



Llay - Manual Traffic Survey, Friday 8th March 2019

Junction: B5373 / Chapel Lane / B51102

Approach: B51102 (West)

TIME	First Left to B5373 (North)								Second Left to Chapel Lane								Ahead to B51102 (East)								Right to B5373 (South)							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0730 - 0745	0	0	88	18	4	1	1	112	0	0	0	0	0	0	0	0	0	0	16	4	0	0	0	20	0	0	3	1	0	0	0	4
0745 - 0800	0	0	105	14	2	1	0	122	0	0	0	0	0	0	0	0	0	1	21	4	2	0	0	28	0	0	3	0	0	0	0	3
Hourly Total	0	0	193	32	6	2	1	234	0	0	0	0	0	0	0	0	0	1	37	8	2	0	0	48	0	0	6	1	0	0	0	7
0800 - 0815	0	0	70	15	1	1	0	87	0	0	1	0	0	0	0	1	0	0	27	3	3	0	0	33	0	0	6	1	0	0	0	7
0815 - 0830	0	0	73	6	0	2	2	83	0	0	0	0	0	0	0	0	0	0	21	0	1	1	1	24	0	0	9	0	0	0	1	10
0830 - 0845	0	0	78	12	3	1	1	95	0	0	0	0	0	0	0	0	0	0	29	6	0	1	0	36	0	0	6	2	1	0	0	9
0845 - 0900	0	0	53	9	0	1	1	64	0	0	0	0	0	0	0	0	0	0	18	1	0	0	0	19	0	0	17	0	0	0	1	18
Hourly Total	0	0	274	42	4	5	4	329	0	0	1	0	0	0	0	1	0	0	95	10	4	2	1	112	0	0	38	3	1	0	2	44
0900 - 0915	0	0	44	9	1	1	0	55	0	0	0	1	0	0	0	1	0	0	17	3	0	1	0	21	0	0	16	1	0	0	0	17
0915 - 0930	0	0	22	9	1	2	0	34	0	0	2	0	0	0	0	2	0	0	14	4	3	1	0	22	0	0	6	1	0	0	0	7
0930 - 0945	0	0	29	9	4	1	0	43	0	0	1	0	0	0	0	1	0	0	12	6	1	0	0	19	0	0	5	3	0	0	0	8
0945 - 1000	0	2	13	3	0	1	0	19	0	0	0	0	0	0	0	0	0	0	4	2	0	0	1	7	0	0	2	0	0	0	0	2
Hourly Total	0	2	108	30	6	5	0	151	0	0	3	1	0	0	0	4	0	0	47	15	4	2	1	69	0	0	29	5	0	0	0	34
Session Total	0	2	575	104	16	12	5	714	0	0	4	1	0	0	0	5	0	1	179	33	10	4	2	229	0	0	73	9	1	0	2	85
1600 - 1615	0	0	48	6	1	0	0	55	0	0	0	0	0	0	0	0	0	0	13	2	0	0	0	15	0	0	18	3	0	0	0	21
1615 - 1630	0	0	43	5	0	2	1	51	0	0	1	0	0	0	0	1	0	0	24	1	0	0	1	26	0	0	16	1	0	0	0	17
1630 - 1645	0	1	43	9	0	2	1	56	0	0	2	0	0	0	0	2	0	0	17	2	0	0	0	19	0	0	15	0	0	0	0	15
1645 - 1700	0	0	58	9	1	0	2	70	0	0	0	0	0	0	0	0	0	0	12	3	0	1	0	16	0	0	20	1	0	0	0	21
Hourly Total	0	1	192	29	2	4	4	232	0	0	3	0	0	0	0	3	0	0	66	8	0	1	1	76	0	0	69	5	0	0	0	74
1700 - 1715	0	0	61	8	0	0	0	69	0	0	3	0	0	0	0	3	0	0	11	2	0	0	0	13	0	0	12	0	0	0	0	12
1715 - 1730	0	0	79	11	1	0	0	91	0	0	3	0	0	0	0	3	0	0	10	3	0	0	0	13	0	0	28	2	0	0	0	30
1730 - 1745	0	0	42	2	1	0	0	45	0	0	1	0	0	0	0	1	0	0	17	0	0	0	0	17	0	0	11	3	0	0	0	14
1745 - 1800	0	0	47	3	0	1	0	51	0	0	2	0	0	0	0	2	0	0	16	2	0	0	0	18	0	0	13	1	0	0	0	14
Hourly Total	0	0	229	24	2	1	0	256	0	0	9	0	0	0	0	9	0	0	54	7	0	0	0	61	0	0	64	6	0	0	0	70
1800 - 1815	0	0	55	3	0	0	0	58	0	0	2	0	0	0	0	2	0	0	16	3	0	0	0	19	0	0	12	0	1	0	0	13
1815 - 1830	0	0	34	3	0	1	0	38	0	0	2	0	0	0	0	2	0	0	12	0	0	0	0	12	0	0	17	0	0	0	0	17
Hourly Total	0	0	89	6	0	1	0	96	0	0	4	0	0	0	0	4	0	0	28	3	0	0	0	31	0	0	29	0	1	0	0	30
Session Total	0	1	510	59	4	6	4	584	0	0	16	0	0	0	0	16	0	0	148	18	0	1	1	168	0	0	162	11	1	0	0	174



Llay - Manual Traffic Survey, Saturday 9th March 2019

Junction: B5373 / Chapel Lane / B51102

Approach: B5373 (North)

TIME	First Left to Chapel Lane								Second Left to B51102 (East)								Ahead to B5373 (South)								Right to B51102 (West)								
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	
1000 - 1015	0	0	0	2	0	0	0	2	0	0	8	3	0	4	0	15	0	0	10	1	0	0	0	0	11	0	1	24	6	0	1	0	32
1015 - 1030	0	0	0	0	0	0	0	0	0	0	12	3	0	2	0	17	0	0	15	0	0	0	0	0	15	0	0	30	5	0	0	0	35
1030 - 1045	0	0	0	0	0	0	0	0	0	0	8	1	0	1	0	10	2	0	9	0	0	0	0	0	11	0	0	27	4	0	1	0	32
1045 - 1100	0	0	0	0	0	0	0	0	0	0	10	2	0	3	0	15	0	0	19	0	0	0	0	0	19	0	0	26	1	0	0	0	27
Hourly Total	0	0	0	2	0	0	0	2	0	0	38	9	0	10	0	57	2	0	53	1	0	0	0	0	56	0	1	107	16	0	2	0	126
1100 - 1115	0	0	0	0	0	0	0	0	0	0	14	4	0	1	0	19	0	0	14	4	0	0	0	0	18	0	0	30	2	0	0	0	32
1115 - 1130	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	7	0	0	8	0	0	0	0	0	8	0	0	26	5	1	1	0	33
1130 - 1145	0	0	0	0	0	0	0	0	0	0	14	1	0	1	0	16	0	0	10	3	0	0	0	0	13	0	0	31	4	0	0	0	35
1145 - 1200	0	0	0	0	0	0	0	0	0	0	10	2	0	0	0	12	0	0	13	3	0	0	0	0	16	0	0	30	3	0	0	0	33
Hourly Total	0	0	0	0	0	0	0	0	0	0	44	8	0	2	0	54	0	0	45	10	0	0	0	0	55	0	0	117	14	1	1	0	133
1200 - 1215	0	0	0	0	0	0	0	0	0	0	9	3	0	1	0	13	0	0	17	1	0	0	0	0	18	0	0	47	5	0	0	0	52
1215 - 1230	0	0	0	0	0	0	0	0	0	0	15	1	0	1	0	17	0	0	17	0	0	0	0	0	17	0	0	32	3	0	0	0	35
1230 - 1245	0	0	0	0	0	0	0	0	0	0	13	3	0	0	0	16	0	0	14	1	0	0	0	0	15	0	0	23	2	0	0	0	25
1245 - 1300	0	0	0	0	0	0	0	0	0	0	19	2	0	0	0	21	0	0	13	9	4	0	0	0	19	0	0	42	2	0	1	0	45
Hourly Total	0	0	0	0	0	0	0	0	0	0	56	9	0	2	0	67	0	0	57	6	0	0	0	0	63	0	0	144	12	0	1	0	157
1300 - 1315	0	0	1	0	0	0	0	1	0	0	15	2	0	0	0	17	0	0	8	0	0	0	0	0	8	0	0	35	2	0	0	0	37
1315 - 1330	0	0	1	0	0	1	0	2	0	0	12	3	0	1	0	16	0	0	10	0	0	0	0	0	10	0	0	26	3	0	0	0	29
1330 - 1345	0	0	2	1	0	0	0	3	0	0	12	1	1	1	0	15	0	0	10	2	0	0	0	0	12	0	0	29	3	0	0	0	32
1345 - 1400	0	0	0	0	0	0	0	0	0	1	11	2	0	0	0	14	0	0	18	0	0	0	0	0	18	0	1	26	3	0	0	0	30
Hourly Total	0	0	4	1	0	1	0	6	0	1	50	8	1	2	0	62	0	0	46	2	0	0	0	0	48	0	1	116	11	0	0	0	128
1400 - 1415	0	0	0	0	0	0	0	0	0	0	11	2	0	1	0	14	0	0	11	1	0	0	0	0	12	0	1	17	3	0	0	0	21
1415 - 1430	0	0	0	0	0	0	0	0	0	1	5	0	0	0	0	6	0	0	8	2	0	0	0	0	10	0	1	22	2	0	0	0	25
1430 - 1445	0	0	0	0	0	1	0	1	0	0	8	0	0	0	0	8	0	0	13	1	0	0	0	0	14	0	1	29	4	0	1	0	35
1445 - 1500	0	0	0	0	0	0	0	0	0	0	6	3	2	0	0	11	0	0	5	0	0	0	0	0	5	0	1	21	1	0	0	0	23
Hourly Total	0	0	0	0	0	1	0	1	0	1	30	5	2	1	0	39	0	0	37	4	0	0	0	0	41	0	4	89	10	0	1	0	104
1500 - 1515	0	0	1	0	0	0	0	1	0	0	9	0	0	0	0	9	0	0	5	0	0	0	0	0	5	0	1	26	1	0	0	0	28
1515 - 1530	0	0	0	0	0	0	0	0	0	0	7	2	0	0	0	9	0	0	7	1	0	0	0	0	8	0	0	22	0	0	0	0	22
1530 - 1545	0	0	0	0	0	0	0	0	0	0	5	2	0	0	0	7	0	0	11	6	0	0	0	0	17	0	0	25	1	0	0	0	26
1545 - 1600	0	0	0	0	1	0	0	1	0	0	12	2	0	0	0	14	0	0	15	1	0	0	0	0	16	0	0	27	2	0	0	0	29
Hourly Total	0	0	1	0	1	0	0	2	0	0	33	6	0	0	0	39	0	0	38	8	0	0	0	0	46	0	1	100	4	0	0	0	105
TOTAL	0	0	5	3	1	2	0	11	0	2	251	45	3	17	0	318	2	0	276	31	0	0	0	0	309	0	7	673	67	1	5	0	753



Play - Manual Traffic Survey, Saturday 9th March 2019

Junction: B5373 / Chapel Lane / B51102

Approach: Chapel Lane

TIME	First Left to B51102 (East)								Second Left to B5373 (South)								Right to B51102 (West)								Last Right to B5373 (North)								
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	
1000 - 1015	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	
1015 - 1030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1030 - 1045	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1045 - 1100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1	
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2	0	0	2	0	0	0	0	2	
1100 - 1115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1115 - 1130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1130 - 1145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	
1145 - 1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1	
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	1	0	0	0	0	1	
1200 - 1215	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	
1215 - 1230	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1	
1230 - 1245	0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	
1245 - 1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0	1	
Hourly Total	0	0	0	2	0	0	0	2	0	0	1	0	0	0	0	1	0	0	4	0	0	0	0	4	0	0	1	0	0	1	0	2	
1300 - 1315	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	0	0	1	
1315 - 1330	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1330 - 1345	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	
1345 - 1400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	
Hourly Total	0	0	0	1	0	0	0	1	1	0	0	1	0	0	0	2	0	0	1	1	0	0	0	2	0	0	2	0	0	0	0	2	
1400 - 1415	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	
1415 - 1430	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0	0	0	0	0	1	0	1	
1430 - 1445	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1445 - 1500	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	5	0	0	0	0	0	1	0	1	
1500 - 1515	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	
1515 - 1530	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0	1	0	
1545 - 1600	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1	0	0	0	0	0	1	0	1	
Hourly Total	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	1	0	3	0	0	0	0	4	0	0	0	0	2	0	2	0	1
TOTAL	0	0	1	4	0	0	0	5	1	0	3	1	0	0	0	5	2	0	14	3	0	0	0	19	0	0	6	0	0	4	0	10	



Llay - Manual Traffic Survey, Saturday 9th March 2019

Junction: B5373 / Chapel Lane / B51102

Approach: B51102 (East)

TIME	Left to B5373 (South)								Ahead to B51102 (West)								Right to B5373 (North)								Last Right to Chapel Lane								
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	
1000 - 1015	0	0	3	0	0	0	0	3	0	1	15	0	0	0	0	16	0	0	9	6	3	0	0	18	0	0	0	0	0	0	0	0	
1015 - 1030	0	0	1	0	0	0	0	1	0	0	6	0	0	0	0	6	3	0	14	2	1	3	0	23	0	0	0	0	0	0	0	0	
1030 - 1045	0	0	3	0	0	0	0	3	0	0	15	2	0	0	0	17	0	0	8	1	0	0	0	9	0	0	0	0	0	0	0	0	
1045 - 1100	0	0	2	0	0	0	0	2	0	0	12	1	1	0	0	14	0	0	17	1	0	1	0	19	0	0	0	0	0	0	0	0	
Hourly Total	0	0	9	0	0	0	0	9	0	1	48	3	1	0	0	53	3	0	48	10	4	4	0	69	0	0	0	0	0	0	0	0	
1100 - 1115	0	0	2	0	0	0	0	2	0	0	12	2	0	0	0	14	0	0	6	4	0	1	0	11	0	0	0	0	0	0	0	0	
1115 - 1130	0	0	2	0	0	0	0	2	0	0	16	2	0	0	0	18	0	0	11	1	1	1	0	14	0	0	0	0	0	0	0	0	
1130 - 1145	0	0	3	0	0	0	0	3	0	1	14	1	1	0	0	17	0	0	9	3	0	1	0	13	0	0	0	0	0	0	0	0	
1145 - 1200	0	0	2	0	0	0	0	2	0	0	17	2	0	0	0	19	0	0	11	3	0	2	0	16	0	0	0	0	0	0	0	0	
Hourly Total	0	0	9	0	0	0	0	9	0	1	59	7	1	0	0	68	0	0	37	11	1	5	0	54	0	0	0	0	0	0	0	0	0
1200 - 1215	0	0	4	0	0	0	0	4	0	0	12	3	0	0	0	15	0	1	19	3	0	0	0	23	0	0	0	0	0	0	0	0	
1215 - 1230	0	0	4	0	0	0	0	4	0	1	18	1	1	0	0	21	0	0	13	3	0	0	0	16	0	0	0	0	0	0	0	0	
1230 - 1245	0	0	3	0	0	0	0	3	0	0	10	4	0	0	0	14	0	0	9	3	0	0	0	12	0	0	0	0	0	0	0	0	
1245 - 1300	0	0	5	0	0	0	0	5	0	1	14	0	0	0	0	15	0	0	11	3	0	4	0	18	0	0	1	0	0	0	0	1	
Hourly Total	0	0	16	0	0	0	0	16	0	2	54	8	1	0	0	65	0	1	52	12	0	4	0	69	0	0	1	0	0	0	0	1	
1300 - 1315	0	0	6	0	0	0	0	6	0	0	12	0	0	0	0	12	0	0	12	3	1	0	0	16	0	0	0	0	0	0	0	0	
1315 - 1330	0	0	4	0	0	0	0	4	2	0	14	1	0	0	0	17	0	0	18	0	1	1	0	20	0	0	0	0	0	0	0	0	
1330 - 1345	0	0	4	0	0	0	0	4	0	0	10	0	0	0	0	10	0	0	17	1	1	0	0	19	0	0	0	0	0	0	0	0	
1345 - 1400	0	0	4	0	0	0	0	4	0	0	11	1	0	0	0	12	0	0	6	1	0	0	0	7	0	0	0	0	0	0	0	0	
Hourly Total	0	0	18	0	0	0	0	18	2	0	47	2	0	0	0	51	0	0	53	5	3	1	0	62	0	0	0	0	0	0	0	0	0
1400 - 1415	0	0	2	0	0	0	0	2	0	0	20	3	0	0	0	23	0	0	10	1	0	0	0	11	0	0	0	0	0	0	0	0	
1415 - 1430	0	0	3	0	0	0	0	3	1	0	14	1	1	0	0	17	0	0	8	3	0	1	0	12	0	0	0	0	0	0	0	0	
1430 - 1445	0	0	3	0	0	0	0	3	0	2	15	1	0	0	0	18	0	0	7	2	0	0	0	9	0	0	1	0	0	0	0	1	
1445 - 1500	0	0	2	0	0	0	0	2	0	0	12	2	0	0	0	14	0	0	10	3	0	0	0	13	0	0	0	0	0	0	0	0	
Hourly Total	0	0	10	0	0	0	0	10	1	2	61	7	1	0	0	72	0	0	35	9	0	1	0	45	0	0	1	0	0	0	0	1	
1500 - 1515	0	0	5	0	0	0	0	5	1	0	17	0	0	0	0	18	0	0	16	2	0	1	0	19	0	0	0	0	0	0	0	0	
1515 - 1530	0	0	4	0	0	0	0	4	0	0	15	1	0	0	0	16	0	0	8	1	0	1	0	10	0	0	0	0	0	0	0	0	
1530 - 1545	0	0	3	0	0	0	0	3	0	0	17	2	0	0	0	19	0	0	8	1	0	0	0	9	0	0	0	0	0	0	0	0	
1545 - 1600	0	0	6	0	0	0	0	6	0	0	7	0	0	0	0	7	0	0	15	1	0	0	0	16	0	0	0	0	0	0	0	0	
Hourly Total	0	0	18	0	0	0	0	18	1	0	56	3	0	0	0	60	0	0	47	5	0	2	0	54	0	0	0	0	0	0	0	0	0
TOTAL	0	0	80	0	0	0	0	80	4	6	325	30	4	0	0	369	3	1	272	52	8	17	0	353	0	0	2	0	0	0	0	2	



Clay - Manual Traffic Survey, Saturday 9th March 2019

Junction: B5373 / Chapel Lane / B51102

Approach: B5373 (South)

TIME	Left to B51102 (West)								Ahead to B5373 (North)								Right to Chapel Lane								Last Right to B51102 (East)								
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	
1000 - 1015	0	0	11	1	0	0	0	12	0	0	12	0	0	0	0	12	0	0	0	0	0	0	0	0	1	0	6	0	0	0	0	7	
1015 - 1030	0	0	15	1	0	0	0	16	0	0	11	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	
1030 - 1045	0	0	15	0	0	0	0	15	0	0	16	2	0	0	0	18	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	
1045 - 1100	0	0	16	0	0	0	0	16	0	1	12	0	0	0	0	13	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	
Hourly Total	0	0	57	2	0	0	0	59	0	1	51	2	0	0	0	54	0	0	0	0	0	0	0	0	1	0	15	0	0	0	0	16	
1100 - 1115	0	0	12	1	0	0	0	13	0	0	11	3	0	0	0	14	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	6	
1115 - 1130	0	0	17	1	1	0	0	19	0	0	13	1	0	0	0	14	0	0	0	0	0	0	0	0	0	5	1	0	0	0	6		
1130 - 1145	0	0	9	2	0	0	0	11	0	0	10	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	
1145 - 1200	0	0	15	2	0	0	0	17	0	0	13	0	1	0	0	14	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	
Hourly Total	0	0	53	6	1	0	0	60	0	0	47	4	1	0	0	52	0	0	0	0	0	0	0	0	0	0	20	1	0	0	0	21	
1200 - 1215	0	0	10	3	0	0	0	13	0	0	7	0	0	0	0	7	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3		
1215 - 1230	0	0	10	1	0	0	0	11	0	0	9	1	0	0	0	10	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	
1230 - 1245	0	0	12	1	0	0	0	13	0	0	12	6	0	0	0	18	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	
1245 - 1300	0	0	10	0	0	0	0	10	0	0	14	4	0	0	0	18	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	
Hourly Total	0	0	42	5	0	0	0	47	0	0	42	11	0	0	0	53	0	0	0	0	0	0	0	0	0	0	14	0	0	0	0	14	
1300 - 1315	0	0	10	2	0	0	0	12	0	0	10	3	0	0	0	13	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	
1315 - 1330	1	0	9	1	0	0	0	11	0	0	7	2	0	0	0	9	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3	
1330 - 1345	0	0	12	1	0	0	0	13	0	0	10	2	0	0	0	12	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	4	
1345 - 1400	0	0	17	0	0	0	0	17	0	0	7	0	0	0	0	7	0	0	1	0	0	0	0	0	1	0	5	0	0	0	0	5	
Hourly Total	1	0	48	4	0	0	0	53	0	0	34	7	0	0	0	41	0	0	1	0	0	0	0	1	0	0	11	2	0	0	0	13	
1400 - 1415	0	0	8	0	0	0	0	8	1	0	15	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	
1415 - 1430	0	0	11	0	0	0	0	11	0	0	8	1	0	0	0	9	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	
1430 - 1445	0	0	9	0	0	0	0	9	0	0	8	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	
1445 - 1500	0	0	5	0	0	0	0	5	0	0	5	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hourly Total	0	0	33	0	0	0	0	33	1	0	36	1	0	0	0	38	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9	
1500 - 1515	0	0	16	1	0	0	0	17	0	0	10	1	0	0	0	11	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4	
1515 - 1530	0	0	17	0	0	0	0	17	0	0	7	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	
1530 - 1545	0	0	4	0	0	0	0	4	0	0	9	1	0	0	0	10	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	
1545 - 1600	0	0	8	0	0	0	0	8	3	0	7	2	0	0	0	12	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5	
Hourly Total	0	0	45	1	0	0	0	46	3	0	33	4	0	0	0	40	0	0	1	0	0	0	0	0	1	0	0	10	1	0	0	0	11
TOTAL	1	0	278	18	1	0	0	298	4	1	243	29	1	0	0	278	0	0	2	0	0	0	0	2	1	0	79	4	0	0	0	84	



Llay - Manual Traffic Survey, Saturday 9th March 2019

Junction: B5373 / Chapel Lane / B51102

Approach: B51102 (West)

TIME	First Left to B5373 (North)								Second Left to Chapel Lane								Ahead to B51102 (East)								Right to B5373 (South)							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
1000 - 1015	0	0	25	2	0	1	0	28	0	0	0	0	0	0	0	0	0	0	18	1	0	0	0	19	0	0	12	3	0	0	0	15
1015 - 1030	0	0	26	5	0	0	0	31	0	0	1	1	0	0	0	2	0	0	14	3	0	1	0	18	0	0	10	0	0	0	0	10
1030 - 1045	0	0	33	5	0	0	0	38	0	0	0	0	0	0	0	0	0	0	18	1	1	1	0	21	0	0	14	1	0	0	0	15
1045 - 1100	0	0	40	2	0	0	0	42	0	0	1	0	0	0	0	1	0	0	21	1	0	0	0	22	0	0	9	1	0	0	0	10
Hourly Total	0	0	124	14	0	1	0	139	0	0	2	1	0	0	0	3	0	0	71	6	1	2	0	80	0	0	45	5	0	0	0	50
1100 - 1115	0	0	30	4	0	0	0	34	0	0	0	0	0	0	0	0	0	1	9	1	0	0	0	11	0	0	6	0	0	0	0	6
1115 - 1130	0	0	18	4	0	1	0	23	1	0	0	0	0	0	0	1	0	0	22	1	0	0	0	23	0	0	13	2	1	0	0	16
1130 - 1145	0	0	45	7	0	1	0	53	0	0	0	0	0	0	0	0	0	0	23	0	1	0	0	24	0	1	20	0	0	0	0	21
1145 - 1200	0	0	25	2	1	0	0	28	0	0	0	0	0	0	0	0	0	0	17	0	1	0	0	18	0	0	10	0	0	0	0	10
Hourly Total	0	0	118	17	1	2	0	138	1	0	0	0	0	0	0	1	0	1	71	2	2	0	0	76	0	1	49	2	1	0	0	53
1200 - 1215	0	0	37	3	0	1	0	41	0	0	1	0	0	0	0	1	0	0	24	3	0	0	0	27	0	0	19	0	0	0	0	19
1215 - 1230	0	0	40	2	0	0	0	42	0	0	2	0	0	0	0	2	0	0	23	1	0	0	0	24	0	0	18	2	0	0	0	20
1230 - 1245	0	0	45	1	0	0	0	46	0	0	1	0	0	0	0	1	0	0	15	1	0	0	0	16	0	0	17	0	0	0	0	17
1245 - 1300	0	0	37	3	0	0	0	40	0	0	0	0	0	0	0	0	0	1	16	2	0	0	0	19	0	0	15	2	0	0	0	17
Hourly Total	0	0	159	9	0	1	0	169	0	0	4	0	0	0	0	4	0	1	78	7	0	0	0	86	0	0	69	4	0	0	0	73
1300 - 1315	0	0	41	3	1	0	0	45	0	0	0	0	0	0	0	0	0	0	16	3	0	0	0	19	0	0	14	1	0	0	0	15
1315 - 1330	0	0	35	2	0	0	0	37	0	0	0	0	0	0	0	0	0	0	16	2	0	0	0	18	0	0	11	0	0	0	0	11
1330 - 1345	0	0	31	1	0	0	0	32	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0	25	0	0	10	0	0	0	0	10
1345 - 1400	0	1	26	3	0	0	0	30	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	15	0	0	13	0	0	0	0	13
Hourly Total	0	1	133	9	1	0	0	144	0	0	0	0	0	0	0	0	0	0	72	5	0	0	0	77	0	0	48	1	0	0	0	49
1400 - 1415	0	0	32	1	0	0	0	33	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	16	0	0	13	0	0	0	0	13
1415 - 1430	0	0	14	2	0	0	0	16	0	0	1	0	0	0	0	1	0	0	10	2	0	0	0	12	0	0	13	0	0	0	0	13
1430 - 1445	0	0	22	2	0	0	0	24	0	0	2	0	0	0	0	2	0	3	13	3	0	0	0	19	0	0	14	0	0	0	0	14
1445 - 1500	0	0	22	0	0	0	0	22	0	0	0	0	0	0	0	0	0	0	18	0	0	0	0	18	0	0	19	1	0	0	0	20
Hourly Total	0	0	90	5	0	0	0	95	0	0	3	0	0	0	0	3	0	3	57	5	0	0	0	65	0	0	59	1	0	0	0	60
1500 - 1515	1	0	27	4	0	0	0	32	0	0	1	0	0	0	0	1	0	0	13	0	0	0	0	13	0	0	13	0	0	0	0	13
1515 - 1530	0	0	22	3	0	0	0	25	0	0	1	1	0	0	0	2	0	1	10	1	0	0	0	12	0	0	10	1	0	0	0	11
1530 - 1545	0	0	21	1	0	0	0	22	0	0	0	0	0	0	0	0	0	1	11	1	0	0	0	13	0	0	9	0	0	0	0	9
1545 - 1600	0	0	33	1	0	0	0	34	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	0	0	16	0	0	0	0	16
Hourly Total	1	0	103	9	0	0	0	113	0	0	2	1	0	0	0	3	0	2	41	2	0	0	0	45	0	0	48	1	0	0	0	49
TOTAL	1	1	727	63	2	4	0	798	1	0	11	2	0	0	0	14	0	7	390	27	3	2	0	429	0	1	318	14	1	0	0	334



APPENDIX G

ALDI STORE TRIP DATA

Vehicles In and Out by Hour by Day

ALDI Bangor

Week Commencing 04/02/2019

Vehicles In

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
00:00	0	0	0	0	0	0	0
01:00	1	0	0	0	0	0	5
02:00	0	0	0	0	0	2	2
03:00	0	0	0	0	1	2	0
04:00	4	4	4	4	4	1	0
05:00	1	1	2	3	3	4	0
06:00	0	1	2	0	1	0	5
07:00	4	3	5	11	7	4	1
08:00	32	29	25	56	34	39	1
09:00	73	61	73	83	82	85	18
10:00	77	80	84	85	99	104	97
11:00	97	93	77	98	102	140	116
12:00	103	84	96	92	116	132	106
13:00	113	103	80	106	111	123	114
14:00	94	86	90	91	97	113	115
15:00	81	82	85	85	119	99	72
16:00	71	76	73	85	106	74	7
17:00	83	63	78	77	72	55	2
18:00	51	38	43	56	45	29	2
19:00	37	29	42	38	32	25	2
20:00	20	19	16	17	25	13	1
21:00	10	9	4	11	8	2	2
22:00	1	0	1	3	1	0	0
23:00	0	1	0	0	0	1	0
	953	862	880	1001	1065	1047	668

Vehicles Out

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
00:00	0	0	0	0	0	0	0
01:00	1	0	0	0	0	0	5
02:00	0	0	0	0	0	1	2
03:00	0	0	0	0	0	3	0
04:00	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0
06:00	0	1	2	0	0	0	0
07:00	1	1	0	0	2	0	0
08:00	23	19	21	28	27	25	1
09:00	50	47	54	79	54	60	2
10:00	64	68	61	67	89	94	67
11:00	97	80	86	90	102	117	100
12:00	96	91	87	109	105	138	113
13:00	122	98	84	90	112	119	113
14:00	95	99	96	113	111	125	112
15:00	87	77	84	82	114	112	109
16:00	81	85	90	101	118	90	22
17:00	88	79	83	82	90	68	5
18:00	65	43	57	73	55	45	6
19:00	45	36	43	42	43	26	3
20:00	22	22	25	27	27	14	2
21:00	12	11	5	12	13	5	5
22:00	4	4	2	5	3	4	0
23:00	0	1	0	1	0	1	1
	953	862	880	1001	1065	1047	668

Vehicles In and Out by Hour by Day

ALDI Old Colwyn

Week Commencing 04/02/2019

Vehicles In

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
00:00	0	0	0	1	0	0	0
01:00	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0
04:00	0	0	0	1	0	0	0
05:00	2	2	1	1	3	2	0
06:00	2	0	1	1	1	2	1
07:00	8	8	4	3	7	6	2
08:00	44	40	41	33	54	31	2
09:00	73	63	53	86	68	70	20
10:00	78	88	79	85	85	102	131
11:00	108	87	95	106	99	108	124
12:00	116	103	82	56	90	116	129
13:00	87	99	80	106	117	111	125
14:00	110	90	118	101	127	135	136
15:00	104	93	106	128	128	130	126
16:00	115	84	107	115	139	106	2
17:00	86	90	83	108	135	85	1
18:00	55	69	55	88	98	52	0
19:00	45	42	41	59	44	37	2
20:00	25	28	18	26	32	23	2
21:00	13	13	12	26	23	9	2
22:00	1	2	0	1	0	3	0
23:00	0	0	0	0	2	1	0
	1072	1001	976	1131	1252	1129	806

Vehicles Out

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
00:00	0	0	0	1	0	0	1
01:00	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0
05:00	0	0	0	0	1	0	0
06:00	0	0	0	0	0	1	0
07:00	3	5	0	1	2	0	1
08:00	30	29	26	22	35	23	1
09:00	67	60	59	66	61	60	5
10:00	71	69	58	90	83	84	91
11:00	90	93	93	90	91	102	133
12:00	126	95	91	82	93	103	123
13:00	87	101	75	78	108	122	129
14:00	113	94	99	106	118	129	142
15:00	110	96	122	132	126	135	145
16:00	105	89	107	119	151	129	24
17:00	106	91	94	118	140	93	5
18:00	58	71	66	88	105	59	0
19:00	49	60	46	63	73	38	2
20:00	34	27	24	39	34	32	2
21:00	16	18	14	34	27	10	2
22:00	6	4	2	2	2	8	0
23:00	0	0	0	0	2	0	0
	1071	1002	976	1131	1252	1128	807

Vehicles In and Out by Hour by Day

ALDI Prestatyn

Week Commencing 04/02/2019

Vehicles In

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
00:00	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0
03:00	0	0	0	1	0	0	0
04:00	0	0	0	0	0	0	0
05:00	1	1	1	1	2	1	0
06:00	1	0	0	1	0	1	2
07:00	0	3	2	3	4	2	1
08:00	37	34	26	37	33	35	0
09:00	69	54	40	63	70	55	19
10:00	79	67	62	78	68	92	86
11:00	78	79	74	98	86	101	89
12:00	71	64	66	71	89	109	100
13:00	61	59	62	64	93	92	90
14:00	70	76	108	90	88	82	112
15:00	102	78	88	99	100	96	72
16:00	95	85	85	74	111	80	3
17:00	84	64	82	66	102	75	1
18:00	45	49	53	68	64	56	2
19:00	41	41	37	54	35	29	1
20:00	11	11	15	12	22	17	1
21:00	2	8	9	7	10	5	1
22:00	0	0	0	0	0	2	0
23:00	0	0	0	0	0	1	0
	847	773	810	887	977	931	580

Vehicles Out

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
00:00	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0
03:00	0	0	0	1	0	0	0
04:00	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0
06:00	1	0	0	0	0	0	0
07:00	0	2	0	1	0	0	0
08:00	22	24	15	25	20	26	0
09:00	61	45	41	51	53	47	6
10:00	74	55	46	76	75	69	68
11:00	78	90	66	73	72	100	83
12:00	66	61	72	98	104	103	107
13:00	75	60	58	64	85	106	87
14:00	54	67	102	83	83	89	101
15:00	107	93	89	100	106	92	103
16:00	91	72	101	89	109	89	19
17:00	99	79	82	63	108	86	1
18:00	54	50	60	78	81	52	2
19:00	45	50	43	57	45	40	1
20:00	16	14	24	18	22	23	1
21:00	3	10	8	9	12	6	1
22:00	1	1	3	1	2	2	0
23:00	0	0	0	0	0	1	0
	847	773	810	887	977	931	580

Vehicles In and Out by Hour by Day

ALDI Ruthin Road, Wrexham

Week Commencing 04/02/2019

Vehicles In

	Mon	Tue	Wed	Thu	Fri	Sat	Sun
00:00	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0
07:00	10	4	8	0	3	18	0
08:00	64	30	42	35	72	80	0
09:00	142	110	83	154	171	142	24
10:00	152	129	113	166	158	175	216
11:00	161	123	131	150	194	206	221
12:00	155	128	113	145	190	197	244
13:00	147	125	119	144	180	181	226
14:00	164	141	140	133	170	179	177
15:00	136	111	126	131	154	163	147
16:00	75	15	62	83	114	119	4
17:00	0	0	0	0	5	0	0
18:00	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0
	1206	916	937	1141	1411	1460	1259

Vehicles Out

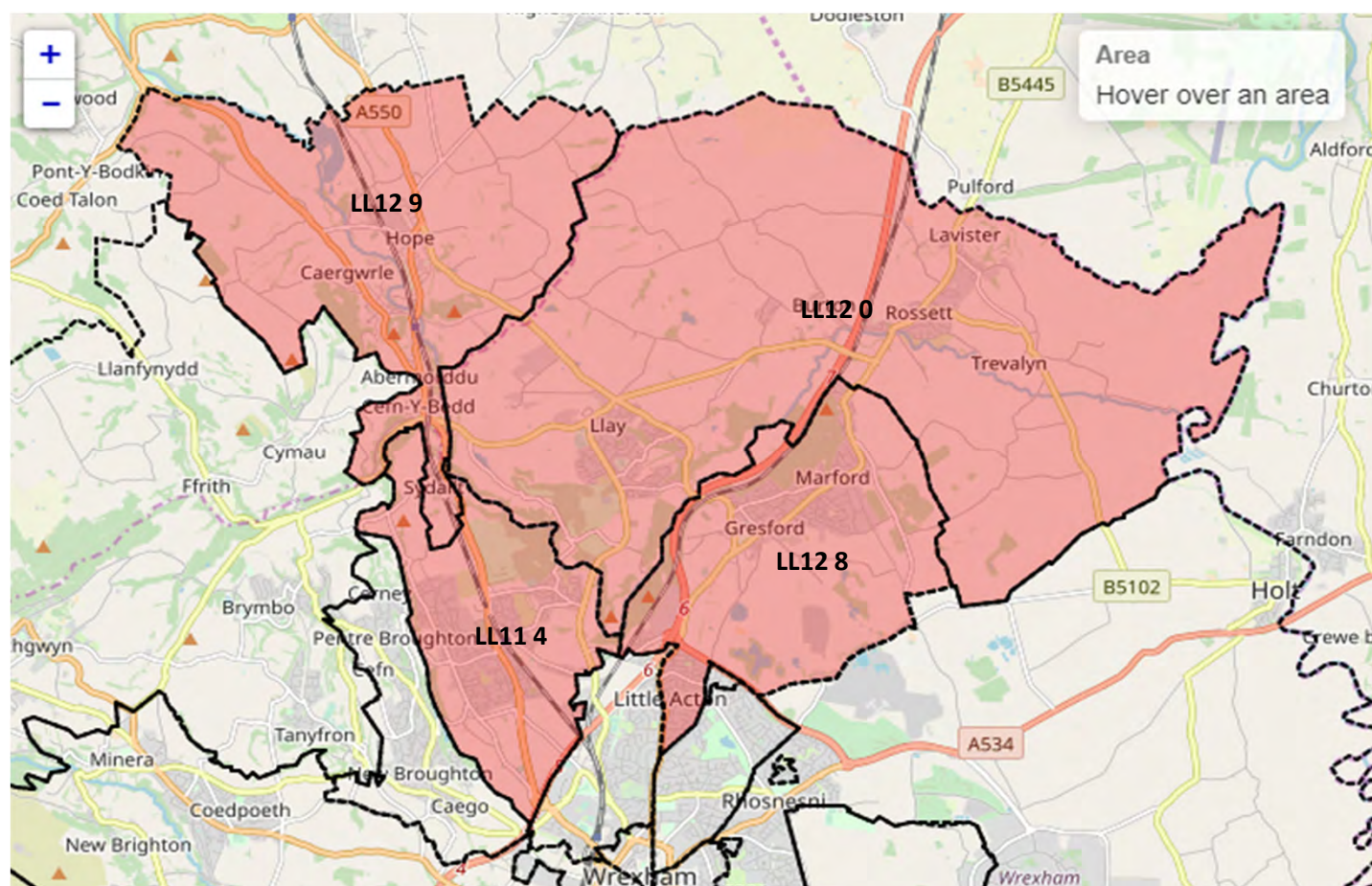
	Mon	Tue	Wed	Thu	Fri	Sat	Sun
00:00	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0
07:00	1	1	1	0	0	0	0
08:00	39	18	33	17	43	68	0
09:00	112	75	63	88	120	94	4
10:00	134	116	92	159	164	167	137
11:00	172	124	121	159	174	204	214
12:00	149	132	133	159	185	182	234
13:00	143	135	109	141	187	193	259
14:00	183	136	136	148	191	192	176
15:00	137	129	136	129	156	161	208
16:00	128	50	104	117	162	173	26
17:00	8	0	9	24	29	26	1
18:00	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0
	1206	916	937	1141	1411	1460	1259



APPENDIX H

GRAVITY MODEL – NEW AND TRANSFERRED TRIP DISTRIBUTION

Proposed Aldi Food Store Catchment



Gravity Model

Trip Distribution

Postcode	Population	Proportion of Total Catchment	Average Travel Distance (km)	Average Travel Time (minute)	Average Travel Time (minute) + 5 minutes	Factor Weighted Population	Proportion of Total Weighted Population
Calculation	A	$B = A/\sum A$	C	D	E	$F = A/(E^{1.5})$	$G = F/\sum F$
LL11 4	9,276	30.74%	5	6	11	254.26	26.35%
LL12 0	8,045	26.66%	3.2	4	9	297.96	30.88%
LL12 8	7,707	25.54%	3.3	7	12	185.40	19.21%
LL12 9	5,146	17.05%	3.3	3	8	227.42	23.57%
Total	30,174	100%				965	100%

Postcode Calculation	Distribution				Weighted Distribution			
	Straight Mile (e)	Gresford Road (s)	B5102 (w)	Rackery Lane (n)	Straight Mile (e)	Gresford Road (s)	B5102 (w)	Rackery Lane (n)
LL11 4		10%	90%		0%	3%	24%	0%
LL12 0	50%	15%	25%	10%	15%	5%	8%	3%
LL12 8	60%	40%			12%	8%	0%	0%
LL12 9				100%	0%	0%	0%	24%
Total					27%	15%	31%	27%



APPENDIX I

GRESFORD ROAD/ SITE ACCESS – MODEL OUTPUTS

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]
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The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

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

Path: D:\Cameron Rose Associates\Projects\486_Aldi, Straight Mile, Llay\ANALYSIS\ICADY
Report generation date: 01/10/2020 14:07:16

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2025 Base plus Committed plus Development			
Stream B-AC	0.12	9.44	0.11	A
Stream C-AB	0.04	4.79	0.03	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

D1 - 2025 Base plus Committed plus Development, AM model duration: 08:00 - 09:30
 D2 - 2025 Base plus Committed plus Development, PM model duration: 08:00 - 09:30
 D3 - 2025 Base plus Committed plus Development, Saturday model duration: 08:00 - 09:30

Run using Junctions 8.0.2.316 at 01/10/2020 14:07:04

File summary

File Description

Title	Gresford Road/ Site Access
Location	Llay
Site Number	
Date	11/02/2019
Version	
Status	
Identifier	
Client	Aldi
Jobnumber	486
Enumerator	Cameron Rose Associates
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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
---	-----	-----	-----	---------	---	------	--------

**(Default Analysis Set) - 2025 Base plus
Committed plus Development, AM**

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2025 Base plus Committed plus Development, AM	2025 Base plus Committed plus Development	AM		ONE HOUR	08:00	09:30	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	T-Junction	Two-way	A,B,C	7.87	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Gresford Road (n)		Major
B	Site Access		Minor
C	Gresford Road (s)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.71		0.00		2.20	130.00	✓	0.00

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

Minor Arm Geometry

[illegible]

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

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	514.740	0.091	0.230	0.144	0.328
1	B-C	665.086	0.099	0.250	-	-
1	C-B	649.248	0.244	0.244	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	230.00	100.000
B	ONE HOUR	✓	43.00	100.000
C	ONE HOUR	✓	340.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

From		To		
		A	B	C
A	A	0.000	37.000	193.000
	B	36.000	0.000	7.000
	C	326.000	14.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

From		To		
		A	B	C
A	A	0.00	0.16	0.84
	B	0.84	0.00	0.16
	C	0.96	0.04	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

From		To		
		A	B	C
A	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

From		To		
		A	B	C
A	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-A-C	0.11	9.44	0.12	A
C-AB	0.03	4.79	0.04	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A-C	32.37	32.07	0.00	462.30	0.070	0.07	8.361	A
C-AB	15.13	15.04	0.00	767.08	0.020	0.02	4.787	A
C-A	240.84	240.84	0.00	-	-	-	-	-
A-B	27.86	27.86	0.00	-	-	-	-	-
A-C	145.30	145.30	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A-C	38.66	38.58	0.00	448.15	0.086	0.09	8.790	A
C-AB	19.34	19.32	0.00	790.07	0.024	0.03	4.670	A
C-A	286.31	286.31	0.00	-	-	-	-	-
A-B	33.26	33.26	0.00	-	-	-	-	-
A-C	173.50	173.50	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
--------	-----------------------	---------------------	----------------------------	-------------------	-----	-----------------	-----------	-----

B-AC	47.34	47.23	0.00	428.55	0.110	0.12	9.437	A
C-AB	25.91	25.86	0.00	821.56	0.032	0.04	4.524	A
C-A	348.44	348.44	0.00	-	-	-	-	-
A-B	40.74	40.74	0.00	-	-	-	-	-
A-C	212.50	212.50	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	47.34	47.34	0.00	428.54	0.110	0.12	9.443	A
C-AB	25.92	25.92	0.00	821.57	0.032	0.04	4.524	A
C-A	348.43	348.43	0.00	-	-	-	-	-
A-B	40.74	40.74	0.00	-	-	-	-	-
A-C	212.50	212.50	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	38.66	38.77	0.00	448.14	0.086	0.10	8.797	A
C-AB	19.36	19.40	0.00	790.09	0.025	0.03	4.673	A
C-A	286.29	286.29	0.00	-	-	-	-	-
A-B	33.26	33.26	0.00	-	-	-	-	-
A-C	173.50	173.50	0.00	-	-	-	-	-

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	32.37	32.45	0.00	462.27	0.070	0.08	8.378	A
C-AB	15.17	15.20	0.00	767.10	0.020	0.02	4.787	A
C-A	240.80	240.80	0.00	-	-	-	-	-
A-B	27.86	27.86	0.00	-	-	-	-	-
A-C	145.30	145.30	0.00	-	-	-	-	-

(Default Analysis Set) - 2025 Base plus Committed plus Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2025 Base plus Committed plus Development, PM	2025 Base plus Committed plus Development	PM		ONE HOUR	08:00	09:30	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	T-Junction	Two-way	A,B,C	13.95	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Gresford Road (n)		Major
B	Site Access		Minor
C	Gresford Road (s)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.71		0.00		2.20	130.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.50										16	15

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

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	514.740	0.091	0.230	0.144	0.328
1	B-C	665.086	0.099	0.250	-	-
1	C-B	649.248	0.244	0.244	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
---------------------	------------------------------	------------------------------	-------------------------------	--------------------	---------------------------	-----------------------------	---------------------------------	------------------------------------	------------------------------------	-------------------------------------

		✓	✓	HV Percentages	2.00				✓	✓
--	--	---	---	----------------	------	--	--	--	---	---

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	346.00	100.000
B	ONE HOUR	✓	179.00	100.000
C	ONE HOUR	✓	265.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

	To		
From	A	B	C
	0.000	101.000	245.000
	145.000	0.000	34.000
	233.000	32.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

From	To			
		A	B	C
	A	0.00	0.29	0.71
	B	0.81	0.00	0.19
C	0.88	0.12	0.00	

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

From	To			
	A	B	C	
	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
C	1.000	1.000	1.000	

Heavy Vehicle Percentages - Junction 1 (for whole period)

From	To			
	A	B	C	
	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
C	0.000	0.000	0.000	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.47	16.12	0.87	C
C-AB	0.07	5.37	0.13	A

C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	134.76	133.12	0.00	457.72	0.294	0.41	11.037	B
C-AB	31.73	31.47	0.00	703.06	0.045	0.07	5.359	A
C-A	167.77	167.77	0.00	-	-	-	-	-
A-B	76.04	76.04	0.00	-	-	-	-	-
A-C	184.45	184.45	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	160.92	160.31	0.00	441.97	0.364	0.56	12.753	B
C-AB	40.09	40.00	0.00	714.49	0.056	0.09	5.337	A
C-A	198.14	198.14	0.00	-	-	-	-	-
A-B	90.80	90.80	0.00	-	-	-	-	-
A-C	220.25	220.25	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	197.08	195.90	0.00	420.19	0.469	0.86	15.963	C
C-AB	52.98	52.82	0.00	730.59	0.073	0.13	5.312	A
C-A	238.79	238.79	0.00	-	-	-	-	-
A-B	111.20	111.20	0.00	-	-	-	-	-
A-C	269.75	269.75	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	197.08	197.03	0.00	420.15	0.469	0.87	16.123	C
C-AB	53.02	53.02	0.00	730.64	0.073	0.13	5.315	A
C-A	238.75	238.75	0.00	-	-	-	-	-
A-B	111.20	111.20	0.00	-	-	-	-	-
A-C	269.75	269.75	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	160.92	162.05	0.00	441.91	0.364	0.58	12.915	B
C-AB	40.15	40.30	0.00	714.56	0.056	0.09	5.343	A
C-A	198.08	198.08	0.00	-	-	-	-	-
A-B	90.80	90.80	0.00	-	-	-	-	-
A-C	220.25	220.25	0.00	-	-	-	-	-

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A-C	134.76	135.40	0.00	457.62	0.294	0.42	11.196	B
C-AB	31.82	31.91	0.00	703.13	0.045	0.07	5.366	A
C-A	167.69	167.69	0.00	-	-	-	-	-
A-B	76.04	76.04	0.00	-	-	-	-	-
A-C	184.45	184.45	0.00	-	-	-	-	-

(Default Analysis Set) - 2025 Base plus Committed plus Development, Saturday

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2025 Base plus Committed plus Development, Saturday	2025 Base plus Committed plus Development	Saturday		ONE HOUR	08:00	09:30	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	T-Junction	Two-way	A,B,C	12.25	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Gresford Road (n)		Major
B	Site Access		Minor
C	Gresford Road (s)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.71		0.00		2.20	130.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.50										16	15

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

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	514.740	0.091	0.230	0.144	0.328
1	B-C	665.086	0.099	0.250	-	-
1	C-B	649.248	0.244	0.244	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	264.00	100.000
B	ONE HOUR	✓	172.00	100.000
C	ONE HOUR	✓	138.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

	To		
	A	B	C
	A	0.000	112.000
	B	145.000	0.000
C	113.000	25.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

From	To		
	A	B	C
	0.00	0.42	0.58
	0.84	0.00	0.16
	0.82	0.18	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

From	To		
	A	B	C
	1.000	1.000	1.000
	1.000	1.000	1.000
	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

From	To		
	A	B	C
	0.000	0.000	0.000
	0.000	0.000	0.000
	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-A-C	0.41	13.38	0.70	B
C-AB	0.05	5.73	0.07	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A-C	129.49	128.04	0.00	482.32	0.268	0.36	10.120	B
C-AB	21.57	21.40	0.00	657.35	0.033	0.04	5.659	A
C-A	82.33	82.33	0.00	-	-	-	-	-
A-B	84.32	84.32	0.00	-	-	-	-	-
A-C	114.43	114.43	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A-C	154.62	154.16	0.00	472.27	0.327	0.48	11.299	B
C-AB	26.50	26.45	0.00	659.41	0.040	0.05	5.687	A

C-A	97.56	97.56	0.00	-	-	-	-	-
A-B	100.69	100.69	0.00	-	-	-	-	-
A-C	136.64	136.64	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A-C	189.38	188.54	0.00	458.41	0.413	0.69	13.296	B
C-AB	33.75	33.68	0.00	662.47	0.051	0.07	5.727	A
C-A	118.19	118.19	0.00	-	-	-	-	-
A-B	123.31	123.31	0.00	-	-	-	-	-
A-C	167.36	167.36	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A-C	189.38	189.34	0.00	458.40	0.413	0.70	13.375	B
C-AB	33.76	33.76	0.00	662.48	0.051	0.07	5.728	A
C-A	118.18	118.18	0.00	-	-	-	-	-
A-B	123.31	123.31	0.00	-	-	-	-	-
A-C	167.36	167.36	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A-C	154.62	155.42	0.00	472.24	0.327	0.50	11.391	B
C-AB	26.51	26.58	0.00	659.43	0.040	0.06	5.691	A
C-A	97.54	97.54	0.00	-	-	-	-	-
A-B	100.69	100.69	0.00	-	-	-	-	-
A-C	136.64	136.64	0.00	-	-	-	-	-

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-A-C	129.49	129.98	0.00	482.26	0.269	0.37	10.233	B
C-AB	21.59	21.64	0.00	657.37	0.033	0.04	5.663	A
C-A	82.30	82.30	0.00	-	-	-	-	-
A-B	84.32	84.32	0.00	-	-	-	-	-
A-C	114.43	114.43	0.00	-	-	-	-	-



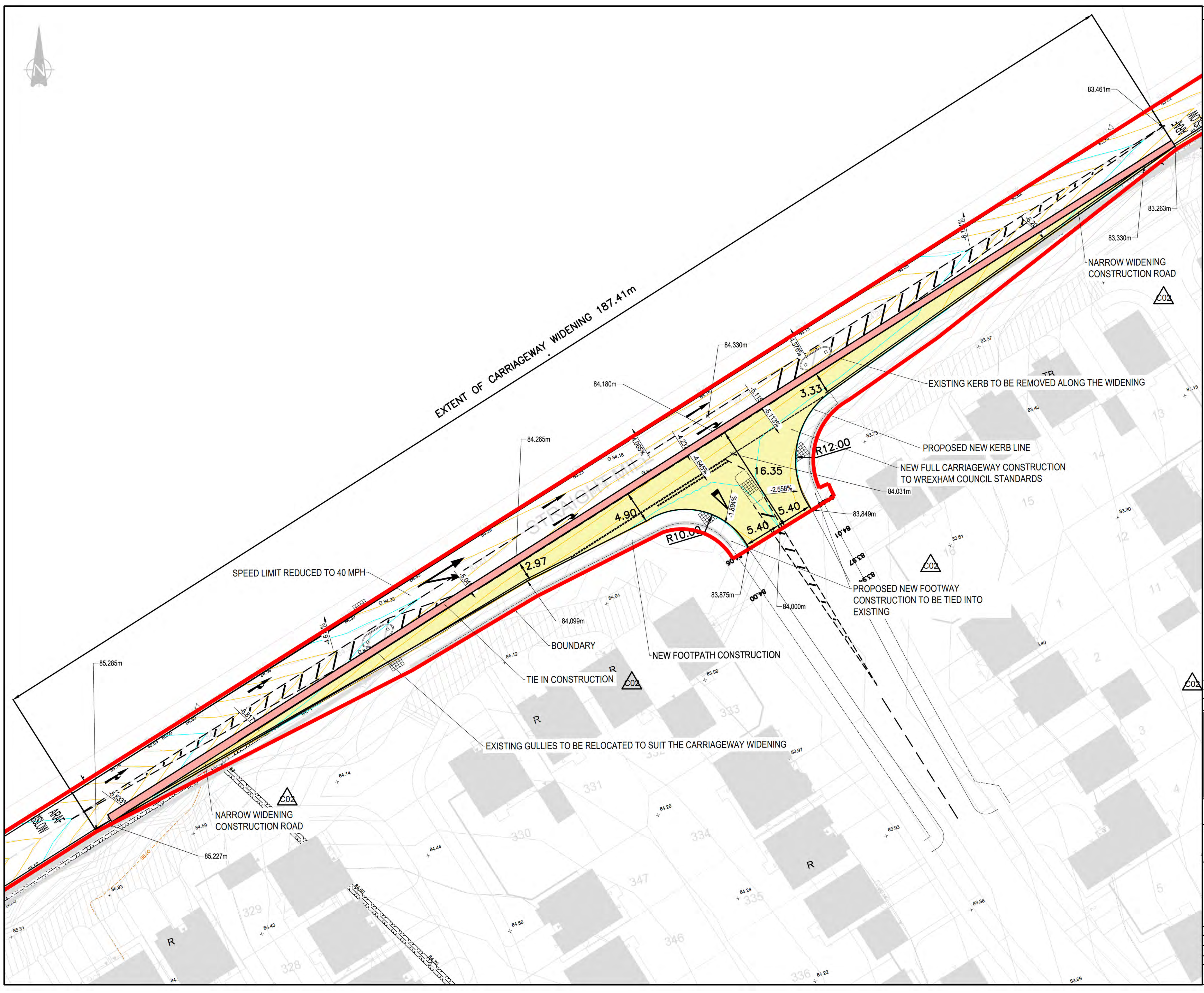
APPENDIX J

**DRAWING 065665-CUR-ZZ-XX-DR-R-9561-C01 – PLANNING
APPLICATION P/2014/0905**



GENERAL NOTES:

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
2. DO NOT SCALE THIS DRAWING. ANY AMBIGUITIES, OMISSIONS AND ERRORS ON DRAWINGS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY. ALL DIMENSIONS MUST BE CHECKED / VERIFIED ON SITE.
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
4. FOR GENERAL NOTES REFER TO DRAWING.



C02	AMENDED TO SUIT COMMENTS	17/01/19	MF	RM
C01	ISSUED FOR S278 APPROVAL	29/11/18	MF	RM
Rev:	Description:	Date:	By:	Chkd:



Merchant Exchange, 17-19 Whitworth Street West, Manchester, M1 5WG
0161 236 2394
manchester@curtins.com
www.curtins.com

Status: **ISSUED FOR CONSTRUCTION APPROVAL** **S4**

Project: **GRESFORD ROAD LLAY**

Dwg Title: **STRAIGHT MILE GIRT
GENERAL ARRANGEMENT**

Size:	Date:	Drawn By:	Designed By:	Checked By:
A1	11/10/2018	MF	MF	RM
Scale:	1:250			
Project No:	Originator:	Zone:	Level:	Type: Discipline: Category / Number: Rev:
065665	- CUR	- ZZ	- XX	- DR - D - 9501 -C02



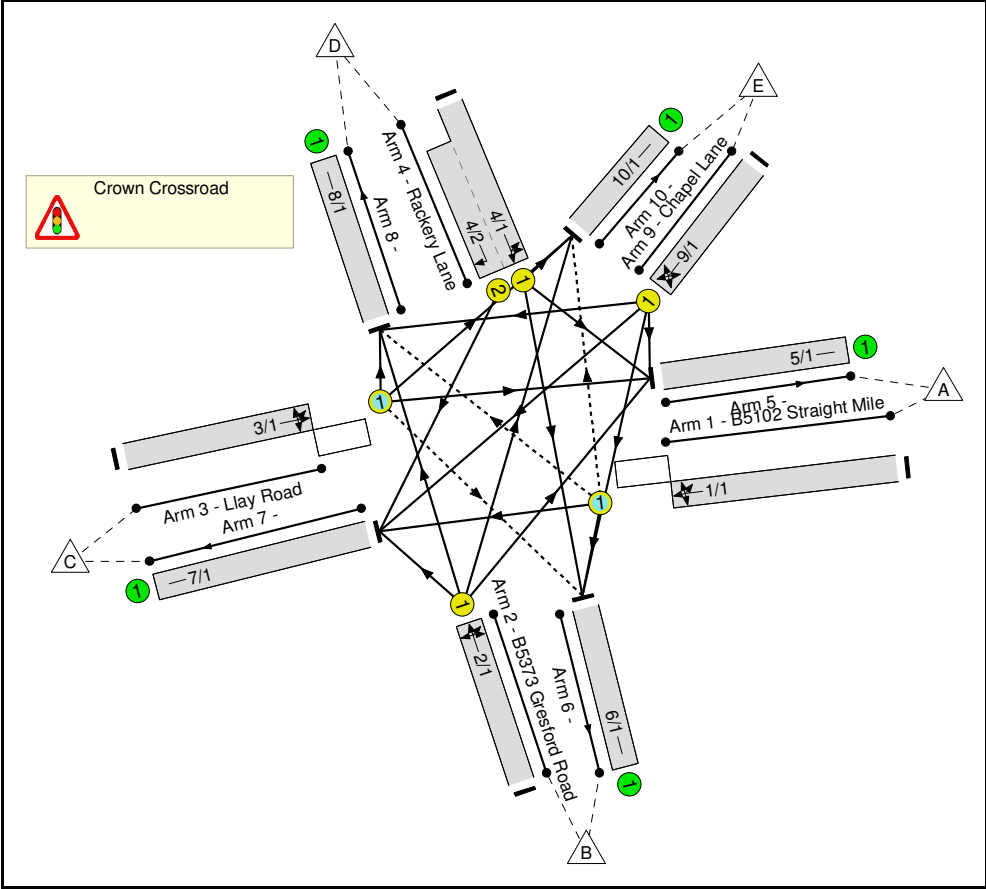
APPENDIX K

CROWN CROSSROADS – MODEL OUTPUTS

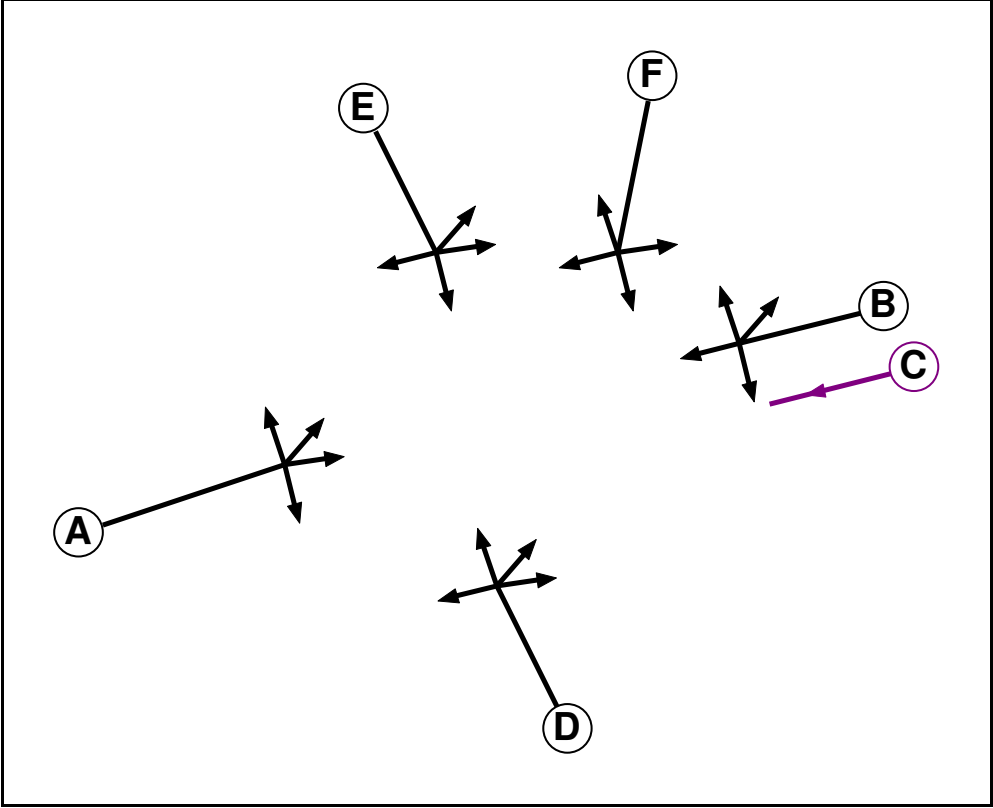
User and Project Details

Project:	Aldi, Llay
Title:	Crown Crossroads
Location:	
File name:	Crown Crossroads_Existing.lsg3x
Author:	
Company:	Cameron Rose Associates
Address:	
Notes:	Existing Layout

Network Layout Diagram



Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Ind. Arrow	B	4	4
D	Traffic		7	7
E	Traffic		7	7
F	Traffic		7	7

Full Input Data And Results

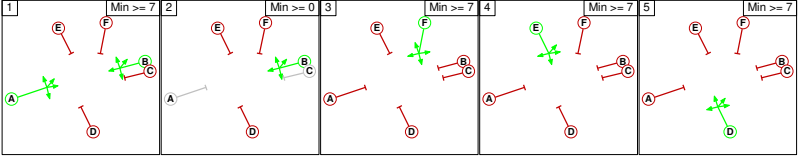
Phase Intergreens Matrix

Terminating Phase	Starting Phase					
	A	B	C	D	E	F
	A	-	4	5	5	9
	B	-	-	7	10	5
	C	2	-	5	10	5
	D	7	6	5	6	9
	E	6	5	5	5	9
	F	9	5	5	7	8

Phases in Stage

Stage No.	Phases in Stage
1	A B
2	B
3	F
4	E
5	D

Stage Diagram



Phase Delays

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

Prohibited Stage Change

From Stage	To Stage				
	1	2	3	4	5
1	0	9	10	7	
2	2	5	10	7	
3	9	5	8	7	
4	6	5	9	5	
5	7	6	9	6	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Crown Crossroad											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/1 (B5102 Straight Mile)	8/1 (Right)	1439	0	3/1	1.09	To 5/1 (Ahead) To 8/1 (Left) To 10/1 (Ahead)	3.00	3.00	0.50	3	3.00
	10/1 (U-Turn)	1439	0	3/1	1.09	To 5/1 (Ahead) To 8/1 (Left) To 10/1 (Ahead)					
3/1 (Llay Road)	6/1 (Right)	1439	0	1/1	1.09	To 6/1 (Left) To 7/1 (Ahead)	3.00	3.00	0.50	3	3.00

Full Input Data And Results

Lane Input Data

Junction: Crown Crossroad												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (B5102 Straight Mile)	O	B	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 6 Left	9.00
											Arm 7 Ahead	Inf
											Arm 8 Right	11.00
											Arm 10 U-Turn	7.00
2/1 (B5373 Gresford Road)	U	D	2	3	60.0	Geom	-	3.40	0.00	Y	Arm 5 Right	7.00
											Arm 7 Left	9.00
											Arm 8 Ahead	Inf
											Arm 10 Right	8.00
3/1 (Llay Road)	O	A	2	3	60.0	Geom	-	5.00	0.00	Y	Arm 5 Ahead	Inf
											Arm 6 Right	20.00
											Arm 8 Left	18.00
											Arm 10 Ahead	Inf
4/1 (Rackery Lane)	U	E	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Left	22.00
											Arm 6 Ahead	Inf
											Arm 10 Left	11.00
4/2 (Rackery Lane)	U	E	2	3	10.0	Geom	-	3.00	0.00	Y	Arm 7 Right	12.00
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-
9/1 (Chapel Lane)	U	F	2	3	60.0	Geom	-	4.50	0.00	Y	Arm 5 U-Turn	7.00
											Arm 6 Left	20.00
											Arm 7 Ahead	40.00
											Arm 8 Right	40.00
10/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2019 AM Peak Survey Flows'	07:45	08:45	01:00	
2: '2019 PM Peak Survey Flows'	16:30	17:30	01:00	
3: '2019 Saturday Peak Survey Flows'	12:00	13:00	01:00	

Scenario 1: '2019 Survey - AM Peak' (FG1: '2019 AM Peak Survey Flows', Plan 1: 'AM Peak (CT 238)')

Traffic Flows, Desired

Desired Flow :

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	6	69	201	0	276
	B	9	0	52	212	4	277
	C	127	31	0	400	1	559
	D	155	136	257	0	1	549
	E	1	2	4	36	0	43
	Tot.	292	175	382	849	6	1704

Traffic Lane Flows

Lane	Scenario 1: 2019 Survey - AM Peak
Junction: Crown Crossroad	
1/1	276
2/1	277
3/1	559
4/1 (with short)	549(In) 292(Out)
4/2 (short)	257
5/1	292
6/1	175
7/1	382
8/1	849
9/1	43
10/1	6

Lane Saturation Flows

Junction: Crown Crossroad								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B5102 Straight Mile)	3.50	0.00	Y	Arm 6 Left	9.00	2.2 %	1782	1782
2/1 (B5373 Gresford Road)	3.40	0.00	Y	Arm 7 Ahead	Inf	25.0 %		
				Arm 8 Right	11.00	72.8 %		
				Arm 10 U-Turn	7.00	0.0 %		
				Arm 5 Right	7.00	3.2 %		
				Arm 7 Left	9.00	18.8 %		
Arm 8 Ahead	Inf	76.5 %						
Arm 10 Right	8.00	1.4 %						
Arm 5 Ahead	Inf	22.7 %						
3/1 (Llay Road)	5.00	0.00	Y	Arm 6 Right	20.00	5.5 %	1988	1988
				Arm 8 Left	18.00	71.6 %		
				Arm 10 Ahead	Inf	0.2 %		
4/1 (Rackery Lane)	3.00	0.00	Y	Arm 5 Left	22.00	53.1 %	1847	1847
				Arm 6 Ahead	Inf	46.6 %		
4/2 (Rackery Lane)	3.00	0.00	Y	Arm 10 Left	11.00	0.3 %	1702	1702
				Arm 7 Right	12.00	100.0 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Chapel Lane)	4.50	0.00	Y	Arm 5 U-Turn	7.00	2.3 %	1979	1979
				Arm 6 Left	20.00	4.7 %		
				Arm 7 Ahead	40.00	9.3 %		
				Arm 8 Right	40.00	83.7 %		
10/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2019 Survey - PM Peak' (FG2: '2019 PM Peak Survey Flows', Plan 2: 'PM Peak (CT 326)')

Traffic Flows, Desired

Desired Flow :

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	21	125	153	0	299
	B	10	0	67	134	1	212
	C	62	78	0	292	8	440
	D	151	109	244	0	2	506
	E	1	2	4	5	0	12
	Tot.	224	210	440	584	11	1469

Traffic Lane Flows

Lane	Scenario 2: 2019 Survey - PM Peak
Junction: Crown Crossroad	
1/1	299
2/1	212
3/1	440
4/1 (with short)	506(In) 262(Out)
4/2 (short)	244
5/1	224
6/1	210
7/1	440
8/1	584
9/1	12
10/1	11

Lane Saturation Flows

Junction: Crown Crossroad								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B5102 Straight Mile)	3.50	0.00	Y	Arm 6 Left	9.00	7.0 %	1817	1817
2/1 (B5373 Gresford Road)	3.40	0.00	Y	Arm 7 Ahead	Inf	41.8 %		
				Arm 8 Right	11.00	51.2 %		
				Arm 10 U-Turn	7.00	0.0 %		
				Arm 5 Right	7.00	4.7 %		
				Arm 7 Left	9.00	31.6 %		
3/1 (Llay Road)	5.00	0.00	Y	Arm 8 Ahead	Inf	63.2 %		
				Arm 10 Right	8.00	0.5 %		
				Arm 5 Ahead	Inf	14.1 %		
				Arm 6 Right	20.00	17.7 %		
				Arm 8 Left	18.00	66.4 %		
4/1 (Rackery Lane)	3.00	0.00	Y	Arm 10 Ahead	Inf	1.8 %	1979	1979
				Arm 6 Right	20.00	17.7 %		
				Arm 8 Left	18.00	66.4 %		
4/2 (Rackery Lane)	3.00	0.00	Y	Arm 6 Right	20.00	17.7 %	1979	1979
4/1 (Rackery Lane)	3.00	0.00	Y	Arm 8 Left	18.00	66.4 %		
				Arm 10 Ahead	Inf	1.8 %		
				Arm 6 Right	20.00	17.7 %		
4/1 (Rackery Lane)	3.00	0.00	Y	Arm 8 Left	18.00	66.4 %	1979	1979
4/2 (Rackery Lane)	3.00	0.00	Y	Arm 10 Ahead	Inf	1.8 %		
				Arm 6 Right	20.00	17.7 %		
				Arm 8 Left	18.00	66.4 %		
4/1 (Rackery Lane)	3.00	0.00	Y	Arm 8 Left	18.00	66.4 %	1979	1979
4/2 (Rackery Lane)	3.00	0.00	Y	Arm 10 Ahead	Inf	1.8 %		
				Arm 6 Right	20.00	17.7 %		
				Arm 8 Left	18.00	66.4 %		
4/1 (Rackery Lane)	3.00	0.00	Y	Arm 8 Left	18.00	66.4 %	1979	1979
4/2 (Rackery Lane)	3.00	0.00	Y	Arm 10 Ahead	Inf	1.8 %		
				Arm 6 Right	20.00	17.7 %		
				Arm 8 Left	18.00	66.4 %		
4/1 (Rackery Lane)	3.00	0.00	Y	Arm 8 Left	18.00	66.4 %	1979	1979
4/2 (Rackery Lane)	3.00	0.00	Y	Arm 10 Ahead	Inf	1.8 %		
				Arm 6 Right	20.00	17.7 %		
				Arm 8 Left	18.00	66.4 %		
4/1 (Rackery Lane)	3.00	0.00	Y	Arm 8 Left	18.00	66.4 %	1979	1979
4/2 (Rackery Lane)	3.00	0.00	Y	Arm 10 Ahead	Inf	1.8 %		
				Arm 6 Right	20.00	17.7 %		
				Arm 8 Left	18.00	66.4 %		
4/1 (Rackery Lane)	3.00	0.00	Y	Arm 8 Left	18.00	66.4 %	1979	1979
4/2 (Rackery Lane)	3.00	0.00	Y	Arm 10 Ahead	Inf	1.8 %		
				Arm 6 Right	20.00	17.7 %		
				Arm 8 Left	18.00	66.4 %		
4/1 (Rackery Lane)	3.00	0.00	Y	Arm 8 Left	18.00	66.4 %	1979	1979
4/2 (Rackery Lane)	3.00	0.00	Y	Arm 10 Ahead	Inf	1.8 %		
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				Arm 8 Left	18.00	66.4 %		
4/1 (Rackery Lane)	3.00	0.00	Y	Arm 8 Left	18.00	66.4 %	1979	1979
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				Arm 8 Left	18.00	66.4 %		
4/1 (Rackery Lane)	3.00	0.00	Y	Arm 8 Left	18.00	66.4 %	1979	1979
4/2 (Rackery Lane)	3.00	0.00	Y	Arm 10 Ahead	Inf	1.8 %		
				Arm 6 Right	20.00	17.7 %		
				Arm 8 Left	18.00	66.4 %		
4/1 (Rackery Lane)	3.00	0.00	Y	Arm 8 Left	18.00	66.4 %	1979	1979
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4/2 (Rackery Lane)	3.00	0.00	Y	Arm 10 Ahead	Inf	1.8 %		
				Arm 6 Right	20.00	17.7 %		
				Arm 8 Left	18.00	66.4 %		
4/1 (Rackery Lane)	3.00	0.00	Y	Arm 8 Left	18.00	66.4 %	1979	1979
4/2 (Rackery Lane)	3.00	0.00	Y	Arm 10 Ahead	Inf	1.8 %		
				Arm 6 Right	20.00	17.7 %		
				Arm 8 Left	18.00	66.4 %		
4/1 (Rackery Lane)	3.00	0.00	Y	Arm 8 Left	18.00	66.4 %	1979	1979
4/2 (Rackery Lane)	3.00	0.00	Y	Arm 10 Ahead	Inf	1.8 %		
				Arm 6 Right	20.00	17.7 %		
				Arm 8 Left	18.00	66.4 %		
4/1 (Rackery Lane)	3.00	0.00	Y	Arm 8 Left	18.00	66.4 %	1979	1979
4/2 (Rackery Lane)	3.00	0.00	Y	Arm 10 Ahead	Inf	1.8 %		
				Arm 6 Right	20.00	17.7 %		
				Arm 8 Left	18.00	66.4 %		
4/1 (Rackery Lane)	3.00	0.00	Y	Arm 8 Left	18.00	66.4 %	1979	1979
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				Arm 8 Left	18.00	66.4 %		
4/1 (Rackery Lane)	3.00	0.00	Y	Arm 8 Left	18.00	66.4 %	1979	1979
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				Arm 6 Right	20.00	17.7 %		
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4/2 (Rackery Lane)	3.00	0.00	Y	Arm 10 Ahead	Inf	1.8 %		
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				Arm 6 Right	20.00	17.7 %		
				Arm 8 Left	18.00	66.4 %		
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				Arm 6 Right	20.00	17.7 %		
				Arm 8 Left	18.00	66.4 %		
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4/2 (Rackery Lane)	3.00	0.00	Y	Arm 10 Ahead	Inf	1.8 %		
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4/1 (Rackery Lane)	3.00	0.00	Y	Arm 8 Left	18.00	66.4 %	1979	1979
4/2 (Rackery Lane)	3.00	0.00	Y	Arm 10 Ahead	Inf	1.8 %		
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4/1 (Rackery Lane)	3.00	0.00	Y	Arm 8 Left	18.00	66.4 %	1979	1979
4/2 (Rackery Lane)	3.00	0.00	Y	Arm 10 Ahead	Inf	1.8 %		
				Arm 6 Right	20.00	17.7 %		
				Arm 8 Left	18.00	66.4 %		
4/1 (Rackery Lane)	3.00	0.00	Y	Arm 8 Left	18.00	66.4 %	1979	1979
4/2 (Rackery Lane)	3.00	0.00	Y	Arm 10 Ahead	Inf	1.8 %		
				Arm 6 Right	20.00	17.7 %		
				Arm 8 Left	18.00	66.4 %		
4/1 (Rackery Lane)	3.00	0.00	Y	Arm 8 Left	18.00	66.4 %	1979	1979
4/2 (Rackery Lane)	3.00	0.00	Y	Arm 10 Ahead	Inf	1.8 %		
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4/1 (Rackery Lane)	3.00	0.00	Y	Arm 8 Left	18.00	66.4 %	1979	1979
4/2 (Rackery Lane)	3.00	0.00	Y	Arm 10 Ahead	Inf	1.8 %		
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4/1 (Rackery Lane)	3.00	0.00	Y	Arm 8 Left	18.00	66.4 %	1979	1979
4/2 (Rackery Lane)	3.00	0.00	Y	Arm 10 Ahead	Inf	1.8 %		
				Arm 6 Right	20.00	17.7 %		
				Arm 8 Left	18.00	66.4 %		
4/1 (Rackery Lane)	3.00	0.00	Y	Arm 8 Left	18.00	66.4 %	1979	1979
4/2 (Rackery Lane)	3.00	0.00	Y	Arm 10 Ahead	Inf	1.8 %		
				Arm 6 Right	20.00	17.7 %		
				Arm 8 Left	18.00	66.4 %		
4/1 (Rackery Lane)	3.00	0.00	Y	Arm 8 Left	18.00	66.4 %	1979	1979
4/2 (Rackery Lane)	3.00	0.00	Y	Arm 10 Ahead	Inf	1.8 %		
				Arm 6 Right	20.00	17.7 %		
				Arm 8 Left	18.00	66.4 %		
4/1 (Rackery Lane)	3.00	0.00	Y	Arm 8 Left	18.00	66.4 %	1979	1979
4/2 (Rackery Lane)	3.00	0.00	Y	Arm 10 Ahead	Inf	1.8 %		
				Arm 6 Right	20.00	17.7 %		
				Arm 8 Left				

Scenario 3: '2019 Survey - Saturday Peak' (FG3: '2019 Saturday Peak Survey Flows', Plan 2: 'PM Peak (CT 326)')

Traffic Flows, Desired

Desired Flow :

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	16	64	74	1	155
	B	14	0	47	53	0	114
	C	85	73	0	170	4	332
	D	70	63	158	0	0	291
	E	2	1	4	3	0	10
	Tot.	171	153	273	300	5	902

Traffic Lane Flows

Lane	Scenario 3: 2019 Survey - Saturday Peak
Junction: Crown Crossroad	
1/1	155
2/1	114
3/1	332
4/1 (with short)	291(In) 133(Out)
4/2 (short)	158
5/1	171
6/1	153
7/1	273
8/1	300
9/1	10
10/1	5

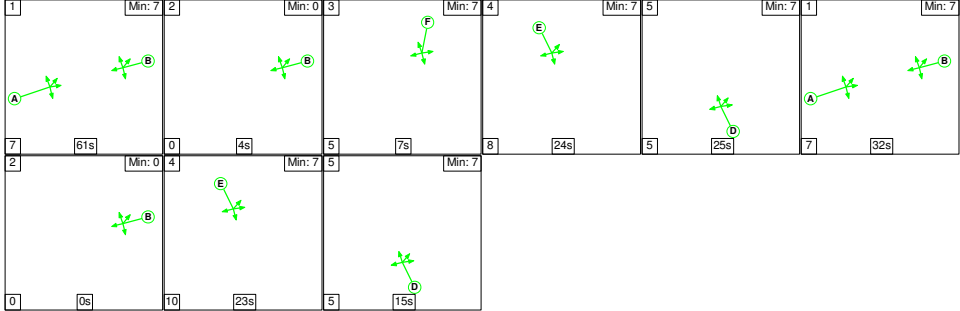
Full Input Data And Results

Lane Saturation Flows

Junction: Crown Crossroad								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B5102 Straight Mile)	3.50	0.00	Y	Arm 6 Left	9.00	10.3 %	1813	1813
2/1 (B5373 Gresford Road)	3.40	0.00	Y	Arm 7 Ahead	Inf	41.3 %		
				Arm 8 Right	11.00	47.7 %		
				Arm 10 U-Turn	7.00	0.6 %		
				Arm 5 Right	7.00	12.3 %		
				Arm 7 Left	9.00	41.2 %		
				Arm 8 Ahead	Inf	46.5 %		
3/1 (Llay Road)	5.00	0.00	Y	Arm 10 Right	8.00	0.0 %	1785	1785
				Arm 5 Ahead	Inf	25.6 %		
				Arm 6 Right	20.00	22.0 %		
				Arm 8 Left	18.00	51.2 %	1997	1997
4/1 (Rackery Lane)	3.00	0.00	Y	Arm 10 Ahead	Inf	1.2 %	1849	1849
				Arm 5 Left	22.00	52.6 %		
4/2 (Rackery Lane)	3.00	0.00	Y	Arm 6 Ahead	Inf	47.4 %	1702	1702
				Arm 10 Left	11.00	0.0 %		
5/1 6/1 7/1 8/1 9/1 (Chapel Lane)	4.50	0.00	Y	Arm 7 Right	12.00	100.0 %	1918	1918
				Infinite Saturation Flow				
				Infinite Saturation Flow				
				Infinite Saturation Flow				
				Infinite Saturation Flow				
				Arm 5 U-Turn	7.00	20.0 %		
				Arm 6 Left	20.00	10.0 %		
Arm 7 Ahead	40.00	40.0 %						
Arm 8 Right	40.00	30.0 %						
10/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2019 Survey - AM Peak' (FG1: '2019 AM Peak Survey Flows', Plan 1: 'AM Peak (CT 238)')

Stage Sequence Diagram

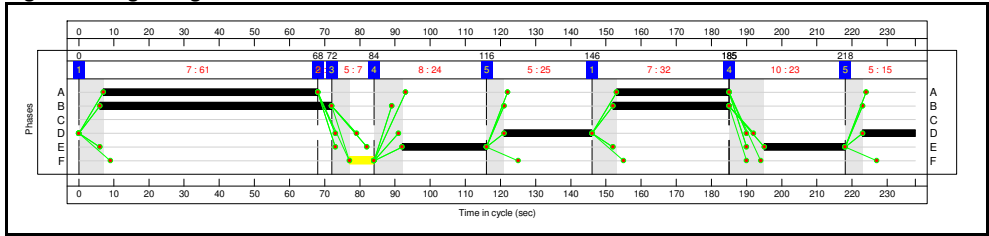


Full Input Data And Results

Stage Timings

Stage	1	2	3	4	5	1	2	4	5
Duration	61	4	7	24	25	32	0	23	15
Change Point	0	68	72	84	116	146	185	185	218

Signal Timings Diagram



Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Crown Crossroads	-	-	N/A	-	-		-	-	-	-	-	-	84.3%
Crown Crossroad	-	-	N/A	-	-		-	-	-	-	-	-	84.3%
1/1	B5102 Straight Mile Left Ahead Right U-Turn	O	N/A	N/A	B		2	99	-	276	1782	332	83.1%
2/1	B5373 Gresford Road Right Left Ahead Right2	U	N/A	N/A	D		2	40	-	277	1878	331	83.6%
3/1	L1ay Road Ahead Right Left Ahead2	O	N/A	N/A	A		2	93	-	559	1988	794	70.4%
4/1+4/2	Rackery Lane Left Ahead Right Left2	U	N/A	N/A	E		2	47	-	549	1847:1702	346+305	84.3 : 84.3%
5/1		U	N/A	N/A	-		-	-	-	292	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	175	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	382	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	849	Inf	Inf	0.0%
9/1	Chapel Lane U-Turn Left Ahead Right	U	N/A	N/A	F		1	7	-	43	1979	67	64.6%
10/1		U	N/A	N/A	-		-	-	-	6	Inf	Inf	0.0%

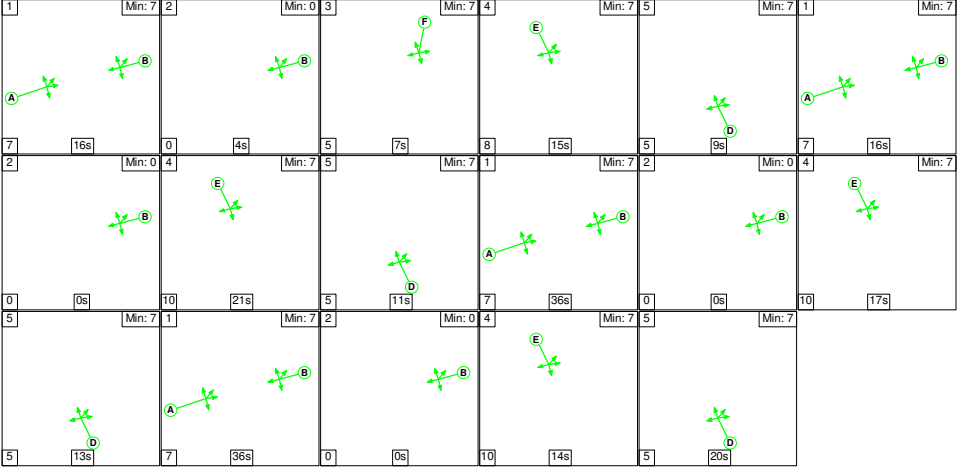
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Crown Crossroads	-	-	172	12	48	21.3	9.2	1.0	31.5	-	-	-	-
Crown Crossroad	-	-	172	12	48	21.3	9.2	1.0	31.5	-	-	-	-
1/1	276	276	141	12	48	4.3	2.3	1.0	7.6	98.8	13.1	2.3	15.3
2/1	277	277	-	-	-	3.8	2.3	-	6.2	80.2	10.8	2.3	13.1
3/1	559	559	31	0	0	4.8	1.2	0.0	6.0	38.4	18.0	1.2	19.2
4/1+4/2	549	549	-	-	-	7.0	2.6	-	9.5	62.6	11.5	2.6	14.1
5/1	292	292	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	175	175	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	382	382	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	849	849	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	43	43	-	-	-	1.4	0.9	-	2.2	185.0	2.8	0.9	3.7
10/1	6	6	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1		PRC for Signalled Lanes (%):			6.7	Total Delay for Signalled Lanes (pcuHr):			31.46	Cycle Time (s): 238			
PRC Over All Lanes (%):					6.7	Total Delay Over All Lanes (pcuHr):			31.46				

Full Input Data And Results

Scenario 2: '2019 Survey - PM Peak' (FG2: '2019 PM Peak Survey Flows', Plan 2: 'PM Peak (CT 326)')

Stage Sequence Diagram

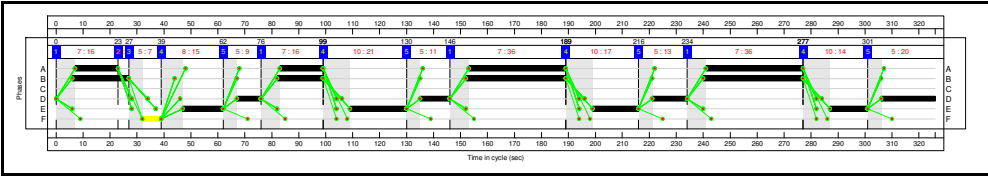


Stage Timings

Stage	1	2	3	4	5	1	2	4	5	1
Duration	16	4	7	15	9	16	0	21	11	36
Change Point	0	23	27	39	62	76	99	99	130	146

Stage	2	4	5	1	2	4	5			
Duration	0	17	13	36	0	14	20			
Change Point	189	189	216	234	277	277	301			

Signal Timings Diagram



Full Input Data And Results

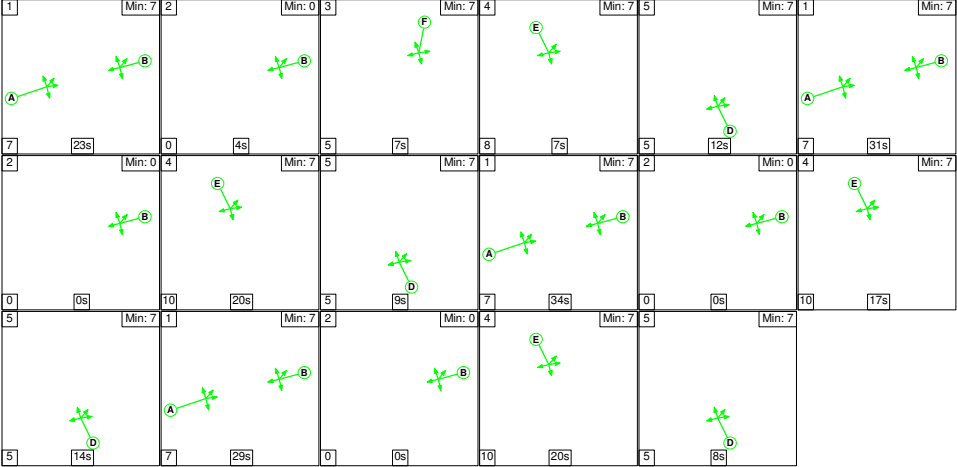
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Crown Crossroads	-	-	N/A	-	-		-	-	-	-	-	-	67.1%
Crown Crossroad	-	-	N/A	-	-		-	-	-	-	-	-	67.1%
1/1	B5102 Straight Mile Left Ahead Right U-Turn	O	N/A	N/A	B		4	112	-	299	1817	460	65.1%
2/1	B5373 Gresford Road Right Left Ahead Right2	U	N/A	N/A	D		4	53	-	212	1838	321	66.0%
3/1	Llay Road Ahead Right Left Ahead2	O	N/A	N/A	A		4	104	-	440	1979	656	67.1%
4/1,4/2	Rackery Lane Left Ahead Right Left2	U	N/A	N/A	E		4	67	-	506	1841:1702	393+366	66.7 : 66.7%
5/1		U	N/A	N/A	-		-	-	-	224	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	210	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	440	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	584	Inf	Inf	0.0%
9/1	Chapel Lane U-Turn Left Ahead Right	U	N/A	N/A	F		1	7	-	12	1951	48	25.1%
10/1		U	N/A	N/A	-		-	-	-	11	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Crown Crossroads	-	-	163	11	57	11.2	4.0	0.5	15.7	-	-	-	-
Crown Crossroad	-	-	163	11	57	11.2	4.0	0.5	15.7	-	-	-	-
1/1	299	299	87	11	55	1.7	0.9	0.5	3.1	37.9	5.3	0.9	6.2
2/1	212	212	-	-	-	1.9	1.0	-	2.8	47.8	4.9	1.0	5.8
3/1	440	440	77	0	1	2.9	1.0	0.0	3.9	31.8	9.2	1.0	10.2
4/1+4/2	506	506	-	-	-	4.2	1.0	-	5.2	36.9	6.0	1.0	7.0
5/1	224	224	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	210	210	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	440	440	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	584	584	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	12	12	-	-	-	0.5	0.2	-	0.7	205.8	1.1	0.2	1.2
10/1	11	11	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1PRC for Signalled Lanes (%):34.1PRC Over All Lanes (%):34.1Total Delay for Signalled Lanes (pcuHr):15.72Total Delay Over All Lanes(pcuHr):15.72Cycle Time (s):326													

Full Input Data And Results
Scenario 3: '2019 Survey - Saturday Peak' (FG3: '2019 Saturday Peak Survey Flows', Plan 2: 'PM Peak (CT 326)')
Stage Sequence Diagram

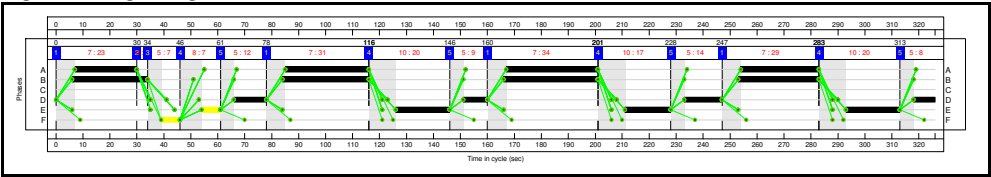


Stage Timings

Stage	1	2	3	4	5	1	2	4	5	1
Duration	23	4	7	7	12	31	0	20	9	34
Change Point	0	30	34	46	61	78	116	116	146	160

Stage	2	4	5	1	2	4	5			
Duration	0	17	14	29	0	20	8			
Change Point	201	201	228	247	283	283	313			

Signal Timings Diagram



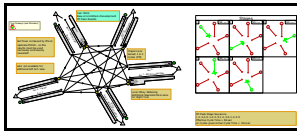
Network Results

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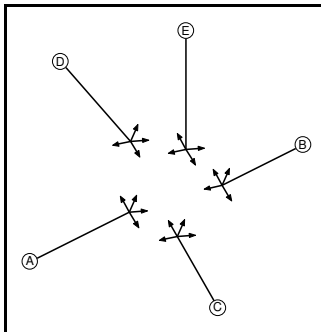
User and Project Details

Project:	Home Farm Residential Development
Title:	Crown Crossroads at Llay
Location:	Llay Wrexham LL12 0NT
File name:	Crown Crossroads_Curtins s278.lsg3x
Author:	GlanvilleJB
Company:	Curtins
Address:	Manchester
Notes:	Physical Junction Improvements and MOVA

Network Layout Diagram



Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Traffic		7	7

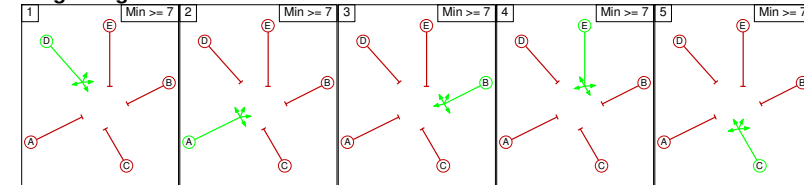
Phase Intergreens Matrix

	Starting Phase				
	A	B	C	D	E
Terminating Phase	A	6	5	5	9
	B	6	7	10	5
	C	7	6	6	9
	D	6	5	5	9
	E	9	5	7	8

Phases in Stage

Stage No.	Phases in Stage
1	D
2	A
3	B
4	E
5	C

Stage Diagram



Phase Delays

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

Prohibited Stage Change

	To Stage				
	1	2	3	4	5
From Stage	1	6	5	9	5
	2	5	6	9	5
	3	10	6	5	7
	4	8	9	5	7
	5	6	7	6	9

Give-Way Lane Input Data

Junction: Llay Fiveways (near Wrexham)
There are no Opposed Lanes in this Junction

Lane Input Data

Junction: Llay Fiveways (near Wrexham)												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (B5102 Straight Mile)	U	B	2	3	7.0	User	2050	-	-	-	-	-
1/2 (B5102 Straight Mile)	U	B	2	3	60.0	User	2017	-	-	-	-	-
2/1 (B5373 Gresford Rd)	U	C	2	3	60.0	User	2079	-	-	-	-	-
3/1 (Llay Rd)	U	A	2	3	60.0	User	2106	-	-	-	-	-
4/1 (Rackery lane)	U	D	2	3	60.0	User	2012	-	-	-	-	-
4/2 (Rackery lane)	U	D	2	3	10.1	User	1860	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-
9/1 (Chapel Lane)	U	E	2	3	60.0	User	1952	-	-	-	-	-
10/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2025 AM ALDI Traffic with Dev'	07:45	08:45	01:00	
2: '2025 PM ALDI Traffic with Dev'	16:45	17:45	01:00	
3: '2025 SAT ALDI Traffic with Dev'	12:00	13:00	01:00	
4: '2025 AM ALDI Traffic with Dev_with Aldi Store'	07:45	08:45	01:00	
5: '2025 PM ALDI Traffic with Dev_with Aldi Store'	16:45	17:45	01:00	
6: '2025 SAT ALDI Traffic with Dev_with Aldi Store'	12:00	13:00	01:00	

Scenario 1: 'AM Design 2025_' (FG1: '2025 AM ALDI Traffic with Dev', Plan 1: 'Chapel Ln in Every Other Cycle')
Traffic Flows, Desired
Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	0	6	85	222	0	313
	B	10	0	78	242	4	334
	C	138	40	0	422	1	601
	D	167	149	271	0	1	588
	Tot.	316	197	438	924	6	1881

Traffic Lane Flows

Lane	Scenario 1: AM Design 2025_
Junction: Llay Fiveways (near Wrexham)	
1/1 (short)	91
1/2 (with short)	313(In) 222(Out)
2/1	334
3/1	601
4/1 (with short)	588(In) 317(Out)
4/2 (short)	271
5/1	316
6/1	197
7/1	438
8/1	924
9/1	45
10/1	6

Lane Saturation Flows

Junction: Llay Fiveways (near Wrexham)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B5102 Straight Mile Lane 1)	This lane uses a directly entered Saturation Flow						2050	2050
1/2 (B5102 Straight Mile Lane 2)	This lane uses a directly entered Saturation Flow						2017	2017
2/1 (B5373 Gresford Rd Lane 1)	This lane uses a directly entered Saturation Flow						2079	2079
3/1 (Llay Rd Lane 1)	This lane uses a directly entered Saturation Flow						2106	2106
4/1 (Rackery lane Lane 1)	This lane uses a directly entered Saturation Flow						2012	2012
4/2 (Rackery lane Lane 2)	This lane uses a directly entered Saturation Flow						1860	1860
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Chapel Lane Lane 1)	This lane uses a directly entered Saturation Flow						1952	1952
10/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: 'PM Design 2025' (FG2: '2025 PM ALDI Traffic with Dev', Plan 4: 'Chapel in Every Four Cycle')

Traffic Flows, Desired

Desired Flow :

	Destination						
Origin		A	B	C	D	E	Tot.
	A	0	22	139	167	0	328
	B	11	0	86	153	1	251
	C	77	105	0	308	8	498
	D	169	132	258	0	2	561
	E	1	2	4	5	0	12
	Tot.	258	261	487	633	11	1650

Traffic Lane Flows

Lane	Scenario 2: PM Design 2025
Junction: Llay Fiveways (near Wrexham)	
1/1 (short)	161
1/2 (with short)	328(In) 167(Out)
2/1	251
3/1	498
4/1 (with short)	561(In) 303(Out)
4/2 (short)	258
5/1	258
6/1	261
7/1	487
8/1	633
9/1	12
10/1	11

Lane Saturation Flows

Junction: Llay Fiveways (near Wrexham)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B5102 Straight Mile Lane 1)	This lane uses a directly entered Saturation Flow						2050	2050
1/2 (B5102 Straight Mile Lane 2)	This lane uses a directly entered Saturation Flow						2017	2017
2/1 (B5373 Gresford Rd Lane 1)	This lane uses a directly entered Saturation Flow						2079	2079
3/1 (Llay Rd Lane 1)	This lane uses a directly entered Saturation Flow						2106	2106
4/1 (Rackery lane Lane 1)	This lane uses a directly entered Saturation Flow						2012	2012
4/2 (Rackery lane Lane 2)	This lane uses a directly entered Saturation Flow						1860	1860
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Chapel Lane Lane 1)	This lane uses a directly entered Saturation Flow						1952	1952
10/1	Infinite Saturation Flow						Inf	Inf

Scenario 3: 'SAT Design 2025' (FG3: '2025 SAT ALDI Traffic with Dev', Plan 4: 'Chapel in Every Four Cycle')
Traffic Flows, Desired
Desired Flow :

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	17	68	78	1	164
	B	15	0	50	56	0	121
	C	91	77	0	181	4	353
	D	74	67	168	0	0	309
	E	2	1	4	4	0	11
	Tot.	182	162	290	319	5	958

Traffic Lane Flows

Lane	Scenario 3: SAT Design 2025
Junction: Llay Fiveways (near Wrexham)	
1/1 (short)	85
1/2 (with short)	164(In) 79(Out)
2/1	121
3/1	353
4/1 (with short)	309(In) 141(Out)
4/2 (short)	168
5/1	182
6/1	162
7/1	290
8/1	319
9/1	11
10/1	5

Lane Saturation Flows

Junction: Llay Fiveways (near Wrexham)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B5102 Straight Mile Lane 1)	This lane uses a directly entered Saturation Flow						2050	2050
1/2 (B5102 Straight Mile Lane 2)	This lane uses a directly entered Saturation Flow						2017	2017
2/1 (B5373 Gresford Rd Lane 1)	This lane uses a directly entered Saturation Flow						2079	2079
3/1 (Llay Rd Lane 1)	This lane uses a directly entered Saturation Flow						2106	2106
4/1 (Rackery lane Lane 1)	This lane uses a directly entered Saturation Flow						2012	2012
4/2 (Rackery lane Lane 2)	This lane uses a directly entered Saturation Flow						1860	1860
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Chapel Lane Lane 1)	This lane uses a directly entered Saturation Flow						1952	1952
10/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: 'AM Design 2025_with Aldi Store' (FG4: '2025 AM ALDI Traffic with Dev_with Aldi Store', Plan 1: 'Chapel Ln in Every Other Cycle')

Traffic Flows, Desired

Desired Flow :

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	5	84	219	0	308
	B	18	0	88	253	4	363
	C	136	57	0	417	1	611
	D	165	164	268	0	1	598
	E	1	2	4	38	0	45
	Tot.	320	228	444	927	6	1925

Traffic Lane Flows

Lane	Scenario 4: AM Design 2025_with Aldi Store
Junction: Llay Fiveways (near Wrexham)	
1/1 (short)	89
1/2 (with short)	308(In) 219(Out)
2/1	363
3/1	611
4/1 (with short)	598(In) 330(Out)
4/2 (short)	268
5/1	320
6/1	228
7/1	444
8/1	927
9/1	45
10/1	6

Lane Saturation Flows

Junction: Llay Fiveways (near Wrexham)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B5102 Straight Mile Lane 1)	This lane uses a directly entered Saturation Flow						2050	2050
1/2 (B5102 Straight Mile Lane 2)	This lane uses a directly entered Saturation Flow						2017	2017
2/1 (B5373 Gresford Rd Lane 1)	This lane uses a directly entered Saturation Flow						2079	2079
3/1 (Llay Rd Lane 1)	This lane uses a directly entered Saturation Flow						2106	2106
4/1 (Rackery lane Lane 1)	This lane uses a directly entered Saturation Flow						2012	2012
4/2 (Rackery lane Lane 2)	This lane uses a directly entered Saturation Flow						1860	1860
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Chapel Lane Lane 1)	This lane uses a directly entered Saturation Flow						1952	1952
10/1	Infinite Saturation Flow						Inf	Inf

Scenario 5: 'PM Design 2025_with Aldi Store' (FG5: '2025 PM ALDI Traffic with Dev_with Aldi Store', Plan 4:

'Chapel in Every Four Cycle')

Traffic Flows, Desired**Desired Flow :**

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	22	134	161	0	317
	B	47	0	132	197	1	377
	C	74	148	0	298	8	528
	D	163	173	250	0	2	588
	E	1	2	4	5	0	12
	Tot.	285	345	520	661	11	1822

Traffic Lane Flows

Lane	Scenario 5: PM Design 2025_with Aldi Store
Junction: Llay Fiveways (near Wrexham)	
1/1 (short)	156
1/2 (with short)	317(In) 161(Out)
2/1	377
3/1	528
4/1 (with short)	588(In) 338(Out)
4/2 (short)	250
5/1	285
6/1	345
7/1	520
8/1	661
9/1	12
10/1	11

Lane Saturation Flows

Junction: Llay Fiveways (near Wrexham)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B5102 Straight Mile Lane 1)	This lane uses a directly entered Saturation Flow						2050	2050
1/2 (B5102 Straight Mile Lane 2)	This lane uses a directly entered Saturation Flow						2017	2017
2/1 (B5373 Gresford Rd Lane 1)	This lane uses a directly entered Saturation Flow						2079	2079
3/1 (Llay Rd Lane 1)	This lane uses a directly entered Saturation Flow						2106	2106
4/1 (Rackery lane Lane 1)	This lane uses a directly entered Saturation Flow						2012	2012
4/2 (Rackery lane Lane 2)	This lane uses a directly entered Saturation Flow						1860	1860
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Chapel Lane Lane 1)	This lane uses a directly entered Saturation Flow						1952	1952
10/1	Infinite Saturation Flow						Inf	Inf

Scenario 6: 'SAT Design 2025_with Aldi Store' (FG6: '2025 SAT ALDI Traffic with Dev_with Aldi Store', Plan 4: 'Chapel in Every Four Cycle')

Traffic Flows, Desired

Desired Flow :

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	16	63	72	1	152
	B	55	0	99	103	0	257
	C	84	131	0	168	4	387
	D	68	114	156	0	0	338
	E	2	1	4	3	0	10
	Tot.	209	262	322	346	5	1144

Traffic Lane Flows

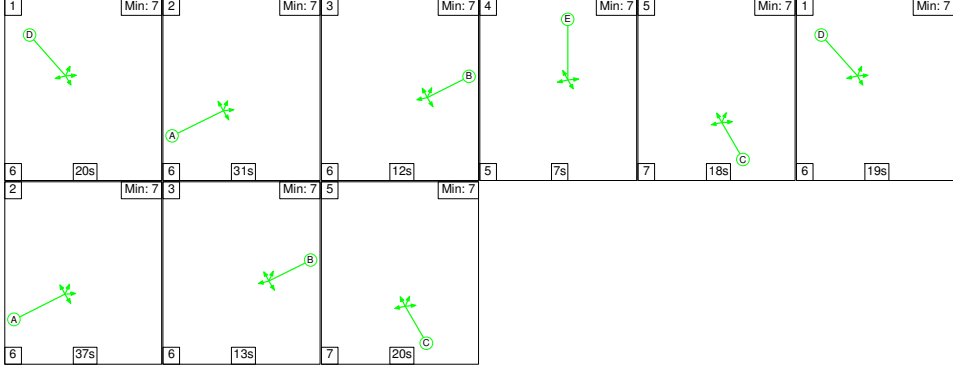
Lane	Scenario 6: SAT Design 2025_with Aldi Store
Junction: Llay Fiveways (near Wrexham)	
1/1 (short)	79
1/2 (with short)	152(In) 73(Out)
2/1	257
3/1	387
4/1 (with short)	338(In) 182(Out)
4/2 (short)	156
5/1	209
6/1	262
7/1	322
8/1	346
9/1	10
10/1	5

Lane Saturation Flows

Junction: Llay Fiveways (near Wrexham)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B5102 Straight Mile Lane 1)	This lane uses a directly entered Saturation Flow						2050	2050
1/2 (B5102 Straight Mile Lane 2)	This lane uses a directly entered Saturation Flow						2017	2017
2/1 (B5373 Gresford Rd Lane 1)	This lane uses a directly entered Saturation Flow						2079	2079
3/1 (Llay Rd Lane 1)	This lane uses a directly entered Saturation Flow						2106	2106
4/1 (Rackery lane Lane 1)	This lane uses a directly entered Saturation Flow						2012	2012
4/2 (Rackery lane Lane 2)	This lane uses a directly entered Saturation Flow						1860	1860
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Chapel Lane Lane 1)	This lane uses a directly entered Saturation Flow						1952	1952
10/1	Infinite Saturation Flow						Inf	Inf

Stage Sequence Diagram

Scenario 1: 'AM Design 2025 ' (FG1: '2025 AM ALDI Traffic with Dev', Plan 1: 'Chapel Ln in Every Other Cycle')

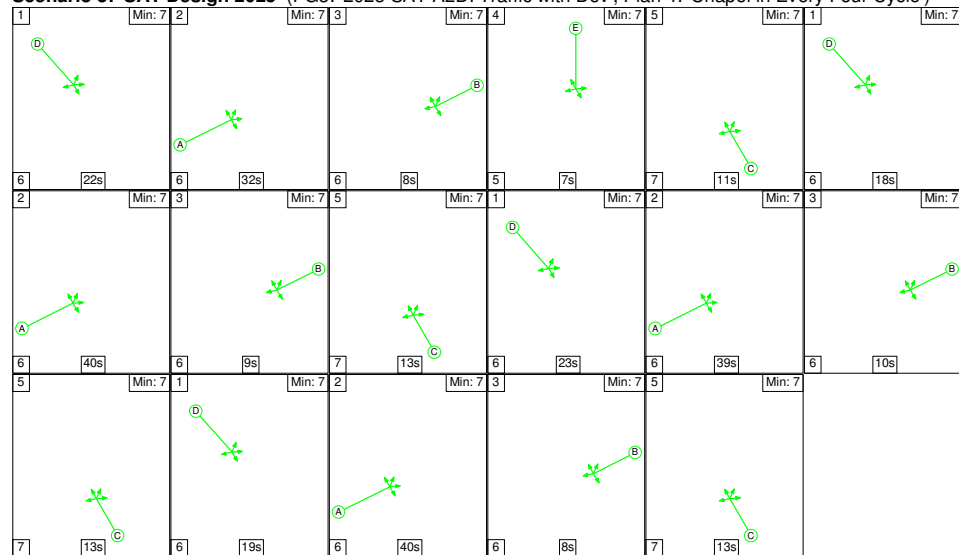


Network Results

Item	Lane Description	Full Phase	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Crown Crossroads at Llay	-	-	-	-	-	94.9%	24.3	24.0	48.4	-	-	-	-
Llay Fiveways (near Wrexham)	-	-	-	-	-	94.9%	24.3	24.0	48.4	-	-	-	-
1/2+1/1	B5102 Straight Mile Left Ahead Right Right2	B	313	2017:2050	330	94.9%	4.4	5.6	9.9	114.2	7.8	5.6	13.4
2/1	B5373 Gresford Rd Right Left Ahead Right2	C	334	2079	358	93.2%	4.4	4.9	9.3	100.0	10.9	4.9	15.7
3/1	Llay Rd Ahead Right Left Left2	A	601	2106	635	94.6%	6.6	6.4	13.0	77.8	19.7	6.4	26.1
4/1+4/2	Rackery lane Left Ahead Right Left2	D	588	2012:1860	622	94.5%	7.6	6.3	13.9	84.8	10.3	6.3	16.5
9/1	Chapel Lane Left Left2 Right Right2	E	45	1952	67	66.9%	1.4	0.9	2.3	185.2	2.9	0.9	3.8
	C1	PRC for Signalled Lanes (%):			-5.4	Total Delay for Signalled Lanes (pcuHr):			48.37	Cycle Time (s):		232	
		PRC Over All Lanes (%):			-5.4	Total Delay Over All Lanes (pcuHr):			48.37				

Network Results

Item	Lane Description	Full Phase	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcu/Hr)	Rand + Oversat Delay (pcu/Hr)	Total Delay (pcu/Hr)	Avg. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Crown Crossroads at Llay	-	-	-	-	-	78.7%	18.8	7.2	26.0	-	-	-	-
Llay Freeways (near Wrexham)	-	-	-	-	-	78.7%	18.8	7.2	26.0	-	-	-	-
1/2+1/1	B5102 Straight Mile Left Ahead Right Right2	B	328	2017:2050	424	77.4%	4.3	1.7	5.9	64.8	5.1	1.7	6.7
2/1	B5373 Gresford Rd Right Left Ahead Right2	C	251	2079	319	78.7%	3.1	1.8	4.8	69.0	7.6	1.8	9.4
3/1	Llay Rd Ahead Right Left Left2	A	498	2106	637	78.2%	4.7	1.8	6.5	46.9	13.8	1.8	15.6
4/1+4/2	Rackery lane Left Ahead Right Left2	D	561	2012:1860	715	78.4%	6.1	1.8	7.8	50.3	8.4	1.8	10.2
9/1	Chapel Lane Left Left2 Right Right2	E	12	1952	36	33.0%	0.7	0.2	0.9	281.0	1.4	0.2	1.7
C1					PRC for Signalised Lanes (%): PRC Over All Lanes (%):	14.4 14.4	Total Delay for Signalised Lanes (pcu/Hr): Total Delay Over All Lanes (pcu/Hr):			25.98 25.98	Cycle Time (s): 430		



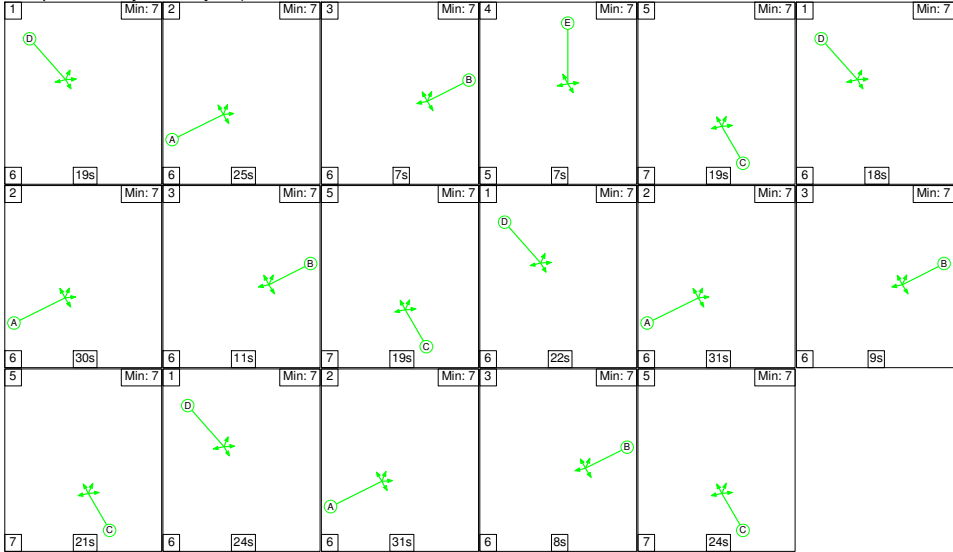
Network Results													
Item	Lane Description	Full Phase	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcu/Hr)	Rand + Oversat Delay (pcu/Hr)	Total Delay (pcu/Hr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Crown Crossroads at Lay	-	-	-	-	-	46.7%	10.0	1.9	12.0	-	-	-	-
Lay Fiveways (near Wrexham)	-	-	-	-	-	46.7%	10.0	1.9	12.0	-	-	-	-
1/2+1/1	B5102 Straight Mile Left Ahead Right Right2	B	164	2017:2050	359	45.7%	2.1	0.4	2.5	55.7	2.6	0.4	3.0
2/1	B5373 Gresford Rd Right Left Ahead Right2	C	121	2079	261	46.3%	1.5	0.4	1.9	56.5	3.5	0.4	3.9
3/1	Lay Rd Ahead Right Left Left2	A	353	2106	759	46.5%	2.6	0.4	3.0	30.9	8.5	0.4	9.0
4/1+4/2	Rackery lane Left Ahead Right Left2	D	309	2012:1860	661	46.7%	3.2	0.4	3.7	42.6	4.4	0.4	4.9
9/1	Chapel Lane Left Left2 Right Right2	E	11	1952	36	30.3%	0.6	0.2	0.9	278.2	1.3	0.2	1.5
C1	PRC for Signalled Lanes (%):				92.6	Total Delay for Signalled Lanes (pcu/Hr):			11.96	Cycle Time (s): 430			
	PRC Over All Lanes (%):				92.6	Total Delay Over All Lanes (pcu/Hr):			11.96				



Item	Lane Description	Full Phase	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcu/Hr)	Rand + Oversat Delay (pcu/Hr)	Total Delay (pcu/Hr)	Avg. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Crown Crossroads at Llay	-	-	-	-	-	98.2%	25.1	33.4	58.5	-	-	-	-
Llay Freeways (near Wrexham)	-	-	-	-	-	98.2%	25.1	33.4	58.5	-	-	-	-
1/2+1/1	B5102 Straight Mile Left Ahead Right Right2	B	308	2017:2050	317	97.2%	4.3	6.8	11.2	130.4	7.8	6.8	14.7
2/1	B5373 Gresford Rd Right Left Ahead Right2	C	363	2079	376	96.4%	4.8	6.8	11.5	114.1	11.8	6.8	18.6
3/1	Llay Rd Ahead Right Left Left2	A	611	2106	626	97.5%	6.9	9.1	16.0	94.2	20.9	9.1	30.0
4/1+4/2	Rackery lane Left Ahead Right Left2	D	598	2012:1860	609	98.2%	7.8	9.8	17.6	105.7	11.8	9.8	21.6
9/1	Chapel Lane Left Left2 Right Right2	E	45	1952	67	66.9%	1.4	0.9	2.3	185.2	2.9	0.9	3.8
C1		PRC for Signalled Lanes (%): PRC Over All Lanes (%):			-9.1 -9.1	Total Delay for Signalled Lanes (pcu/Hr): Total Delay Over All Lanes (pcu/Hr):			58.53 58.53	Cycle Time (s): 232			

Stage Sequence Diagram

Scenario 5: 'PM Design 2025_with Aldi Store' (FG5: '2025 PM ALDI Traffic with Dev_with Aldi Store', Plan 4: 'Chapel in Every Four Cycle')

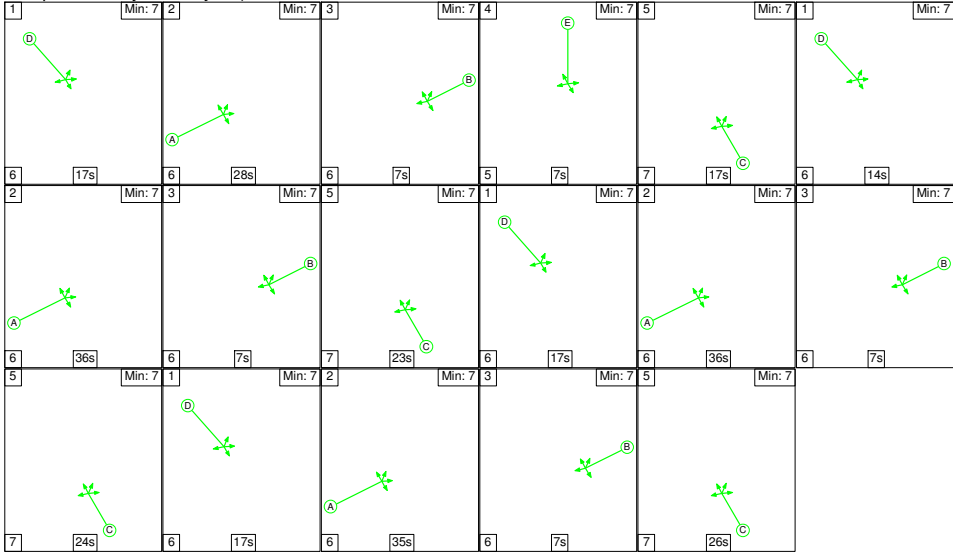


Network Results

Item	Lane Description	Full Phase	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcu/Hr)	Rand + Oversat Delay (pcu/Hr)	Total Delay (pcu/Hr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Crown Crossroads at Llay	-	-	-	-	-	89.7%	21.4	14.7	36.1	-	-	-	-
Llay Fiveways (near Wrexham)	-	-	-	-	-	89.7%	21.4	14.7	36.1	-	-	-	-
1/2+1/1	B5102 Straight Mile Left Ahead Right Right2	B	317	2017:2050	360	88.0%	4.3	3.2	7.4	84.6	5.0	3.2	8.2
2/1	B5373 Gresford Rd Right Left Ahead Right2	C	377	2079	421	89.6%	4.4	3.7	8.1	77.1	11.1	3.7	14.8
3/1	Llay Rd Ahead Right Left Left2	A	528	2106	593	89.1%	5.4	3.7	9.1	62.1	15.5	3.7	19.2
4/1+4/2	Rackery lane Left Ahead Right Left2	D	588	2012:1860	655	89.7%	6.6	3.9	10.5	64.4	9.8	3.9	13.7
9/1	Chapel Lane Left Left2 Right Right2	E	12	1952	36	33.0%	0.7	0.2	0.9	281.0	1.4	0.2	1.7
C1		PRC for Signalled Lanes (%):			0.3	Total Delay for Signalled Lanes (pcu/Hr):			36.09	Cycle Time (s):			430
		PRC Over All Lanes (%):			0.3	Total Delay Over All Lanes (pcu/Hr):			36.09				

Stage Sequence Diagram

Scenario 6: 'SAT Design 2025_with Aldi Store' (FG6: '2025 SAT ALDI Traffic with Dev_with Aldi Store', Plan 4: 'Chapel in Every Four Cycle')



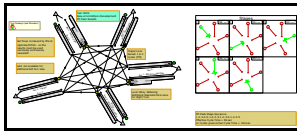
Network Results

Item	Lane Description	Full Phase	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcu/Hr)	Rand + Oversat Delay (pcu/Hr)	Total Delay (pcu/Hr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Crown Crossroads at Llay	-	-	-	-	-	56.8%	12.4	2.7	15.1	-	-	-	-
Llay Fiveways (near Wrexham)	-	-	-	-	-	56.8%	12.4	2.7	15.1	-	-	-	-
1/2+1/1	B5102 Straight Mile Left Ahead Right Right2	B	152	2017:2050	294	51.7%	2.0	0.5	2.6	60.5	2.3	0.5	2.9
2/1	B5373 Gresford Rd Right Left Ahead Right2	C	257	2079	454	56.5%	2.7	0.6	3.3	46.5	7.1	0.6	7.8
3/1	Llay Rd Ahead Right Left Left2	A	387	2106	681	56.8%	3.2	0.7	3.9	36.3	9.7	0.7	10.3
4/1+4/2	Rackery lane Left Ahead Right Left2	D	338	2012:1860	600	56.4%	3.9	0.6	4.5	48.4	5.1	0.6	5.7
9/1	Chapel Lane Left Left2 Right Right2	E	10	1952	36	27.5%	0.6	0.2	0.8	275.6	1.2	0.2	1.4
C1		PRC for Signalled Lanes (%):		58.3		Total Delay for Signalled Lanes (pcu/Hr):		15.08		Cycle Time (s): 430			
		PRC Over All Lanes (%):		58.3		Total Delay Over All Lanes (pcu/Hr):		15.08					

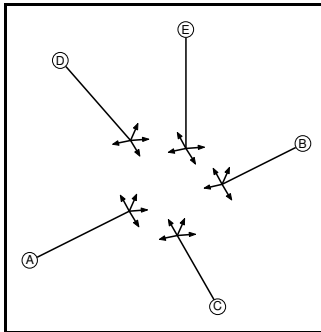
User and Project Details

Project:	Home Farm Residential Development
Title:	Crown Crossroads at Llay
Location:	Llay Wrexham LL12 0NT
File name:	Crown Crossroads_Aldi Mitigation.lsg3x
Author:	CBarratt
Company:	Cameron Rose Associates
Address:	Manchester
Notes:	Physical Junction Improvements and MOVA

Network Layout Diagram



Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Traffic		7	7

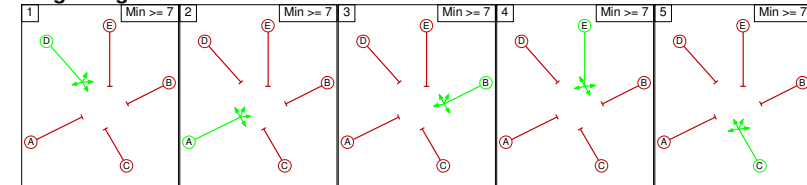
Phase Intergreens Matrix

	Starting Phase				
	A	B	C	D	E
	A	6	5	5	9
	B	6	7	10	5
	C	7	6	6	9
	D	6	5	5	9
	E	9	5	7	8

Phases in Stage

Stage No.	Phases in Stage
1	D
2	A
3	B
4	E
5	C

Stage Diagram



Phase Delays

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

Prohibited Stage Change

	To Stage				
	1	2	3	4	5
	1	6	5	9	5
	2	5	6	9	5
	3	10	6	5	7
	4	8	9	5	7
	5	6	7	6	9

Give-Way Lane Input Data

Junction: Llay Fiveways (near Wrexham)
There are no Opposed Lanes in this Junction

Lane Input Data

Junction: Llay Fiveways (near Wrexham)												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (B5102 Straight Mile)	U	B	2	3	10.4	User	2050	-	-	-	-	-
1/2 (B5102 Straight Mile)	U	B	2	3	60.0	User	2017	-	-	-	-	-
2/1 (B5373 Gresford Rd)	U	C	2	3	60.0	User	2079	-	-	-	-	-
3/1 (Llay Rd)	U	A	2	3	60.0	User	2106	-	-	-	-	-
4/1 (Rackery lane)	U	D	2	3	60.0	User	2012	-	-	-	-	-
4/2 (Rackery lane)	U	D	2	3	10.1	User	1860	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-
9/1 (Chapel Lane)	U	E	2	3	60.0	User	1952	-	-	-	-	-
10/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'AM Peak 2014 Surveyed Flows'	07:45	08:45	01:00	
2: 'PM Peak 2014 Surveyed Flows'	16:45	17:45	01:00	
3: 'AM Peak 2019 Base'	07:45	08:45	01:00	
4: 'PM Peak 2019 Base'	16:45	17:45	01:00	
5: 'AM Peak 2019 Base + Com.+Dev.'	07:45	08:45	01:00	
6: 'PM Peak 2019 Base + Com.+Dev.'	16:45	17:45	01:00	
7: 'AM Peak 2024 Base'	07:45	08:45	01:00	
8: 'PM Peak 2024 Base'	16:45	17:45	01:00	
9: 'AM Peak 2026 Base + Com.+Dev.'	07:45	08:45	01:00	
10: 'PM Peak 2026 Base + Com.+Dev.'	16:45	17:45	01:00	
11: 'AM Dev 2026'	07:45	08:45	01:00	
12: 'PM Dev 2026'	16:45	17:45	01:00	
13: 'AM Base 2026'	07:45	08:45	01:00	
14: 'PM Base 2026'	16:45	17:45	01:00	
15: '2026 AM ALDI Traffic with Dev'	07:45	08:45	01:00	
16: '2026 PM ALDI Traffic with Dev'	16:45	17:45	01:00	
17: '2025 AM ALDI Traffic with Dev_with Aldi Store'	07:45	08:45	01:00	
18: '2025 PM ALDI Traffic with Dev_with Aldi Store'	16:45	17:45	01:00	
19: '2025 SATALDI Traffic with Dev_with Aldi Store'	12:00	13:00	01:00	

Scenario 1: 'AM Design 2025_with Aldi Store' (FG17: '2025 AM ALDI Traffic with Dev_with Aldi Store', Plan 1: 'Chapel Ln in Every Other Cycle')
Traffic Flows, Desired
Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	0	5	84	219	0	308
	B	18	0	88	253	4	363
	C	136	57	0	417	1	611
	D	165	164	268	0	1	598
	E	1	2	4	38	0	45
	Tot.	320	228	444	927	6	1925

Traffic Lane Flows

Lane	Scenario 1: AM Design 2025_with Aldi Store
Junction: Llay Fiveways (near Wrexham)	
1/1 (short)	89
1/2 (with short)	308(In) 219(Out)
2/1	363
3/1	611
4/1 (with short)	598(In) 330(Out)
4/2 (short)	268
5/1	320
6/1	228
7/1	444
8/1	927
9/1	45
10/1	6

Lane Saturation Flows

Junction: Llay Fiveways (near Wrexham)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B5102 Straight Mile Lane 1)	This lane uses a directly entered Saturation Flow						2050	2050
1/2 (B5102 Straight Mile Lane 2)	This lane uses a directly entered Saturation Flow						2017	2017
2/1 (B5373 Gresford Rd Lane 1)	This lane uses a directly entered Saturation Flow						2079	2079
3/1 (Llay Rd Lane 1)	This lane uses a directly entered Saturation Flow						2106	2106
4/1 (Rackery lane Lane 1)	This lane uses a directly entered Saturation Flow						2012	2012
4/2 (Rackery lane Lane 2)	This lane uses a directly entered Saturation Flow						1860	1860
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Chapel Lane Lane 1)	This lane uses a directly entered Saturation Flow						1952	1952
10/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: 'PM Design 2025_with Aldi Store' (FG18: '2025 PM ALDI Traffic with Dev_with Aldi Store', Plan 4: 'Chapel in Every Four Cycle')
Traffic Flows, Desired
Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	0	22	136	163	0	321
	B	47	0	132	198	1	378
	C	75	149	0	301	9	534
	D	165	174	252	0	2	593
	E	1	2	4	5	0	12
	Tot.	288	347	524	667	12	1838

Traffic Lane Flows

Lane	Scenario 2: PM Design 2025_with Aldi Store
Junction: Llay Fiveways (near Wrexham)	
1/1 (short)	158
1/2 (with short)	321(In) 163(Out)
2/1	378
3/1	534
4/1 (with short)	593(In) 341(Out)
4/2 (short)	252
5/1	288
6/1	347
7/1	524
8/1	667
9/1	12
10/1	12

Lane Saturation Flows

Junction: Llay Fiveways (near Wrexham)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B5102 Straight Mile Lane 1)	This lane uses a directly entered Saturation Flow						2050	2050
1/2 (B5102 Straight Mile Lane 2)	This lane uses a directly entered Saturation Flow						2017	2017
2/1 (B5373 Gresford Rd Lane 1)	This lane uses a directly entered Saturation Flow						2079	2079
3/1 (Llay Rd Lane 1)	This lane uses a directly entered Saturation Flow						2106	2106
4/1 (Rackery lane Lane 1)	This lane uses a directly entered Saturation Flow						2012	2012
4/2 (Rackery lane Lane 2)	This lane uses a directly entered Saturation Flow						1860	1860
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Chapel Lane Lane 1)	This lane uses a directly entered Saturation Flow						1952	1952
10/1	Infinite Saturation Flow						Inf	Inf

Scenario 3: 'SAT Design 2025_with Aldi Store' (FG19: '2025 SATALDI Traffic with Dev_with Aldi Store', Plan 4: 'Chapel in Every Four Cycle')
Traffic Flows, Desired
Desired Flow :

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	16	63	72	1	152
	B	55	0	99	103	0	257
	C	84	131	0	168	4	387
	D	68	114	156	0	0	338
	E	2	1	4	3	0	10
	Tot.	209	262	322	346	5	1144

Traffic Lane Flows

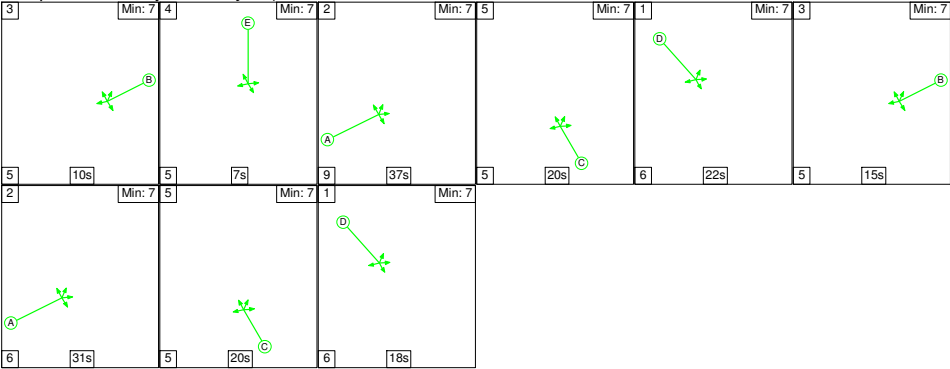
Lane	Scenario 3: SAT Design 2025_with Aldi Store
Junction: Llay Fiveways (near Wrexham)	
1/1 (short)	79
1/2 (with short)	152(In) 73(Out)
2/1	257
3/1	387
4/1 (with short)	338(In) 182(Out)
4/2 (short)	156
5/1	209
6/1	262
7/1	322
8/1	346
9/1	10
10/1	5

Lane Saturation Flows

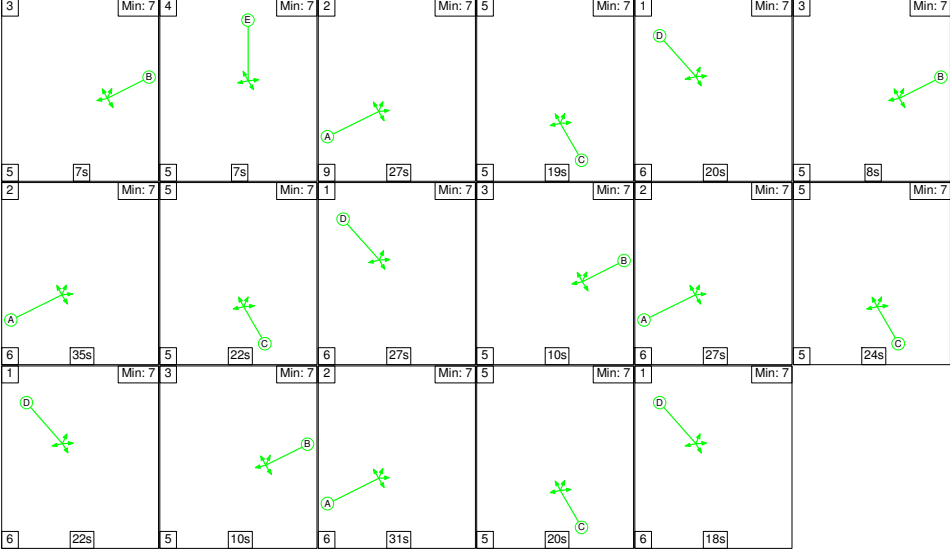
Junction: Llay Fiveways (near Wrexham)								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B5102 Straight Mile Lane 1)	This lane uses a directly entered Saturation Flow						2050	2050
1/2 (B5102 Straight Mile Lane 2)	This lane uses a directly entered Saturation Flow						2017	2017
2/1 (B5373 Gresford Rd Lane 1)	This lane uses a directly entered Saturation Flow						2079	2079
3/1 (Llay Rd Lane 1)	This lane uses a directly entered Saturation Flow						2106	2106
4/1 (Rackery lane Lane 1)	This lane uses a directly entered Saturation Flow						2012	2012
4/2 (Rackery lane Lane 2)	This lane uses a directly entered Saturation Flow						1860	1860
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1 (Chapel Lane Lane 1)	This lane uses a directly entered Saturation Flow						1952	1952
10/1	Infinite Saturation Flow						Inf	Inf

Stage Sequence Diagram

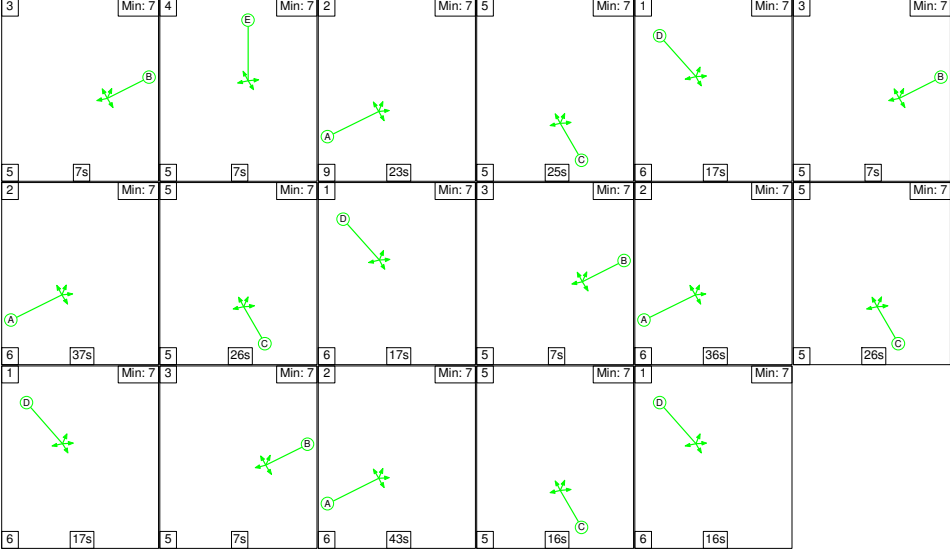
Scenario 1: 'AM Design 2025_with Aldi Store' (FG17: '2025 AM ALDI Traffic with Dev_with Aldi Store', Plan 1: 'Chapel Ln in Every Other Cycle')



Item	Lane Description	Full Phase	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Crown Crossroads at Llay	-	-	-	-	-	96.9%	25.1	28.5	53.6	-	-	-	-
Llay Fiveways (near Wrexham)	-	-	-	-	-	96.9%	25.1	28.5	53.6	-	-	-	-
1/2+1/1	B5102 Straight Mile Left Ahead Right Right2	B	308	2017:2050	330	93.3%	4.3	4.8	9.2	107.1	7.8	4.8	12.7
2/1	B5373 Gresford Rd Right Left Ahead Right2	C	363	2079	376	96.4%	4.9	6.8	11.6	115.1	12.3	6.8	19.1
3/1	Llay Rd Ahead Right Left Left2	A	611	2106	635	96.2%	6.8	7.7	14.4	85.1	20.0	7.7	27.7
4/1+4/2	Rackery lane Left Ahead Right Left2	D	598	2012:1860	617	96.9%	7.8	8.3	16.1	97.0	12.6	8.3	20.9
9/1	Chapel Lane Left Left2 Right Right2	E	45	1952	67	66.9%	1.4	0.9	2.3	185.2	2.9	0.9	3.8
C1 PRC for Signalled Lanes (%): -7.6 Total Delay for Signalled Lanes (pcuHr): 53.65 Cycle Time (s): 232													
PRC Over All Lanes (%): -7.6 Total Delay Over All Lanes(pcuHr): 53.65													



Item	Lane Description	Full Phase	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcu/Hr)	Rand + Oversat Delay (pcu/Hr)	Total Delay (pcu/Hr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Crown Crossroads at Llay	-	-	-	-	-	88.1%	21.3	13.2	34.5	-	-	-	-
Llay Fiveways (near Wrexham)	-	-	-	-	-	88.1%	21.3	13.2	34.5	-	-	-	-
1/2+1/1	B5102 Straight Mile Left Ahead Right Right2	B	321	2017:2050	369	87.0%	4.3	3.0	7.3	81.9	5.2	3.0	8.1
2/1	B5373 Gresford Rd Right Left Ahead Right2	C	378	2079	430	87.8%	4.3	3.2	7.6	72.0	11.2	3.2	14.5
3/1	Llay Rd Ahead Right Left Left2	A	534	2106	607	87.9%	5.4	3.3	8.8	59.1	16.0	3.3	19.4
4/1+4/2	Rackery lane Left Ahead Right Left2	D	593	2012:1860	673	88.1%	6.5	3.4	9.9	60.3	10.3	3.4	13.7
9/1	Chapel Lane Left Left2 Right Right2	E	12	1952	36	33.0%	0.7	0.2	0.9	281.0	1.4	0.2	1.7
C1 PRC for Signalled Lanes (%): 2.1 Total Delay for Signalled Lanes (pcu/Hr): 34.50 Cycle Time (s): 430 PRC Over All Lanes (%): 2.1 Total Delay Over All Lanes(pcu/Hr): 34.50													



Item	Lane Description	Full Phase	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcu/Hr)	Rand + Oversat Delay (pcu/Hr)	Total Delay (pcu/Hr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Crown Crossroads at Lay	-	-	-	-	-	55.3%	12.2	2.5	14.8	-	-	-	-
Lay Fiveways (near Wrexham)	-	-	-	-	-	55.3%	12.2	2.5	14.8	-	-	-	-
1/2+1/1	B5102 Straight Mile Left Ahead Right Right2	B	152	2017:2050	303	50.2%	2.0	0.5	2.5	59.7	2.3	0.5	2.8
2/1	B5373 Gresford Rd Right Left Ahead Right2	C	257	2079	469	54.8%	2.6	0.6	3.2	45.3	7.1	0.6	7.7
3/1	Llay Rd Ahead Right Left Left2	A	387	2106	700	55.3%	3.2	0.6	3.8	35.1	9.8	0.6	10.4
4/1+4/2	Rackery lane Left Ahead Right Left2	D	338	2012:1860	617	54.8%	3.9	0.6	4.5	47.5	5.1	0.6	5.7
9/1	Chapel Lane Left Left2 Right Right2	E	10	1952	36	27.5%	0.6	0.2	0.8	275.6	1.2	0.2	1.4
C1					PRC for Signalled Lanes (%): PRC Over All Lanes (%):	62.9 62.9	Total Delay for Signalled Lanes (pcu/Hr): Total Delay Over All Lanes (pcu/Hr):			14.75 14.75	Cycle Time (s): 430		

Item	Lane Description	Full Phase	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcu/Hr)	Rand + Oversat Delay (pcu/Hr)	Total Delay (pcu/Hr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Crown Crossroads at Lay	-	-	-	-	-	55.3%	12.2	2.5	14.8	-	-	-	-
Lay Fiveways (near Wrexham)	-	-	-	-	-	55.3%	12.2	2.5	14.8	-	-	-	-
1/2+1/1	B5102 Straight Mile Left Ahead Right Right2	B	152	2017:2050	303	50.2%	2.0	0.5	2.5	59.7	2.3	0.5	2.8
2/1	B5373 Gresford Rd Right Left Ahead Right2	C	257	2079	469	54.8%	2.6	0.6	3.2	45.3	7.1	0.6	7.7
3/1	Llay Rd Ahead Right Left Left2	A	387	2106	700	55.3%	3.2	0.6	3.8	35.1	9.8	0.6	10.4
4/1+4/2	Rackery lane Left Ahead Right Left2	D	338	2012:1860	617	54.8%	3.9	0.6	4.5	47.5	5.1	0.6	5.7
9/1	Chapel Lane Left Left2 Right Right2	E	10	1952	36	27.5%	0.6	0.2	0.8	275.6	1.2	0.2	1.4
C1					PRC for Signalled Lanes (%): PRC Over All Lanes (%):	62.9 62.9	Total Delay for Signalled Lanes (pcu/Hr): Total Delay Over All Lanes (pcu/Hr):			14.75 14.75	Cycle Time (s): 430		