0	0	4
	2 - Peregine Way	0	0	0
	3 - Wretchwick Way North	7	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Neunkirchen Way	0.21	1.62	0.3	A	500	750
2 - Peregine Way	0.39	4.51	0.6	A	423	635
3 - Wretchwick Way North	0.26	2.40	0.4	A	481	721

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Neunkirchen Way	410	103	20	2896	0.142	410	568	0.0	0.2	1.492	A
2 - Peregine Way	347	87	324	1398	0.248	346	105	0.0	0.3	3.417	A
3 - Wretchwick Way North	394	99	194	2247	0.176	394	476	0.0	0.2	2.069	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Neunkirchen Way	490	122	23	2893	0.169	490	679	0.2	0.2	1.544	A
2 - Peregine Way	414	104	387	1359	0.305	414	126	0.3	0.4	3.806	A
3 - Wretchwick Way North	471	118	232	2218	0.212	471	570	0.2	0.3	2.197	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
A - Neunkirchen Way	600	150	29	2889	0.208	600	832	0.2	0.3	1.621	A
2 - Peregine Way	508	127	474	1306	0.389	507	154	0.4	0.6	4.498	A
3 - Wretchwick Way North	577	144	284	2178	0.265	577	698	0.3	0.4	2.397	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
A - Neunkirchen Way	600	150	29	2889	0.208	600	832	0.3	0.3	1.621	A
2 - Peregine Way	508	127	475	1306	0.389	508	154	0.6	0.6	4.507	A
3 - Wretchwick Way North	577	144	284	2178	0.265	577	698	0.4	0.4	2.397	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
A - Neunkirchen Way	490	122	23	2893	0.169	490	680	0.3	0.2	1.544	A
2 - Peregine Way	414	104	388	1359	0.305	415	126	0.6	0.4	3.816	A
3 - Wretchwick Way North	471	118	232	2217	0.212	471	570	0.4	0.3	2.198	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Neunkirchen Way	410	103	20	2896	0.142	410	570	0.2	0.2	1.495	A
2 - Peregine Way	347	87	325	1397	0.248	348	105	0.4	0.3	3.432	A
3 - Wretchwick Way North	394	99	194	2247	0.176	395	478	0.3	0.2	2.074	A

BASELINE 2021+DEV 300, 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	A, 2, 3	2.67	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	BASELINE 2021+DEV 300	PM	SATURN WITH DEV TURNING FLOWS 2021	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 (PCU/hr)	Scaling Factor (%)
A - Neunkirchen Way		ONE HOUR	✓	1198	100.000
2 - Peregine Way		ONE HOUR	✓	262	100.000
3 - Wretchwick Way North		ONE HOUR	✓	632	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Neunkirchen Way	2 - Peregine Way	3 - Wretchwick Way North
From	A - Neunkirchen Way	0	366	832
	2 - Peregine Way	161	0	101
	3 - Wretchwick Way North	568	63	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Neunkirchen Way	2 - Peregine Way	3 - Wretchwick Way North
From	A - Neunkirchen Way	0	0	1
	2 - Peregine Way	0	0	0
	3 - Wretchwick Way North	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Neunkirchen Way	0.46	2.36	0.9	A	1099	1649
2 - Peregine Way	0.28	4.80	0.4	A	240	360
3 - Wretchwick Way North	0.31	2.36	0.5	A	580	869

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Neunkirchen Way	902	225	48	2872	0.314	900	548	0.0	0.5	1.835	A
2 - Peregine Way	197	49	625	1215	0.162	196	322	0.0	0.2	3.534	A
3 - Wretchwick Way North	476	119	121	2303	0.206	474	701	0.0	0.3	2.020	A

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
A - Neunkirchen Way	1077	269	57	2864	0.376	1076	655	0.5	0.6	2.027	A
2 - Peregine Way	235	59	748	1140	0.206	235	385	0.2	0.3	3.977	A
3 - Wretchwick Way North	568	142	145	2285	0.249	568	838	0.3	0.3	2.152	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
A - Neunkirchen Way	1319	330	70	2853	0.462	1318	803	0.6	0.9	2.360	A
2 - Peregine Way	288	72	916	1038	0.278	288	472	0.3	0.4	4.795	A
3 - Wretchwick Way North	695	174	177	2260	0.308	695	1026	0.3	0.5	2.362	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
A - Neunkirchen Way	1319	330	70	2853	0.462	1319	803	0.9	0.9	2.362	A
2 - Peregine Way	288	72	916	1038	0.278	288	472	0.4	0.4	4.803	A
3 - Wretchwick Way North	695	174	178	2260	0.308	695	1027	0.5	0.5	2.362	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
A - Neunkirchen Way	1077	269	57	2864	0.376	1078	657	0.9	0.6	2.030	A
2 - Peregine Way	235	59	749	1139	0.207	236	386	0.4	0.3	3.987	A
3 - Wretchwick Way North	568	142	145	2285	0.249	568	840	0.5	0.3	2.154	A

18:00 - 18:15

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
A - Neunkirchen Way	902	225	48	2872	0.314	902	550	0.6	0.5	1.842	A
2 - Peregine Way	197	49	627	1213	0.162	197	323	0.3	0.2	3.545	A
3 - Wretchwick Way North	476	119	122	2303	0.206	476	703	0.3	0.3	2.023	A

BASELINE 2026+DEV 300, 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	A, 2, 3	2.77	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	BASELINE 2026+DEV 300	AM	SATURN WITH DEV TURNING FLOWS 2026	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Neunkirchen Way		ONE HOUR	✓	550	100.000
2 - Peregine Way		ONE HOUR	✓	483	100.000
3 - Wretchwick Way North		ONE HOUR	✓	383	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Neunkirchen Way	2 - Peregine Way	3 - Wretchwick Way North
From	A - Neunkirchen Way	0	122	428
	2 - Peregine Way	280	0	202
	3 - Wretchwick Way North	357	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Neunkirchen Way	2 - Peregine Way	3 - Wretchwick Way North
From	A - Neunkirchen Way	0	0	0
	2 - Peregine Way	0	0	0
	3 - Wretchwick Way North	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Neunkirchen Way	0.21	1.58	0.3	A	505	757
2 - Peregine Way	0.41	4.63	0.7	A	443	664
3 - Wretchwick Way North	0.20	2.13	0.2	A	351	527

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Neunkirchen Way	414	104	19	2896	0.143	414	478	0.0	0.2	1.449	A
2 - Peregine Way	363	91	322	1399	0.260	362	111	0.0	0.3	3.466	A
3 - Wretchwick Way North	288	72	210	2235	0.129	288	473	0.0	0.2	1.900	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Neunkirchen Way	495	124	23	2893	0.171	494	573	0.2	0.2	1.500	A
2 - Peregine Way	434	108	385	1361	0.319	433	133	0.3	0.5	3.880	A
3 - Wretchwick Way North	344	86	252	2202	0.156	344	566	0.2	0.2	1.991	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
A - Neunkirchen Way	606	151	28	2889	0.210	606	701	0.2	0.3	1.576	A
2 - Peregine Way	531	133	471	1308	0.406	530	163	0.5	0.7	4.623	A
3 - Wretchwick Way North	422	105	308	2159	0.195	421	693	0.2	0.2	2.129	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
A - Neunkirchen Way	606	151	28	2889	0.210	606	702	0.3	0.3	1.576	A
2 - Peregine Way	531	133	471	1308	0.406	531	163	0.7	0.7	4.633	A
3 - Wretchwick Way North	422	105	309	2159	0.195	422	694	0.2	0.2	2.130	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
A - Neunkirchen Way	495	124	23	2893	0.171	495	574	0.3	0.2	1.500	A
2 - Peregine Way	434	108	385	1361	0.319	435	133	0.7	0.5	3.892	A
3 - Wretchwick Way North	344	86	252	2202	0.156	344	567	0.2	0.2	1.993	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Neunkirchen Way	414	104	19	2896	0.143	414	480	0.2	0.2	1.449	A
2 - Peregine Way	363	91	322	1399	0.260	364	112	0.5	0.4	3.479	A
3 - Wretchwick Way North	288	72	211	2234	0.129	288	475	0.2	0.2	1.901	A

BASELINE 2026+DEV 300, 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	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	A, 2, 3	2.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	BASELINE 2026+DEV 300	PM	SATURN WITH DEV TURNING FLOWS 2026	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 (PCU/hr)	Scaling Factor (%)
A - Neunkirchen Way		ONE HOUR	✓	867	100.000
2 - Peregine Way		ONE HOUR	✓	270	100.000
3 - Wretchwick Way North		ONE HOUR	✓	449	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Neunkirchen Way	2 - Peregine Way	3 - Wretchwick Way North
From	A - Neunkirchen Way	0	338	529
	2 - Peregine Way	178	0	92
	3 - Wretchwick Way North	379	70	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Neunkirchen Way	2 - Peregine Way	3 - Wretchwick Way North
From	A - Neunkirchen Way	0	0	0
	2 - Peregine Way	0	0	0
	3 - Wretchwick Way North	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Neunkirchen Way	0.34	1.90	0.5	A	796	1193
2 - Peregine Way	0.24	3.81	0.3	A	248	372
3 - Wretchwick Way North	0.22	2.06	0.3	A	412	618

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - Neunkirchen Way	653	163	53	2868	0.228	652	418	0.0	0.3	1.624	A
2 - Peregine Way	203	51	398	1353	0.150	203	307	0.0	0.2	3.128	A
3 - Wretchwick Way North	338	85	134	2294	0.147	337	467	0.0	0.2	1.839	A

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
A - Neunkirchen Way	779	195	63	2859	0.273	779	500	0.3	0.4	1.730	A
2 - Peregine Way	243	61	475	1306	0.186	243	367	0.2	0.2	3.386	A
3 - Wretchwick Way North	404	101	160	2273	0.178	403	558	0.2	0.2	1.925	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
A - Neunkirchen Way	955	239	77	2847	0.335	954	613	0.4	0.5	1.901	A
2 - Peregine Way	297	74	582	1241	0.240	297	449	0.2	0.3	3.814	A
3 - Wretchwick Way North	494	124	196	2246	0.220	494	683	0.2	0.3	2.055	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
A - Neunkirchen Way	955	239	77	2847	0.335	955	613	0.5	0.5	1.901	A
2 - Peregine Way	297	74	582	1241	0.240	297	449	0.3	0.3	3.815	A
3 - Wretchwick Way North	494	124	196	2245	0.220	494	684	0.3	0.3	2.055	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
A - Neunkirchen Way	779	195	63	2859	0.273	780	501	0.5	0.4	1.733	A
2 - Peregine Way	243	61	476	1305	0.186	243	367	0.3	0.2	3.391	A
3 - Wretchwick Way North	404	101	160	2273	0.178	404	559	0.3	0.2	1.926	A

18:00 - 18:15

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
A - Neunkirchen Way	653	163	53	2868	0.228	653	420	0.4	0.3	1.627	A
2 - Peregine Way	203	51	398	1352	0.150	203	307	0.2	0.2	3.133	A
3 - Wretchwick Way North	338	85	134	2293	0.147	338	468	0.2	0.2	1.840	A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.0.2.5947

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 770558 software@trl.co.uk www.trlsoftware.co.uk

Filename: Seel Way - A41 East - Grav Rd N - A41 W - B4100.j9
Path: M:\Projects\17167-00 - Gavray Drive, Bicester\Technical\Arcady\Rev A
Report generation date: 27/03/2018 17:32:51

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (min)	RFC	LOS	Queue (PCU)	Delay (min)	RFC	LOS
	A1 - BASELINE 2021							
A - Seelshield Way	2.0	0.15	0.66	A	1.7	0.13	0.62	A
B - A41 East	3.2	0.14	0.75	A	14.7	0.57	0.95	D
C - Gravenhill Road North	1.3	0.24	0.54	B	125.5	11.75	1.57	F
D - A41 West	6.2	0.24	0.86	B	96.8	2.94	1.11	F
E - B4100 London Road	0.5	0.08	0.34	A	1.8	0.20	0.64	B
	A1 - BASELINE 2026							
A - Seelshield Way	1.3	0.11	0.56	A	1.0	0.10	0.50	A
B - A41 East	2.8	0.14	0.73	A	29.6	1.09	1.00	F
C - Gravenhill Road North	6.6	0.72	0.88	E	3.7	0.59	0.80	E
D - A41 West	11.1	0.40	0.92	C	38.7	1.17	1.02	F
E - B4100 London Road	0.4	0.08	0.26	A	1.1	0.14	0.52	A
	A1 - BASELINE 2021+DEV 180							
A - Seelshield Way	2.1	0.16	0.67	A	1.7	0.13	0.63	A
B - A41 East	3.3	0.15	0.76	A	17.5	0.66	0.96	E
C - Gravenhill Road North	1.3	0.25	0.55	C	133.0	12.69	1.63	F
D - A41 West	6.6	0.26	0.87	C	110.1	3.53	1.13	F
E - B4100 London Road	0.6	0.09	0.36	A	1.9	0.20	0.65	B
	A1 - BASELINE 2026+DEV 180							
A - Seelshield Way	1.4	0.12	0.58	A	1.0	0.10	0.50	A
B - A41 East	2.9	0.14	0.74	A	32.4	1.17	1.01	F
C - Gravenhill Road North	7.3	0.80	0.89	E	3.9	0.63	0.82	E
D - A41 West	12.2	0.44	0.93	D	46.0	1.34	1.03	F
E - B4100 London Road	0.4	0.08	0.28	A	1.1	0.14	0.52	A
	A1 - BASELINE 2021+DEV 300							
A - Seelshield Way	2.2	0.16	0.69	A	1.8	0.13	0.64	A
B - A41 East	3.4	0.15	0.77	A	19.8	0.74	0.97	E
C - Gravenhill Road North	1.4	0.26	0.56	C	137.9	13.35	1.66	F
D - A41 West	6.9	0.27	0.87	C	119.0	3.95	1.14	F
E - B4100 London Road	0.6	0.09	0.37	A	1.9	0.20	0.65	B
	A1 - BASELINE 2026+DEV 300							
A - Seelshield Way	1.4	0.12	0.58	A	1.0	0.10	0.51	A
B - A41 East	2.9	0.15	0.74	A	34.4	1.23	1.01	F
C - Gravenhill Road North	7.8	0.86	0.90	F	4.1	0.65	0.82	E
D - A41 West	13.0	0.46	0.94	D	51.3	1.46	1.03	F
E - B4100 London Road	0.4	0.09	0.29	A	1.2	0.14	0.53	A

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

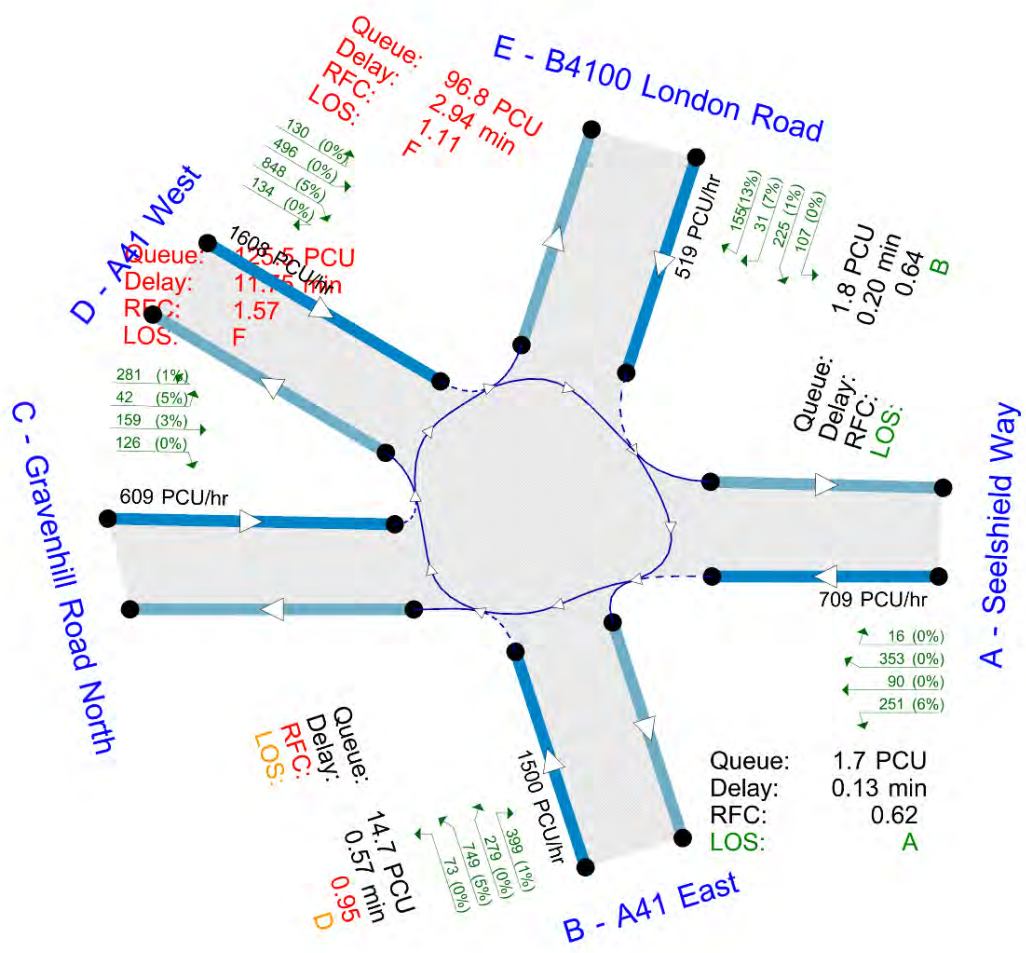
File summary

File Description

Title	Seelshield Way/A41 East/Gravenhill Road North/A41 West/B4100 London Road AM Peak
Location	Bicester
Site number	
Date	13/07/2010
Version	
Status	TIA
Identifier	
Client	JJ Gallagher Ltd
Jobnumber	18578-01-1
Enumerator	Alexanders [CS5DG3J]
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	min	-Min	perMin



Flows show original traffic demand (PCU/hr).

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 (min)	Queue threshold (PCU)
5.75				0.85	0.60	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	BASELINE 2021	AM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV	ONE HOUR	07:45	09:15	15	✓
D2	BASELINE 2021	PM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV	ONE HOUR	16:45	18:15	15	✓
D3	BASELINE 2026	AM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV	ONE HOUR	07:45	09:15	15	✓
D4	BASELINE 2026	PM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV	ONE HOUR	16:45	18:15	15	✓
D5	BASELINE 2021+DEV 180	AM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV+180 DEV	ONE HOUR	07:45	09:15	15	✓
D6	BASELINE 2021+DEV 180	PM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV+180 DEV	ONE HOUR	16:45	18:15	15	✓
D7	BASELINE 2026+DEV 180	AM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV+180 DEV	ONE HOUR	07:45	09:15	15	✓
D8	BASELINE 2026+DEV 180	PM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV+180 DEV	ONE HOUR	16:45	18:15	15	✓
D9	BASELINE 2021+DEV 300	AM	SATURN WITH DEV TURNING FLOWS 2021	ONE HOUR	07:45	09:15	15	✓
D10	BASELINE 2021+DEV 300	PM	SATURN WITH DEV TURNING FLOWS 2021	ONE HOUR	16:45	18:15	15	✓
D11	BASELINE 2026+DEV 300	AM	SATURN WITH DEV TURNING FLOWS 2026	ONE HOUR	07:45	09:15	15	✓
D12	BASELINE 2026+DEV 300	PM	SATURN WITH DEV TURNING FLOWS 2026	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	(Default Analysis Set)	✓	100.000	100.000

(Default Analysis Set) - BASELINE 2021, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	(untitled)	Standard Roundabout	A, B, C, D, E	0.18	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
A	Seelshield Way	
B	A41 East	
C	Gravenhill Road North	
D	A41 West	
E	B4100 London Road	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
A - Seelshield Way	7.00	7.00	0.0	20.0	70.0	31.0	
B - A41 East	5.25	8.50	20.0	20.0	70.0	31.0	
C - Gravenhill Road North	3.50	7.00	5.0	20.0	70.0	20.0	
D - A41 West	5.00	9.00	20.0	20.0	70.0	42.0	
E - B4100 London Road	7.00	7.00	0.0	20.0	70.0	39.0	

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
A - Seelshield Way	Direct	(ARCADY 6 CT10 Import)	0
B - A41 East	Direct	(ARCADY 6 CT10 Import)	0
C - Gravenhill Road North	Direct	(ARCADY 6 CT10 Import)	0
D - A41 West	Direct	(ARCADY 6 CT10 Import)	0
E - B4100 London Road	Direct	(ARCADY 6 CT10 Import)	0

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
A - Seelshield Way	0.570	2114
B - A41 East	0.588	2231
C - Gravenhill Road North	0.472	1436
D - A41 West	0.568	2160
E - B4100 London Road	0.554	2055

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	BASELINE 2021	AM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Seelshield Way		ONE HOUR	✓	739	100.000
B - A41 East		ONE HOUR	✓	1228	100.000
C - Gravenhill Road North		ONE HOUR	✓	293	100.000
D - A41 West		ONE HOUR	✓	1424	100.000
E - B4100 London Road		ONE HOUR	✓	329	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Seelshield Way	B - A41 East	C - Gravenhill Road North	D - A41 West	E - B4100 London Road
From	A - Seelshield Way	0	297	98	327	17
	B - A41 East	201	0	37	804	186
	C - Gravenhill Road North	58	43	0	162	30
	D - A41 West	243	942	115	0	125
	E - B4100 London Road	28	188	38	75	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Seelshield Way	B - A41 East	C - Gravenhill Road North	D - A41 West	E - B4100 London Road
From	A - Seelshield Way	0	8	10	0	0
	B - A41 East	9	0	0	7	3
	C - Gravenhill Road North	1	0	0	22	7
	D - A41 West	0	8	0	0	19
	E - B4100 London Road	0	1	5	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Seelshield Way	0.66	0.15	2.0	A	678	1017
B - A41 East	0.75	0.14	3.2	A	1127	1690
C - Gravenhill Road North	0.54	0.24	1.3	B	269	403
D - A41 West	0.86	0.24	6.2	B	1307	1961
E - B4100 London Road	0.34	0.08	0.5	A	302	453

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Seelshield Way	556	139	1049	1516	0.367	554	397	0.0	0.6	0.065	A
B - A41 East	925	231	502	1936	0.478	921	1101	0.0	1.0	0.063	A
C - Gravenhill Road North	220	55	1207	866	0.254	219	215	0.0	0.4	0.104	A
D - A41 West	1072	268	401	1933	0.555	1067	1025	0.0	1.3	0.074	A
E - B4100 London Road	248	62	1199	1390	0.178	247	268	0.0	0.2	0.053	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Seelshield Way	664	166	1256	1398	0.475	663	476	0.6	0.9	0.085	A
B - A41 East	1104	276	601	1878	0.588	1102	1318	1.0	1.5	0.082	A
C - Gravenhill Road North	263	66	1445	754	0.349	262	258	0.4	0.6	0.137	A
D - A41 West	1281	320	480	1888	0.678	1277	1227	1.3	2.2	0.104	A
E - B4100 London Road	296	74	1436	1260	0.235	296	321	0.2	0.3	0.063	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 (min)	LOS
A - Seelshield Way	814	203	1530	1242	0.655	810	580	0.9	1.9	0.144	A
B - A41 East	1352	338	733	1799	0.751	1346	1606	1.5	3.1	0.139	A
C - Gravenhill Road North	322	81	1764	603	0.535	320	314	0.6	1.2	0.236	B
D - A41 West	1568	392	586	1828	0.858	1554	1498	2.2	5.8	0.223	B
E - B4100 London Road	362	91	1748	1087	0.333	362	392	0.3	0.5	0.084	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 (min)	LOS
A - Seelshield Way	814	203	1541	1236	0.658	814	584	1.9	2.0	0.148	A
B - A41 East	1352	338	737	1797	0.752	1352	1617	3.1	3.2	0.143	A
C - Gravenhill Road North	322	81	1772	599	0.538	322	316	1.2	1.3	0.243	B
D - A41 West	1568	392	589	1826	0.859	1567	1506	5.8	6.2	0.245	B
E - B4100 London Road	362	91	1762	1079	0.336	362	394	0.5	0.5	0.085	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 (min)	LOS
A - Seelshield Way	664	166	1271	1389	0.478	668	481	2.0	1.0	0.087	A
B - A41 East	1104	276	606	1874	0.589	1110	1334	3.2	1.5	0.084	A
C - Gravenhill Road North	263	66	1456	748	0.352	266	260	1.3	0.6	0.140	A
D - A41 West	1281	320	484	1885	0.679	1296	1237	6.2	2.3	0.111	A
E - B4100 London Road	296	74	1455	1249	0.237	297	325	0.5	0.3	0.064	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Seelshield Way	556	139	1057	1511	0.368	558	400	1.0	0.6	0.066	A
B - A41 East	925	231	505	1934	0.478	927	1110	1.5	1.0	0.064	A
C - Gravenhill Road North	220	55	1215	862	0.256	221	217	0.6	0.4	0.105	A
D - A41 West	1072	268	404	1931	0.555	1076	1032	2.3	1.3	0.075	A
E - B4100 London Road	248	62	1210	1385	0.179	248	270	0.3	0.2	0.053	A

(Default Analysis Set) - BASELINE 2021, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	(untitled)	Standard Roundabout	A, B, C, D, E	2.61	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	BASELINE 2021	PM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV	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 (PCU/hr)	Scaling Factor (%)
A - Seelshield Way		ONE HOUR	✓	709	100.000
B - A41 East		ONE HOUR	✓	1500	100.000
C - Gravenhill Road North		ONE HOUR	✓	609	100.000
D - A41 West		ONE HOUR	✓	1608	100.000
E - B4100 London Road		ONE HOUR	✓	519	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Seelshield Way	B - A41 East	C - Gravenhill Road North	D - A41 West	E - B4100 London Road
From	A - Seelshield Way	0	251	90	353	16
	B - A41 East	399	0	73	749	279
	C - Gravenhill Road North	159	126	0	281	42
	D - A41 West	496	848	134	0	130
	E - B4100 London Road	107	225	31	155	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Seelshield Way	B - A41 East	C - Gravenhill Road North	D - A41 West	E - B4100 London Road
From	A - Seelshield Way	0	6	0	0	0
	B - A41 East	1	0	0	5	0
	C - Gravenhill Road North	3	0	0	1	5
	D - A41 West	0	5	0	0	0
	E - B4100 London Road	0	1	7	13	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Seelshield Way	0.62	0.13	1.7	A	651	976
B - A41 East	0.95	0.57	14.7	D	1376	2065
C - Gravenhill Road North	1.57	11.75	125.5	F	559	838
D - A41 West	1.11	2.94	96.8	F	1476	2214
E - B4100 London Road	0.64	0.20	1.8	B	476	714

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Seelshield Way	534	133	1135	1467	0.364	532	868	0.0	0.6	0.065	A
B - A41 East	1129	282	583	1888	0.598	1123	1084	0.0	1.5	0.080	A
C - Gravenhill Road North	458	115	1461	746	0.615	452	245	0.0	1.6	0.203	B
D - A41 West	1211	303	763	1727	0.701	1202	1150	0.0	2.3	0.115	A
E - B4100 London Road	390	98	1615	1160	0.336	388	350	0.0	0.5	0.081	A

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 (min)	LOS
A - Seelshield Way	638	159	1350	1344	0.474	636	1033	0.6	0.9	0.086	A
B - A41 East	1348	337	697	1821	0.741	1343	1290	1.5	2.8	0.128	A
C - Gravenhill Road North	547	137	1748	611	0.896	529	292	1.6	6.1	0.642	E
D - A41 West	1446	361	906	1645	0.879	1429	1371	2.3	6.5	0.266	C
E - B4100 London Road	466	117	1919	992	0.470	465	417	0.5	0.9	0.118	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 (min)	LOS
A - Seelshield Way	781	195	1508	1255	0.622	778	1150	0.9	1.6	0.128	A
B - A41 East	1652	413	838	1738	0.950	1614	1448	2.8	12.3	0.410	C
C - Gravenhill Road North	670	168	2109	440	1.525	437	342	6.1	64.3	5.170	F
D - A41 West	1771	443	982	1602	1.105	1584	1565	6.5	53.1	1.294	F
E - B4100 London Road	571	143	2090	897	0.637	567	476	0.9	1.8	0.188	B

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 (min)	LOS
A - Seelshield Way	781	195	1515	1250	0.624	781	1159	1.6	1.7	0.130	A
B - A41 East	1652	413	842	1736	0.952	1642	1454	12.3	14.7	0.567	D
C - Gravenhill Road North	670	168	2139	426	1.574	426	345	64.3	125.5	11.746	F
D - A41 West	1771	443	989	1599	1.108	1596	1576	53.1	96.8	2.934	F
E - B4100 London Road	571	143	2103	890	0.642	571	482	1.8	1.8	0.196	B

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 (min)	LOS
A - Seelshield Way	638	159	1468	1277	0.499	640	1114	1.7	1.0	0.097	A
B - A41 East	1348	337	715	1810	0.745	1395	1393	14.7	3.1	0.164	A
C - Gravenhill Road North	547	137	1800	586	0.934	581	310	125.5	117.0	11.459	F
D - A41 West	1446	361	958	1616	0.895	1599	1424	96.8	58.5	2.937	F
E - B4100 London Road	466	117	2113	884	0.527	469	444	1.8	1.2	0.152	A

18:00 - 18:15

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 (min)	LOS
A - Seelshield Way	534	133	1337	1352	0.395	535	1017	1.0	0.7	0.075	A
B - A41 East	1129	282	606	1874	0.602	1135	1266	3.1	1.6	0.084	A
C - Gravenhill Road North	458	115	1476	739	0.620	733	265	117.0	48.5	6.829	F
D - A41 West	1211	303	919	1638	0.739	1432	1289	58.5	3.1	0.655	E
E - B4100 London Road	390	98	1962	968	0.403	392	390	1.2	0.7	0.109	A

(Default Analysis Set) - BASELINE 2026, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	(untitled)	Standard Roundabout	A, B, C, D, E	0.31	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	BASELINE 2026	AM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Seelshield Way		ONE HOUR	✓	619	100.000
B - A41 East		ONE HOUR	✓	1103	100.000
C - Gravenhill Road North		ONE HOUR	✓	533	100.000
D - A41 West		ONE HOUR	✓	1606	100.000
E - B4100 London Road		ONE HOUR	✓	239	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Seelshield Way	B - A41 East	C - Gravenhill Road North	D - A41 West	E - B4100 London Road
From	A - Seelshield Way	0	91	149	370	9
	B - A41 East	26	0	97	901	78
	C - Gravenhill Road North	172	88	0	248	25
	D - A41 West	297	935	216	0	158
	E - B4100 London Road	38	70	35	96	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Seelshield Way	B - A41 East	C - Gravenhill Road North	D - A41 West	E - B4100 London Road
From	A - Seelshield Way	0	0	7	0	0
	B - A41 East	0	0	0	6	4
	C - Gravenhill Road North	1	0	0	14	9
	D - A41 West	0	8	0	0	16
	E - B4100 London Road	0	2	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Seelshield Way	0.56	0.11	1.3	A	568	852
B - A41 East	0.73	0.14	2.8	A	1012	1518
C - Gravenhill Road North	0.88	0.72	6.6	E	489	733
D - A41 West	0.92	0.40	11.1	C	1474	2210
E - B4100 London Road	0.26	0.08	0.4	A	220	329

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Seelshield Way	466	117	1078	1499	0.311	464	400	0.0	0.5	0.059	A
B - A41 East	830	208	656	1845	0.450	827	886	0.0	0.9	0.062	A
C - Gravenhill Road North	401	100	1111	911	0.440	398	373	0.0	0.8	0.124	A
D - A41 West	1209	302	298	1991	0.607	1203	1210	0.0	1.6	0.080	A
E - B4100 London Road	180	45	1298	1336	0.135	180	202	0.0	0.2	0.053	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Seelshield Way	557	139	1290	1379	0.404	556	478	0.5	0.7	0.074	A
B - A41 East	992	248	785	1769	0.561	990	1060	0.9	1.3	0.081	A
C - Gravenhill Road North	479	120	1329	808	0.593	476	446	0.8	1.5	0.192	B
D - A41 West	1444	361	357	1958	0.737	1439	1449	1.6	2.9	0.121	A
E - B4100 London Road	215	54	1553	1194	0.180	215	242	0.2	0.2	0.062	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 (min)	LOS
A - Seelshield Way	682	170	1562	1224	0.557	680	577	0.7	1.3	0.112	A
B - A41 East	1214	304	958	1667	0.728	1209	1283	1.3	2.7	0.136	A
C - Gravenhill Road North	587	147	1624	669	0.877	570	543	1.5	5.8	0.570	D
D - A41 West	1768	442	429	1916	0.923	1740	1765	2.9	9.8	0.320	C
E - B4100 London Road	263	66	1876	1016	0.259	263	293	0.2	0.4	0.081	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 (min)	LOS
A - Seelshield Way	682	170	1581	1213	0.562	682	586	1.3	1.3	0.115	A
B - A41 East	1214	304	963	1664	0.730	1214	1299	2.7	2.8	0.140	A
C - Gravenhill Road North	587	147	1631	666	0.881	583	547	5.8	6.6	0.722	E
D - A41 West	1768	442	437	1912	0.925	1763	1777	9.8	11.1	0.401	C
E - B4100 London Road	263	66	1903	1000	0.263	263	297	0.4	0.4	0.083	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 (min)	LOS
A - Seelshield Way	557	139	1320	1361	0.409	559	493	1.3	0.7	0.076	A
B - A41 East	992	248	794	1764	0.562	997	1086	2.8	1.4	0.083	A
C - Gravenhill Road North	479	120	1338	804	0.596	499	452	6.6	1.6	0.223	B
D - A41 West	1444	361	369	1950	0.740	1476	1468	11.1	3.1	0.142	A
E - B4100 London Road	215	54	1598	1170	0.184	216	247	0.4	0.2	0.064	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Seelshield Way	466	117	1089	1493	0.312	467	404	0.7	0.5	0.059	A
B - A41 East	830	208	661	1842	0.451	832	895	1.4	0.9	0.063	A
C - Gravenhill Road North	401	100	1118	908	0.442	404	376	1.6	0.9	0.128	A
D - A41 West	1209	302	302	1989	0.608	1215	1220	3.1	1.7	0.083	A
E - B4100 London Road	180	45	1312	1328	0.136	180	204	0.2	0.2	0.053	A

(Default Analysis Set) - BASELINE 2026, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	(untitled)	Standard Roundabout	A, B, C, D, E	0.87	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	BASELINE 2026	PM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV	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 (PCU/hr)	Scaling Factor (%)
A - Seelshield Way		ONE HOUR	✓	541	100.000
B - A41 East		ONE HOUR	✓	1468	100.000
C - Gravenhill Road North		ONE HOUR	✓	362	100.000
D - A41 West		ONE HOUR	✓	1735	100.000
E - B4100 London Road		ONE HOUR	✓	436	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Seelshield Way	B - A41 East	C - Gravenhill Road North	D - A41 West	E - B4100 London Road
From	A - Seelshield Way	0	34	146	353	7
	B - A41 East	148	0	177	1028	115
	C - Gravenhill Road North	113	49	0	179	20
	D - A41 West	480	851	252	0	153
	E - B4100 London Road	104	125	23	185	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Seelshield Way	B - A41 East	C - Gravenhill Road North	D - A41 West	E - B4100 London Road
From	A - Seelshield Way	0	6	0	0	0
	B - A41 East	0	0	0	3	1
	C - Gravenhill Road North	2	0	0	0	10
	D - A41 West	0	5	0	0	0
	E - B4100 London Road	0	2	9	11	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Seelshield Way	0.50	0.10	1.0	A	496	744
B - A41 East	1.00	1.09	29.6	F	1347	2021
C - Gravenhill Road North	0.80	0.59	3.7	E	332	499
D - A41 West	1.02	1.17	38.7	F	1592	2388
E - B4100 London Road	0.52	0.14	1.1	A	400	600

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Seelshield Way	407	102	1111	1481	0.275	406	633	0.0	0.4	0.056	A
B - A41 East	1105	276	724	1805	0.612	1099	792	0.0	1.6	0.086	A
C - Gravenhill Road North	273	68	1375	786	0.347	271	447	0.0	0.5	0.117	A
D - A41 West	1306	327	339	1968	0.664	1298	1307	0.0	2.0	0.091	A
E - B4100 London Road	328	82	1417	1270	0.258	326	220	0.0	0.4	0.067	A

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 (min)	LOS
A - Seelshield Way	486	122	1328	1357	0.358	485	756	0.4	0.6	0.069	A
B - A41 East	1320	330	866	1722	0.767	1313	947	1.6	3.2	0.148	A
C - Gravenhill Road North	326	81	1644	659	0.494	324	535	0.5	1.0	0.180	B
D - A41 West	1560	390	405	1930	0.808	1551	1563	2.0	4.1	0.159	A
E - B4100 London Road	392	98	1693	1117	0.351	391	264	0.4	0.6	0.087	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 (min)	LOS
A - Seelshield Way	595	149	1577	1215	0.490	594	897	0.6	1.0	0.097	A
B - A41 East	1616	404	1048	1614	1.001	1547	1122	3.2	20.4	0.624	E
C - Gravenhill Road North	399	100	1959	511	0.781	390	637	1.0	3.2	0.473	D
D - A41 West	1910	478	482	1886	1.013	1826	1867	4.1	25.3	0.640	E
E - B4100 London Road	480	120	1996	949	0.505	478	311	0.6	1.1	0.134	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 (min)	LOS
A - Seelshield Way	595	149	1599	1202	0.495	595	911	1.0	1.0	0.099	A
B - A41 East	1616	404	1055	1610	1.004	1579	1139	20.4	29.6	1.086	F
C - Gravenhill Road North	399	100	1989	497	0.803	397	646	3.2	3.7	0.587	E
D - A41 West	1910	478	491	1881	1.016	1857	1895	25.3	38.7	1.166	F
E - B4100 London Road	480	120	2031	930	0.516	479	317	1.1	1.1	0.141	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 (min)	LOS
A - Seelshield Way	486	122	1423	1303	0.373	488	811	1.0	0.6	0.074	A
B - A41 East	1320	330	890	1707	0.773	1424	1020	29.6	3.7	0.293	C
C - Gravenhill Road North	326	81	1744	612	0.532	336	570	3.7	1.2	0.227	B
D - A41 West	1560	390	431	1915	0.814	1695	1649	38.7	4.9	0.422	D
E - B4100 London Road	392	98	1840	1035	0.378	393	285	1.1	0.6	0.099	A

18:00 - 18:15

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 (min)	LOS
A - Seelshield Way	407	102	1125	1472	0.276	408	641	0.6	0.4	0.057	A
B - A41 East	1105	276	730	1801	0.613	1113	803	3.7	1.6	0.090	A
C - Gravenhill Road North	273	68	1391	779	0.350	275	453	1.2	0.6	0.121	A
D - A41 West	1306	327	344	1965	0.665	1318	1322	4.9	2.1	0.096	A
E - B4100 London Road	328	82	1438	1258	0.261	329	224	0.6	0.4	0.068	A

(Default Analysis Set) - BASELINE 2021+DEV 180, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	(untitled)	Standard Roundabout	A, B, C, D, E	0.19	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	BASELINE 2021+DEV 180	AM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV+180 DEV	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Seelshield Way		ONE HOUR	✓	750	100.000
B - A41 East		ONE HOUR	✓	1234	100.000
C - Gravenhill Road North		ONE HOUR	✓	293	100.000
D - A41 West		ONE HOUR	✓	1436	100.000
E - B4100 London Road		ONE HOUR	✓	350	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Seelshield Way	B - A41 East	C - Gravenhill Road North	D - A41 West	E - B4100 London Road
From	A - Seelshield Way	0	297	99	336	17
	B - A41 East	204	0	37	804	189
	C - Gravenhill Road North	58	43	0	162	30
	D - A41 West	248	942	115	0	131
	E - B4100 London Road	28	199	39	84	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Seelshield Way	B - A41 East	C - Gravenhill Road North	D - A41 West	E - B4100 London Road
From	A - Seelshield Way	0	8	10	0	0
	B - A41 East	9	0	0	7	3
	C - Gravenhill Road North	1	0	0	22	7
	D - A41 West	0	8	0	0	19
	E - B4100 London Road	0	1	5	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Seelshield Way	0.67	0.16	2.1	A	688	1032
B - A41 East	0.76	0.15	3.3	A	1132	1699
C - Gravenhill Road North	0.55	0.25	1.3	C	269	403
D - A41 West	0.87	0.26	6.6	C	1317	1976
E - B4100 London Road	0.36	0.09	0.6	A	321	481

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Seelshield Way	564	141	1064	1507	0.375	562	404	0.0	0.6	0.066	A
B - A41 East	929	232	517	1927	0.482	925	1109	0.0	1.0	0.064	A
C - Gravenhill Road North	220	55	1225	857	0.257	219	217	0.0	0.4	0.105	A
D - A41 West	1081	270	405	1930	0.560	1075	1039	0.0	1.3	0.074	A
E - B4100 London Road	263	66	1206	1387	0.190	262	275	0.0	0.2	0.054	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Seelshield Way	674	169	1274	1388	0.486	673	483	0.6	1.0	0.087	A
B - A41 East	1109	277	619	1867	0.594	1107	1328	1.0	1.5	0.084	A
C - Gravenhill Road North	263	66	1466	743	0.354	262	260	0.4	0.6	0.140	A
D - A41 West	1291	323	485	1885	0.685	1287	1243	1.3	2.3	0.106	A
E - B4100 London Road	314	79	1443	1255	0.250	314	329	0.2	0.3	0.064	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 (min)	LOS
A - Seelshield Way	826	206	1551	1230	0.671	821	589	1.0	2.1	0.152	A
B - A41 East	1359	340	755	1787	0.761	1352	1617	1.5	3.3	0.145	A
C - Gravenhill Road North	322	81	1790	590	0.546	319	317	0.6	1.3	0.246	B
D - A41 West	1581	395	592	1824	0.867	1565	1518	2.3	6.2	0.234	B
E - B4100 London Road	385	96	1756	1082	0.356	384	401	0.3	0.6	0.087	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 (min)	LOS
A - Seelshield Way	826	206	1563	1223	0.675	825	593	2.1	2.1	0.157	A
B - A41 East	1359	340	759	1784	0.762	1359	1629	3.3	3.3	0.150	A
C - Gravenhill Road North	322	81	1799	586	0.549	322	319	1.3	1.3	0.254	C
D - A41 West	1581	395	595	1822	0.867	1579	1526	6.2	6.6	0.260	C
E - B4100 London Road	385	96	1771	1074	0.358	385	404	0.6	0.6	0.088	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 (min)	LOS
A - Seelshield Way	674	169	1291	1378	0.489	678	489	2.1	1.0	0.090	A
B - A41 East	1109	277	624	1864	0.595	1116	1345	3.3	1.6	0.086	A
C - Gravenhill Road North	263	66	1478	738	0.357	266	263	1.3	0.6	0.143	A
D - A41 West	1291	323	490	1882	0.686	1307	1254	6.6	2.4	0.115	A
E - B4100 London Road	314	79	1464	1244	0.253	315	333	0.6	0.3	0.065	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Seelshield Way	564	141	1073	1502	0.376	566	407	1.0	0.6	0.067	A
B - A41 East	929	232	521	1925	0.483	931	1118	1.6	1.0	0.064	A
C - Gravenhill Road North	220	55	1233	853	0.258	221	219	0.6	0.4	0.107	A
D - A41 West	1081	270	408	1928	0.561	1085	1046	2.4	1.4	0.076	A
E - B4100 London Road	263	66	1216	1381	0.191	264	277	0.3	0.2	0.054	A

(Default Analysis Set) - BASELINE 2021+DEV 180, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	(untitled)	Standard Roundabout	A, B, C, D, E	2.94	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	BASELINE 2021+DEV 180	PM	SATURN WITH DEV TURNING FLOWS 2021-300 DEV+180 DEV	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 (PCU/hr)	Scaling Factor (%)
A - Seelshield Way		ONE HOUR	✓	721	100.000
B - A41 East		ONE HOUR	✓	1514	100.000
C - Gravenhill Road North		ONE HOUR	✓	610	100.000
D - A41 West		ONE HOUR	✓	1629	100.000
E - B4100 London Road		ONE HOUR	✓	528	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Seelshield Way	B - A41 East	C - Gravenhill Road North	D - A41 West	E - B4100 London Road
From	A - Seelshield Way	0	255	90	361	16
	B - A41 East	405	0	73	749	287
	C - Gravenhill Road North	160	126	0	281	43
	D - A41 West	507	848	134	0	140
	E - B4100 London Road	107	230	31	160	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Seelshield Way	B - A41 East	C - Gravenhill Road North	D - A41 West	E - B4100 London Road
From	A - Seelshield Way	0	6	0	0	0
	B - A41 East	1	0	0	5	0
	C - Gravenhill Road North	3	0	0	1	5
	D - A41 West	0	5	0	0	0
	E - B4100 London Road	0	1	7	13	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Seelshield Way	0.63	0.13	1.7	A	662	993
B - A41 East	0.96	0.66	17.5	E	1389	2084
C - Gravenhill Road North	1.63	12.69	133.0	F	560	840
D - A41 West	1.13	3.53	110.1	F	1495	2243
E - B4100 London Road	0.65	0.20	1.9	B	485	727

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Seelshield Way	543	136	1142	1463	0.371	541	882	0.0	0.6	0.066	A
B - A41 East	1140	285	593	1882	0.606	1134	1090	0.0	1.6	0.082	A
C - Gravenhill Road North	459	115	1482	736	0.624	453	245	0.0	1.6	0.211	B
D - A41 West	1227	307	774	1720	0.713	1217	1160	0.0	2.5	0.120	A
E - B4100 London Road	398	99	1628	1153	0.345	395	363	0.0	0.5	0.083	A

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 (min)	LOS
A - Seelshield Way	649	162	1357	1341	0.484	647	1048	0.6	0.9	0.088	A
B - A41 East	1361	340	709	1814	0.750	1355	1295	1.6	3.0	0.133	A
C - Gravenhill Road North	549	137	1772	599	0.916	528	292	1.6	6.9	0.710	E
D - A41 West	1465	366	918	1639	0.894	1445	1381	2.5	7.3	0.293	C
E - B4100 London Road	475	119	1932	985	0.482	473	432	0.5	1.0	0.122	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 (min)	LOS
A - Seelshield Way	794	199	1503	1257	0.632	791	1157	0.9	1.7	0.131	A
B - A41 East	1667	417	851	1730	0.964	1623	1443	3.0	14.1	0.454	D
C - Gravenhill Road North	672	168	2134	428	1.569	426	340	6.9	68.3	5.642	F
D - A41 West	1794	448	989	1598	1.122	1584	1571	7.3	59.7	1.431	F
E - B4100 London Road	581	145	2082	901	0.645	578	491	1.0	1.8	0.192	B

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 (min)	LOS
A - Seelshield Way	794	199	1508	1254	0.633	794	1165	1.7	1.7	0.133	A
B - A41 East	1667	417	855	1728	0.965	1653	1447	14.1	17.5	0.664	E
C - Gravenhill Road North	672	168	2165	413	1.626	413	343	68.3	133.0	12.694	F
D - A41 West	1794	448	996	1594	1.125	1593	1582	59.7	110.1	3.307	F
E - B4100 London Road	581	145	2092	896	0.649	581	496	1.8	1.9	0.199	B

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 (min)	LOS
A - Seelshield Way	649	162	1459	1282	0.506	651	1122	1.7	1.1	0.097	A
B - A41 East	1361	340	725	1804	0.754	1418	1385	17.5	3.3	0.182	B
C - Gravenhill Road North	549	137	1835	569	0.964	565	308	133.0	128.9	12.505	F
D - A41 West	1465	366	967	1611	0.909	1596	1433	110.1	77.2	3.534	F
E - B4100 London Road	475	119	2103	890	0.534	477	460	1.9	1.2	0.153	A

18:00 - 18:15

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 (min)	LOS
A - Seelshield Way	543	136	1384	1325	0.410	545	1052	1.1	0.7	0.079	A
B - A41 East	1140	285	622	1865	0.611	1147	1307	3.3	1.6	0.087	A
C - Gravenhill Road North	459	115	1497	729	0.630	723	271	128.9	63.0	8.001	F
D - A41 West	1227	307	926	1634	0.751	1522	1294	77.2	3.5	1.232	F
E - B4100 London Road	398	99	2037	926	0.429	399	411	1.2	0.8	0.119	A

(Default Analysis Set) - BASELINE 2026+DEV 180, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	(untitled)	Standard Roundabout	A, B, C, D, E	0.34	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	BASELINE 2026+DEV 180	AM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV+180 DEV	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Seelshield Way		ONE HOUR	✓	630	100.000
B - A41 East		ONE HOUR	✓	1103	100.000
C - Gravenhill Road North		ONE HOUR	✓	533	100.000
D - A41 West		ONE HOUR	✓	1621	100.000
E - B4100 London Road		ONE HOUR	✓	251	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Seelshield Way	B - A41 East	C - Gravenhill Road North	D - A41 West	E - B4100 London Road
From	A - Seelshield Way	0	91	149	380	9
	B - A41 East	26	0	97	901	78
	C - Gravenhill Road North	172	88	0	248	25
	D - A41 West	306	935	216	0	164
	E - B4100 London Road	38	70	37	106	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Seelshield Way	B - A41 East	C - Gravenhill Road North	D - A41 West	E - B4100 London Road
From	A - Seelshield Way	0	0	7	0	0
	B - A41 East	0	0	0	6	4
	C - Gravenhill Road North	1	0	0	14	9
	D - A41 West	0	8	0	0	16
	E - B4100 London Road	0	2	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Seelshield Way	0.58	0.12	1.4	A	578	867
B - A41 East	0.74	0.14	2.9	A	1012	1518
C - Gravenhill Road North	0.89	0.80	7.3	E	489	733
D - A41 West	0.93	0.44	12.2	D	1487	2231
E - B4100 London Road	0.28	0.08	0.4	A	230	346

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Seelshield Way	474	119	1087	1494	0.317	473	406	0.0	0.5	0.060	A
B - A41 East	830	208	673	1835	0.453	827	886	0.0	0.9	0.062	A
C - Gravenhill Road North	401	100	1126	904	0.444	398	375	0.0	0.8	0.126	A
D - A41 West	1220	305	298	1991	0.613	1214	1226	0.0	1.7	0.081	A
E - B4100 London Road	189	47	1305	1332	0.142	188	207	0.0	0.2	0.053	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Seelshield Way	567	142	1300	1373	0.413	566	486	0.5	0.7	0.075	A
B - A41 East	992	248	806	1757	0.564	990	1060	0.9	1.3	0.082	A
C - Gravenhill Road North	479	120	1347	800	0.599	476	448	0.8	1.5	0.196	B
D - A41 West	1457	364	357	1958	0.744	1452	1467	1.7	3.0	0.124	A
E - B4100 London Road	226	56	1561	1190	0.190	225	247	0.2	0.2	0.063	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 (min)	LOS
A - Seelshield Way	694	173	1572	1218	0.570	691	586	0.7	1.3	0.115	A
B - A41 East	1214	304	982	1653	0.735	1209	1281	1.3	2.8	0.140	A
C - Gravenhill Road North	587	147	1646	659	0.891	568	545	1.5	6.2	0.612	E
D - A41 West	1784	446	428	1917	0.931	1754	1786	3.0	10.6	0.340	C
E - B4100 London Road	276	69	1883	1012	0.273	276	299	0.2	0.4	0.083	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 (min)	LOS
A - Seelshield Way	694	173	1593	1206	0.575	694	596	1.3	1.4	0.119	A
B - A41 East	1214	304	988	1650	0.736	1214	1298	2.8	2.9	0.145	A
C - Gravenhill Road North	587	147	1653	655	0.895	582	549	6.2	7.3	0.799	E
D - A41 West	1784	446	436	1912	0.933	1778	1799	10.6	12.2	0.437	D
E - B4100 London Road	276	69	1912	996	0.278	276	303	0.4	0.4	0.085	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 (min)	LOS
A - Seelshield Way	567	142	1334	1353	0.419	569	503	1.4	0.7	0.078	A
B - A41 East	992	248	815	1752	0.566	998	1089	2.9	1.4	0.084	A
C - Gravenhill Road North	479	120	1357	795	0.602	501	455	7.3	1.7	0.234	B
D - A41 West	1457	364	371	1950	0.747	1493	1487	12.2	3.2	0.150	A
E - B4100 London Road	226	56	1610	1163	0.194	226	253	0.4	0.2	0.065	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Seelshield Way	474	119	1098	1488	0.319	476	411	0.7	0.5	0.060	A
B - A41 East	830	208	678	1832	0.453	832	895	1.4	0.9	0.063	A
C - Gravenhill Road North	401	100	1133	901	0.445	404	378	1.7	0.9	0.130	A
D - A41 West	1220	305	302	1989	0.614	1226	1235	3.2	1.7	0.084	A
E - B4100 London Road	189	47	1320	1324	0.143	189	209	0.2	0.2	0.054	A

(Default Analysis Set) - BASELINE 2026+DEV 180, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	(untitled)	Standard Roundabout	A, B, C, D, E	0.96	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	BASELINE 2026+DEV 180	PM	SATURN WITH DEV TURNING FLOWS 2026-300 DEV+180 DEV	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 (PCU/hr)	Scaling Factor (%)
A - Seelshield Way		ONE HOUR	✓	550	100.000
B - A41 East		ONE HOUR	✓	1468	100.000
C - Gravenhill Road North		ONE HOUR	✓	364	100.000
D - A41 West		ONE HOUR	✓	1755	100.000
E - B4100 London Road		ONE HOUR	✓	444	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Seelshield Way	B - A41 East	C - Gravenhill Road North	D - A41 West	E - B4100 London Road
From	A - Seelshield Way	0	34	147	362	7
	B - A41 East	148	0	177	1028	115
	C - Gravenhill Road North	114	49	0	179	21
	D - A41 West	490	851	252	0	162
	E - B4100 London Road	104	125	24	191	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Seelshield Way	B - A41 East	C - Gravenhill Road North	D - A41 West	E - B4100 London Road
From	A - Seelshield Way	0	6	0	0	0
	B - A41 East	0	0	0	3	1
	C - Gravenhill Road North	2	0	0	0	10
	D - A41 West	0	5	0	0	0
	E - B4100 London Road	0	2	9	11	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Seelshield Way	0.50	0.10	1.0	A	505	757
B - A41 East	1.01	1.17	32.4	F	1347	2021
C - Gravenhill Road North	0.82	0.63	3.9	E	334	501
D - A41 West	1.03	1.34	46.0	F	1610	2415
E - B4100 London Road	0.52	0.14	1.1	A	407	611

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Seelshield Way	414	104	1117	1477	0.280	413	641	0.0	0.4	0.056	A
B - A41 East	1105	276	737	1797	0.615	1099	792	0.0	1.6	0.087	A
C - Gravenhill Road North	274	68	1386	781	0.350	272	449	0.0	0.5	0.119	A
D - A41 West	1321	330	340	1967	0.672	1313	1318	0.0	2.1	0.093	A
E - B4100 London Road	334	84	1425	1266	0.264	333	228	0.0	0.4	0.068	A

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 (min)	LOS
A - Seelshield Way	495	124	1335	1353	0.366	494	766	0.4	0.6	0.070	A
B - A41 East	1320	330	882	1712	0.771	1313	947	1.6	3.3	0.151	A
C - Gravenhill Road North	327	82	1657	653	0.501	325	537	0.5	1.0	0.184	B
D - A41 West	1578	394	406	1929	0.818	1568	1576	2.1	4.3	0.166	A
E - B4100 London Road	399	100	1702	1112	0.359	398	273	0.4	0.6	0.089	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 (min)	LOS
A - Seelshield Way	606	151	1578	1214	0.499	604	904	0.6	1.0	0.098	A
B - A41 East	1616	404	1066	1604	1.008	1542	1116	3.3	21.8	0.656	E
C - Gravenhill Road North	400	100	1971	505	0.793	391	637	1.0	3.3	0.497	D
D - A41 West	1932	483	482	1886	1.024	1834	1880	4.3	28.8	0.701	E
E - B4100 London Road	489	122	1996	949	0.515	487	320	0.6	1.1	0.136	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 (min)	LOS
A - Seelshield Way	606	151	1599	1202	0.504	606	918	1.0	1.0	0.101	A
B - A41 East	1616	404	1073	1600	1.010	1574	1132	21.8	32.4	1.173	F
C - Gravenhill Road North	400	100	2001	491	0.815	398	646	3.3	3.9	0.626	E
D - A41 West	1932	483	491	1881	1.027	1864	1907	28.8	46.0	1.337	F
E - B4100 London Road	489	122	2029	931	0.525	488	326	1.1	1.1	0.143	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 (min)	LOS
A - Seelshield Way	495	124	1446	1290	0.384	496	830	1.0	0.6	0.076	A
B - A41 East	1320	330	910	1696	0.778	1434	1033	32.4	3.8	0.333	C
C - Gravenhill Road North	327	82	1767	602	0.543	338	577	3.9	1.2	0.239	B
D - A41 West	1578	394	434	1913	0.824	1740	1670	46.0	5.3	0.575	D
E - B4100 London Road	399	100	1876	1016	0.393	401	299	1.1	0.7	0.103	A

18:00 - 18:15

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 (min)	LOS
A - Seelshield Way	414	104	1133	1468	0.282	415	650	0.6	0.4	0.057	A
B - A41 East	1105	276	744	1793	0.616	1114	804	3.8	1.7	0.091	A
C - Gravenhill Road North	274	68	1402	774	0.354	277	455	1.2	0.6	0.123	A
D - A41 West	1321	330	345	1964	0.673	1334	1334	5.3	2.1	0.099	A
E - B4100 London Road	334	84	1447	1253	0.267	335	232	0.7	0.4	0.069	A

(Default Analysis Set) - BASELINE 2021+DEV 300, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	(untitled)	Standard Roundabout	A, B, C, D, E	0.20	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	BASELINE 2021+DEV 300	AM	SATURN WITH DEV TURNING FLOWS 2021	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Seelshield Way		ONE HOUR	✓	757	100.000
B - A41 East		ONE HOUR	✓	1238	100.000
C - Gravenhill Road North		ONE HOUR	✓	293	100.000
D - A41 West		ONE HOUR	✓	1443	100.000
E - B4100 London Road		ONE HOUR	✓	363	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Seelshield Way	B - A41 East	C - Gravenhill Road North	D - A41 West	E - B4100 London Road
From	A - Seelshield Way	0	297	100	343	17
	B - A41 East	206	0	37	804	191
	C - Gravenhill Road North	58	43	0	162	30
	D - A41 West	252	942	115	0	135
	E - B4100 London Road	28	207	39	89	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Seelshield Way	B - A41 East	C - Gravenhill Road North	D - A41 West	E - B4100 London Road
From	A - Seelshield Way	0	8	10	0	0
	B - A41 East	9	0	0	7	3
	C - Gravenhill Road North	1	0	0	22	7
	D - A41 West	0	8	0	0	19
	E - B4100 London Road	0	1	5	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Seelshield Way	0.69	0.16	2.2	A	694	1041
B - A41 East	0.77	0.15	3.4	A	1136	1704
C - Gravenhill Road North	0.56	0.26	1.4	C	269	403
D - A41 West	0.87	0.27	6.9	C	1324	1986
E - B4100 London Road	0.37	0.09	0.6	A	333	500

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Seelshield Way	570	142	1075	1501	0.379	567	408	0.0	0.6	0.067	A
B - A41 East	932	233	527	1921	0.485	928	1115	0.0	1.0	0.064	A
C - Gravenhill Road North	220	55	1237	852	0.259	219	218	0.0	0.4	0.106	A
D - A41 West	1086	272	408	1929	0.563	1081	1048	0.0	1.4	0.075	A
E - B4100 London Road	273	68	1210	1385	0.197	272	279	0.0	0.2	0.054	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Seelshield Way	680	170	1286	1381	0.493	679	488	0.6	1.0	0.089	A
B - A41 East	1113	278	630	1860	0.598	1111	1334	1.0	1.6	0.085	A
C - Gravenhill Road North	263	66	1480	737	0.357	262	261	0.4	0.6	0.141	A
D - A41 West	1297	324	488	1883	0.689	1294	1254	1.4	2.3	0.108	A
E - B4100 London Road	327	82	1448	1253	0.261	326	334	0.2	0.4	0.065	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 (min)	LOS
A - Seelshield Way	833	208	1566	1222	0.682	828	595	1.0	2.2	0.157	A
B - A41 East	1363	341	769	1778	0.766	1356	1625	1.6	3.4	0.149	A
C - Gravenhill Road North	322	81	1807	582	0.553	319	318	0.6	1.3	0.253	C
D - A41 West	1589	397	596	1822	0.872	1572	1531	2.3	6.5	0.242	B
E - B4100 London Road	400	100	1761	1079	0.371	399	407	0.4	0.6	0.089	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 (min)	LOS
A - Seelshield Way	833	208	1578	1215	0.686	833	599	2.2	2.2	0.164	A
B - A41 East	1363	341	773	1776	0.767	1363	1637	3.4	3.4	0.154	A
C - Gravenhill Road North	322	81	1816	578	0.557	322	320	1.3	1.4	0.262	C
D - A41 West	1589	397	599	1820	0.873	1587	1539	6.5	6.9	0.271	C
E - B4100 London Road	400	100	1777	1071	0.374	400	410	0.6	0.6	0.090	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 (min)	LOS
A - Seelshield Way	680	170	1304	1371	0.496	685	494	2.2	1.0	0.092	A
B - A41 East	1113	278	636	1857	0.599	1120	1352	3.4	1.6	0.088	A
C - Gravenhill Road North	263	66	1493	731	0.360	266	264	1.4	0.6	0.146	A
D - A41 West	1297	324	493	1880	0.690	1315	1266	6.9	2.4	0.117	A
E - B4100 London Road	327	82	1470	1240	0.263	327	338	0.6	0.4	0.067	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Seelshield Way	570	142	1083	1496	0.381	571	411	1.0	0.6	0.068	A
B - A41 East	932	233	530	1919	0.486	934	1124	1.6	1.0	0.065	A
C - Gravenhill Road North	220	55	1245	848	0.260	221	220	0.6	0.4	0.108	A
D - A41 West	1086	272	411	1927	0.564	1091	1055	2.4	1.4	0.077	A
E - B4100 London Road	273	68	1221	1379	0.198	274	281	0.4	0.3	0.055	A

(Default Analysis Set) - BASELINE 2021+DEV 300, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	(untitled)	Standard Roundabout	A, B, C, D, E	3.17	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	BASELINE 2021+DEV 300	PM	SATURN WITH DEV TURNING FLOWS 2021	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 (PCU/hr)	Scaling Factor (%)
A - Seelshield Way		ONE HOUR	✓	730	100.000
B - A41 East		ONE HOUR	✓	1524	100.000
C - Gravenhill Road North		ONE HOUR	✓	611	100.000
D - A41 West		ONE HOUR	✓	1643	100.000
E - B4100 London Road		ONE HOUR	✓	534	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Seelshield Way	B - A41 East	C - Gravenhill Road North	D - A41 West	E - B4100 London Road
From	A - Seelshield Way	0	257	90	367	16
	B - A41 East	410	0	73	749	292
	C - Gravenhill Road North	161	126	0	281	44
	D - A41 West	515	848	134	0	146
	E - B4100 London Road	107	232	31	164	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Seelshield Way	B - A41 East	C - Gravenhill Road North	D - A41 West	E - B4100 London Road
From	A - Seelshield Way	0	6	0	0	0
	B - A41 East	1	0	0	5	0
	C - Gravenhill Road North	3	0	0	1	5
	D - A41 West	0	5	0	0	0
	E - B4100 London Road	0	1	7	13	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Seelshield Way	0.64	0.13	1.8	A	670	1004
B - A41 East	0.97	0.74	19.8	E	1398	2097
C - Gravenhill Road North	1.66	13.35	137.9	F	561	841
D - A41 West	1.14	3.95	119.0	F	1508	2262
E - B4100 London Road	0.65	0.20	1.9	B	490	736

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Seelshield Way	549	137	1146	1461	0.376	547	891	0.0	0.6	0.067	A
B - A41 East	1147	287	600	1878	0.611	1141	1093	0.0	1.6	0.083	A
C - Gravenhill Road North	460	115	1496	730	0.631	454	245	0.0	1.7	0.216	B
D - A41 West	1237	309	782	1716	0.721	1227	1167	0.0	2.6	0.123	A
E - B4100 London Road	402	101	1637	1148	0.350	400	372	0.0	0.6	0.084	A

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 (min)	LOS
A - Seelshield Way	656	164	1361	1338	0.490	654	1058	0.6	1.0	0.089	A
B - A41 East	1370	342	717	1809	0.757	1364	1299	1.6	3.1	0.136	A
C - Gravenhill Road North	550	137	1788	591	0.929	526	292	1.7	7.5	0.760	E
D - A41 West	1477	369	926	1634	0.904	1456	1388	2.6	7.9	0.313	C
E - B4100 London Road	480	120	1940	980	0.490	479	442	0.6	1.0	0.125	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 (min)	LOS
A - Seelshield Way	803	201	1500	1259	0.638	800	1162	1.0	1.8	0.133	A
B - A41 East	1677	419	860	1725	0.972	1628	1440	3.1	15.5	0.487	D
C - Gravenhill Road North	673	168	2149	421	1.599	419	339	7.5	70.9	5.973	F
D - A41 West	1809	452	994	1596	1.134	1583	1575	7.9	64.3	1.528	F
E - B4100 London Road	588	147	2077	904	0.651	585	500	1.0	1.9	0.194	B

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 (min)	LOS
A - Seelshield Way	803	201	1504	1257	0.639	803	1170	1.8	1.8	0.135	A
B - A41 East	1677	419	864	1723	0.974	1660	1443	15.5	19.8	0.739	E
C - Gravenhill Road North	673	168	2182	405	1.661	405	342	70.9	137.9	13.349	F
D - A41 West	1809	452	1001	1592	1.137	1590	1587	64.3	119.0	3.563	F
E - B4100 London Road	588	147	2085	900	0.654	588	506	1.9	1.9	0.201	B

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 (min)	LOS
A - Seelshield Way	656	164	1452	1286	0.510	659	1129	1.8	1.1	0.098	A
B - A41 East	1370	342	732	1800	0.761	1435	1379	19.8	3.4	0.198	B
C - Gravenhill Road North	550	137	1860	557	0.986	557	307	137.9	135.9	13.216	F
D - A41 West	1477	369	976	1606	0.920	1592	1441	119.0	90.3	3.951	F
E - B4100 London Road	480	120	2098	893	0.538	483	470	1.9	1.2	0.154	A

18:00 - 18:15

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 (min)	LOS
A - Seelshield Way	549	137	1416	1307	0.420	551	1076	1.1	0.7	0.081	A
B - A41 East	1147	287	632	1859	0.617	1154	1334	3.4	1.7	0.088	A
C - Gravenhill Road North	460	115	1511	722	0.637	717	275	135.9	71.7	8.727	F
D - A41 West	1237	309	930	1632	0.758	1582	1298	90.3	4.0	1.710	F
E - B4100 London Road	402	101	2088	898	0.448	404	425	1.2	0.9	0.127	A

(Default Analysis Set) - BASELINE 2026+DEV 300 , AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	(untitled)	Standard Roundabout	A, B, C, D, E	0.35	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	BASELINE 2026+DEV 300	AM	SATURN WITH DEV TURNING FLOWS 2026	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Seelshield Way		ONE HOUR	✓	638	100.000
B - A41 East		ONE HOUR	✓	1103	100.000
C - Gravenhill Road North		ONE HOUR	✓	533	100.000
D - A41 West		ONE HOUR	✓	1631	100.000
E - B4100 London Road		ONE HOUR	✓	259	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Seelshield Way	B - A41 East	C - Gravenhill Road North	D - A41 West	E - B4100 London Road
From	A - Seelshield Way	0	91	150	387	9
	B - A41 East	26	0	97	901	78
	C - Gravenhill Road North	172	88	0	248	25
	D - A41 West	312	935	216	0	168
	E - B4100 London Road	38	70	38	113	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Seelshield Way	B - A41 East	C - Gravenhill Road North	D - A41 West	E - B4100 London Road
From	A - Seelshield Way	0	0	7	0	0
	B - A41 East	0	0	0	6	4
	C - Gravenhill Road North	1	0	0	14	9
	D - A41 West	0	8	0	0	16
	E - B4100 London Road	0	2	6	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Seelshield Way	0.58	0.12	1.4	A	585	878
B - A41 East	0.74	0.15	2.9	A	1012	1518
C - Gravenhill Road North	0.90	0.86	7.8	F	489	733
D - A41 West	0.94	0.46	13.0	D	1496	2244
E - B4100 London Road	0.29	0.09	0.4	A	238	356

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Seelshield Way	480	120	1092	1491	0.322	478	411	0.0	0.5	0.060	A
B - A41 East	830	208	685	1828	0.454	827	886	0.0	0.9	0.063	A
C - Gravenhill Road North	401	100	1136	900	0.446	398	376	0.0	0.8	0.127	A
D - A41 West	1228	307	298	1991	0.617	1221	1236	0.0	1.7	0.082	A
E - B4100 London Road	195	49	1309	1330	0.147	194	210	0.0	0.2	0.054	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Seelshield Way	573	143	1307	1369	0.419	572	492	0.5	0.7	0.076	A
B - A41 East	992	248	819	1749	0.567	990	1060	0.9	1.4	0.083	A
C - Gravenhill Road North	479	120	1359	794	0.603	476	450	0.8	1.6	0.200	B
D - A41 West	1466	366	356	1958	0.749	1460	1479	1.7	3.1	0.126	A
E - B4100 London Road	233	58	1566	1187	0.196	232	251	0.2	0.2	0.064	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 (min)	LOS
A - Seelshield Way	702	175	1580	1214	0.578	699	592	0.7	1.4	0.118	A
B - A41 East	1214	304	999	1643	0.739	1208	1280	1.4	2.9	0.143	A
C - Gravenhill Road North	587	147	1660	652	0.900	566	547	1.6	6.6	0.642	E
D - A41 West	1795	449	427	1917	0.936	1763	1800	3.1	11.2	0.354	C
E - B4100 London Road	285	71	1887	1010	0.282	284	303	0.2	0.4	0.084	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 (min)	LOS
A - Seelshield Way	702	175	1600	1202	0.584	702	602	1.4	1.4	0.122	A
B - A41 East	1214	304	1004	1640	0.740	1214	1298	2.9	2.9	0.148	A
C - Gravenhill Road North	587	147	1668	648	0.905	582	551	6.6	7.8	0.859	F
D - A41 West	1795	449	436	1912	0.939	1788	1813	11.2	13.0	0.464	D
E - B4100 London Road	285	71	1917	993	0.287	285	307	0.4	0.4	0.086	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 (min)	LOS
A - Seelshield Way	573	143	1343	1348	0.425	576	509	1.4	0.8	0.079	A
B - A41 East	992	248	829	1743	0.569	998	1090	2.9	1.4	0.085	A
C - Gravenhill Road North	479	120	1369	789	0.607	503	457	7.8	1.7	0.242	B
D - A41 West	1466	366	372	1949	0.752	1505	1501	13.0	3.3	0.155	A
E - B4100 London Road	233	58	1619	1158	0.201	233	257	0.4	0.3	0.066	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Seelshield Way	480	120	1104	1485	0.323	481	416	0.8	0.5	0.061	A
B - A41 East	830	208	690	1825	0.455	832	895	1.4	0.9	0.064	A
C - Gravenhill Road North	401	100	1143	896	0.448	404	379	1.7	0.9	0.131	A
D - A41 West	1228	307	302	1989	0.617	1234	1246	3.3	1.7	0.085	A
E - B4100 London Road	195	49	1324	1321	0.148	195	212	0.3	0.2	0.054	A

(Default Analysis Set) - BASELINE 2026+DEV 300, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (min)	Junction LOS
1	(untitled)	Standard Roundabout	A, B, C, D, E	1.03	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Description	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	BASELINE 2026+DEV 300	PM	SATURN WITH DEV TURNING FLOWS 2026	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 (PCU/hr)	Scaling Factor (%)
A - Seelshield Way		ONE HOUR	✓	557	100.000
B - A41 East		ONE HOUR	✓	1468	100.000
C - Gravenhill Road North		ONE HOUR	✓	365	100.000
D - A41 West		ONE HOUR	✓	1768	100.000
E - B4100 London Road		ONE HOUR	✓	449	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A - Seelshield Way	B - A41 East	C - Gravenhill Road North	D - A41 West	E - B4100 London Road
From	A - Seelshield Way	0	34	148	367	7
	B - A41 East	148	0	177	1028	115
	C - Gravenhill Road North	115	49	0	179	22
	D - A41 West	497	851	252	0	168
	E - B4100 London Road	104	125	25	196	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		A - Seelshield Way	B - A41 East	C - Gravenhill Road North	D - A41 West	E - B4100 London Road
From	A - Seelshield Way	0	6	0	0	0
	B - A41 East	0	0	0	3	1
	C - Gravenhill Road North	2	0	0	0	10
	D - A41 West	0	5	0	0	0
	E - B4100 London Road	0	2	9	11	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (min)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Seelshield Way	0.51	0.10	1.0	A	511	766
B - A41 East	1.01	1.23	34.4	F	1347	2021
C - Gravenhill Road North	0.82	0.65	4.1	E	335	502
D - A41 West	1.03	1.46	51.3	F	1622	2433
E - B4100 London Road	0.53	0.14	1.2	A	412	618

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (min)	LOS
A - Seelshield Way	419	105	1121	1475	0.284	417	646	0.0	0.4	0.057	A
B - A41 East	1105	276	746	1792	0.617	1099	792	0.0	1.6	0.088	A
C - Gravenhill Road North	275	69	1394	778	0.353	272	451	0.0	0.5	0.120	A
D - A41 West	1331	333	340	1967	0.677	1323	1326	0.0	2.1	0.094	A
E - B4100 London Road	338	85	1430	1263	0.268	337	233	0.0	0.4	0.068	A

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 (min)	LOS
A - Seelshield Way	500	125	1339	1351	0.370	500	772	0.4	0.6	0.071	A
B - A41 East	1320	330	892	1706	0.773	1313	947	1.6	3.3	0.153	A
C - Gravenhill Road North	328	82	1666	649	0.505	326	539	0.5	1.0	0.187	B
D - A41 West	1589	397	407	1929	0.824	1580	1585	2.1	4.5	0.171	B
E - B4100 London Road	404	101	1708	1109	0.364	403	279	0.4	0.6	0.090	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 (min)	LOS
A - Seelshield Way	613	153	1579	1214	0.505	611	909	0.6	1.0	0.100	A
B - A41 East	1616	404	1078	1597	1.012	1539	1112	3.3	22.7	0.679	E
C - Gravenhill Road North	401	100	1979	501	0.801	392	638	1.0	3.5	0.514	D
D - A41 West	1947	487	482	1886	1.032	1839	1888	4.5	31.3	0.744	E
E - B4100 London Road	495	124	1995	949	0.521	493	326	0.6	1.1	0.138	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 (min)	LOS
A - Seelshield Way	613	153	1598	1203	0.509	613	923	1.0	1.0	0.102	A
B - A41 East	1616	404	1084	1593	1.014	1570	1127	22.7	34.4	1.233	F
C - Gravenhill Road North	401	100	2008	488	0.823	399	646	3.5	4.1	0.654	E
D - A41 West	1947	487	492	1881	1.035	1867	1915	31.3	51.3	1.460	F
E - B4100 London Road	495	124	2027	932	0.531	494	332	1.1	1.2	0.145	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 (min)	LOS
A - Seelshield Way	500	125	1463	1280	0.391	502	844	1.0	0.6	0.078	A
B - A41 East	1320	330	923	1688	0.782	1442	1042	34.4	3.9	0.366	C
C - Gravenhill Road North	328	82	1782	594	0.552	339	582	4.1	1.3	0.248	B
D - A41 West	1589	397	437	1912	0.831	1771	1684	51.3	5.7	0.713	E
E - B4100 London Road	404	101	1901	1002	0.403	406	308	1.2	0.7	0.107	A

18:00 - 18:15

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 (min)	LOS
A - Seelshield Way	419	105	1138	1465	0.286	420	656	0.6	0.4	0.058	A
B - A41 East	1105	276	753	1788	0.618	1114	805	3.9	1.7	0.092	A
C - Gravenhill Road North	275	69	1410	770	0.357	277	457	1.3	0.6	0.124	A
D - A41 West	1331	333	346	1964	0.678	1345	1342	5.7	2.2	0.101	A
E - B4100 London Road	338	85	1454	1249	0.271	340	237	0.7	0.4	0.070	A

APPENDIX E –
GRAVEN HILL DEVELOPMENT IMPROVEMENTS TO A41 / A4421 ROUNDABOUT

N

Sports Field

Site Access

Key

Proposed Scheme

0 m 50 m

Scale 1:1000 @ A3

Defence Infrastructure Organisation

Redevelopment of MOD Bicester
Transport Assessment

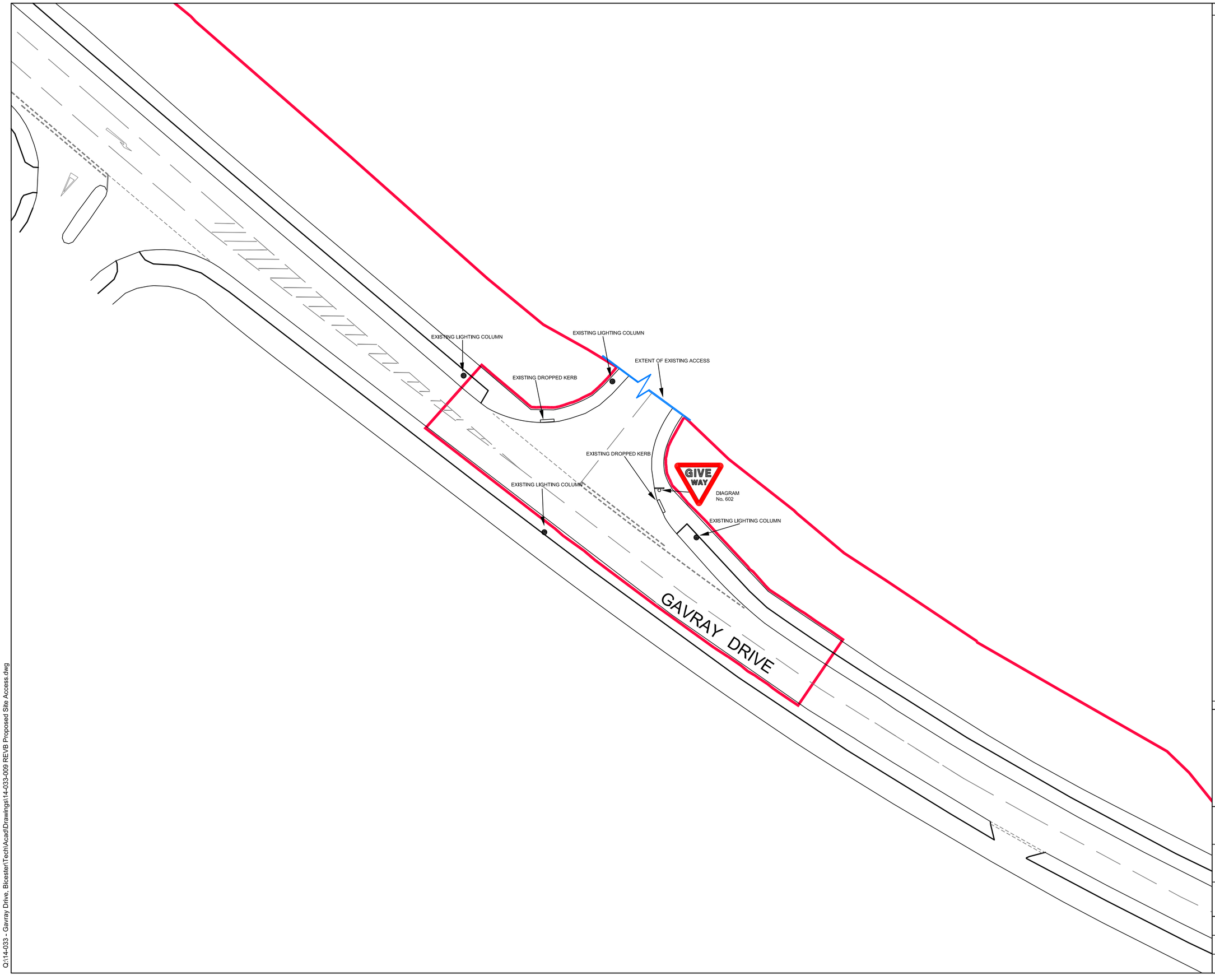
Figure 11.3
A41/Gravenhill Road/B4100 - Mitigation Scheme (signal)

September 2011
27808-L390.dwg yadap

amec

APPENDIX F –

PRELIMINARY LAYOUT OF S278 WORKS



NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH PLAN DRAWINGS 14-033-002 TO 005 AND CROSS SECTIONAL DRAWING 14-033-006.

Rev	Amendments	Drn	Chk	App	Date

Odyssey Markides

Elizabeth House
39 York Road
London
SE1 7NQ

Telephone: 0207 620 2444
Fax: 0207 620 1168
E: enquiries@odysseymarkides.com
W: www.odysseymarkides.com

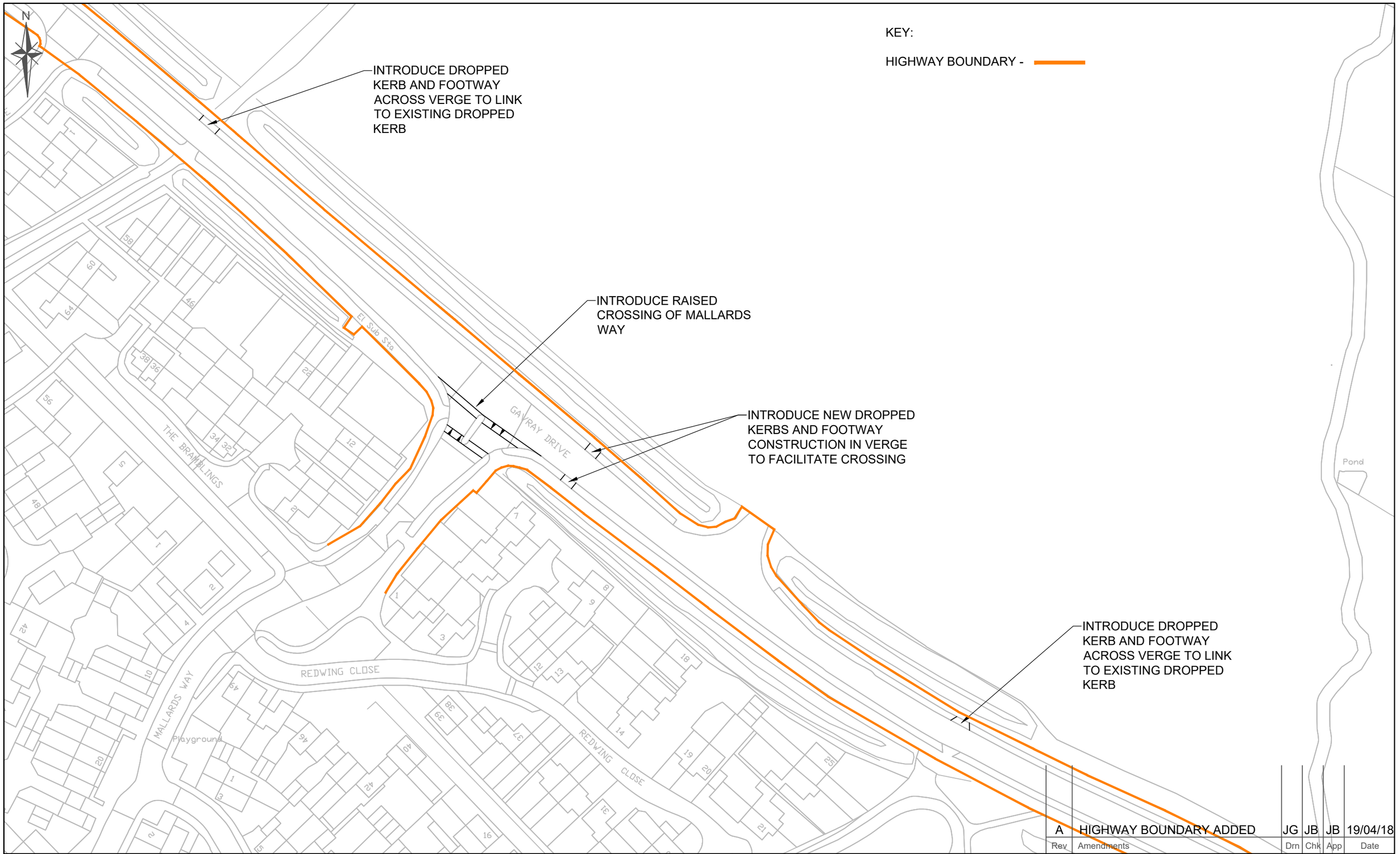
Job Title
GAVRAY DRIVE, BICESTER

Drawing Title
SITE ACCESS

Client
GALLAGHER ESTATES

Scale	Date	Designed
1:500 @ A3	27/04/2015	DCP
Drawn	Checked	Approved
DCP	AS	JB
Job No	Drawing No	Rev
14-033	14-033/009	B

Q:\14-033 - Gavray Drive, Bicester\Tech\Acad\Drawings\14-033-009 REVB Proposed Site Access.dwg



Rev	Amendments	Drn	Chk	App	Date
A	HIGHWAY BOUNDARY ADDED	JG	JB	JB	19/04/18

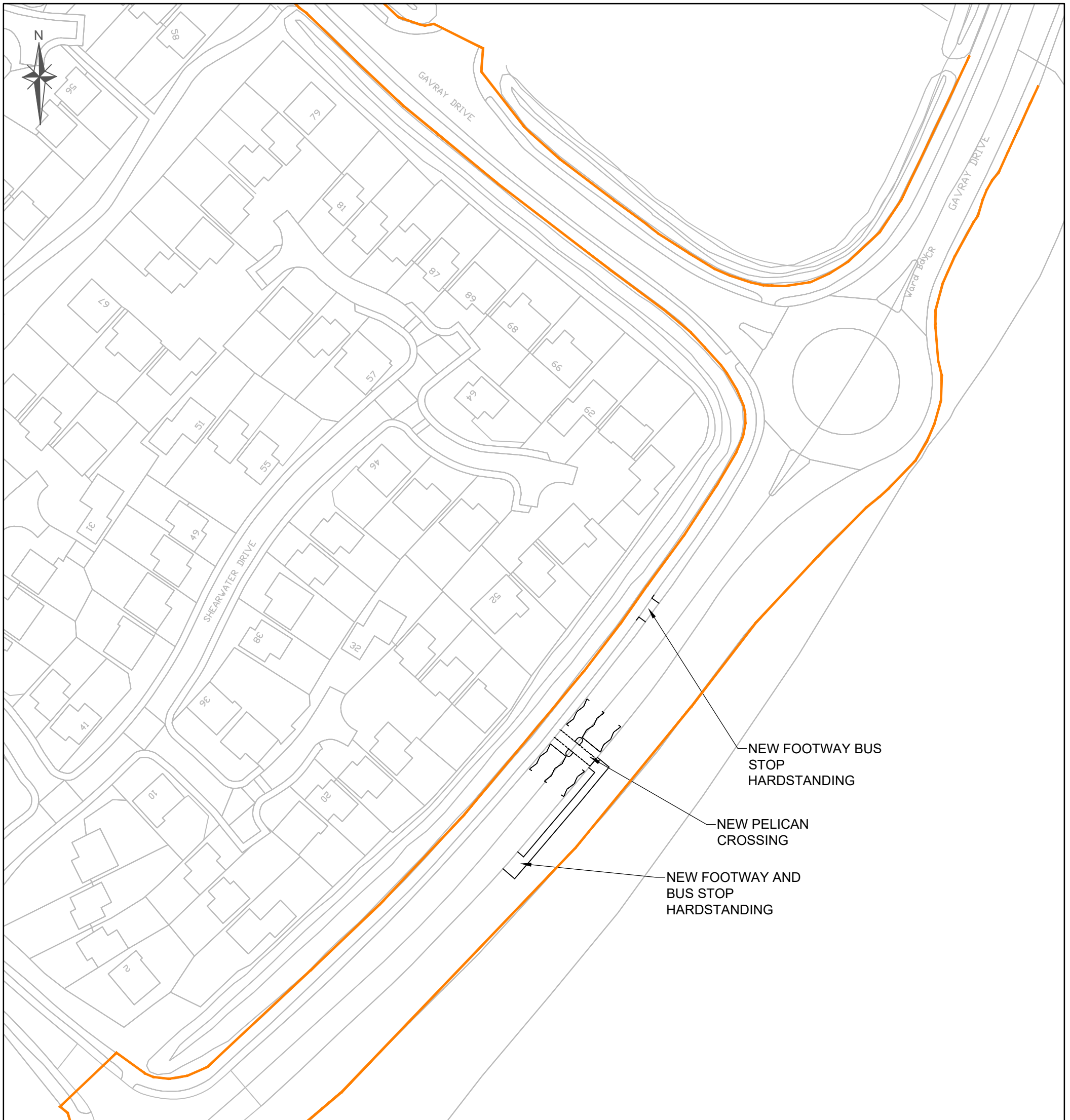
MARKIDES ASSOCIATES
9th Floor ,
The Tower Building,
York Road
London
SE1 7NX
Telephone: 0207 442 2225
E: enquiries@markidesassociates.co.uk
W: www.markidesassociates.co.uk

Job Title
LAND AT GAVARY DRIVE, BICESTER

Drawing Title
INDICATIVE SKETCH OF S278 WORKS ON GAVRAY DRIVE

Client
GALLAGHER ESTATES

Scale	Date	Designed
1:1000@A3	18.04.18	JG
Drawn	**Checked**	**Approved**
JG	JB	JB
Job No	**Drawing No**	**Rev**
17167	17167-01-SK01	A



KEY:

HIGHWAY BOUNDARY -

Rev	Amendments	Drn	Chk	App	Date
A	HIGHWAY BOUNDARY ADDED	JG	JB	JB	19/04/18

MARKIDES ASSOCIATES

9th Floor ,
The Tower Building,
York Road
London
SE1 7NX

Telephone: 0207 442 2225

E: enquiries@markidesassociates.co.uk
W: www.markidesassociates.co.uk

Job Title: LAND AT GAVRAY DRIVE, BICESTER	Scale: 1:1000@A3	Date: 18.04.18	Designed: JG	
Drawing Title: INDICATIVE SKETCH OF S278 WORKS ON WRETCHWICK WAY	Drawn: JG	Checked: JB	Approved: JB	
Client: GALLAGHER ESTATES	Job No: 17167	Drawing No: 17167-01-SK02		Rev: -