Appendix A – Base Data

Base Traffic Data

Traffic Survey Data Analysis and CRF Calculation

ATC Data

																		AM Peak					PM Peak	
Location	Road	Source	Reference	Direction One		Direction Two		Weekday Average (Mon - Fri)	Direction One		Direction Two		Daily Average (Mon-Sun)	Weekday Am Peak				AM Peak Hour Flow 2-way (Average Mon-Fri)	Weekday Pm Peak				PM Peak Hour Flow (Average Mon-Fri)	Date
A57 DUNHAM ON TRENT (east of Laneham Road - updated White Swan)	A57	ATC Data for Bassetlaw	1001	5,045	EB	5,023	WB	10,068	4,730	EB	4,712	WB	9,442	508	EB	464	WB	972	476	EB	487	WB	963	Weekly Volume Report: Monday, January 25, 2010 to Sunday, January 31, 2010
A57 WORKSOP BYPASS (SOUTH OF B6041 GATEFORD ROAD)	A57	ATC Data for Bassetlaw	1002	11,539	NB	11,689	SB	23,228	10,893	NB	10,962	SB	21,855	678	NB	1,154	SB	1,832	1,174	NB	856	SB	2,030	2012-06-11 to 2012-07-08
A60 High Road, Carlton in Lindrick (south of Long Lane)	A60	ATC Data for Bassetlaw	1004	5,035	NB	4,941	SB	9,976	4,712	NB	4,655	SB	9,367	343	NB	500	SB	843	507	NB	372	SB	879	2010-05-10 to 2010-05-16
A60 Carlton Road, Worksop (north of Wingfield Ave - updated Sth Oakholme Rise)	A60	ATC Data for Bassetlaw	1006	4,724	NB	5,169	SB	9,893	4,494	NB	4,946	SB	9,440	284	NB	524	SB	808	473	NB	388	SB	861	2010-06-14 to 2010-06-20
A161 Stockwith Road Misterton, North of Newells Terrace	A161	ATC Data for Bassetlaw	1147	2,495	NB	2,478	SB	4,973	2,322	NB	2,298	SB	4,620	144	NB	267	SB	411	293	NB	185	SB	478	Weekly Volume Report: Monday, September 13, 2010 to Sunday, September 19, 2010
A620 BABWORTH (east of B6420 Mansfield Road)	A620	ATC Data for Bassetlaw	1010	7,383	EB	7,422	WB	14,805	6,659	EB	6,700	WB	13,359	698	EB	718	WB	1,416	655	EB	608	WB	1,263	Multi-Day Volume Report NOTTSPERMANENT 000013406880: 2012-06-11 to 2012-07-08
A620 Babworth Road, Retford (east of Railway Bridge)	A620	ATC Data for Bassetlaw	1011	9,203	EB	9,370	WB	18,573	8,357	EB	8,464	WB	16,821	827	EB	804	WB	1,631	754	EB	818	WB	1,572	02/02/07 to 08/02/07
A620 Welham Road Retford - East of Lidget Lane (Updated N of Bonemill Lane)	A620	ATC Data for Bassetlaw	1012	3,699	EB	3,874	WB	7,573	3,386	EB	3,567	WB	6,953	303	EB	417	WB	720	348	EB	344	WB	692	Multi-Day Volume Report NOTTSPERMANENT 000010527382: 2011-11-07 to 2011-12-04
A620 Gainsborough Road, North Wheatley (west of Wood Lane)	A620	ATC Data for Bassetlaw	1015	2,309	EB	2,412	WB	4,722	2,200	EB	2,316	WB	4,516	189	EB	232	WB	421	208	EB	219	WB	427	08/05/05 to 14/05/05
A631 Bawtry Road, Scaftworth (NW of Theaker Lane)	A631	ATC Data for Bassetlaw	1016	4,793	NB	4,870	SB	9,663	4,634	NB	4,416	SB	9,050	384	NB	361	SB	745	373	NB	440	SB	813	18/06/06 to 24/06/06
A631 EAST OF EVERTON	A631	ATC Data for Bassetlaw	1017	4,294	EB	4,253	WB	8,547	4,036	EB	4,086	WB	8,122	343	EB	363	WB	706	378	EB	367	WB	745	2012-06-11 to 2012-07-08
A634 Sheffield Road, Blyth (west of Park Drive)	A634	ATC Data for Bassetlaw	1020	2,407	EB	2,393	WB	4,800	2,373	EB	2,382	WB	4,755	225	EB	178	WB	403	209	EB	255	WB	464	2011-09-12 to 2011-09-18
A638 Great North Road, Scrooby (NW of Church Lane)	A638	ATC Data for Bassetlaw	1021	2,698	NB	2,735	SB	5,432	2,517	NB	2,547	SB	5,065	201	NB	232	SB	433	250	NB	247	SB	497	12/11/06 to 18/11/06
A638 Great North Road, Barnby Moor (north of A634)	A638	ATC Data for Bassetlaw	1024	2,751	NB	2,959	SB	5,711	2,595	NB	2,780	SB	5,375	189	NB	314	SB	503	295	NB	215	SB	510	18/06/06 to 24/06/06
A638 Great North Road, Gamston (south of Causeway Lane)	A638	ATC Data for Bassetlaw	1028	5,090	NB	5,148	SB	10,238	4,761	NB	4,821	SB	9,582	438	NB	381	SB	819	476	NB	453	SB	929	29/05/07 to 04/06/07
A638 Great North Road, Rockley (south of Holme Lane)	A638	ATC Data for Bassetlaw	1029	3,041	NB	3,271	SB	6,313	2,890	NB	3,095	SB	5,984	248	NB	236	SB	484	278	NB	282	SB	560	29/05/07 to 04/06/07
A6075 Lincoln Road, Tuxford (west of Marnham Road)	A6075	ATC Data for Bassetlaw	1031	3,268	EB	3,221	WB	6,489	3,027	EB	3,005	WB	6,032	363	EB	342	WB	705	301	EB	312	WB	613	Multi-Day Volume Report NOTTSPERMANENT 000011207471: 2012-06-25 to 2012-07-15
B1403 Main Street, Hayton (north of Scotter Lane)	B1403	ATC Data for Bassetlaw	1033	922	NB	902	SB	1,824	877	NB	847	SB	1,724	68	NB	112	SB	180	109	NB	72	SB	181	05/02/06 to 11/02/06
B6024 NEWCASTLE AVE WORKSOP (east of Westgate)	B6024	ATC Data for Bassetlaw	1034	4,331	NB	4,268	SB	8,599	4,108	NB	3,932	SB	8,040	363	NB	341	SB	704	304	NB	373	SB	677	2012-05-14 to 2012-06-03
B6034 OLLERTON RD WEST OF CARBURTON	B6034	ATC Data for Bassetlaw	1035	2,694	NB	2,688	SB	5,382	2,527	NB	2,527	SB	5,054	261	NB	223	SB	484	233	NB	242	SB	475	2012-06-11 to 2012-07-08
B6040 Retford Road, Worksop (west of B6079)	B6040	ATC Data for Bassetlaw	1036	7,305	EB	7,159	WB	14,464	6,509	EB	6,374	WB	12,883	532	EB	605	WB	1,137	658	EB	557	WB	1,215	Multi-Day Volume Report NOTTSPERMANENT 000010716078: 2012-05-14 to 2012-06-03
B6040 Gateford Road, Worksop (NW of Victoria Square)	B6040	ATC Data for Bassetlaw	1037	5,723	NB	4,951	SB	10,674	5,282	NB	4,626	SB	9,908	305	NB	360	SB	665	525	NB	302	SB	827	18/03/07 to 24/03/07
B6041 GATEFORD RD WORKSOP(east of Lady Walk)	B6041	ATC Data for Bassetlaw	1176	7,035	EB	7,012	WB	14,047	6,566	EB	6,531	WB	13,097	636	EB	532	WB	1,168	578	EB	744	WB	1,322	2012-05-14 to 2012-06-03
B6041 Kilton Hill, Worksop (north of Plantation Hill)	B6041	ATC Data for Bassetlaw	1039	5,729	NB	6,278	SB	12,007	5,269	NB	5,712	SB	10,981	339	NB	676	SB	1,015	555	NB	455	SB	1,010	2011-06-20 to 2011-06-26
B6041 KILTON HILL WORKSOP NORTH OF KILTON CRESCENT	B6041	ATC Data for Bassetlaw	1040	8,431	NB	8,084	SB	16,515	7,698	NB	7,358	SB	15,056	572	NB	787	SB	1,359	773	NB	606	SB	1,379	Weekly Volume Report NOTTS_AIU_SPEED 000010675979: 2011-06-20 to 2011-06-26
B6045 Blyth Road, Worksop (SW of Gloucester Road)	B6045	ATC Data for Bassetlaw	1041	4,716	NB	4,527	SB	9,243	4,237	NB	4,079	SB	8,316	314	NB	443	SB	757	460	NB	325	SB	785	Multi-Day Volume Report NOTTSPERMANENT 000010655980: 2012-05-14 to 2012-06-03
B6045 Ranskill Road, Mattersey (west of village)	B6045	ATC Data for Bassetlaw	1045	1,120	EB	1,083	WB	2,203	919	EB	879	WB	1,798	136	EB	93	WB	229	107	EB	104	WB	211	2012-05-05 to 2012-05-10
B6079 Retford Road, near Ranby (west of A1)	B6079	ATC Data for Bassetlaw	1046	4,315	NB	4,174	SB	8,489	3,849	NB	3,773	SB	7,622	412	NB	383	SB	795	364	NB	352	SB	716	2012-06-11 to 2012-07-08
B6420 Mansfield Road, Morton	B6420	ATC Data for Bassetlaw	1048	1,595	NB	1,778	SB	3,373	1,495	NB	1,634	SB	3,129	114	NB	206	SB	320	136	NB	160	SB	296	12/10/09 to 18/10/09
B6463 Tickhill Road, Harworth (NW of Baulk Lane)	B6463	ATC Data for Bassetlaw	1049	2,804	NB	2,936	SB	5,740	2,599	NB	2,730	SB	5,329	225	NB	226	SB	451	222	NB	267	SB	489	12/11/06 to 18/11/06
B6463 Main Street, Styrrup (SW of Pinfold Lane)	B6463	ATC Data for Bassetlaw	1050	1,527	NB	1,566	SB	3,093	1,412	NB	1,446	SB	2,858	148	NB	144	SB	292	143	NB	161	SB	304	05/02/06 to 11/02/06
C65 Blyth Road Harworth South of Harworth Railway Line	C65	ATC Data for Bassetlaw	1051	3,422	NB	3,307	SB	6,729	2,979	NB	2,867	SB	5,846	185	NB	348	SB	533	365	NB	220	SB	585	Weekly Volume Report NOTTS_LTP_TUBES 000010306191: 2012-05-14 to 2012-05-20
Old London Road, Nr Ranby (north of Green Mile Lane)		ATC Data for Bassetlaw	1055	779	NB	708	SB	1,486	691	NB	635	SB	1,325	85	NB	106	SB	191	117	NB	71	SB	188	05/10/03 to 11/10/03
Randall Way, Retford (SW of Millman Way)		ATC Data for Bassetlaw	1056	2,385	NB	1,923	SB	4,308	2,135	NB	1,740	SB	3,875	247	NB	139	SB	386	169	NB	205	SB	374	11/03/07 to 17/03/07
SCROOBY RD HARWORTH (west of Waterslack Road)		ATC Data for Bassetlaw	1058	2,086	EB	2,185	WB	4,271	1,991	EB	2,068	WB	4,059	130	EB	159	WB	289	196	EB	175	WB	371	Multi-Day Volume Report NOTTSPERMANENT 000010336291: 2012-06-25 to 2012-07-22
Tiln Lane Retford south of Smeath Lane		ATC Data for Bassetlaw	1060	982	NB	719	SB	1,701	928	NB	673	SB	1,601	68	NB	51	SB	119	90	NB	54	SB	144	Multi-Day Volume Report NOTTSPERMANENT 000011117082: 2011-11-07 to 2011-12-04
Sparken Hill, Worksop - South of Danesfield Road		ATC Data for Bassetlaw	1062	1,654	NB	1,530	SB	3,184	1,453	NB	1,349	SB	2,802	164	NB	183	SB	347	164	NB	148	SB	312	Multi-Day Volume Report NOTTSTUBES 000010605877: 2012-02-03 to 2012-02-15
Sturton Road, North Leverton (south of the Surgery)		ATC Data for Bassetlaw	1065	1,404	NB	1,464	SB	2,869	1,235	NB	1,286	SB	2,520	123	NB	202	SB	325	198	NB	124	SB	322	04/03/07 to 10/03/07
Valley Road, Worksop (south of Nene Walk)		ATC Data for Bassetlaw	1066	1,837	NB	2,139	SB	3,977	1,726	NB	1,966	SB	3,692	135	NB	328	SB	463	185	NB	196	SB	381	26/02/06 to 04/03/06
Westgate, Worksop (south of West St)		ATC Data for Bassetlaw	1067	2,586	NB	3,262	SB	5,849	2,334	NB	2,863	SB	5,197	126	NB	292	SB	418	226	NB	263	SB	489	02/02/07 to 08/02/07
West Hill Road, Retford (north of the Fairway)		ATC Data for Bassetlaw	1068	2,440	NB	2,639	SB	5,080	2,293	NB	2,497	SB	4,790	299	NB	160	SB	459	163	NB	300	SB	463	18/06/06 to 24/06/06
Whinney Moor Lane, Retford (SE of Thrumpton Close)		ATC Data for Bassetlaw	1070	1,104	NB	999	SB	2,103	1,019	NB	921	SB	1,939	134	NB	81	SB	215	99	NB	91	SB	190	18/06/06 to 24/06/06
A620 - Moorgate - Retford (North East of A638 Arlington Way)	A620	Retford TC Cordon (9 hours)	1072	7,627	NB	7,627	SB	15,255	7,042	NB	7,042	SB	14,083	517	NB	723	SB	1,240	784	NB	620	SB	1,404	12/03/2012
A638 - London Road - Retford (South East of Wright Wilson Street)	A638	Temp ATC	1277old2	7,342	NB	7,571	SB	14,499	7,020	NB	7,237	SB	13,385	687	NB	522	SB	1,209	573	NB	731	SB	1,304	2010-06-14 to 2010-06-20
B6044 - Albert Road - Retford (West of Beehive Street)	B6044	Retford TC Cordon (9 hours)	1074	2,588	EB	2,588	WB	5,175	2,389	EB	2,389	WB	4,778	243	EB	178	WB	421	229	EB	247	WB	476	12/03/2012
Bridgegate - Retford (South East of A620 / A638 Roundabout)		Retford TC Cordon (9 hours)	1075	3,438	NB	3,438	SB	6,877	3,202	NB	3,202	SB	6,403	279	NB	285	SB	564	343	NB	285	SB	628	09/03/2009
Spital Hill - Retford (North East of A638 Arlington Way)		Retford TC Cordon (9 hours)	1076	3,090	EB	3,090	WB	6,179	2,852	EB	2,852	WB	5,705	197	EB	299	WB	496	265	EB	310	WB	575	17/05/2012
B6024 - POTTER STREET - WORKSOP (East of Watson Road)	B6024	Worksop TC Cordon (9 hours)	1079	3,652	EB	3,652	WB	7,304	3,372	EB	3,372	WB	6,743	221	EB	361	WB	582	271	EB	413	WB	684	19/03/2012
A57 (West of B6034 Roundabout)	A57	Worksop MTCs	1084	9,430	EB	9,430	WB	18,860	8,780	EB	8,780	WB	17,561	981	EB	670	WB	1,651	766	EB	852	WB	1,618	30/06/2009
B6034 (North of A57 Roundabout)	B6034	Worksop MTCs	1085	3,254	NB	3,254	SB	6,508	3,030	NB	3,030	SB	6,059	266	NB	292	SB	558	265	NB	305	SB	570	30/06/2009
B6034 (South of A57 Roundabout)	B6034	Worksop MTCs	1086	2,117	NB	2,117	SB	4,235	1,971	NB	1,971	SB	3,943	196	NB	232	SB	428	161	NB	145	SB	306	30/06/2009
Eastgate (east of B6045/B6040)		Worksop MTCs	1098	2,409	EB	2,409	WB	4,817	2,243	EB	2,243	WB	4,486	145	EB	209	WB	354	210	EB	271	WB	481	02/04/2009
Memorial Ave (east of B6040 junction)		Worksop MTCs	1102	3,165	EB	3,165	WB	6,329	2,922	EB	2,922	WB	5,843	209	EB	256	WB	465	362	EB	270	WB	632	19/03/2012
B6040 (north of B6024 junction)	B6040	Worksop MTCs	1103	4,315	NB	4,315	SB	8,631	4,018	NB	4,018	SB	8,036	248	NB	424	SB	672	361	NB	463	SB	824	02/04/2009
A632 (west of A60)	A632	Temp ATC	1124	2,226	EB	2,218	WB	4,737	2,073	EB	2,067	WB	4,373	222	EB	189	WB	411	184	EB	226	WB	410	Multi-Day Volume Report NOTTSTUBES 000010815370: 2011-11-28 to 2011-12-11
Laneham Road (north of cocketts hill)		County MTCs	1129	2,155	NB	2,155	SB	4,310	2,006	NB	2,006	SB	4,013	207	NB	162	SB	369	143	NB	235	SB	378	06/05/2009
A1 BLYTH (SOUTHEAST OF A614/B6045 ROUNDABOUT)	A1	DfT Count Data (12 hours)	1133	17,718	NB	17,718	SB	35,436	16,358	NB	16,358	SB	32,715	1,352	NB	1,773	SB	3,125	1,514	NB	1,503	SB	3,017	Monday 12th September 2011
A1 BLYTH ROAD, SOUTH OF A620, RANBY	A1	DfT Count Data (12 hours)	1134	22,100	NB	22,100	SB	44,200	20,403	NB	20,403	SB	40,806	1,385	NB	1,273	SB	2,658	2,928	NB	2,075	SB	5,003	Friday 10th June 2011
A57 WORKSOP (SOUTH OF SANDY LANE	A57	DfT Count Data (12 hours)	1138	14,773	NB	14,773	SB	29,546	13,639	NB	13,639	SB	27,277	1,147	NB	1,288	SB	2,435	1,365	NB	1,321	SB	2,686	Monday 11th April 2011
A57 WORKSOP BYPASS (NORTH OF SANDY LANE)	A57	DfT Count Data (12 hours)	1139	11,337	NB	11,337	SB	22,674	10,467	NB	10,467	SB	20,933	703	NB	1,090	SB	1,793	1,156	NB	981	SB	2,137	Wednesday 6th April 2011
A57 WORKSOP BYPASS, EAST OF B6034 NETHERTON ROAD	A57	DfT Count Data (12 hours)	1140	8,643	EB	8,643	WB	17,285	7,979	EB	7,979	WB	15,958	761	EB	777	WB	1,538	601	EB	857	WB	1,458	Wednesday 7th July 2010
A60 MALPASS HILL, SOUTH OF STYRRUP LANE, NORTH OF OLDCOTES	A60	DfT Count Data (12 hours)	1144	2,466	NB	2,466	SB	4,933	2,296	NB	2,296	SB	4,593	198	NB	214	SB	412	211	NB	232	SB	443	03/05/2007
A60 MANSFIELD ROAD, WORKSOP (WEST OF MEADOW ROAD)	A60	DfT Count Data (12 hours)	1145	10,855	EB	10,855	WB	21,711	10,022	EB	10,022	WB	20,044	1,043	EB	777	WB	1,820	844	EB	1,099	WB	1,943	Tuesday 15th June 2010
A161 HAXEY ROAD, MISTERTON (N OF ROOKS LANE)	A161	Temp ATC	1146	2,427	NB	2,568	SB	5,181	2,239	NB	2,358	SB	4,783	184	NB	200	SB	384	269	NB	245	SB	514	Weekly Volume Report: Monday, June 14, 2010 to Sunday, June 20, 2010
A614 BAWTRY ROAD, BLYTH (NORTH OF BLYTH ROAD)	A614	DfT Count Data (12 hours)	1148	3,620	NB	3,620	SB	7,240	3,371	NB	3,371	SB	6,742	311	NB	361	SB	672	359	NB	224	SB	583	12/06/2006
A614 NORTH OF OLLERTON	A614	Permanent ATC Data	1149	5,006	NB	5,078	SB	10,084	4,566	NB	4,642	SB	9,208	447	NB	403	SB	850	385	NB	456	SB	841	Multi-Day Volume Report NOTTSPERMANENT 000030106573: 2012-06-11 to 2012-07-08
A619 DARFOULDS (EAST OF RAILWAY BRIDGE)	A619	DfT Count Data (12 hours)	1152	5,694	EB	5,694	WB	11,388	5,302	EB	5,302	WB	10,604	494	EB	408	WB	902	527	EB	545	WB	1,072	08/09/2009
A620 AMCOTT WAY, RETFORD (EAST OF MORRISONS ACCESS)	A620	DfT Count Data (12 hours)	1153	10,238	EB	10,238	WB	20,476	9,452	EB	9,452	WB	18,904	761	EB	862	WB	1,623	869	EB	1,057	WB	1,926	Friday 7th October 2011
A620 GAINSBOROUGH ROAD, NORTH WHEATLEY (EAST OF EASTFIELD)	A620	DfT Count Data (12 hours)	1154	2,383	NB	2,383	SB	4,765	2,219	NB	2,219	SB	4,437	195	NB	202	SB	397	205	NB	224	SB	429	11/09/2007
A620 GAINSBOROUGH ROAD, SAUNDBY (BETWEEN MARSH LANE AND BOLE CORNER)	A620	DfT Count Data (12 hours)	1155	3,981	NB	3,981	SB	7,962	3,707	NB	3,707	SB	7,413	249	NB	373	SB	622	480	NB	278	SB	758	10/07/2009
A620 HOSPITAL ROAD, RETFORD (NORTHEAST OF QUEEN STREET)	A620	NCC	1156	7,549	NB	7,549	SB	15,099	6,970	NB	6,970	SB	13,939	582	NB	673	SB	1,255	574	NB	788	SB	1,362	12/07/2011
A620 STRAIGHT MILE, RANBY (EAST OF H.M.PRISON)	A620	DfT Count Data (12 hours)	1157	7,252	EB	7,252	WB	14,504	6,752	EB	6,752	WB	13,505	689	EB	686	WB	1,375	565	EB	574	WB	1,139	12/05/2008
A631 GAINSBOROUGH ROAD, EAST OF EVERTON (WEST OF B6045)	A631	DfT Count Data (12 hours)	1158	3,234	EB	3,234	WB	6,467	3,011	EB	3,011	WB	6,022	247	EB	264	WB	511	317	EB	293	WB	610	28/03/2007
A631 GRINGLEY ON THE HILL BYPASS (WEST OF GREEN ROAD	A631	DfT Count Data (12 hours)	1159	4,990	EB	4,990	WB	9,981	4,647	EB	4,647	WB	9,293	419	EB	432	WB	851	449	EB	430	WB	879	16/10/2008
A631 THE FLOOD ROAD, EAST OF BECKINGHAM	A631	Temp ATC	1160	9,295	EB	8,862	WB	16,899	9,049	EB	8,421	WB	15,601	707	EB	596	WB	1,303	820	EB	806	WB	1,626	Multi-Day Volume Report NOTTS_AIU_SPEED 000010108089: 2012-08-13 to 2012-08-26
A638 GREAT NORTH ROAD, BARNBY MOOR (SOUTHEAST OF STATION ROAD)	A638	DfT Count Data (12 hours)	1161	4,595	NB	4,595	SB	9,190	4,279	NB	4,279	SB	8,557	296	NB	444	SB	740	436	NB	417	SB	853	12/06/2007
A638 GREAT NORTH ROAD, SOUTH OF EATON	A638	DfT Count Data (12 hours)	1162	7,021	NB	7,021	SB	14,043	6,482	NB	6,482	SB	12,965	516	NB	611	SB	1,127	543	NB	764	SB	1,307	Monday 4th April 2011
A638 GREAT NORTH ROAD, SOUTH OF SCROOBY	A638	DfT Count Data (12 hours)	1163	2,579	NB	2,579	SB	5,158	2,401	NB	2,401	SB	4,802	198	NB	220	SB	418	239	NB	237	SB	476	19/05/2008
A638 NORTH ROAD, RETFORD (NORTHWEST OF COURT ROAD)	A638	Temp ATC	1026	6,667	NB	6,679	SB	12,693	6,212	NB	6,227	SB	12,439	483	NB	575	SB	1,058	560	NB	582	SB	1,142	2011-06-27 to 2011-07-03
A6075 ASHVALE ROAD (S OF LINCOLN RD) TUXFORD	A6075	DfT Count Data (12 hours)	1166	2,057	NB	2,057	SB	4,113	1,915	NB	1,915	SB	3,830	162	NB	167	SB	329	234	NB	150	SB	384	05/10/2006
A6075 DARLTON ROAD, EAST OF TUXFORD	A6075	DfT Count Data (12 hours)	1167	1,737	NB	1,737	SB	3,473	1,617	NB	1,617	SB	3,234	154	NB	145	SB	299	143	NB	160	SB	303	05/10/2006
A6075 LINCOLN ROAD, TUXFORD (WEST OF A1)	A6075	DfT Count Data (12 hours)	1168	4,633	EB	4,633	WB	9,265	4,314	EB	4,314	WB	8,627	425	EB	410	WB	835	378	EB	393	WB	771	05/10/2006
B1164 GREAT NORTH ROAD, N OF SUTTON ON TRENT	B1164	DfT Count Data (12 hours)	1169	913	NB	932	SB	1,892	816	NB	837	SB	1,747	88	NB	62	SB	150	90	NB	88	SB	178	2012-06-25 to 2012-07-01
B1164 GREAT NORTH ROAD, SIBTHORPE (SOUTHEAST OF MARKHAM MOOR ROUNDABOUT)	B1164	DfT Count Data (12 hours)	1170	2,400	NB	2,400	SB	4,800	2,235	NB	2,235	SB	4,469	241	NB	152	SB	393	319	NB	120	SB	439	23/05/2008
B1403 CHURCH STREET, MISTERTON (BETWEEN CARR LANE AND CHURCH LANE)	B1403	DfT Count Data (12 hours)	1171	990	NB	999	SB	2,094	942	NB	946	SB	1,934	65	NB	109	SB	174	108	NB	81	SB	189	Weekly Volume Report: Monday, June 14, 2010 to Sunday, June 20, 2010
B1403 WALKERINGHAM ROAD, GRINGLEY ON THE HILL (NE OF HALL'S ROAD)	B1403	DfT Count Data (12 hours)	1173	1,488	NB	1,488	SB	2,977	1,386	NB	1,386	SB	2,772	98	NB	163	SB	261	158	NB	97	SB	255	09/05/2008
B6034 OLLERTON ROAD, S OF WORKSOP (N OF SCOTLAND FARM)	B6034	DfT Count Data (12 hours)	1175	3,355	NB	3,355	SB	6,710	3,124	NB	3,124	SB	6,248	364	NB	238	SB	602	289	NB	272	SB	561	16/10/2008
B6045 BLYTH ROAD, W OF RANSKILL (NE OF THE GRANGE)	B6045	DfT Count Data (12 hours)	1178	1,488	EB	1,488	WB	2,977	1,386	EB	1,386	WB	2,772	101	EB	135	WB	236	151	EB	129	WB	280	10/09/2009
B6045 CARLTON ROAD, WORKSOP (N OF VICTORIA SQUARE)	B6045	DfT Count Data (12 hours)	1179	2,758	NB	2,758	SB	5,516	2,546	NB	2,546	SB	5,092	162	NB	320	SB	482	221	NB	253	SB	474	Monday 19th September 2011
ALISON AVENUE, WHITE HOUSES, S OF RETFORD		DfT Count Data (12 hours)	1186	352	NB	352	SB	704	325	NB	325	SB	650	38	NB	19	SB	57	28	NB	37	SB	65	Friday 14th October 2011
HALLCROFT ROAD RETFORD SOUTH OF THE GLEBE		Permanent ATC Data	1190	3,512	NB	3,640	SB	7,152	3,243	NB	3,358	SB	6,601	282	NB	385	SB	667	242	NB	330	SB	572	Multi-Day Volume Report NOTTSPERMANENT 000011047081: 2012-06-11 to 2012-07-08
SCAMPTON ROAD, WORKSOP (W OF ASHES		DfT Count Data (12 hours)	1193	1,324	EB	1,324	WB	2,648	1,222	EB	1,222	WB	2,445	49	EB	169	WB	218	170	EB	71	WB	241	Monday 11th July 2011
SMEATH LANE/TILN LANE JUNCTION, NORTH OF RETFORD		DfT Count Data (12 hours)	1195	669	NB	669	SB	1,339	618	NB	618	SB	1,236	50	NB	36	SB	86	101	NB	45	SB	146	Thursday 24th June 2010
UNNAMED ROAD, RAGNALL (N OF ROBERTS FARM)		DfT Count Data (12 hours)	1197	695	NB	695	SB	1,390	642	NB	642	SB	1,284	76	NB	49	SB	125	38	NB	78	SB	116	Thursday 20th October 2011
B6045 BLYTH ROAD (NORTHEAST OF THIEVESDALE HOUSE) WORKSOP	B6045	AADTs 2011	1177	4,928		4,928		9,857	4,550		4,550		9,100	421	0	421	0	841	434	0	434	0	867	2011
B6387 NORTHEAST OF BEVERCOTES COLLIERY ENTRANCE	B6387	AADTs 2011	1182	2,031		2,031		4,062	1,875		1,875		3,750	173	0	173	0	347	179	0	179	0	357	2011
Tuxford Road/Markham Road: A57, East Markham - B1164, Tuxford		AADTs 2011	1183	677		677		1,354	625		625		1,250	58	0	58	0	116	60	0	60	0	119	2011
NETHERTON ROAD, WORKSOP (NORTH OF PELHAM STREET)		AADTs 2011	1191	1,083		1,083		2,166	1,000		1,000		2,000	92	0	92	0	185	95	0	95	0	191	2011
OLLERTON ROAD, RETFORD (SOUTH OF ORDSALL ROAD)		AADTs 2011	1192	2,275		2,275		4,549	2,100		2,100		4,200	194	0	194	0	388	200	0	200	0	400	2011
A1 (M)Yorkshire boundary - A 614 (Blyth roundabout)	A1	AADTs 2011	1199	23,451		23,451		46,901	21,650		21,650		43,300	2,001	0	2,001	0	4,002	2,064	0	2,064	0	4,127	2011
A1 A 614 (Blyth roundabout) - A 634 (south of Blyth)	A1	AADTs 2011	1200	22,232		22,232		44,464	20,525		20,525		41,050	1,897	0	1,897	0	3,794	1,956	0	1,956	0	3,913	2011
A1 A 634 (south of Blyth) - A 620, Ranby	A1	AADTs 2011	1201	21,501		21,501		43,002	19,850		19,850		39,700	1,835	0	1,835	0	3,669	1,892	0	1,892	0	3,784	2011
A1 A 620, Ranby - A 614 (Five Lanes End roundabout)	A1	AADTs 2011	1202	22,936		22,936		45,872	21,175		21,175		42,350	1,957	0	1,957	0	3,914	2,018	0	2,018	0	4,037	2011
A1 A 614 (Five Lanes End roundabout) - B 6420 Mansfield Road	A1	AADTs 2011	1203	23,315		23,315		46,630	21,525		21,525		43,050	1,989	0	1,989	0	3,979	2,052	0	2,052	0	4,103	2011
A1 B 6420 Mansfield Road - B 6387	A1	AADTs 2011	1204	23,315		23,315		46,630	21,525		21,525		43,050	1,989	0	1,989	0	3,979	2,052	0	2,052	0	4,103	2011
A1 B 6387 - A 57 (Markham Moor)	A1	AADTs 2011	1205	20,526		20,526		41,052	18,950		18,950		37,900	1,751	0	1,751	0	3,503	1,806	0	1,806	0	3,613	2011
A1 A 57 (Markham Moor) - A 6075, Tuxford	A1	AADTs 2011	1206	19,551		19,551		39,102	18,050		18,050		36,100	1,668	0	1,668	0	3,336	1,720	0	1,720	0	3,441	2011
A1 A 6075, Tuxford - B 1164, Carlton-on-Trent	A1	AADTs 2011	1207	18,576		18,576		37,153	17,150		17,150		34,300	1,585	0	1,585	0	3,170	1,635	0	1,635	0	3,269	2011
A57 South Yorkshire boundary - B 6041 Gateford Road, Worksop	A57	AADTs 2011	1208	12,863		12,863		25,725	11,875		11,875		23,750	1,098	0	1,098	0	2,195	1,132	0	1,132	0	2,264	2011
A57 Worksop Bypass: B 6041 Gateford Road - Claylands Avenue	A57	AADTs 2011	1209	11,617		11,617		23,234	10,725		10,725		21,450	991	0	991	0	1,982	1,022	0	1,022	0	2,045	2011
A57 Worksop Bypass: Claylands Avenue - A 60 Sandy Lane	A57	AADTs 2011	1210	11,590		11,590		23,180	10,700		10,700		21,400	989	0	989	0	1,978	1,020	0	1,020	0	2,040	2011
A57 Worksop Bypass: A 60 Sandy Lane - A 60 Newcastle Avenue	A57	AADTs 2011	1211	16,302		16,302		32,603	15,050		15,050		30,100	1,391	0	1,391	0	2,782	1,435	0	1,435	0	2,869	2011
A57 Worksop Bypass: A 60 Newcastle Avenue - B 6034 Netherton Road	A57	AADTs 2011	1212	10,453		10,453		20,905	9,650		9,650		19,300	892	0	892	0	1,784	920	0	920	0	1,840	2011
A57 Worksop Bypass: B 6034 Netherton Road - B 6040 Retford Road	A57	AADTs 2011	1213	7,961		7,961		15,923	7,350		7,350		14,700	679	0	679	0	1,359	701	0	701	0	1,401	2011
A57 B 6040 Retford Road, Worksop - A 1 (Five Lanes End roundabout)	A57	AADTs 2011	1214	7,718		7,718		15,435	7,125		7,125		14,250	659	0	659	0	1,317	679	0	679	0	1,358	2011
A57 A 1 (Markham Moor) - A 6075, Darlton	A57	AADTs 2011	1137	4,008		4,008		8,015	3,700		3,700		7,400	342	0	342	0	684	353	0	353	0	705	2011
A57 A 6075, Darlton - C 2, Ragnall	A57	AADTs 2011	1216	5,091		5,091		10,182	4,700		4,700		9,400	434	0	434	0	869	448	0	448	0	896	2011
A57 C 2, Ragnall - Lincolnshire boundary	A57	AADTs 2011	1217	5,253		5,253		10,507	4,850		4,850		9,700	448	0	448	0	897	462	0	462	0	925	2011
A60 South Yorkshire boundary - A 634, Oldcotes	A60	AADTs 2011	1218	2,139		2,139		4,279	1,975		1,975		3,950	183	0	183	0	365	188	0	188	0	377	2011
A60 A 634, Oldcotes - B 6463 Lamb Lane	A60	AADTs 2011	1219	3,574		3,574		7,149	3,300		3,300		6,600	305	0	305	0	610	315	0	315	0	629	2011
A60 B 6463 Lamb Lane, Oldcotes - Church Street, Langold	A60	AADTs 2011	1220	3,439		3,439		6,878	3,175		3,175		6,350	293	0	293	0	587	303	0	303	0	605	2011
A60 Church Street, Langold - Rotherham Baulk, Carlton-in-Lindrick	A60	AADTs 2011	1221	4,251		4,251		8,503	3,925		3,925		7,850	363	0	363	0	726	374	0	374	0	748	2011
A60 Doncaster Road, Carlton in Lindrick: Rotherham Baulk - Long Lane	A60	AADTs 2011	1222	4,522		4,522		9,044	4,175		4,175		8,350	386	0	386	0	772	398	0	398	0	796	2011
A60 Long Lane, Carlton-in-Lindrick - B 6041, Worksop	A60	AADTs 2011	1223	4,631		4,631		9,261	4,275		4,275		8,550	395	0	395	0	790	407	0	407	0	815	2011
A60 Carlton Road, Worksop: B 6041 - B 6045 Blyth Road	A60	AADTs 2011	1224	4,847		4,847		9,694	4,475		4,475		8,950	414	0	414	0	827	427	0	427	0	853	2011
A60 Turner Road, Worksop: B 6045 Carlton Road - B 6040 Gateford Road	A60	AADTs 2011	1225	6,472		6,472		12,944	5,975		5,975		11,950	552	0	552	0	1,104	570	0	570	0	1,139	2011
A60 Gateford Road, Worksop: Turner Road - Babbage Way	A60	AADTs 2011	1226	11,184		11,184		22,367	10,325		10,325		20,650	954	0	954	0	1,909	984	0	984	0	1,968	2011
A60 Babbage Way / Sandy Lane, Worksop: B 6040 Gateford Road - A 57 Worksop Bypass	A60	AADTs 2011	1227	8,043		8,043		16,085	7,425		7,425		14,850	686	0	686	0	1,372	708	0	708	0	1,415	2011
A60 A 57 Worksop Bypass - A 619 (Darfoulds roundabout)	A60	AADTs 2011	1228	10,182		10,182		20,364	9,400		9,400		18,800	869	0	869	0	1,738	896	0	896	0	1,792	2011
A60 A 619 (Darfoulds roundabout) - Derbyshire boundary	A60	AADTs 2011	1229	4,685		4,685		9,369	4,325		4,325		8,650	400	0	400	0	799	412	0	412	0	824	2011
A60 Derbyshire boundary - A 616 Creswell Road, Cuckney	A60	AADTs 2011	1230	3,087		3,087		6,174	2,850		2,850		5,700	263	0	263	0	527	272	0	272	0	543	2011

Location	Road	Source	Reference	Direction One	Direction Two	Weekday Average (Mon - Fri)	Direction One	Direction Two	Daily Average (Mon-Sun)	Weekday Am Peak				AM Peak Hour Flow 2-way (Average Mon-Fri)	Weekday Pm Peak				PM Peak Hour Flow (Average Mon-Fri)	Date
A60 Mansfield Road, Cuckney: A 616 Creswell Road - A 632 Langwith Road	A60	AADTs 2011	1231	3,277	3,277	6,553	3,025	3,025	6,050	280	0	280	0	559	288	0	288	0	577	2011
A60 A 632 Langwith Road, Cuckney - B 6031 Bishop's Walk, Church Warsop	A60	AADTs 2011	1232	3,141	3,141	6,282	2,900	2,900	5,800	268	0	268	0	536	276	0	276	0	553	2011
A161 North Lincolnshire boundary - B 1403, Misterton	A161	AADTs 2011	1233	2,383	2,383	4,766	2,200	2,200	4,400	203	0	203	0	407	210	0	210	0	419	2011
A161 Misterton: B1403 - Stockwith Road	A161	AADTs 2011	1234	2,004	2,004	4,008	1,850	1,850	3,700	171	0	171	0	342	176	0	176	0	353	2011
A161 Stockwith Road, Misterton - A 631, Beckingham	A161	AADTs 2011	1235	2,410	2,410	4,820	2,225	2,225	4,450	206	0	206	0	411	212	0	212	0	424	2011
A614 Yorkshire boundary - A638	A614	AADTs 2011	1236	6,255	6,255	12,511	5,775	5,775	11,550	534	0	534	0	1,067	550	0	550	0	1,101	2011
A614 A638 - A1 (M) (Blyth roundabout)	A614	AADTs 2011	1237	3,520	3,520	7,041	3,250	3,250	6,500	300	0	300	0	601	310	0	310	0	620	2011
A614 A1 (Five Lanes End roundabout) - Lime Tree Avenue, Clumber Park	A614	AADTs 2011	1238	5,660	5,660	11,319	5,225	5,225	10,450	483	0	483	0	966	498	0	498	0	996	2011
A614 Lime Tree Avenue, Clumber Park - Bothamsall Roundabout	A614	AADTs 2011	1239	5,226	5,226	10,453	4,825	4,825	9,650	446	0	446	0	892	460	0	460	0	920	2011
A614 Bothamsall Roundabout - A616 (Ollerton roundabout)	A614	AADTs 2008	1240	5,719	0 5,719	0 11,438	5,325	5,325	10,650	488	0	488	0	976	503	0	503	0	1,007	2,008
A616 Derbyshire boundary - A60 Worksop Road, Cuckney	A616	AADTs 2011	1241	1,462	1,462	2,925	1,350	1,350	2,700	125	0	125	0	250	129	0	129	0	257	2011
A616 A60 Worksop Road - A632 Budby Road, Cuckney	A616	AADTs 2011	1242	1,110	1,110	2,220	1,025	1,025	2,050	95	0	95	0	189	98	0	98	0	195	2011
A616 A632 Budby Road, Cuckney - B6034 Ollerton Road, Budby	A616	AADTs 2011	1243	2,031	2,031	4,062	1,875	1,875	3,750	173	0	173	0	347	179	0	179	0	357	2011
A619 Derbyshire boundary - A60 (Darfoulds roundabout)	A619	AADTs 2011	1244	5,470	5,470	10,940	5,050	5,050	10,100	467	0	467	0	933	481	0	481	0	963	2011
A620 Straight Mile: A 1, Ranby - B 6420 Mansfield Road, Babworth	A620	AADTs 2011	1245	5,524	5,524	11,048	5,100	5,100	10,200	471	0	471	0	943	486	0	486	0	972	2011
A620 Babworth Road: B 6420 Mansfield Road, Babworth - Ordsall Road, Retford	A620	AADTs 2011	1246	7,095	7,095	14,190	6,550	6,550	13,100	605	0	605	0	1,211	624	0	624	0	1,249	2011
A620 Babworth Road, Retford: Ordsall Road - Queen Street	A620	AADTs 2011	1247	9,017	9,017	18,035	8,325	8,325	16,650	769	0	769	0	1,539	794	0	794	0	1,587	2011
A620 Hospital Road, Retford: Queen Street - A 638 North Road	A620	AADTs 2011	1248	6,770	6,770	13,540	6,250	6,250	12,500	578	0	578	0	1,155	596	0	596	0	1,191	2011
A620 Amcott Way, Retford: A 638 North Road - A 638 Arlington Way	A620	AADTs 2011	1249	10,832	10,832	21,663	10,000	10,000	20,000	924	0	924	0	1,848	953	0	953	0	1,906	2011
A620 Moorgate, Retford: A 638 - Tiln Lane	A620	AADTs 2011	1250	7,176	7,176	14,352	6,625	6,625	13,250	612	0	612	0	1,225	631	0	631	0	1,263	2011
A620 Tiln Lane, Retford - B 1403, Clarborough	A620	AADTs 2011	1251	4,333	4,333	8,665	4,000	4,000	8,000	370	0	370	0	739	381	0	381	0	763	2011
A620 B 1403, Clarborough - Haughgate Hill, North Wheatley	A620	AADTs 2011	1252	2,816	2,816	5,632	2,600	2,600	5,200	240	0	240	0	481	248	0	248	0	496	2011
A620 Haughgate Hill, North Wheatley - Bole Corner	A620	AADTs 2011	1253	2,248	2,248	4,495	2,075	2,075	4,150	192	0	192	0	384	198	0	198	0	396	2011
A620 Bole Corner - A 631, Beckingham	A620	AADTs 2011	1254	3,493	3,493	6,986	3,225	3,225	6,450	298	0	298	0	596	307	0	307	0	615	2011
A631 Yorkshire boundary - High Street, Everton	A631	AADTs 2011	1255	4,874	4,874	9,749	4,500	4,500	9,000	416	0	416	0	832	429	0	429	0	858	2011
A631 High Street, Everton - B 6045 Eel Pool Road, Drakeholes	A631	AADTs 2011	1256	4,251	4,251	8,503	3,925	3,925	7,850	363	0	363	0	726	374	0	374	0	748	2011
A631 B 6045 Eel Pool Road, Drakeholes - B 1403 Clayworth Road, Gringley-on-the-Hill	A631	AADTs 2011	1257	4,712	4,712	9,424	4,350	4,350	8,700	402	0	402	0	804	415	0	415	0	829	2011
A631 B 1403 Clayworth Road - B 1403 Green Road, Gringley-on-the-Hill	A631	AADTs 2011	1258	4,928	4,928	9,857	4,550	4,550	9,100	421	0	421	0	841	434	0	434	0	867	2011
A631 B 1403 Green Road, Gringley-on-the-Hill - A 161, Beckingham	A631	AADTs 2011	1259	4,062	4,062	8,124	3,750	3,750	7,500	347	0	347	0	693	357	0	357	0	715	2011
A631 Beckingham Bypass: A 161 - A 620	A631	AADTs 2011	1260	6,201	6,201	12,402	5,725	5,725	11,450	529	0	529	0	1,058	546	0	546	0	1,091	2011
A631 A 620 - Lincolnshire boundary	A631	AADTs 2011	1261	9,044	9,044	18,089	8,350	8,350	16,700	772	0	772	0	1,543	796	0	796	0	1,592	2011
A632 Derbyshire boundary - Wood Lane	A632	AADTs 2011	1262	2,248	2,248	4,495	2,075	2,075	4,150	192	0	192	0	384	198	0	198	0	396	2011
A632 Wood Lane - A60 Mansfield Road, Cuckney	A632	AADTs 2011	1263	1,679	1,679	3,358	1,550	1,550	3,100	143	0	143	0	287	148	0	148	0	295	2011
A632 Budby Road, Cuckney: A60 Mansfield Road - A616 Budby Road	A632	AADTs 2011	1264	1,110	1,110	2,220	1,025	1,025	2,050	95	0	95	0	189	98	0	98	0	195	2011
A634 Yorkshire boundary - A 60, Oldcotes	A634	AADTs 2011	1265	2,356	2,356	4,712	2,175	2,175	4,350	201	0	201	0	402	207	0	207	0	415	2011
A634 A 60, Oldcotes - B 6463	A634	AADTs 2011	1266	3,520	3,520	7,041	3,250	3,250	6,500	300	0	300	0	601	310	0	310	0	620	2011
A634 B 6463 - A 634 High Street, Blyth	A634	AADTs 2011	1267	2,356	2,356	4,712	2,175	2,175	4,350	201	0	201	0	402	207	0	207	0	415	2011
A634 High Street, Blyth: A 634 - B 6045 Worksop Road	A634	AADTs 2011	1268	4,874	4,874	9,749	4,500	4,500	9,000	416	0	416	0	832	429	0	429	0	858	2011
A634 High Street / Spital Road, Blyth: B 6045 Worksop Road - A 1 (south of Blyth)	A634	AADTs 2011	1269	975	975	1,950	900	900	1,800	83	0	83	0	166	86	0	86	0	172	2011
A634 Retford Road: A 634 High Street, Blyth - B 6045 (east of Blyth)	A634	AADTs 2011	1270	3,818	3,818	7,636	3,525	3,525	7,050	326	0	326	0	652	336	0	336	0	672	2011
A634 B 6045 - A 638, Barnby Moor	A634	AADTs 2011	1271	2,004	2,004	4,008	1,850	1,850	3,700	171	0	171	0	342	176	0	176	0	353	2011
A638 Great North Road: A 614 - B 6045 Blyth Road, Ranskill	A638	AADTs 2011	1272	2,491	2,491	4,983	2,300	2,300	4,600	213	0	213	0	425	219	0	219	0	438	2011
A638 Great North Road: B 6045 Blyth Road, Ranskill - A 634, Barnby Moor	A638	AADTs 2011	1273	2,816	2,816	5,632	2,600	2,600	5,200	240	0	240	0	481	248	0	248	0	496	2011
A638 Great North Road: A 634, Barnby Moor - Randall Way, Retford	A638	AADTs 2011	1274	4,333	4,333	8,665	4,000	4,000	8,000	370	0	370	0	739	381	0	381	0	763	2011
A638 North Road, Retford: Randall Way - A 620 Hospital Road	A638	AADTs 2011	1275	6,716	6,716	13,431	6,200	6,200	12,400	573	0	573	0	1,146	591	0	591	0	1,182	2011
A638 Arlington Way, Retford: A 620 Moorgate - B 6044 Albert Road	A638	AADTs 2011	1276	6,607	6,607	13,215	6,100	6,100	12,200	564	0	564	0	1,128	581	0	581	0	1,163	2011
A638 London Road, Retford: B 6044 Albert Road - Bracken Lane	A638	AADTs 2011	1277	7,907	7,907	15,814	7,300	7,300	14,600	675	0	675	0	1,349	696	0	696	0	1,392	2011
A638 London Road / Great North Road: Bracken Lane, Retford - B 6387 Rectory Lane, Gamston	A638	AADTs 2011	1278	7,609	7,609	15,219	7,025	7,025	14,050	649	0	649	0	1,299	670	0	670	0	1,339	2011
A638 Great North Road: B 6387 Rectory Lane, Gamston - A 1, Markham Moor	A638	AADTs 2011	1279	2,952	2,952	5,903	2,725	2,725	5,450	252	0	252	0	504	260	0	260	0	519	2011
A6075 Cocking Hill, Boughton - A1, Tuxford	A6075	AADTs 2011	1280	2,220	2,220	4,441	2,050	2,050	4,100	189	0	189	0	379	195	0	195	0	391	2011
A6075 Lincoln Road, Tuxford: A1 - Marnham Road	A6075	AADTs 2011	1281	3,033	3,033	6,066	2,800	2,800	5,600	259	0	259	0	518	267	0	267	0	534	2011
A6075 Marnham Road, Tuxford - A57, Dariton	A6075	AADTs 2011	1282	1,571	1,571	3,141	1,450	1,450	2,900	134	0	134	0	268	138	0	138	0	276	2011
B1164 A 1 / A 638 (Markham Moor) - A 1 / A 6075 (Tuxford)	B1164	AADTs 2011	1283	2,248	2,248	4,495	2,075	2,075	4,150	192	0	192	0	384	198	0	198	0	396	2011
B1164 A 6075, Tuxford - A 1, Carlton-on-Trent	B1164	AADTs 2011	1284	921	921	1,841	850	850	1,700	79	0	79	0	157	81	0	81	0	162	2011
B1403 A 161, Misterton - Fountain Hill Road, Walkeringham	B1403	AADTs 2011	1286	975	975	1,950	900	900	1,800	83	0	83	0	166	86	0	86	0	172	2011
B1403 Fountain Hill Road, Walkeringham - A 631, Gringley-on-the-Hill	B1403	AADTs 2011	1287	1,300	1,300	2,600	1,200	1,200	2,400	111	0	111	0	222	114	0	114	0	229	2011
B1403 A 631, Gringley-on-the-Hill - A 620, Clarborough	B1403	AADTs 2011	1288	731	731	1,462	675	675	1,350	62	0	62	0	125	64	0	64	0	129	2011
B6024 Newcastle Avenue, Worksop: A 57 Worksop Bypass - Westgate	B6024	AADTs 2011	1289	5,335	5,335	10,669	4,925	4,925	9,850	455	0	455	0	910	469	0	469	0	939	2011
B6024 Newcastle Avenue, Worksop: Westgate - B6040 Watson Road	B6024	AADTs 2011	1290	4,306	4,306	8,611	3,975	3,975	7,950	367	0	367	0	735	379	0	379	0	758	2011
B6034 A 57 Worksop Bypass - Sparken Hill	B6034	AADTs 2011	1291	2,627	2,627	5,253	2,425	2,425	4,850	224	0	224	0	448	231	0	231	0	462	2011
B6034 Ollerton Road: Sparken Hill, Worksop - Lime Tree Avenue, Carburton	B6034	AADTs 2011	1292	2,654	2,654	5,308	2,450	2,450	4,900	226	0	226	0	453	234	0	234	0	467	2011
B6034 Ollerton Road: Lime Tree Avenue, Carburton - A 616, Budby	B6034	AADTs 2011	1293	2,708	2,708	5,416	2,500	2,500	5,000	231	0	231	0	462	238	0	238	0	477	2011
B6040 Gateford Road, Worksop: B 6041 Raymoth Lane - A 60 Turner Road	B6040	AADTs 2011	1294	5,118	5,118	10,236	4,725	4,725	9,450	437	0	437	0	873	450	0	450	0	901	2011
B6040 Gateford Road, Worksop: A 60 Turner Road - B 6045 Carlton Road	B6040	AADTs 2011	1295	4,874	4,874	9,749	4,500	4,500	9,000	416	0	416	0	832	429	0	429	0	858	2011
B6040 Bridge Place, Worksop: B 6045 Carlton Road - Bridge Place	B6040	AADTs 2011	1296	6,012	6,012	12,023	5,550	5,550	11,100	513	0	513	0	1,026	529	0	529	0	1,058	2011
B6040 Watson Road, Worksop: Bridge Place - B 6024 Newcastle Avenue	B6040	AADTs 2011	1297	5,037	5,037	10,073	4,650	4,650	9,300	430	0	430	0	860	443	0	443	0	886	2011
B6040 Watson Road, Worksop: B 6024 Newcastle Avenue - Potter Street	B6040	AADTs 2011	1298	3,114	3,114	6,228	2,875	2,875	5,750	266	0	266	0	531	274	0	274	0	548	2011
B6040 Potter Street, Worksop: Bridge Street - Watson Road	B6040	AADTs 2008	1299	5,182	0 5,182	0 10,364	4,825	4,825	9,650	442	0	442	0	884	456	0	456	0	912	2,008
B6040 Potter Street, Worksop: Watson Road - Lowtown Street	B6040	AADTs 2011	1300	4,143	4,143	8,286	3,825	3,825	7,650	354	0	354	0	707	365	0	365	0	729	2011
B6040 Cheapside: Lowtown Street - B 6041 High Hoe Road, Worksop	B6040	AADTs 2011	1301	6,634	6,634	13,269	6,125	6,125	12,250	566	0	566	0	1,132	584	0	584	0	1,168	2011
B6040 Retford Road, Worksop: B 6041 High Hoe Road - B 6079	B6040	AADTs 2011	1302	6,797	6,797	13,594	6,275	6,275	12,550	580	0	580	0	1,160	598	0	598	0	1,196	2011
B6040 B 6079 Retford Road - A 57 Worksop Bypass	B6040	AADTs 2011	1303	2,870	2,870	5,741	2,650	2,650	5,300	245	0	245	0	490	253	0	253	0	505	2011
B6041 Gateford Road, Worksop: A 57 Worksop Bypass - Raymoth Lane	B6041	AADTs 2011	1304	7,095	7,095	14,190	6,550	6,550	13,100	605	0	605	0	1,211	624	0	624	0	1,249	2011
B6041 Raymoth Lane: B 6040 - A 60 Carlton Road, Worksop	B6041	AADTs 2011	1305	5,660	5,660	11,319	5,225	5,225	10,450	483	0	483	0	966	498	0	498	0	996	2011
B6041 Thievesdale Lane: A 60 Carlton Road - B 6045 Blyth Road, Worksop	B6041	AADTs 2011	1306	5,768	5,768	11,536	5,325	5,325	10,650	492	0	492	0	984	508	0	508	0	1,015	2011
B6041 Kilton Hill, Worksop: B 6045 Blyth Road - Kilton Road	B6041	AADTs 2011	1307	7,988	7,988	15,977	7,375	7,375	14,750	682	0	682	0	1,363	703	0	703	0	1,406	2011
B6041 Kilton Road - B 6040 Retford Road, Worksop	B6041	AADTs 2011	1308	6,634	6,634	13,269	6,125	6,125	12,250	566	0	566	0	1,132	584	0	584	0	1,168	2011
B6044 Retford Station - A 638, Retford	B6044	AADTs 2011	1309	2,248	2,248	4,495	2,075	2,075	4,150	192	0	192	0	384	198	0	198	0	396	2011
B6045 Carlton Road, Worksop: B 6040 Gateford Road - A 60 Turner Road	B6045	AADTs 2011	1310	2,816	2,816	5,632	2,600	2,600	5,200	240	0	240	0	481	248	0	248	0	496	2011
B6045 Blyth Road, Worksop: A 60 Turner Road - B 6041 Kilton Hill	B6045	AADTs 2011	1311	4,279	4,279	8,557	3,950	3,950	7,900	365	0	365	0	730	377	0	377	0	753	2011
B6045 Blyth Road: B 6041 Kilton Hill - B 6041 Thievesdale Lane, Worksop	B6045	AADTs 2011	1312	6,716	6,716	13,431	6,200	6,200	12,400	573	0	573	0	1,146	591	0	591	0	1,182	2011
B6045 B 6041 Thievesdale Lane, Worksop - A 634, Blyth	B6045	AADTs 2011	1313	4,928	4,928	9,857	4,550	4,550	9,100	421	0	421	0	841	434	0	434	0	867	2011
B6045 A 634, Blyth - A 1(M) (Blyth roundabout)	B6045	AADTs 2011	1314	3,926	3,926	7,853	3,625	3,625	7,250	335	0	335	0	670	346	0	346	0	691	2011
B6045 A 634, Blyth - A 638, Ranskill	B6045	AADTs 2011	1315	1,354	1,354	2,708	1,250	1,250	2,500	116	0	116	0	231	119	0	119	0	238	2011
B6045 A 638, Ranskill - A 631	B6045	AADTs 2011	1316	1,679	1,679	3,358	1,550	1,550	3,100	143	0	143	0	287	148	0	148	0	295	2011
B6079 B 6040, Worksop - A 1, Ranby	B6079	AADTs 2011	1317	4,089	4,089	8,178	3,775	3,775	7,550	349	0	349	0	698	360	0	360	0	720	2011
B6387 A 638, Gamston - A 1	B6387	AADTs 2011	1318	3,331	3,331	6,661	3,075	3,075	6,150	284	0	284	0	568	293	0	293	0	586	2011
B6387 A 1 - Main Street, Bothamsall	B6387	AADTs 2011	1319	2,031	2,031	4,062	1,875	1,875	3,750	173	0	173	0	347	179	0	179	0	357	2011
B6387 New Hill, Walesby - A 6075, Boughton	B6387	AADTs 2008	1321	2,578	0 2,578	0 5,155	2,400	2,400	4,800	220	0	220	0	440	227	0	227	0	454	2,008
B6420 Mansfield Road: A 620, Babworth - A 1	B6420	AADTs 2011	1324	1,896	1,896	3,791	1,750	1,750	3,500	162	0	162	0	323	167	0	167	0	334	2011
B6461 A 614 Old Rufford Road - A 616, Ollerton	B6461	AADTs 2008	1325	805	0 805	0 1,611	750	750	1,500	69	0	69	0	137	71	0	71	0	142	2,008
B6463 South Yorkshire boundary - Scrooby Road, Harworth	B6463	AADTs 2011	1326	2,600	2,600	5,199	2,400	2,400	4,800	222	0	222	0	444	229	0	229	0	458	2011
B6463 Scrooby Road, Harworth - A 634 Oldcotes	B6463	AADTs 2011	1327	1,571	1,571	3,141	1,450	1,450	2,900	134	0	134	0	268	138	0	138	0	276	2011
C2 A 620, Bole Corner - Station Road, Sturton-le-Steeple	C2	AADTs 2011	1329	2,031	2,031	4,062	1,875	1,875	3,750	173	0	173	0	347	179	0	179	0	357	2011
C2 Station Road, Sturton-le-Steeple - Main Street, North Leverton	C2	AADTs 2011	1330	1,841	1,841	3,683	1,700	1,700	3,400	157	0	157	0	314	162	0	162	0	324	2011
C2 Main Street, Laneham - A 57, Ragnall	C2	AADTs 2011	1334	1,841	1,841	3,683	1,700	1,700	3,400	157	0	157	0	314	162	0	162	0	324	2011
C2 A 57, Ragnall - B 1164, Sutton-on-Trent	C2	AADTs 2011	1335	731	731	1,462	675	675	1,350	62	0	62	0	125	64	0	64	0	129	2011
C6 A 60, Warsop - A 616 Budby Crossroads	C6	AADTs 2008	1336	1,530	0 1,530	0 3,061	1,425	1,425	2,850	131	0	131	0	261	135	0	135	0	269	2,008
C6 A 616 Budby Crossroads - A 614, Shepherds Lodge	C6	AADTs 2008	1337	1,020	0 1,020	0 2,041	950	950	1,900	87	0	87	0	174	90	0	90	0	180	2,008
C6 A 614, Shepherds Lodge - B 6387, east of Bothamsall	C6	AADTs 2011	1338	839	839	1,679	775	775	1,550	72	0	72	0	143	74	0	74	0	148	2011
C10 Wiseton Road: B 6045 Eel Pool Road, Drakeholes - B 1403 Gringley Road, Clayworth	C10	AADTs 2011	1339	569	569	1,137	525	525	1,050	49	0	49	0	97	50	0	50	0	100	2011
C10 Sturton Road / Wheatley Road: South Wheatley - Sturton le Steeple	C10	AADTs 2011	1340	542	542	1,083	500	500	1,000	46	0	46	0	92	48	0	48	0	95	2011
C204 Memorial Avenue, Worksop: B 6040 Watson Road - Priorswell Road	C204	AADTs 2011	1341	3,250	3,250	6,499	3,000	3,000	6,000	277	0	277	0	555	286	0	286	0	572	2011
C205 Park Street, Worksop: B 6040 Potter Street - Westgate	C205	AADTs 2011	1343	4,522	4,522	9,044	4,175	4,175	8,350	386	0	386	0	772	398	0	398	0	796	2011
C205 Sparken Hill, Worksop: Westgate - B6034	C205	AADTs 2011	1344	2,031	2,031	4,062	1,875	1,875	3,750	173	0	173	0	347	179	0	179	0	357	2011
Darlton Road (North of junction with the A57)		County MTCs	1345	580	580 NB	580 SB	1,160	540 NB	540 SB	1,080	58	NB	47 SB	105	32	NB	64 SB		96	20/06/2001
Bawtry Road, Harworth (north of Devonshire Road)		ATC Data for Basseflaw	1346	2079	NB 2023	SB 4102	1861	NB 1986	SB 3,847	131	NB	166	SB 297	197	NB	181	SB		378	Weekly Volume Report NOTTS_ABU_SPEED 000010306291: 2010-07-12 to 2010-07-18
Shepherds Avenue, Worksop (west of Kilton Hill)		ATC Data for Basseflaw	1347	2,190	EB 2,540	WB 4,730	2,045	EB 2,331	WB 4,376	158	EB	253	WB 411	189	EB	222	WB		411	21/09/03 to 27/09/03
Claylands Avenue, Worksop (east of the A57)		County MTCs	1348	2,608	EB 2,608	WB 5,215	2,428	EB 2,428	WB 4,856	298	EB	126	WB 424	138	EB	342	WB		480	18/03/2002
Thievesdale Lane, Worksop (west of The Paddocks)		County MTCs	1349	1,471	EB 1,471	WB 2,942	1,370	EB 1,370	WB 2,740	148	EB	90	WB 238	151	EB	121	WB		272	01/11/2006
Snape Lane (north of the A614)		MTC	1350	652	NB 652	SB 1,304	607	NB 607	SB 1,214	62	NB	57	SB 119	38	NB	69	SB		107	20/07/2006
Snape Lane (south of the A614)		MTC	1351	658	NB 658	SB 1,315	612	NB 612	SB 1,225	52	NB	68	SB 120	37	NB	71	SB		108	20/07/2006
A631 Bawtry Road, Scaftworth (NW of Theaker Lane)	A631	ATC Data for Basseflaw - SING	2016	4,793	NB 4,870	SB 9,663	4,634	NB 4,416	SB 9,050	384	NB	361	SB 745	373	NB	440	SB		813	18/06/06 to 24/06/06
Hallcroft Road, Retford: Northfield Way - Randall Way		AADTs 2011	2017	2,437	NB 2,437	SB 4,874	2,250	NB 2,250	SB 4,500	208	NB	208	SB 416	214	NB	214	SB		429	
C2 - LANEHAM ROAD / C2 RAMPTON ROAD / RETFORD ROAD - RAMPTON	C2	COBA Count Report	1333	2,184	NB 2,184	SB 4,368	2,016	NB 2,016	SB 4,032	220	NB	133	SB 353	100	NB	304	SB		404	13/07/2010

Traffic Survey Data Analysis and CRF Calculation

Carriageway		A	B
Single Carrageway		1,380	15
Dual Carriageway		2,100	20
Motorway		2,300	25

Width Factor
If dual carriageway = Width/(lanes*3.65)
If single carriageway = (0.171*Width)-0.25

Average from within the AM & PM peak hours

ATC Data

Location	Seasonal Factors Year chosen	NCC 2011 Factor	Daily Average (Mon-Fri)	AAWT	Daily Average (Mon-Sun)	AADT	AM Peak Hour Flow 2-way (Average Mon-Fri)	% of daily flows in peak hour	%	% direction 1 split within peak hour	%	AM Peak hour direction 1 flow	AM Peak hour direction 2 flow	PM Peak Hour Flow 2-way (Average Mon-Fri)	% of daily flows in peak hour	%	% direction 1 split within peak hour	%	PM Peak hour direction 1 flow	PM Peak hour direction 2 flow	% of HGVs within peak hour flow (including PSVs)	Carriageway Width	Lanes per direction	Capacity (A - B * Pk%HGVs)	Width Factor	CRF	% of AADT to CRF	% of AAWT to CRF
A57 DUNHAM ON TRENT (east of Laneham Road - updated White Swan)	2010	0.998	10,046	10,280	9,421	9,641	970	9.65%	9.7	52.26%	52.3	507	463	961	9.56%	9.6	50.57%	50.6	486	475	12.0%	7.0	1	1,378	0.947	24,258	39.7%	42.4%
A57 WORKSOP BYPASS (SOUTH OF B6041 GATEFORD ROAD)	2011	1.000	23,228	22,998	21,855	21,639	1,832	7.89%	7.9	62.99%	63.0	1,154	678	2,030	8.74%	8.7	57.83%	57.8	1,174	856	9.1%	7.0	2	2,098	0.959	74,908	28.9%	30.7%
A60 High Road, Carlton in Lindrick (south of Long Lane)	2010	0.998	9,954	9,625	9,346	9,038	841	8.45%	8.5	59.31%	59.3	499	342	877	8.81%	8.8	57.68%	57.7	506	371	4.5%	7.2	1	1,379	0.981	25,004	36.1%	38.5%
A60 Carlton Road, Worksop (north of Wingfield Ave - updated Sth Oakholme Rise)	2010	0.998	9,871	9,781	9,419	9,333	806	8.17%	8.2	64.85%	64.9	523	283	859	8.70%	8.7	54.94%	54.9	472	387	4.0%	7.0	1	1,379	0.947	26,071	35.8%	37.5%
A161 Stockwith Road Misterton, North of Newells Terrace	2010	0.998	4,962	4,959	4,610	4,607	410	8.26%	8.3	64.96%	65.0	266	144	477	9.61%	9.6	61.30%	61.3	292	185	6.2%	6.5	1	1,379	0.862	18,733	24.6%	26.5%
A620 BABWORTH (east of B6420 Mansfield Road)	2011	1.000	14,805	14,659	13,359	13,227	1,416	9.56%	9.6	50.71%	50.7	718	698	1,263	8.53%	8.5	51.86%	51.9	655	608	4.0%	7.0	1	1,379	0.947	24,305	54.4%	60.3%
A620 Babworth Road, Retford (east of Railway Bridge)	2007	0.945	17,551	18,121	15,895	16,411	1,541	8.78%	8.8	50.71%	50.7	781	760	1,486	8.46%	8.5	52.04%	52.0	773	713	4.2%	8.7	1	1,379	1.238	34,724	47.3%	52.2%
A620 Welham Road Retford - East of Lidget Lane (Updated N of Bonemill Lane)	2011	1.000	7,573	7,549	6,953	6,931	720	9.51%	9.5	57.92%	57.9	417	303	692	9.14%	9.1	50.29%	50.3	348	344	4.5%	7.2	1	1,379	0.981	22,566	30.7%	33.5%
A620 Gainsborough Road, North Wheatley (west of Wood Lane)	2006	0.982	4,634	4,501	4,432	4,304	413	8.92%	8.9	55.11%	55.1	228	186	419	9.04%	9.0	51.29%	51.3	215	204	4.7%	6.8	2	2,099	0.932	80,632	5.3%	5.6%
A631 Bawtry Road, Scaftworth (NW of Theaker Lane)	2006	0.975	9,416	9,327	8,820	8,736	726	7.71%	7.7	51.54%	51.5	374	352	792	8.41%	8.4	54.12%	54.1	429	363	15.0%	7.0	2	2,097	0.959	82,721	10.6%	11.3%
A631 EAST OF EVERTON	2011	1.000	8,547	8,463	8,122	8,042	706	8.26%	8.3	51.42%	51.4	363	343	745	8.72%	8.7	50.74%	50.7	378	367	8.1%	6.8	1	1,379	0.913	27,042	29.7%	31.3%
A634 Sheffield Road, Blyth (west of Park Drive)	2011	1.000	4,800	4,798	4,755	4,753	403	8.40%	8.4	55.83%	55.8	225	178	464	9.67%	9.7	54.96%	55.0	255	209	6.9%	6.5	1	1,379	0.862	22,152	21.5%	21.7%
A638 Great North Road, Scrooby (NW of Church Lane)	2006	0.975	5,294	5,127	4,935	4,780	422	7.97%	8.0	53.58%	53.6	226	196	484	9.15%	9.1	50.30%	50.3	244	241	5.1%	7.2	1	1,379	0.981	27,416	17.4%	18.7%
A638 Great North Road, Barnby Moor (north of A634)	2006	0.975	5,565	5,512	5,238	5,189	490	8.81%	8.8	62.43%	62.4	306	184	497	8.93%	8.9	57.84%	57.8	287	210	5.1%	7.0	1	1,379	0.947	23,800	21.8%	23.2%
A638 Great North Road, Gamston (south of Causeway Lane)	2007	0.945	9,675	9,544	9,055	8,932	774	8.00%	8.0	53.48%	53.5	414	360	878	9.07%	9.1	51.24%	51.2	450	428	5.3%	7.2	1	1,379	0.981	27,242	32.8%	35.0%
A638 Great North Road, Rockley (south of Holme Lane)	2007	0.945	5,965	5,885	5,655	5,578	457	7.67%	7.7	51.24%	51.2	234	223	529	8.87%	8.9	50.36%	50.4	266	263	5.1%	7.6	1	1,379	1.050	30,720	18.2%	19.2%
A6075 Lincoln Road, Tuxford (west of Marnham Road)	2011	1.000	6,489	6,436	6,032	5,982	705	10.86%	10.9	51.49%	51.5	363	342	613	9.45%	9.4	50.90%	50.9	312	301	8.5%	6.8	1	1,379	0.913	20,913	28.6%	30.8%
B1403 Main Street, Hayton (north of Scotter Lane)	2006	0.975	1,777	1,827	1,680	1,726	175	9.87%	9.9	62.22%	62.2	109	66	176	9.92%	9.9	60.22%	60.2	106	70	5.0%	6.5	1	1,379	0.862	18,789	9.2%	9.7%
B6024 NEWCASTLE AVE WORKSOP (east of Westgate)	2011	1.000	8,599	8,393	8,040	7,847	704	8.19%	8.2	51.56%	51.6	363	341	677	7.87%	7.9	55.10%	55.1	373	304	5.8%	7.5	1	1,379	1.033	31,539	24.9%	26.6%
B6034 OLLERTON RD WEST OF CARBURTON	2011	1.000	5,382	5,329	5,054	5,004	484	8.99%	9.0	53.93%	53.9	261	223	475	8.83%	8.8	50.95%	50.9	242	233	2.1%	7.0	1	1,380	0.947	25,300	19.8%	21.1%
B6040 Retford Road, Worksop (west of B6079)	2011	1.000	14,464	14,117	12,883	12,574	1,137	7.86%	7.9	53.21%	53.2	605	532	1,215	8.40%	8.4	54.16%	54.2	658	557	3.0%	7.2	1	1,380	0.981	26,502	47.4%	53.3%
B6040 Gateford Road, Worksop (NW of Victoria Square)	2007	0.945	10,087	10,004	9,363	9,286	628	6.23%	6.2	54.14%	54.1	340	288	781	7.75%	7.7	63.48%	63.5	496	285	4.6%	7.5	1	1,379	1.033	26,876	34.6%	37.2%
B6041 GATEFORD RD WORKSOP(east of Lady Walk)	2011	1.000	14,047	13,710	13,097	12,783	1,168	8.31%	8.3	54.45%	54.5	636	532	1,322	9.41%	9.4	56.28%	56.3	744	578	2.8%	7.2	1	1,380	0.981	23,829	53.6%	57.5%
B6041 Kilton Hill, Worksop (north of Plantation Hill)	2011	1.000	12,007	11,888	10,981	10,873	1,015	8.45%	8.5	66.60%	66.6	676	339	1,010	8.41%	8.4	54.95%	55.0	555	455	2.1%	8.0	1	1,380	1.118	25,056	43.4%	47.4%
B6041 KILTON HILL WORKSOP NORTH OF KILTON CRESCENT	2011	1.000	16,515	16,352	15,056	14,907	1,359	8.23%	8.2	57.91%	57.9	787	572	1,379	8.35%	8.3	56.06%	56.1	773	606	2.5%	7.0	1	1,380	0.947	25,447	58.6%	64.3%
B6045 Blyth Road, Worksop (SW of Gloucester Road)	2011	1.000	9,243	9,021	8,316	8,117	757	8.19%	8.2	58.52%	58.5	443	314	785	8.49%	8.5	58.60%	58.6	460	325	3.0%	6.8	1	1,380	0.913	22,765	35.7%	39.6%
B6045 Ranskill Road, Mattersey (west of village)	2011	1.000	2,203	2,150	1,798	1,755	229	10.37%	10.4	59.30%	59.3	136	93	211	9.58%	9.6	50.71%	50.7	107	104	5.7%	5.8	1	1,379	0.742	13,577	12.9%	15.8%
B6079 Retford Road, near Ranby (west of A1)	2011	1.000	8,489	8,405	7,622	7,547	795	9.37%	9.4	51.82%	51.8	412	383	716	8.43%	8.4	50.84%	50.8	364	352	5.0%	6.0	1	1,379	0.776	19,801	38.1%	42.4%
B6420 Mansfield Road, Morton	2009	0.982	3,312	3,300	3,072	3,062	314	9.47%	9.5	64.39%	64.4	202	112	291	8.78%	8.8	54.15%	54.2	157	133	3.6%	6.5	1	1,379	0.862	18,071	16.9%	18.3%
B6463 Tickhill Road, Harworth (NW of Baulk Lane)	2006	0.975	5,594	5,417	5,193	5,029	440	7.86%	7.9	50.11%	50.1	220	219	477	8.52%	8.5	54.60%	54.6	260	216	6.8%	8.5	1	1,379	1.204	33,124	15.2%	16.4%
B6463 Main Street, Styrrup (SW of Pinfold Lane)	2006	0.975	3,014	3,098	2,785	2,862	285	9.44%	9.4	50.68%	50.7	144	140	296	9.83%	9.8	52.96%	53.0	157	139	6.8%	7.2	1	1,379	0.981	24,019	11.9%	12.9%
C65 Blyth Road Harworth South of Harworth Railway Line	2011	1.000	6,729	6,568	5,846	5,706	533	7.92%	7.9	65.29%	65.3	348	185	585	8.69%	8.7	62.39%	62.4	365	220	4.9%	7.0	1	1,379	0.947	20,920	27.3%	31.4%
Old London Road, Nr Ranby (north of Green Mile Lane)	2006	0.989	1,469	1,442	1,310	1,286	189	12.85%	12.9	55.50%	55.5	105	84	186	12.65%	12.6	62.23%	62.2	116	70	6.2%	5.8	1	1,379	0.742	12,789	10.1%	11.3%
Randall Way, Retford (SW of Millman Way)	2007	0.945	4,071	4,038	3,662	3,632	365	8.96%	9.0	63.99%	64.0	233	131	353	8.68%	8.7	54.81%	54.8	194	160	6.2%	7.0	1	1,379	0.947	20,489	17.7%	19.7%
SCROOBY RD HARWORTH (west of Waterslack Road)	2011	1.000	4,271	4,236	4,059	4,026	289	6.77%	6.8	55.02%	55.0	159	130	371	8.69%	8.7	52.83%	52.8	196	175	5.1%	7.2	1	1,379	0.981	28,026	14.4%	15.1%
Tiln Lane Retford south of Smeath Lane	2011	1.000	1,701	1,696	1,601	1,596	119	7.00%	7.0	57.14%	57.1	68	51	144	8.47%	8.5	62.50%	62.5	90	54	11.5%	5.6	1	1,378	0.708	17,349	9.2%	9.8%
Sparken Hill, Worksop - South of Danesfield Road	2011	1.000	3,184	3,230	2,802	2,842	347	10.90%	10.9	52.74%	52.7	183	164	312	9.80%	9.8	52.56%	52.6	164	148	1.4%	8.0	1	1,380	1.118	23,620	12.0%	13.7%
Sturton Road, North Leverton (south of the Surgery)	2007	0.945	2,711	2,689	2,382	2,362	307	11.33%	11.3	62.15%	62.2	191	116	304	11.22%	11.2	61.49%	61.5	187	117	6.2%	6.0	1	1,379	0.776	13,352	17.7%	20.1%
Valley Road, Worksop (south of Nene Walk)	2006	0.975	3,875	3,983	3,598	3,698	451	11.64%	11.6	70.84%	70.8	320	132	371	9.58%	9.6	51.44%	51.4	191	180	6.2%	8.0	1	1,379	1.118	17,354	21.3%	23.0%
Westgate, Worksop (south of West St)	2007	0.945	5,527	5,706	4,911	5,071	395	7.15%	7.1	69.86%	69.9	276	119	462	8.36%	8.4	53.78%	53.8	249	214	4.4%	5.8	1	1,379	0.742	20,219	25.1%	28.2%
West Hill Road, Retford (north of the Fairway)	2006	0.975	4,950	4,903	4,668	4,623	447	9.04%	9.0	65.14%	65.1	291	156	451	9.11%	9.1	64.79%	64.8	292	159	1.9%	6.5	1	1,380	0.862	18,977	24.4%	25.8%
Whinney Moor Lane, Retford (SE of Thrumpton Close)	2006	0.975	2,050	2,030	1,890	1,872	210	10.22%	10.2	62.33%	62.3	131	79	185	9.03%	9.0	52.11%	52.1	96	89	6.2%	8.5	1	1,379	1.204	24,022	7.8%	8.5%
A620 - Moorgate - Retford (North East of A638 Arlington Way)	2011	1.000	15,255	15,034	14,083	13,879	1,240	8.13%	8.1	58.31%	58.3	723	517	1,404	9.20%	9.2	55.84%	55.8	784	620	2.6%	8.0	1	1,380	1.118	27,707	50.1%	54.3%
A638 - London Road - Retford (South East of Wright Wilson Street)	2010	0.998	14,467	14,334	13,356	13,233	1,206	8.34%	8.3	56.82%	56.8	685	521	1,301	8.99%	9.0	56.06%	56.1	729	572	5.1%	7.0	1	1,379	0.947	23,917	55.3%	59.9%
B6044 - Albert Road - Retford (West of Beehive Street)	2011	1.000	5,175	5,100	4,778	4,709	421	8.13%	8.1	57.72%	57.7	243	178	476	9.20%	9.2	51.89%	51.9	247	229	2.1%	6.5	1	1,380	0.8615	22,992	20.5%	22.2%
Bridgegate - Retford (South East of A620 / A638 Roundabout)	2009	0.982	6,752	6,633	6,287	6,176	554	8.20%	8.2	50.53%	50.5	280	274	617	9.13%	9.1	54.62%	54.6	337	280	2.7%	7.0	1	1,380	0.947	24,390	25.3%	27.2%
Spital Hill - Retford (North East of A638 Arlington Way)	2011	1.000	6,179	6,031	5,705	5,568	496	8.03%	8.0	60.28%	60.3	299	197	575	9.31%	9.3	53.91%	53.9	310	265	1.3%	6.0	1	1,380	0.776	19,704	28.3%	30.6%
B6024 - POTTER STREET - WORKSOP (East of Watson Road)	2011	1.000	7,304	7,198	6,743	6,646	582	7.97%	8.0	62.03%	62.0	361	221	684	9.36%	9.4	60.38%	60.4	413	271	2.8%	6.0	1	1,380	0.776	17,480	38.0%	41.2%
A57 (West of B6034 Roundabout)	2009	0.982	18,516	18,160	17,241	16,909	1,621	8.75%	8.8	59.42%	59.4	963	658	1,589	8.58%	8.6	52.66%	52.7	836	752	8.4%	7.2	1	1,379	0.9812	24,217	69.8%	75.0%
B6034 (North of A57 Roundabout)	2009	0.982	6,389	6,266	5,949	5,835	548	8.57%	8.6	52.33%	52.3	287	261	560	8.76%	8.8	53.51%	53.5	299	260	2.4%	6.8	1	1,380	0.9128	25,019	23.3%	25.0%
B6034 (South of A57 Roundabout)	2009	0.982	4,158	4,077	3,871	3,797	420	10.11%	10.1	54.21%	54.2	228	192	300	7.23%	7.2	52.61%	52.6	158	142	2.1%	7.0	1	1,380	0.947	22,206	17.1%	18.4%
Eastgate (east of B6045/B6040)	2009	0.982	4,730	4,626	4,404	4,307	348	7.35%	7.3	59.04%	59.0	205	142	472	9.98%	10.0	56.34%	56.3	266	206	5.4%	8.0	1	1,379	1.118	25,522	16.9%	18.1%
Memorial Ave (east of B6040 junction)	2011	1.000	6,329	6,238	5,843	5,759	465	7.35%	7.3	55.05%	55.1	256	209	632	9.99%	10.0	57.28%	57.3	362	270	1.7%	8.0	1	1,380	1.118	24,899	23.1%	25.1%
B6040 (north of B6024 junction)	2009	0.982	8,474	8,288	7,890	7,717	660	7.79%	7.8	63.10%	63.1	416	243	809	9.55%	9.5	56.19%	56.2	455	354	5.7%	7.8	1	1,379	1.0838	25,944	29.7%	31.9%
A632 (west of A60)	2011	1.000	4,737	4,724	4,373	4,361	411	8.68%	8.7	54.01%	54.0	222	189	410	8.66%	8.7	55.12%	55.1	226	184	4.7%	6.0	1	1,379	0.776	21,084	20.7%	22.4%
Laneham Road (north of cocketts hill)	2009	0.982	4,231	4,118	3,940	3,834	362	8.56%	8.6	56.10%	56.1	203	159	371	8.77%	8.8	62.17%	62.2	231	140	6.2%	6.6	1	1,379	0.8786	20,690	18.5%	19.9%
A1 BLYTH (SOUTHEAST OF A614/B6045 ROUNDABOUT)	2011	1.000	35,436	34,524	32,715	31,873	3,125	8.82%	8.8	56.74%	56.7	1,773	1,352	3,017	8.51%	8.5	50.18%	50.2	1,514	1,503	22.4%	7.0	2	2,096	0.959	74,155	43.0%	46.6%
A1 BLYTH ROAD, SOUTH OF A620, RANBY	2011	1.000	44,200	43,114	40,806	39,804	2,658	6.01%	6.0	52.11%	52.1	1,385	1,273	5,003	11.32%	11.3	58.52%	58.5	2,928	2,075	17.4%	7.0	2	2,097	0.959	56,035	71.0%	76.9%
A57 WORKSOP (SOUTH OF SANDY LANE	2011	1.000	29,546	28,571	27,277	26,377	2,435	8.24%	8.2	52.90%	52.9	1,288	1,147	2,686	9.09%	9.1	50.82%	50.8	1,365	1,321	7.0%	7.0	2	2,099	0.959	80,426	32.8%	35.5%
A57 WORKSOP BYPASS (NORTH OF SANDY LANE)	2011	1.000	22,674	21,926	20,933	20,243	1,793	7.91%	7.9	60.79%	60.8	1,090	703	2,137	9.42%	9.4	54.09%	54.1	1,156	981	7.2%	7.2	1	1,379	0.9812	24,501	82.6%	89.5%
A57 WORKSOP BYPASS, EAST OF B6034 NETHERTON ROAD	2010	0.998	17,247	17,093	15,923	15,780	1,535	8.90%	8.9	50.52%	50.5	775	759	1,455	8.43%	8.4	58.78%	58.8	855	600	9.3%	7.2	1	1,379	0.9812	27,782	56.8%	61.5%
A60 MALPASS HILL, SOUTH OF STYRRUP LANE, NORTH OF OLDCOTES	2007	0.945	4,661	4,599	4,340	4,282	389	8.35%	8.4	51.94%	51.9	202	187	419	8.98%	9.0	52.37%	52.4	219	199	4.0%	7.8	1	1,379	1.0838	29,597	14.5%	15.5%
A60 MANSFIELD ROAD, WORKSOP (WEST OF MEADOW ROAD)	2010	0.998	21,663	21,464	20,000	19,816	1,816	8.38%	8.4	57.31%	57.3	1,041	775	1,939	8.95%	8.9	56.56%	56.6	1,097	842	5.8%	7.2	1	1,379	0.9812	24,680	80.3%	87.0%
A161 HAXEY ROAD, MISTERTON (N OF ROOKS LANE)	2010	0.998	5,170	5,122	4,773	4,729	383	7.41%	7.4	52.08%	52.1	200	184	513	9.92%	9.9	52.33%	52.3	268	244	4.4%	6.5	1	1,379	0.8615	21,130	22.4%	24.2%
A614 BAWTRY ROAD, BLYTH (NORTH OF BLYTH ROAD)	2006	0.975	7,056	6,989	6,570	6,508	655	9.28%	9.3	53.72%	53.7	352	303	568	8.05%	8.1	61.58%	61.6	350	218	15.3%	7.5	1	1,378	1.0325	26,565	24.5%	26.3%
A614 NORTH OF OLLERTON	2011	1.000	10,084	9,984	9,208	9,117	850	8.43%	8.4	52.59%	52.6	447	403	841	8.34%	8.3	54.22%	54.2	456	385	11.4%	8.0	1	1,378	1.118	31,742	28.7%	31.5%
A619 DARFOULDS (EAST OF RAILWAY BRIDGE)	2009	0.982	11,181	11,097	10,411	10,333	886	7.92%	7.9	54.77%	54.8	485	401	1,052	9.41%	9.4	50.84%	50.8	535	517	11.2%	8.0	1	1,378	1.118	29,983	34.5%	37.0%
A620 AMCOTT WAY, RETFORD (EAST OF MORRISONS ACCESS)	2011	1.000	20,476	20,564	18,904	18,985	1,623	7.93%	7.9	53.11%	53.1	862	761	1,926	9.41%	9.4	54.88%	54.9	1,057	869	3.6%	8.2	1	1,379	1.1522	28,426	66.8%	72.3%
A620 GAINSBOROUGH ROAD, NORTH WHEATLEY (EAST OF EASTFIELD)	2007	0.945	4,503	4,474	4,193	4,166	375	8.33%	8.3	50.88%	50.9	191	184	405	9.00%	9.0	52.21%	52.2	212	194	7.4%	7.0	1	1,379	0.947	25,867	16.1%	17.3%
A620 GAINSBOROUGH ROAD, SAUNDBY (BETWEEN MARSH LANE AND BOLE CORNER)	2009	0.982	7,817	7,842	7,278	7,302	611	7.81%	7.8	59.97%	60.0	366	244	744	9.52%	9.5	63.32%	63.3	471	273	8.3%	6.8	1	1,379	0.9128	19,437	37.6%	40.3%
A620 HOSPITAL ROAD, RETFORD (NORTHEAST OF QUEEN STREET)	2011	1.000	15,099	14,974	13,939	13,825	1,255	8.31%	8.3	53.63%	53.6	673	582	1,362	9.02%	9.0	57.86%	57.9	788	574	2.9%	6.5	1	1,380	0.8615	21,024	65.8%	71.2%
A620 STRAIGHT MILE, RANBY (EAST OF H.M.PRISON)	2008	0.972	14,094	13,639	13,123	12,700	1,336	9.48%	9.5	50.11%	50.1	670	667	1,107	7.85%	7.9	50.40%	50.4	558	549	4.2%	7.0	1	1,379	0.947	25,604	49.6%	53.3%
A631 GAINSBOROUGH ROAD, EAST OF EVERTON (WEST OF B6045)	2007	0.945	6,111	6,061	5,691	5,644	483	7.90%	7.9	51.66%	51.7	249	233	576	9.43%	9.4	51.97%	52.0	300	277	11.9%	7.0	1	1,378	0.947	24,794	22.8%	24.4%
A631 GRINGLEY ON THE HILL BYPASS (WEST OF GREEN ROAD	2008	0.972	9,698	9,690	9,030	9,023	827	8.53%	8.5	50.76%	50.8	420	407	854	8.81%	8.8	51.08%	51.1	436	418	9.9%	7.0	2	2,098	0.959	83,280	10.8%	11.6%
A631 THE FLOOD ROAD, EAST OF BECKINGHAM	2011	1.000	16,899	17,580	15,601	16,231	1,303	7.71%	7.7	54.26%	54.3	707	596	1,626	9.62%	9.6	50.43%	50.4	820	806	7.2%	6.0	1	1,379	0.776	20,359	79.7%	86.4%
A638 GREAT NORTH ROAD, BARNBY MOOR (SOUTHEAST OF STATION ROAD)	2007	0.945	8,685	8,567	8,087	7,977	699	8.05%	8.1	60.00%	60.0	420	280	806	9.28%	9.3	51.11%	51.1	412	394	5.1%	8.0	1	1,379	1.118	30,265	26.4%	28.3%
A638 GREAT NORTH ROAD, SOUTH OF EATON	2011	1.000	14,043	13,580	12,965	12,537	1,127	8.03%	8.0	54.21%	54.2	611	516	1,307	9.31%	9.3	58.45%	58.5	764	543	2.8%	7.6	1	1,380	1.0496	24,572	51.0%	55.3%
A638 GREAT NORTH ROAD, SOUTH OF SCROOBY	2008	0.972	5,012	4,850	4,667	4,516	406	8.10%	8.1	52.63%	52.6	214	192	463	9.23%	9.2	50.21%	50.2	232	230	11.6%	7.2	1	1,378	0.9812	27,174	16.6%	17.8%
A638 NORTH ROAD, RETFORD (NORTHWEST OF COURT ROAD)	2011	1.000	12,693	12,568	12,439	12,316	1,058	8.34%	8.3	54.35%	54.3	575	483	1,142	9.00%	9.0	50.96%	51.0	582	560	5.1%	7.2	1	1,379	0.9812	28,924	42.6%	43.4%
A6075 ASHVALE ROAD (S OF LINCOLN RD) TUXFORD	2006	0.975	4,009	3,988	3,733	3,713	321	8.00%	8.0	50.76%	50.8	163	158	374	9.34%	9.3	60.94%	60.9	228	146	14.3%	7.0	1	1,378	0.947	21,358	17.4%	18.7%
A6075 DARLTON ROAD, EAST OF TUXFORD	2006	0.975	3,385	3,367	3,151	3,135	291	8.61%	8.6	51.51%	51.5	150	141	295	8.72%	8.7	52.81%	52.8	156	139	8.5%	6.0	1	1,379	0.776	21,624	14.5%	15.6%
A6075 LINCOLN ROAD, TUXFORD (WEST OF A1)	2006	0.975	9,029	8,983	8,407	8,364	814	9.01%	9.0	50.90%	50.9	414	400	751	8.32%	8.3	50.97%	51.0	383	368	8.5%	7.0	1	1,379	0.947	26,504	31.6%	33.9%
B1164 GREAT NORTH ROAD, N OF SUTTON ON TRENT	2011	1.000	1,892	1,874	1,747	1,730	150	7.93%	7.9	58.67%	58.7	88	62	178	9.41%	9.4	50.56%	50.6	90	88	11.2%	7.2	1	1,378	0.9812	26,253	6.6%	7.1%
B1164 GREAT NORTH ROAD, SIBTHORPE (SOUTHEAST OF MARKHAM MOOR ROUNDABOUT)	2008	0.972	4,664	4,514	4,343	4,203	382	8.19%	8.2	61.32%	61.3	234	148	427	9.15%	9.1	72.67%	72.7	310	117	9.3%	8.0	1	1,379	1.118	21,594	19.5%	20.9%
B1403 CHURCH STREET, MISTERTON (BETWEEN CARR LANE AND CHURCH LANE)	2010	0.998	2,090	2,071	1,929	1,912	174	8.31%	8.3	62.64%	62.6	109	65	189	9.02%	9.0	57.14%	57.1	108	81	6.8%	6.0	1	1,379	0.776	19,158	10.0%	10.8%
B1403 WALKERINGHAM ROAD, GRINGLEY ON THE HILL (NE OF HALL'S ROAD)	2008	0.972	2,893	2,799	2,693	2,607	254	8.77%	8.8	62.45%	62.5	158	95	248	8.57%	8.6	61.96%	62.0	154	94	7.6%	6.0	1	1,379	0.776	18,196	14.3%	15.4%
B6034 OLLERTON ROAD, S OF WORKSOP (N OF SCOTLAND FARM)	2008	0.972	6,520	6,514	6,071	6,066	585	8.97%	9.0	60.47%	60.5	354	231	545	8.36%	8.4	51.52%	51.5	281	264	2.1%	7.5	1	1,380	1.0325	24,450	24.8%	26.6%
B6045 BLYTH ROAD, W OF RANSKILL (NE OF THE GRANGE)	2009	0.982	2,923	2,901	2,721	2,701	232	7.93%	7.9	57.20%	57.2	133	99	275	9.41%	9.4	53.93%	53.9	148	127	6.3%	6.0	1	1,379	0.776	19,645	13.7%	14.8%
B6045 CARLTON ROAD, WORKSOP (N OF VICTORIA SQUARE)	2011	1.000	5,516	5,514	5,092	5,090	482	8.74%	8.7	66.39%	66.4	320	162	474	8.59%	8.6	53.38%	53.4	253	221	4.4%	7.5	1	1,379	1.0325	22,663	22.5%	24.3%
ALISON AVENUE, WHITE HOUSES, S OF RETFORD	2011	1.000	704	707	650	653	57	8.10%	8.1	66.67%	66.7	38	19	65	9.23%	9.2	56.92%	56.9	37	28	0.0%	5.2	1	1,380	0.6392	15,492	4.2%	4.6%
HALLCROFT ROAD RETFORD SOUTH OF THE GLEBE	2011	1.000	7,152	7,093	6,601	6,547	667	9.33%	9.3	57.72%	57.7	385	282	572	8.00%	8.0	57.69%	57.7	330	242	1.9%	6.2	1	1,380	0.8102	19,166	34.2%	37.0%
SCAMPTON ROAD, WORKSOP (W OF ASHES	2011	1.000	2,648	2,626	2,445	2,425	218	8.23%	8.2	77.52%	77.5	169	49	241	9.10%	9.1	70.54%	70.5	170	71	1.1%	7.0	1	1,380	0.947	18,792	12.9%	14.0%
SMEATH LANE/TILN LANE JUNCTION, NORTH OF RETFORD	2010	0.998	1,336	1,323	1,233	1,222	86	6.42%	6.4	58.14%	58.1	50	36	146	10.91%	10.9	69.18%	69.2	101	45	8.6%	6.0	1	1,379	0.776	13,090	9.3%	10.1%
UNNAMED ROAD, RAGNALL (N OF ROBERTS FARM)	2011	1.000	1,390	1,396	1,284	1,289	125	8.99%	9.0	60.80%	60.8	76	49	116	8.34%	8.3	67.24%	67.2	78	38	14.9%	5.5	1	1,378	0.6905	16,069	8.0%	8.7%
B6045 BLYTH ROAD (NORTHEAST OF THIEVESDALE HOUSE) WORKSOP	2011	1.000	9,857	9,857	9,100	9,100	841	8.53%	8.5	50.00%	50.0	421	421	867	8.80%	8.8	50.00%	50.0	434	434	5.5%	6.8	1	1,379	0.9128	26,415	34.4%	37.3%
B6387 NORTHEAST OF BEVERCOTES COLLIERY ENTRANCE	2011	1.000	4,062	4,062	3,750	3,750	347	8.53%	8.5	50.00%	50.0	173	173	357	8.80%	8.8	50.00%	50.0	179	179	2.7%	6.5	1	1,380	0.8615	24,938	15.0%	16.3%
Tuxford Road/Markham Road: A57, East Markham - B1164, Tuxford	2011	1.000	1,354	1,354	1,250	1,250	116	8.53%	8.5	50.00%	50.0	58	58	119	8.80%	8.8	50.00%	50.0	60	60	5.6%	5.4	1	1,379	0.6734	19,487	6.4%	6.9%
NETHERTON ROAD, WORKSOP (NORTH OF PELHAM STREET)	2011	1.000	2,166	2,166	2,000	2,000	185	8.53%	8.5	50.00%	50.0	92	92	191	8.80%	8.8	50.00%	50.0	95	95	2.3%	6.5	1	1,380	0.8615	24,939	8.0%	8.7%
OLLERTON ROAD, RETFORD (SOUTH OF ORDSALL ROAD)	2011	1.000	4,549	4,549	4,200	4,200	388	8.53%	8.5	50.00%	50.0	194	194	400	8.80%	8.8	50.00%	50.0	200	200	3.3%	7.8	1	1,380	1.0838	31,371	13.4%	14.5%
A1 (M)Yorkshire boundary - A 614 (Blyth roundabout)	2011	1.000	46,901	46,901	43,300	43,300	4,002	8.53%	8.5	50.00%	50.0	2,001	2,001	4,127	8.80%	8.8	50.00%	50.0	2,064	2,064	15.3%	7.2	2	2,097	0.986	86,793	49.9%	54.0%
A1 A 614 (Blyth roundabout) - A 634 (south of Blyth)	2011	1.000	44,464	44,464	41,050	41,050	3,794	8.53%	8.5	50.00%	50.0	1,897	1,897	3,913	8.80%	8.8	50.00%	50.0	1,956	1,956	15.4%	7.2	2	2,097	0.986	86,792	47.3%	51.2%
A1 A 634 (south of Blyth) - A 620, Ranby	2011	1.000	43,002	43,002	39,700	39,700	3,669	8.53%	8.5	50.00%	50.0	1,835	1,835	3,784	8.80%	8.8	50.00%	50.0	1,892	1,892	15.8%	7.0	2	2,097	0.959	84,378	47.1%	51.0%
A1 A 620, Ranby - A 614 (Five Lanes End roundabout)	2011	1.000	45,872	45,872	42,350	42,350	3,914	8.53%	8.5	50.00%	50.0	1,957	1,957	4,037	8.80%	8.8	50.00%	50.0	2,018	2,018	15.0%	7.2	2	2,097	0.986	86,796	48.8%	52.9%
A1 A 614 (Five Lanes End roundabout) - B 6420 Mansfield Road	2011	1.000	46,630	46,630	43,050	43,050	3,979	8.53%	8.5	50.00%	50.0	1,989	1,989	4,103	8.80%	8.8	50.00%	50.0	2,052	2,052	16.6%	7.2	2	2,097	0.986	86,782	49.6%	53.7%
A1 B 6420 Mansfield Road - B 6387	2011	1.000	46,630	46,630	43,050	43,050	3,979	8.53%	8.5	50.00%	50.0	1,989	1,989	4,103	8.80%	8.8	50.00%	50.0	2,052	2,052	16.6%	7.0	2	2,097	0.959	84,372	51.0%	55.3%
A1 B 6387 - A 57 (Markham Moor)	2011	1.000	41,052	41,052	37,900	37,900	3,503	8.53%	8.5	50.00%	50.0	1,751	1,751	3,613	8.80%	8.8	50.00%	50.0	1,806	1,806	16.6%	7.0	2	2,097	0.959	84,372	44.9%	48.7%
A1 A 57 (Markham Moor) - A 6075, Tuxford	2011	1.000	39,102	39,102	36,100	36,100	3,336	8.53%	8.5	50.00%	50.0	1,668	1,668	3,441	8.80%	8.8	50.00%	50.0	1,720	1,720	15.4%	7.0	2	2,097	0.959	84,381	42.8%	46.3%
A1 A 6075, Tuxford - B 1164, Carlton-on-Trent	2011	1.000	37,153	37,153	34,300	34,300	3,170	8.53%	8.5	50.00%	50.0	1,585	1,585	3,269	8.80%	8.8	50.00%	50.0	1,635	1,635	15.4%	7.2	2	2,097	0.986	86,792	39.5%	42.8%
A57 South Yorkshire boundary - B 6041 Gateford Road, Worksop	2011	1.000	25,725	25,725	23,750	23,750	2,195	8.53%	8.5	50.00%	50.0	1,098	1,098	2,264	8.80%	8.8	50.00%	50.0	1,132	1,132	7.7%	7.2	1	1,379	0.9812	28,388	83.7%	90.6%
A57 Worksop Bypass: B 6041 Gateford Road - Claylands Avenue	2011	1.000	23,234	23,234	21,450	21,450	1,982	8.53%	8.5	50.00%	50.0	991	991	2,045	8.80%	8.8	50.00%	50.0	1,022	1,022	7.7%	7.2	2	2,098	0.986	86,856	24.7%	26.8%
A57 Worksop Bypass: Claylands Avenue - A 60 Sandy Lane	2011	1.000	23,180	23,180	21,400	21,400	1,978	8.53%	8.5	50.00%	50.0	989	989	2,040	8.80%	8.8	50.00%	50.0	1,020	1,020	7.7%	7.2	1	1,379	0.9812	28,388	75.4%	81.7%
A57 Worksop Bypass: A 60 Sandy Lane - A 60 Newcastle Avenue	2011	1.000	32,603	32,603	30,100	30,100	2,782	8.53%	8.5	50.00%	50.0	1,391	1,391	2,869	8.80%	8.8	50.00%	50.0	1,435	1,435	5.9%	7.0	2	2,099	0.959	84,458	35.6%	38.6%
A57 Worksop Bypass: A 60 Newcastle Avenue - B 6034 Netherton Road	2011	1.000	20,905	20,905	19,300	19,300	1,784	8.53%	8.5	50.00%	50.0	892	892	1,840	8.80%	8.8	50.00%	50.0	920	920	7.2%	7.2	1	1,379	0.9812	28,389	68.0%	73.6%
A57 Worksop Bypass: B 6034 Netherton Road - B 6040 Retford Road	2011	1.000	15,923	15,923	14,700	14,700	1,359	8.53%	8.5	50.00%	50.0	679	679	1,401	8.80%	8.8	50.00%	50.0	701	701	11.5%	7.2	1	1,378	0.9812	28,376	51.8%	56.1%
A57 B 6040 Retford Road, Worksop - A 1 (Five Lanes End roundabout)	2011	1.000	15,435	15,435	14,250	14,250	1,317	8.53%	8.5	50.00%	50.0	659	659	1,358	8.80%	8.8	50.00%	50.0	679	679	11.5%	7.0	1	1,378	0.947	27,387	52.0%	56.4%
A57 A 1 (Markham Moor) - A 6075, Darlton	2011	1.000	8,015	8,015	7,400	7,400	684	8.53%	8.5	50.00%	50.0	342	342	705	8.80%	8.8	50.00%	50.0	353	353	9.2%	6.0	1	1,379	0.776	22,447	33.0%	35.7%
A57 A 6075, Darlton - C 2, Ragnall	2011	1.000	10,182	10,182	9,400	9,400	869	8.53%	8.5	50.00%	50.0	434	434	896	8.80%	8.8	50.00%	50.0	448	448	10.3%	6.0	1	1,378	0.776	22,445	41.9%	45.4%
A57 C 2, Ragnall - Lincolnshire boundary	2011	1.000	10,507	10,507	9,700	9,700	897	8.53%	8.5	50.00%	50.0	448	448	925	8.80%	8.8	50.00%	50.0	462	462	10.3%	6.0	1	1,378	0.776	22,445	43.2%	46.8%
A60 South Yorkshire boundary - A 634, Oldcotes	2011	1.000	4,279	4,279	3,950	3,950	365	8.53%	8.5	50.00%	50.0	183	183	377	8.80%	8.8	50.00%	50.0	188	188	6.6%	6.0	1	1,379	0.776	22,454	17.6%	19.1%
A60 A 634, Oldcotes - B 6463 Lamb Lane	2011	1.000	7,149	7,149	6,600	6,600	610	8.53%	8.5	50.00%	50.0	305	305	629	8.80%	8.8	50.00%	50.0	315	315	2.4%	7.0	1	1,380	0.947	27,414	24.1%	26.1%
A60 B 6463 Lamb Lane, Oldcotes - Church Street, Langold	2011	1.000	6,878	6,878	6,350	6,350	587	8.53%	8.5	50.00%	50.0	293	293	605	8.80%	8.8	50.00%	50.0	303	303	2.4%	7.2	1	1,380	0.9812	28,404	22.4%	24.2%
A60 Church Street, Langold - Rotherham Baulk, Carlton-in-Lindrick	2011	1.000	8,503	8,503	7,850	7,850	726	8.53%	8.5	50.00%	50.0	363	363	748	8.80%	8.8	50.00%	50.0	374	374	2.4%	7.2	1	1,380	0.9812	28,404	27.6%	29.9%
A60 Doncaster Road, Carlton in Lindrick: Rotherham Baulk - Long Lane	2011	1.000	9,044	9,044	8,350	8,350	772	8.53%	8.5	50.00%	50.0	386	386	796	8.80%	8.8	50.00%	50.0	398	398	2.4%	7.2	1	1,380	0.9812	28,404	29.4%	31.8%
A60 Long Lane, Carlton-in-Lindrick - B 6041, Worksop	2011	1.000	9,261	9,261	8,550	8,550	790	8.53%	8.5	50.00%	50.0	395	395	815	8.80%	8.8	50.00%	50.0	407	407	3.8%	7.0	1	1,379	0.947	27,410	31.2%	33.8%
A60 Carlton Road, Worksop: B 6041 - B 6045 Blyth Road	2011	1.000	9,694	9,694	8,950	8,950	827	8.53%	8.5	50.00%	50.0	414	414	853	8.80%	8.8	50.00%	50.0	427	427	3.5%	7.4	1	1,379	1.0154	29,391	30.5%	33.0%
A60 Turner Road, Worksop: B 6045 Carlton Road - B 6040 Gateford Road	2011	1.000	12,944	12,944	11,950	11,950	1,104	8.53%	8.5	50.00%	50.0	552	552	1,139	8.80%	8.8	50.00%	50.0	570	570	3.5%	7.0	1	1,379	0.947	27,411	43.6%	47.2%
A60 Gateford Road, Worksop: Turner Road - Babbage Way	2011	1.000	22,367	22,367	20,650	20,650	1,909	8.53%	8.5	50.00%	50.0	954	954	1,968	8.80%	8.8	50.00%	50.0	984	984	3.4%	7.0	1	1,379	0.947	27,411	75.3%	81.6%
A60 Babbage Way / Sandy Lane, Worksop: B 6040 Gateford Road - A 57 Worksop Bypass	2011	1.000	16,085	16,085	14,850	14,850	1,372	8.53%	8.5	50.00%	50.0	686	686	1,415	8.80%	8.8	50.00%	50.0	708	708	3.8%	7.8	1	1,379	1.0838	31,370	47.3%	51.3%
A60 A 57 Worksop Bypass - A 619 (Darfoulds roundabout)	2011	1.000	20,364	20,364	18,800	18,800	1,738	8.53%	8.5	50.00%	50.0	869	869	1,792	8.80%	8.8	50.00%	50.0	896	896	6.8%	7.2	1	1,379	0.9812	28,391	66.2%	71.7%
A60 A 619 (Darfoulds roundabout) - Derbyshire boundary	2011	1.000	9,369	9,369	8,650	8,650	799	8.53%	8.5	50.00%	50.0	400	400	824	8.80%	8.8	50.00%	50.0	412	412	7.1%	7.0	1	1,379	0.947	27,400	31.6%	34.2%
A60 Derbyshire boundary - A 616 Creswell Road, Cuckney	2011	1.000	6,174	6,174	5,700	5,700	527	8.53%	8.5	50.00%	50.0	263	263	543	8.80%	8.8	50.00%	50.0	272	272	4.8%	7.0	1	1,379	0.947	27,407	20.8%	22.5%

Location	Seasonal Factors Year chosen	NCC 2011 Factor	Daily Average (Mon-Fri)	AAWT	Daily Average (Mon-Sun)	AADT	AM Peak Hour Flow 2-way (Average Mon-Fri)	% of daily flows in peak hour	%	% direction 1 split within peak hour	%	AM Peak hour direction 1 flow	AM Peak hour direction 2 flow	PM Peak Hour Flow 2-way (Average Mon-Fri)	% of daily flows in peak hour	%	% direction 1 split within peak hour	%	PM Peak hour direction 1 flow	PM Peak hour direction 2 flow	% of HGVs within peak hour flow (including PSVs)	Carriageway Width	Lanes per direction	Capacity (A - B * Pk%HGVs)	Width Factor	CRF	% of AADT to CRF	% of AAWT to CRF
A60 Mansfield Road, Cuckney: A 616 Creswell Road - A 632 Langwith Road	2011	1.000	6,553	6,553	6,050	6,050	559	8.53%	8.5	50.00%	50.0	280	280	577	8.80%	8.8	50.00%	50.0	288	288	3.5%	7.0	1	1,379	0.947	27,411	22.1%	23.9%
A60 A 632 Langwith Road, Cuckney - B 6031 Bishop's Walk, Church Warsop	2011	1.000	6,282	6,282	5,800	5,800	536	8.53%	8.5	50.00%	50.0	268	268	553	8.80%	8.8	50.00%	50.0	276	276	3.6%	7.0	1	1,379	0.947	27,411	21.2%	22.9%
A161 North Lincolnshire boundary - B 1403, Misterton	2011	1.000	4,766	4,766	4,400	4,400	407	8.53%	8.5	50.00%	50.0	203	203	419	8.80%	8.8	50.00%	50.0	210	210	3.6%	6.0	1	1,379	0.776	22,461	19.6%	21.2%
A161 Misterton: B1403 - Stockwith Road	2011	1.000	4,008	4,008	3,700	3,700	342	8.53%	8.5	50.00%	50.0	171	171	353	8.80%	8.8	50.00%	50.0	176	176	4.9%	6.0	1	1,379	0.776	22,458	16.5%	17.8%
A161 Stockwith Road, Misterton - A 631, Beckingham	2011	1.000	4,820	4,820	4,450	4,450	411	8.53%	8.5	50.00%	50.0	206	206	424	8.80%	8.8	50.00%	50.0	212	212	5.6%	6.0	1	1,379	0.776	22,456	19.8%	21.5%
A614 Yorkshire boundary - A638	2011	1.000	12,511	12,511	11,550	11,550	1,067	8.53%	8.5	50.00%	50.0	534	534	1,101	8.80%	8.8	50.00%	50.0	550	550	7.7%	7.0	1	1,379	0.947	27,398	42.2%	45.7%
A614 A638 - A1 (M) (Blyth roundabout)	2011	1.000	7,041	7,041	6,500	6,500	601	8.53%	8.5	50.00%	50.0	300	300	620	8.80%	8.8	50.00%	50.0	310	310	12.7%	7.0	1	1,378	0.947	27,383	23.7%	25.7%
A614 A1 (Five Lanes End roundabout) - Lime Tree Avenue, Clumber Park	2011	1.000	11,319	11,319	10,450	10,450	966	8.53%	8.5	50.00%	50.0	483	483	996	8.80%	8.8	50.00%	50.0	498	498	9.2%	7.6	1	1,379	1.0496	30,362	34.4%	37.3%
A614 Lime Tree Avenue, Clumber Park - Bothamsall Roundabout	2011	1.000	10,453	10,453	9,650	9,650	892	8.53%	8.5	50.00%	50.0	446	446	920	8.80%	8.8	50.00%	50.0	460	460	9.2%	7.6	1	1,379	1.0496	30,362	31.8%	34.4%
A614 Bothamsall Roundabout - A616 (Ollerton roundabout)	2008	0.972	11,114	11,114	10,349	10,349	948	8.53%	8.5	50.00%	50.0	474	474	978	8.80%	8.8	50.00%	50.0	489	489	9.2%	7.6	1	1,379	1.0496	30,612	33.8%	36.3%
A616 Derbyshire boundary - A60 Worksop Road, Cuckney	2011	1.000	2,925	2,925	2,700	2,700	250	8.53%	8.5	50.00%	50.0	125	125	257	8.80%	8.8	50.00%	50.0	129	129	3.6%	6.0	1	1,379	0.776	22,461	12.0%	13.0%
A616 A60 Worksop Road - A632 Budby Road, Cuckney	2011	1.000	2,220	2,220	2,050	2,050	189	8.53%	8.5	50.00%	50.0	95	95	195	8.80%	8.8	50.00%	50.0	98	98	5.1%	6.0	1	1,379	0.776	22,457	9.1%	9.9%
A616 A632 Budby Road, Cuckney - B6034 Ollerton Road, Budby	2011	1.000	4,062	4,062	3,750	3,750	347	8.53%	8.5	50.00%	50.0	173	173	357	8.80%	8.8	50.00%	50.0	179	179	10.6%	6.0	1	1,378	0.776	22,444	16.7%	18.1%
A619 Derbyshire boundary - A60 (Darfoulds roundabout)	2011	1.000	10,940	10,940	10,100	10,100	933	8.53%	8.5	50.00%	50.0	467	467	963	8.80%	8.8	50.00%	50.0	481	481	9.3%	7.0	1	1,379	0.947	27,394	36.9%	39.9%
A620 Straight Mile: A 1, Ranby - B 6420 Mansfield Road, Babworth	2011	1.000	11,048	11,048	10,200	10,200	943	8.53%	8.5	50.00%	50.0	471	471	972	8.80%	8.8	50.00%	50.0	486	486	4.2%	7.0	1	1,379	0.947	27,409	37.2%	40.3%
A620 Babworth Road: B 6420 Mansfield Road, Babworth - Ordsall Road, Retford	2011	1.000	14,190	14,190	13,100	13,100	1,211	8.53%	8.5	50.00%	50.0	605	605	1,249	8.80%	8.8	50.00%	50.0	624	624	3.9%	7.0	1	1,379	0.947	27,410	47.8%	51.8%
A620 Babworth Road, Retford: Ordsall Road - Queen Street	2011	1.000	18,035	18,035	16,650	16,650	1,539	8.53%	8.5	50.00%	50.0	769	769	1,587	8.80%	8.8	50.00%	50.0	794	794	3.9%	8.2	1	1,379	1.1522	33,349	49.9%	54.1%
A620 Hospital Road, Retford: Queen Street - A 638 North Road	2011	1.000	13,540	13,540	12,500	12,500	1,155	8.53%	8.5	50.00%	50.0	578	578	1,191	8.80%	8.8	50.00%	50.0	596	596	3.9%	7.2	1	1,379	0.9812	28,400	44.0%	47.7%
A620 Amcott Way, Retford: A 638 North Road - A 638 Arlington Way	2011	1.000	21,663	21,663	20,000	20,000	1,848	8.53%	8.5	50.00%	50.0	924	924	1,906	8.80%	8.8	50.00%	50.0	953	953	3.1%	8.2	1	1,380	1.1522	33,352	60.0%	65.0%
A620 Moorgate, Retford: A 638 - Tiln Lane	2011	1.000	14,352	14,352	13,250	13,250	1,225	8.53%	8.5	50.00%	50.0	612	612	1,263	8.80%	8.8	50.00%	50.0	631	631	3.6%	8.0	1	1,379	1.118	32,360	40.9%	44.4%
A620 Tiln Lane, Retford - B 1403, Clarborough	2011	1.000	8,665	8,665	8,000	8,000	739	8.53%	8.5	50.00%	50.0	370	370	763	8.80%	8.8	50.00%	50.0	381	381	4.4%	6.2	1	1,379	0.8102	23,449	34.1%	37.0%
A620 B 1403, Clarborough - Haughgate Hill, North Wheatley	2011	1.000	5,632	5,632	5,200	5,200	481	8.53%	8.5	50.00%	50.0	240	240	496	8.80%	8.8	50.00%	50.0	248	248	6.6%	7.0	1	1,379	0.947	27,402	19.0%	20.6%
A620 Haughgate Hill, North Wheatley - Bole Corner	2011	1.000	4,495	4,495	4,150	4,150	384	8.53%	8.5	50.00%	50.0	192	192	396	8.80%	8.8	50.00%	50.0	198	198	6.3%	7.0	1	1,379	0.947	27,403	15.1%	16.4%
A620 Bole Corner - A 631, Beckingham	2011	1.000	6,986	6,986	6,450	6,450	596	8.53%	8.5	50.00%	50.0	298	298	615	8.80%	8.8	50.00%	50.0	307	307	7.2%	7.0	1	1,379	0.947	27,400	23.5%	25.5%
A631 Yorkshire boundary - High Street, Everton	2011	1.000	9,749	9,749	9,000	9,000	832	8.53%	8.5	50.00%	50.0	416	416	858	8.80%	8.8	50.00%	50.0	429	429	9.7%	7.6	1	1,379	1.0496	30,360	29.6%	32.1%
A631 High Street, Everton - B 6045 Eel Pool Road, Drakeholes	2011	1.000	8,503	8,503	7,850	7,850	726	8.53%	8.5	50.00%	50.0	363	363	748	8.80%	8.8	50.00%	50.0	374	374	9.1%	7.0	1	1,379	0.947	27,394	28.7%	31.0%
A631 B 6045 Eel Pool Road, Drakeholes - B 1403 Clayworth Road, Gringley-on-the-Hill	2011	1.000	9,424	9,424	8,700	8,700	804	8.53%	8.5	50.00%	50.0	402	402	829	8.80%	8.8	50.00%	50.0	415	415	8.2%	6.8	1	1,379	0.9128	26,407	32.9%	35.7%
A631 B 1403 Clayworth Road - B 1403 Green Road, Gringley-on-the-Hill	2011	1.000	9,857	9,857	9,100	9,100	841	8.53%	8.5	50.00%	50.0	421	421	867	8.80%	8.8	50.00%	50.0	434	434	8.2%	7.0	2	2,098	0.959	84,439	10.8%	11.7%
A631 B 1403 Green Road, Gringley-on-the-Hill - A 161, Beckingham	2011	1.000	8,124	8,124	7,500	7,500	693	8.53%	8.5	50.00%	50.0	347	347	715	8.80%	8.8	50.00%	50.0	357	357	8.2%	7.0	1	1,379	0.947	27,397	27.4%	29.7%
A631 Beckingham Bypass: A 161 - A 620	2011	1.000	12,402	12,402	11,450	11,450	1,058	8.53%	8.5	50.00%	50.0	529	529	1,091	8.80%	8.8	50.00%	50.0	546	546	7.0%	7.2	2	2,099	0.986	86,862	13.2%	14.3%
A631 A 620 - Lincolnshire boundary	2011	1.000	18,089	18,089	16,700	16,700	1,543	8.53%	8.5	50.00%	50.0	772	772	1,592	8.80%	8.8	50.00%	50.0	796	796	6.0%	7.2	2	2,099	0.986	86,870	19.2%	20.8%
A632 Derbyshire boundary - Wood Lane	2011	1.000	4,495	4,495	4,150	4,150	384	8.53%	8.5	50.00%	50.0	192	192	396	8.80%	8.8	50.00%	50.0	198	198	3.8%	6.2	1	1,379	0.8102	23,450	17.7%	19.2%
A632 Wood Lane - A60 Mansfield Road, Cuckney	2011	1.000	3,358	3,358	3,100	3,100	287	8.53%	8.5	50.00%	50.0	143	143	295	8.80%	8.8	50.00%	50.0	148	148	3.8%	6.0	1	1,379	0.776	22,461	13.8%	14.9%
A632 Budby Road, Cuckney: A60 Mansfield Road - A616 Budby Road	2011	1.000	2,220	2,220	2,050	2,050	189	8.53%	8.5	50.00%	50.0	95	95	195	8.80%	8.8	50.00%	50.0	98	98	3.9%	6.0	1	1,379	0.776	22,460	9.1%	9.9%
A634 Yorkshire boundary - A 60, Oldcotes	2011	1.000	4,712	4,712	4,350	4,350	402	8.53%	8.5	50.00%	50.0	201	201	415	8.80%	8.8	50.00%	50.0	207	207	6.4%	6.2	1	1,379	0.8102	23,444	18.6%	20.1%
A634 A 60, Oldcotes - B 6463	2011	1.000	7,041	7,041	6,500	6,500	601	8.53%	8.5	50.00%	50.0	300	300	620	8.80%	8.8	50.00%	50.0	310	310	7.5%	7.6	1	1,379	1.0496	30,367	21.4%	23.2%
A634 B 6463 - A 634 High Street, Blyth	2011	1.000	4,712	4,712	4,350	4,350	402	8.53%	8.5	50.00%	50.0	201	201	415	8.80%	8.8	50.00%	50.0	207	207	7.5%	6.4	1	1,379	0.8444	24,430	17.8%	19.3%
A634 High Street, Blyth: A 634 - B 6045 Worksop Road	2011	1.000	9,749	9,749	9,000	9,000	832	8.53%	8.5	50.00%	50.0	416	416	858	8.80%	8.8	50.00%	50.0	429	429	5.6%	8.0	1	1,379	1.118	32,353	27.8%	30.1%
A634 High Street / Spital Road, Blyth: B 6045 Worksop Road - A 1 (south of Blyth)	2011	1.000	1,950	1,950	1,800	1,800	166	8.53%	8.5	50.00%	50.0	83	83	172	8.80%	8.8	50.00%	50.0	86	86	11.0%	7.5	1	1,378	1.0325	29,861	6.0%	6.5%
A634 Retford Road: A 634 High Street, Blyth - B 6045 (east of Blyth)	2011	1.000	7,636	7,636	7,050	7,050	652	8.53%	8.5	50.00%	50.0	326	326	672	8.80%	8.8	50.00%	50.0	336	336	6.0%	6.4	1	1,379	0.8444	24,434	28.9%	31.3%
A634 B 6045 - A 638, Barnby Moor	2011	1.000	4,008	4,008	3,700	3,700	342	8.53%	8.5	50.00%	50.0	171	171	353	8.80%	8.8	50.00%	50.0	176	176	4.0%	6.8	1	1,379	0.9128	26,420	14.0%	15.2%
A638 Great North Road: A 614 - B 6045 Blyth Road, Ranskill	2011	1.000	4,983	4,983	4,600	4,600	425	8.53%	8.5	50.00%	50.0	213	213	438	8.80%	8.8	50.00%	50.0	219	219	9.8%	7.6	1	1,379	1.0496	30,360	15.2%	16.4%
A638 Great North Road: B 6045 Blyth Road, Ranskill - A 634, Barnby Moor	2011	1.000	5,632	5,632	5,200	5,200	481	8.53%	8.5	50.00%	50.0	240	240	496	8.80%	8.8	50.00%	50.0	248	248	7.0%	7.2	1	1,379	0.9812	28,390	18.3%	19.8%
A638 Great North Road: A 634, Barnby Moor - Randall Way, Retford	2011	1.000	8,665	8,665	8,000	8,000	739	8.53%	8.5	50.00%	50.0	370	370	763	8.80%	8.8	50.00%	50.0	381	381	5.4%	8.5	1	1,379	1.2035	34,828	23.0%	24.9%
A638 North Road, Retford: Randall Way - A 620 Hospital Road	2011	1.000	13,431	13,431	12,400	12,400	1,146	8.53%	8.5	50.00%	50.0	573	573	1,182	8.80%	8.8	50.00%	50.0	591	591	4.2%	7.2	1	1,379	0.9812	28,399	43.7%	47.3%
A638 Arlington Way, Retford: A 620 Moorgate - B 6044 Albert Road	2011	1.000	13,215	13,215	12,200	12,200	1,128	8.53%	8.5	50.00%	50.0	564	564	1,163	8.80%	8.8	50.00%	50.0	581	581	4.0%	6.8	1	1,379	0.9128	26,420	46.2%	50.0%
A638 London Road, Retford: B 6044 Albert Road - Bracken Lane	2011	1.000	15,814	15,814	14,600	14,600	1,349	8.53%	8.5	50.00%	50.0	675	675	1,392	8.80%	8.8	50.00%	50.0	696	696	2.8%	7.6	1	1,380	1.0496	30,383	48.1%	52.0%
A638 London Road / Great North Road: Bracken Lane, Retford - B 6387 Rectory Lane, Gamston	2011	1.000	15,219	15,219	14,050	14,050	1,299	8.53%	8.5	50.00%	50.0	649	649	1,339	8.80%	8.8	50.00%	50.0	670	670	2.6%	8.0	1	1,380	1.118	32,364	43.4%	47.0%
A638 Great North Road: B 6387 Rectory Lane, Gamston - A 1, Markham Moor	2011	1.000	5,903	5,903	5,450	5,450	504	8.53%	8.5	50.00%	50.0	252	252	519	8.80%	8.8	50.00%	50.0	260	260	4.7%	8.5	1	1,379	1.2035	34,831	15.6%	16.9%
A6075 Cocking Hill, Boughton - A1, Tuxford	2011	1.000	4,441	4,441	4,100	4,100	379	8.53%	8.5	50.00%	50.0	189	189	391	8.80%	8.8	50.00%	50.0	195	195	8.5%	6.2	1	1,379	0.8102	23,438	17.5%	18.9%
A6075 Lincoln Road, Tuxford: A1 - Marnham Road	2011	1.000	6,066	6,066	5,600	5,600	518	8.53%	8.5	50.00%	50.0	259	259	534	8.80%	8.8	50.00%	50.0	267	267	7.3%	6.0	1	1,379	0.776	22,452	24.9%	27.0%
A6075 Marnham Road, Tuxford - A57, Darlton	2011	1.000	3,141	3,141	2,900	2,900	268	8.53%	8.5	50.00%	50.0	134	134	276	8.80%	8.8	50.00%	50.0	138	138	7.3%	7.0	1	1,379	0.947	27,400	10.6%	11.5%
B1164 A 1 / A 638 (Markham Moor) - A 1 / A 6075 (Tuxford)	2011	1.000	4,495	4,495	4,150	4,150	384	8.53%	8.5	50.00%	50.0	192	192	396	8.80%	8.8	50.00%	50.0	198	198	8.1%	8.5	1	1,379	1.2035	34,818	11.9%	12.9%
B1164 A 6075, Tuxford - A 1, Carlton-on-Trent	2011	1.000	1,841	1,841	1,700	1,700	157	8.53%	8.5	50.00%	50.0	79	79	162	8.80%	8.8	50.00%	50.0	81	81	9.9%	8.5	1	1,379	1.2035	34,811	4.9%	5.3%
B1403 A 161, Misterton - Fountain Hill Road, Walkeringham	2011	1.000	1,950	1,950	1,800	1,800	166	8.53%	8.5	50.00%	50.0	83	83	172	8.80%	8.8	50.00%	50.0	86	86	6.0%	6.0	1	1,379	0.776	22,455	8.0%	8.7%
B1403 Fountain Hill Road, Walkeringham - A 631, Gringley-on-the-Hill	2011	1.000	2,600	2,600	2,400	2,400	222	8.53%	8.5	50.00%	50.0	111	111	229	8.80%	8.8	50.00%	50.0	114	114	6.7%	6.0	1	1,379	0.776	22,453	10.7%	11.6%
B1403 A 631, Gringley-on-the-Hill - A 620, Clarborough	2011	1.000	1,462	1,462	1,350	1,350	125	8.53%	8.5	50.00%	50.0	62	62	129	8.80%	8.8	50.00%	50.0	64	64	4.7%	5.8	1	1,379	0.7418	21,469	6.3%	6.8%
B6024 Newcastle Avenue, Worksop: A 57 Worksop Bypass - Westgate	2011	1.000	10,669	10,669	9,850	9,850	910	8.53%	8.5	50.00%	50.0	455	455	939	8.80%	8.8	50.00%	50.0	469	469	4.0%	7.5	1	1,379	1.0325	29,884	33.0%	35.7%
B6024 Newcastle Avenue, Worksop: Westgate - B6040 Watson Road	2011	1.000	8,611	8,611	7,950	7,950	735	8.53%	8.5	50.00%	50.0	367	367	758	8.80%	8.8	50.00%	50.0	379	379	5.4%	7.5	1	1,379	1.0325	29,880	26.6%	28.8%
B6034 A 57 Worksop Bypass - Sparken Hill	2011	1.000	5,253	5,253	4,850	4,850	448	8.53%	8.5	50.00%	50.0	224	224	462	8.80%	8.8	50.00%	50.0	231	231	2.3%	7.0	1	1,380	0.947	27,414	17.7%	19.2%
B6034 Ollerton Road: Sparken Hill, Worksop - Lime Tree Avenue, Carburton	2011	1.000	5,308	5,308	4,900	4,900	453	8.53%	8.5	50.00%	50.0	226	226	467	8.80%	8.8	50.00%	50.0	234	234	2.1%	6.8	1	1,380	0.9128	26,425	18.5%	20.1%
B6034 Ollerton Road: Lime Tree Avenue, Carburton - A 616, Budby	2011	1.000	5,416	5,416	5,000	5,000	462	8.53%	8.5	50.00%	50.0	231	231	477	8.80%	8.8	50.00%	50.0	238	238	2.9%	6.5	1	1,380	0.8615	24,938	20.0%	21.7%
B6040 Gateford Road, Worksop: B 6041 Raymoth Lane - A 60 Turner Road	2011	1.000	10,236	10,236	9,450	9,450	873	8.53%	8.5	50.00%	50.0	437	437	901	8.80%	8.8	50.00%	50.0	450	450	2.4%	8.0	1	1,380	1.118	32,364	29.2%	31.6%
B6040 Gateford Road, Worksop: A 60 Turner Road - B 6045 Carlton Road	2011	1.000	9,749	9,749	9,000	9,000	832	8.53%	8.5	50.00%	50.0	416	416	858	8.80%	8.8	50.00%	50.0	429	429	4.0%	8.8	1	1,379	1.2548	36,318	24.8%	26.8%
B6040 Bridge Place, Worksop: B 6045 Carlton Road - Bridge Place	2011	1.000	12,023	12,023	11,100	11,100	1,026	8.53%	8.5	50.00%	50.0	513	513	1,058	8.80%	8.8	50.00%	50.0	529	529	4.9%	7.0	1	1,379	0.947	27,407	40.5%	43.9%
B6040 Watson Road, Worksop: Bridge Place - B 6024 Newcastle Avenue	2011	1.000	10,073	10,073	9,300	9,300	860	8.53%	8.5	50.00%	50.0	430	430	886	8.80%	8.8	50.00%	50.0	443	443	6.2%	6.0	1	1,379	0.776	22,455	41.4%	44.9%
B6040 Watson Road, Worksop: B 6024 Newcastle Avenue - Potter Street	2011	1.000	6,228	6,228	5,750	5,750	531	8.53%	8.5	50.00%	50.0	266	266	548	8.80%	8.8	50.00%	50.0	274	274	3.7%	7.0	1	1,379	0.947	27,410	21.0%	22.7%
B6040 Potter Street, Worksop: Bridge Street - Watson Road	2008	0.972	10,071	10,071	9,377	9,377	859	8.53%	8.5	50.00%	50.0	430	430	886	8.80%	8.8	50.00%	50.0	443	443	2.4%	6.8	1	1,380	0.9128	26,642	35.2%	37.8%
B6040 Potter Street, Worksop: Watson Road - Lowtown Street	2011	1.000	8,286	8,286	7,650	7,650	707	8.53%	8.5	50.00%	50.0	354	354	729	8.80%	8.8	50.00%	50.0	365	365	2.4%	6.0	1	1,380	0.776	22,464	34.1%	36.9%
B6040 Cheapside: Lowtown Street - B 6041 High Hoe Road, Worksop	2011	1.000	13,269	13,269	12,250	12,250	1,132	8.53%	8.5	50.00%	50.0	566	566	1,168	8.80%	8.8	50.00%	50.0	584	584	2.5%	7.0	1	1,380	0.947	27,414	44.7%	48.4%
B6040 Retford Road, Worksop: B 6041 High Hoe Road - B 6079	2011	1.000	13,594	13,594	12,550	12,550	1,160	8.53%	8.5	50.00%	50.0	580	580	1,196	8.80%	8.8	50.00%	50.0	598	598	1.5%	7.5	1	1,380	1.0325	29,892	42.0%	45.5%
B6040 B 6079 Retford Road - A 57 Worksop Bypass	2011	1.000	5,741	5,741	5,300	5,300	490	8.53%	8.5	50.00%	50.0	245	245	505	8.80%	8.8	50.00%	50.0	253	253	1.5%	7.0	1	1,380	0.947	27,417	19.3%	20.9%
B6041 Gateford Road, Worksop: A 57 Worksop Bypass - Raymoth Lane	2011	1.000	14,190	14,190	13,100	13,100	1,211	8.53%	8.5	50.00%	50.0	605	605	1,249	8.80%	8.8	50.00%	50.0	624	624	2.2%	9.0	1	1,380	1.289	37,315	35.1%	38.0%
B6041 Raymoth Lane: B 6040 - A 60 Carlton Road, Worksop	2011	1.000	11,319	11,319	10,450	10,450	966	8.53%	8.5	50.00%	50.0	483	483	996	8.80%	8.8	50.00%	50.0	498	498	2.0%	6.8	1	1,380	0.9128	26,425	39.5%	42.8%
B6041 Thievesdale Lane: A 60 Carlton Road - B 6045 Blyth Road, Worksop	2011	1.000	11,536	11,536	10,650	10,650	984	8.53%	8.5	50.00%	50.0	492	492	1,015	8.80%	8.8	50.00%	50.0	508	508	3.0%	6.8	1	1,380	0.9128	26,422	40.3%	43.7%
B6041 Kilton Hill, Worksop: B 6045 Blyth Road - Kilton Road	2011	1.000	15,977	15,977	14,750	14,750	1,363	8.53%	8.5	50.00%	50.0	682	682	1,406	8.80%	8.8	50.00%	50.0	703	703	1.5%	7.8	1	1,380	1.0838	31,377	47.0%	50.9%
B6041 Kilton Road - B 6040 Retford Road, Worksop	2011	1.000	13,269	13,269	12,250	12,250	1,132	8.53%	8.5	50.00%	50.0	566	566	1,168	8.80%	8.8	50.00%	50.0	584	584	2.0%	6.8	1	1,380	0.9128	26,425	46.4%	50.2%
B6044 Retford Station - A 638, Retford	2011	1.000	4,495	4,495	4,150	4,150	384	8.53%	8.5	50.00%	50.0	192	192	396	8.80%	8.8	50.00%	50.0	198	198	2.6%	6.0	1	1,380	0.776	22,463	18.5%	20.0%
B6045 Carlton Road, Worksop: B 6040 Gateford Road - A 60 Turner Road	2011	1.000	5,632	5,632	5,200	5,200	481	8.53%	8.5	50.00%	50.0	240	240	496	8.80%	8.8	50.00%	50.0	248	248	4.3%	6.8	1	1,379	0.9128	26,419	19.7%	21.3%
B6045 Blyth Road, Worksop: A 60 Turner Road - B 6041 Kilton Hill	2011	1.000	8,557	8,557	7,900	7,900	730	8.53%	8.5	50.00%	50.0	365	365	753	8.80%	8.8	50.00%	50.0	377	377	2.0%	6.5	1	1,380	0.8615	24,940	31.7%	34.3%
B6045 Blyth Road: B 6041 Kilton Hill - B 6041 Thievesdale Lane, Worksop	2011	1.000	13,431	13,431	12,400	12,400	1,146	8.53%	8.5	50.00%	50.0	573	573	1,182	8.80%	8.8	50.00%	50.0	591	591	2.1%	7.8	1	1,380	1.0838	31,375	39.5%	42.8%
B6045 B 6041 Thievesdale Lane, Worksop - A 634, Blyth	2011	1.000	9,857	9,857	9,100	9,100	841	8.53%	8.5	50.00%	50.0	421	421	867	8.80%	8.8	50.00%	50.0	434	434	4.8%	7.5	1	1,379	1.0325	29,881	30.5%	33.0%
B6045 A 634, Blyth - A 1(M) (Blyth roundabout)	2011	1.000	7,853	7,853	7,250	7,250	670	8.53%	8.5	50.00%	50.0	335	335	691	8.80%	8.8	50.00%	50.0	346	346	8.0%	6.0	1	1,379	0.776	22,450	32.3%	35.0%
B6045 A 634, Blyth - A 638, Ranskill	2011	1.000	2,708	2,708	2,500	2,500	231	8.53%	8.5	50.00%	50.0	116	116	238	8.80%	8.8	50.00%	50.0	119	119	5.4%	6.0	1	1,379	0.776	22,457	11.1%	12.1%
B6045 A 638, Ranskill - A 631	2011	1.000	3,358	3,358	3,100	3,100	287	8.53%	8.5	50.00%	50.0	143	143	295	8.80%	8.8	50.00%	50.0	148	148	4.4%	6.0	1	1,379	0.776	22,459	13.8%	15.0%
B6079 B 6040, Worksop - A 1, Ranby	2011	1.000	8,178	8,178	7,550	7,550	698	8.53%	8.5	50.00%	50.0	349	349	720	8.80%	8.8	50.00%	50.0	360	360	3.5%	6.8	1	1,379	0.9128	26,421	28.6%	31.0%
B6387 A 638, Gamston - A 1	2011	1.000	6,661	6,661	6,150	6,150	568	8.53%	8.5	50.00%	50.0	284	284	586	8.80%	8.8	50.00%	50.0	293	293	3.3%	6.8	1	1,380	0.9128	26,422	23.3%	25.2%
B6387 A 1 - Main Street, Bothamsall	2011	1.000	4,062	4,062	3,750	3,750	347	8.53%	8.5	50.00%	50.0	173	173	357	8.80%	8.8	50.00%	50.0	179	179	2.4%	6.2	1	1,380	0.8102	23,454	16.0%	17.3%
B6387 New Hill, Walesby - A 6075, Boughton	2008	0.972	5,009	5,009	4,664	4,664	427	8.53%	8.5	50.00%	50.0	214	214	441	8.80%	8.8	50.00%	50.0	220	220	2.4%	6.5	1	1,380	0.8615	25,144	18.5%	19.9%
B6420 Mansfield Road: A 620, Babworth - A 1	2011	1.000	3,791	3,791	3,500	3,500	323	8.53%	8.5	50.00%	50.0	162	162	334	8.80%	8.8	50.00%	50.0	167	167	3.4%	6.0	1	1,379	0.776	22,462	15.6%	16.9%
B6461 A 614 Old Rufford Road - A 616, Ollerton	2008	0.972	1,565	1,565	1,458	1,458	134	8.53%	8.5	50.00%	50.0	67	67	138	8.80%	8.8	50.00%	50.0	69	69	6.8%	6.0	1	1,379	0.776	22,638	6.4%	6.9%
B6463 South Yorkshire boundary - Scrooby Road, Harworth	2011	1.000	5,199	5,199	4,800	4,800	444	8.53%	8.5	50.00%	50.0	222	222	458	8.80%	8.8	50.00%	50.0	229	229	6.8%	6.8	1	1,379	0.9128	26,411	18.2%	19.7%
B6463 Scrooby Road, Harworth - A 634 Oldcotes	2011	1.000	3,141	3,141	2,900	2,900	268	8.53%	8.5	50.00%	50.0	134	134	276	8.80%	8.8	50.00%	50.0	138	138	6.8%	6.8	1	1,379	0.9128	26,411	11.0%	11.9%
C2 A 620, Bole Corner - Station Road, Sturton-le-Steeple	2011	1.000	4,062	4,062	3,750	3,750	347	8.53%	8.5	50.00%	50.0	173	173	357	8.80%	8.8	50.00%	50.0	179	179	12.5%	6.8	1	1,378	0.9128	26,395	14.2%	15.4%
C2 Station Road, Sturton-le-Steeple - Main Street, North Leverton	2011	1.000	3,683	3,683	3,400	3,400	314	8.53%	8.5	50.00%	50.0	157	157	324	8.80%	8.8	50.00%	50.0	162	162	4.0%	6.8	1	1,379	0.9128	26,420	12.9%	13.9%
C2 Main Street, Laneham - A 57, Ragnall	2011	1.000	3,683	3,683	3,400	3,400	314	8.53%	8.5	50.00%	50.0	157	157	324	8.80%	8.8	50.00%	50.0	162	162	9.0%	6.8	1	1,379	0.9128	26,405	12.9%	13.9%
C2 A 57, Ragnall - B 1164, Sutton-on-Trent	2011	1.000	1,462	1,462	1,350	1,350	125	8.53%	8.5	50.00%	50.0	62	62	129	8.80%	8.8	50.00%	50.0	64	64	10.5%	6.0	1	1,378	0.776	22,444	6.0%	6.5%
C6 A 60, Warsop - A 616 Budby Crossroads	2008	0.972	2,974	2,974	2,769	2,769	254	8.53%	8.5	50.00%	50.0	127	127	262	8.80%	8.8	50.00%	50.0	131	131	3.2%	5.8	1	1,380	0.7418	21,649	12.8%	13.7%
C6 A 616 Budby Crossroads - A 614, Shepherds Lodge	2008	0.972	1,983	1,983	1,846	1,846	169	8.53%	8.5	50.00%	50.0	85	85	175	8.80%	8.8	50.00%	50.0	87	87	3.2%	6.0	1	1,380	0.776	22,647	8.2%	8.8%
C6 A 614, Shepherds Lodge - B 6387, east of Bothamsall	2011	1.000	1,679	1,679	1,550	1,550	143	8.53%	8.5	50.00%	50.0	72	72	148	8.80%	8.8	50.00%	50.0	74	74	3.2%	5.6	1	1,380	0.7076	20,482	7.6%	8.2%
C10 Wiseton Road: B 6045 Eel Pool Road, Drakeholes - B 1403 Gringley Road, Clayworth	2011	1.000	1,137	1,137	1,050	1,050	97	8.53%	8.5	50.00%	50.0	49	49	100	8.80%	8.8	50.00%	50.0	50	50	3.2%	5.8	1	1,380	0.7418	21,472	4.9%	5.3%
C10 Sturton Road / Wheatley Road: South Wheatley - Sturton le Steeple	2011	1.000	1,083	1,083	1,000	1,000	92	8.53%	8.5	50.00%	50.0	46	46	95	8.80%	8.8	50.00%	50.0	48	48	3.2%	5.5	1	1,380	0.6905	19,987	5.0%	5.4%
C204 Memorial Avenue, Worksop: B 6040 Watson Road - Priorswell Road	2011	1.000	6,499	6,499	6,000	6,000	555	8.53%	8.5	50.00%	50.0	277	277	572	8.80%	8.8	50.00%	50.0	286	286	1.7%	8.0	1	1,380	1.118	32,367	18.5%	20.1%
C205 Park Street, Worksop: B 6040 Potter Street - Westgate	2011	1.000	9,044	9,044	8,350	8,350	772	8.53%	8.5	50.00%	50.0	386	386	796	8.80%	8.8	50.00%	50.0	398	398	3.4%	7.0	1	1,379	0.947	27,411	30.5%	33.0%
C205 Sparken Hill, Worksop: Westgate - B6034	2011	1.000	4,062	4,062	3,750	3,750	347	8.53%	8.5	50.00%	50.0	173	173	357	8.80%	8.8	50.00%	50.0	179	179	1.4%	8.0	1	1,380	1.118	32,368	11.6%	12.5%
Darlton Road (North of junction with the A57)	2006	1.075	1,247	1,200	1,161	1,117	113	9.05%	9.1	55.24%	55.2	62	51	103	8.28%	8.3	66.67%	66.7	69	34	6.2%	5.4	1	1,379	0.6734	17,288	6.5%	6.9%
Bawtry Road, Harworth (north of Devonshire Road)	2010	0.998	4,093	4,056	3,839	3,804	296	7.24%	7.2	55.89%	55.9	166	131	377	9.22%	9.2	52.12%	52.1	197	181	6.2%	5.8	1	1,379	0.7418	19,977	19.0%	20.3%
Shepherds Avenue, Worksop (west of Kilton Hill)	2006	0.989	4,676	4,604	4,326	4,260	406	8.69%	8.7	61.56%	61.6	250	156	406	8.69%	8.7	54.01%	54.0	219	187	6.2%	6.0	1	1,379	0.776	21,096	20.2%	21.8%
Claylands Avenue, Worksop (east of the A57)	2006	1.012	5,278	5,320	4,914	4,954	429	8.13%	8.1	70.28%	70.3	302	128	486	9.20%	9.2	71.25%	71.3	346	140	12.6%	6.8	1	1,378	0.9128	17,862	27.7%	29.8%
Thievesdale Lane, Worksop (west of The Paddocks)	2006	0.975	2,867	2,777	2,670	2,586	232	8.09%	8.1	62.18%	62.2	144	88	265	9.24%	9.2	55.51%	55.5	147	118	3.5%	6.0	1	1,379	0.776	19,422	13.3%	14.3%
Snape Lane (north of the A614)	2006	0.975	1,271	1,272	1,183	1,184	116	9.13%	9.1	52.10%	52.1	60	56	104	8.21%	8.2	64.49%	64.5	67	37	6.6%	5.5	1	1,379	0.6905	18,646	6.4%	6.8%
Snape Lane (south of the A614)	2006	0.975	1,282	1,283	1,194	1,195	117	9.12%	9.1	56.67%	56.7	66	51	105	8.21%	8.2	65.74%	65.7	69	36	3.9%	5.0	1	1,379	0.605	15,032	7.9%	8.5%
A631 Bawtry Road, Scaftworth (NW of Theaker Lane)	2006	0.975	9,416	9,327	8,820	8,736	726	7.71%	7.7	51.54%	51.5	374	352	792	8.41%	8.4	54.12%	54.1	429	363	15.0%	7.0	1	2,097	0.947	40,847	21.4%	22.8%
Hallcroft Road, Retford: Northfield Way - Randall Way	2011	1.000	4,874	4,874	4,500	4,500	416	8.53%	8.5	50.00%	50.0	208	208	429	8.80%	8.8	50.00%	50.0	214	214	1.9%	6.2	1	1,380	0.8102	23,455	19.2%	20.8%
C2 - LANEHAM ROAD / C2 RAMPTON ROAD / RETFORD ROAD - RAMPTON	2010	0.998	4,358	4,319	4,023	3,987	352	8.08%	8.1	62.32%	62.3	220	133	403	9.25%	9.3	75.25%	75.2	303	100	7.0%	6.8	1	2,099	0.913	25,408	15.7%	17.0%

16 HR AAWT to ADDT Factors

	NCC County Road Monthly Factor											
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
January (1)	1.117	1.081	1.036	1.017	1.007	1.007	1.000	0.985	0.981	0.978	0.992	0.992
February (2)	1.086	1.031	0.982	0.975	0.994	0.985	0.987	0.946	0.974	0.977	0.971	0.971
March (3)	1.087	0.998	0.952	0.955	0.978	0.964	0.948	0.956	0.936	0.944	0.943	0.943
April (4)	1.056	0.972	0.947	0.937	0.929	0.954	0.937	0.917	0.932	0.929	0.926	0.926
May (5)	1.003	0.942	0.939	0.919	0.933	0.939	0.944	0.922	0.927	0.924	0.934	0.934
June (6)	1.013	1.019	0.953	0.954	0.939	0.950	0.943	0.933	0.934	0.947	0.948	0.948
July (7)	1.010	0.943	0.968	0.944	0.939	0.960	0.963	0.960	0.956	0.947	0.949	0.949
August (8)	1.026	0.955	0.969	0.986	0.983	0.996	0.974	1.002	0.994	0.996	0.996	0.996
September (9)	1.059	0.966	0.956	0.948	0.957	0.941	0.950	0.961	0.946	0.955	0.957	0.957
October (10)	1.012	0.951	0.953	0.954	0.967	0.954	0.953	0.952	0.949	0.952	0.961	0.961
November (11)	1.025	0.978	0.962	0.952	0.956	0.929	0.939	0.949	0.946	0.948	0.954	0.954
December (12)	1.142	1.047	1.030	1.059	0.945	0.927	0.937	0.949	0.958	0.971	0.955	0.955

Note: No 2012 factors are available so 2011 factors have been applied

	Trunk Roads in Notts Monthly Factor											
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
January (1)	1.169	1.269	1.150	1.123	1.107	1.118	1.132	1.082	1.124	1.052	1.067	1.067
February (2)	1.066	1.104	1.039	1.045	1.061	1.063	1.052	1.014	1.042	1.025	1.029	1.029
March (3)	1.022	1.109	1.021	1.031	1.020	1.069	1.044	0.990	1.036	1.007	1.018	1.018
April (4)	0.993	1.089	0.987	0.974	0.999	0.984	0.978	0.975	0.979	0.961	0.959	0.959
May (5)	0.977	1.071	0.995	0.989	0.996	0.998	0.994	0.961	0.969	0.983	0.985	0.985
June (6)	1.004	1.063	0.981	0.966	0.976	0.981	0.984	0.965	0.974	0.975	0.972	0.972
July (7)	0.980	1.071	0.977	0.966	0.946	0.966	0.968	0.968	0.956	0.959	0.957	0.957
August (8)	0.951	1.055	0.959	0.987	0.977	0.962	0.955	0.964	0.947	0.962	0.963	0.963
September (9)	0.987	1.087	0.976	0.973	0.983	0.970	0.972	0.991	0.971	0.972	0.970	0.970
October (10)	0.988	1.092	0.992	0.993	0.982	0.979	0.987	0.983	0.976	0.975	0.984	0.984
November (11)	1.020	1.102	1.040	1.034	1.006	1.015	1.025	1.021	1.012	1.019	1.021	1.021
December (12)	1.037	1.089	1.133	1.060	1.047	1.022	1.071	1.070	1.024	1.061	1.029	1.029

Note: No 2012 factors are available so 2011 factors have been applied

Year	Bassetlaw to 2011 Factor
1998	
1999	
2000	
2001	1.075
2002	1.012
2003	0.989
2004	1.003
2005	0.982
2006	0.975
2007	0.945
2008	0.972
2009	0.982
2010	0.998
2011	1.000
2012	1.000

Factor to 2008	Increase for 2009
1.107	0.009
1.098	0.009
1.095	0.009
1.088	0.009
1.057	0.009
1.016	0.009
1.014	0.009
1.004	0.009
0.993	0.009
0.980	0.009
1.000	0.009

Year	Chosen Year for Factors
1998	2006
1999	2006
2000	2006
2001	2006
2002	2006
2003	2006
2004	2006
2005	2006
2006	2006
2007	2007
2008	2008
2009	2009
2010	2010
2011	2011
2012	2011

NORMALISED SEASONALITY FACTORS

	NCC County Road Monthly Factor											
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
January (1)	1.061	1.092	1.067	1.052	1.048	1.051	1.046	1.034	1.030	1.023	1.037	1.037
February (2)	1.031	1.041	1.012	1.009	1.035	1.028	1.032	0.993	1.022	1.022	1.014	1.014
March (3)	1.032	1.008	0.981	0.988	1.018	1.006	0.992	1.003	0.982	0.988	0.986	0.986
April (4)	1.002	0.982	0.976	0.969	0.968	0.995	0.980	0.963	0.978	0.973	0.967	0.967
May (5)	0.952	0.951	0.967	0.951	0.971	0.979	0.987	0.968	0.973	0.967	0.976	0.976
June (6)	0.962	1.029	0.982	0.986	0.977	0.991	0.986	0.980	0.981	0.991	0.990	0.990
July (7)	0.959	0.953	0.998	0.977	0.977	1.001	1.007	1.008	1.003	0.991	0.992	0.992
August (8)	0.975	0.964	0.998	1.020	1.024	1.039	1.019	1.052	1.043	1.042	1.040	1.040
September (9)	1.006	0.976	0.985	0.980	0.996	0.981	0.994	1.009	0.992	0.999	1.000	1.000
October (10)	0.961	0.961	0.982	0.987	1.007	0.995	0.996	0.999	0.996	0.996	1.004	1.004
November (11)	0.974	0.987	0.991	0.984	0.995	0.968	0.982	0.996	0.993	0.992	0.997	0.997
December (12)	1.085	1.057	1.061	1.096	0.984	0.967	0.980	0.996	1.006	1.016	0.997	0.997

Note: No 2012 factors are available so 2011 factors have been applied

	Trunk Roads in Notts Monthly Factor											
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
January (1)	1.150	1.154	1.126	1.110	1.098	1.106	1.116	1.083	1.123	1.056	1.071	1.071
February (2)	1.049	1.004	1.018	1.033	1.052	1.052	1.038	1.015	1.041	1.029	1.033	1.033
March (3)	1.006	1.008	1.000	1.019	1.011	1.057	1.030	0.992	1.035	1.011	1.022	1.022
April (4)	0.977	0.990	0.967	0.963	0.991	0.974	0.965	0.976	0.978	0.965	0.963	0.963
May (5)	0.961	0.974	0.974	0.977	0.988	0.988	0.981	0.962	0.968	0.987	0.989	0.989
June (6)	0.988	0.966	0.961	0.955	0.968	0.971	0.971	0.966	0.973	0.979	0.975	0.975
July (7)	0.965	0.974	0.957	0.955	0.938	0.956	0.955	0.969	0.956	0.963	0.961	0.961
August (8)	0.936	0.959	0.939	0.976	0.969	0.952	0.943	0.966	0.946	0.966	0.966	0.966
September (9)	0.971	0.988	0.956	0.962	0.975	0.960	0.959	0.992	0.970	0.976	0.974	0.974
October (10)	0.972	0.993	0.972	0.981	0.974	0.969	0.974	0.984	0.975	0.979	0.987	0.987
November (11)	1.003	1.002	1.019	1.022	0.998	1.005	1.011	1.022	1.011	1.023	1.025	1.025
December (12)	1.021	0.990	1.110	1.048	1.038	1.012	1.057	1.071	1.024	1.066	1.033	1.033

Note: No 2012 factors are available so 2011 factors have been applied

TEMPRO Analysis

TEMPRO Analysis

Information on growth assumptions obtained from TEMPRO (6.2 dataset) for the study time period of 2012 to 2026 are summarised in the table below.

Area	Population by Age Group			Workers	Households	Jobs	Total Population
	<16	16 - 64	65+				
Bassetlaw (Authority)	1032.8	-245.8	8690.2	-239.6	6317.2	4313.4	9477.2

TEMPRO therefore assumes an increase of 6,317 dwellings within Bassetlaw District during the study time period.

The study has examined the following increase in dwellings in the District during the study time period:

Committed Residential Dwellings	3,083
Proposed Residential Dwellings	3,391
Total Residential Dwellings	6,474

The committed/proposed residential development that has been assessed therefore exceeds the growth assumptions contained within TEMPRO by a factor of: 1.02
Additional allowance has also been made for the effect of committed development trips from outside of the district that will pass through the District.
On this basis it is not considered necessary to apply any additional traffic growth to the highway network within the district.

TEMPRO assumes an increase of 4,313 jobs, or employees within Bassetlaw District during the study time period.
Employee densities for different employment uses are provided in Appendix 7 of 'The Regional Spatial Strategy For The East Midlands (RSS8)', March 2005, an extract of which is reproduced below:

(iii) Estimate of Number of Employees
Existing employee density data for each of the three broad employment uses (B1 Office, B2 General Industry/B1 Non-Office, and B8 Warehousing) indicates the following square metre/employee:

	Out of City Centre	Urban	Rural	Out of Town
B1	14	16	16	16
B2	30	35	35	35
B8	78	78	78	78

Applying these employee densities to the committed and proposed employment uses proposed within the District gives:

Proposed Use-Class	Sqm/Employee	Committed GFA (Sqm)	Growth GFA (Sqm)	Total GFA (Sqm)	Estimated Employees
B1	16	131,500	130,900	262,400	16,400
B2	35	109,000	197,300	306,300	8,751
B8	78	779,157	329,800	1,108,957	14,217
Total		1,019,657	658,000	1,677,657	39,369

The increase in employees in TEMPRO is 4,313
Assuming the same proportional split between employment uses the increase in TEMPRO is equivalent to the following employment areas:

Proposed Use-Class	% of Total	Estimated Total GFA (Sqm)
B1	16%	10,793
B2	18%	27,561
B8	66%	222,375
Total	100%	260,729

The study has examined the following increase in employment floor area in the District during the study time period:

Committed Employment (Sqm)	1,019,657
Growth Employment (Sqm)	658,000
Total Employment (Sqm)	1,677,657

With an equivalent employee increase of 39,369

The committed/proposed employment development that has been assessed therefore exceeds the growth assumptions contained within TEMPRO by a factor of: 6.43
Additional allowance has also been made for the effect of committed development trips from outside of the district that will pass through the District.
On this basis it is not considered necessary to apply any additional traffic growth to the highway network within the district.

Appendix B – Committed Development

Vehicle Trip Generation for Committed Development Sites within the District:

Employment:

Name	Site ID	Net Employment Developable Area (sqm)	Vehicle Trips						Distribution Wards
			AM			PM			
			Inbound	Outbound	2-Way	Inbound	Outbound	2-Way	
Bevercotes Colliery, Ollerton Road	09/05/00002	253,960	193	122	315	81	208	290	East Markham
Former Glass Works,	61/09/00052	76,645	58	37	95	25	63	87	Blyth
Snape Lane, Snape Lane	61/08/00050	153,000	116	73	190	49	125	174	Blyth
Steetley,	70/11/00005	32,400	25	16	40	10	27	37	Worksop South
Brunel Park, Harworth	66/09/00021	23,000	17	11	29	7	19	26	Blyth
Randall Way, Randall Way	01/10/00227	80,000	61	38	99	26	66	91	East Retford North
Claylands Avenue, Claylands Avenue	02/11/00003	77,000	59	37	95	25	63	88	East Retford West
Claylands Avenue, Claylands Avenue	02/11/00097	67,500	51	32	84	22	55	77	Worksop North West
Eastgate, Eastgate	02/11/00318	40,000	558	111	670	76	459	535	Worksop South East
Retford Road, Retford Road	10/11/00003	25,000	19	12	31	8	21	29	Worksop South East
Albian Close, Albian Close	02/11/00399	105,000	750	189	938	123	624	746	Worksop North West
Highgrounds, A57	69/11/00006	113,500	586	165	751	106	493	598	Worksop North West
Randall Way, Randall Way	01/09/00241	126,500	275	142	417	81	241	322	East Retford North
Shireoaks Triangle,	70/12/00003	100,000	350	117	467	73	300	373	Worksop North West
		1,273,505	3,118	1,102	4,220	711	2,763	3,474	

Residential:

Name	Site ID	Number of Dwellings	Vehicle Trips						Distribution Wards
			AM			PM			
			Inbound	Outbound	2-Way	Inbound	Outbound	2-Way	
Former Ordsall Hall Comprehensive, Ordsall Road	BAS0016	61	10	25	35	23	14	37	Sutton
Elizabethan High School (Lower School), North Road	BAS0017	90	14	37	51	34	21	55	East Retford North
Elizabethan High School (Upper School), Queen Street	BAS0018	48	8	19	27	18	11	29	East Retford West
Retford Oaks High School (Upper School), Pennington Walk	BAS0019	28	4	11	16	11	6	17	East Retford East
St. Giles School, Swales Close	BAS0020	9	1	4	5	3	2	5	East Retford North
Land off, Thrumpton Lane	BAS0050	51	8	21	29	19	12	31	East Retford West
Land off, Kilton Crescent	BAS0061	55	9	22	31	21	13	34	Worksop East
Land off, Monmouth Road	BAS0062	24	4	10	14	9	5	15	Worksop North East
Land off, Creswell Road	BAS0063	30	5	12	17	11	7	18	Worksop North West
Land north of, Amcott Way	BAS0065	63	10	26	36	24	14	38	East Retford North
Land off, Amcott Way	BAS0066	16	3	6	9	6	4	10	East Retford North
Former Bridon Wire Works, Ollerton Road	BAS0067 (01/09/00071)	11	2	4	6	4	3	7	East Retford South
Former Bridon Wire Works, Ollerton Road	BAS0067 (01/10/00116)	142	23	58	80	54	33	87	East Retford South
Former Portland School, Sparken Hill	BAS0074	83	13	34	47	32	19	51	Worksop South
Land off, Newlands	BAS0077	198	32	80	112	75	45	121	East Retford South
Corner of, Marsh Lane/ Fox Covert Lane	BAS0081	76	12	31	43	29	17	46	Misterton
Land south of the Fire Station, Fox Covert Lane	BAS0083	45	7	18	25	17	10	27	Beckingham
Land south of 72, Station Street	BAS0097	6	1	2	3	2	1	4	Misterton
Land off, Landa Grove	BAS0118	20	3	8	11	8	5	12	Tuxford and Trent
Land at American Gardens, Markham Road	BAS0129	9	1	4	5	3	2	5	Tuxford and Trent
Former detention centre, West Wells Lane	BAS0137	32	5	13	18	12	7	20	Everton
Land at Corner Farm, Main Street	BAS0171	19	3	8	11	7	4	12	Clayworth
Land off, Hawkins Close	BAS0183	17	3	7	10	6	4	10	Harworth
Harworth Colliery, Scrooby Road	BAS0189 phase 1	119	19	48	67	45	27	73	Harworth
Former Poultry Factory, Mark Lane	BAS0196	41	7	17	23	16	9	25	East Markham
Land at Firbeck Colliery, Doncaster Road	BAS0217	300	48	122	170	114	69	183	Carlton
Land at, Cemetery Road	BAS0221	92	15	37	52	35	21	56	Langold
Land at, Gateford Road	BAS0267	35	6	14	20	13	8	21	Worksop North West
Land north of, All Hallows Street	BAS0321	6	1	2	3	2	1	4	East Retford South
Former Community Centre, Bracebridge Avenue	BAS0329	5	1	2	3	2	1	3	Worksop East
Land north of, Galway Mews	BAS0334	7	1	3	4	3	2	4	Harworth
Land north of, Claylands Avenue	BAS0352	42	7	17	24	16	10	26	Worksop North West
Former Trade and Labour Centre, Westgate	BAS0374	27	4	11	15	10	6	16	Worksop South
Land off, Beverley Road	BAS0376	85	14	35	48	32	19	52	Harworth
Land at the Piggeries, Scrooby Road	BAS0378	36	6	15	20	14	8	22	Harworth
Land east of, Carolgate	BAS0380	4	1	2	2	2	1	2	East Retford East
Land south of, Fox Covert Lane	BAS0381	31	5	13	18	12	7	19	Beckingham
Land off, North Carr Road	BAS0389	2	0	1	1	1	0	1	Misterton
Land south of, Main Street	BAS0449	2	0	1	1	1	0	1	Sturton
Land off, Hallcroft Avenue	BAS0527	53	8	22	30	20	12	32	East Retford North
Land at Stanton House, 43, Westgate	BAS0528	10	2	4	6	4	2	6	Worksop South
Builders Yard, Dock Road	BAS0529	23	4	9	13	9	5	14	Worksop North West
Poplar Farm,	BAS0530	10	2	4	6	4	2	6	Rampton
Former Langold Hotel, Doncaster Road	BAS0531	13	2	5	7	5	3	8	Langold
Land off, Doncaster Road	BAS0585	5	1	2	3	2	1	3	Carlton
Land east of, Heathfield Gardens	BAS0602	8	1	3	5	3	2	5	East Retford North
Fairy Grove Nurseries, London Road	BAS0605	34	5	14	19	13	8	21	East Retford East
Former Boundary Day Centre,	BAS0606	19	3	8	11	7	4	12	Worksop South
Former Manton School, Kingston Road	BAS0609	31	5	13	18	12	7	19	Worksop South East
Land rear of 27, Grove Street	BAS0614	10	2	4	6	4	2	6	East Retford East
Land at, Heathfield Gardens	BAS0616	8	1	3	5	3	2	5	East Retford North
Harworth Colliery Phase 2	0	850	136	345	481	324	195	519	Harworth
Worksop Shortfall	0	15	2	6	8	6	3	9	Worksop East
Retford Shortfall	0	0	0	0	0	0	0	0	East Retford East
Harworth Shortfall	0	0	0	0	0	0	0	0	Langold
Tuxford Shortfall	0	27	4	11	15	10	6	16	Tuxford and Trent
		3,083	493	1,252	1,745	1,175	706	1,881	

Note: Only employment/retail sites with a gfa of 1,500sqm. All residential sites have been included.

Summary of all Relevant Development Proposals within Districts/Boroughs Immediately Adjacent to Bassetlaw District

County / Unitary Authority	District/ Borough	Size of Development						
		No. of Dwellings	100 sq m				Hotel Beds	P&R Spaces
			B1	B2	B8	A1		
North Lincs	North Lincs	11,671	2,096	2,145	2,081	0	0	0
Lincolnshire	West Lindsey	2,229	51	84	0	19	0	0
Nottinghamshire	Newark and Sherwood	6,726	144	452	1,470	110	477	0
Nottinghamshire	Mansfield	3,939	240	240	240	0	0	0
Derbyshire	Bolsover	0	0	0	0	0	0	0
South Yorkshire	Rotherham	3,890	4	0	0	15	0	0
South Yorkshire	Doncaster	18,190	3,574	2,946	11,250	0	0	0
Total		46,645	6,109	5,867	15,041	144	477	0

Vehicle Trip Generation for Committed Development Sites Located Outside of the District:

Residential: Privately Owned Houses

Name	Number of Dwellings	Vehicle Trips					
		AM			PM		
		Inbound	Outbound	2-Way	Inbound	Outbound	2-Way
North Lincs	11,671	1,867	4,738	6,606	4,447	2,673	7,119
West Lindsey	2,229	357	905	1,262	849	510	1,360
Newark and Sherwood	6,726	1,076	2,731	3,807	2,563	1,540	4,103
Mansfield	3,939	630	1,599	2,229	1,501	902	2,403
Bolsover	0	0	0	0	0	0	0
Rotherham	3,890	622	1,579	2,202	1,482	891	2,373
Doncaster	18,190	2,910	7,385	10,296	6,930	4,166	11,096
Total	46,645	7,463	18,938	26,401	17,772	10,682	28,453

Employment:B1 Business Parks

Name	Floor Area (100 sqm)	Vehicle Trips					
		AM			PM		
		Inbound	Outbound	2-Way	Inbound	Outbound	2-Way
North Lincs	2,096	2,926	583	3,509	400	2,404	2,804
West Lindsey	51	71	14	85	10	58	68
Newark and Sherwood	144	201	40	241	28	165	193
Mansfield	240	335	67	402	46	275	321
Bolsover	0	0	0	0	0	0	0
Rotherham	4	6	1	7	1	5	5
Doncaster	3,574	4,989	993	5,982	683	4,099	4,782
Total	6,109	8,528	1,698	10,226	1,167	7,007	8,173

Employment:B2 Industrial Estates

Name	Floor Area (100 sqm)	Vehicle Trips					
		AM			PM		
		Inbound	Outbound	2-Way	Inbound	Outbound	2-Way
North Lincs	2,145	978	474	1,452	255	802	1,057
West Lindsey	84	38	18	57	10	31	41
Newark and Sherwood	452	206	100	306	54	169	223
Mansfield	240	109	53	162	29	90	118
Bolsover	0	0	0	0	0	0	0
Rotherham	0	0	0	0	0	0	0
Doncaster	2,946	1,344	651	1,995	351	1,102	1,453
Total	5,867	2,675	1,297	3,972	698	2,194	2,893

Employment:B8 Warehousing (commercial)

Name	Floor Area (100 sqm)	Vehicle Trips					
		AM			PM		
		Inbound	Outbound	2-Way	Inbound	Outbound	2-Way
North Lincs	2,081	158	100	258	67	171	237
West Lindsey	0	0	0	0	0	0	0
Newark and Sherwood	1,470	112	71	182	47	121	168
Mansfield	240	18	12	30	8	20	27
Bolsover	0	0	0	0	0	0	0
Rotherham	0	0	0	0	0	0	0
Doncaster	11,250	855	540	1,395	360	922	1,282
Total	15,041	1,143	722	1,865	481	1,233	1,715

Retail: A1 Mixed Shopping Malls

Name	Floor Area (100 sqm)	Vehicle Trips					
		AM			PM		
		Inbound	Outbound	2-Way	Inbound	Outbound	2-Way
North Lincs	0	0	0	0	0	0	0
West Lindsey	19	25	13	37	25	34	59
Newark and Sherwood	110	143	74	217	144	198	341
Mansfield	0	0	0	0	0	0	0
Bolsover	0	0	0	0	0	0	0
Rotherham	15	20	10	30	20	27	47
Doncaster	0	0	0	0	0	0	0
Total	144	187	97	284	188	259	447

Hotel: Hotels

Name	Floor Area (100 sqm)	Vehicle Trips					
		AM			PM		
		Inbound	Outbound	2-Way	Inbound	Outbound	2-Way
North Lincs	0	0	0	0	0	0	0
West Lindsey	0	0	0	0	0	0	0
Newark and Sherwood	477	145	211	357	173	109	282
Mansfield	0	0	0	0	0	0	0
Bolsover	0	0	0	0	0	0	0
Rotherham	0	0	0	0	0	0	0
Doncaster	0	0	0	0	0	0	0
Total	477	145	211	357	173	109	282

Total Residential:

Name	Vehicle Trips					
	AM			PM		
	Inbound	Outbound	2-Way	Inbound	Outbound	2-Way
North Lincs	1,867	4,738	6,606	4,447	2,673	7,119
West Lindsey	357	905	1,262	849	510	1,360
Newark and Sherwood	1,076	2,731	3,807	2,563	1,540	4,103
Mansfield	630	1,599	2,229	1,501	902	2,403
Bolsover	0	0	0	0	0	0
Rotherham	622	1,579	2,202	1,482	891	2,373
Doncaster	2,910	7,385	10,296	6,930	4,166	11,096
Total	7,463	18,938	26,401	17,772	10,682	28,453

Total Employment (Includes Hotel & Retail):

Name	Vehicle Trips					
	AM			PM		
	Inbound	Outbound	2-Way	Inbound	Outbound	2-Way
North Lincs	4,062	1,157	5,219	722	3,377	4,099
West Lindsey	134	45	179	44	124	168
Newark and Sherwood	807	496	1,303	445	761	1,206
Mansfield	463	131	594	82	385	467
Bolsover	0	0	0	0	0	0
Rotherham	25	11	36	20	32	52
Doncaster	7,187	2,185	9,372	1,393	6,124	7,517
Total	12,679	4,025	16,704	2,707	10,802	13,509

Vehicle Trip Calculation Parameters
Vehicle Trip Rates - Applied to Committed Developments

Residential Vehicle Trip Rates (From TRICS 2012(b) - Privately owned houses)

AM Inbound	0.160	Vehicle Trips per Dwelling
AM Outbound	0.406	Vehicle Trips per Dwelling
PM Inbound	0.381	Vehicle Trips per Dwelling
PM Outbound	0.229	Vehicle Trips per Dwelling

B1 Vehicle Trip Rates (From TRICS 2012(b) - Business Parks)

AM Inbound	1.396	Vehicle Trips per 100sqm GFA
AM Outbound	0.278	Vehicle Trips per 100sqm GFA
PM Inbound	0.191	Vehicle Trips per 100sqm GFA
PM Outbound	1.147	Vehicle Trips per 100sqm GFA

B2 Vehicle Trip Rates (From TRICS 2012(b) - Industrial Estates)

AM Inbound	0.456	Vehicle Trips per 100sqm GFA
AM Outbound	0.221	Vehicle Trips per 100sqm GFA
PM Inbound	0.119	Vehicle Trips per 100sqm GFA
PM Outbound	0.374	Vehicle Trips per 100sqm GFA

B8 Vehicle Trip Rates (From TRICS 2012(b) - Warehousing (Commerical))

AM Inbound	0.076	Vehicle Trips per 100sqm GFA
AM Outbound	0.048	Vehicle Trips per 100sqm GFA
PM Inbound	0.032	Vehicle Trips per 100sqm GFA
PM Outbound	0.082	Vehicle Trips per 100sqm GFA

A1 Vehicle Trip Rates (From TRICS 2012(b) - Mixed Shopping Malls)

AM Inbound	1.301	Vehicle Trips per 100sqm GFA
AM Outbound	0.675	Vehicle Trips per 100sqm GFA
PM Inbound	1.309	Vehicle Trips per 100sqm GFA
PM Outbound	1.802	Vehicle Trips per 100sqm GFA

Hotel Vehicle Trip Rates (From TRICS 2012(b) - Hotels)

AM Inbound	0.305	Vehicle Trips per Bedroom
AM Outbound	0.443	Vehicle Trips per Bedroom
PM Inbound	0.363	Vehicle Trips per Bedroom
PM Outbound	0.228	Vehicle Trips per Bedroom

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST		
	BD	BEDFORDSHIRE	2 days
	ES	EAST SUSSEX	1 days
	EX	ESSEX	1 days
03	SOUTH WEST		
	CW	CORNWALL	2 days
	GS	GLOUCESTERSHIRE	1 days
	WL	WILTSHIRE	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	2 days
	SF	SUFFOLK	3 days
05	EAST MIDLANDS		
	DS	DERBYSHIRE	1 days
	LE	LEICESTERSHIRE	1 days
	LN	LINCOLNSHIRE	2 days
	NT	NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	2 days
	ST	STAFFORDSHIRE	1 days
	WM	WEST MIDLANDS	3 days
	WO	WORCESTERSHIRE	4 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	4 days
08	NORTH WEST		
	CH	CHESHIRE	2 days
	GM	GREATER MANCHESTER	1 days
	LC	LANCASHIRE	2 days
	MS	MERSEYSIDE	1 days
09	NORTH		
	CB	CUMBRIA	2 days
	TV	TEES VALLEY	1 days

Filtering Stage 2 selection:

Parameter:	Number of dwellings
Actual Range:	9 to 372 (units:)
Range Selected by User:	9 to 491 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/04 to 18/11/11

Selected survey days:

Monday	6 days
Tuesday	12 days
Wednesday	5 days
Thursday	12 days
Friday	6 days

Selected survey types:

Manual count	41 days
Directional ATC Count	0 days

Selected Locations:

Edge of Town Centre	3
Suburban Area (PPS6 Out of Centre)	17
Edge of Town	19
Neighbourhood Centre (PPS6 Local Centre)	2

Selected Location Sub Categories:

Residential Zone	31
Out of Town	1
No Sub Category	9

LIST OF SITES relevant to selection parameters

1 BD-03-A-01 SEMI DETACHED, LUTON BEDFORDSHIRE
NEW BEDFORD ROAD

LUTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 131
Survey date: THURSDAY 08/07/04 Survey Type: MANUAL

2 BD-03-A-02 SEMI DETACHED, LUTON BEDFORDSHIRE
RIDDY LANE

LUTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 82
Survey date: TUESDAY 06/07/04 Survey Type: MANUAL

3 CA-03-A-02 MIXED HOUSES, PETERBOROUGH CAMBRIDGESHIRE
THORPE ROAD

PETERBOROUGH
Edge of Town Centre
Residential Zone
Total Number of dwellings: 363
Survey date: THURSDAY 13/05/04 Survey Type: MANUAL

4 CA-03-A-04 DETACHED, PETERBOROUGH CAMBRIDGESHIRE

THORPE PARK ROAD
PETERBOROUGH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 9
Survey date: TUESDAY 18/10/11 Survey Type: MANUAL

5 CB-03-A-03 SEMI DETACHED, WORKINGTON CUMBRIA
HAWKSHEAD AVENUE

WORKINGTON
Edge of Town
Residential Zone
Total Number of dwellings: 40
Survey date: THURSDAY 20/11/08 Survey Type: MANUAL

6 CB-03-A-04 SEMI DETACHED, WORKINGTON CUMBRIA
MOORCLOSE ROAD
SALTERBACK
WORKINGTON
Edge of Town
No Sub Category
Total Number of dwellings: 82
Survey date: FRIDAY 24/04/09 Survey Type: MANUAL

7 CH-03-A-05 DETACHED, CREWE CHESHIRE
SYDNEY ROAD
SYDNEY
CREWE
Edge of Town
Residential Zone
Total Number of dwellings: 17
Survey date: TUESDAY 14/10/08 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 CH-03-A-06 SEMI-DET./BUNGALOWS,CREWE CHESHIRE
CREWE ROAD

CREWE
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 129
Survey date: TUESDAY 14/10/08 Survey Type: MANUAL

9 CW-03-A-01 TERRACED, PENZANCE CORNWALL
ALVERTON ROAD

PENZANCE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 13
Survey date: THURSDAY 30/06/05 Survey Type: MANUAL

10 CW-03-A-02 SEMI D./DETATCHED, TRURO CORNWALL
BOSVEAN GARDENS

TRURO
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 73
Survey date: TUESDAY 18/09/07 Survey Type: MANUAL

11 DS-03-A-01 SEMI D./TERRACED, DRONFIELD DERBYSHIRE
THE AVENUE
HOLMESDALE
DRONFIELD
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Number of dwellings: 20
Survey date: THURSDAY 22/06/06 Survey Type: MANUAL

12 ES-03-A-02 PRIVATE HOUSING,PEACEHAVEN EAST SUSSEX
SOUTH COAST ROAD

PEACEHAVEN
Edge of Town
Residential Zone
Total Number of dwellings: 37
Survey date: FRIDAY 18/11/11 Survey Type: MANUAL

13 EX-03-A-01 SEMI-DET., STANFORD-LE-HOPE ESSEX
MILTON ROAD
CORRINGHAM
STANFORD-LE-HOPE
Edge of Town
Residential Zone
Total Number of dwellings: 237
Survey date: TUESDAY 13/05/08 Survey Type: MANUAL

14 GM-03-A-10 DETACHED/SEMI, MANCHESTER GREATER MANCHESTER
BUTT HILL DRIVE
PRESTWICH
MANCHESTER
Edge of Town
Residential Zone
Total Number of dwellings: 29
Survey date: WEDNESDAY 12/10/11 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

15 GS-03-A-01 SEMI D./TERRACED, GLOUCESTER GLOUCESTERSHIRE
KINGSHOLM ROAD
KINGSHOLM
GLOUCESTER
Edge of Town Centre
No Sub Category
Total Number of dwellings: 73
Survey date: TUESDAY 25/05/04 Survey Type: MANUAL

16 LC-03-A-22 BUNGALOWS, BLACKPOOL LANCASHIRE
CLIFTON DRIVE NORTH

BLACKPOOL
Edge of Town
Residential Zone
Total Number of dwellings: 98
Survey date: TUESDAY 18/10/05 Survey Type: MANUAL

17 LC-03-A-29 DETACHED/SEMI D., BLACKBURN LANCASHIRE
REVIDGE ROAD
FOUR LANE ENDS
BLACKBURN
Edge of Town
Residential Zone
Total Number of dwellings: 185
Survey date: THURSDAY 10/06/04 Survey Type: MANUAL

18 LE-03-A-01 DETACHED, MELTON MOWBRAY LEICESTERSHIRE
REDWOOD AVENUE

MELTON MOWBRAY
Edge of Town
Residential Zone
Total Number of dwellings: 11
Survey date: TUESDAY 03/05/05 Survey Type: MANUAL

19 LN-03-A-01 MIXED HOUSES, LINCOLN LINCOLNSHIRE
BRANT ROAD
BRACEBRIDGE
LINCOLN
Edge of Town
Residential Zone
Total Number of dwellings: 150
Survey date: TUESDAY 15/05/07 Survey Type: MANUAL

20 LN-03-A-02 MIXED HOUSES, LINCOLN LINCOLNSHIRE
HYKEHAM ROAD

LINCOLN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 186
Survey date: MONDAY 14/05/07 Survey Type: MANUAL

21 MS-03-A-01 TERRACED, RUNCORN MERSEYSIDE
PALACE FIELDS AVENUE

RUNCORN
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Number of dwellings: 372
Survey date: THURSDAY 06/10/05 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

22 NT-03-A-03 SEMI DETACHED,KIRKBY-IN-ASHFD NOTTINGHAMSHIRE
B6018 SUTTON ROAD

KIRKBY-IN-ASHFIELD
Edge of Town
Residential Zone
Total Number of dwellings: 166
Survey date: WEDNESDAY 28/06/06 Survey Type: MANUAL

23 NY-03-A-01 MIXED HOUSES,NORTHALLERTON NORTH YORKSHIRE
GRAMMAR SCHOOL LANE

NORTHALLERTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 52
Survey date: TUESDAY 25/09/07 Survey Type: MANUAL

24 NY-03-A-03 PRIVATE HOUSING, BOROUGHBRIDGE NORTH YORKSHIRE
NEW ROW

BOROUGHBRIDGE
Edge of Town Centre
Residential Zone
Total Number of dwellings: 14
Survey date: MONDAY 15/09/08 Survey Type: MANUAL

25 NY-03-A-05 HOUSES AND FLATS, RIPON NORTH YORKSHIRE
BOROUGHBRIDGE ROAD

RIPON
Edge of Town
No Sub Category
Total Number of dwellings: 71
Survey date: MONDAY 22/09/08 Survey Type: MANUAL

26 NY-03-A-06 BUNGALOWS/SEMI DET., BBDGE NORTH YORKSHIRE
HORSEFAIR

BOROUGHBRIDGE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 115
Survey date: FRIDAY 14/10/11 Survey Type: MANUAL

27 SF-03-A-01 SEMI DETACHED, IPSWICH SUFFOLK
A1156 FELIXSTOWE ROAD
RACECOURSE
IPSWICH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 77
Survey date: WEDNESDAY 23/05/07 Survey Type: MANUAL

28 SF-03-A-02 SEMI DET./TERRACED, IPSWICH SUFFOLK
STOKE PARK DRIVE
MAIDENHALL
IPSWICH
Edge of Town
Residential Zone
Total Number of dwellings: 230
Survey date: THURSDAY 24/05/07 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

29 SF-03-A-03 MIXED HOUSES, BURY ST EDMDS SUFFOLK
BARTON HILL
FORNHAM ST MARTIN
BURY ST EDMUNDS
Edge of Town
Out of Town
Total Number of dwellings: 101
Survey date: MONDAY 15/05/06 Survey Type: MANUAL

30 SH-03-A-03 DETATCHED, SHREWSBURY SHROPSHIRE
SOMERBY DRIVE
BICTON HEATH
SHREWSBURY
Edge of Town
No Sub Category
Total Number of dwellings: 10
Survey date: FRIDAY 26/06/09 Survey Type: MANUAL

31 SH-03-A-04 TERRACED, SHREWSBURY SHROPSHIRE
ST MICHAEL'S STREET

SHREWSBURY
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 108
Survey date: THURSDAY 11/06/09 Survey Type: MANUAL

32 ST-03-A-05 TERRACED/DETACHED, STOKE STAFFORDSHIRE
WATERMEET GROVE
ETRURIA
STOKE-ON-TRENT
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 14
Survey date: WEDNESDAY 26/11/08 Survey Type: MANUAL

33 TV-03-A-01 MIXED HOUSES/FLATS, HARTLEPL TEES VALLEY
POWLETT ROAD

HARTLEPOOL
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 225
Survey date: THURSDAY 14/04/05 Survey Type: MANUAL

34 WL-03-A-01 SEMI D./TERRACED W. BASSETT WILTSHIRE
MAPLE DRIVE

WOOTTON BASSETT
Edge of Town
Residential Zone
Total Number of dwellings: 99
Survey date: MONDAY 02/10/06 Survey Type: MANUAL

35 WM-03-A-01 TERRACED, COVENTRY WEST MIDLANDS
FOLESHILL ROAD
FOLESHILL
COVENTRY
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 79
Survey date: FRIDAY 03/02/06 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

36 WM-03-A-02 DETACHED/SEMI D., STRBRIDGE WEST MIDLANDS
HEATH STREET

STOURBRIDGE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 12
Survey date: WEDNESDAY 26/04/06 Survey Type: MANUAL

37 WM-03-A-03 MIXED HOUSING, COVENTRY WEST MIDLANDS
BASELEY WAY
ROWLEYS GREEN
COVENTRY
Edge of Town
Residential Zone
Total Number of dwellings: 84
Survey date: MONDAY 24/09/07 Survey Type: MANUAL

38 WO-03-A-01 DETACHED, BROMSGROVE WORCESTERSHIRE
MARLBOROUGH AVENUE
ASTON FIELDS
BROMSGROVE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 10
Survey date: THURSDAY 23/06/05 Survey Type: MANUAL

39 WO-03-A-02 SEMI DETACHED, REDDITCH WORCESTERSHIRE
MEADOWHILL ROAD

REDDITCH
Edge of Town
No Sub Category
Total Number of dwellings: 48
Survey date: TUESDAY 02/05/06 Survey Type: MANUAL

40 WO-03-A-03 DETACHED, KIDDERMINSTER WORCESTERSHIRE
BLAKEBROOK
BLAKEBROOK
KIDDERMINSTER
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 138
Survey date: FRIDAY 05/05/06 Survey Type: MANUAL

41 WO-03-A-06 DET./TERRACED, BROMSGROVE WORCESTERSHIRE
ST GODWALDS ROAD
ASTON FIELDS
BROMSGROVE
Edge of Town
No Sub Category
Total Number of dwellings: 232
Survey date: THURSDAY 30/06/05 Survey Type: MANUAL

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00	0	0	0.000	0	0	0.000	0	0	0.000
01:00 - 02:00	0	0	0.000	0	0	0.000	0	0	0.000
02:00 - 03:00	0	0	0.000	0	0	0.000	0	0	0.000
03:00 - 04:00	0	0	0.000	0	0	0.000	0	0	0.000
04:00 - 05:00	0	0	0.000	0	0	0.000	0	0	0.000
05:00 - 06:00	0	0	0.000	0	0	0.000	0	0	0.000
06:00 - 07:00	0	0	0.000	0	0	0.000	0	0	0.000
07:00 - 08:00	41	103	0.073	41	103	0.263	41	103	0.336
08:00 - 09:00	41	103	0.160	41	103	0.406	41	103	0.566
09:00 - 10:00	41	103	0.178	41	103	0.214	41	103	0.392
10:00 - 11:00	41	103	0.152	41	103	0.190	41	103	0.342
11:00 - 12:00	41	103	0.190	41	103	0.179	41	103	0.369
12:00 - 13:00	41	103	0.203	41	103	0.183	41	103	0.386
13:00 - 14:00	41	103	0.184	41	103	0.177	41	103	0.361
14:00 - 15:00	41	103	0.194	41	103	0.195	41	103	0.389
15:00 - 16:00	41	103	0.283	41	103	0.217	41	103	0.500
16:00 - 17:00	41	103	0.322	41	103	0.197	41	103	0.519
17:00 - 18:00	41	103	0.381	41	103	0.229	41	103	0.610
18:00 - 19:00	41	103	0.272	41	103	0.222	41	103	0.494
19:00 - 20:00	0	0	0.000	0	0	0.000	0	0	0.000
20:00 - 21:00	0	0	0.000	0	0	0.000	0	0	0.000
21:00 - 22:00	0	0	0.000	0	0	0.000	0	0	0.000
22:00 - 23:00	0	0	0.000	0	0	0.000	0	0	0.000
23:00 - 24:00	0	0	0.000	0	0	0.000	0	0	0.000
Total Rates:			2.592			2.672			5.264

Parameter summary

Trip rate parameter range selected:	9 - 372 (units:)
Survey date date range:	01/01/04 - 18/11/11
Number of weekdays (Monday-Friday):	41
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : B - BUSINESS PARK
VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	BU	BUCKINGHAMSHIRE	1 days
	HC	HAMPSHIRE	1 days
	HF	HERTFORDSHIRE	1 days
03	SOUTH WEST		
	DC	DORSET	1 days
	WL	WILTSHIRE	1 days
04	EAST ANGLIA		
	NF	NORFOLK	1 days
	SF	SUFFOLK	1 days
05	EAST MIDLANDS		
	LN	LINCOLNSHIRE	1 days
	NT	NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS		
	HE	HEREFORDSHIRE	1 days
	SH	SHROPSHIRE	3 days
	WM	WEST MIDLANDS	1 days
	WO	WORCESTERSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NO	NORTH LINCOLNSHIRE	1 days
08	NORTH WEST		
	GM	GREATER MANCHESTER	1 days
	LC	LANCASHIRE	1 days
09	NORTH		
	TW	TYNE & WEAR	4 days

Filtering Stage 2 selection:

Parameter:	Gross floor area
Actual Range:	975 to 121275 (units: sqm)
Range Selected by User:	975 to 121275 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/04 to 18/10/11

Selected survey days:

Monday	3 days
Tuesday	8 days
Wednesday	1 days
Thursday	8 days
Friday	2 days

Selected survey types:

Manual count	22 days
Directional ATC Count	0 days

Selected Locations:

Town Centre	1
Edge of Town Centre	1
Suburban Area (PPS6 Out of Centre)	5
Edge of Town	14
Neighbourhood Centre (PPS6 Local Centre)	1

Selected Location Sub Categories:

Industrial Zone	7
Commercial Zone	5
Residential Zone	2
Retail Zone	1
Built-Up Zone	2
Village	1
No Sub Category	4

LIST OF SITES relevant to selection parameters

1 BU-02-B-01 BUSINESS PARK, HIGH WYCOMBE BUCKINGHAMSHIRE
LONDON ROAD

HIGH WYCOMBE
Edge of Town
No Sub Category
Total Gross floor area: 13300 sqm
Survey date: THURSDAY 08/07/04 Survey Type: MANUAL

2 DC-02-B-01 BUSINESS PARK, POOLE DORSET
COMMERCIAL ROAD

POOLE
Suburban Area (PPS6 Out of Centre)
Built-Up Zone
Total Gross floor area: 1570 sqm
Survey date: THURSDAY 17/07/08 Survey Type: MANUAL

3 GM-02-B-03 BUSINESS PARK, SALE GREATER MANCHESTER
CROSS STREET

SALE
Edge of Town
Industrial Zone
Total Gross floor area: 3985 sqm
Survey date: TUESDAY 18/10/11 Survey Type: MANUAL

4 HC-02-B-01 BUSINESS PARK, BASINGSTOKE HAMPSHIRE
CROCKFORD LANE
CHINEHAM BUSINESS PARK
BASINGSTOKE
Edge of Town
Commercial Zone
Total Gross floor area: 121275 sqm
Survey date: THURSDAY 22/11/07 Survey Type: MANUAL

5 HE-02-B-01 BUSINESS PARK, NR HEREFORD HEREFORDSHIRE
A4103
WHITESTONE
NEAR HEREFORD
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Gross floor area: 18808 sqm
Survey date: TUESDAY 13/09/11 Survey Type: MANUAL

6 HF-02-B-01 BUSINESS PARK, HATFIELD HERTFORDSHIRE
ST ALBANS ROAD WEST

HATFIELD
Edge of Town
Commercial Zone
Total Gross floor area: 26000 sqm
Survey date: MONDAY 07/07/08 Survey Type: MANUAL

7 LC-02-B-03 BUSINESS PARK, PRESTON LANCASHIRE
NAVIGATION WAY

PRESTON
Edge of Town
Commercial Zone
Total Gross floor area: 3450 sqm
Survey date: TUESDAY 18/10/11 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 LN-02-B-01 BUSINESS PARK, LINCOLN LINCOLNSHIRE
BISHOPS ROAD

LINCOLN
Edge of Town
Industrial Zone
Total Gross floor area: 4460 sqm
Survey date: TUESDAY 17/05/05 Survey Type: MANUAL

9 NF-02-B-02 BUSINESS PARK, NORWICH NORFOLK
WHITING ROAD
LONG JOHN'S HILL
NORWICH
Edge of Town
Retail Zone
Total Gross floor area: 7400 sqm
Survey date: THURSDAY 17/05/07 Survey Type: MANUAL

10 NO-02-B-02 BUSINESS PARK, SCUNTHORPE NORTH LINCOLNSHIRE
DONCASTER ROAD

SCUNTHORPE
Edge of Town
Residential Zone
Total Gross floor area: 1574 sqm
Survey date: THURSDAY 22/09/05 Survey Type: MANUAL

11 NT-02-B-01 BUSINESS PARK, NOTTINGHAM NOTTINGHAMSHIRE
PARK LANE

NOTTINGHAM
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Gross floor area: 2321 sqm
Survey date: THURSDAY 17/05/07 Survey Type: MANUAL

12 SF-02-B-01 BUSINESS PK, BURY ST EDMUNDS SUFFOLK
KEMPSON WAY

BURY ST EDMUNDS
Edge of Town
Industrial Zone
Total Gross floor area: 2480 sqm
Survey date: WEDNESDAY 10/05/06 Survey Type: MANUAL

13 SH-02-B-01 BUSINESS PARK, SHREWSBURY SHROPSHIRE
WELSHPOOL ROAD

SHREWSBURY
Edge of Town
Commercial Zone
Total Gross floor area: 17197 sqm
Survey date: TUESDAY 14/06/05 Survey Type: MANUAL

14 SH-02-B-02 BUSINESS PARK, TELFORD SHROPSHIRE
STAFFORD COURT

TELFORD
Edge of Town Centre
Commercial Zone
Total Gross floor area: 9500 sqm
Survey date: MONDAY 22/06/09 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

15 SH-02-B-03 BUSINESS CENTRE, TELFORD SHROPSHIRE
CASTLE STREET
HADLEY
TELFORD
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Gross floor area: 1300 sqm
Survey date: TUESDAY 16/06/09 Survey Type: MANUAL

16 TW-02-B-01 BUSINESS PARK, NEWCASTLE TYNE & WEAR
ST THOMAS STREET

NEWCASTLE
Town Centre
Built-Up Zone
Total Gross floor area: 975 sqm
Survey date: TUESDAY 03/05/05 Survey Type: MANUAL

17 TW-02-B-02 BUSINESS PARK,NORTH SHIELDS TYNE & WEAR
HIGH FLATWORTH

NORTH SHIELDS
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 27142 sqm
Survey date: FRIDAY 10/10/08 Survey Type: MANUAL

18 TW-02-B-03 BUSINESS PARK, SUNDERLAND TYNE & WEAR
CITY WAY
EAST HERRINGTON
SUNDERLAND
Edge of Town
No Sub Category
Total Gross floor area: 77513 sqm
Survey date: THURSDAY 09/10/08 Survey Type: MANUAL

19 TW-02-B-04 BUSINESS PARK, NEWCASTLE TYNE & WEAR
KINGFISHER BOULEVARD
LEMINGTON
NEWCASTLE UPON TYNE
Edge of Town
Industrial Zone
Total Gross floor area: 38853 sqm
Survey date: THURSDAY 11/12/08 Survey Type: MANUAL

20 WL-02-B-01 BUSINESS PK,WOOTTON BASSETT WILTSHIRE
HIGH STREET
COPED HALL
WOOTTON BASSETT
Edge of Town
Residential Zone
Total Gross floor area: 2600 sqm
Survey date: MONDAY 02/10/06 Survey Type: MANUAL

21 WM-02-B-01 BUSINESS PARK, COVENTRY WEST MIDLANDS
COURTALD WAY
FOLESHILL
COVENTRY
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 30042 sqm
Survey date: FRIDAY 10/02/06 Survey Type: MANUAL

22 WO-02-B-01 BUSINESS PARK, REDDITCH WORCESTERSHIRE
BURNT MEADOW ROAD
MOORS MOAT NTH IND. EST
REDDITCH
Edge of Town
Industrial Zone
Total Gross floor area: 3525 sqm
Survey date: TUESDAY 02/05/06 Survey Type: MANUAL

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00	0	0	0.000	0	0	0.000	0	0	0.000
01:00 - 02:00	0	0	0.000	0	0	0.000	0	0	0.000
02:00 - 03:00	0	0	0.000	0	0	0.000	0	0	0.000
03:00 - 04:00	0	0	0.000	0	0	0.000	0	0	0.000
04:00 - 05:00	0	0	0.000	0	0	0.000	0	0	0.000
05:00 - 06:00	0	0	0.000	0	0	0.000	0	0	0.000
06:00 - 07:00	0	0	0.000	0	0	0.000	0	0	0.000
07:00 - 08:00	22	18876	0.544	22	18876	0.126	22	18876	0.670
08:00 - 09:00	22	18876	1.396	22	18876	0.278	22	18876	1.674
09:00 - 10:00	22	18876	0.707	22	18876	0.230	22	18876	0.937
10:00 - 11:00	22	18876	0.273	22	18876	0.223	22	18876	0.496
11:00 - 12:00	22	18876	0.267	22	18876	0.255	22	18876	0.522
12:00 - 13:00	22	18876	0.351	22	18876	0.480	22	18876	0.831
13:00 - 14:00	22	18876	0.476	22	18876	0.432	22	18876	0.908
14:00 - 15:00	22	18876	0.264	22	18876	0.314	22	18876	0.578
15:00 - 16:00	22	18876	0.248	22	18876	0.398	22	18876	0.646
16:00 - 17:00	22	18876	0.248	22	18876	0.767	22	18876	1.015
17:00 - 18:00	22	18876	0.191	22	18876	1.147	22	18876	1.338
18:00 - 19:00	22	18876	0.110	22	18876	0.406	22	18876	0.516
19:00 - 20:00	0	0	0.000	0	0	0.000	0	0	0.000
20:00 - 21:00	0	0	0.000	0	0	0.000	0	0	0.000
21:00 - 22:00	0	0	0.000	0	0	0.000	0	0	0.000
22:00 - 23:00	0	0	0.000	0	0	0.000	0	0	0.000
23:00 - 24:00	0	0	0.000	0	0	0.000	0	0	0.000
Total Rates:			5.075			5.056			10.131

Parameter summary

Trip rate parameter range selected:	975 - 121275 (units: sqm)
Survey date date range:	01/01/04 - 18/10/11
Number of weekdays (Monday-Friday):	22
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : D - INDUSTRIAL ESTATE
VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	1 days
	EX	ESSEX	1 days
03	SOUTH WEST		
	BR	BRISTOL CITY	2 days
	CW	CORNWALL	2 days
	WL	WILTSHIRE	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	3 days
	SF	SUFFOLK	1 days
05	EAST MIDLANDS		
	DS	DERBYSHIRE	1 days
	LN	LINCOLNSHIRE	1 days
	NT	NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS		
	HE	HEREFORDSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	1 days
	WY	WEST YORKSHIRE	2 days
08	NORTH WEST		
	CH	CHESHIRE	1 days
	LC	LANCASHIRE	1 days
	MS	MERSEYSIDE	2 days
09	NORTH		
	CB	CUMBRIA	1 days
	DH	DURHAM	1 days
	NB	NORTHUMBERLAND	1 days
	TW	TYNE & WEAR	1 days

Filtering Stage 2 selection:

Parameter:	Gross floor area
Actual Range:	1197 to 102000 (units: sqm)
Range Selected by User:	708 to 167416 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/04 to 17/10/11

Selected survey days:

Monday	6 days
Tuesday	8 days
Wednesday	2 days
Thursday	6 days
Friday	4 days

Selected survey types:

Manual count	26 days
Directional ATC Count	0 days

Selected Locations:

Edge of Town Centre	1
Suburban Area (PPS6 Out of Centre)	8
Edge of Town	13
Neighbourhood Centre (PPS6 Local Centre)	2
Free Standing (PPS6 Out of Town)	2

Selected Location Sub Categories:

Industrial Zone	15
Residential Zone	2
Built-Up Zone	2
Village	1
Out of Town	1
No Sub Category	5

LIST OF SITES relevant to selection parameters

1 BR-02-D-02 INDUSTRIAL ESTATE, BRISTOL BRISTOL CITY
NOVERS HILL
BEDMINSTER
BRISTOL
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 6000 sqm
Survey date: THURSDAY 19/11/09 Survey Type: MANUAL

2 BR-02-D-03 INDUSTRIAL ESTATE, BRISTOL BRISTOL CITY
CROFTS END ROAD
SPEEDWELL
BRISTOL
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 6000 sqm
Survey date: TUESDAY 20/10/09 Survey Type: MANUAL

3 CA-02-D-01 IND. ESTATE, PETERBOROUGH CAMBRIDGESHIRE
STURROCK WAY
BRETTON
PETERBOROUGH
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 4300 sqm
Survey date: TUESDAY 13/05/08 Survey Type: MANUAL

4 CA-02-D-02 IND. ESTATE, CAMBRIDGE CAMBRIDGESHIRE
COLDHAM'S ROAD
COLDHAM'S COMMON
CAMBRIDGE
Edge of Town
Industrial Zone
Total Gross floor area: 2063 sqm
Survey date: MONDAY 19/10/09 Survey Type: MANUAL

5 CA-02-D-03 IND. ESTATE, PETERBOROUGH CAMBRIDGESHIRE
SAVILLE ROAD
WESTWOOD
PETERBOROUGH
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Gross floor area: 4425 sqm
Survey date: THURSDAY 22/10/09 Survey Type: MANUAL

6 CB-02-D-04 INDUSTRIAL ESTATE, BRAMPTON CUMBRIA
CARLISLE ROAD

BRAMPTON
Edge of Town
No Sub Category
Total Gross floor area: 17708 sqm
Survey date: WEDNESDAY 16/12/09 Survey Type: MANUAL

7 CH-02-D-02 INDUSTRIAL EST., NORTHWICH CHESHIRE
MANCHESTER ROAD
WINCHAM
NORTHWICH
Edge of Town
Industrial Zone
Total Gross floor area: 22000 sqm
Survey date: FRIDAY 15/06/07 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 CW-02-D-02 INDUSTRIAL ESTATE, CAMBORNE CORNWALL
DRUIDS ROAD

CAMBORNE
Edge of Town
Industrial Zone
Total Gross floor area: 6515 sqm
Survey date: FRIDAY 21/09/07 Survey Type: MANUAL

9 CW-02-D-03 IND. ESTATE, NEAR PENZANCE CORNWALL
LONG ROCK ROAD
LONG ROCK
NEAR PENZANCE
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Gross floor area: 36500 sqm
Survey date: MONDAY 03/10/11 Survey Type: MANUAL

10 DH-02-D-01 INDUSTRIAL ESTATE,NR CONSETT DURHAM
PARKWAY
ANNFIELD PLAIN
NEAR CONSETT
Free Standing (PPS6 Out of Town)
Out of Town
Total Gross floor area: 12025 sqm
Survey date: WEDNESDAY 27/04/05 Survey Type: MANUAL

11 DS-02-D-01 IND. ESTATE,SOUTH NORMANTON DERBYSHIRE
BERRISTOW LANE

SOUTH NORMANTON
Edge of Town
Industrial Zone
Total Gross floor area: 92286 sqm
Survey date: TUESDAY 15/06/04 Survey Type: MANUAL

12 ES-02-D-05 IND. ESTATE, EASTBOURNE EAST SUSSEX
COURTLANDS ROAD

EASTBOURNE
Edge of Town
Residential Zone
Total Gross floor area: 7525 sqm
Survey date: MONDAY 30/11/09 Survey Type: MANUAL

13 EX-02-D-01 INDUSTRIAL ESTATE, LOUGHTON ESSEX
OAKWOOD HILL

LOUGHTON
Edge of Town
Industrial Zone
Total Gross floor area: 27687 sqm
Survey date: THURSDAY 22/11/07 Survey Type: MANUAL

14 HE-02-D-01 BUSINESS PARK, HEREFORD HEREFORDSHIRE
BURCOTT ROAD

HEREFORD
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 1758 sqm
Survey date: MONDAY 17/10/11 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

15 LC-02-D-04 INDUSTRIAL ESTATE, GARSTANG LANCASHIRE
GREEN LANE WEST

GARSTANG
Edge of Town
Industrial Zone
Total Gross floor area: 4555 sqm
Survey date: FRIDAY 16/06/06 Survey Type: MANUAL

16 LN-02-D-01 INDUSTRIAL ESTATE, GRANTHAM LINCOLNSHIRE
BELTON LANE

GRANTHAM
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 5347 sqm
Survey date: THURSDAY 12/05/05 Survey Type: MANUAL

17 MS-02-D-05 INDUSTRIAL ESTATE, ST HELENS MERSEYSIDE
BROADOAK ROAD

ST HELENS
Edge of Town
No Sub Category
Total Gross floor area: 2430 sqm
Survey date: TUESDAY 18/10/05 Survey Type: MANUAL

18 MS-02-D-06 INDUSTRIAL EST., LIVERPOOL MERSEYSIDE
BOALER STREET

LIVERPOOL
Neighbourhood Centre (PPS6 Local Centre)
Industrial Zone
Total Gross floor area: 4800 sqm
Survey date: THURSDAY 09/09/10 Survey Type: MANUAL

19 NB-02-D-01 INDUSTRIAL ESTATE, HEXHAM NORTHUMBERLAND
A695

HEXHAM
Edge of Town
Industrial Zone
Total Gross floor area: 10525 sqm
Survey date: MONDAY 23/05/05 Survey Type: MANUAL

20 NT-02-D-01 IND. ESTATE, SUTTON-IN-ASHFLD NOTTINGHAMSHIRE
B6028 STONEYFORD ROAD
STANTON HILL
SUTTON-IN-ASHFIELD
Edge of Town
No Sub Category
Total Gross floor area: 26400 sqm
Survey date: FRIDAY 30/06/06 Survey Type: MANUAL

21 NY-02-D-01 INDUSTRIAL ESTATE, SHERBURN NORTH YORKSHIRE
AVIATION WAY

SHERBURN IN ELMET
Free Standing (PPS6 Out of Town)
Industrial Zone
Total Gross floor area: 1197 sqm
Survey date: TUESDAY 19/04/05 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

22 SF-02-D-02 INDUSTRIAL ESTATE, IPSWICH SUFFOLK
HADLEIGH ROAD
WESTBOURNE
IPSWICH
Suburban Area (PPS6 Out of Centre)
Built-Up Zone
Total Gross floor area: 102000 sqm
Survey date: TUESDAY 22/05/07 Survey Type: MANUAL

23 TW-02-D-06 INDUSTRIAL ESTATE, N. SHIELDS TYNE & WEAR
NORHAM ROAD
WEST CHIRTON
NORTH SHIELDS
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 23000 sqm
Survey date: THURSDAY 19/10/06 Survey Type: MANUAL

24 WL-02-D-01 IND. ESTATE, WOOTTON BASSETT WILTSHIRE
MARLBOROUGH ROAD

WOOTTON BASSETT
Edge of Town
Industrial Zone
Total Gross floor area: 7050 sqm
Survey date: TUESDAY 03/10/06 Survey Type: MANUAL

25 WY-02-D-01 INDUSTRIAL ESTATE, LEEDS WEST YORKSHIRE
PARK HOUSE WEST

LEEDS
Edge of Town Centre
Built-Up Zone
Total Gross floor area: 4225 sqm
Survey date: TUESDAY 19/04/05 Survey Type: MANUAL

26 WY-02-D-02 INDUSTRIAL EST., HUDDERSFIELD WEST YORKSHIRE
A629 WAKEFIELD ROAD
TANDEM
HUDDERSFIELD
Edge of Town
No Sub Category
Total Gross floor area: 20824 sqm
Survey date: MONDAY 11/09/06 Survey Type: MANUAL

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00	0	0	0.000	0	0	0.000	0	0	0.000
01:00 - 02:00	0	0	0.000	0	0	0.000	0	0	0.000
02:00 - 03:00	0	0	0.000	0	0	0.000	0	0	0.000
03:00 - 04:00	0	0	0.000	0	0	0.000	0	0	0.000
04:00 - 05:00	0	0	0.000	0	0	0.000	0	0	0.000
05:00 - 06:00	0	0	0.000	0	0	0.000	0	0	0.000
06:00 - 07:00	0	0	0.000	0	0	0.000	0	0	0.000
07:00 - 08:00	26	17659	0.363	26	17659	0.148	26	17659	0.511
08:00 - 09:00	26	17659	0.456	26	17659	0.221	26	17659	0.677
09:00 - 10:00	26	17659	0.327	26	17659	0.252	26	17659	0.579
10:00 - 11:00	26	17659	0.293	26	17659	0.283	26	17659	0.576
11:00 - 12:00	26	17659	0.318	26	17659	0.323	26	17659	0.641
12:00 - 13:00	26	17659	0.282	26	17659	0.341	26	17659	0.623
13:00 - 14:00	26	17659	0.318	26	17659	0.309	26	17659	0.627
14:00 - 15:00	26	17659	0.282	26	17659	0.296	26	17659	0.578
15:00 - 16:00	26	17659	0.252	26	17659	0.305	26	17659	0.557
16:00 - 17:00	26	17659	0.228	26	17659	0.429	26	17659	0.657
17:00 - 18:00	26	17659	0.119	26	17659	0.374	26	17659	0.493
18:00 - 19:00	26	17659	0.065	26	17659	0.136	26	17659	0.201
19:00 - 20:00	0	0	0.000	0	0	0.000	0	0	0.000
20:00 - 21:00	0	0	0.000	0	0	0.000	0	0	0.000
21:00 - 22:00	0	0	0.000	0	0	0.000	0	0	0.000
22:00 - 23:00	0	0	0.000	0	0	0.000	0	0	0.000
23:00 - 24:00	0	0	0.000	0	0	0.000	0	0	0.000
Total Rates:			3.303			3.417			6.720

Parameter summary

Trip rate parameter range selected:	1197 - 102000 (units: sqm)
Survey date date range:	01/01/04 - 17/10/11
Number of weekdays (Monday-Friday):	26
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : F - WAREHOUSING (COMMERCIAL)
VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	HC	HAMPSHIRE	1 days
	HF	HERTFORDSHIRE	1 days
	SC	SURREY	1 days
03	SOUTH WEST		
	CW	CORNWALL	1 days
05	EAST MIDLANDS		
	DS	DERBYSHIRE	1 days
	LN	LINCOLNSHIRE	1 days
06	WEST MIDLANDS		
	WM	WEST MIDLANDS	1 days
08	NORTH WEST		
	LC	LANCASHIRE	1 days
09	NORTH		
	TV	TEES VALLEY	2 days

Filtering Stage 2 selection:

Parameter: Gross floor area
Actual Range: 387 to 80066 (units: sqm)
Range Selected by User: 387 to 80066 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/04 to 05/07/11

Selected survey days:

Monday	1 days
Tuesday	5 days
Wednesday	2 days
Thursday	1 days
Friday	1 days

Selected survey types:

Manual count	10 days
Directional ATC Count	0 days

Selected Locations:

Edge of Town Centre	2
Suburban Area (PPS6 Out of Centre)	2
Edge of Town	6

Selected Location Sub Categories:

Industrial Zone	4
Commercial Zone	2
Residential Zone	1
No Sub Category	3

LIST OF SITES relevant to selection parameters

1 CW-02-F-01 WAREHOUSING, TRURO CORNWALL
A390
THREEMILESTONE
NEAR TRURO
Edge of Town
No Sub Category
Total Gross floor area: 5150 sqm
Survey date: TUESDAY 18/09/07 Survey Type: MANUAL

2 DS-02-F-01 ARMADILLO S. STORAGE, DERBY DERBYSHIRE
FORRESTERS BUSINESS P..
SINFIN LANE
DERBY
Edge of Town Centre
Commercial Zone
Total Gross floor area: 1900 sqm
Survey date: TUESDAY 05/07/11 Survey Type: MANUAL

3 HC-02-F-01 WAREHOUSING, SOUTHAMPTON HAMPSHIRE
MAURETANIA ROAD
NURSLING INDUSTRIAL ESTATE
SOUTHAMPTON
Edge of Town
Industrial Zone
Total Gross floor area: 4000 sqm
Survey date: WEDNESDAY 21/11/07 Survey Type: MANUAL

4 HF-02-F-03 DISTRIBUTION CEN., HATFIELD HERTFORDSHIRE
HATFIELD BUSINESS CEN.
HATFIELD
Edge of Town
Commercial Zone
Total Gross floor area: 80000 sqm
Survey date: THURSDAY 10/07/08 Survey Type: MANUAL

5 LC-02-F-02 WAREHOUSING, PRESTON LANCASHIRE
CHORLEY ROAD
WALTON-LE-DALE
PRESTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 1200 sqm
Survey date: FRIDAY 22/06/07 Survey Type: MANUAL

6 LN-02-F-01 BOOK SERVICE, GRANTHAM LINCOLNSHIRE
TRENT ROAD
GRANTHAM
Edge of Town
No Sub Category
Total Gross floor area: 32300 sqm
Survey date: MONDAY 29/11/10 Survey Type: MANUAL

7 SC-02-F-04 WAREHOUSING, CHERTSEY SURREY
PRETORIA ROAD
CHERTSEY
Edge of Town
No Sub Category
Total Gross floor area: 4460 sqm
Survey date: TUESDAY 27/11/07 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 TV-02-F-02 ARGOS WAREHOUSE, DARL'TON TEES VALLEY
ROUNDHOUSE ROAD
FAVERDALE
DARLINGTON
Edge of Town
Industrial Zone
Total Gross floor area: 80066 sqm
Survey date: TUESDAY 07/10/08 Survey Type: MANUAL

9 TV-02-F-03 ELEC. COMPONENTS, STOCKTON TEES VALLEY
UNIT 8,NAVIGATOR COURT

STOCKTON-ON-TEES
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 387 sqm
Survey date: TUESDAY 28/06/11 Survey Type: MANUAL

10 WM-02-F-01 LEGETT LOGIS., BIRMINGHAM WEST MIDLANDS
SAMPSON ROAD NORTH

BIRMINGHAM
Edge of Town Centre
Industrial Zone
Total Gross floor area: 4000 sqm
Survey date: WEDNESDAY 17/06/09 Survey Type: MANUAL

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30	0	0	0.000	0	0	0.000	0	0	0.000
00:30 - 01:00	0	0	0.000	0	0	0.000	0	0	0.000
01:00 - 01:30	0	0	0.000	0	0	0.000	0	0	0.000
01:30 - 02:00	0	0	0.000	0	0	0.000	0	0	0.000
02:00 - 02:30	0	0	0.000	0	0	0.000	0	0	0.000
02:30 - 03:00	0	0	0.000	0	0	0.000	0	0	0.000
03:00 - 03:30	0	0	0.000	0	0	0.000	0	0	0.000
03:30 - 04:00	0	0	0.000	0	0	0.000	0	0	0.000
04:00 - 04:30	0	0	0.000	0	0	0.000	0	0	0.000
04:30 - 05:00	0	0	0.000	0	0	0.000	0	0	0.000
05:00 - 05:30	0	0	0.000	0	0	0.000	0	0	0.000
05:30 - 06:00	0	0	0.000	0	0	0.000	0	0	0.000
06:00 - 06:30	0	0	0.000	0	0	0.000	0	0	0.000
06:30 - 07:00	0	0	0.000	0	0	0.000	0	0	0.000
07:00 - 07:30	10	21346	0.030	10	21346	0.022	10	21346	0.052
07:30 - 08:00	10	21346	0.058	10	21346	0.034	10	21346	0.092
08:00 - 08:30	10	21346	0.037	10	21346	0.022	10	21346	0.059
08:30 - 09:00	10	21346	0.039	10	21346	0.026	10	21346	0.065
09:00 - 09:30	10	21346	0.038	10	21346	0.029	10	21346	0.067
09:30 - 10:00	10	21346	0.033	10	21346	0.025	10	21346	0.058
10:00 - 10:30	10	21346	0.025	10	21346	0.028	10	21346	0.053
10:30 - 11:00	10	21346	0.027	10	21346	0.025	10	21346	0.052
11:00 - 11:30	10	21346	0.025	10	21346	0.027	10	21346	0.052
11:30 - 12:00	10	21346	0.029	10	21346	0.026	10	21346	0.055
12:00 - 12:30	10	21346	0.034	10	21346	0.035	10	21346	0.069
12:30 - 13:00	10	21346	0.029	10	21346	0.029	10	21346	0.058
13:00 - 13:30	10	21346	0.046	10	21346	0.040	10	21346	0.086
13:30 - 14:00	10	21346	0.064	10	21346	0.047	10	21346	0.111
14:00 - 14:30	10	21346	0.042	10	21346	0.060	10	21346	0.102
14:30 - 15:00	10	21346	0.045	10	21346	0.049	10	21346	0.094
15:00 - 15:30	10	21346	0.034	10	21346	0.057	10	21346	0.091
15:30 - 16:00	10	21346	0.048	10	21346	0.047	10	21346	0.095
16:00 - 16:30	10	21346	0.038	10	21346	0.049	10	21346	0.087
16:30 - 17:00	10	21346	0.030	10	21346	0.051	10	21346	0.081
17:00 - 17:30	10	21346	0.018	10	21346	0.044	10	21346	0.062
17:30 - 18:00	10	21346	0.014	10	21346	0.038	10	21346	0.052
18:00 - 18:30	10	21346	0.009	10	21346	0.031	10	21346	0.040
18:30 - 19:00	10	21346	0.005	10	21346	0.020	10	21346	0.025
19:00 - 19:30	0	0	0.000	0	0	0.000	0	0	0.000
19:30 - 20:00	0	0	0.000	0	0	0.000	0	0	0.000
20:00 - 20:30	0	0	0.000	0	0	0.000	0	0	0.000
20:30 - 21:00	0	0	0.000	0	0	0.000	0	0	0.000
21:00 - 21:30	0	0	0.000	0	0	0.000	0	0	0.000
21:30 - 22:00	0	0	0.000	0	0	0.000	0	0	0.000
22:00 - 22:30	0	0	0.000	0	0	0.000	0	0	0.000
22:30 - 23:00	0	0	0.000	0	0	0.000	0	0	0.000
23:00 - 23:30	0	0	0.000	0	0	0.000	0	0	0.000
23:30 - 24:00	0	0	0.000	0	0	0.000	0	0	0.000
Total Rates:			0.797			0.861			1.658

Parameter summary

Trip rate parameter range selected:	387 - 80066 (units: sqm)
Survey date date range:	01/01/04 - 05/07/11
Number of weekdays (Monday-Friday):	10
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
Category : M - MIXED SHOPPING MALLS
VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	1 days
	HC	HAMPSHIRE	1 days

Filtering Stage 2 selection:

Parameter:	Gross floor area
Actual Range:	10057 to 14693 (units: sqm)
Range Selected by User:	4792 to 14693 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/97 to 01/03/12

Selected survey days:

Thursday	1 days
Friday	1 days

Selected survey types:

Manual count	2 days
Directional ATC Count	0 days

Selected Locations:

Town Centre	1
Edge of Town	1

Selected Location Sub Categories:

Residential Zone	1
Built-Up Zone	1

LIST OF SITES relevant to selection parameters

1 ES-01-M-02 SHOPPING MALL, EASTBOURNE EAST SUSSEX
KINGFISHER DRIVE
LANGNEY
EASTBOURNE
Edge of Town
Residential Zone
Total Gross floor area: 14693 sqm
Survey date: THURSDAY 01/03/01 Survey Type: MANUAL

2 HC-01-M-01 SHOPPING MALL, HAVANT HAMPSHIRE
ELM LANE

HAVANT
Town Centre
Built-Up Zone
Total Gross floor area: 10057 sqm
Survey date: FRIDAY 21/11/97 Survey Type: MANUAL

TRIP RATE for Land Use 01 - RETAIL/M - MIXED SHOPPING MALLS
VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00	0	0	0.000	0	0	0.000	0	0	0.000
01:00 - 02:00	0	0	0.000	0	0	0.000	0	0	0.000
02:00 - 03:00	0	0	0.000	0	0	0.000	0	0	0.000
03:00 - 04:00	0	0	0.000	0	0	0.000	0	0	0.000
04:00 - 05:00	0	0	0.000	0	0	0.000	0	0	0.000
05:00 - 06:00	0	0	0.000	0	0	0.000	0	0	0.000
06:00 - 07:00	0	0	0.000	0	0	0.000	0	0	0.000
07:00 - 08:00	1	14693	0.919	1	14693	0.783	1	14693	1.702
08:00 - 09:00	2	12375	1.301	2	12375	0.675	2	12375	1.976
09:00 - 10:00	2	12375	2.291	2	12375	1.341	2	12375	3.632
10:00 - 11:00	2	12375	2.675	2	12375	2.190	2	12375	4.865
11:00 - 12:00	2	12375	2.695	2	12375	2.699	2	12375	5.394
12:00 - 13:00	2	12375	2.598	2	12375	2.707	2	12375	5.305
13:00 - 14:00	2	12375	2.477	2	12375	2.598	2	12375	5.075
14:00 - 15:00	2	12375	2.360	2	12375	2.541	2	12375	4.901
15:00 - 16:00	2	12375	2.323	2	12375	2.432	2	12375	4.755
16:00 - 17:00	2	12375	1.935	2	12375	2.602	2	12375	4.537
17:00 - 18:00	2	12375	1.309	2	12375	1.802	2	12375	3.111
18:00 - 19:00	2	12375	0.691	2	12375	1.026	2	12375	1.717
19:00 - 20:00	1	14693	0.817	1	14693	0.810	1	14693	1.627
20:00 - 21:00	1	14693	0.184	1	14693	0.259	1	14693	0.443
21:00 - 22:00	0	0	0.000	0	0	0.000	0	0	0.000
22:00 - 23:00	0	0	0.000	0	0	0.000	0	0	0.000
23:00 - 24:00	0	0	0.000	0	0	0.000	0	0	0.000
Total Rates:			24.575			24.465			49.040

Parameter summary

Trip rate parameter range selected:	10057 - 14693 (units: sqm)
Survey date date range:	01/01/97 - 01/03/12
Number of weekdays (Monday-Friday):	2
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 06 - HOTEL, FOOD & DRINK
Category : A - HOTELS
VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	BU	BUCKINGHAMSHIRE	1 days
	HF	HERTFORDSHIRE	1 days
	WS	WEST SUSSEX	1 days
03	SOUTH WEST		
	DV	DEVON	1 days
	GS	GLOUCESTERSHIRE	1 days
	WL	WILTSHIRE	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	2 days
	NF	NORFOLK	2 days
05	EAST MIDLANDS		
	DS	DERBYSHIRE	2 days
	NR	NORTHAMPTONSHIRE	1 days
06	WEST MIDLANDS		
	HE	HEREFORDSHIRE	1 days
	WM	WEST MIDLANDS	3 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	WY	WEST YORKSHIRE	1 days
08	NORTH WEST		
	CH	CHESHIRE	1 days
	GM	GREATER MANCHESTER	2 days
	LC	LANCASHIRE	1 days
09	NORTH		
	DH	DURHAM	1 days
	TV	TEES VALLEY	2 days
	TW	TYNE & WEAR	1 days

Filtering Stage 2 selection:

Parameter:	Gross floor area
Actual Range:	1080 to 8500 (units: sqm)
Range Selected by User:	926 to 9700 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/04 to 21/10/11

Selected survey days:

Monday	3 days
Tuesday	5 days
Wednesday	5 days
Thursday	7 days
Friday	6 days

Selected survey types:

Manual count	26 days
Directional ATC Count	0 days

Selected Locations:

Town Centre	6
Edge of Town Centre	5
Suburban Area (PPS6 Out of Centre)	10
Edge of Town	4
Neighbourhood Centre (PPS6 Local Centre)	1

Selected Location Sub Categories:

Commercial Zone	2
Development Zone	2
Residential Zone	4
Retail Zone	1
Built-Up Zone	2
Village	1
Out of Town	1
No Sub Category	13

LIST OF SITES relevant to selection parameters

1 BU-06-A-01 HOLIDAY INN, AYLESBURY BUCKINGHAMSHIRE
NEW ROAD

AYLESBURY
Edge of Town
Out of Town
Total Gross floor area: 4675 sqm
Survey date: THURSDAY 03/12/09 Survey Type: MANUAL

2 CA-06-A-02 HOTEL, CAMBRIDGE CAMBRIDGESHIRE
GONVILLE PLACE

CAMBRIDGE
Edge of Town Centre
No Sub Category
Total Gross floor area: 5350 sqm
Survey date: THURSDAY 13/05/04 Survey Type: MANUAL

3 CA-06-A-03 TRAVELODGE, CAMBRIDGE CAMBRIDGESHIRE
CLIFTON WAY
CAMBRIDGE LEISURE PARK
CAMBRIDGE
Suburban Area (PPS6 Out of Centre)
Built-Up Zone
Total Gross floor area: 3950 sqm
Survey date: FRIDAY 16/10/09 Survey Type: MANUAL

4 CH-06-A-01 RAMADA JARVIS, CHESTER CHESHIRE
WHITCHURCH ROAD
CHRISTLETON
CHESTER
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Gross floor area: 6000 sqm
Survey date: WEDNESDAY 15/10/08 Survey Type: MANUAL

5 DH-06-A-01 PREMIER INN, DURHAM DURHAM
FREEMANS PLACE
MILLENNIUM PLACE
DURHAM
Edge of Town Centre
Development Zone
Total Gross floor area: 3570 sqm
Survey date: THURSDAY 04/12/08 Survey Type: MANUAL

6 DS-06-A-01 DAYS INN, DERBY DERBYSHIRE
SIR FRANK WHITTLE RD

DERBY
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Gross floor area: 5304 sqm
Survey date: WEDNESDAY 23/06/04 Survey Type: MANUAL

7 DS-06-A-02 JURY'S INN, DERBY DERBYSHIRE
KING STREET

DERBY
Town Centre
Commercial Zone
Total Gross floor area: 1200 sqm
Survey date: TUESDAY 19/07/11 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 DV-06-A-02 PREMIER INN, PLYMOUTH DEVON
SUTTON ROAD
SUTTON HARBOUR
PLYMOUTH
Edge of Town Centre
No Sub Category
Total Gross floor area: 3420 sqm
Survey date: WEDNESDAY 21/10/09 Survey Type: MANUAL

9 GM-06-A-06 PREMIER LODGE, URMSTON GREATER MANCHESTER
TRAFFORD BOULEVARD

URMSTON
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Gross floor area: 2475 sqm
Survey date: MONDAY 07/06/04 Survey Type: MANUAL

10 GM-06-A-07 TRAVELODGE, MANCHESTER GREATER MANCHESTER
BLACKFRIARS STREET
SALFORD
MANCHESTER
Edge of Town Centre
Built-Up Zone
Total Gross floor area: 7925 sqm
Survey date: TUESDAY 25/05/04 Survey Type: MANUAL

11 GS-06-A-01 PREMIER INN, CHELTENHAM GLOUCESTERSHIRE
GLOUCESTER ROAD
ST MARKS
CHELTENHAM
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 2025 sqm
Survey date: WEDNESDAY 28/04/10 Survey Type: MANUAL

12 HE-06-A-01 HOTEL, HEREFORD HEREFORDSHIRE
BROAD STREET

HEREFORD
Town Centre
No Sub Category
Total Gross floor area: 3096 sqm
Survey date: THURSDAY 02/03/06 Survey Type: MANUAL

13 HF-06-A-03 NOVOTEL, STEVENAGE HERTFORDSHIRE
A1(M)
KNEBWORTH PARK
STEVENAGE
Edge of Town
No Sub Category
Total Gross floor area: 5125 sqm
Survey date: THURSDAY 08/07/04 Survey Type: MANUAL

14 LC-06-A-04 BEST WESTERN, LEYLAND LANCASHIRE
LEYLAND WAY

LEYLAND
Edge of Town
Residential Zone
Total Gross floor area: 6000 sqm
Survey date: FRIDAY 21/10/11 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

15 NF-06-A-01 HOTEL, NORWICH NORFOLK
PALACE STREET
TOMBLANDS
NORWICH
Edge of Town Centre
No Sub Category
Total Gross floor area: 3530 sqm
Survey date: WEDNESDAY 16/05/07 Survey Type: MANUAL

16 NF-06-A-02 HOLIDAY INN, NORWICH NORFOLK
IPSWICH ROAD
HARFORD PARK
NORWICH
Edge of Town
No Sub Category
Total Gross floor area: 5600 sqm
Survey date: THURSDAY 30/09/10 Survey Type: MANUAL

17 NR-06-A-01 COMFORT INN, KETTERING NORTHAMPTONSHIRE
HIGH STREET

KETTERING
Town Centre
No Sub Category
Total Gross floor area: 5868 sqm
Survey date: FRIDAY 06/05/05 Survey Type: MANUAL

18 TV-06-A-02 HOTEL, MIDDLESBROUGH TEES VALLEY
MARTON ROAD

MIDDLESBOROUGH
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Gross floor area: 2550 sqm
Survey date: FRIDAY 18/12/09 Survey Type: MANUAL

19 TV-06-A-03 THISTLE, MIDDLESBROUGH TEES VALLEY
FRY STREET

MIDDLESBROUGH
Town Centre
Commercial Zone
Total Gross floor area: 8500 sqm
Survey date: MONDAY 27/06/11 Survey Type: MANUAL

20 TW-06-A-01 PREMIER TRAV. INN, NEWCASTLE TYNE & WEAR
CITY ROAD
QUAYSIDE
NEWCASTLE
Suburban Area (PPS6 Out of Centre)
Development Zone
Total Gross floor area: 3075 sqm
Survey date: TUESDAY 26/04/05 Survey Type: MANUAL

21 WL-06-A-01 THISTLE, SWINDON WILTSHIRE
ISLINGTON STREET

SWINDON
Town Centre
No Sub Category
Total Gross floor area: 5000 sqm
Survey date: FRIDAY 09/07/04 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

22 WM-06-A-01 HOTEL, WOLVERHAMPTON WEST MIDLANDS
LICHFIELD ROAD

WOLVERHAMPTON
Town Centre
No Sub Category
Total Gross floor area: 5768 sqm
Survey date: TUESDAY 21/02/06 Survey Type: MANUAL

23 WM-06-A-03 HOTEL, COVENTRY WEST MIDLANDS
HOLYHEAD ROAD

COVENTRY
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 1700 sqm
Survey date: THURSDAY 27/09/07 Survey Type: MANUAL

24 WM-06-A-04 PURPLE HOTEL, BIRMINGHAM WEST MIDLANDS
CUCKOO ROAD
NECHELLS
BIRMINGHAM
Suburban Area (PPS6 Out of Centre)
Retail Zone
Total Gross floor area: 3500 sqm
Survey date: TUESDAY 25/11/08 Survey Type: MANUAL

25 WS-06-A-03 EXPRESS BY HOL. INN, CRAWLEY WEST SUSSEX
HASLETT AVENUE EAST

CRAWLEY
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Gross floor area: 2350 sqm
Survey date: MONDAY 07/12/09 Survey Type: MANUAL

26 WY-06-A-02 HOTEL, LEEDS WEST YORKSHIRE
CLIFF ROAD
HEADINGLEY
LEEDS
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 1080 sqm
Survey date: FRIDAY 11/06/10 Survey Type: MANUAL

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/A - HOTELS
VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00	0	0	0.000	0	0	0.000	0	0	0.000
01:00 - 02:00	0	0	0.000	0	0	0.000	0	0	0.000
02:00 - 03:00	0	0	0.000	0	0	0.000	0	0	0.000
03:00 - 04:00	0	0	0.000	0	0	0.000	0	0	0.000
04:00 - 05:00	0	0	0.000	0	0	0.000	0	0	0.000
05:00 - 06:00	0	0	0.000	0	0	0.000	0	0	0.000
06:00 - 07:00	0	0	0.000	0	0	0.000	0	0	0.000
07:00 - 08:00	26	4178	0.158	26	4178	0.316	26	4178	0.474
08:00 - 09:00	26	4178	0.305	26	4178	0.443	26	4178	0.748
09:00 - 10:00	26	4178	0.280	26	4178	0.309	26	4178	0.589
10:00 - 11:00	26	4178	0.232	26	4178	0.230	26	4178	0.462
11:00 - 12:00	26	4178	0.209	26	4178	0.234	26	4178	0.443
12:00 - 13:00	26	4178	0.209	26	4178	0.214	26	4178	0.423
13:00 - 14:00	26	4178	0.188	26	4178	0.208	26	4178	0.396
14:00 - 15:00	26	4178	0.197	26	4178	0.214	26	4178	0.411
15:00 - 16:00	26	4178	0.220	26	4178	0.229	26	4178	0.449
16:00 - 17:00	26	4178	0.241	26	4178	0.220	26	4178	0.461
17:00 - 18:00	26	4178	0.363	26	4178	0.228	26	4178	0.591
18:00 - 19:00	26	4178	0.352	26	4178	0.214	26	4178	0.566
19:00 - 20:00	21	4006	0.422	21	4006	0.266	21	4006	0.688
20:00 - 21:00	21	4006	0.199	21	4006	0.163	21	4006	0.362
21:00 - 22:00	17	3854	0.162	17	3854	0.153	17	3854	0.315
22:00 - 23:00	2	3060	0.278	2	3060	0.310	2	3060	0.588
23:00 - 24:00	1	2550	0.039	1	2550	0.000	1	2550	0.039
Total Rates:			4.054			3.951			8.005

Parameter summary

Trip rate parameter range selected:	1080 - 8500 (units: sqm)
Survey date date range:	01/01/04 - 21/10/11
Number of weekdays (Monday-Friday):	26
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	3

Appendix C – Development Trip Generation

Residential Trip Generation

Analysis of 2001 Census Data: 2001 Ward Boundaries

2001 Wards	Census 2001: Resident Population (2001 Ward Boundaries) - Method of Travel to Work (Persons)													
	All People	Not currently working	Currently Working	Work From Home	Underground, metro, light rail or tram	Train	Bus, minibus or coach	Taxi or minicab	Driving a car or van	Passenger in a car or van	Motorcycle, scooter or moped	Bicycle	On foot	Other
Beckingham	1,629	588	1,041	138	0	3	25	3	745	65	7	16	34	5
Blyth	1,664	604	1,060	142	3	4	24	0	759	44	4	16	57	7
Carlton	4,308	1,855	2,453	228	3	15	130	0	1,568	212	25	58	203	11
Clayworth	1,471	564	907	130	3	4	18	0	649	50	5	13	30	5
East Markham	1,715	645	1,070	198	0	8	18	0	718	44	11	11	59	3
East Retford East	4,879	2,078	2,801	237	0	26	47	10	1,692	192	29	141	412	15
East Retford North	4,146	1,758	2,388	169	3	21	30	15	1,489	171	36	149	297	8
East Retford South	3,139	1,249	1,890	129	0	15	64	7	1,141	165	25	129	210	5
East Retford West	3,002	1,089	1,913	155	0	35	30	5	1,081	123	14	102	357	11
Everton	1,609	569	1,040	156	0	5	25	3	729	50	8	11	43	10
Harworth	5,311	2,510	2,801	168	0	11	150	3	1,679	298	39	114	326	13
Langold	1,790	821	969	72	0	4	68	0	596	113	8	24	73	11
Misterton	1,674	635	1,039	133	0	5	24	0	692	65	12	41	61	6
Rampton	1,923	950	973	150	0	10	32	0	591	45	7	20	114	4
Ranskill	1,696	741	955	111	0	4	16	0	665	72	7	22	54	4
Sturton	1,588	556	1,032	166	0	5	28	0	696	54	15	16	49	3
Sutton	2,202	1,170	1,032	151	0	3	15	3	671	52	10	19	97	11
Tuxford and Trent	2,964	1,140	1,824	266	0	7	30	0	1,181	122	26	30	157	5
Welbeck	1,758	881	877	106	0	14	30	6	541	50	13	21	84	12
Worksop East	4,795	2,053	2,742	160	0	38	83	10	1,597	270	34	118	422	10
Worksop North	5,542	1,691	3,851	239	5	57	121	4	2,542	341	37	121	378	6
Worksop North East	4,782	1,823	2,959	198	3	40	96	6	1,960	251	37	72	287	9
Worksop North West	4,961	1,741	3,220	242	0	39	118	7	1,971	273	37	117	402	14
Worksop South	4,661	1,720	2,941	265	0	25	55	10	1,909	204	26	89	340	18
Worksop South East	5,117	2,749	2,368	169	0	14	112	19	1,205	289	25	139	383	13
District Average	3,133	1,287	1,846	171	1	16	56	4	1,163	145	20	64	197	9
Worksop Average	4,976	1,963	3,014	212	1	36	98	9	1,864	271	33	109	369	12
Rural Average	2,551	1,074	1,477	158	1	10	42	3	941	105	16	50	143	8

- Assumed to represent the urban area of Worksop
- Assumed to represent the rural areas of the District

2001 Wards	Census 2001: Resident Population (2001 Ward Boundaries) - Method of Travel to Work (%)										
	Underground, metro, light rail or tram	Train	Bus, minibus or coach	Taxi or minicab	Driving a car or van	Passenger in a car or van	Motorcycle, scooter or moped	Bicycle	On foot	Other	Total
District Average	0.05%	0.98%	3.32%	0.27%	69.43%	8.63%	1.19%	3.84%	11.77%	0.52%	100.00%
Worksop Average	0.05%	1.27%	3.48%	0.33%	66.54%	9.69%	1.17%	3.90%	13.16%	0.42%	100.00%
Rural Average	0.05%	0.79%	3.21%	0.22%	71.36%	7.93%	1.20%	3.80%	10.84%	0.59%	100.00%

Note: As there is little difference between the observed modal splits for the whole District and Worksop (the largest town in the District) an average for the whole of the District has been applied.

Trip Rate and Modal Split Summary

Person trips per household are estimated from data obtained from the following tip rates obtained from the TRICS database.

TRICS Person Trips Per Household		
	AM	PM
Inbound	0.235	0.600
Outbound	0.843	0.370

Note: AM = 08:00 - 09:00, PM = 17:00 - 18:00

Data Source: TRICS 2012(a) Median trip rates for 'Residential - Houses Privately Owned'. **AM Peak**

Data Source: TRICS 2012(a) Average trip rates for 'Residential - Houses Privately Owned'. **PM Peak**

Census 2001 'Travel to Work' modal splits have then been used to estimate trips made by each mode of travel. This is considered to be a good approximation of the modal split of all residential trips as the majority of trips made during the AM and PM peak hours will be work related.

As there is little difference between the observed modal splits for the whole District and Worksop (the largest town in the District) an average for the whole of the District has been applied.

	Census 2001: All People Aged 16-74 in Employment - Method of Travel to Work (%)										
	Underground, metro, light rail or tram	Train	Bus, minibus or coach	Taxi or minicab	Driving a car or van	Passenger in a car or van	Motorcycle, scooter or moped	Bicycle	On foot	Other	Total
District Average	0.05%	0.98%	3.32%	0.27%	69.43%	8.63%	1.19%	3.84%	11.77%	0.52%	100.00%

Note: People working from home are ignored in the calculation because these are excluded from the TRICS person trip rates.

Multiplying the TRICS person trip rates by the percentage of persons 'Driving a Car or Van' provides trip rates for car trip generation per dwelling as follows:

Vehicle Trips Per Household		
	AM	PM
Inbound	0.163	0.417
Outbound	0.585	0.257

Proposed Residential Development Sites

Settlement	Location	SHLAA Reference	Dwelling Numbers	Representative Ward
Worksop	North of Montford Road	35	700	Worksop North
Worksop	Gateford Road	28	330	Worksop North West
Worksop	Brancliffe Lane	195	180	Worksop North West
Worksop	Mary Street	90	50	Worksop North West
Worksop	Queen Elizabeth Crescent	30	54	Worksop North West
Worksop	Lincoln St - Fumival Street	561	21	Worksop North West
Worksop	North of Mansfield Rd	9	250	Worksop South
Tuxford	South of Tuxford	122	69	Tuxford and Trent
Tuxford	South of Tuxford	490	196	Tuxford and Trent
Retford	North Road (opposite Randall Way)	51	175	East Retford North
Retford	Lansdown Drive/St Andrew's Way	40 & 52	184	East Retford South
Harworth	East of Blyth Road	190	195	Harworth
Harworth	Baulk Lane	182	408	Harworth
Harworth	Grange View	194	192	Harworth
Harworth	Tickhill Road	192	90	Harworth
			3,094	

Rural Service Centre	Ward	Reference	Dwelling Numbers	Distribution Ward	Ward Total
Beckingham	Beckingham	RSC1	6	Misterton	20
Walkeringham	Beckingham	RSC2	14	Misterton	
Blyth	Blyth	RSC3	9	Harworth	9
Clarborough/Hayton	Clayworth	RSC4	0	East Retford North	0
East Markham	East Markham	RSC5	11	Tuxford and Trent	16
Gamston	East Markham	RSC6	5	Tuxford and Trent	
Everton	Everton	RSC7	13	Misterton	31
Gringley-on-the-Hill	Everton	RSC8	0	Misterton	
Misson	Everton	RSC9	18	Misterton	
Rampton	Rampton	RSC10	14	Tuxford and Trent	14
Mattersey	Ranskill	RSC11	13	Harworth	13
Ranskill	Ranskill	RSC12	0	Harworth	
North Leverton	Sturton	RSC13	15	Misterton	38
North/South Wheatley	Sturton	RSC14	12	Misterton	
Sturton-le-Steeple	Sturton	RSC15	11	Misterton	
Lound	Sutton	RSC16	0	East Retford North	0
Sutton	Sutton	RSC17	0	East Retford North	
Dunham	Tuxford & Trent	RSC18	0	Tuxford and Trent	0
Cuckney	Welbeck	RSC19	5	Worksop North West	21
Elkesley	Welbeck	RSC20	11	Worksop North West	
Nether Langwith	Welbeck	RSC21	5	Worksop North West	
		Total	162		162

Development Summary

Distribution Ward	Growth Scenario
Beckingham	0
Blyth	0
Carlton	0
Clayworth	0
East Markham	0
East Retford East	0
East Retford North	175
East Retford South	184
East Retford West	0
Everton	0
Harworth	907
Langold	0
Misterton	89
Rampton	0
Ranskill	0
Sturton	0
Sutton	0
Tuxford and Trent	295
Welbeck	0
Worksop East	0
Worksop North	700
Worksop North East	0
Worksop North West	656
Worksop South	250
Worksop South East	0
Totals	**3,256**

Residential AM Inbound Trip Generation by Mode of Transport

	AM Inbound Person Trips	Underground, metro, light rail or tram	Train	Bus, minibus or coach	Taxi or minicab	Driving a car or van	Passenger in a car or van	Motorcycle, scooter or moped	Bicycle	On foot	Other
Average of Bassetlaw Wards	0.235	0.05%	0.98%	3.32%	0.27%	69.43%	8.63%	1.19%	3.84%	11.77%	0.52%

Settlement	Growth Scenario Balance Dwellings	AM Inbound Person Trips	Underground, metro, light rail or tram	Train	Bus, minibus or coach	Taxi or minicab	Driving a car or van	Passenger in a car or van	Motorcycle, scooter or moped	Bicycle	On foot	Other
Beckingham	0	0	0	0	0	0	0	0	0	0	0	0
Blyth	0	0	0	0	0	0	0	0	0	0	0	0
Carlton	0	0	0	0	0	0	0	0	0	0	0	0
Clayworth	0	0	0	0	0	0	0	0	0	0	0	0
East Markham	0	0	0	0	0	0	0	0	0	0	0	0
East Retford East	0	0	0	0	0	0	0	0	0	0	0	0
East Retford North	175	41	0	0	1	0	29	4	0	2	5	0
East Retford South	184	43	0	0	1	0	30	4	1	2	5	0
East Retford West	0	0	0	0	0	0	0	0	0	0	0	0
Everton	0	0	0	0	0	0	0	0	0	0	0	0
Harworth	907	213	0	2	7	1	148	18	3	8	25	1
Langold	0	0	0	0	0	0	0	0	0	0	0	0
Misterton	89	21	0	0	1	0	15	2	0	1	2	0
Rampton	0	0	0	0	0	0	0	0	0	0	0	0
Ranskill	0	0	0	0	0	0	0	0	0	0	0	0
Sturton	0	0	0	0	0	0	0	0	0	0	0	0
Sutton	0	0	0	0	0	0	0	0	0	0	0	0
Tuxford and Trent	295	69	0	1	2	0	48	6	1	3	8	0
Welbeck	0	0	0	0	0	0	0	0	0	0	0	0
Worksop East	0	0	0	0	0	0	0	0	0	0	0	0
Worksop North	700	165	0	2	5	0	114	14	2	6	19	1
Worksop North East	0	0	0	0	0	0	0	0	0	0	0	0
Worksop North West	656	154	0	2	5	0	107	13	2	6	18	1
Worksop South	250	59	0	1	2	0	41	5	1	2	7	0
Worksop South East	0	0	0	0	0	0	0	0	0	0	0	0
Total	3,256	765	0	8	25	2	531	66	9	29	90	4

Residential AM Outbound Trip Generation by Mode of Transport

	AM Outbound Person Trips	Underground, metro, light rail or tram	Train	Bus, minibus or coach	Taxi or minicab	Driving a car or van	Passenger in a car or van	Motorcycle, scooter or moped	Bicycle	On foot	Other
Average of District	0.843	0.05%	0.98%	3.32%	0.27%	69.43%	8.63%	1.19%	3.84%	11.77%	0.52%

Ward	Growth Scenario Balance Dwellings	AM Outbound Person Trips	Underground, metro, light rail or tram	Train	Bus, minibus or coach	Taxi or minicab	Driving a car or van	Passenger in a car or van	Motorcycle, scooter or moped	Bicycle	On foot	Other
Beckingham	0	0	0	0	0	0	0	0	0	0	0	0
Blyth	0	0	0	0	0	0	0	0	0	0	0	0
Carlton	0	0	0	0	0	0	0	0	0	0	0	0
Clayworth	0	0	0	0	0	0	0	0	0	0	0	0
East Markham	0	0	0	0	0	0	0	0	0	0	0	0
East Retford East	0	0	0	0	0	0	0	0	0	0	0	0
East Retford North	175	148	0	1	5	0	102	13	2	6	17	1
East Retford South	184	155	0	2	5	0	108	13	2	6	18	1
East Retford West	0	0	0	0	0	0	0	0	0	0	0	0
Everton	0	0	0	0	0	0	0	0	0	0	0	0
Harworth	907	765	0	8	25	2	531	66	9	29	90	4
Langold	0	0	0	0	0	0	0	0	0	0	0	0
Misterton	89	75	0	1	2	0	52	6	1	3	9	0
Rampton	0	0	0	0	0	0	0	0	0	0	0	0
Ranskill	0	0	0	0	0	0	0	0	0	0	0	0
Sturton	0	0	0	0	0	0	0	0	0	0	0	0
Sutton	0	0	0	0	0	0	0	0	0	0	0	0
Tuxford and Trent	295	249	0	2	8	1	173	21	3	10	29	1
Welbeck	0	0	0	0	0	0	0	0	0	0	0	0
Worksop East	0	0	0	0	0	0	0	0	0	0	0	0
Worksop North	700	590	0	6	20	2	410	51	7	23	69	3
Worksop North East	0	0	0	0	0	0	0	0	0	0	0	0
Worksop North West	656	553	0	5	18	1	384	48	7	21	65	3
Worksop South	250	211	0	2	7	1	146	18	3	8	25	1
Worksop South East	0	0	0	0	0	0	0	0	0	0	0	0
Total	3,256	2,745	1	27	91	7	1,906	237	33	105	323	14

	Total	Underground, metro, light rail or tram	Train	Bus, minibus or coach	Taxi or minicab	Driving a car or van	Passenger in a car or van	Motorcycle, scooter or moped	Bicycle	On foot	Other
Inbound	765	0	8	25	2	531	66	9	29	90	4
Outbound	2,745	1	27	91	7	1,906	237	33	105	323	14
2-Way	3,510	2	35	116	9	2,437	303	42	135	413	18

Residential Modal Split Comparison

			Underground, metro, light rail or tram	Train	Bus, minibus or coach	Taxi or minicab	Driving a car or van	Passenger in a car or van	Motorcycle, scooter or moped	Bicycle	On foot	Other
Beckingham			0.00%	0.33%	2.77%	0.33%	82.50%	7.20%	0.78%	1.77%	3.77%	0.55%
Blyth			0.33%	0.44%	2.61%	0.00%	82.68%	4.79%	0.44%	1.74%	6.21%	0.76%
Carlton			0.13%	0.67%	5.84%	0.00%	70.47%	9.53%	1.12%	2.61%	9.12%	0.49%
Clayworth			0.39%	0.51%	2.32%	0.00%	83.53%	6.44%	0.64%	1.67%	3.86%	0.64%
East Markham			0.00%	0.92%	2.06%	0.00%	82.34%	5.05%	1.26%	1.26%	6.77%	0.34%
East Retford East			0.00%	1.01%	1.83%	0.39%	65.99%	7.49%	1.13%	5.50%	16.07%	0.59%
East Retford North			0.14%	0.95%	1.35%	0.68%	67.10%	7.71%	1.62%	6.71%	13.38%	0.36%
East Retford South			0.00%	0.85%	3.63%	0.40%	64.79%	9.37%	1.42%	7.33%	11.93%	0.28%
East Retford West			0.00%	1.99%	1.71%	0.28%	61.49%	7.00%	0.80%	5.80%	20.31%	0.63%
Everton			0.00%	0.57%	2.83%	0.34%	82.47%	5.66%	0.90%	1.24%	4.86%	1.13%
Harworth			0.00%	0.42%	5.70%	0.11%	63.77%	11.32%	1.48%	4.33%	12.38%	0.49%
Langold			0.00%	0.45%	7.58%	0.00%	66.44%	12.60%	0.89%	2.68%	8.14%	1.23%
Misterton			0.00%	0.55%	2.65%	0.00%	76.38%	7.17%	1.32%	4.53%	6.73%	0.66%
Rampton			0.00%	1.22%	3.89%	0.00%	71.81%	5.47%	0.85%	2.43%	13.85%	0.49%
Ranskill			0.00%	0.47%	1.90%	0.00%	78.79%	8.53%	0.83%	2.61%	6.40%	0.47%
Sturton			0.00%	0.58%	3.23%	0.00%	80.37%	6.24%	1.73%	1.85%	5.66%	0.35%
Sutton			0.00%	0.34%	1.70%	0.34%	76.16%	5.90%	1.14%	2.16%	11.01%	1.25%
Tuxford and Trent			0.00%	0.45%	1.93%	0.00%	75.80%	7.83%	1.67%	1.93%	10.08%	0.32%
Welbeck			0.00%	1.82%	3.89%	0.78%	70.17%	6.49%	1.69%	2.72%	10.89%	1.56%
Worksop East			0.00%	1.47%	3.21%	0.39%	61.85%	10.46%	1.32%	4.57%	16.34%	0.39%
Worksop North			0.14%	1.58%	3.35%	0.11%	70.38%	9.44%	1.02%	3.35%	10.47%	0.17%
Worksop North East			0.11%	1.45%	3.48%	0.22%	70.99%	9.09%	1.34%	2.61%	10.39%	0.33%
Worksop North West			0.00%	1.31%	3.96%	0.24%	66.19%	9.17%	1.24%	3.93%	13.50%	0.47%
Worksop South			0.00%	0.93%	2.06%	0.37%	71.34%	7.62%	0.97%	3.33%	12.71%	0.67%
Worksop South East			0.00%	0.64%	5.09%	0.86%	54.80%	13.14%	1.14%	6.32%	17.42%	0.59%
Average of Representative Bassetlaw Wards			0.05%	0.72%	3.57%	0.17%	69.95%	8.79%	1.41%	4.01%	10.87%	0.47%
Average of all Bassetlaw Wards			0.05%	0.98%	3.32%	0.27%	69.43%	8.63%	1.19%	3.84%	11.77%	0.52%
Difference (representative against all)			0.00%	0.26%	-0.25%	0.09%	-0.53%	-0.15%	-0.22%	-0.16%	0.91%	0.06%

Vehicle Trip Rates

Residential Vehicle Trip Rates

AM Inbound	0.163	Vehicle Trips per Dwelling
AM Outbound	0.585	Vehicle Trips per Dwelling
PM Inbound	0.417	Vehicle Trips per Dwelling
PM Outbound	0.257	Vehicle Trips per Dwelling

Residential Vehicle Trip Generation

Ward	Allocation Dwellings	Vehicle Trips						Distribution Wards
		AM			PM			
		Inbound	Outbound	2-Way	Inbound	Outbound	2-Way	
Beckingham	0	0	0	0	0	0	0	-
Blyth	0	0	0	0	0	0	0	-
Carlton	0	0	0	0	0	0	0	-
Clayworth	0	0	0	0	0	0	0	-
East Markham	0	0	0	0	0	0	0	-
East Retford East	0	0	0	0	0	0	0	-
East Retford North	175	29	102	131	73	45	118	East Retford North
East Retford South	184	30	108	138	77	47	124	East Retford North
East Retford West	0	0	0	0	0	0	0	-
Everton	0	0	0	0	0	0	0	-
Harworth	907	148	531	679	378	233	611	Harworth
Langold	0	0	0	0	0	0	0	-
Misterton	89	15	52	67	37	23	60	Misterton
Rampton	0	0	0	0	0	0	0	-
Ranskill	0	0	0	0	0	0	0	-
Sturton	0	0	0	0	0	0	0	-
Sutton	0	0	0	0	0	0	0	-
Tuxford and Trent	295	48	173	221	123	76	199	Tuxford and Trent
Welbeck	0	0	0	0	0	0	0	-
Worksop East	0	0	0	0	0	0	0	-
Worksop North	700	114	410	524	292	180	471	Worksop North West
Worksop North East	0	0	0	0	0	0	0	-
Worksop North West	656	107	384	491	273	169	442	Worksop North West
Worksop South	250	41	146	187	104	64	168	Worksop North West
Worksop South East	0	0	0	0	0	0	0	-
Total	3,256	531	1,906	2,437	1,356	836	2,193	

Site by Site Residential Vehicle Trip Generation

Settlement	Location	Site Reference	Dwelling Numbers	Representative Ward	AM			PM		
					Inbound	Outbound	2-Way	Inbound	Outbound	2-Way
Worksop	North of Montford Road	35	700	Worksop North	114	410	524	292	180	471
Worksop	Gateford Road	28	330	Worksop North West	54	193	247	137	85	222
Worksop	Brancliffe Lane	195	180	Worksop North West	29	105	135	75	46	121
Worksop	Mary Street	90	50	Worksop North West	8	29	37	21	13	34
Worksop	Queen Elizabeth Crescent	30	54	Worksop North West	9	32	40	22	14	36
Worksop	Lincoln St - Fumival Street	561	21	Worksop North West	3	12	16	9	5	14
Worksop	North of Mansfield Rd	9	250	Worksop South	41	146	187	104	64	168
Tuxford	South of Tuxford	122	69	Tuxford and Trent	11	40	52	29	18	46
Tuxford	South of Tuxford	490	196	Tuxford and Trent	32	115	147	82	50	132
Retford	North Road (opposite Randall Way)	51	175	East Retford North	29	102	131	73	45	118
Retford	Lansdown Drive/St Andrew's Way	40 & 52	184	East Retford South	30	108	138	77	47	124
Harworth	East of Blyth Road	190	195	Harworth	32	114	146	81	50	131
Harworth	Baulk Lane	182	408	Harworth	67	239	305	170	105	275
Harworth	Grange View	194	192	Harworth	31	112	144	80	49	129
Harworth	Tickhill Road	192	90	Harworth	15	53	67	37	23	61
Beckingham	Beckingham	RSC1	6	Misterton	1	4	4	2	2	4
Walkeringham	Beckingham	RSC2	14	Misterton	2	8	10	6	4	9
Blyth	Blyth	RSC3	9	Harworth	1	5	7	4	2	6
Clarborough/Hayton	Clayworth	RSC4	0	East Retford North	0	0	0	0	0	0
East Markham	East Markham	RSC5	11	Tuxford and Trent	2	6	8	5	3	7
Gamston	East Markham	RSC6	5	Tuxford and Trent	1	3	4	2	1	3
Everton	Everton	RSC7	13	Misterton	2	8	10	5	3	9
Gringley-on-the-Hill	Everton	RSC8	0	Misterton	0	0	0	0	0	0
Misson	Everton	RSC9	18	Misterton	3	11	13	7	5	12
Rampton	Rampton	RSC10	14	Tuxford and Trent	2	8	10	6	4	9
Mattersey	Ranskill	RSC11	13	Harworth	2	8	10	5	3	9
Ranskill	Ranskill	RSC12	0	Harworth	0	0	0	0	0	0
North Leverton	Sturton	RSC13	15	Misterton	2	9	11	6	4	10
North/South Wheatley	Sturton	RSC14	12	Misterton	2	7	9	5	3	8
Sturton-le-Steeple	Sturton	RSC15	11	Misterton	2	6	8	5	3	7
Lound	Sutton	RSC16	0	East Retford North	0	0	0	0	0	0
Sutton	Sutton	RSC17	0	East Retford North	0	0	0	0	0	0
Dunham	Tuxford & Trent	RSC18	0	Tuxford and Trent	0	0	0	0	0	0
Cuckney	Welbeck	RSC19	5	Worksop North West	1	3	4	2	1	3
Elkesley	Welbeck	RSC20	11	Worksop North West	2	6	8	5	3	7
Nether Langwith	Welbeck	RSC21	5	Worksop North West	1	3	4	2	1	3
			3,256		531	1,906	2,437	1,356	836	2,193

TRICS Methodology

TRICS data has been derived using the largest sample of 'Multi Modal' data available within TRICS 2012(a) in order to be as representative as possible (TRICS Good Practice Guide recommends a minimum of 20 sites). The only sites that were excluded from the analysis were sites in Greater London, Northern Ireland and the Republic of Ireland as these were considered to be unrepresentative.

The trip generation methodology applies the total 'Person Trip' rates obtained from TRICS and estimates modal share using observed modal splits derived from 2001 Census data. Average modal splits are applied for the whole of the District as there is little difference between the modal splits for rural and urban areas (i.e. Worksop which is the largest town within the District) .

The TRICS 'Person Trip' rates have been checked for robustness using the mean/median 'cross-testing' methodology advocated in the TRICS Good Practice Guide (see following worksheets for details). The test reveals that in the AM the 2-way median trip rates are slightly higher than the average rates whilst in the PM peak the 2-way average trip rates are slightly higher. Median rates have therefore been applied in the AM and average in the PM.

The use of average/median trip rates as opposed to 85th %ile trip rates is considered appropriate for this strategic study because there is no reason to suggest that residential sites within the Bassetlaw area are likely to exhibt higher trip rates than the average trip rates extracted from the TRICS database. On this basis the applied average rates are considered to be robust.

Vehicle Trips Per Household - Urban		
	AM	PM
Inbound	0.163	0.417
Outbound	0.585	0.257
2-Way	0.748	0.673

Vehicle trip rates per dwelling derived in this spreadsheet

TRICS 2012(b)v6.10.1
Trip Rate Parameter: Number of dwellings
TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
Calculation Factor: 1 DWELLS
Count Type: TOTAL PEOPLE

	ARRIVALS			DEPARTURES			TOTALS			
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	
00:00-01:00	0	0	0	0	0	0	0	0	0	
01:00-02:00	0	0	0	0	0	0	0	0	0	
02:00-03:00	0	0	0	0	0	0	0	0	0	
03:00-04:00	0	0	0	0	0	0	0	0	0	
04:00-05:00	0	0	0	0	0	0	0	0	0	
05:00-06:00	0	0	0	0	0	0	0	0	0	
06:00-07:00	0	0	0	0	0	0	0	0	0	
07:00-08:00	41	103	0.112	41	103	0.387	41	103	0.499	
08:00-09:00	41	103	0.254	41	103	0.820	41	103	1.074	Mean AM
09:00-10:00	41	103	0.260	41	103	0.344	41	103	0.604	
10:00-11:00	41	103	0.231	41	103	0.302	41	103	0.533	
11:00-12:00	41	103	0.288	41	103	0.275	41	103	0.563	
12:00-13:00	41	103	0.303	41	103	0.280	41	103	0.583	
13:00-14:00	41	103	0.284	41	103	0.270	41	103	0.554	
14:00-15:00	41	103	0.298	41	103	0.298	41	103	0.596	
15:00-16:00	41	103	0.614	41	103	0.372	41	103	0.986	
16:00-17:00	41	103	0.550	41	103	0.342	41	103	0.892	
17:00-18:00	41	103	0.600	41	103	0.370	41	103	0.970	Mean PM
18:00-19:00	41	103	0.439	41	103	0.377	41	103	0.816	
19:00-20:00	0	0	0	0	0	0	0	0	0	
20:00-21:00	0	0	0	0	0	0	0	0	0	
21:00-22:00	0	0	0	0	0	0	0	0	0	
22:00-23:00	0	0	0	0	0	0	0	0	0	
23:00-24:00	0	0	0	0	0	0	0	0	0	
Daily Trip Rates:			4.233			4.437			8.67	

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
Ranking Type: TOTALS Time Range: 08:00-09:00
**85th Percentile = no. 7

Rank	Site Ref	Description	Area	DWELLS	Day	Date	Arrivals	Departures	Totals
1	BD-03-A-02	SEMI DETACHED, LUTON	BEDFORDSHIRE	82	Tuesday	06/07/2004	0.744	1.317	2.061
2	CB-03-A-03	SEMI DETACHED, WORKINGTON	CUMBRIA	40	Thursday	20/11/2008	0.450	1.425	1.875
3	CH-03-A-05	DETACHED, CREWE	CHESHIRE	17	Tuesday	14/10/2008	0.235	1.471	1.706
4	WO-03-A-01	DETACHED, BROMSGROVE	WORCESTERSHIRE	10	Thursday	23/06/2005	0.600	1.100	1.700
5	LE-03-A-01	DETACHED, MELTON MOWBRAY	LEICESTERSHIRE	11	Tuesday	03/05/2005	0.364	1.273	1.637
6	CA-03-A-04	DETACHED, PETERBOROUGH	CAMBRIDGESHIRE	9	Tuesday	18/10/2011	0.000	1.556	1.556
7 **	EX-03-A-01	SEMI-DET., STANFORD-LE-HOPE	ESSEX	237	Tuesday	13/05/2008	0.367	1.152	1.519
8	SF-03-A-02	SEMI DET./TERRACED, IPSWICH	SUFFOLK	230	Thursday	24/05/2007	0.443	1.074	1.517
9	WO-03-A-03	DETACHED, KIDDERMINSTER	WORCESTERSHIRE	138	Friday	05/05/2006	0.384	1.058	1.442
10	GM-03-A-10	DETACHED/SEMI, MANCHESTER	GREATER MANCHESTER	29	Wednesday	12/10/2011	0.172	1.207	1.379
11	WM-03-A-03	MIXED HOUSING, COVENTRY	WEST MIDLANDS	84	Monday	24/09/2007	0.405	0.905	1.310
12	NY-03-A-01	MIXED HOUSES,NORTHALLERTON	NORTH YORKSHIRE	52	Tuesday	25/09/2007	0.269	1.000	1.269
13	WM-03-A-01	TERRACED, COVENTRY	WEST MIDLANDS	79	Friday	03/02/2006	0.380	0.886	1.266
14	DS-03-A-01	SEMI D./TERRACED, DRONFIELD	DERBYSHIRE	20	Thursday	22/06/2006	0.600	0.650	1.250
15	SH-03-A-04	TERRACED, SHREWSBURY	SHROPSHIRE	108	Thursday	11/06/2009	0.407	0.843	1.250
16	SF-03-A-03	MIXED HOUSES, BURY ST EDMDS	SUFFOLK	101	Monday	15/05/2006	0.218	1.010	1.228
17	WO-03-A-02	SEMI DETACHED, REDDITCH	WORCESTERSHIRE	48	Tuesday	02/05/2006	0.292	0.917	1.209
18	LC-03-A-29	DETACHED/SEMI D., BLACKBURN	LANCASHIRE	185	Thursday	10/06/2004	0.162	1.016	1.178
19	LN-03-A-01	MIXED HOUSES, LINCOLN	LINCOLNSHIRE	150	Tuesday	15/05/2007	0.247	0.920	1.167
20	SH-03-A-03	DETATCHED, SHREWSBURY	SHROPSHIRE	10	Friday	26/06/2009	0.300	0.800	1.100
21	LN-03-A-02	MIXED HOUSES, LINCOLN	LINCOLNSHIRE	186	Monday	14/05/2007	0.301	0.790	1.091
22	BD-03-A-01	SEMI DETACHED, LUTON	BEDFORDSHIRE	131	Thursday	08/07/2004	0.206	0.870	1.076
23	WO-03-A-06	DET./TERRACED, BROMSGROVE	WORCESTERSHIRE	232	Thursday	30/06/2005	0.129	0.927	1.056
24	CW-03-A-02	SEMI D./DETATCHED, TRURO	CORNWALL	73	Tuesday	18/09/2007	0.178	0.877	1.055
25	WM-03-A-02	DETACHED/SEMI D., STRBRIDGE	WEST MIDLANDS	12	Wednesday	26/04/2006	0.333	0.667	1.000
26	CA-03-A-02	MIXED HOUSES, PETERBOROUGH	CAMBRIDGESHIRE	363	Thursday	13/05/2004	0.273	0.702	0.975
27	TV-03-A-01	MIXED HOUSES/FLATS, HARTLEPL	TEES VALLEY	225	Thursday	14/04/2005	0.196	0.764	0.960
28	ST-03-A-05	TERRACED/DETACHED, STOKE	STAFFORDSHIRE	14	Wednesday	26/11/2008	0.214	0.714	0.928
29	SF-03-A-01	SEMI DETACHED, IPSWICH	SUFFOLK	77	Wednesday	23/05/2007	0.117	0.805	0.922
30	CB-03-A-04	SEMI DETACHED, WORKINGTON	CUMBRIA	82	Friday	24/04/2009	0.207	0.695	0.902
31	NY-03-A-05	HOUSES AND FLATS, RIPON	NORTH YORKSHIRE	71	Monday	22/09/2008	0.211	0.676	0.887
32	NT-03-A-03	SEMI DETACHED,KIRKBY-IN-ASHFD	NOTTINGHAMSHIRE	166	Wednesday	28/06/2006	0.169	0.687	0.856
33	GS-03-A-01	SEMI D./TERRACED, GLOUCESTER	GLOUCESTERSHIRE	73	Tuesday	25/05/2004	0.192	0.616	0.808
34	ES-03-A-02	PRIVATE HOUSING,PEACEHAVEN	EAST SUSSEX	37	Friday	18/11/2011	0.108	0.622	0.730
35 **	LC-03-A-22	BUNGALOWS, BLACKPOOL	LANCASHIRE	98	Tuesday	18/10/2005	0.255	0.469	0.724
36	WL-03-A-01	SEMI D./TERRACED W. BASSETT	WILTSHIRE	99	Monday	02/10/2006	0.081	0.636	0.717
37	NY-03-A-06	BUNGALOWS/SEMI DET., BBDGE	NORTH YORKSHIRE	115	Friday	14/10/2011	0.157	0.539	0.696
38	CH-03-A-06	SEMI-DET./BUNGALOWS,CREWE	CHESHIRE	129	Tuesday	14/10/2008	0.225	0.457	0.682
39	CW-03-A-01	TERRACED, PENZANCE	CORNWALL	13	Thursday	30/06/2005	0.385	0.231	0.616
40	MS-03-A-01	TERRACED, RUNCORN	MERSEYSIDE	372	Thursday	06/10/2005	0.110	0.478	0.588
41	NY-03-A-03	PRIVATE HOUSING, BOROUGHBRIDGE	NORTH YORKSHIRE	14	Monday	15/09/2008	0.143	0.357	0.500

	2-Way	Arrivals	Departures
85th percentile	1.519	0.405	1.152
Mean	1.074	0.254	0.820
Median	1.091	0.235	0.843
Difference between mean and median	-0.017	0.019	-0.023

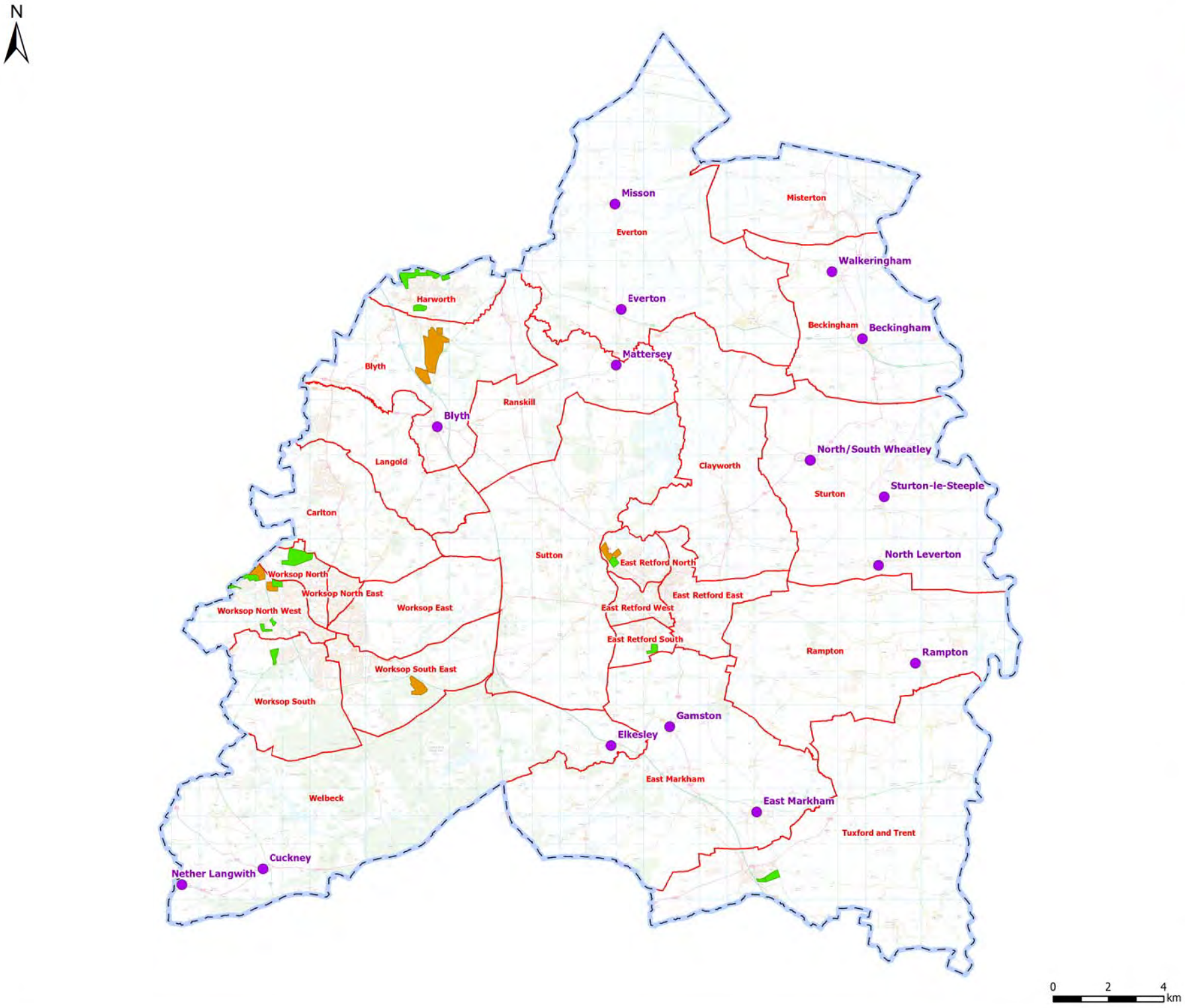
Note: The mean/median 'cross-reference' test demonstrates that the average person trip rates are being biased by low trip generation sites in the sample. As a result the higher median person trip rates have been applied in the assessment.

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
Ranking Type: TOTALS Time Range: 17:00-18:00
**85th Percentile = no. 7

Rank	Site Ref	Description	Area	DWELLS	Day	Date	Arrivals	Departures	Totals
1	LC-03-A-29	DETACHED/SEMI D., BLACKBURN	LANCASHIRE	185	Thursday	10/06/2004	0.897	0.589	1.486
2	WM-03-A-03	MIXED HOUSING, COVENTRY	WEST MIDLANDS	84	Monday	24/09/2007	0.798	0.560	1.358
3	LN-03-A-02	MIXED HOUSES, LINCOLN	LINCOLNSHIRE	186	Monday	14/05/2007	0.769	0.548	1.317
4	SH-03-A-03	DETATCHED, SHREWSBURY	SHROPSHIRE	10	Friday	26/06/2009	0.700	0.600	1.300
5	SF-03-A-02	SEMI DET./TERRACED, IPSWICH	SUFFOLK	230	Thursday	24/05/2007	0.778	0.517	1.295
6	SH-03-A-04	TERRACED, SHREWSBURY	SHROPSHIRE	108	Thursday	11/06/2009	0.833	0.426	1.259
7 **	CA-03-A-04	DETACHED, PETERBOROUGH	CAMBRIDGESHIRE	9	Tuesday	18/10/2011	1.000	0.222	1.222
8	CW-03-A-02	SEMI D./DETATCHED, TRURO	CORNWALL	73	Tuesday	18/09/2007	0.822	0.397	1.219
9	WO-03-A-03	DETACHED, KIDDERMINSTER	WORCESTERSHIRE	138	Friday	05/05/2006	0.812	0.399	1.211
10	WO-03-A-01	DETACHED, BROMSGROVE	WORCESTERSHIRE	10	Thursday	23/06/2005	0.600	0.600	1.200
11	EX-03-A-01	SEMI-DET., STANFORD-LE-HOPE	ESSEX	237	Tuesday	13/05/2008	0.675	0.481	1.156
12	WM-03-A-01	TERRACED, COVENTRY	WEST MIDLANDS	79	Friday	03/02/2006	0.759	0.392	1.151
13	NT-03-A-03	SEMI DETACHED,KIRKBY-IN-ASHFD	NOTTINGHAMSHIRE	166	Wednesday	28/06/2006	0.645	0.464	1.109
14	SF-03-A-03	MIXED HOUSES, BURY ST EDMDS	SUFFOLK	101	Monday	15/05/2006	0.713	0.337	1.050
15	CB-03-A-03	SEMI DETACHED, WORKINGTON	CUMBRIA	40	Thursday	20/11/2008	0.675	0.375	1.050
16	WO-03-A-02	SEMI DETACHED, REDDITCH	WORCESTERSHIRE	48	Tuesday	02/05/2006	0.646	0.354	1.000
17	CW-03-A-01	TERRACED, PENZANCE	CORNWALL	13	Thursday	30/06/2005	0.615	0.308	0.923
18	WM-03-A-02	DETACHED/SEMI D., STRBRIDGE	WEST MIDLANDS	12	Wednesday	26/04/2006	0.167	0.750	0.917
19	TV-03-A-01	MIXED HOUSES/FLATS, HARTLEPL	TEES VALLEY	225	Thursday	14/04/2005	0.556	0.351	0.907
20	BD-03-A-02	SEMI DETACHED, LUTON	BEDFORDSHIRE	82	Tuesday	06/07/2004	0.415	0.476	0.891
21	WO-03-A-06	DET./TERRACED, BROMSGROVE	WORCESTERSHIRE	232	Thursday	30/06/2005	0.629	0.259	0.888
22	NY-03-A-05	HOUSES AND FLATS, RIPON	NORTH YORKSHIRE	71	Monday	22/09/2008	0.662	0.225	0.887
23	GS-03-A-01	SEMI D./TERRACED, GLOUCESTER	GLOUCESTERSHIRE	73	Tuesday	25/05/2004	0.658	0.219	0.877
24	SF-03-A-01	SEMI DETACHED, IPSWICH	SUFFOLK	77	Wednesday	23/05/2007	0.494	0.377	0.871
25	LN-03-A-01	MIXED HOUSES, LINCOLN	LINCOLNSHIRE	150	Tuesday	15/05/2007	0.587	0.280	0.867
26	BD-03-A-01	SEMI DETACHED, LUTON	BEDFORDSHIRE	131	Thursday	08/07/2004	0.573	0.290	0.863
27	NY-03-A-03	PRIVATE HOUSING, BOROUGHBRIDGE	NORTH YORKSHIRE	14	Monday	15/09/2008	0.643	0.214	0.857
28	ST-03-A-05	TERRACED/DETACHED, STOKE	STAFFORDSHIRE	14	Wednesday	26/11/2008	0.571	0.286	0.857
29	CH-03-A-05	DETACHED, CREWE	CHESHIRE	17	Tuesday	14/10/2008	0.471	0.353	0.824
30	LE-03-A-01	DETACHED, MELTON MOWBRAY	LEICESTERSHIRE	11	Tuesday	03/05/2005	0.455	0.364	0.819
31	LC-03-A-22	BUNGALOWS, BLACKPOOL	LANCASHIRE	98	Tuesday	18/10/2005	0.510	0.306	0.816
32	CB-03-A-04	SEMI DETACHED, WORKINGTON	CUMBRIA	82	Friday	24/04/2009	0.561	0.244	0.805
33	CA-03-A-02	MIXED HOUSES, PETERBOROUGH	CAMBRIDGESHIRE	363	Thursday	13/05/2004	0.444	0.358	0.802
34	WL-03-A-01	SEMI D./TERRACED W. BASSETT	WILTSHIRE	99	Monday	02/10/2006	0.505	0.293	0.798
35 **	NY-03-A-01	MIXED HOUSES,NORTHALLERTON	NORTH YORKSHIRE	52	Tuesday	25/09/2007	0.404	0.365	0.769
36	GM-03-A-10	DETACHED/SEMI, MANCHESTER	GREATER MANCHESTER	29	Wednesday	12/10/2011	0.621	0.138	0.759
37	ES-03-A-02	PRIVATE HOUSING,PEACEHAVEN	EAST SUSSEX	37	Friday	18/11/2011	0.703	0.027	0.730
38	NY-03-A-06	BUNGALOWS/SEMI DET., BBDGE	NORTH YORKSHIRE	115	Friday	14/10/2011	0.417	0.270	0.687
39	MS-03-A-01	TERRACED, RUNCORN	MERSEYSIDE	372	Thursday	06/10/2005	0.395	0.277	0.672
40	DS-03-A-01	SEMI D./TERRACED, DRONFIELD	DERBYSHIRE	20	Thursday	22/06/2006	0.250	0.350	0.600
41	CH-03-A-06	SEMI-DET./BUNGALOWS,CREWE	CHESHIRE	129	Tuesday	14/10/2008	0.178	0.225	0.403

	2-Way	Arrivals	Departures
85th Percentile	1.222	0.778	0.517
Mean	0.970	0.600	0.370
Median	0.888	0.621	0.353
Difference between mean and median	0.082	-0.021	0.017

Note: The mean/median 'cross-reference' test demonstrates that the average person trip rates are not being unduly biased by low or high trip generation sites in the sample. In addition the 2-way average trip rates are slightly higher than the median trip rates Therefore the use of average trip rates are considered acceptable.



Legend

- Rural Service Centres
- Residential
- Employment
- Bassetlaw District Boundary
- Bassetlaw Ward Boundaries

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REV	DESCRIPTION	BY	CHK	APP	DATE
A	Revision of SHLAA sites	JJC	ASG	ASG	18/11/13

Client:

EXECUTIVE PARK
AVALON WAY
ANSTEY
LEICESTER
LE7 7GR
TEL: +44 (0)116 234 8000
FAX: +44 (0)116 234 8001
e-mail: leicester@wyg.com

Project:
Site Allocations D.P.D. Modelling Support

Drawing Title:
Figure 10
Allocation Site Locations

Scale @ A3	Drawn	Date	Checked	Date	Approved	Date
NTS	JJC	17/09/12	ASG	17/09/12	ASG	17/09/12

Project No.	Office	Type	Drawing No.	Revision
A078085	35	18	007	A

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Employment Trip Generation

Analysis of 2001 Census Data: 2001 Ward Boundaries

2001 Wards	Census 2001: Workplace Population (2001 Ward Boundaries) - Method of Travel to Work (Persons)													
	All People	Not currently working	Currently Working	Work From Home	Underground, metro, light rail or tram	Train	Bus, minibus or coach	Taxi or minicab	Driving a car or van	Passenger in a car or van	Motorcycle, scooter or moped	Bicycle	On foot	Other
Beckingham	1,208	588	620	138	0	3	13	0	340	51	11	33	28	3
Blyth	2,619	604	2,015	142	0	3	45	3	1,465	183	26	50	92	6
Carlton	4,222	1,855	2,367	228	3	6	62	3	1,512	229	41	63	209	11
Clayworth	966	564	402	130	0	0	11	0	207	19	4	11	17	3
East Markham	1,619	645	974	198	0	3	44	5	535	82	15	11	78	3
East Retford East	3,969	2,078	1,891	237	0	8	62	14	978	143	9	96	341	3
East Retford North	3,501	1,758	1,743	169	0	7	42	5	1,019	131	13	120	227	10
East Retford South	1,843	1,249	594	129	0	3	7	0	262	30	5	56	99	3
East Retford West	4,561	1,089	3,472	155	0	9	89	12	2,126	219	28	234	592	8
Everton	1,133	569	564	156	0	0	17	3	289	45	4	8	39	3
Harworth	4,357	2,510	1,847	168	3	3	31	3	1,198	100	15	73	250	3
Langold	1,163	821	342	72	0	0	13	0	153	30	3	8	57	6
Misterton	1,199	635	564	133	0	3	10	0	282	31	4	37	58	6
Rampton	3,263	950	2,313	150	0	7	31	3	1,790	134	42	32	120	4
Ranskill	1,192	741	451	111	0	0	8	0	229	37	3	12	48	3
Sturton	1,460	556	904	166	0	3	17	3	595	52	5	20	43	0
Sutton	2,436	1,170	1,266	151	0	0	21	3	837	61	29	43	116	5
Tuxford and Trent	2,985	1,140	1,845	266	0	4	42	3	1,195	143	30	33	122	7
Welbeck	2,413	881	1,532	106	0	0	40	3	1,079	107	21	35	129	12
Worksop East	3,965	2,053	1,912	160	3	7	45	3	1,291	104	7	24	265	3
Worksop North	3,102	1,691	1,411	239	3	10	29	9	808	91	7	38	174	3
Worksop North East	3,314	1,823	1,491	198	0	11	52	4	893	91	10	21	206	5
Worksop North West	7,765	1,741	6,024	242	3	21	206	19	3,968	579	110	316	544	16
Worksop South	6,085	1,720	4,365	265	0	12	339	14	2,634	351	51	97	586	16
Worksop South East	8,617	2,749	5,868	169	3	25	306	12	3,822	760	99	211	452	9
District Average	3,158	1,287	1,871	171	1	6	63	5	1,180	152	24	67	196	6
Worksop Average	5,475	1,963	3,512	212	2	14	163	10	2,236	329	47	118	371	9
Rural Average	2,427	1,074	1,353	158	0	3	32	3	847	96	16	51	140	5

- Assumed to represent the urban area of Worksop
- Assumed to represent the rural areas of the District

2001 Wards	Census 2001: Workplace Population (2001 Ward Boundaries) - Method of Travel to Work (%)										
	Underground, metro, light rail or tram	Train	Bus, minibus or coach	Taxi or minicab	Driving a car or van	Passenger in a car or van	Motorcycle, scooter or moped	Bicycle	On foot	Other	Total
District Average	0.04%	0.35%	3.72%	0.29%	69.43%	8.95%	1.39%	3.96%	11.51%	0.36%	100.00%
Worksop Average	0.06%	0.43%	4.93%	0.31%	67.76%	9.98%	1.43%	3.57%	11.25%	0.26%	100.00%
Rural Average	0.03%	0.27%	2.67%	0.28%	70.88%	8.05%	1.36%	4.29%	11.74%	0.44%	100.00%

Note: As there is little difference between the Worksop average and the average for the whole District the averages for the whole District will be applied.

Trip Rate and Modal Split Summary

Person trips per 100 sqm employment GFA are estimated from data obtained from the following tip rates obtained from the TRICS database.
These represent person trips by all modes.

TRICS Person Trips Per 100sqm GFA (All Modes)		
	AM	PM
Inbound	2.286	0.218
Outbound	0.318	1.978

Note: AM = 08:00 - 09:00, PM = 17:00 - 18:00
Data Source: TRICS 2012(b) Median trip rates for 'Employment - Business Park'.

Census 2001 Daytime Population 'Travel to Work' modal splits have then been used to estimate trips made by each mode of travel.

	Census 2001: Workplace Population (2001 Ward Boundaries) - Method of Travel to Work (%)										
	Underground, metro, light rail or tram	Train	Bus, minibus or coach	Taxi or minicab	Driving a car or van	Passenger in a car or van	Motorcycle, scooter or moped	Bicycle	On foot	Other	Total
District Average	0.04%	0.35%	3.72%	0.29%	69.43%	8.95%	1.39%	3.96%	11.51%	0.36%	100.00%

Note: People working from home are ignored in the calculation because these are not relevant for employment sites.

Multiplying the TRICS Person Trip rates by the percentage of persons 'Driving a Car or Van' provides trip rates for vehicle trip generation per 100sqm GFA as follows:

Vehicle Trips Per 100sqm GFA (Urban)		
	AM	PM
Inbound	1.587	0.151
Outbound	0.221	1.373

Note: TRICS 'Total People' trip rates include OGV drivers arriving/departing employment sites. However, OGV activity in the peak hours is typically minimal and has therefore not been separated from the trip rates.
The resultant vehicle trip generation therefore includes a small volume of OGV trips.

Trip Rate and Modal Split Summary

Person trips per 100 sqm employment GFA are estimated from data obtained from the following tip rates obtained from the TRICS database.
These represent person trips by all modes.

TRICS Person Trips Per 100sqm GFA (All Modes)		
	AM	PM
Inbound	0.782	0.176
Outbound	0.430	0.744

Note: AM = 08:00 - 09:00, PM = 17:00 - 18:00
Data Source: TRICS 2010(a) Median trip rates for 'Employment - Industrial Estates'.

Census 2001 Daytime Population 'Travel to Work' modal splits have then been used to estimate trips made by each mode of travel.

	Census 2001: Workplace Population (2001 Ward Boundaries) - Method of Travel to Work (%)										
	Underground, metro, light rail or tram	Train	Bus, minibus or coach	Taxi or minicab	Driving a car or van	Passenger in a car or van	Motorcycle, scooter or moped	Bicycle	On foot	Other	Total
District Average	0.04%	0.35%	3.72%	0.29%	69.43%	8.95%	1.39%	3.96%	11.51%	0.36%	100.00%

Note: People working from home are ignored in the calculation because these are not relevant for employment sites.

Multiplying the TRICS Person Trip rates by the percentage of persons 'Driving a Car or Van' provides trip rates for vehicle trip generation per 100sqm GFA as follows:

Vehicle Trips Per 100sqm GFA (Urban)		
	AM	PM
Inbound	0.543	0.122
Outbound	0.299	0.517

Note: TRICS 'Total People' trip rates include OGV drivers arriving/departing employment sites. However, OGV activity in the peak hours is typically minimal and has therefore not been separated from the trip rates.
The resultant vehicle trip generation therefore includes a small volume of OGV trips.

Trip Rate and Modal Split Summary

Person trips per 100 sqm employment GFA are estimated from data obtained from the following tip rates obtained from the TRICS database.
These represent person trips by all modes.

TRICS Person Trips Per 100sqm GFA (All Modes)		
	AM	PM
Inbound	0.038	0.019
Outbound	0.019	0.046

Note: AM = 08:00 - 09:00, PM = 17:00 - 18:00
Data Source: TRICS 2010(a) Average trip rates for 'Employment - Warehouse (Commercial)'.

Census 2001 Daytime Population 'Travel to Work' modal splits have then been used to estimate trips made by each mode of travel.

	Census 2001: Workplace Population (2001 Ward Boundaries) - Method of Travel to Work (%)										
	Underground, metro, light rail or tram	Train	Bus, minibus or coach	Taxi or minicab	Driving a car or van	Passenger in a car or van	Motorcycle, scooter or moped	Bicycle	On foot	Other	Total
District Average	0.04%	0.35%	3.72%	0.29%	69.43%	8.95%	1.39%	3.96%	11.51%	0.36%	100.00%

Note: People working from home are ignored in the calculation because these are not relevant for employment sites.

Multiplying the TRICS Person Trip rates by the percentage of persons 'Driving a Car or Van' provides trip rates for vehicle trip generation per 100sqm GFA as follows:

Vehicle Trips Per 100sqm GFA (Urban)		
	AM	PM
Inbound	0.026	0.013
Outbound	0.013	0.032

Note: TRICS 'Total People' trip rates include OGV drivers arriving/departing employment sites. However, OGV activity in the peak hours is typically minimal and has therefore not been separated from the trip rates.
The resultant vehicle trip generation therefore includes a small volume of OGV trips.

Summary of Employment Sites to be Assessed

Site Ref	Name	Location	Proposed Use	Assumed Employment Land Area (sqm)	Net Employment Developable Area (sqm)	Ward	Assumed Use Classes		
							B1	B2	B8
W6	Claylands Ave	Worksop	Mixed Use	65,000	26,000	Worksop North West	25%	25%	50%
W8	Gateford Rd	Worksop	Mixed Use	154,000	61,600	Worksop North West	25%	25%	50%
W1	A57 South of Manton Wood	Worksop	Mixed Use	250,000	100,000	Worksop South East	25%	25%	50%
R7	North Road	Retford	Mixed Use	157,000	62,800	East Retford North	0%	100%	0%
HB1	North of Snape Lane	Harworth Bircotes	Mixed Use	40,000	16,000	Harworth	50%	50%	0%
HB2	East of Blyth Road	Harworth Bircotes	Mixed Use	760,000	304,000	Harworth	25%	25%	50%
HB3	Between M1 and Blyth Road	Harworth Bircotes	Mixed Use	210,000	84,000	Harworth	0%	0%	100%
Total				1,636,000	654,400				

Notes:

1. Net employment development areas assumed to be 40% of assumed site area.

Employment AM Employee Trip Generation by Mode of Transport

	AM Inbound Employee Trip Rate (per 100sqm GFA)	Underground, metro, light rail or tram	Train	Bus, minibus or coach	Taxi or minicab	Driving a car or van	Passenger in a car or van	Motorcycle, scooter or moped	Bicycle	On foot	Other
District Average (B1)	2.286	0.04%	0.35%	3.72%	0.29%	69.43%	8.95%	1.39%	3.96%	11.51%	0.36%
District Average (B2)	0.782	0.04%	0.35%	3.72%	0.29%	69.43%	8.95%	1.39%	3.96%	11.51%	0.36%
District Average (B8)	0.038	0.04%	0.35%	3.72%	0.29%	69.43%	8.95%	1.39%	3.96%	11.51%	0.36%

Site Ref	Name	Net Employment Developable Area (sqm)	AM Inbound Person Trips	Underground, metro, light rail or tram	Train	Bus, minibus or coach	Taxi or minicab	Driving a car or van	Passenger in a car or van	Motorcycle, scooter or moped	Bicycle	On foot	Other
W6	Claylands Ave	26,000	204	0	1	8	1	142	18	3	8	24	1
W8	Gateford Rd	61,600	484	0	2	18	1	336	43	7	19	56	2
W1	A57 South of Manton Wood	100,000	786	0	3	29	2	546	70	11	31	90	3
R7	North Road	62,800	491	0	2	18	1	341	44	7	19	57	2
HB1	North of Snape Lane	16,000	245	0	1	9	1	170	22	3	10	28	1
HB2	East of Blyth Road	304,000	2,389	1	8	89	7	1,659	214	33	95	275	8
HB3	Between M1 and Blyth Road	84,000	32	0	0	1	0	22	3	0	1	4	0
Total		654,400	4,632	2	16	172	14	3,216	414	65	183	533	16

Employment AM Employee Trip Generation by Mode of Transport

	AM Outboundbound Employee Trip Rate (per 100sqm GFA)	Underground, metro, light rail or tram	Train	Bus, minibus or coach	Taxi or minicab	Driving a car or van	Passenger in a car or van	Motorcycle, scooter or moped	Bicycle	On foot	Other
District Average (B1)	0.318	0.04%	0.35%	3.72%	0.29%	69.43%	8.95%	1.39%	3.96%	11.51%	0.36%
District Average (B2)	0.430	0.04%	0.35%	3.72%	0.29%	69.43%	8.95%	1.39%	3.96%	11.51%	0.36%
District Average (B8)	0.019	0.04%	0.35%	3.72%	0.29%	69.43%	8.95%	1.39%	3.96%	11.51%	0.36%

Site Ref	Name	Net Employment Developable Area (sqm)	AM Outbound Person Trips	Underground, metro, light rail or tram	Train	Bus, minibus or coach	Taxi or minicab	Driving a car or van	Passenger in a car or van	Motorcycle, scooter or moped	Bicycle	On foot	Other
W6	Claylands Ave	26,000	51	0	0	2	0	35	5	1	2	6	0
W8	Gateford Rd	61,600	121	0	0	5	0	84	11	2	5	14	0
W1	A57 South of Manton Wood	100,000	197	0	1	7	1	136	18	3	8	23	1
R7	North Road	62,800	270	0	1	10	1	187	24	4	11	31	1
HB1	North of Snape Lane	16,000	60	0	0	2	0	42	5	1	2	7	0
HB2	East of Blyth Road	304,000	597	0	2	22	2	415	53	8	24	69	2
HB3	Between M1 and Blyth Road	84,000	16	0	0	1	0	11	1	0	1	2	0
Total		654,400	1,312	1	5	49	4	911	117	18	52	151	5

Employment Vehicle Trip Generation

WYG Ref	Name	Net Employment Developable Area (sqm)	Vehicle Trips						Distribution Wards
			AM			PM			
			Inbound	Outbound	2-Way	Inbound	Outbound	2-Way	
W6	Claylands Ave	26,000	142	35	177	19	127	146	Worksop North West
W8	Gateford Rd	61,600	336	84	420	46	301	347	Worksop North West
W1	A57 South of Manton Wood	100,000	546	136	682	75	488	563	Worksop South East
R7	North Road	62,800	341	187	528	77	324	401	East Retford North
HB1	North of Snape Lane	16,000	170	42	212	22	151	173	Harworth
HB2	East of Blyth Road	304,000	1,659	415	2,073	228	1,485	1,713	Harworth
HB3	Between M1 and Blyth Road	84,000	22	11	33	11	27	38	Harworth
		654,400	3,216	911	4,127	478	2,903	3,381	

Employment Modal Split Comparison

		Underground, metro, light rail or tram	Train	Bus, minibus or coach	Taxi or minicab	Driving a car or van	Passenger in a car or van	Motorcycle, scooter or moped	Bicycle	On foot	Other
Beckingham		0.00%	0.62%	2.70%	0.00%	70.54%	10.58%	2.28%	6.85%	5.81%	0.62%
Blyth		0.00%	0.16%	2.40%	0.16%	78.22%	9.77%	1.39%	2.67%	4.91%	0.32%
Carlton		0.14%	0.28%	2.90%	0.14%	70.69%	10.71%	1.92%	2.95%	9.77%	0.51%
Clayworth		0.00%	0.00%	4.04%	0.00%	76.10%	6.99%	1.47%	4.04%	6.25%	1.10%
East Markham		0.00%	0.39%	5.67%	0.64%	68.94%	10.57%	1.93%	1.42%	10.05%	0.39%
East Retford East		0.00%	0.48%	3.75%	0.85%	59.13%	8.65%	0.54%	5.80%	20.62%	0.18%
East Retford North		0.00%	0.44%	2.67%	0.32%	64.74%	8.32%	0.83%	7.62%	14.42%	0.64%
East Retford South		0.00%	0.65%	1.51%	0.00%	56.34%	6.45%	1.08%	12.04%	21.29%	0.65%
East Retford West		0.00%	0.27%	2.68%	0.36%	64.09%	6.60%	0.84%	7.05%	17.85%	0.24%
Everton		0.00%	0.00%	4.17%	0.74%	70.83%	11.03%	0.98%	1.96%	9.56%	0.74%
Harworth		0.18%	0.18%	1.85%	0.18%	71.35%	5.96%	0.89%	4.35%	14.89%	0.18%
Langold		0.00%	0.00%	4.81%	0.00%	56.67%	11.11%	1.11%	2.96%	21.11%	2.22%
Misterton		0.00%	0.70%	2.32%	0.00%	65.43%	7.19%	0.93%	8.58%	13.46%	1.39%
Rampton		0.00%	0.32%	1.43%	0.14%	82.76%	6.20%	1.94%	1.48%	5.55%	0.18%
Ranskill		0.00%	0.00%	2.35%	0.00%	67.35%	10.88%	0.88%	3.53%	14.12%	0.88%
Sturton		0.00%	0.41%	2.30%	0.41%	80.62%	7.05%	0.68%	2.71%	5.83%	0.00%
Sutton		0.00%	0.00%	1.88%	0.27%	75.07%	5.47%	2.60%	3.86%	10.40%	0.45%
Tuxford and Trent		0.00%	0.25%	2.66%	0.19%	75.68%	9.06%	1.90%	2.09%	7.73%	0.44%
Welbeck		0.00%	0.00%	2.81%	0.21%	75.67%	7.50%	1.47%	2.45%	9.05%	0.84%
Worksop East		0.17%	0.40%	2.57%	0.17%	73.69%	5.94%	0.40%	1.37%	15.13%	0.17%
Worksop North		0.26%	0.85%	2.47%	0.77%	68.94%	7.76%	0.60%	3.24%	14.85%	0.26%
Worksop North East		0.00%	0.85%	4.02%	0.31%	69.06%	7.04%	0.77%	1.62%	15.93%	0.39%
Worksop North West		0.05%	0.36%	3.56%	0.33%	68.63%	10.01%	1.90%	5.47%	9.41%	0.28%
Worksop South		0.00%	0.29%	8.27%	0.34%	64.24%	8.56%	1.24%	2.37%	14.29%	0.39%
Worksop South East		0.05%	0.44%	5.37%	0.21%	67.06%	13.34%	1.74%	3.70%	7.93%	0.16%
District Average	2.286	0.04%	0.35%	3.72%	0.29%	69.43%	8.95%	1.39%	3.96%	11.51%	0.36%

Average of Representative Bassetlaw Wards	0.06%	0.37%	2.66%	0.19%	69.42%	8.54%	1.39%	5.18%	11.61%	0.57%
Average of all Bassetlaw Wards	0.04%	0.35%	3.72%	0.29%	69.43%	8.95%	1.39%	3.96%	11.51%	0.36%
Difference (representative against all)	-0.02%	-0.02%	1.06%	0.10%	0.01%	0.41%	0.00%	-1.22%	-0.10%	-0.22%

Vehicle Trip Calculation Parameters

Vehicle Trip Rates - B1

Urban Employment Vehicle Trip Rates

AM Inbound	1.587	Vehicle Trips per 100sqm GFA
AM Outbound	0.221	Vehicle Trips per 100sqm GFA
PM Inbound	0.151	Vehicle Trips per 100sqm GFA
PM Outbound	1.373	Vehicle Trips per 100sqm GFA

Vehicle Trip Calculation Parameters

Vehicle Trip Rates - B2

Urban Employment Vehicle Trip Rates

AM Inbound	0.543	Vehicle Trips per 100sqm GFA
AM Outbound	0.299	Vehicle Trips per 100sqm GFA
PM Inbound	0.122	Vehicle Trips per 100sqm GFA
PM Outbound	0.517	Vehicle Trips per 100sqm GFA

Vehicle Trip Calculation Parameters

Vehicle Trip Rates - B8

Urban Employment Vehicle Trip Rates

AM Inbound	0.026	Vehicle Trips per 100sqm GFA
AM Outbound	0.013	Vehicle Trips per 100sqm GFA
PM Inbound	0.013	Vehicle Trips per 100sqm GFA
PM Outbound	0.032	Vehicle Trips per 100sqm GFA

TRICS Methodology

TRICS data has been derived using the largest sample of 'Multi Modal' data available within TRICS 2012(b) in order to be as representative as possible (TRICS Good Practice Guide recommends a minimum of 20 sites). The only sites that were excluded from the analysis were sites in Greater London, Northern Ireland and the Republic of Ireland as these were considered to be unrepresentative.

Bassetlaw DC have provided an indication of the type of employment land use to be located on each site. Therefore, the TRICS database has been interrogated for B1 Business Park sites, B2 Industrial Estates and B8 Warehousing (Commercial). There is no reason to suggest that the sites within Bassetlaw will exhibit higher rates than those analysed from within the TRICS database and so it is considered that median trip rates are appropriate and will provide a accurate picture of potential trip generation levels. As a result it is considered inappropriate to apply 85th percentile trip rates for the employment land uses as this would result in a significant over estimation of the future employment trip generation.

The trip generation methodology applies the total 'Person Trip' rates obtained from TRICS and estimates modal share using observed modal splits derived from 2001 Census data for the Bassetlaw area. The 2001 Census modal splits have been averaged across the whole of the Bassetlaw area. The TRICS 'Total People' trip rates include OGV movements. However, as the rates are extracted for the peak hours these trips are minimal for most uses and so have not been separated from employee trips to/from the sites.

The TRICS 'Person Trip' rates have been checked for robustness using the mean/median 'cross-testing' methodology advocated in the TRICS Good Practice Guide (see following worksheets for details). The test reveals that the average trip rates for B1 and B2 uses are being biased by low generation sites within the data sample. Therefore, in order to eliminate this bias the median trip rates have been applied for the purposes of a robust assessment. For B8 uses the 2-way average rates are slightly higher than the median rates. Average rates have therefore been applied for B8 uses.

The use of mean/median trip rates as opposed to 85th %ile trip rates is considered appropriate for this strategic study as the choice of assumed employment use is considered accurate (for the reasons stated above).

TRICS 2012(b)v6.10.1
Trip Rate Parameter: Gross floor area
TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
Calculation Factor: 100 sqm
Count Type: TOTAL PEOPLE

	ARRIVALS			DEPARTURES			TOTALS			
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	
00:00-00:30	0	0	0	0	0	0	0	0	0	
00:30-01:00	0	0	0	0	0	0	0	0	0	
01:00-01:30	0	0	0	0	0	0	0	0	0	
01:30-02:00	0	0	0	0	0	0	0	0	0	
02:00-02:30	0	0	0	0	0	0	0	0	0	
02:30-03:00	0	0	0	0	0	0	0	0	0	
03:00-03:30	0	0	0	0	0	0	0	0	0	
03:30-04:00	0	0	0	0	0	0	0	0	0	
04:00-04:30	0	0	0	0	0	0	0	0	0	
04:30-05:00	0	0	0	0	0	0	0	0	0	
05:00-05:30	0	0	0	0	0	0	0	0	0	
05:30-06:00	0	0	0	0	0	0	0	0	0	
06:00-06:30	0	0	0	0	0	0	0	0	0	
06:30-07:00	0	0	0	0	0	0	0	0	0	
07:00-07:30	16	12681	0.21	16	12681	0.06	16	12681	0.271	
07:30-08:00	16	12681	0.65	16	12681	0.1	16	12681	0.75	
08:00-08:30	16	12681	0.8	16	12681	0.15	16	12681	0.951	Mean AM
08:30-09:00	16	12681	1.21	16	12681	0.18	16	12681	1.382	
09:00-09:30	16	12681	0.68	16	12681	0.19	16	12681	0.866	
09:30-10:00	16	12681	0.36	16	12681	0.17	16	12681	0.533	
10:00-10:30	16	12681	0.21	16	12681	0.17	16	12681	0.374	
10:30-11:00	16	12681	0.19	16	12681	0.15	16	12681	0.34	
11:00-11:30	16	12681	0.21	16	12681	0.2	16	12681	0.406	
11:30-12:00	16	12681	0.3	16	12681	0.23	16	12681	0.528	
12:00-12:30	16	12681	0.27	16	12681	0.48	16	12681	0.754	
12:30-13:00	16	12681	0.33	16	12681	0.31	16	12681	0.64	
13:00-13:30	16	12681	0.36	16	12681	0.42	16	12681	0.781	
13:30-14:00	16	12681	0.35	16	12681	0.28	16	12681	0.622	
14:00-14:30	16	12681	0.21	16	12681	0.24	16	12681	0.455	
14:30-15:00	16	12681	0.21	16	12681	0.26	16	12681	0.466	
15:00-15:30	16	12681	0.18	16	12681	0.33	16	12681	0.509	
15:30-16:00	16	12681	0.23	16	12681	0.36	16	12681	0.582	
16:00-16:30	16	12681	0.17	16	12681	0.57	16	12681	0.736	
16:30-17:00	16	12681	0.23	16	12681	0.67	16	12681	0.899	
17:00-17:30	16	12681	0.15	16	12681	1.01	16	12681	1.159	Mean PM
17:30-18:00	16	12681	0.1	16	12681	0.7	16	12681	0.791	
18:00-18:30	16	12681	0.07	16	12681	0.35	16	12681	0.415	
18:30-19:00	16	12681	0.03	16	12681	0.13	16	12681	0.159	
19:00-19:30	0	0	0	0	0	0	0	0	0	
19:30-20:00	0	0	0	0	0	0	0	0	0	
20:00-20:30	0	0	0	0	0	0	0	0	0	
20:30-21:00	0	0	0	0	0	0	0	0	0	
21:00-21:30	0	0	0	0	0	0	0	0	0	
21:30-22:00	0	0	0	0	0	0	0	0	0	
22:00-22:30	0	0	0	0	0	0	0	0	0	
22:30-23:00	0	0	0	0	0	0	0	0	0	
23:00-23:30	0	0	0	0	0	0	0	0	0	
23:30-24:00	0	0	0	0	0	0	0	0	0	
Daily Trip Rates:			7.68			7.69			15.37	

RANK ORDER for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
Ranking Type: TOTALS Time Range: 08:00-09:00

Rank	Site Ref	Description	Area	GFA	Day	Date	Arrivals	Departures	Totals
1	NO-02-B-02	BUSINESS PARK, SCUNTHORPE	NORTH LINCOLNSHIRE	1,574	Thursday	22/09/2005	3.939	0.064	4.003
2	SH-02-B-01	BUSINESS PARK, SHREWSBURY	SHROPSHIRE	17,197	Tuesday	14/06/2005	2.989	0.785	3.774
3 **	SH-02-B-02	BUSINESS PARK, TELFORD	SHROPSHIRE	9,500	Monday	22/06/2009	3.105	0.295	3.400
4	WL-02-B-01	BUSINESS PK,WOOTTON BASSETT	WILTSHIRE	2,600	Monday	02/10/2006	2.692	0.346	3.038
5	NF-02-B-02	BUSINESS PARK, NORWICH	NORFOLK	7,400	Thursday	17/05/2007	2.635	0.392	3.027
6	NT-02-B-01	BUSINESS PARK, NOTTINGHAM	NOTTINGHAMSHIRE	2,321	Thursday	17/05/2007	2.499	0.388	2.887
7	TW-02-B-03	BUSINESS PARK, SUNDERLAND	TYNE & WEAR	77,513	Thursday	09/10/2008	2.405	0.320	2.725
8	LN-02-B-01	BUSINESS PARK, LINCOLN	LINCOLNSHIRE	4,460	Tuesday	17/05/2005	1.996	0.673	2.669
9	SF-02-B-01	BUSINESS PK, BURY ST EDMUNDS	SUFFOLK	2,480	Wednesday	10/05/2006	2.460	0.161	2.621
10	DC-02-B-01	BUSINESS PARK, POOLE	DORSET	1,570	Thursday	17/07/2008	2.166	0.127	2.293
11	WO-02-B-01	BUSINESS PARK, REDDITCH	WORCESTERSHIRE	3,525	Tuesday	02/05/2006	1.560	0.511	2.071
12	BU-02-B-01	BUSINESS PARK, HIGH WYCOMBE	BUCKINGHAMSHIRE	13,300	Thursday	08/07/2004	1.744	0.098	1.842
13	TW-02-B-01	BUSINESS PARK, NEWCASTLE	TYNE & WEAR	975	Tuesday	03/05/2005	1.333	0.410	1.743
14 **	SH-02-B-03	BUSINESS CENTRE, TELFORD	SHROPSHIRE	1,300	Tuesday	16/06/2009	1.385	0.308	1.693
15	WM-02-B-01	BUSINESS PARK, COVENTRY	WEST MIDLANDS	30,042	Friday	10/02/2006	1.072	0.316	1.388
16	TW-02-B-02	BUSINESS PARK,NORTH SHIELDS	TYNE & WEAR	27,142	Friday	10/10/2008	0.711	0.107	0.818

	2-Way	Arrivals	Departures
85th percentile	3.310	2.915	0.486
Average	2.333	2.009	0.324
Median	2.645	2.286	0.318
Difference between mean and median	-0.312	-0.277	0.006

Note: The mean/median 'cross-reference' test demonstrates that the average person trip rates are being biased by low trip generation sites in the sample. As a result the higher median person trip rates have been applied in the assessment.

RANK ORDER for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
Ranking Type: TOTALS Time Range: 17:00-18:00
**85th Percentile = no. 4

Rank	Site Ref	Description	Area	GFA	Day	Date	Arrivals	Departures	Totals
1	SH-02-B-01	BUSINESS PARK, SHREWSBURY	SHROPSHIRE	17,197	Tuesday	14/06/2005	0.739	2.826	3.565
2	DC-02-B-01	BUSINESS PARK, POOLE	DORSET	1,570	Thursday	17/07/2008	0.701	2.293	2.994
3 **	NF-02-B-02	BUSINESS PARK, NORWICH	NORFOLK	7,400	Thursday	17/05/2007	0.405	2.568	2.973
4	WL-02-B-01	BUSINESS PK,WOOTTON BASSETT	WILTSHIRE	2,600	Monday	02/10/2006	0.231	2.308	2.539
5	NO-02-B-02	BUSINESS PARK, SCUNTHORPE	NORTH LINCOLNSHIRE	1,574	Thursday	22/09/2005	0.318	2.160	2.478
6	NT-02-B-01	BUSINESS PARK, NOTTINGHAM	NOTTINGHAMSHIRE	2,321	Thursday	17/05/2007	0.259	2.154	2.413
7	TW-02-B-03	BUSINESS PARK, SUNDERLAND	TYNE & WEAR	77,513	Thursday	09/10/2008	0.270	2.068	2.338
8	SH-02-B-02	BUSINESS PARK, TELFORD	SHROPSHIRE	9,500	Monday	22/06/2009	0.116	2.074	2.190
9	BU-02-B-01	BUSINESS PARK, HIGH WYCOMBE	BUCKINGHAMSHIRE	13,300	Thursday	08/07/2004	0.241	1.887	2.128
10	TW-02-B-01	BUSINESS PARK, NEWCASTLE	TYNE & WEAR	975	Tuesday	03/05/2005	0.205	1.846	2.051
11	SF-02-B-01	BUSINESS PK, BURY ST EDMUNDS	SUFFOLK	2,480	Wednesday	10/05/2006	0.161	1.532	1.693
12	WO-02-B-01	BUSINESS PARK, REDDITCH	WORCESTERSHIRE	3,525	Tuesday	02/05/2006	0.085	1.504	1.589
13	SH-02-B-03	BUSINESS CENTRE, TELFORD	SHROPSHIRE	1,300	Tuesday	16/06/2009	0.154	1.308	1.462
14 **	LN-02-B-01	BUSINESS PARK, LINCOLN	LINCOLNSHIRE	4,460	Tuesday	17/05/2005	0.179	1.233	1.412
15	WM-02-B-01	BUSINESS PARK, COVENTRY	WEST MIDLANDS	30,042	Friday	10/02/2006	0.080	0.922	1.002
16	TW-02-B-02	BUSINESS PARK,NORTH SHIELDS	TYNE & WEAR	27,142	Friday	10/10/2008	0.070	0.339	0.409

	2-Way	Arrivals	Departures
85th percentile	2.865	0.383	2.304
Average	1.950	0.246	1.704
Median	2.159	0.218	1.978
Difference between mean and median	-0.209	0.028	-0.274

Note: The mean/median 'cross-reference' test demonstrates that the average person trip rates are being biased by low trip generation sites in the sample. As a result the higher median person trip rates have been applied in the assessment.

TRICS 2012(b)v6.10.1
Trip Rate Parameter: Gross floor area
TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
Calculation Factor: 100 sqm
Count Type: TOTAL PEOPLE

	ARRIVALS			DEPARTURES			TOTALS			
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	
00:00-00:30	0	0	0	0	0	0	0	0	0	
00:30-01:00	0	0	0	0	0	0	0	0	0	
01:00-01:30	0	0	0	0	0	0	0	0	0	
01:30-02:00	0	0	0	0	0	0	0	0	0	
02:00-02:30	0	0	0	0	0	0	0	0	0	
02:30-03:00	0	0	0	0	0	0	0	0	0	
03:00-03:30	0	0	0	0	0	0	0	0	0	
03:30-04:00	0	0	0	0	0	0	0	0	0	
04:00-04:30	0	0	0	0	0	0	0	0	0	
04:30-05:00	0	0	0	0	0	0	0	0	0	
05:00-05:30	0	0	0	0	0	0	0	0	0	
05:30-06:00	0	0	0	0	0	0	0	0	0	
06:00-06:30	0	0	0	0	0	0	0	0	0	
06:30-07:00	0	0	0	0	0	0	0	0	0	
07:00-07:30	21	15320	0.23	21	15320	0.07	21	15320	0.294	
07:30-08:00	21	15320	0.3	21	15320	0.12	21	15320	0.423	
08:00-08:30	21	15320	0.31	21	15320	0.15	21	15320	0.455	Mean AM
08:30-09:00	21	15320	0.31	21	15320	0.18	21	15320	0.486	
09:00-09:30	21	15320	0.24	21	15320	0.18	21	15320	0.416	
09:30-10:00	21	15320	0.19	21	15320	0.19	21	15320	0.378	
10:00-10:30	21	15320	0.22	21	15320	0.19	21	15320	0.408	
10:30-11:00	21	15320	0.21	21	15320	0.22	21	15320	0.427	
11:00-11:30	21	15320	0.22	21	15320	0.21	21	15320	0.432	
11:30-12:00	21	15320	0.24	21	15320	0.26	21	15320	0.501	
12:00-12:30	21	15320	0.21	21	15320	0.27	21	15320	0.481	
12:30-13:00	21	15320	0.22	21	15320	0.23	21	15320	0.446	
13:00-13:30	21	15320	0.21	21	15320	0.24	21	15320	0.452	
13:30-14:00	21	15320	0.24	21	15320	0.21	21	15320	0.448	
14:00-14:30	21	15320	0.21	21	15320	0.23	21	15320	0.439	
14:30-15:00	21	15320	0.19	21	15320	0.2	21	15320	0.39	
15:00-15:30	21	15320	0.2	21	15320	0.21	21	15320	0.411	
15:30-16:00	21	15320	0.2	21	15320	0.25	21	15320	0.442	
16:00-16:30	21	15320	0.18	21	15320	0.3	21	15320	0.481	
16:30-17:00	21	15320	0.17	21	15320	0.3	21	15320	0.474	
17:00-17:30	21	15320	0.12	21	15320	0.3	21	15320	0.414	Mean PM
17:30-18:00	21	15320	0.07	21	15320	0.19	21	15320	0.255	
18:00-18:30	21	15320	0.06	21	15320	0.11	21	15320	0.17	
18:30-19:00	21	15320	0.03	21	15320	0.07	21	15320	0.097	
19:00-19:30	0	0	0	0	0	0	0	0	0	
19:30-20:00	0	0	0	0	0	0	0	0	0	
20:00-20:30	0	0	0	0	0	0	0	0	0	
20:30-21:00	0	0	0	0	0	0	0	0	0	
21:00-21:30	0	0	0	0	0	0	0	0	0	
21:30-22:00	0	0	0	0	0	0	0	0	0	
22:00-22:30	0	0	0	0	0	0	0	0	0	
22:30-23:00	0	0	0	0	0	0	0	0	0	
23:00-23:30	0	0	0	0	0	0	0	0	0	
23:30-24:00	0	0	0	0	0	0	0	0	0	
Daily Trip Rates:			4.77			4.85			9.62	

RANK ORDER for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
Ranking Type: TOTALS Time Range: 08:00-09:00
**85th Percentile = no. 4

Rank	Site Ref	Description	Area	GFA	Day	Date	Arrivals	Departures	Totals
1	NB-02-D-01	INDUSTRIAL ESTATE, HEXHAM	NORTHUMBERLAND	10,525	Monday	23/05/2005	1.900	1.140	3.040
2	HE-02-D-01	BUSINESS PARK, HEREFORD	HEREFORDSHIRE	1,758	Monday	17/10/2011	1.820	0.569	2.389
3	CA-02-D-02	IND. ESTATE, CAMBRIDGE	CAMBRIDGESHIRE	2,063	Monday	19/10/2009	1.163	1.212	2.375
4 **	WL-02-D-01	IND. ESTATE, WOOTTON BASSETT	WILTSHIRE	7,050	Tuesday	03/10/2006	1.404	0.723	2.127
5	MS-02-D-06	INDUSTRIAL EST., LIVERPOOL	MERSEYSIDE	4,800	Thursday	09/09/2010	1.167	0.958	2.125
6	CA-02-D-03	IND. ESTATE, PETERBOROUGH	CAMBRIDGESHIRE	4,425	Thursday	22/10/2009	1.424	0.520	1.944
7	BR-02-D-03	INDUSTRIAL ESTATE, BRISTOL	BRISTOL CITY	6,000	Tuesday	20/10/2009	1.533	0.383	1.916
8	ES-02-D-05	IND. ESTATE, EASTBOURNE	EAST SUSSEX	7,525	Monday	30/11/2009	0.997	0.492	1.489
9	CW-02-D-02	INDUSTRIAL ESTATE, CAMBORNE	CORNWALL	6,515	Friday	21/09/2007	0.906	0.430	1.336
10	BR-02-D-02	INDUSTRIAL ESTATE, BRISTOL	BRISTOL CITY	6,000	Thursday	19/11/2009	0.967	0.250	1.217
11	LC-02-D-04	INDUSTRIAL ESTATE, GARSTANG	LANCASHIRE	4,555	Friday	16/06/2006	0.724	0.461	1.185
12	LN-02-D-01	INDUSTRIAL ESTATE, GRANTHAM	LINCOLNSHIRE	5,347	Thursday	12/05/2005	0.748	0.374	1.122
13	CA-02-D-01	IND. ESTATE, PETERBOROUGH	CAMBRIDGESHIRE	4,300	Tuesday	13/05/2008	0.581	0.512	1.093
14	CW-02-D-03	IND. ESTATE, NEAR PENZANCE	CORNWALL	36,500	Monday	03/10/2011	0.658	0.430	1.088
15	CH-02-D-02	INDUSTRIAL EST., NORTHWICH	CHESHIRE	22,000	Friday	15/06/2007	0.782	0.282	1.064
16	CB-02-D-04	INDUSTRIAL ESTATE, BRAMPTON	CUMBRIA	17,708	Wednesday	16/12/2009	0.469	0.265	0.734
17	MS-02-D-05	INDUSTRIAL ESTATE, ST HELENS	MERSEYSIDE	2,430	Tuesday	18/10/2005	0.412	0.247	0.659
18 **	TW-02-D-06	INDUSTRIAL ESTATE, N. SHIELDS	TYNE & WEAR	23,000	Thursday	19/10/2006	0.396	0.204	0.600
19	SF-02-D-02	INDUSTRIAL ESTATE, IPSWICH	SUFFOLK	102,000	Tuesday	22/05/2007	0.367	0.217	0.584
20	NT-02-D-01	IND. ESTATE, SUTTON-IN-ASHFLD	NOTTINGHAMSHIRE	26,400	Friday	30/06/2006	0.356	0.197	0.553
21	WY-02-D-02	INDUSTRIAL EST., HUDDERSFIELD	WEST YORKSHIRE	20,824	Monday	11/09/2006	0.283	0.082	0.365

	2-Way	Arrivals	Departures
85th percentile	2.127	1.424	0.723
Average	0.941	0.615	0.326
Median	1.185	0.782	0.430
Difference between mean and median	-0.244	-0.167	-0.104

Note: The mean/median 'cross-reference' test demonstrates that the average person trip rates are being biased by low trip generation sites in the sample. As a result the higher median person trip rates have been applied in the assessment.

RANK ORDER for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
Ranking Type: TOTALS Time Range: 17:00-18:00
**85th Percentile = no. 4

Rank	Site Ref	Description	Area	GFA	Day	Date	Arrivals	Departures	Totals
1	CA-02-D-03	IND. ESTATE, PETERBOROUGH	CAMBRIDGESHIRE	4,425	Thursday	22/10/2009	0.497	1.401	1.898
2	LN-02-D-01	INDUSTRIAL ESTATE, GRANTHAM	LINCOLNSHIRE	5,347	Thursday	12/05/2005	0.898	0.860	1.758
3	CA-02-D-01	IND. ESTATE, PETERBOROUGH	CAMBRIDGESHIRE	4,300	Tuesday	13/05/2008	0.605	1.093	1.698
4 **	NB-02-D-01	INDUSTRIAL ESTATE, HEXHAM	NORTHUMBERLAND	10,525	Monday	23/05/2005	0.475	1.159	1.634
5	CW-02-D-02	INDUSTRIAL ESTATE, CAMBORNE	CORNWALL	6,515	Friday	21/09/2007	0.460	1.167	1.627
6	CA-02-D-02	IND. ESTATE, CAMBRIDGE	CAMBRIDGESHIRE	2,063	Monday	19/10/2009	0.291	1.212	1.503
7	BR-02-D-03	INDUSTRIAL ESTATE, BRISTOL	BRISTOL CITY	6,000	Tuesday	20/10/2009	0.200	1.117	1.317
8	WL-02-D-01	IND. ESTATE, WOOTTON BASSETT	WILTSHIRE	7,050	Tuesday	03/10/2006	0.170	1.106	1.276
9	ES-02-D-05	IND. ESTATE, EASTBOURNE	EAST SUSSEX	7,525	Monday	30/11/2009	0.226	0.744	0.970
10	LC-02-D-04	INDUSTRIAL ESTATE, GARSTANG	LANCASHIRE	4,555	Friday	16/06/2006	0.176	0.768	0.944
11	HE-02-D-01	BUSINESS PARK, HEREFORD	HEREFORDSHIRE	1,758	Monday	17/10/2011	0.057	0.796	0.853
12	CW-02-D-03	IND. ESTATE, NEAR PENZANCE	CORNWALL	36,500	Monday	03/10/2011	0.132	0.507	0.639
13	CB-02-D-04	INDUSTRIAL ESTATE, BRAMPTON	CUMBRIA	17,708	Wednesday	16/12/2009	0.192	0.401	0.593
14	MS-02-D-05	INDUSTRIAL ESTATE, ST HELENS	MERSEYSIDE	2,430	Tuesday	18/10/2005	0.288	0.288	0.576
15	CH-02-D-02	INDUSTRIAL EST., NORTHWICH	CHESHIRE	22,000	Friday	15/06/2007	0.109	0.459	0.568
16	BR-02-D-02	INDUSTRIAL ESTATE, BRISTOL	BRISTOL CITY	6,000	Thursday	19/11/2009	0.050	0.500	0.550
17	SF-02-D-02	INDUSTRIAL ESTATE, IPSWICH	SUFFOLK	102,000	Tuesday	22/05/2007	0.152	0.340	0.492
18 **	TW-02-D-06	INDUSTRIAL ESTATE, N. SHIELDS	TYNE & WEAR	23,000	Thursday	19/10/2006	0.091	0.348	0.439
19	WY-02-D-02	INDUSTRIAL EST., HUDDERSFIELD	WEST YORKSHIRE	20,824	Monday	11/09/2006	0.106	0.264	0.370
20	NT-02-D-01	IND. ESTATE, SUTTON-IN-ASHFLD	NOTTINGHAMSHIRE	26,400	Friday	30/06/2006	0.125	0.231	0.356
21	MS-02-D-06	INDUSTRIAL EST., LIVERPOOL	MERSEYSIDE	4,800	Thursday	09/09/2010	0.021	0.146	0.167

	2-Way	Arrivals	Departures
85th percentile	1.634	0.475	1.159
Average	0.669	0.181	0.488
Median	0.853	0.176	0.744
Difference between mean and median	-0.184	0.005	-0.256

Note: The mean/median 'cross-reference' test demonstrates that the average person trip rates are being biased by low trip generation sites in the sample. As a result the higher median person trip rates have been applied in the assessment.

TRICS 2012(b)v6.10.1
Trip Rate Parameter: Gross floor area
TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
Calculation Factor: 100 sqm
Count Type: TOTAL PEOPLE

	ARRIVALS			DEPARTURES			TOTALS			
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	
00:00-00:30	0	0	0	0	0	0	0	0	0	
00:30-01:00	0	0	0	0	0	0	0	0	0	
01:00-01:30	0	0	0	0	0	0	0	0	0	
01:30-02:00	0	0	0	0	0	0	0	0	0	
02:00-02:30	0	0	0	0	0	0	0	0	0	
02:30-03:00	0	0	0	0	0	0	0	0	0	
03:00-03:30	0	0	0	0	0	0	0	0	0	
03:30-04:00	0	0	0	0	0	0	0	0	0	
04:00-04:30	0	0	0	0	0	0	0	0	0	
04:30-05:00	0	0	0	0	0	0	0	0	0	
05:00-05:30	0	0	0	0	0	0	0	0	0	
05:30-06:00	0	0	0	0	0	0	0	0	0	
06:00-06:30	0	0	0	0	0	0	0	0	0	
06:30-07:00	0	0	0	0	0	0	0	0	0	
07:00-07:30	2	56183	0.02	2	56183	0.01	2	56183	0.027	
07:30-08:00	2	56183	0.04	2	56183	0.01	2	56183	0.054	
08:00-08:30	2	56183	0.02	2	56183	0.01	2	56183	0.03	Mean AM
08:30-09:00	2	56183	0.02	2	56183	0.01	2	56183	0.027	
09:00-09:30	2	56183	0.03	2	56183	0.01	2	56183	0.043	
09:30-10:00	2	56183	0.04	2	56183	0.01	2	56183	0.056	
10:00-10:30	2	56183	0.01	2	56183	0.02	2	56183	0.033	
10:30-11:00	2	56183	0.01	2	56183	0	2	56183	0.01	
11:00-11:30	2	56183	0.01	2	56183	0.01	2	56183	0.017	
11:30-12:00	2	56183	0.01	2	56183	0.01	2	56183	0.025	
12:00-12:30	2	56183	0.02	2	56183	0.02	2	56183	0.035	
12:30-13:00	2	56183	0.02	2	56183	0.01	2	56183	0.025	
13:00-13:30	2	56183	0.05	2	56183	0.02	2	56183	0.072	
13:30-14:00	2	56183	0.11	2	56183	0.07	2	56183	0.181	
14:00-14:30	2	56183	0.01	2	56183	0.07	2	56183	0.083	
14:30-15:00	2	56183	0.01	2	56183	0.03	2	56183	0.042	
15:00-15:30	2	56183	0.01	2	56183	0.02	2	56183	0.035	
15:30-16:00	2	56183	0.01	2	56183	0.03	2	56183	0.042	
16:00-16:30	2	56183	0.02	2	56183	0.03	2	56183	0.048	
16:30-17:00	2	56183	0.01	2	56183	0.03	2	56183	0.042	
17:00-17:30	2	56183	0.01	2	56183	0.02	2	56183	0.037	Mean PM
17:30-18:00	2	56183	0.01	2	56183	0.02	2	56183	0.028	
18:00-18:30	2	56183	0.01	2	56183	0.02	2	56183	0.035	
18:30-19:00	2	56183	0.01	2	56183	0.02	2	56183	0.022	
19:00-19:30	0	0	0	0	0	0	0	0	0	
19:30-20:00	0	0	0	0	0	0	0	0	0	
20:00-20:30	0	0	0	0	0	0	0	0	0	
20:30-21:00	0	0	0	0	0	0	0	0	0	
21:00-21:30	0	0	0	0	0	0	0	0	0	
21:30-22:00	0	0	0	0	0	0	0	0	0	
22:00-22:30	0	0	0	0	0	0	0	0	0	
22:30-23:00	0	0	0	0	0	0	0	0	0	
23:00-23:30	0	0	0	0	0	0	0	0	0	
23:30-24:00	0	0	0	0	0	0	0	0	0	
Daily Trip Rates:			0.51			0.54			1.049	

RANK ORDER for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
Ranking Type: TOTALS Time Range: 08:00-09:00
85th/15th Percentile Survey Not Highlighted

Rank	Site Ref	Description	Area	GFA	Day	Date	Arrivals	Departures	Totals
1	LN-02-F-01	BOOK SERVICE, GRANTHAM	LINCOLNSHIRE	32,300	Monday	29/11/2010	0.077	0.012	0.089
2	TV-02-F-02	ARGOS WAREHOUSE, DARL'TON	TEES VALLEY	80,066	Tuesday	07/10/2008	0.022	0.021	0.043

	2-Way	Arrivals	Departures
85th percentile	0.082	0.069	0.020
Average	0.057	0.038	0.019
Median	0.066	0.050	0.017
Difference between mean and median	-0.009	-0.012	0.003

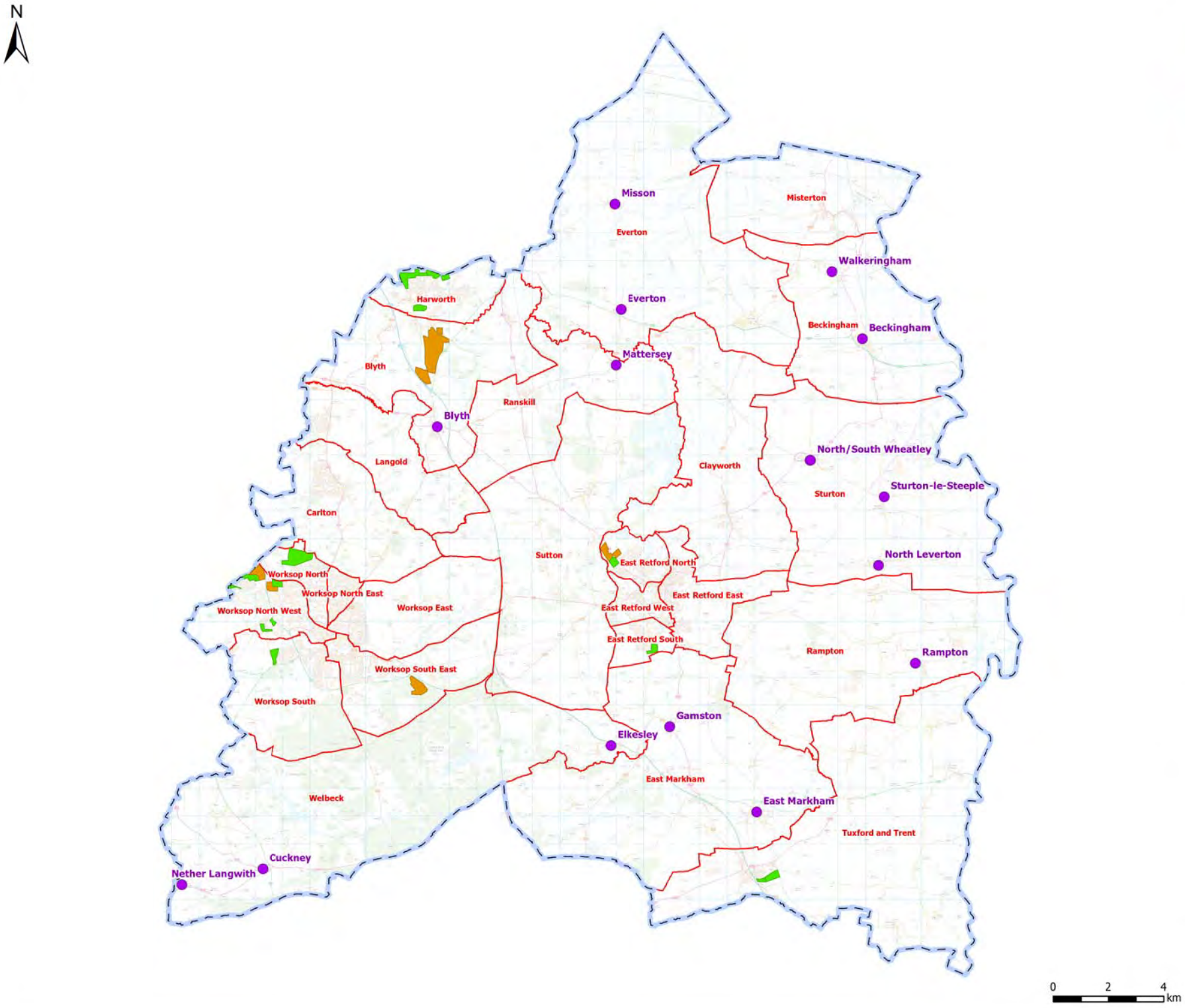
Note: The mean/median 'cross-reference' test demonstrates that the average person trip rates are being biased by low trip generation sites in the sample. As a result the higher median person trip rates have been applied in the assessment.

RANK ORDER for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)
Ranking Type: TOTALS Time Range: 17:00-18:00
85th/15th Percentile Survey Not Highlighted

Rank	Site Ref	Description	Area	GFA	Day	Date	Arrivals	Departures	Totals
1	TV-02-F-02	ARGOS WAREHOUSE, DARL'TON	TEES VALLEY	80,066	Tuesday	07/10/2008	0.024	0.051	0.075
2	LN-02-F-01	BOOK SERVICE, GRANTHAM	LINCOLNSHIRE	32,300	Monday	29/11/2010	0.009	0.034	0.043

	2-Way	Arrivals	Departures
85th percentile	0.070	0.022	0.048
Average	0.065	0.019	0.046
Median	0.059	0.017	0.043
Difference between mean and median	0.006	0.003	0.004

Note: The mean/median 'cross-reference' test demonstrates that the average person trip rates are not being unduly biased by low or high trip generation sites in the sample. Therefore the use of average trip rates is considered acceptable.



Legend

- Rural Service Centres
- Residential
- Employment
- Bassetlaw District Boundary
- Bassetlaw Ward Boundaries

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REV	DESCRIPTION	BY	CHK	APP	DATE
A	Revision of SHLAA sites	JJC	ASG	ASG	18/11/13

Client:

EXECUTIVE PARK
AVALON WAY
ANSTEY
LEICESTER
LE7 7GR
TEL: +44 (0)116 234 8000
FAX: +44 (0)116 234 8001
e-mail: leicester@wyg.com

Project:
Site Allocations D.P.D. Modelling Support

Drawing Title:
Figure 10
Allocation Site Locations

Scale @ A3	Drawn	Date	Checked	Date	Approved	Date
NTS	JJC	17/09/12	ASG	17/09/12	ASG	17/09/12

Project No.	Office	Type	Drawing No.	Revision
A078085	35	18	007	A

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TRICS Reports

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST		
	BD	BEDFORDSHIRE	2 days
	ES	EAST SUSSEX	1 days
	EX	ESSEX	1 days
03	SOUTH WEST		
	CW	CORNWALL	2 days
	GS	GLOUCESTERSHIRE	1 days
	WL	WILTSHIRE	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	2 days
	SF	SUFFOLK	3 days
05	EAST MIDLANDS		
	DS	DERBYSHIRE	1 days
	LE	LEICESTERSHIRE	1 days
	LN	LINCOLNSHIRE	2 days
	NT	NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	2 days
	ST	STAFFORDSHIRE	1 days
	WM	WEST MIDLANDS	3 days
	WO	WORCESTERSHIRE	4 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	4 days
08	NORTH WEST		
	CH	CHESHIRE	2 days
	GM	GREATER MANCHESTER	1 days
	LC	LANCASHIRE	2 days
	MS	MERSEYSIDE	1 days
09	NORTH		
	CB	CUMBRIA	2 days
	TV	TEES VALLEY	1 days

Filtering Stage 2 selection:

Parameter:	Number of dwellings
Actual Range:	9 to 372 (units:)
Range Selected by User:	9 to 491 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/04 to 18/11/11

Selected survey days:

Monday	6 days
Tuesday	12 days
Wednesday	5 days
Thursday	12 days
Friday	6 days

Selected survey types:

Manual count	41 days
Directional ATC Count	0 days

Selected Locations:

Edge of Town Centre	3
Suburban Area (PPS6 Out of Centre)	17
Edge of Town	19
Neighbourhood Centre (PPS6 Local Centre)	2

Selected Location Sub Categories:

Residential Zone	31
Out of Town	1
No Sub Category	9

LIST OF SITES relevant to selection parameters

1 BD-03-A-01 SEMI DETACHED, LUTON BEDFORDSHIRE
NEW BEDFORD ROAD

LUTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 131
Survey date: THURSDAY 08/07/04 Survey Type: MANUAL

2 BD-03-A-02 SEMI DETACHED, LUTON BEDFORDSHIRE
RIDDY LANE

LUTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 82
Survey date: TUESDAY 06/07/04 Survey Type: MANUAL

3 CA-03-A-02 MIXED HOUSES, PETERBOROUGH CAMBRIDGESHIRE
THORPE ROAD

PETERBOROUGH
Edge of Town Centre
Residential Zone
Total Number of dwellings: 363
Survey date: THURSDAY 13/05/04 Survey Type: MANUAL

4 CA-03-A-04 DETACHED, PETERBOROUGH CAMBRIDGESHIRE

THORPE PARK ROAD
PETERBOROUGH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 9
Survey date: TUESDAY 18/10/11 Survey Type: MANUAL

5 CB-03-A-03 SEMI DETACHED, WORKINGTON CUMBRIA
HAWKSHEAD AVENUE

WORKINGTON
Edge of Town
Residential Zone
Total Number of dwellings: 40
Survey date: THURSDAY 20/11/08 Survey Type: MANUAL

6 CB-03-A-04 SEMI DETACHED, WORKINGTON CUMBRIA
MOORCLOSE ROAD
SALTERBACK
WORKINGTON
Edge of Town
No Sub Category
Total Number of dwellings: 82
Survey date: FRIDAY 24/04/09 Survey Type: MANUAL

7 CH-03-A-05 DETACHED, CREWE CHESHIRE
SYDNEY ROAD
SYDNEY
CREWE
Edge of Town
Residential Zone
Total Number of dwellings: 17
Survey date: TUESDAY 14/10/08 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 CH-03-A-06 SEMI-DET./BUNGALOWS,CREWE CHESHIRE
CREWE ROAD

CREWE
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 129
Survey date: TUESDAY 14/10/08 Survey Type: MANUAL

9 CW-03-A-01 TERRACED, PENZANCE CORNWALL
ALVERTON ROAD

PENZANCE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 13
Survey date: THURSDAY 30/06/05 Survey Type: MANUAL

10 CW-03-A-02 SEMI D./DETATCHED, TRURO CORNWALL
BOSVEAN GARDENS

TRURO
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 73
Survey date: TUESDAY 18/09/07 Survey Type: MANUAL

11 DS-03-A-01 SEMI D./TERRACED, DRONFIELD DERBYSHIRE
THE AVENUE
HOLMESDALE
DRONFIELD
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Number of dwellings: 20
Survey date: THURSDAY 22/06/06 Survey Type: MANUAL

12 ES-03-A-02 PRIVATE HOUSING,PEACEHAVEN EAST SUSSEX
SOUTH COAST ROAD

PEACEHAVEN
Edge of Town
Residential Zone
Total Number of dwellings: 37
Survey date: FRIDAY 18/11/11 Survey Type: MANUAL

13 EX-03-A-01 SEMI-DET., STANFORD-LE-HOPE ESSEX
MILTON ROAD
CORRINGHAM
STANFORD-LE-HOPE
Edge of Town
Residential Zone
Total Number of dwellings: 237
Survey date: TUESDAY 13/05/08 Survey Type: MANUAL

14 GM-03-A-10 DETACHED/SEMI, MANCHESTER GREATER MANCHESTER
BUTT HILL DRIVE
PRESTWICH
MANCHESTER
Edge of Town
Residential Zone
Total Number of dwellings: 29
Survey date: WEDNESDAY 12/10/11 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

15 GS-03-A-01 SEMI D./TERRACED, GLOUCESTER GLOUCESTERSHIRE
KINGSHOLM ROAD
KINGSHOLM
GLOUCESTER
Edge of Town Centre
No Sub Category
Total Number of dwellings: 73
Survey date: TUESDAY 25/05/04 Survey Type: MANUAL

16 LC-03-A-22 BUNGALOWS, BLACKPOOL LANCASHIRE
CLIFTON DRIVE NORTH

BLACKPOOL
Edge of Town
Residential Zone
Total Number of dwellings: 98
Survey date: TUESDAY 18/10/05 Survey Type: MANUAL

17 LC-03-A-29 DETACHED/SEMI D., BLACKBURN LANCASHIRE
REVIDGE ROAD
FOUR LANE ENDS
BLACKBURN
Edge of Town
Residential Zone
Total Number of dwellings: 185
Survey date: THURSDAY 10/06/04 Survey Type: MANUAL

18 LE-03-A-01 DETACHED, MELTON MOWBRAY LEICESTERSHIRE
REDWOOD AVENUE

MELTON MOWBRAY
Edge of Town
Residential Zone
Total Number of dwellings: 11
Survey date: TUESDAY 03/05/05 Survey Type: MANUAL

19 LN-03-A-01 MIXED HOUSES, LINCOLN LINCOLNSHIRE
BRANT ROAD
BRACEBRIDGE
LINCOLN
Edge of Town
Residential Zone
Total Number of dwellings: 150
Survey date: TUESDAY 15/05/07 Survey Type: MANUAL

20 LN-03-A-02 MIXED HOUSES, LINCOLN LINCOLNSHIRE
HYKEHAM ROAD

LINCOLN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 186
Survey date: MONDAY 14/05/07 Survey Type: MANUAL

21 MS-03-A-01 TERRACED, RUNCORN MERSEYSIDE
PALACE FIELDS AVENUE

RUNCORN
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Number of dwellings: 372
Survey date: THURSDAY 06/10/05 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

22 NT-03-A-03 SEMI DETACHED,KIRKBY-IN-ASHFD NOTTINGHAMSHIRE
B6018 SUTTON ROAD

KIRKBY-IN-ASHFIELD
Edge of Town
Residential Zone
Total Number of dwellings: 166
Survey date: WEDNESDAY 28/06/06 Survey Type: MANUAL

23 NY-03-A-01 MIXED HOUSES,NORTHALLERTON NORTH YORKSHIRE
GRAMMAR SCHOOL LANE

NORTHALLERTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 52
Survey date: TUESDAY 25/09/07 Survey Type: MANUAL

24 NY-03-A-03 PRIVATE HOUSING, BOROUGHBRIDGE NORTH YORKSHIRE
NEW ROW

BOROUGHBRIDGE
Edge of Town Centre
Residential Zone
Total Number of dwellings: 14
Survey date: MONDAY 15/09/08 Survey Type: MANUAL

25 NY-03-A-05 HOUSES AND FLATS, RIPON NORTH YORKSHIRE
BOROUGHBRIDGE ROAD

RIPON
Edge of Town
No Sub Category
Total Number of dwellings: 71
Survey date: MONDAY 22/09/08 Survey Type: MANUAL

26 NY-03-A-06 BUNGALOWS/SEMI DET., BBDGE NORTH YORKSHIRE
HORSEFAIR

BOROUGHBRIDGE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 115
Survey date: FRIDAY 14/10/11 Survey Type: MANUAL

27 SF-03-A-01 SEMI DETACHED, IPSWICH SUFFOLK
A1156 FELIXSTOWE ROAD
RACECOURSE
IPSWICH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 77
Survey date: WEDNESDAY 23/05/07 Survey Type: MANUAL

28 SF-03-A-02 SEMI DET./TERRACED, IPSWICH SUFFOLK
STOKE PARK DRIVE
MAIDENHALL
IPSWICH
Edge of Town
Residential Zone
Total Number of dwellings: 230
Survey date: THURSDAY 24/05/07 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

29 SF-03-A-03 MIXED HOUSES, BURY ST EDMDS SUFFOLK
BARTON HILL
FORNHAM ST MARTIN
BURY ST EDMUNDS
Edge of Town
Out of Town
Total Number of dwellings: 101
Survey date: MONDAY 15/05/06 Survey Type: MANUAL

30 SH-03-A-03 DETATCHED, SHREWSBURY SHROPSHIRE
SOMERBY DRIVE
BICTON HEATH
SHREWSBURY
Edge of Town
No Sub Category
Total Number of dwellings: 10
Survey date: FRIDAY 26/06/09 Survey Type: MANUAL

31 SH-03-A-04 TERRACED, SHREWSBURY SHROPSHIRE
ST MICHAEL'S STREET

SHREWSBURY
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 108
Survey date: THURSDAY 11/06/09 Survey Type: MANUAL

32 ST-03-A-05 TERRACED/DETACHED, STOKE STAFFORDSHIRE
WATERMEET GROVE
ETRURIA
STOKE-ON-TRENT
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 14
Survey date: WEDNESDAY 26/11/08 Survey Type: MANUAL

33 TV-03-A-01 MIXED HOUSES/FLATS, HARTLEPL TEES VALLEY
POWLETT ROAD

HARTLEPOOL
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 225
Survey date: THURSDAY 14/04/05 Survey Type: MANUAL

34 WL-03-A-01 SEMI D./TERRACED W. BASSETT WILTSHIRE
MAPLE DRIVE

WOOTTON BASSETT
Edge of Town
Residential Zone
Total Number of dwellings: 99
Survey date: MONDAY 02/10/06 Survey Type: MANUAL

35 WM-03-A-01 TERRACED, COVENTRY WEST MIDLANDS
FOLESHILL ROAD
FOLESHILL
COVENTRY
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 79
Survey date: FRIDAY 03/02/06 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

36 WM-03-A-02 DETACHED/SEMI D., STRBRIDGE WEST MIDLANDS
HEATH STREET

STOURBRIDGE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 12
Survey date: WEDNESDAY 26/04/06 Survey Type: MANUAL

37 WM-03-A-03 MIXED HOUSING, COVENTRY WEST MIDLANDS
BASELEY WAY
ROWLEYS GREEN
COVENTRY
Edge of Town
Residential Zone
Total Number of dwellings: 84
Survey date: MONDAY 24/09/07 Survey Type: MANUAL

38 WO-03-A-01 DETACHED, BROMSGROVE WORCESTERSHIRE
MARLBOROUGH AVENUE
ASTON FIELDS
BROMSGROVE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 10
Survey date: THURSDAY 23/06/05 Survey Type: MANUAL

39 WO-03-A-02 SEMI DETACHED, REDDITCH WORCESTERSHIRE
MEADOWHILL ROAD

REDDITCH
Edge of Town
No Sub Category
Total Number of dwellings: 48
Survey date: TUESDAY 02/05/06 Survey Type: MANUAL

40 WO-03-A-03 DETACHED, KIDDERMINSTER WORCESTERSHIRE
BLAKEBROOK
BLAKEBROOK
KIDDERMINSTER
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 138
Survey date: FRIDAY 05/05/06 Survey Type: MANUAL

41 WO-03-A-06 DET./TERRACED, BROMSGROVE WORCESTERSHIRE
ST GODWALDS ROAD
ASTON FIELDS
BROMSGROVE
Edge of Town
No Sub Category
Total Number of dwellings: 232
Survey date: THURSDAY 30/06/05 Survey Type: MANUAL

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00	0	0	0.000	0	0	0.000	0	0	0.000
01:00 - 02:00	0	0	0.000	0	0	0.000	0	0	0.000
02:00 - 03:00	0	0	0.000	0	0	0.000	0	0	0.000
03:00 - 04:00	0	0	0.000	0	0	0.000	0	0	0.000
04:00 - 05:00	0	0	0.000	0	0	0.000	0	0	0.000
05:00 - 06:00	0	0	0.000	0	0	0.000	0	0	0.000
06:00 - 07:00	0	0	0.000	0	0	0.000	0	0	0.000
07:00 - 08:00	41	103	0.112	41	103	0.387	41	103	0.499
08:00 - 09:00	41	103	0.254	41	103	0.820	41	103	1.074
09:00 - 10:00	41	103	0.260	41	103	0.344	41	103	0.604
10:00 - 11:00	41	103	0.231	41	103	0.302	41	103	0.533
11:00 - 12:00	41	103	0.288	41	103	0.275	41	103	0.563
12:00 - 13:00	41	103	0.303	41	103	0.280	41	103	0.583
13:00 - 14:00	41	103	0.284	41	103	0.270	41	103	0.554
14:00 - 15:00	41	103	0.298	41	103	0.298	41	103	0.596
15:00 - 16:00	41	103	0.614	41	103	0.372	41	103	0.986
16:00 - 17:00	41	103	0.550	41	103	0.342	41	103	0.892
17:00 - 18:00	41	103	0.600	41	103	0.370	41	103	0.970
18:00 - 19:00	41	103	0.439	41	103	0.377	41	103	0.816
19:00 - 20:00	0	0	0.000	0	0	0.000	0	0	0.000
20:00 - 21:00	0	0	0.000	0	0	0.000	0	0	0.000
21:00 - 22:00	0	0	0.000	0	0	0.000	0	0	0.000
22:00 - 23:00	0	0	0.000	0	0	0.000	0	0	0.000
23:00 - 24:00	0	0	0.000	0	0	0.000	0	0	0.000
Total Rates:			4.233			4.437			8.670

Parameter summary

Trip rate parameter range selected:	9 - 372 (units:)
Survey date date range:	01/01/04 - 18/11/11
Number of weekdays (Monday-Friday):	41
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : B - BUSINESS PARK
MULTI-MODAL TOTAL PEOPLE

Selected regions and areas:

02	SOUTH EAST		
	BU	BUCKINGHAMSHIRE	1 days
03	SOUTH WEST		
	DC	DORSET	1 days
	WL	WILTSHIRE	1 days
04	EAST ANGLIA		
	NF	NORFOLK	1 days
	SF	SUFFOLK	1 days
05	EAST MIDLANDS		
	LN	LINCOLNSHIRE	1 days
	NT	NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	3 days
	WM	WEST MIDLANDS	1 days
	WO	WORCESTERSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NO	NORTH LINCOLNSHIRE	1 days
09	NORTH		
	TW	TYNE & WEAR	3 days

Filtering Stage 2 selection:

Parameter: Gross floor area
Actual Range: 975 to 77513 (units: sqm)
Range Selected by User: 975 to 118448 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/04 to 22/06/09

Selected survey days:

Monday	2 days
Tuesday	5 days
Wednesday	1 days
Thursday	6 days
Friday	2 days

Selected survey types:

Manual count	16 days
Directional ATC Count	0 days

Selected Locations:

Town Centre	1
Edge of Town Centre	1
Suburban Area (PPS6 Out of Centre)	5
Edge of Town	9

Selected Location Sub Categories:

Industrial Zone	5
Commercial Zone	2
Residential Zone	2
Retail Zone	1
Built-Up Zone	2
No Sub Category	4

LIST OF SITES relevant to selection parameters

1 BU-02-B-01 BUSINESS PARK, HIGH WYCOMBE BUCKINGHAMSHIRE
LONDON ROAD

HIGH WYCOMBE
Edge of Town
No Sub Category
Total Gross floor area: 13300 sqm
Survey date: THURSDAY 08/07/04 Survey Type: MANUAL

2 DC-02-B-01 BUSINESS PARK, POOLE DORSET
COMMERCIAL ROAD

POOLE
Suburban Area (PPS6 Out of Centre)
Built-Up Zone
Total Gross floor area: 1570 sqm
Survey date: THURSDAY 17/07/08 Survey Type: MANUAL

3 LN-02-B-01 BUSINESS PARK, LINCOLN LINCOLNSHIRE
BISHOPS ROAD

LINCOLN
Edge of Town
Industrial Zone
Total Gross floor area: 4460 sqm
Survey date: TUESDAY 17/05/05 Survey Type: MANUAL

4 NF-02-B-02 BUSINESS PARK, NORWICH NORFOLK
WHITING ROAD
LONG JOHN'S HILL
NORWICH
Edge of Town
Retail Zone
Total Gross floor area: 7400 sqm
Survey date: THURSDAY 17/05/07 Survey Type: MANUAL

5 NO-02-B-02 BUSINESS PARK, SCUNTHORPE NORTH LINCOLNSHIRE
DONCASTER ROAD

SCUNTHORPE
Edge of Town
Residential Zone
Total Gross floor area: 1574 sqm
Survey date: THURSDAY 22/09/05 Survey Type: MANUAL

6 NT-02-B-01 BUSINESS PARK, NOTTINGHAM NOTTINGHAMSHIRE
PARK LANE

NOTTINGHAM
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Gross floor area: 2321 sqm
Survey date: THURSDAY 17/05/07 Survey Type: MANUAL

7 SF-02-B-01 BUSINESS PK, BURY ST EDMUNDS SUFFOLK
KEMPSON WAY

BURY ST EDMUNDS
Edge of Town
Industrial Zone
Total Gross floor area: 2480 sqm
Survey date: WEDNESDAY 10/05/06 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 SH-02-B-01 BUSINESS PARK, SHREWSBURY SHROPSHIRE
WELSHPOOL ROAD

SHREWSBURY
Edge of Town
Commercial Zone
Total Gross floor area: 17197 sqm
Survey date: TUESDAY 14/06/05 Survey Type: MANUAL

9 SH-02-B-02 BUSINESS PARK, TELFORD SHROPSHIRE
STAFFORD COURT

TELFORD
Edge of Town Centre
Commercial Zone
Total Gross floor area: 9500 sqm
Survey date: MONDAY 22/06/09 Survey Type: MANUAL

10 SH-02-B-03 BUSINESS CENTRE, TELFORD SHROPSHIRE
CASTLE STREET
HADLEY
TELFORD
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Gross floor area: 1300 sqm
Survey date: TUESDAY 16/06/09 Survey Type: MANUAL

11 TW-02-B-01 BUSINESS PARK, NEWCASTLE TYNE & WEAR
ST THOMAS STREET

NEWCASTLE
Town Centre
Built-Up Zone
Total Gross floor area: 975 sqm
Survey date: TUESDAY 03/05/05 Survey Type: MANUAL

12 TW-02-B-02 BUSINESS PARK,NORTH SHIELDS TYNE & WEAR
HIGH FLATWORTH

NORTH SHIELDS
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 27142 sqm
Survey date: FRIDAY 10/10/08 Survey Type: MANUAL

13 TW-02-B-03 BUSINESS PARK, SUNDERLAND TYNE & WEAR
CITY WAY
EAST HERRINGTON
SUNDERLAND
Edge of Town
No Sub Category
Total Gross floor area: 77513 sqm
Survey date: THURSDAY 09/10/08 Survey Type: MANUAL

14 WL-02-B-01 BUSINESS PK,WOOTTON BASSETT WILTSHIRE
HIGH STREET
COPED HALL
WOOTTON BASSETT
Edge of Town
Residential Zone
Total Gross floor area: 2600 sqm
Survey date: MONDAY 02/10/06 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

15 WM-02-B-01 BUSINESS PARK, COVENTRY WEST MIDLANDS
COURTALD WAY
FOLESHILL
COVENTRY
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 30042 sqm
Survey date: FRIDAY 10/02/06 Survey Type: MANUAL

16 WO-02-B-01 BUSINESS PARK, REDDITCH WORCESTERSHIRE
BURNT MEADOW ROAD
MOORS MOAT NTH IND. EST
REDDITCH
Edge of Town
Industrial Zone
Total Gross floor area: 3525 sqm
Survey date: TUESDAY 02/05/06 Survey Type: MANUAL

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00	0	0	0.000	0	0	0.000	0	0	0.000
01:00 - 02:00	0	0	0.000	0	0	0.000	0	0	0.000
02:00 - 03:00	0	0	0.000	0	0	0.000	0	0	0.000
03:00 - 04:00	0	0	0.000	0	0	0.000	0	0	0.000
04:00 - 05:00	0	0	0.000	0	0	0.000	0	0	0.000
05:00 - 06:00	0	0	0.000	0	0	0.000	0	0	0.000
06:00 - 07:00	0	0	0.000	0	0	0.000	0	0	0.000
07:00 - 08:00	16	12681	0.860	16	12681	0.161	16	12681	1.021
08:00 - 09:00	16	12681	2.008	16	12681	0.324	16	12681	2.332
09:00 - 10:00	16	12681	1.038	16	12681	0.361	16	12681	1.399
10:00 - 11:00	16	12681	0.396	16	12681	0.318	16	12681	0.714
11:00 - 12:00	16	12681	0.503	16	12681	0.431	16	12681	0.934
12:00 - 13:00	16	12681	0.602	16	12681	0.792	16	12681	1.394
13:00 - 14:00	16	12681	0.706	16	12681	0.697	16	12681	1.403
14:00 - 15:00	16	12681	0.417	16	12681	0.504	16	12681	0.921
15:00 - 16:00	16	12681	0.409	16	12681	0.682	16	12681	1.091
16:00 - 17:00	16	12681	0.397	16	12681	1.238	16	12681	1.635
17:00 - 18:00	16	12681	0.246	16	12681	1.704	16	12681	1.950
18:00 - 19:00	16	12681	0.098	16	12681	0.476	16	12681	0.574
19:00 - 20:00	0	0	0.000	0	0	0.000	0	0	0.000
20:00 - 21:00	0	0	0.000	0	0	0.000	0	0	0.000
21:00 - 22:00	0	0	0.000	0	0	0.000	0	0	0.000
22:00 - 23:00	0	0	0.000	0	0	0.000	0	0	0.000
23:00 - 24:00	0	0	0.000	0	0	0.000	0	0	0.000
Total Rates:			7.680			7.688			15.368

Parameter summary

Trip rate parameter range selected:	975 - 77513 (units: sqm)
Survey date date range:	01/01/04 - 22/06/09
Number of weekdays (Monday-Friday):	16
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : D - INDUSTRIAL ESTATE
MULTI-MODAL TOTAL PEOPLE

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	1 days
03	SOUTH WEST		
	BR	BRISTOL CITY	2 days
	CW	CORNWALL	2 days
	WL	WILTSHIRE	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	3 days
	SF	SUFFOLK	1 days
05	EAST MIDLANDS		
	LN	LINCOLNSHIRE	1 days
	NT	NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS		
	HE	HEREFORDSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	WY	WEST YORKSHIRE	1 days
08	NORTH WEST		
	CH	CHESHIRE	1 days
	LC	LANCASHIRE	1 days
	MS	MERSEYSIDE	2 days
09	NORTH		
	CB	CUMBRIA	1 days
	NB	NORTHUMBERLAND	1 days
	TW	TYNE & WEAR	1 days

Filtering Stage 2 selection:

Parameter: Gross floor area
Actual Range: 1758 to 102000 (units: sqm)
Range Selected by User: 1758 to 102000 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/04 to 17/10/11

Selected survey days:

Monday	6 days
Tuesday	5 days
Wednesday	1 days
Thursday	5 days
Friday	4 days

Selected survey types:

Manual count	21 days
Directional ATC Count	0 days

Selected Locations:

Suburban Area (PPS6 Out of Centre)	8
Edge of Town	11
Neighbourhood Centre (PPS6 Local Centre)	2

Selected Location Sub Categories:

Industrial Zone	12
Residential Zone	2
Built-Up Zone	1
Village	1
No Sub Category	5

LIST OF SITES relevant to selection parameters

1 BR-02-D-02 INDUSTRIAL ESTATE, BRISTOL BRISTOL CITY
NOVERS HILL
BEDMINSTER
BRISTOL
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 6000 sqm
Survey date: THURSDAY 19/11/09 Survey Type: MANUAL

2 BR-02-D-03 INDUSTRIAL ESTATE, BRISTOL BRISTOL CITY
CROFTS END ROAD
SPEEDWELL
BRISTOL
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 6000 sqm
Survey date: TUESDAY 20/10/09 Survey Type: MANUAL

3 CA-02-D-01 IND. ESTATE, PETERBOROUGH CAMBRIDGESHIRE
STURROCK WAY
BRETTON
PETERBOROUGH
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 4300 sqm
Survey date: TUESDAY 13/05/08 Survey Type: MANUAL

4 CA-02-D-02 IND. ESTATE, CAMBRIDGE CAMBRIDGESHIRE
COLDHAM'S ROAD
COLDHAM'S COMMON
CAMBRIDGE
Edge of Town
Industrial Zone
Total Gross floor area: 2063 sqm
Survey date: MONDAY 19/10/09 Survey Type: MANUAL

5 CA-02-D-03 IND. ESTATE, PETERBOROUGH CAMBRIDGESHIRE
SAVILLE ROAD
WESTWOOD
PETERBOROUGH
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Gross floor area: 4425 sqm
Survey date: THURSDAY 22/10/09 Survey Type: MANUAL

6 CB-02-D-04 INDUSTRIAL ESTATE, BRAMPTON CUMBRIA
CARLISLE ROAD

BRAMPTON
Edge of Town
No Sub Category
Total Gross floor area: 17708 sqm
Survey date: WEDNESDAY 16/12/09 Survey Type: MANUAL

7 CH-02-D-02 INDUSTRIAL EST., NORTHWICH CHESHIRE
MANCHESTER ROAD
WINCHAM
NORTHWICH
Edge of Town
Industrial Zone
Total Gross floor area: 22000 sqm
Survey date: FRIDAY 15/06/07 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 CW-02-D-02 INDUSTRIAL ESTATE, CAMBORNE CORNWALL
DRUIDS ROAD

CAMBORNE
Edge of Town
Industrial Zone
Total Gross floor area: 6515 sqm
Survey date: FRIDAY 21/09/07 Survey Type: MANUAL

9 CW-02-D-03 IND. ESTATE, NEAR PENZANCE CORNWALL
LONG ROCK ROAD
LONG ROCK
NEAR PENZANCE
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Gross floor area: 36500 sqm
Survey date: MONDAY 03/10/11 Survey Type: MANUAL

10 ES-02-D-05 IND. ESTATE, EASTBOURNE EAST SUSSEX
COURTLANDS ROAD

EASTBOURNE
Edge of Town
Residential Zone
Total Gross floor area: 7525 sqm
Survey date: MONDAY 30/11/09 Survey Type: MANUAL

11 HE-02-D-01 BUSINESS PARK, HEREFORD HEREFORDSHIRE
BURCOTT ROAD

HEREFORD
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 1758 sqm
Survey date: MONDAY 17/10/11 Survey Type: MANUAL

12 LC-02-D-04 INDUSTRIAL ESTATE, GARSTANG LANCASHIRE
GREEN LANE WEST

GARSTANG
Edge of Town
Industrial Zone
Total Gross floor area: 4555 sqm
Survey date: FRIDAY 16/06/06 Survey Type: MANUAL

13 LN-02-D-01 INDUSTRIAL ESTATE, GRANTHAM LINCOLNSHIRE
BELTON LANE

GRANTHAM
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 5347 sqm
Survey date: THURSDAY 12/05/05 Survey Type: MANUAL

14 MS-02-D-05 INDUSTRIAL ESTATE, ST HELENS MERSEYSIDE
BROADOAK ROAD

ST HELENS
Edge of Town
No Sub Category
Total Gross floor area: 2430 sqm
Survey date: TUESDAY 18/10/05 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

15 MS-02-D-06 INDUSTRIAL EST., LIVERPOOL MERSEYSIDE
BOALER STREET

LIVERPOOL
Neighbourhood Centre (PPS6 Local Centre)
Industrial Zone
Total Gross floor area: 4800 sqm
Survey date: THURSDAY 09/09/10 Survey Type: MANUAL

16 NB-02-D-01 INDUSTRIAL ESTATE, HEXHAM NORTHUMBERLAND
A695

HEXHAM
Edge of Town
Industrial Zone
Total Gross floor area: 10525 sqm
Survey date: MONDAY 23/05/05 Survey Type: MANUAL

17 NT-02-D-01 IND. ESTATE, SUTTON-IN-ASHFLD NOTTINGHAMSHIRE
B6028 STONEYFORD ROAD
STANTON HILL
SUTTON-IN-ASHFIELD
Edge of Town
No Sub Category
Total Gross floor area: 26400 sqm
Survey date: FRIDAY 30/06/06 Survey Type: MANUAL

18 SF-02-D-02 INDUSTRIAL ESTATE, IPSWICH SUFFOLK
HADLEIGH ROAD
WESTBOURNE
IPSWICH
Suburban Area (PPS6 Out of Centre)
Built-Up Zone
Total Gross floor area: 102000 sqm
Survey date: TUESDAY 22/05/07 Survey Type: MANUAL

19 TW-02-D-06 INDUSTRIAL ESTATE, N. SHIELDS TYNE & WEAR
NORHAM ROAD
WEST CHIRTON
NORTH SHIELDS
Suburban Area (PPS6 Out of Centre)
Industrial Zone
Total Gross floor area: 23000 sqm
Survey date: THURSDAY 19/10/06 Survey Type: MANUAL

20 WL-02-D-01 IND. ESTATE, WOOTTON BASSETT WILTSHIRE
MARLBOROUGH ROAD

WOOTTON BASSETT
Edge of Town
Industrial Zone
Total Gross floor area: 7050 sqm
Survey date: TUESDAY 03/10/06 Survey Type: MANUAL

21 WY-02-D-02 INDUSTRIAL EST., HUDDERSFIELD WEST YORKSHIRE
A629 WAKEFIELD ROAD
TANDEM
HUDDERSFIELD
Edge of Town
No Sub Category
Total Gross floor area: 20824 sqm
Survey date: MONDAY 11/09/06 Survey Type: MANUAL

TRIP RATE for Land Use 02 - EMPLOYMENT/D - INDUSTRIAL ESTATE
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30	0	0	0.000	0	0	0.000	0	0	0.000
00:30 - 01:00	0	0	0.000	0	0	0.000	0	0	0.000
01:00 - 01:30	0	0	0.000	0	0	0.000	0	0	0.000
01:30 - 02:00	0	0	0.000	0	0	0.000	0	0	0.000
02:00 - 02:30	0	0	0.000	0	0	0.000	0	0	0.000
02:30 - 03:00	0	0	0.000	0	0	0.000	0	0	0.000
03:00 - 03:30	0	0	0.000	0	0	0.000	0	0	0.000
03:30 - 04:00	0	0	0.000	0	0	0.000	0	0	0.000
04:00 - 04:30	0	0	0.000	0	0	0.000	0	0	0.000
04:30 - 05:00	0	0	0.000	0	0	0.000	0	0	0.000
05:00 - 05:30	0	0	0.000	0	0	0.000	0	0	0.000
05:30 - 06:00	0	0	0.000	0	0	0.000	0	0	0.000
06:00 - 06:30	0	0	0.000	0	0	0.000	0	0	0.000
06:30 - 07:00	0	0	0.000	0	0	0.000	0	0	0.000
07:00 - 07:30	21	15320	0.226	21	15320	0.068	21	15320	0.294
07:30 - 08:00	21	15320	0.300	21	15320	0.123	21	15320	0.423
08:00 - 08:30	21	15320	0.307	21	15320	0.148	21	15320	0.455
08:30 - 09:00	21	15320	0.308	21	15320	0.178	21	15320	0.486
09:00 - 09:30	21	15320	0.240	21	15320	0.176	21	15320	0.416
09:30 - 10:00	21	15320	0.191	21	15320	0.187	21	15320	0.378
10:00 - 10:30	21	15320	0.215	21	15320	0.193	21	15320	0.408
10:30 - 11:00	21	15320	0.211	21	15320	0.216	21	15320	0.427
11:00 - 11:30	21	15320	0.223	21	15320	0.209	21	15320	0.432
11:30 - 12:00	21	15320	0.241	21	15320	0.260	21	15320	0.501
12:00 - 12:30	21	15320	0.212	21	15320	0.269	21	15320	0.481
12:30 - 13:00	21	15320	0.218	21	15320	0.228	21	15320	0.446
13:00 - 13:30	21	15320	0.214	21	15320	0.238	21	15320	0.452
13:30 - 14:00	21	15320	0.242	21	15320	0.206	21	15320	0.448
14:00 - 14:30	21	15320	0.214	21	15320	0.225	21	15320	0.439
14:30 - 15:00	21	15320	0.192	21	15320	0.198	21	15320	0.390
15:00 - 15:30	21	15320	0.202	21	15320	0.209	21	15320	0.411
15:30 - 16:00	21	15320	0.196	21	15320	0.246	21	15320	0.442
16:00 - 16:30	21	15320	0.177	21	15320	0.304	21	15320	0.481
16:30 - 17:00	21	15320	0.170	21	15320	0.304	21	15320	0.474
17:00 - 17:30	21	15320	0.115	21	15320	0.299	21	15320	0.414
17:30 - 18:00	21	15320	0.066	21	15320	0.189	21	15320	0.255
18:00 - 18:30	21	15320	0.060	21	15320	0.110	21	15320	0.170
18:30 - 19:00	21	15320	0.029	21	15320	0.068	21	15320	0.097
19:00 - 19:30	0	0	0.000	0	0	0.000	0	0	0.000
19:30 - 20:00	0	0	0.000	0	0	0.000	0	0	0.000
20:00 - 20:30	0	0	0.000	0	0	0.000	0	0	0.000
20:30 - 21:00	0	0	0.000	0	0	0.000	0	0	0.000
21:00 - 21:30	0	0	0.000	0	0	0.000	0	0	0.000
21:30 - 22:00	0	0	0.000	0	0	0.000	0	0	0.000
22:00 - 22:30	0	0	0.000	0	0	0.000	0	0	0.000
22:30 - 23:00	0	0	0.000	0	0	0.000	0	0	0.000
23:00 - 23:30	0	0	0.000	0	0	0.000	0	0	0.000
23:30 - 24:00	0	0	0.000	0	0	0.000	0	0	0.000
Total Rates:			4.769			4.851			9.620

Parameter summary

Trip rate parameter range selected:	1758 - 102000 (units: sqm)
Survey date date range:	01/01/04 - 17/10/11
Number of weekdays (Monday-Friday):	21
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : F - WAREHOUSING (COMMERCIAL)
MULTI-MODAL TOTAL PEOPLE

Selected regions and areas:

05	EAST MIDLANDS		
	LN	LINCOLNSHIRE	1 days
09	NORTH		
	TV	TEES VALLEY	1 days

Filtering Stage 2 selection:

Parameter:	Gross floor area
Actual Range:	32300 to 80066 (units: sqm)
Range Selected by User:	3824 to 80066 (units: sqm)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/04 to 29/11/10

Selected survey days:

Monday	1 days
Tuesday	1 days

Selected survey types:

Manual count	2 days
Directional ATC Count	0 days

Selected Locations:

Edge of Town	2

Selected Location Sub Categories:

Industrial Zone	1
No Sub Category	1

LIST OF SITES relevant to selection parameters

1 LN-02-F-01 BOOK SERVICE, GRANTHAM LINCOLNSHIRE
TRENT ROAD

GRANTHAM
Edge of Town
No Sub Category
Total Gross floor area: 32300 sqm
Survey date: MONDAY 29/11/10 Survey Type: MANUAL

2 TV-02-F-02 ARGOS WAREHOUSE, DARL'TON TEES VALLEY
ROUNDHOUSE ROAD
FAVERDALE
DARLINGTON
Edge of Town
Industrial Zone
Total Gross floor area: 80066 sqm
Survey date: TUESDAY 07/10/08 Survey Type: MANUAL

TRIP RATE for Land Use 02 - EMPLOYMENT/F - WAREHOUSING (COMMERCIAL)

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00	0	0	0.000	0	0	0.000	0	0	0.000
01:00 - 02:00	0	0	0.000	0	0	0.000	0	0	0.000
02:00 - 03:00	0	0	0.000	0	0	0.000	0	0	0.000
03:00 - 04:00	0	0	0.000	0	0	0.000	0	0	0.000
04:00 - 05:00	0	0	0.000	0	0	0.000	0	0	0.000
05:00 - 06:00	0	0	0.000	0	0	0.000	0	0	0.000
06:00 - 07:00	0	0	0.000	0	0	0.000	0	0	0.000
07:00 - 08:00	2	56183	0.061	2	56183	0.020	2	56183	0.081
08:00 - 09:00	2	56183	0.038	2	56183	0.019	2	56183	0.057
09:00 - 10:00	2	56183	0.075	2	56183	0.023	2	56183	0.098
10:00 - 11:00	2	56183	0.017	2	56183	0.026	2	56183	0.043
11:00 - 12:00	2	56183	0.017	2	56183	0.025	2	56183	0.042
12:00 - 13:00	2	56183	0.031	2	56183	0.028	2	56183	0.059
13:00 - 14:00	2	56183	0.158	2	56183	0.094	2	56183	0.252
14:00 - 15:00	2	56183	0.028	2	56183	0.097	2	56183	0.125
15:00 - 16:00	2	56183	0.025	2	56183	0.053	2	56183	0.078
16:00 - 17:00	2	56183	0.028	2	56183	0.062	2	56183	0.090
17:00 - 18:00	2	56183	0.020	2	56183	0.046	2	56183	0.066
18:00 - 19:00	2	56183	0.016	2	56183	0.041	2	56183	0.057
19:00 - 20:00	0	0	0.000	0	0	0.000	0	0	0.000
20:00 - 21:00	0	0	0.000	0	0	0.000	0	0	0.000
21:00 - 22:00	0	0	0.000	0	0	0.000	0	0	0.000
22:00 - 23:00	0	0	0.000	0	0	0.000	0	0	0.000
23:00 - 24:00	0	0	0.000	0	0	0.000	0	0	0.000
Total Rates:			0.514			0.534			1.048

Parameter summary

Trip rate parameter range selected:	32300 - 80066 (units: sqm)
Survey date date range:	01/01/04 - 29/11/10
Number of weekdays (Monday-Friday):	2
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

Appendix D – Preliminary Junction Capacity Calculations

A060969 - Bassetlaw - Capacity Assessments
A57/A60 Sandy Lane/Highgrounds Road Roundabout

Arm	Without Mitigation 2026 Base + Committed				Without Mitigation 2026 Base + Committed + Allocations				With Mitigation 2026 Base + Committed + Allocations			
	AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak	
	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue
A60 (East)	0.712	2.42	0.720	2.51	0.739	2.77	0.751	2.94	0.834	4.65	0.774	3.30
A57 (South)	0.943	13.35	0.851	5.47	1.103	123.35	1.008	38.34	0.888	7.49	0.812	4.24
Highgrounds Road	0.613	1.55	0.641	1.75	0.688	2.12	0.774	3.21	0.761	2.97	0.760	3.02
A57 (North)	1.102	99.94	0.990	25.88	1.329	363.42	1.163	159.66	1.034	58.58	0.894	7.88

A57/A60/B6024/St. Annes Drive Roundabout

Arm	Without Mitigation 2026 Base + Committed				Without Mitigation 2026 Base + Committed + Allocations				With Mitigation 2026 Base + Committed + Allocations			
	AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak	
	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue
B6024 Newcastle Avenue	0.889	6.91	1.291	132.90	1.007	23.30	1.402	230.01	0.795	3.68	0.986	20.08
A57 (South)	0.716	2.47	0.906	8.40	0.815	4.22	1.081	70.16	0.615	1.58	0.894	7.52
A60	1.022	37.35	0.706	2.35	1.264	206.64	0.836	4.84	0.915	9.59	0.656	1.88
St. Annes Drive	0.734	2.53	0.359	0.56	0.827	4.05	0.448	0.80	0.798	3.43	0.376	0.59
A57 (North)	1.133	128.88	1.034	53.51	1.355	422.79	0.203	217.47	0.959	17.11	0.832	4.83

Changes to Existing Geometry Tested

Approach	Entry	Flare	Radius	Diameter	Conflict
0	3.5	16.5	0	35	0
0	3	34	0	35	0
0	2.7	43.2	0	35	0
0	1	7	0	35	0
0	2.7	76.5	0	35	0

Note: modifications assumed to be undeliverable so signal control proposed.

A57/B6041 Gateford Road Roundabout Roundabout

Arm	Without Mitigation 2026 Base + Committed				Without Mitigation 2026 Base + Committed + Allocations				With Mitigation 2026 Base + Committed + Allocations			
	AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak	
	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue
A57 (north)	0.255	0.34	0.072	0.08	0.967	18.23	0.793	3.72	0.773	3.36	0.660	1.88
Woodsetts Lane	0.000	0.00	0.000	0.00	0.842	4.70	0.627	1.64	0.850	5.03	0.677	2.09
B6041 Gateford Road	0.105	0.12	0.091	0.10	1.275	185.29	0.598	1.48	0.649	1.82	0.390	0.64
A57 (south)	0.091	0.10	0.214	0.27	0.748	2.93	1.236	250.81	0.469	0.88	0.820	4.46
Site Access	0.000	0.00	0.000	0.00	0.207	0.26	0.646	1.78	0.223	0.29	0.843	4.67

A60/A619

Arm	Without Mitigation 2026 Base + Committed				Without Mitigation 2026 Base + Committed + Allocations				With Mitigation 2026 Base + Committed + Allocations			
	AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak	
	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue
Eastern Priority												
B-C	0.000	0.00	0.000	0.00	0.000	0.00	0.000	0.00				
B-A	0.049	0.05	0.016	0.02	0.051	0.05	0.017	0.02				
C-B	0.000	0.00	0.000	0.00	0.000	0.00	0.000	0.00				
Note:- A = A60 (south), B = A619 (west), C = A60 (north)												
Northern Priority												
A60 (north)	0.000	0.00	0.000	0.00	0.000	0.00	0.000	0.00				
A60 (south)	1.528	227.89	0.618	1.59	1.685	318.36	0.687	2.14				
A619 (west)	0.000	0.00	0.000	0.00	0.000	0.00	0.000	0.00				
Note:- A = A60 (north), B = A60 (south), C = A619 (west)												
Southern Priority												
A619 (west)	0.000	0.00	0.000	0.00	0.000	0.00	0.000	0.00				
A60 (north)	1.028	21.92	1.154	62.18	1.197	65.46	1.277	110.13				
A60 (south)	0.000	0.00	0.000	0.00	0.000	0.00	0.000	0.00				
Note:- A = A619 (west), B = A60 (north), C = A60 (south)												

Arm	Without Mitigation 2026 Base + Committed				Without Mitigation 2026 Base + Committed + Allocations				With Mitigation 2026 Base + Committed + Allocations			
	AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak	
	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue
Improvement Option 1												
A60 (north)									0.631	1.7	0.864	6.06
A60 (south)									0.629	1.68	0.358	0.56
A619 (west)									0.859	5.56	0.117	0.13
Improvement Option 2												
A60 (north)									0.558	1.26	0.764	3.19
A60 (south)									0.639	1.75	0.365	0.57
A619 (west)									0.837	4.78	0.112	0.13

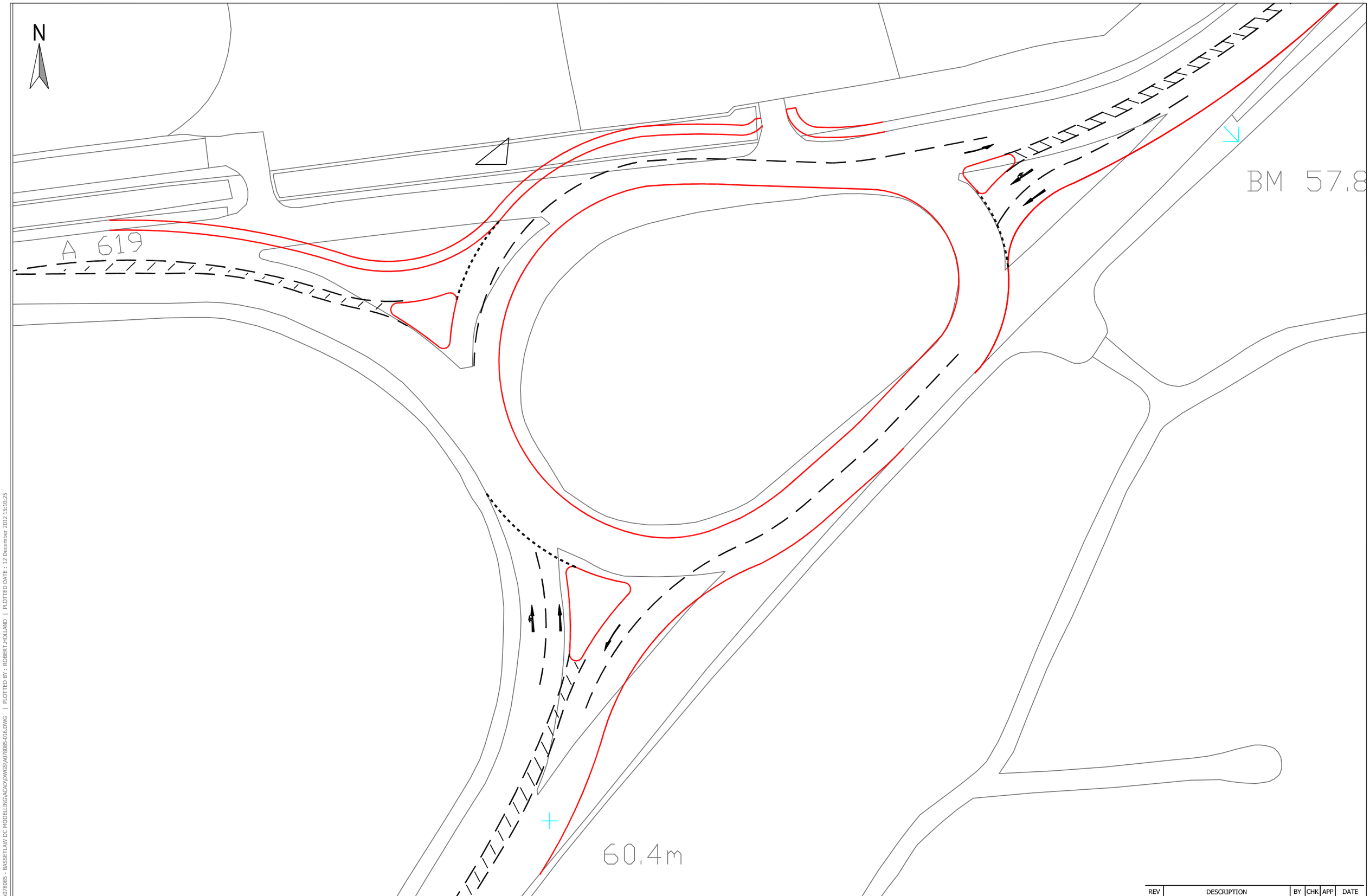
A060969 - Bassetlaw - Capacity Assessments
Gateford Road/Ashes Park Avenue Priority Junction

Arm	Without Mitigation				Without Mitigation				With Mitigation			
	2026 Base + Committed				2026 Base + Committed + Allocations				2026 Base + Committed + Allocations			
	AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak	
	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue
Ashes Park Avenue to Gateford Road (east)	0.000	0.00	0.000	0.00	4.664	320.54	***	182.81				
Ashes Park Avenue to Gateford Road (west)	0.130	0.15	0.050	0.05	4.669	449.63	***	197.78				
Gateford Road (east)	0.000	0.00	0.000	0.00	0.445	0.82	1.165	31.00				

Gateford Road/Raymoth Lane Priority Junction

Arm	Without Mitigation				Without Mitigation				With Mitigation			
	2026 Base + Committed				2026 Base + Committed + Allocations				2026 Base + Committed + Allocations			
	AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak	
	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue	RFC	Queue
Raymoth Lane to Gateford Road (south)	0.002	0.00	0.003	0.00	2.048	80.97	1.859	52.20				
Raymoth Lane to Gateford Road (north)	0.163	0.19	0.048	0.05	2.066	235.99	1.884	164.75				
Gateford Road (south)	0.003	0.00	0.002	0.00	0.322	0.47	0.530	0.65				

A60/A619 Roundabout
Sketches & Capacity Assessments



REV	DESCRIPTION	BY	CHK	APP	DATE

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FAX: +44 (0)116 234 8001
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Client: BASSETLAW DISTRICT COUNCIL NORTH NOTTINGHAMSHIRE

Project: Bassetlaw Transport Study

Drawing Title: Possible Improvements at the A60/A619 Roundabout Option 1

Scale @ A3	Drawn	Date	Checked	Date	Approved	Date
1:500	DBV	19/07/2010	ASG	19/07/2010	ASG	19/07/2010

Project No.	Office	Type	Drawing No.	Revision
A078-85	35	18	016	-

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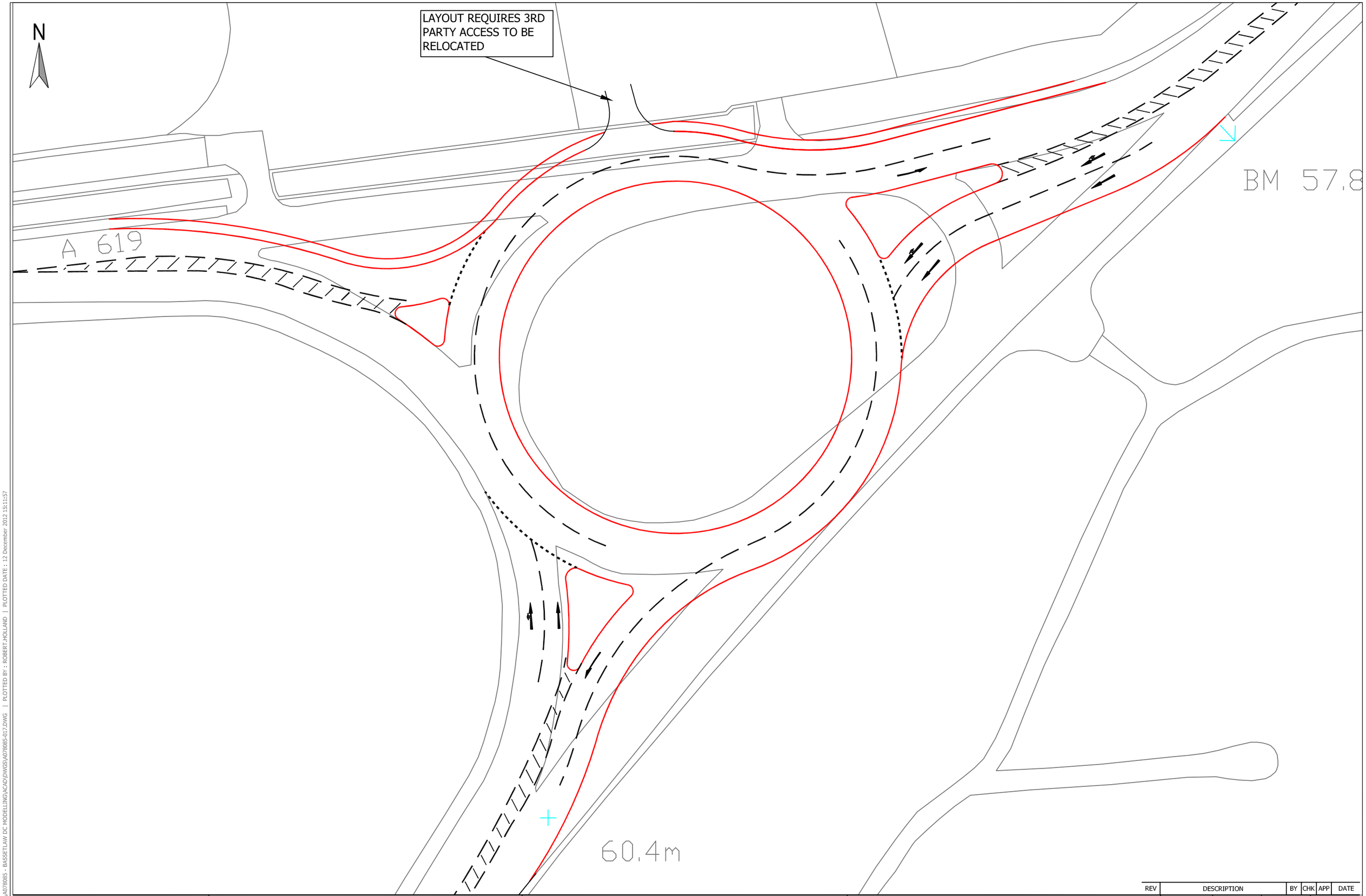
FILENAME : N:\PROJECTS\A078085 - BASSETLAW DC MODELLING\ACAD\DWGS\A078085-016.DWG | PLOTTED BY : ROBERT.HOLLAND | PLOTTED DATE : 12 December 2012 15:10:25



REV	DESCRIPTION	BY	CHK	APP	DATE

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Project: Bassetlaw Transport Study

Drawing Title: Possible Improvements at the A60/A619 Roundabout Option 2

Scale @ A3	Drawn	Date	Checked	Date	Approved	Date
1:500	DBV	19/07/2010	RJH	19/07/2010	ASG	19/07/2010

Project No.	Office	Type	Drawing No.	Revision
A078085	35	18	017	-

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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Run with file:-
"N:\Projects\A078085 - Bassetlaw DC Modelling\calculations\Capacity Assessments\1. A619-A60 Priorities\Oct 2012\
Eastern priority\Eastern priority junction.vpi"
(drive-on-the-left) at 14:47:00 on Monday, 3 December 2012

.RUN INFORMATION
****

RUN TITLE : A619-A60 Junction - Eastern priority
LOCATION : Bassetlaw
DATE : 19/02/10
CLIENT : Bassetlaw DC
ENUMERATOR : martin.murphy [35-T-048CS]
JOB NUMBER : A078085
STATUS : Preliminary
DESCRIPTION : 23.11.12 RJH: New flows

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY
****

INPUT DATA

```
MAJOR ROAD (ARM C) ---------------------- MAJOR ROAD (ARM A)
                                       I
                                       I
                                       I
                                       I
                                       I
                                       I
                                 MINOR ROAD (ARM B)
```

ARM A IS A60 (south)
ARM B IS A619 (west)
ARM C IS A60 (north)

.STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 9.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)100.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 0.0 M.
- VISIBILITY TO RIGHT	(VB-A) 0.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	8.00 M.
WIDTH AT 10 M FROM JUNCTION	8.00 M.
WIDTH AT 15 M FROM JUNCTION	8.00 M.
WIDTH AT 20 M FROM JUNCTION	7.00 M.
- LENGTH OF FLARED SECTION	2 VEHS

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
631.87	0.21	0.21

(NB These values do not allow for any site specific corrections)

.TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

.Demand set: 2026 Base + Committed + Development AM

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

.DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.00	0.00	0.00
ARM B	15.00	45.00	75.00	0.22	0.34	0.22
ARM C	15.00	45.00	75.00	14.66	21.99	14.66

.Demand set: 2026 Base + Committed + Development AM

TIME	TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S) FROM/TO	ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.000	0.000
		0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM B	1.000	0.000	0.000
		18.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		1173.0	0.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2026 Base + Committed + Development AM
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.00	9.57	0.000		0.00	0.00	0.0		0.00
B-A	0.23	7.43	0.030		0.00	0.03	0.4		0.14
C-A	14.72								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.00	9.55	0.000		0.00	0.00	0.0		0.00
B-A	0.27	7.02	0.038		0.03	0.04	0.6		0.15
C-A	17.58								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.00	9.52	0.000		0.00	0.00	0.0		0.00
B-A	0.33	6.45	0.051		0.04	0.05	0.8		0.16
C-A	21.52								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY	PEDESTRIAN FLOW	START QUEUE	END QUEUE	DELAY (VEH.MIN/	GEOMETRIC DELAY (VEH.MIN/	AVERAGE DELAY PER ARRIVING

Eastern priority junction

			(RFC)	(PEDS/MIN)	(VEHS)	(VEHS)	TIME SEGMENT)	TIME SEGMENT)	VEHICLE (MIN)
08.30-08.45									
B-C	0.00	9.52	0.000		0.00	0.00	0.0		0.00
B-A	0.33	6.45	0.051		0.05	0.05	0.8		0.16
C-A	21.52								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.00	9.55	0.000		0.00	0.00	0.0		0.00
B-A	0.27	7.02	0.038		0.05	0.04	0.6		0.15
C-A	17.58								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-C	0.00	9.57	0.000		0.00	0.00	0.0		0.00
B-A	0.23	7.43	0.030		0.04	0.03	0.5		0.14
C-A	14.72								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.1
08.45	0.1
09.00	0.0
09.15	0.0

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	24.8	16.5	3.7	0.15	3.7	0.15
C-A	1614.5	1076.4				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	0.0	0.0				
A-C	0.0	0.0				
ALL	1639.3	1092.9	3.7	0.00	3.7	0.00

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
631.87	0.21	0.21

(NB These values do not allow for any site specific corrections)

.TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

.Demand set: 2026 Base + Committed + Development PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

.DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.00	0.00	0.00
ARM B	15.00	45.00	75.00	0.06	0.09	0.06
ARM C	15.00	45.00	75.00	20.14	30.21	20.14

.Demand set: 2026 Base + Committed + Development PM

TIME	FROM/TO	TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.000	0.000
		0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM B	1.000	0.000	0.000
		5.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		1611.0	0.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2026 Base + Committed + Development PM
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.00	9.62	0.000		0.00	0.00	0.0		0.00
B-A	0.06	6.64	0.009		0.00	0.01	0.1		0.15
C-A	20.21								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.00	9.61	0.000		0.00	0.00	0.0		0.00
B-A	0.07	6.07	0.012		0.01	0.01	0.2		0.17
C-A	24.14								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.00	9.60	0.000		0.00	0.00	0.0		0.00
B-A	0.09	5.29	0.017		0.01	0.02	0.3		0.19
C-A	29.56								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00

```
I   A-B       0.00                                                                                                   I
I   A-C       0.00                                                                                                   I
I                                                                                                                    I
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.--------------------------------------------------------------------------------------------------------------------
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
I 17.30-17.45                                                                                                        I
I   B-C       0.00      9.60    0.000                0.00   0.00        0.0                           0.00      I
I   B-A       0.09      5.29    0.017                0.02   0.02        0.3                           0.19      I
I   C-A      29.56                                                                                                   I
I   C-B       0.00      9.57    0.000                0.00   0.00        0.0                           0.00      I
I   A-B       0.00                                                                                                   I
I   A-C       0.00                                                                                                   I
I                                                                                                                    I
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I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
I 17.45-18.00                                                                                                        I
I   B-C       0.00      9.61    0.000                0.00   0.00        0.0                           0.00      I
I   B-A       0.07      6.07    0.012                0.02   0.01        0.2                           0.17      I
I   C-A      24.14                                                                                                   I
I   C-B       0.00      9.57    0.000                0.00   0.00        0.0                           0.00      I
I   A-B       0.00                                                                                                   I
I   A-C       0.00                                                                                                   I
I                                                                                                                    I
.--------------------------------------------------------------------------------------------------------------------
.--------------------------------------------------------------------------------------------------------------------
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
I 18.00-18.15                                                                                                        I
I   B-C       0.00      9.62    0.000                0.00   0.00        0.0                           0.00      I
I   B-A       0.06      6.64    0.009                0.01   0.01        0.1                           0.15      I
I   C-A      20.21                                                                                                   I
I   C-B       0.00      9.57    0.000                0.00   0.00        0.0                           0.00      I
I   A-B       0.00                                                                                                   I
I   A-C       0.00                                                                                                   I
I                                                                                                                    I
.--------------------------------------------------------------------------------------------------------------------
.
QUEUE FOR STREAM    B-C
-------------------------
 TIME          NO. OF
 SEGMENT       VEHICLES
 ENDING        IN QUEUE
  17.00           0.0
  17.15           0.0
  17.30           0.0
  17.45           0.0
  18.00           0.0
  18.15           0.0
.
QUEUE FOR STREAM    B-A
-------------------------
 TIME          NO. OF
 SEGMENT       VEHICLES
 ENDING        IN QUEUE
  17.00           0.0
  17.15           0.0
  17.30           0.0
  17.45           0.0
  18.00           0.0
  18.15           0.0
.
QUEUE FOR STREAM    C-B
-------------------------
 TIME          NO. OF
 SEGMENT       VEHICLES
 ENDING        IN QUEUE
  17.00           0.0
  17.15           0.0
  17.30           0.0
  17.45           0.0
  18.00           0.0
  18.15           0.0
.
                QUEUEING DELAY INFORMATION OVER WHOLE PERIOD
                ---------------------------------------------
--------------------------------------------------------------------------
I STREAM I   TOTAL DEMAND  I   * QUEUEING *      I * INCLUSIVE QUEUEING * I
I        I                 I    * DELAY *        I       * DELAY *        I
I        I-----------------------------------------------------------------I
I        I  (VEH)  (VEH/H) I  (MIN)    (MIN/VEH) I    (MIN)     (MIN/VEH) I
--------------------------------------------------------------------------
I  B-C   I    0.0 I    0.0 I     0.0 I    0.00   I       0.0  I    0.00   I
I  B-A   I    6.9 I    4.6 I     1.2 I    0.17   I       1.2  I    0.17   I
I  C-A   I 2217.4 I 1478.3 I         I           I            I           I
I  C-B   I    0.0 I    0.0 I     0.0 I    0.00   I       0.0  I    0.00   I
I  A-B   I    0.0 I    0.0 I         I           I            I           I
I  A-C   I    0.0 I    0.0 I         I           I            I           I
--------------------------------------------------------------------------
I  ALL   I 2224.3 I 1482.9 I     1.2 I    0.00   I       1.2  I    0.00   I
--------------------------------------------------------------------------
* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******


.SLOPES AND INTERCEPT
 --------------------
 (NB:Streams may be combined, in which case capacity will be adjusted)
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Eastern priority junction

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
631.87	0.21	0.21

(NB These values do not allow for any site specific corrections)

.TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

.Demand set: 2026 Base + Committed AM

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

.DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.00	0.00	0.00
ARM B	15.00	45.00	75.00	0.22	0.34	0.22
ARM C	15.00	45.00	75.00	12.99	19.48	12.99

.Demand set: 2026 Base + Committed AM

TIME	FROM/TO	TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.000	0.000
		0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM B	1.000	0.000	0.000
		18.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		1039.0	0.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2026 Base + Committed AM
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.00	9.57	0.000		0.00	0.00	0.0		0.00
B-A	0.23	7.68	0.029		0.00	0.03	0.4		0.13
C-A	13.04								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.00	9.55	0.000		0.00	0.00	0.0		0.00
B-A	0.27	7.31	0.037		0.03	0.04	0.6		0.14
C-A	15.57								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

Eastern priority junction

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.00	9.52	0.000		0.00	0.00	0.0		0.00
B-A	0.33	6.81	0.049		0.04	0.05	0.7		0.15
C-A	19.07								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.00	9.52	0.000		0.00	0.00	0.0		0.00
B-A	0.33	6.81	0.049		0.05	0.05	0.8		0.15
C-A	19.07								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.00	9.55	0.000		0.00	0.00	0.0		0.00
B-A	0.27	7.31	0.037		0.05	0.04	0.6		0.14
C-A	15.57								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-C	0.00	9.57	0.000		0.00	0.00	0.0		0.00
B-A	0.23	7.68	0.029		0.04	0.03	0.5		0.13
C-A	13.04								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.1
08.45	0.1
09.00	0.0
09.15	0.0

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	24.8	16.5	3.6	0.14	3.6	0.14
C-A	1430.1	953.4				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	0.0	0.0				
A-C	0.0	0.0				
ALL	1454.9	969.9	3.6	0.00	3.6	0.00

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
631.87	0.21	0.21

(NB These values do not allow for any site specific corrections)

.TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

.Demand set: 2026 Base + Committed PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

.DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.00	0.00	0.00
ARM B	15.00	45.00	75.00	0.06	0.09	0.06
ARM C	15.00	45.00	75.00	18.51	27.77	18.51

.Demand set: 2026 Base + Committed PM

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS / (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.000	0.000
		0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM B	1.000	0.000	0.000
		5.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		1481.0	0.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2026 Base + Committed PM
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.00	9.62	0.000		0.00	0.00	0.0		0.00
B-A	0.06	6.87	0.009		0.00	0.01	0.1		0.15
C-A	18.58								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.00	9.61	0.000		0.00	0.00	0.0		0.00
B-A	0.07	6.35	0.012		0.01	0.01	0.2		0.16

```
I   C-A      22.19                                                                                                   I
I   C-B       0.00      9.57    0.000                0.00   0.00        0.0                            0.00        I
I   A-B       0.00                                                                                                   I
I   A-C       0.00                                                                                                   I
I                                                                                                                    I
.--------------------------------------------------------------------------------------------------------------------

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I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                              (RFC)    (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
I 17.15-17.30                                                                                                        I
I   B-C       0.00      9.60    0.000                0.00   0.00        0.0                            0.00        I
I   B-A       0.09      5.63    0.016                0.01   0.02        0.2                            0.18        I
I   C-A      27.18                                                                                                   I
I   C-B       0.00      9.57    0.000                0.00   0.00        0.0                            0.00        I
I   A-B       0.00                                                                                                   I
I   A-C       0.00                                                                                                   I
I                                                                                                                    I
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I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                              (RFC)    (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
I 17.30-17.45                                                                                                        I
I   B-C       0.00      9.60    0.000                0.00   0.00        0.0                            0.00        I
I   B-A       0.09      5.63    0.016                0.02   0.02        0.2                            0.18        I
I   C-A      27.18                                                                                                   I
I   C-B       0.00      9.57    0.000                0.00   0.00        0.0                            0.00        I
I   A-B       0.00                                                                                                   I
I   A-C       0.00                                                                                                   I
I                                                                                                                    I
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I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                              (RFC)    (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
I 17.45-18.00                                                                                                        I
I   B-C       0.00      9.61    0.000                0.00   0.00        0.0                            0.00        I
I   B-A       0.07      6.35    0.012                0.02   0.01        0.2                            0.16        I
I   C-A      22.19                                                                                                   I
I   C-B       0.00      9.57    0.000                0.00   0.00        0.0                            0.00        I
I   A-B       0.00                                                                                                   I
I   A-C       0.00                                                                                                   I
I                                                                                                                    I
.--------------------------------------------------------------------------------------------------------------------

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I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                              (RFC)    (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
I 18.00-18.15                                                                                                        I
I   B-C       0.00      9.62    0.000                0.00   0.00        0.0                            0.00        I
I   B-A       0.06      6.87    0.009                0.01   0.01        0.1                            0.15        I
I   C-A      18.58                                                                                                   I
I   C-B       0.00      9.57    0.000                0.00   0.00        0.0                            0.00        I
I   A-B       0.00                                                                                                   I
I   A-C       0.00                                                                                                   I
I                                                                                                                    I
.--------------------------------------------------------------------------------------------------------------------
.
QUEUE FOR STREAM    B-C
-------------------------
 TIME          NO. OF
 SEGMENT       VEHICLES
 ENDING        IN QUEUE
  17.00           0.0
  17.15           0.0
  17.30           0.0
  17.45           0.0
  18.00           0.0
  18.15           0.0
.
QUEUE FOR STREAM    B-A
-------------------------
 TIME          NO. OF
 SEGMENT       VEHICLES
 ENDING        IN QUEUE
  17.00           0.0
  17.15           0.0
  17.30           0.0
  17.45           0.0
  18.00           0.0
  18.15           0.0
.
QUEUE FOR STREAM    C-B
-------------------------
 TIME          NO. OF
 SEGMENT       VEHICLES
 ENDING        IN QUEUE
  17.00           0.0
  17.15           0.0
  17.30           0.0
  17.45           0.0
  18.00           0.0
  18.15           0.0
.
                 QUEUEING DELAY INFORMATION OVER WHOLE PERIOD
                 ---------------------------------------------
-----------------------------------------------------------------------------
I STREAM I   TOTAL DEMAND  I   * QUEUEING *      I * INCLUSIVE QUEUEING * I
I        I                 I    * DELAY *        I       * DELAY *        I
I        I-----------------------------------------------------------------I
I        I  (VEH)  (VEH/H) I  (MIN)    (MIN/VEH) I    (MIN)     (MIN/VEH) I
-----------------------------------------------------------------------------
I  B-C   I    0.0 I    0.0 I     0.0 I    0.00   I       0.0  I    0.00   I
I  B-A   I    6.9 I    4.6 I     1.1 I    0.16   I       1.1  I    0.16   I
I  C-A   I 2038.5 I 1359.0 I         I           I            I           I
I  C-B   I    0.0 I    0.0 I     0.0 I    0.00   I       0.0  I    0.00   I
I  A-B   I    0.0 I    0.0 I         I           I            I           I
I  A-C   I    0.0 I    0.0 I         I           I            I           I
-----------------------------------------------------------------------------
```

```
                                                    Eastern priority junction
I  ALL   I 2045.4 I 1363.6 I     1.1 I    0.00   I       1.1  I    0.00   I
-----------------------------------------------------------------------------
* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******
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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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Run with file:-
"N:\Projects\A078085 - Bassetlaw DC Modelling\calculations\Capacity Assessments\1. A619-A60 Priorities\Oct 2012\
Northern priority\Northern priority junction.vpi"
(drive-on-the-left) at 14:48:56 on Monday, 3 December 2012

.RUN INFORMATION
****

RUN TITLE : A619-A60 Junction - Northern priority
LOCATION : Bassetlaw
DATE : 19/02/10
CLIENT : Bassetlaw DC
ENUMERATOR : martin.murphy [35-T-048CS]
JOB NUMBER : A078085
STATUS : Preliminary
DESCRIPTION : 23.11.2012 RJH: New flows

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY
****

INPUT DATA

```
                    MAJOR ROAD (ARM C) ---------------------- MAJOR ROAD (ARM A)
                                                I
                                                I
                                                I
                                                I
                                                I
                                                I
                                        MINOR ROAD (ARM B)
```

ARM A IS A60 (north)
ARM B IS A60 (south)
ARM C IS A619 (west)

.STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.25 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)200.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 200.0 M.
- VISIBILITY TO RIGHT	(VB-A) 200.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	8.00 M.
WIDTH AT 10 M FROM JUNCTION	7.50 M.
WIDTH AT 15 M FROM JUNCTION	7.00 M.
WIDTH AT 20 M FROM JUNCTION	7.00 M.
- LENGTH OF FLARED SECTION	4 VEHS

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
689.79	0.26	0.26

(NB These values do not allow for any site specific corrections)

.TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

.Demand set: 2026 Base + Committed + Development AM

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

.DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.00	0.00	0.00
ARM B	15.00	45.00	75.00	11.25	16.88	11.25
ARM C	15.00	45.00	75.00	9.75	14.63	9.75

.Demand set: 2026 Base + Committed + Development AM

TIME	TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S) FROM/TO	ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.000	0.000
		0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM B	1.000	0.000	0.000
		900.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		780.0	0.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2026 Base + Committed + Development AM
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.00	8.44	0.000		0.00	0.00	0.0		0.00
B-A	11.29	10.82	1.044		0.00	16.46	151.4		1.07
C-A	9.79								
C-B	0.00	10.45	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.00	8.44	0.000		0.00	0.00	0.0		0.00
B-A	13.48	10.39	1.298		16.46	63.35	600.0		4.15
C-A	11.69								
C-B	0.00	10.45	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.00	8.44	0.000		0.00	0.00	0.0		0.00
B-A	16.52	9.80	1.685		63.35	164.06	1705.7		11.76
C-A	14.31								
C-B	0.00	10.45	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY	PEDESTRIAN FLOW	START QUEUE	END QUEUE	DELAY (VEH.MIN/	GEOMETRIC DELAY (VEH.MIN/	AVERAGE DELAY PER ARRIVING

			(RFC)	(PEDS/MIN)	(VEHS)	(VEHS)	TIME SEGMENT)	TIME SEGMENT)	VEHICLE (MIN)
08.30-08.45									
B-C	0.00	8.44	0.000		0.00	0.00	0.0		0.00
B-A	16.52	9.80	1.685		164.06	264.74	3216.0		22.02
C-A	14.31								
C-B	0.00	10.45	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.00	8.44	0.000		0.00	0.00	0.0		0.00
B-A	13.48	10.39	1.298		264.74	311.16	4319.3		27.33
C-A	11.69								
C-B	0.00	10.45	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-C	0.00	8.44	0.000		0.00	0.00	0.0		0.00
B-A	11.29	10.82	1.044		311.16	318.36	4721.4		29.20
C-A	9.79								
C-B	0.00	10.45	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	16.5	**********
08.15	63.4	**********
08.30	164.1	**********
08.45	264.7	**********
09.00	311.2	**********
09.15	318.4	**********

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	1238.8	825.9	14713.6	11.88	19399.1	15.66
C-A	1073.6	715.7				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	0.0	0.0				
A-C	0.0	0.0				
ALL	2312.4	1541.6	14713.6	6.36	19399.1	8.39

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
689.79	0.26	0.26

(NB These values do not allow for any site specific corrections)

.TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

.Demand set: 2026 Base + Committed + Development PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

.DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.00	0.00	0.00
ARM B	15.00	45.00	75.00	5.84	8.76	5.84
ARM C	15.00	45.00	75.00	1.60	2.40	1.60

.Demand set: 2026 Base + Committed + Development PM

TIME	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) FROM/TO ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.000	0.000
		0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM B	1.000	0.000	0.000
		467.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		128.0	0.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2026 Base + Committed + Development PM
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.00	9.94	0.000		0.00	0.00	0.0		0.00
B-A	5.86	12.64	0.463		0.00	0.85	12.1		0.14
C-A	1.61								
C-B	0.00	10.45	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.00	9.67	0.000		0.00	0.00	0.0		0.00
B-A	7.00	12.57	0.556		0.85	1.22	17.5		0.18
C-A	1.92								
C-B	0.00	10.45	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.00	9.30	0.000		0.00	0.00	0.0		0.00
B-A	8.57	12.48	0.687		1.22	2.09	29.0		0.25
C-A	2.35								
C-B	0.00	10.45	0.000		0.00	0.00	0.0		0.00

```
I   A-B       0.00                                                                                                   I
I   A-C       0.00                                                                                                   I
I                                                                                                                    I
.--------------------------------------------------------------------------------------------------------------------
.--------------------------------------------------------------------------------------------------------------------
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
I 17.30-17.45                                                                                                        I
I   B-C       0.00      9.28    0.000                0.00   0.00        0.0                           0.00      I
I   B-A       8.57     12.48    0.687                2.09   2.14       31.8                           0.26      I
I   C-A       2.35                                                                                                 I
I   C-B       0.00     10.45    0.000                0.00   0.00        0.0                           0.00      I
I   A-B       0.00                                                                                                 I
I   A-C       0.00                                                                                                 I
I                                                                                                                    I
.--------------------------------------------------------------------------------------------------------------------
.--------------------------------------------------------------------------------------------------------------------
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
I 17.45-18.00                                                                                                        I
I   B-C       0.00      9.65    0.000                0.00   0.00        0.0                           0.00      I
I   B-A       7.00     12.57    0.556                2.14   1.29       20.4                           0.18      I
I   C-A       1.92                                                                                                 I
I   C-B       0.00     10.45    0.000                0.00   0.00        0.0                           0.00      I
I   A-B       0.00                                                                                                 I
I   A-C       0.00                                                                                                 I
I                                                                                                                    I
.--------------------------------------------------------------------------------------------------------------------
.--------------------------------------------------------------------------------------------------------------------
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
I 18.00-18.15                                                                                                        I
I   B-C       0.00      9.93    0.000                0.00   0.00        0.0                           0.00      I
I   B-A       5.86     12.64    0.463                1.29   0.88       13.7                           0.15      I
I   C-A       1.61                                                                                                 I
I   C-B       0.00     10.45    0.000                0.00   0.00        0.0                           0.00      I
I   A-B       0.00                                                                                                 I
I   A-C       0.00                                                                                                 I
I                                                                                                                    I
.--------------------------------------------------------------------------------------------------------------------
.
QUEUE FOR STREAM    B-C
-------------------------
 TIME          NO. OF
 SEGMENT       VEHICLES
 ENDING        IN QUEUE
  17.00           0.0
  17.15           0.0
  17.30           0.0
  17.45           0.0
  18.00           0.0
  18.15           0.0
.
QUEUE FOR STREAM    B-A
-------------------------
 TIME          NO. OF
 SEGMENT       VEHICLES
 ENDING        IN QUEUE
  17.00           0.8    *
  17.15           1.2    *
  17.30           2.1    **
  17.45           2.1    **
  18.00           1.3    *
  18.15           0.9    *
.
QUEUE FOR STREAM    C-B
-------------------------
 TIME          NO. OF
 SEGMENT       VEHICLES
 ENDING        IN QUEUE
  17.00           0.0
  17.15           0.0
  17.30           0.0
  17.45           0.0
  18.00           0.0
  18.15           0.0
.
                QUEUEING DELAY INFORMATION OVER WHOLE PERIOD
                ---------------------------------------------
 ---------------------------------------------------------------------------
 I STREAM I   TOTAL DEMAND  I   * QUEUEING *      I * INCLUSIVE QUEUEING * I
 I        I                I    * DELAY *        I       * DELAY *        I
 I        I----------------------------------------------------------------I
 I        I  (VEH)  (VEH/H) I  (MIN)    (MIN/VEH) I    (MIN)     (MIN/VEH) I
 ---------------------------------------------------------------------------
 I  B-C   I    0.0 I    0.0 I     0.0 I    0.00   I       0.0  I    0.00   I
 I  B-A   I  642.8 I  428.5 I   124.5 I    0.19   I     124.6  I    0.19   I
 I  C-A   I  176.2 I  117.5 I         I           I            I           I
 I  C-B   I    0.0 I    0.0 I     0.0 I    0.00   I       0.0  I    0.00   I
 I  A-B   I    0.0 I    0.0 I         I           I            I           I
 I  A-C   I    0.0 I    0.0 I         I           I            I           I
 ---------------------------------------------------------------------------
 I  ALL   I  819.0 I  546.0 I   124.5 I    0.15   I     124.6  I    0.15   I
 ---------------------------------------------------------------------------
 * DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
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 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
  A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

 *******END OF RUN*******


 .SLOPES AND INTERCEPT
  --------------------
  (NB:Streams may be combined, in which case capacity will be adjusted)
```

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
689.79	0.26	0.26

(NB These values do not allow for any site specific corrections)

.TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

.Demand set: 2026 Base + Committed AM

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

.DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.00	0.00	0.00
ARM B	15.00	45.00	75.00	10.45	15.67	10.45
ARM C	15.00	45.00	75.00	9.02	13.54	9.02

.Demand set: 2026 Base + Committed AM

TIME	TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S) FROM/TO	ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.000	0.000
		0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM B	1.000	0.000	0.000
		836.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		722.0	0.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2026 Base + Committed AM
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.00	8.56	0.000		0.00	0.00	0.0		0.00
B-A	10.49	10.98	0.956		0.00	9.05	95.3		0.72
C-A	9.06								
C-B	0.00	10.45	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.00	8.44	0.000		0.00	0.00	0.0		0.00
B-A	12.53	10.58	1.183		9.05	39.67	369.6		2.62
C-A	10.82								
C-B	0.00	10.45	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.00	8.44	0.000		0.00	0.00	0.0		0.00
B-A	15.34	10.04	1.528		39.67	119.25	1192.1		8.10
C-A	13.25								
C-B	0.00	10.45	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.00	8.44	0.000		0.00	0.00	0.0		0.00
B-A	15.34	10.04	1.528		119.25	198.75	2385.0		15.53
C-A	13.25								
C-B	0.00	10.45	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.00	8.44	0.000		0.00	0.00	0.0		0.00
B-A	12.53	10.58	1.183		198.75	227.89	3199.8		20.10
C-A	10.82								
C-B	0.00	10.45	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-C	0.00	8.44	0.000		0.00	0.00	0.0		0.00
B-A	10.49	10.98	0.956		227.89	221.28	3368.8		20.55
C-A	9.06								
C-B	0.00	10.45	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	9.1	*********
08.15	39.7	**********
08.30	119.2	**********
08.45	198.8	**********
09.00	227.9	**********
09.15	221.3	**********

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	1150.7	767.1	10610.7	9.22	12841.0	11.16
C-A	993.8	662.5				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	0.0	0.0				
A-C	0.0	0.0				
ALL	2144.5	1429.6	10610.7	4.95	12841.0	5.99

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
689.79	0.26	0.26

(NB These values do not allow for any site specific corrections)

.TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

.Demand set: 2026 Base + Committed PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

.DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.00	0.00	0.00
ARM B	15.00	45.00	75.00	5.34	8.01	5.34
ARM C	15.00	45.00	75.00	0.96	1.44	0.96

.Demand set: 2026 Base + Committed PM

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS / (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.000	0.000
		0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM B	1.000	0.000	0.000
		427.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		77.0	0.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2026 Base + Committed PM
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.00	10.07	0.000		0.00	0.00	0.0		0.00
B-A	5.36	12.79	0.419		0.00	0.71	10.2		0.13
C-A	0.97								
C-B	0.00	10.45	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.00	9.83	0.000		0.00	0.00	0.0		0.00
B-A	6.40	12.74	0.502		0.71	0.99	14.3		0.16

C-A	1.15								
C-B	0.00	10.45	0.000	0.00	0.00	0.0		0.00	
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.00	9.50	0.000		0.00	0.00	0.0		0.00
B-A	7.84	12.69	0.618		0.99	1.56	22.1		0.20
C-A	1.41								
C-B	0.00	10.45	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.00	9.49	0.000		0.00	0.00	0.0		0.00
B-A	7.84	12.69	0.618		1.56	1.59	23.7		0.21
C-A	1.41								
C-B	0.00	10.45	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.00	9.81	0.000		0.00	0.00	0.0		0.00
B-A	6.40	12.74	0.502		1.59	1.03	16.2		0.16
C-A	1.15								
C-B	0.00	10.45	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.00	10.05	0.000		0.00	0.00	0.0		0.00
B-A	5.36	12.79	0.419		1.03	0.73	11.4		0.14
C-A	0.97								
C-B	0.00	10.45	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.7	*
17.15	1.0	*
17.30	1.6	**
17.45	1.6	**
18.00	1.0	*
18.15	0.7	*

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	587.7	391.8	97.7	0.17	97.7	0.17
C-A	106.0	70.7				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	0.0	0.0				
A-C	0.0	0.0				

```
                                                    Northern priority junction
I  ALL   I  693.7 I  462.5 I    97.7 I    0.14   I      97.7  I    0.14   I
-----------------------------------------------------------------------------
* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******
```

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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Run with file:-
"N:\Projects\A078085 - Bassetlaw DC Modelling\calculations\Capacity Assessments\1. A619-A60 Priorities\Oct 2012\
Southern priority\Southern priority junction.vpi"
(drive-on-the-left) at 14:50:44 on Monday, 3 December 2012

.RUN INFORMATION

```
RUN TITLE       : A619-A60 Junction - Southern priority
LOCATION        : Bassetlaw
DATE            : 19/02/10
CLIENT          : Bassetlaw DC
ENUMERATOR      : martin.murphy [35-T-048CS]
JOB NUMBER      : A078085
STATUS          : Preliminary
DESCRIPTION     : 23.11.12 RJH: New flows
```

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

```
                    MAJOR ROAD (ARM C) ---------------------- MAJOR ROAD (ARM A)
                                                I
                                                I
                                                I
                                                I
                                                I
                                                I
                                          MINOR ROAD (ARM B)
```

ARM A IS A619 (west)
ARM B IS A60 (north)
ARM C IS A60 (south)

.STREAM LABELLING CONVENTION

```
        STREAM  A-B  CONTAINS TRAFFIC GOING FROM ARM  A TO ARM B
        STREAM  B-AC CONTAINS TRAFFIC GOING FROM ARM  B TO ARM A AND TO ARM  C
        ETC.
```

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 8.50 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)100.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 200.0 M.
- VISIBILITY TO RIGHT	(VB-A) 200.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	8.00 M.
WIDTH AT 10 M FROM JUNCTION	8.00 M.
WIDTH AT 15 M FROM JUNCTION	8.00 M.
WIDTH AT 20 M FROM JUNCTION	8.00 M.
- LENGTH OF FLARED SECTION	4 VEHS

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
631.87	0.22	0.22

(NB These values do not allow for any site specific corrections)

.TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

.Demand set: 2026 Base + Committed + Development AM

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

.DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.00	0.00	0.00
ARM B	15.00	45.00	75.00	7.80	11.70	7.80
ARM C	15.00	45.00	75.00	11.63	17.44	11.63

.Demand set: 2026 Base + Committed + Development AM

TIME	FROM/TO	TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.000	0.000
		0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM B	1.000	0.000	0.000
		624.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		930.0	0.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2026 Base + Committed + Development AM
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.00	9.65	0.000		0.00	0.00	0.0		0.00
B-A	7.83	10.65	0.735		0.00	2.56	33.5		0.32
C-A	11.67								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.00	9.06	0.000		0.00	0.00	0.0		0.00
B-A	9.35	10.20	0.917		2.56	6.99	82.4		0.73
C-A	13.93								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.00	8.86	0.000		0.00	0.00	0.0		0.00
B-A	11.45	9.57	1.197		6.99	36.90	334.1		2.61
C-A	17.07								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY	PEDESTRIAN FLOW	START QUEUE	END QUEUE	DELAY (VEH.MIN/	GEOMETRIC DELAY (VEH.MIN/	AVERAGE DELAY PER ARRIVING

			(RFC)	(PEDS/MIN)	(VEHS)	(VEHS)	TIME SEGMENT)	TIME SEGMENT)	VEHICLE (MIN)
08.30-08.45									
B-C	0.00	8.86	0.000		0.00	0.00	0.0		0.00
B-A	11.45	9.57	1.197		36.90	65.46	768.0		5.49
C-A	17.07								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.00	8.86	0.000		0.00	0.00	0.0		0.00
B-A	9.35	10.20	0.917		65.46	55.05	903.8		5.97
C-A	13.93								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-C	0.00	8.86	0.000		0.00	0.00	0.0		0.00
B-A	7.83	10.65	0.735		55.05	15.55	529.5		3.48
C-A	11.67								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	2.6	***
08.15	7.0	*******
08.30	36.9	**********
08.45	65.5	**********
09.00	55.0	**********
09.15	15.6	**********

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	858.9	572.6	2651.3	3.09	2662.7	3.10
C-A	1280.1	853.4				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	0.0	0.0				
A-C	0.0	0.0				
ALL	2139.0	1426.0	2651.3	1.24	2662.7	1.24

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
631.87	0.22	0.22

(NB These values do not allow for any site specific corrections)

.TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

.Demand set: 2026 Base + Committed + Development PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

.DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.00	0.00	0.00
ARM B	15.00	45.00	75.00	9.70	14.55	9.70
ARM C	15.00	45.00	75.00	6.25	9.38	6.25

.Demand set: 2026 Base + Committed + Development PM

TIME	FROM/TO	TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.000	0.000
		0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM B	1.000	0.000	0.000
		776.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		500.0	0.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2026 Base + Committed + Development PM
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.00	9.37	0.000		0.00	0.00	0.0		0.00
B-A	9.74	11.74	0.829		0.00	4.15	51.4		0.40
C-A	6.27								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.00	8.86	0.000		0.00	0.00	0.0		0.00
B-A	11.63	11.49	1.012		4.15	14.58	152.4		1.12
C-A	7.49								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.00	8.86	0.000		0.00	0.00	0.0		0.00
B-A	14.24	11.15	1.277		14.58	61.47	572.3		3.66
C-A	9.18								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00

```
I   A-B       0.00                                                                                                   I
I   A-C       0.00                                                                                                   I
I                                                                                                                    I
.--------------------------------------------------------------------------------------------------------------------
.--------------------------------------------------------------------------------------------------------------------
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
I 17.30-17.45                                                                                                        I
I   B-C       0.00      8.86    0.000                0.00   0.00        0.0                           0.00      I
I   B-A      14.24     11.15    1.277               61.47 107.85     1270.1                           7.69      I
I   C-A       9.18                                                                                                 I
I   C-B       0.00      9.57    0.000                0.00   0.00        0.0                           0.00      I
I   A-B       0.00                                                                                                 I
I   A-C       0.00                                                                                                 I
I                                                                                                                    I
.--------------------------------------------------------------------------------------------------------------------
.--------------------------------------------------------------------------------------------------------------------
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
I 17.45-18.00                                                                                                        I
I   B-C       0.00      8.86    0.000                0.00   0.00        0.0                           0.00      I
I   B-A      11.63     11.49    1.012              107.85 110.33     1636.3                           9.57      I
I   C-A       7.49                                                                                                 I
I   C-B       0.00      9.57    0.000                0.00   0.00        0.0                           0.00      I
I   A-B       0.00                                                                                                 I
I   A-C       0.00                                                                                                 I
I                                                                                                                    I
.--------------------------------------------------------------------------------------------------------------------
.--------------------------------------------------------------------------------------------------------------------
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
I 18.00-18.15                                                                                                        I
I   B-C       0.00      8.86    0.000                0.00   0.00        0.0                           0.00      I
I   B-A       9.74     11.74    0.829              110.33  81.87     1441.5                           8.28      I
I   C-A       6.27                                                                                                 I
I   C-B       0.00      9.57    0.000                0.00   0.00        0.0                           0.00      I
I   A-B       0.00                                                                                                 I
I   A-C       0.00                                                                                                 I
I                                                                                                                    I
.--------------------------------------------------------------------------------------------------------------------
.
QUEUE FOR STREAM    B-C
-------------------------
 TIME          NO. OF
 SEGMENT       VEHICLES
 ENDING        IN QUEUE
  17.00           0.0
  17.15           0.0
  17.30           0.0
  17.45           0.0
  18.00           0.0
  18.15           0.0
.
QUEUE FOR STREAM    B-A
-------------------------
 TIME          NO. OF
 SEGMENT       VEHICLES
 ENDING        IN QUEUE
  17.00           4.2    ****
  17.15          14.6    ***************
  17.30          61.5    ************************************************************
  17.45         107.9    ******************************************************************************************
  18.00         110.3    ******************************************************************************************
  18.15          81.9    ********************************************************************************
.
QUEUE FOR STREAM    C-B
-------------------------
 TIME          NO. OF
 SEGMENT       VEHICLES
 ENDING        IN QUEUE
  17.00           0.0
  17.15           0.0
  17.30           0.0
  17.45           0.0
  18.00           0.0
  18.15           0.0
.
                QUEUEING DELAY INFORMATION OVER WHOLE PERIOD
                ---------------------------------------------
-----------------------------------------------------------------------------
I STREAM I   TOTAL DEMAND  I   * QUEUEING *      I * INCLUSIVE QUEUEING * I
I        I                 I    * DELAY *        I       * DELAY *        I
I        I-----------------------------------------------------------------I
I        I  (VEH)  (VEH/H) I  (MIN)    (MIN/VEH) I    (MIN)     (MIN/VEH) I
-----------------------------------------------------------------------------
I  B-C   I    0.0 I    0.0 I     0.0 I    0.00   I       0.0  I    0.00   I
I  B-A   I 1068.1 I  712.1 I  5123.9 I    4.80   I    5409.4  I    5.06   I
I  C-A   I  688.2 I  458.8 I         I           I            I           I
I  C-B   I    0.0 I    0.0 I     0.0 I    0.00   I       0.0  I    0.00   I
I  A-B   I    0.0 I    0.0 I         I           I            I           I
I  A-C   I    0.0 I    0.0 I         I           I            I           I
-----------------------------------------------------------------------------
I  ALL   I 1756.3 I 1170.9 I  5123.9 I    2.92   I    5409.4  I    3.08   I
-----------------------------------------------------------------------------
* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******


.SLOPES AND INTERCEPT
 --------------------
 (NB:Streams may be combined, in which case capacity will be adjusted)
```

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
631.87	0.22	0.22

(NB These values do not allow for any site specific corrections)

.TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

.Demand set: 2026 Base + Committed AM

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

.DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.00	0.00	0.00
ARM B	15.00	45.00	75.00	6.86	10.29	6.86
ARM C	15.00	45.00	75.00	10.82	16.24	10.82

.Demand set: 2026 Base + Committed AM

TIME	FROM/TO	TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.000	0.000
		0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM B	1.000	0.000	0.000
		549.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		866.0	0.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2026 Base + Committed AM
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.00	9.93	0.000		0.00	0.00	0.0		0.00
B-A	6.89	10.81	0.637		0.00	1.68	22.9		0.24
C-A	10.87								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.00	9.45	0.000		0.00	0.00	0.0		0.00
B-A	8.23	10.39	0.792		1.68	3.37	44.5		0.42
C-A	12.98								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.00	8.86	0.000		0.00	0.00	0.0		0.00
B-A	10.07	9.80	1.028		3.37	14.67	147.6		1.26
C-A	15.89								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.00	8.86	0.000		0.00	0.00	0.0		0.00
B-A	10.07	9.80	1.028		14.67	21.92	276.3		2.15
C-A	15.89								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.00	9.06	0.000		0.00	0.00	0.0		0.00
B-A	8.23	10.39	0.792		21.92	4.63	158.5		1.23
C-A	12.98								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-C	0.00	9.85	0.000		0.00	0.00	0.0		0.00
B-A	6.89	10.81	0.637		4.63	1.83	31.0		0.28
C-A	10.87								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.7	**
08.15	3.4	***
08.30	14.7	**********
08.45	21.9	**********
09.00	4.6	*****
09.15	1.8	**

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * * DELAY * (MIN)	* QUEUEING * * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * * DELAY * (MIN)	* INCLUSIVE QUEUEING * * DELAY * (MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	755.7	503.8	680.7	0.90	680.9	0.90
C-A	1192.0	794.7				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	0.0	0.0				
A-C	0.0	0.0				
ALL	1947.6	1298.4	680.7	0.35	680.9	0.35

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
631.87	0.22	0.22

(NB These values do not allow for any site specific corrections)

.TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

.Demand set: 2026 Base + Committed PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

.DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	0.00	0.00	0.00
ARM B	15.00	45.00	75.00	8.89	13.33	8.89
ARM C	15.00	45.00	75.00	5.75	8.63	5.75

.Demand set: 2026 Base + Committed PM

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.000	0.000
		0.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM B	1.000	0.000	0.000
		711.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		460.0	0.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET 2026 Base + Committed PM
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.00	9.59	0.000		0.00	0.00	0.0		0.00
B-A	8.92	11.84	0.753		0.00	2.81	36.7		0.31
C-A	5.77								
C-B	0.00	9.57	0.000		0.00	0.00	0.0		0.00
A-B	0.00								
A-C	0.00								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.00	9.06	0.000		0.00	0.00	0.0		0.00
B-A	10.65	11.61	0.917		2.81	7.26	86.6		0.67

```
I   C-A       6.89                                                                                                    I
I   C-B       0.00      9.57    0.000                0.00   0.00        0.0                             0.00        I
I   A-B       0.00                                                                                                    I
I   A-C       0.00                                                                                                    I
I                                                                                                                     I
.-------------------------------------------------------------------------------------------------------------------
.-------------------------------------------------------------------------------------------------------------------
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                              (RFC)    (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
I 17.15-17.30                                                                                                         I
I   B-C       0.00      8.86    0.000                0.00   0.00        0.0                             0.00        I
I   B-A      13.05     11.30    1.154                7.26  35.59      327.4                             2.19        I
I   C-A       8.44                                                                                                    I
I   C-B       0.00      9.57    0.000                0.00   0.00        0.0                             0.00        I
I   A-B       0.00                                                                                                    I
I   A-C       0.00                                                                                                    I
I                                                                                                                     I
.-------------------------------------------------------------------------------------------------------------------
.-------------------------------------------------------------------------------------------------------------------
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                              (RFC)    (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
I 17.30-17.45                                                                                                         I
I   B-C       0.00      8.86    0.000                0.00   0.00        0.0                             0.00        I
I   B-A      13.05     11.30    1.154               35.59  62.18      733.8                             4.51        I
I   C-A       8.44                                                                                                    I
I   C-B       0.00      9.57    0.000                0.00   0.00        0.0                             0.00        I
I   A-B       0.00                                                                                                    I
I   A-C       0.00                                                                                                    I
I                                                                                                                     I
.-------------------------------------------------------------------------------------------------------------------
.-------------------------------------------------------------------------------------------------------------------
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                              (RFC)    (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
I 17.45-18.00                                                                                                         I
I   B-C       0.00      8.86    0.000                0.00   0.00        0.0                             0.00        I
I   B-A      10.65     11.61    0.917               62.18  50.51      845.2                             4.94        I
I   C-A       6.89                                                                                                    I
I   C-B       0.00      9.57    0.000                0.00   0.00        0.0                             0.00        I
I   A-B       0.00                                                                                                    I
I   A-C       0.00                                                                                                    I
I                                                                                                                     I
.-------------------------------------------------------------------------------------------------------------------
.-------------------------------------------------------------------------------------------------------------------
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                              (RFC)    (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
I 18.00-18.15                                                                                                         I
I   B-C       0.00      8.86    0.000                0.00   0.00        0.0                             0.00        I
I   B-A       8.92     11.84    0.753               50.51  10.17      455.1                             2.73        I
I   C-A       5.77                                                                                                    I
I   C-B       0.00      9.57    0.000                0.00   0.00        0.0                             0.00        I
I   A-B       0.00                                                                                                    I
I   A-C       0.00                                                                                                    I
I                                                                                                                     I
.-------------------------------------------------------------------------------------------------------------------
.
QUEUE FOR STREAM    B-C
-------------------------
 TIME          NO. OF
 SEGMENT       VEHICLES
 ENDING        IN QUEUE
  17.00           0.0
  17.15           0.0
  17.30           0.0
  17.45           0.0
  18.00           0.0
  18.15           0.0
.
QUEUE FOR STREAM    B-A
-------------------------
 TIME          NO. OF
 SEGMENT       VEHICLES
 ENDING        IN QUEUE
  17.00           2.8    ***
  17.15           7.3    *******
  17.30          35.6    ************************************
  17.45          62.2    ****************************************************************
  18.00          50.5    ****************************************************
  18.15          10.2    **********
.
QUEUE FOR STREAM    C-B
-------------------------
 TIME          NO. OF
 SEGMENT       VEHICLES
 ENDING        IN QUEUE
  17.00           0.0
  17.15           0.0
  17.30           0.0
  17.45           0.0
  18.00           0.0
  18.15           0.0
.
                 QUEUEING DELAY INFORMATION OVER WHOLE PERIOD
                 ---------------------------------------------
-------------------------------------------------------------------------
I STREAM I   TOTAL DEMAND  I   * QUEUEING *      I * INCLUSIVE QUEUEING * I
I        I                 I    * DELAY *        I       * DELAY *        I
I        I-----------------------------------------------------------------I
I        I  (VEH)  (VEH/H) I  (MIN)    (MIN/VEH) I    (MIN)     (MIN/VEH) I
-------------------------------------------------------------------------
I  B-C   I    0.0 I    0.0 I     0.0 I    0.00   I       0.0  I    0.00   I
I  B-A   I  978.6 I  652.4 I  2484.8 I    2.54   I    2489.2  I    2.54   I
I  C-A   I  633.2 I  422.1 I         I           I            I           I
I  C-B   I    0.0 I    0.0 I     0.0 I    0.00   I       0.0  I    0.00   I
I  A-B   I    0.0 I    0.0 I         I           I            I           I
I  A-C   I    0.0 I    0.0 I         I           I            I           I
-------------------------------------------------------------------------
```

```
                                                    Southern priority junction
I  ALL   I 1611.8 I 1074.5 I  2484.8 I    1.54   I    2489.2  I    1.54   I
-------------------------------------------------------------------------
* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******
```

ARCADY 7

Version: 7.0.0.99 [10 July 2009]
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File: N:\Projects\A078085 - Bassetlaw DC Modelling\calculations\Capacity Assessments\1. A619-A60 Priorities\Oct 2012 \Imps\A60-A619 Roundabout - op 1 imps.arc7
Report generation date: 06/12/2012 14:30:07

» A1 - (Default Analysis Set) - D1 - 2026 Base + Com + Dev AM, AM
» A1 - (Default Analysis Set) - D2 - 2026 Base + Com + Dev PM, PM

File summary

File Description

Title	A60/A619 Roundabout
Location	Bassetlaw
Date	12/03/2010
Client	Bassetlaw DC
Jobnumber	A078085
Enumerator	martin.murphy [35-T-048CS]
Description	23.11.12 RJH: New development flows assessed.
Results Upto Date	False

Analysis Options

RFC Threshold	Vehicle Length (m)	Do Queue Variations
0.85	5.75	

Sorting and Display

Show Arm Names	Arm Grouping	Sorting Direction	Sorting Type	Data Matrix Style	Time Style
	Order	Ascending	Numerical	By Destination	Absolute Time

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	min	-Min	perMin

A1 - (Default Analysis Set) - D1 - 2026 Base + Com + Dev AM, AM

Data Errors and Warnings

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

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors

(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
2026 Base + Com + Dev AM, AM	2026 Base + Com + Dev AM	AM			Yes			07:45	09:15	90	15	ONE HOUR

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	A60 (North)	
B	A60 (South)	
C	A619 (West)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.50	7.50	46.00	20.00	87.00	38.00	
B	4.00	7.50	26.00	45.00	74.00	31.00	
C	3.25	5.50	21.00	20.00	79.00	44.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.505	2056.823
B		((calculated))	((calculated))	0.541	1999.494
C		((calculated))	((calculated))	0.422	1419.934

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

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
			Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	1173.00	100.000	N/A
B	ONE HOUR	Yes	930.00	100.000	N/A
C	ONE HOUR	Yes	781.00	100.000	N/A

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	883.10	883.10	N/A	N/A
07:45-08:00	B	700.15	700.15	N/A	N/A
07:45-08:00	C	587.98	587.98	N/A	N/A
08:00-08:15	A	1054.50	1054.50	N/A	N/A
08:00-08:15	B	836.05	836.05	N/A	N/A
08:00-08:15	C	702.10	702.10	N/A	N/A
08:15-08:30	A	1291.50	1291.50	N/A	N/A
08:15-08:30	B	1023.95	1023.95	N/A	N/A
08:15-08:30	C	859.90	859.90	N/A	N/A
08:30-08:45	A	1291.50	1291.50	N/A	N/A
08:30-08:45	B	1023.95	1023.95	N/A	N/A
08:30-08:45	C	859.90	859.90	N/A	N/A
08:45-09:00	A	1054.50	1054.50	N/A	N/A
08:45-09:00	B	836.05	836.05	N/A	N/A
08:45-09:00	C	702.10	702.10	N/A	N/A
09:00-09:15	A	883.10	883.10	N/A	N/A
09:00-09:15	B	700.15	700.15	N/A	N/A
09:00-09:15	C	587.98	587.98	N/A	N/A

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Roundabout 1 (for whole period)

		To		
		A	B	C
From	A	0.00	549.00	624.00
	B	900.00	0.00	30.00
	C	763.00	18.00	0.00

Turning Proportions (Veh) - Roundabout 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.47	0.53
	B	0.97	0.00	0.03
	C	0.98	0.02	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.00	1.00	1.00
	B	1.00	1.00	1.00
	C	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.00	0.00
	B	0.00	0.00	0.00
	C	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Total Demand (Veh/hr)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.63	0.08	1.70	A	1076.37	1614.55	104.40	0.06	1.16	104.41	0.06	0.505	2056.823
B	0.63	0.10	1.68	A	853.38	1280.08	98.39	0.08	1.09	98.40	0.08	0.541	1999.494
C	0.86	0.41	5.56	C	716.66	1074.99	236.99	0.22	2.63	237.02	0.22	0.422	1419.934

Main Results

Main results: (07:45-08:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	883.10	220.77	880.09	1245.28	13.45	0.00	2050.03	2047.01	0.431	0.00	0.75
B	700.15	175.04	697.49	425.36	468.18	0.00	1746.30	1410.58	0.401	0.00	0.67
C	587.98	146.99	583.74	490.68	674.99	0.00	1134.80	843.30	0.518	0.00	1.06

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1054.50	263.63	1053.30	1490.91	16.11	0.00	2048.69	2047.01	0.515	0.75	1.05
B	836.05	209.01	834.86	509.09	560.33	0.00	1696.46	1410.58	0.493	0.67	0.96
C	702.10	175.53	699.09	587.26	807.93	0.00	1078.65	843.30	0.651	1.06	1.81

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1291.50	322.87	1288.96	1815.18	19.51	0.00	2046.98	2047.01	0.631	1.05	1.69
B	1023.95	255.99	1021.14	622.78	685.69	0.00	1628.67	1410.58	0.629	0.96	1.66
C	859.90	214.97	846.48	718.63	988.20	0.00	1002.50	843.30	0.858	1.81	5.17

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1291.50	322.87	1291.45	1829.40	19.78	0.00	2046.84	2047.01	0.631	1.69	1.70
B	1023.95	255.99	1023.89	624.22	687.01	0.00	1627.95	1410.58	0.629	1.66	1.68
C	859.90	214.97	858.32	720.04	990.86	0.00	1001.38	843.30	0.859	5.17	5.56

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1054.50	263.63	1057.02	1511.89	16.52	0.00	2048.49	2047.01	0.515	1.70	1.07
B	836.05	209.01	838.84	511.23	562.30	0.00	1695.40	1410.58	0.493	1.68	0.98
C	702.10	175.53	716.62	589.36	811.78	0.00	1077.02	843.30	0.652	5.56	1.93

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	883.10	220.77	884.33	1256.45	13.63	0.00	2049.94	2047.01	0.431	1.07	0.76
B	700.15	175.04	701.38	427.52	470.44	0.00	1745.08	1410.58	0.401	0.98	0.67
C	587.98	146.99	591.32	493.06	678.76	0.00	1133.21	843.30	0.519	1.93	1.09

Queueing Delay Results

Queueing Delay results: (07:45-08:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	11.02	0.73	0.051	A	A
B	9.73	0.65	0.057	A	A
C	15.16	1.01	0.108	A	A

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	15.44	1.03	0.060	A	A
B	14.10	0.94	0.070	A	A
C	25.70	1.71	0.157	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	24.44	1.63	0.079	A	A

B	23.96	1.60	0.098	A	A
C	65.76	4.38	0.357	C	C

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	25.40	1.69	0.079	A	A
B	25.11	1.67	0.099	A	A
C	80.99	5.40	0.409	C	C

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	16.47	1.10	0.061	A	A
B	15.16	1.01	0.070	A	A
C	32.26	2.15	0.173	B	B

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	11.64	0.78	0.052	A	A
B	10.32	0.69	0.058	A	A
C	17.12	1.14	0.111	A	A

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.50	7.50	46.00	20.00	87.00	38.00		0.505	2056.823
B	4.00	7.50	26.00	45.00	74.00	31.00		0.541	1999.494
C	3.25	5.50	21.00	20.00	79.00	44.00		0.422	1419.934

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (min)
07:45-08:00	A	883.10	2050.03	0.431	0.00	0.00	0.75	11.02	(0.00)	0.051
07:45-08:00	B	700.15	1746.30	0.401	0.00	0.00	0.67	9.73	(0.00)	0.057
07:45-08:00	C	587.98	1134.80	0.518	0.00	0.00	1.06	15.16	(0.00)	0.108
08:00-08:15	A	1054.50	2048.69	0.515	0.00	0.75	1.05	15.44	(0.00)	0.060
08:00-08:15	B	836.05	1696.46	0.493	0.00	0.67	0.96	14.10	(0.00)	0.070
08:00-08:15	C	702.10	1078.65	0.651	0.00	1.06	1.81	25.70	(0.00)	0.157
08:15-08:30	A	1291.50	2046.98	0.631	0.00	1.05	1.69	24.44	(0.00)	0.079
08:15-08:30	B	1023.95	1628.67	0.629	0.00	0.96	1.66	23.96	(0.00)	0.098
08:15-08:30	C	859.90	1002.50	0.858	0.00	1.81	5.17	65.76	(0.00)	0.357
08:30-08:45	A	1291.50	2046.84	0.631	0.00	1.69	1.70	25.40	(0.00)	0.079
08:30-08:45	B	1023.95	1627.95	0.629	0.00	1.66	1.68	25.11	(0.00)	0.099
08:30-08:45	C	859.90	1001.38	0.859	0.00	5.17	5.56	80.99	(0.00)	0.409
08:45-09:00	A	1054.50	2048.49	0.515	0.00	1.70	1.07	16.47	(0.00)	0.061
08:45-09:00	B	836.05	1695.40	0.493	0.00	1.68	0.98	15.16	(0.00)	0.070

08:45-09:00	**C**	702.10	1077.02	0.652	0.00	5.56	1.93	32.26	(0.00)	0.173
09:00-09:15	**A**	883.10	2049.94	0.431	0.00	1.07	0.76	11.64	(0.00)	0.052
09:00-09:15	**B**	700.15	1745.08	0.401	0.00	0.98	0.67	10.32	(0.00)	0.058
09:00-09:15	**C**	587.98	1133.21	0.519	0.00	1.93	1.09	17.12	(0.00)	0.111

A1 - (Default Analysis Set) - D2 - 2026 Base + Com + Dev PM, PM

Data Errors and Warnings

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

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
2026 Base + Com + Dev PM, PM	2026 Base + Com + Dev PM	PM			Yes			16:45	18:15	90	15	ONE HOUR

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	A60 (North)	
B	A60 (South)	
C	A619 (West)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00

B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.50	7.50	46.00	20.00	87.00	38.00	
B	4.00	7.50	26.00	45.00	74.00	31.00	
C	3.25	5.50	21.00	20.00	79.00	44.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.505	2056.823
B		((calculated))	((calculated))	0.541	1999.494
C		((calculated))	((calculated))	0.422	1419.934

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

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
			Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	1612.00	100.000	N/A
B	ONE HOUR	Yes	500.00	100.000	N/A
C	ONE HOUR	Yes	128.00	100.000	N/A

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
16:45-17:00	A	1213.60	1213.60	N/A	N/A
16:45-17:00	B	376.43	376.43	N/A	N/A
16:45-17:00	C	96.37	96.37	N/A	N/A
17:00-17:15	A	1449.15	1449.15	N/A	N/A

17:00-17:15	**B**	449.49	449.49	N/A	N/A
17:00-17:15	**C**	115.07	115.07	N/A	N/A
17:15-17:30	**A**	1774.85	1774.85	N/A	N/A
17:15-17:30	**B**	550.51	550.51	N/A	N/A
17:15-17:30	**C**	140.93	140.93	N/A	N/A
17:30-17:45	**A**	1774.85	1774.85	N/A	N/A
17:30-17:45	**B**	550.51	550.51	N/A	N/A
17:30-17:45	**C**	140.93	140.93	N/A	N/A
17:45-18:00	**A**	1449.15	1449.15	N/A	N/A
17:45-18:00	**B**	449.49	449.49	N/A	N/A
17:45-18:00	**C**	115.07	115.07	N/A	N/A
18:00-18:15	**A**	1213.60	1213.60	N/A	N/A
18:00-18:15	**B**	376.43	376.43	N/A	N/A
18:00-18:15	**C**	96.37	96.37	N/A	N/A

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Roundabout 1 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.00	836.00	776.00
	B	467.00	0.00	33.00
	C	123.00	5.00	0.00

Turning Proportions (Veh) - Roundabout 1 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.00	0.52	0.48
	B	0.93	0.00	0.07
	C	0.96	0.04	0.00

Vehicle Mix

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

		To		
		A	**B**	**C**
From	**A**	1.00	1.00	1.00
	B	1.00	1.00	1.00
	C	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.00	0.00	0.00
	B	0.00	0.00	0.00
	C	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Total Demand (Veh/hr)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.86	0.21	6.06	B	1479.20	2218.80	282.65	0.13	3.14	282.68	0.13	0.505	2056.823
B	0.36	0.06	0.56	A	458.81	688.21	36.60	0.05	0.41	36.60	0.05	0.541	1999.494
C	0.12	0.06	0.13	A	117.46	176.18	9.46	0.05	0.11	9.46	0.05	0.422	1419.934

Main Results

Main results: (16:45-17:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1213.60	303.40	1207.89	442.80	3.75	0.00	2054.93	2040.25	0.591	0.00	1.43
B	376.43	94.11	375.28	630.18	581.47	0.00	1685.03	1468.34	0.223	0.00	0.29
C	96.37	24.09	96.04	606.24	350.51	0.00	1271.87	840.62	0.076	0.00	0.08

Main results: (17:00-17:15)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1449.15	362.29	1445.49	529.97	4.49	0.00	2054.56	2040.25	0.705	1.43	2.34
B	449.49	112.37	449.11	754.14	695.84	0.00	1623.18	1468.34	0.277	0.29	0.38
C	115.07	28.77	114.99	725.48	419.47	0.00	1242.74	840.62	0.093	0.08	0.10

Main results: (17:15-17:30)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1774.85	443.71	1760.99	648.85	5.50	0.00	2054.05	2040.25	0.864	2.34	5.81
B	550.51	137.63	549.83	918.77	847.72	0.00	1541.04	1468.34	0.357	0.38	0.55
C	140.93	35.23	140.81	884.01	513.54	0.00	1203.01	840.62	0.117	0.10	0.13

Main results: (17:30-17:45)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1774.85	443.71	1773.85	649.59	5.51	0.00	2054.04	2040.25	0.864	5.81	6.06
B	550.51	137.63	550.50	925.44	853.91	0.00	1537.69	1468.34	0.358	0.55	0.56
C	140.93	35.23	140.93	890.25	514.16	0.00	1202.74	840.62	0.117	0.13	0.13

Main results: (17:45-18:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1449.15	362.29	1463.59	531.15	4.50	0.00	2054.55	2040.25	0.705	6.06	2.45
B	449.49	112.37	450.17	763.53	704.56	0.00	1618.46	1468.34	0.278	0.56	0.39
C	115.07	28.77	115.19	734.27	420.46	0.00	1242.32	840.62	0.093	0.13	0.10

Main results: (18:00-18:15)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1213.60	303.40	1217.55	444.62	3.77	0.00	2054.92	2040.25	0.591	2.45	1.46
B	376.43	94.11	376.81	635.20	586.11	0.00	1682.52	1468.34	0.224	0.39	0.29
C	96.37	24.09	96.45	610.98	351.94	0.00	1271.27	840.62	0.076	0.10	0.08

Queueing Delay Results

Queueing Delay results: (16:45-17:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	20.59	1.37	0.070	A	A
B	4.22	0.28	0.046	A	A
C	1.20	0.08	0.051	A	A

Queueing Delay results: (17:00-17:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	33.58	2.24	0.098	A	A
B	5.64	0.38	0.051	A	A
C	1.51	0.10	0.053	A	A

Queueing Delay results: (17:15-17:30)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	77.09	5.14	0.196	B	B
B	8.13	0.54	0.061	A	A
C	1.96	0.13	0.056	A	A

Queueing Delay results: (17:30-17:45)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	89.33	5.96	0.212	B	B
B	8.32	0.55	0.061	A	A
C	1.98	0.13	0.056	A	A

Queueing Delay results: (17:45-18:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	39.43	2.63	0.104	A	A
B	5.89	0.39	0.051	A	A
C	1.56	0.10	0.053	A	A

Queueing Delay results: (18:00-18:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	22.64	1.51	0.072	A	A
B	4.40	0.29	0.046	A	A
C	1.25	0.08	0.051	A	A

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.50	7.50	46.00	20.00	87.00	38.00		0.505	2056.823
B	4.00	7.50	26.00	45.00	74.00	31.00		0.541	1999.494
C	3.25	5.50	21.00	20.00	79.00	44.00		0.422	1419.934

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (min)
16:45-17:00	**A**	1213.60	2054.93	0.591	0.00	0.00	1.43	20.59	(0.00)	0.070
16:45-17:00	**B**	376.43	1685.03	0.223	0.00	0.00	0.29	4.22	(0.00)	0.046
16:45-17:00	**C**	96.37	1271.87	0.076	0.00	0.00	0.08	1.20	(0.00)	0.051
17:00-17:15	**A**	1449.15	2054.56	0.705	0.00	1.43	2.34	33.58	(0.00)	0.098
17:00-17:15	**B**	449.49	1623.18	0.277	0.00	0.29	0.38	5.64	(0.00)	0.051
17:00-17:15	**C**	115.07	1242.74	0.093	0.00	0.08	0.10	1.51	(0.00)	0.053
17:15-17:30	**A**	1774.85	2054.05	0.864	0.00	2.34	5.81	77.09	(0.00)	0.196
17:15-17:30	**B**	550.51	1541.04	0.357	0.00	0.38	0.55	8.13	(0.00)	0.061
17:15-17:30	**C**	140.93	1203.01	0.117	0.00	0.10	0.13	1.96	(0.00)	0.056
17:30-17:45	**A**	1774.85	2054.04	0.864	0.00	5.81	6.06	89.33	(0.00)	0.212
17:30-17:45	**B**	550.51	1537.69	0.358	0.00	0.55	0.56	8.32	(0.00)	0.061
17:30-17:45	**C**	140.93	1202.74	0.117	0.00	0.13	0.13	1.98	(0.00)	0.056
17:45-18:00	**A**	1449.15	2054.55	0.705	0.00	6.06	2.45	39.43	(0.00)	0.104
17:45-18:00	**B**	449.49	1618.46	0.278	0.00	0.56	0.39	5.89	(0.00)	0.051
17:45-18:00	**C**	115.07	1242.32	0.093	0.00	0.13	0.10	1.56	(0.00)	0.053
18:00-18:15	**A**	1213.60	2054.92	0.591	0.00	2.45	1.46	22.64	(0.00)	0.072
18:00-18:15	**B**	376.43	1682.52	0.224	0.00	0.39	0.29	4.40	(0.00)	0.046
18:00-18:15	**C**	96.37	1271.27	0.076	0.00	0.10	0.08	1.25	(0.00)	0.051

ARCADY 7

Version: 7.0.0.99 [10 July 2009]
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File: N:\Projects\A078085 - Bassetlaw DC Modelling\calculations\Capacity Assessments\1. A619-A60 Priorities\Oct 2012 \Imps\A60-A619 Roundabout - op 2 imps.arc7
Report generation date: 06/12/2012 14:30:43

» A1 - (Default Analysis Set) - D1 - 2026 Base + Com + Dev AM, AM
» A1 - (Default Analysis Set) - D2 - 2026 Base + Com + Dev PM, PM

File summary

File Description

Title	A60/A619 Roundabout
Location	Bassetlaw
Date	12/03/2010
Client	Bassetlaw DC
Jobnumber	A078085
Enumerator	martin.murphy [35-T-048CS]
Description	23.11.12. RJH: New development flows assessed.
Results Upto Date	False

Analysis Options

RFC Threshold	Vehicle Length (m)	Do Queue Variations
0.85	5.75	

Sorting and Display

Show Arm Names	Arm Grouping	Sorting Direction	Sorting Type	Data Matrix Style	Time Style
	Order	Ascending	Numerical	By Destination	Absolute Time

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	min	-Min	perMin

A1 - (Default Analysis Set) - D1 - 2026 Base + Com + Dev AM, AM

Data Errors and Warnings

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

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors

(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
2026 Base + Com + Dev AM, AM	2026 Base + Com + Dev AM	AM			Yes			07:45	09:15	90	15	ONE HOUR

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	A60 (North)	
B	A60 (South)	
C	A619 (West)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.50	8.00	52.00	22.50	68.00	20.00	
B	4.00	7.50	26.00	45.00	68.00	32.00	
C	3.25	5.75	21.00	20.00	68.00	36.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.625	2325.804
B		((calculated))	((calculated))	0.566	1992.717
C		((calculated))	((calculated))	0.478	1501.362

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

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
			Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	1173.00	100.000	N/A
B	ONE HOUR	Yes	930.00	100.000	N/A
C	ONE HOUR	Yes	781.00	100.000	N/A

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	883.10	883.10	N/A	N/A
07:45-08:00	B	700.15	700.15	N/A	N/A
07:45-08:00	C	587.98	587.98	N/A	N/A
08:00-08:15	A	1054.50	1054.50	N/A	N/A
08:00-08:15	B	836.05	836.05	N/A	N/A
08:00-08:15	C	702.10	702.10	N/A	N/A
08:15-08:30	A	1291.50	1291.50	N/A	N/A
08:15-08:30	B	1023.95	1023.95	N/A	N/A
08:15-08:30	C	859.90	859.90	N/A	N/A
08:30-08:45	A	1291.50	1291.50	N/A	N/A
08:30-08:45	B	1023.95	1023.95	N/A	N/A
08:30-08:45	C	859.90	859.90	N/A	N/A
08:45-09:00	A	1054.50	1054.50	N/A	N/A
08:45-09:00	B	836.05	836.05	N/A	N/A
08:45-09:00	C	702.10	702.10	N/A	N/A
09:00-09:15	A	883.10	883.10	N/A	N/A
09:00-09:15	B	700.15	700.15	N/A	N/A
09:00-09:15	C	587.98	587.98	N/A	N/A

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Roundabout 1 (for whole period)

		To		
		A	B	C
From	A	0.00	549.00	624.00
	B	900.00	0.00	30.00
	C	763.00	18.00	0.00

Turning Proportions (Veh) - Roundabout 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.47	0.53
	B	0.97	0.00	0.03
	C	0.98	0.02	0.00

Vehicle Mix

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

		To		
		A	B	C
From	A	1.00	1.00	1.00
	B	1.00	1.00	1.00
	C	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.00	0.00
	B	0.00	0.00	0.00
	C	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Total Demand (Veh/hr)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.56	0.06	1.26	A	1076.37	1614.55	80.75	0.05	0.90	80.75	0.05	0.625	2325.804
B	0.64	0.10	1.75	A	853.38	1280.08	101.48	0.08	1.13	101.49	0.08	0.566	1992.717
C	0.84	0.35	4.78	C	716.66	1074.99	210.96	0.20	2.34	210.98	0.20	0.478	1501.362

Main Results

Main results: (07:45-08:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	883.10	220.77	880.64	1245.53	13.46	0.00	2317.40	2312.82	0.381	0.00	0.61
B	700.15	175.04	697.44	425.63	468.48	0.00	1727.33	1295.74	0.405	0.00	0.68
C	587.98	146.99	584.05	490.97	674.95	0.00	1178.83	902.14	0.499	0.00	0.98

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1054.50	263.63	1053.63	1491.16	16.12	0.00	2315.74	2312.82	0.455	0.61	0.83
B	836.05	209.01	834.81	509.25	560.50	0.00	1675.20	1295.74	0.499	0.68	0.99
C	702.10	175.53	699.40	587.43	807.88	0.00	1115.30	902.14	0.630	0.98	1.66

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1291.50	322.87	1289.81	1816.97	19.56	0.00	2313.59	2312.82	0.558	0.83	1.25
B	1023.95	255.99	1020.97	623.23	686.14	0.00	1604.03	1295.74	0.638	0.99	1.73
C	859.90	214.97	848.49	719.07	988.03	0.00	1029.21	902.14	0.835	1.66	4.51

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1291.50	322.87	1291.48	1829.86	19.79	0.00	2313.44	2312.82	0.558	1.25	1.26
B	1023.95	255.99	1023.88	624.24	687.03	0.00	1603.52	1295.74	0.639	1.73	1.75
C	859.90	214.97	858.79	720.05	990.85	0.00	1027.86	902.14	0.837	4.51	4.78

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1054.50	263.63	1056.17	1509.73	16.46	0.00	2315.52	2312.82	0.455	1.26	0.84
B	836.05	209.01	839.02	510.78	561.85	0.00	1674.43	1295.74	0.499	1.75	1.01
C	702.10	175.53	714.24	588.92	811.96	0.00	1113.35	902.14	0.631	4.78	1.75

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	883.10	220.77	883.99	1256.12	13.62	0.00	2317.30	2312.82	0.381	0.84	0.62
B	700.15	175.04	701.43	427.35	470.25	0.00	1726.32	1295.74	0.406	1.01	0.69
C	587.98	146.99	590.94	492.88	678.81	0.00	1176.98	902.14	0.500	1.75	1.01

Queueing Delay Results

Queueing Delay results: (07:45-08:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	9.02	0.60	0.042	A	A
B	9.90	0.66	0.058	A	A
C	14.11	0.94	0.100	A	A

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	12.26	0.82	0.048	A	A
B	14.44	0.96	0.071	A	A
C	23.63	1.58	0.143	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	18.34	1.22	0.059	A	A

B	24.90	1.66	0.102	A	A
C	58.58	3.91	0.314	C	B

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	18.84	1.26	0.059	A	A
B	26.15	1.74	0.103	A	A
C	70.12	4.67	0.349	C	C

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	12.87	0.86	0.048	A	A
B	15.56	1.04	0.072	A	A
C	28.76	1.92	0.155	A	A

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	9.42	0.63	0.042	A	A
B	10.52	0.70	0.059	A	A
C	15.77	1.05	0.103	A	A

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.50	8.00	52.00	22.50	68.00	20.00		0.625	2325.804
B	4.00	7.50	26.00	45.00	68.00	32.00		0.566	1992.717
C	3.25	5.75	21.00	20.00	68.00	36.00		0.478	1501.362

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (min)
07:45-08:00	A	883.10	2317.40	0.381	0.00	0.00	0.61	9.02	(0.00)	0.042
07:45-08:00	B	700.15	1727.33	0.405	0.00	0.00	0.68	9.90	(0.00)	0.058
07:45-08:00	C	587.98	1178.83	0.499	0.00	0.00	0.98	14.11	(0.00)	0.100
08:00-08:15	A	1054.50	2315.74	0.455	0.00	0.61	0.83	12.26	(0.00)	0.048
08:00-08:15	B	836.05	1675.20	0.499	0.00	0.68	0.99	14.44	(0.00)	0.071
08:00-08:15	C	702.10	1115.30	0.630	0.00	0.98	1.66	23.63	(0.00)	0.143
08:15-08:30	A	1291.50	2313.59	0.558	0.00	0.83	1.25	18.34	(0.00)	0.059
08:15-08:30	B	1023.95	1604.03	0.638	0.00	0.99	1.73	24.90	(0.00)	0.102
08:15-08:30	C	859.90	1029.21	0.835	0.00	1.66	4.51	58.58	(0.00)	0.314
08:30-08:45	A	1291.50	2313.44	0.558	0.00	1.25	1.26	18.84	(0.00)	0.059
08:30-08:45	B	1023.95	1603.52	0.639	0.00	1.73	1.75	26.15	(0.00)	0.103
08:30-08:45	C	859.90	1027.86	0.837	0.00	4.51	4.78	70.12	(0.00)	0.349
08:45-09:00	A	1054.50	2315.52	0.455	0.00	1.26	0.84	12.87	(0.00)	0.048
08:45-09:00	B	836.05	1674.43	0.499	0.00	1.75	1.01	15.56	(0.00)	0.072

08:45-09:00	**C**	702.10	1113.35	0.631	0.00	4.78	1.75	28.76	(0.00)	0.155
09:00-09:15	**A**	883.10	2317.30	0.381	0.00	0.84	0.62	9.42	(0.00)	0.042
09:00-09:15	**B**	700.15	1726.32	0.406	0.00	1.01	0.69	10.52	(0.00)	0.059
09:00-09:15	**C**	587.98	1176.98	0.500	0.00	1.75	1.01	15.77	(0.00)	0.103

A1 - (Default Analysis Set) - D2 - 2026 Base + Com + Dev PM, PM

Data Errors and Warnings

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

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
2026 Base + Com + Dev PM, PM	2026 Base + Com + Dev PM	PM			Yes			16:45	18:15	90	15	ONE HOUR

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	A60 (North)	
B	A60 (South)	
C	A619 (West)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00

B	0.00	99999.00		0.00
C	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.50	8.00	52.00	22.50	68.00	20.00	
B	4.00	7.50	26.00	45.00	68.00	32.00	
C	3.25	5.75	21.00	20.00	68.00	36.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.625	2325.804
B		((calculated))	((calculated))	0.566	1992.717
C		((calculated))	((calculated))	0.478	1501.362

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

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
			Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	1612.00	100.000	N/A
B	ONE HOUR	Yes	500.00	100.000	N/A
C	ONE HOUR	Yes	128.00	100.000	N/A

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
16:45-17:00	A	1213.60	1213.60	N/A	N/A
16:45-17:00	B	376.43	376.43	N/A	N/A
16:45-17:00	C	96.37	96.37	N/A	N/A
17:00-17:15	A	1449.15	1449.15	N/A	N/A

17:00-17:15	**B**	449.49	449.49	N/A	N/A
17:00-17:15	**C**	115.07	115.07	N/A	N/A
17:15-17:30	**A**	1774.85	1774.85	N/A	N/A
17:15-17:30	**B**	550.51	550.51	N/A	N/A
17:15-17:30	**C**	140.93	140.93	N/A	N/A
17:30-17:45	**A**	1774.85	1774.85	N/A	N/A
17:30-17:45	**B**	550.51	550.51	N/A	N/A
17:30-17:45	**C**	140.93	140.93	N/A	N/A
17:45-18:00	**A**	1449.15	1449.15	N/A	N/A
17:45-18:00	**B**	449.49	449.49	N/A	N/A
17:45-18:00	**C**	115.07	115.07	N/A	N/A
18:00-18:15	**A**	1213.60	1213.60	N/A	N/A
18:00-18:15	**B**	376.43	376.43	N/A	N/A
18:00-18:15	**C**	96.37	96.37	N/A	N/A

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Roundabout 1 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.00	836.00	776.00
	B	467.00	0.00	33.00
	C	123.00	5.00	0.00

Turning Proportions (Veh) - Roundabout 1 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.00	0.52	0.48
	B	0.93	0.00	0.07
	C	0.96	0.04	0.00

Vehicle Mix

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

		To		
		A	**B**	**C**
From	**A**	1.00	1.00	1.00
	B	1.00	1.00	1.00
	C	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.00	0.00	0.00
	B	0.00	0.00	0.00
	C	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Total Demand (Veh/hr)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.76	0.11	3.19	A	1479.20	2218.80	174.84	0.08	1.94	174.86	0.08	0.625	2325.804
B	0.36	0.06	0.57	A	458.81	688.21	37.49	0.05	0.42	37.49	0.05	0.566	1992.717
C	0.11	0.05	0.13	A	117.46	176.18	9.00	0.05	0.10	9.00	0.05	0.478	1501.362

Main Results

Main results: (16:45-17:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1213.60	303.40	1209.26	442.80	3.75	0.00	2323.46	2304.03	0.522	0.00	1.09
B	376.43	94.11	375.26	630.89	582.12	0.00	1662.95	1364.40	0.226	0.00	0.29
C	96.37	24.09	96.05	606.89	350.49	0.00	1333.87	892.39	0.072	0.00	0.08

Main results: (17:00-17:15)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1449.15	362.29	1446.94	529.96	4.49	0.00	2323.00	2304.03	0.624	1.09	1.64
B	449.49	112.37	449.10	754.89	696.54	0.00	1598.13	1364.40	0.281	0.29	0.39
C	115.07	28.77	114.99	726.18	419.46	0.00	1300.92	892.39	0.088	0.08	0.10

Main results: (17:15-17:30)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1774.85	443.71	1768.81	648.82	5.50	0.00	2322.37	2304.03	0.764	1.64	3.15
B	550.51	137.63	549.79	922.82	851.49	0.00	1510.36	1364.40	0.364	0.39	0.57
C	140.93	35.23	140.81	887.77	513.50	0.00	1255.97	892.39	0.112	0.10	0.13

Main results: (17:30-17:45)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1774.85	443.71	1774.66	649.59	5.51	0.00	2322.37	2304.03	0.764	3.15	3.19
B	550.51	137.63	550.50	925.86	854.31	0.00	1508.76	1364.40	0.365	0.57	0.57
C	140.93	35.23	140.93	890.64	514.17	0.00	1255.66	892.39	0.112	0.13	0.13

Main results: (17:45-18:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1449.15	362.29	1455.21	531.17	4.50	0.00	2322.99	2304.03	0.624	3.19	1.68
B	449.49	112.37	450.20	759.19	700.53	0.00	1595.88	1364.40	0.282	0.57	0.39
C	115.07	28.77	115.18	730.24	420.49	0.00	1300.42	892.39	0.088	0.13	0.10

Main results: (18:00-18:15)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1213.60	303.40	1215.90	444.63	3.77	0.00	2323.45	2304.03	0.522	1.68	1.10
B	376.43	94.11	376.83	634.35	585.32	0.00	1661.14	1364.40	0.227	0.39	0.29
C	96.37	24.09	96.44	610.19	351.95	0.00	1333.17	892.39	0.072	0.10	0.08

Queueing Delay Results

Queueing Delay results: (16:45-17:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	15.83	1.06	0.054	A	A
B	4.29	0.29	0.047	A	A
C	1.15	0.08	0.048	A	A

Queueing Delay results: (17:00-17:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	23.86	1.59	0.068	A	A
B	5.76	0.38	0.052	A	A
C	1.43	0.10	0.051	A	A

Queueing Delay results: (17:15-17:30)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	44.48	2.97	0.107	A	A
B	8.38	0.56	0.062	A	A
C	1.86	0.12	0.054	A	A

Queueing Delay results: (17:30-17:45)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	47.63	3.18	0.109	A	A
B	8.57	0.57	0.063	A	A
C	1.89	0.13	0.054	A	A

Queueing Delay results: (17:45-18:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	26.11	1.74	0.070	A	A
B	6.01	0.40	0.052	A	A
C	1.48	0.10	0.051	A	A

Queueing Delay results: (18:00-18:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	16.92	1.13	0.054	A	A
B	4.47	0.30	0.047	A	A
C	1.19	0.08	0.049	A	A

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.50	8.00	52.00	22.50	68.00	20.00		0.625	2325.804
B	4.00	7.50	26.00	45.00	68.00	32.00		0.566	1992.717
C	3.25	5.75	21.00	20.00	68.00	36.00		0.478	1501.362

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (min)
16:45-17:00	**A**	1213.60	2323.46	0.522	0.00	0.00	1.09	15.83	(0.00)	0.054
16:45-17:00	**B**	376.43	1662.95	0.226	0.00	0.00	0.29	4.29	(0.00)	0.047
16:45-17:00	**C**	96.37	1333.87	0.072	0.00	0.00	0.08	1.15	(0.00)	0.048
17:00-17:15	**A**	1449.15	2323.00	0.624	0.00	1.09	1.64	23.86	(0.00)	0.068
17:00-17:15	**B**	449.49	1598.13	0.281	0.00	0.29	0.39	5.76	(0.00)	0.052
17:00-17:15	**C**	115.07	1300.92	0.088	0.00	0.08	0.10	1.43	(0.00)	0.051
17:15-17:30	**A**	1774.85	2322.37	0.764	0.00	1.64	3.15	44.48	(0.00)	0.107
17:15-17:30	**B**	550.51	1510.36	0.364	0.00	0.39	0.57	8.38	(0.00)	0.062
17:15-17:30	**C**	140.93	1255.97	0.112	0.00	0.10	0.13	1.86	(0.00)	0.054
17:30-17:45	**A**	1774.85	2322.37	0.764	0.00	3.15	3.19	47.63	(0.00)	0.109
17:30-17:45	**B**	550.51	1508.76	0.365	0.00	0.57	0.57	8.57	(0.00)	0.063
17:30-17:45	**C**	140.93	1255.66	0.112	0.00	0.13	0.13	1.89	(0.00)	0.054
17:45-18:00	**A**	1449.15	2322.99	0.624	0.00	3.19	1.68	26.11	(0.00)	0.070
17:45-18:00	**B**	449.49	1595.88	0.282	0.00	0.57	0.39	6.01	(0.00)	0.052
17:45-18:00	**C**	115.07	1300.42	0.088	0.00	0.13	0.10	1.48	(0.00)	0.051
18:00-18:15	**A**	1213.60	2323.45	0.522	0.00	1.68	1.10	16.92	(0.00)	0.054
18:00-18:15	**B**	376.43	1661.14	0.227	0.00	0.39	0.29	4.47	(0.00)	0.047
18:00-18:15	**C**	96.37	1333.17	0.072	0.00	0.10	0.08	1.19	(0.00)	0.049

A60/A57/B6024 St Anne's Drive
Capacity Assessments

ARCADY 7

Version: 7.0.0.99 [10 July 2009]
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File: N:\Projects\A078085 - Bassetlaw DC Modelling\calculations\Capacity Assessments\2. A60-A57-B6024-St Annes Dr Rnd\Oct 2012\Existing\A60-A57-B6024 Roundabout.arc7
Report generation date: 06/12/2012 14:25:56

» A1 - (Default Analysis Set) - D1 - 2026 Base + Committed + Development AM, AM
» A1 - (Default Analysis Set) - D2 - 2026 Base + Committed + Development PM, PM
» A1 - (Default Analysis Set) - D3 - 2026 Base + Com AM, AM
» A1 - (Default Analysis Set) - D4 - 2026 Base + Com PM, PM

File summary

File Description

Title	A60-A57-B6024-St. Annes Dr Roundabout
Location	Bassetlaw
Date	19/02/2010
Status	Preliminary
Client	Bassetlaw DC
Jobnumber	A078085
Enumerator	martin.murphy [35-T-048CS]
Description	23.11.12 RJH: New Flows
Results Upto Date	False

Analysis Options

RFC Threshold	Vehicle Length (m)	Do Queue Variations
0.85	5.75	

Sorting and Display

Show Arm Names	Arm Grouping	Sorting Direction	Sorting Type	Data Matrix Style	Time Style
	Order	Ascending	Numerical	By Destination	Absolute Time

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	min	-Min	perMin

A1 - (Default Analysis Set) - D1 - 2026 Base + Committed + Development AM, AM

Data Errors and Warnings

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

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
2026 Base + Committed + Development AM, AM	2026 Base + Committed + Development AM	AM			Yes			07:45	09:15	90	15	ONE HOUR

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	B6024 Newcastle Avenue	
B	A57 (south)	
C	A60	
D	At Annes Drive	
E	A57 (north)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	3.50	7.00	13.50	40.00	85.00	17.00	
B	7.50	8.00	1.00	30.00	85.00	26.00	
C	3.50	8.80	56.80	20.00	85.00	25.00	
D	4.00	8.00	8.00	22.50	85.00	23.00	
E	7.00	8.80	3.50	30.00	85.00	22.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.486	1754.213
B		((calculated))	((calculated))	0.570	2401.112
C		((calculated))	((calculated))	0.558	2337.003
D		((calculated))	((calculated))	0.473	1728.034
E		((calculated))	((calculated))	0.577	2429.679

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

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
			Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	854.00	100.000	N/A
B	ONE HOUR	Yes	1210.00	100.000	N/A
C	ONE HOUR	Yes	1715.00	100.000	N/A
D	ONE HOUR	Yes	276.00	100.000	N/A
E	ONE HOUR	Yes	2266.00	100.000	N/A

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	642.94	642.94	N/A	N/A
07:45-08:00	B	910.95	910.95	N/A	N/A
07:45-08:00	C	1291.14	1291.14	N/A	N/A
07:45-08:00	D	207.79	207.79	N/A	N/A
07:45-08:00	E	1705.96	1705.96	N/A	N/A
08:00-08:15	A	767.73	767.73	N/A	N/A
08:00-08:15	B	1087.77	1087.77	N/A	N/A
08:00-08:15	C	1541.75	1541.75	N/A	N/A

08:00-08:15	**D**	248.12	248.12	N/A	N/A
08:00-08:15	**E**	2037.09	2037.09	N/A	N/A
08:15-08:30	**A**	940.27	940.27	N/A	N/A
08:15-08:30	**B**	1332.23	1332.23	N/A	N/A
08:15-08:30	**C**	1888.25	1888.25	N/A	N/A
08:15-08:30	**D**	303.88	303.88	N/A	N/A
08:15-08:30	**E**	2494.91	2494.91	N/A	N/A
08:30-08:45	**A**	940.27	940.27	N/A	N/A
08:30-08:45	**B**	1332.23	1332.23	N/A	N/A
08:30-08:45	**C**	1888.25	1888.25	N/A	N/A
08:30-08:45	**D**	303.88	303.88	N/A	N/A
08:30-08:45	**E**	2494.91	2494.91	N/A	N/A
08:45-09:00	**A**	767.73	767.73	N/A	N/A
08:45-09:00	**B**	1087.77	1087.77	N/A	N/A
08:45-09:00	**C**	1541.75	1541.75	N/A	N/A
08:45-09:00	**D**	248.12	248.12	N/A	N/A
08:45-09:00	**E**	2037.09	2037.09	N/A	N/A
09:00-09:15	**A**	642.94	642.94	N/A	N/A
09:00-09:15	**B**	910.95	910.95	N/A	N/A
09:00-09:15	**C**	1291.14	1291.14	N/A	N/A
09:00-09:15	**D**	207.79	207.79	N/A	N/A
09:00-09:15	**E**	1705.96	1705.96	N/A	N/A

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Roundabout 1 (for whole period)

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	0.00	42.00	318.00	30.00	464.00
	B	170.00	0.00	346.00	50.00	644.00
	C	406.00	299.00	0.00	10.00	1000.00
	D	112.00	61.00	26.00	0.00	77.00
	E	625.00	1090.00	510.00	41.00	0.00

Turning Proportions (Veh) - Roundabout 1 (for whole period)

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	0.00	0.05	0.37	0.04	0.54
	B	0.14	0.00	0.29	0.04	0.53
	C	0.24	0.17	0.00	0.01	0.58
	D	0.41	0.22	0.09	0.00	0.28
	E	0.28	0.48	0.23	0.02	0.00

Vehicle Mix

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

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00

	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Total Demand (Veh/hr)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	1.01	1.49	23.30	F	783.65	1175.47	749.76	0.64	8.33	749.95	0.64	0.486	1754.213
B	0.81	0.20	4.22	B	1110.32	1665.48	201.65	0.12	2.24	201.67	0.12	0.570	2401.112
C	1.26	7.30	206.64	F	1573.71	2360.57	8441.74	3.58	93.80	8554.25	3.62	0.558	2337.003
D	0.83	0.86	4.05	F	253.26	379.89	163.73	0.43	1.82	163.78	0.43	0.473	1728.034
E	1.35	13.11	422.79	F	2079.32	3118.98	18994.14	6.09	211.05	21404.43	6.86	0.577	2429.679

Main Results

Main results: (07:45-08:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	642.94	160.73	636.35	978.13	1506.45	0.00	1022.82	942.19	0.629	0.00	1.65
B	910.95	227.74	906.94	1109.27	1033.53	0.00	1812.01	1618.26	0.503	0.00	1.00
C	1291.14	322.79	1280.31	894.33	1046.14	0.00	1753.29	1369.61	0.736	0.00	2.71
D	207.79	51.95	206.03	97.74	2228.72	0.00	673.72	326.74	0.308	0.00	0.44
E	1705.96	426.49	1682.30	1632.47	802.28	0.00	1966.66	1837.57	0.867	0.00	5.92

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	767.73	191.93	757.94	1122.04	1686.15	0.00	935.57	942.19	0.821	1.65	4.09
B	1087.77	271.94	1085.00	1248.52	1195.57	0.00	1719.65	1618.26	0.633	1.00	1.69
C	1541.75	385.44	1509.98	1033.78	1246.79	0.00	1641.33	1369.61	0.939	2.71	10.65
D	248.12	62.03	245.71	113.88	2642.89	0.00	477.79	326.74	0.519	0.44	1.04
E	2037.09	509.27	1857.88	1938.28	950.31	0.00	1881.22	1837.57	1.083	5.92	50.72

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	940.27	235.07	891.33	1168.66	1689.29	0.00	934.05	942.19	1.007	4.09	16.33
B	1332.23	333.06	1323.05	1257.10	1323.52	0.00	1646.72	1618.26	0.809	1.69	3.99
C	1888.25	472.06	1499.32	1152.89	1493.68	0.00	1503.58	1369.61	1.256	10.65	107.88
D	303.88	75.97	293.97	128.09	2864.92	0.00	372.76	326.74	0.815	1.04	3.52
E	2494.91	623.73	1843.77	2144.71	1014.18	0.00	1844.36	1837.57	1.353	50.72	213.50

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	940.27	235.07	912.40	1170.99	1689.27	0.00	934.06	942.19	1.007	16.33	23.30
B	1332.23	333.06	1331.31	1257.86	1343.82	0.00	1635.15	1618.26	0.815	3.99	4.22
C	1888.25	472.06	1493.20	1163.39	1511.73	0.00	1493.50	1369.61	1.264	107.88	206.64
D	303.88	75.97	301.74	129.10	2875.84	0.00	367.59	326.74	0.827	3.52	4.05
E	2494.91	623.73	1841.83	2159.15	1018.43	0.00	1841.91	1837.57	1.355	213.50	376.78

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	767.73	191.93	838.18	1149.32	1702.66	0.00	927.55	942.19	0.828	23.30	5.68
B	1087.77	271.94	1097.11	1269.01	1271.83	0.00	1676.18	1618.26	0.649	4.22	1.88
C	1541.75	385.44	1602.90	1067.17	1301.77	0.00	1610.65	1369.61	0.957	206.64	191.36
D	248.12	62.03	257.82	117.65	2787.01	0.00	409.61	326.74	0.606	4.05	1.63
E	2037.09	509.27	1853.03	2045.89	998.95	0.00	1853.15	1837.57	1.099	376.78	422.79

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	642.94	160.73	656.11	1135.19	1709.99	0.00	923.99	942.19	0.696	5.68	2.39
B	910.95	227.74	914.24	1272.01	1094.09	0.00	1777.49	1618.26	0.512	1.88	1.06
C	1291.14	322.79	1733.23	942.48	1065.86	0.00	1742.29	1369.61	0.741	191.36	80.84
D	207.79	51.95	210.82	104.45	2694.64	0.00	453.31	326.74	0.458	1.63	0.87
E	1705.96	426.49	1852.24	1912.51	992.94	0.00	1856.62	1837.57	0.919	422.79	386.22

Queueing Delay Results

Queueing Delay results: (07:45-08:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	23.02	1.53	0.153	A	A
B	14.56	0.97	0.066	A	A
C	37.64	2.51	0.124	A	A
D	6.34	0.42	0.128	A	A
E	76.41	5.09	0.197	B	B

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	53.62	3.57	0.321	C	B
B	24.41	1.63	0.094	A	A
C	124.88	8.33	0.388	C	C
D	14.58	0.97	0.256	C	B
E	444.14	29.61	1.068	F	E

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	169.11	11.27	0.908	F	D
B	54.29	3.62	0.180	B	B
C	893.71	59.58	2.507	F	F

D	43.13	2.88	0.691	E	D
E	1982.15	132.14	4.392	F	F

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	299.66	19.98	1.488	F	F
B	62.05	4.14	0.196	B	B
C	2359.06	157.27	6.271	F	F
D	57.58	3.84	0.861	F	D
E	4427.13	295.14	9.650	F	F

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	164.28	10.95	0.852	F	D
B	29.93	2.00	0.105	A	A
C	2985.01	199.00	7.299	F	F
D	28.17	1.88	0.417	D	C
E	5996.75	399.78	12.983	F	F

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	40.07	2.67	0.234	B	B
B	16.41	1.09	0.070	A	A
C	2041.44	136.10	4.723	F	F
D	13.94	0.93	0.250	C	B
E	6067.57	404.50	13.105	F	F

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	3.50	7.00	13.50	40.00	85.00	17.00		0.486	1754.213
B	7.50	8.00	1.00	30.00	85.00	26.00		0.570	2401.112
C	3.50	8.80	56.80	20.00	85.00	25.00		0.558	2337.003
D	4.00	8.00	8.00	22.50	85.00	23.00		0.473	1728.034
E	7.00	8.80	3.50	30.00	85.00	22.00		0.577	2429.679

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (min)
07:45-08:00	A	642.94	1022.82	0.629	0.00	0.00	1.65	23.02	(0.00)	0.153
07:45-08:00	B	910.95	1812.01	0.503	0.00	0.00	1.00	14.56	(0.00)	0.066
07:45-08:00	C	1291.14	1753.29	0.736	0.00	0.00	2.71	37.64	(0.00)	0.124
07:45-08:00	D	207.79	673.72	0.308	0.00	0.00	0.44	6.34	(0.00)	0.128
07:45-08:00	E	1705.96	1966.66	0.867	0.00	0.00	5.92	76.41	(0.00)	0.197
08:00-08:15	A	767.73	935.57	0.821	0.00	1.65	4.09	53.62	(0.00)	0.321
08:00-08:15	B	1087.77	1719.65	0.633	0.00	1.00	1.69	24.41	(0.00)	0.094

08:00-08:15	**C**	1541.75	1641.33	0.939	0.00	2.71	10.65	124.88	(0.00)	0.388
08:00-08:15	**D**	248.12	477.79	0.519	0.00	0.44	1.04	14.58	(0.00)	0.256
08:00-08:15	**E**	2037.09	1881.22	1.083	0.00	5.92	50.72	444.14	(0.00)	1.068
08:15-08:30	**A**	940.27	934.05	1.007	0.00	4.09	16.33	169.11	(0.00)	0.908
08:15-08:30	**B**	1332.23	1646.72	0.809	0.00	1.69	3.99	54.29	(0.00)	0.180
08:15-08:30	**C**	1888.25	1503.58	1.256	0.00	10.65	107.88	893.71	(0.00)	2.507
08:15-08:30	**D**	303.88	372.76	0.815	0.00	1.04	3.52	43.13	(0.00)	0.691
08:15-08:30	**E**	2494.91	1844.36	1.353	0.00	50.72	213.50	1982.15	(0.00)	4.392
08:30-08:45	**A**	940.27	934.06	1.007	0.00	16.33	23.30	299.66	(0.00)	1.488
08:30-08:45	**B**	1332.23	1635.15	0.815	0.00	3.99	4.22	62.05	(0.00)	0.196
08:30-08:45	**C**	1888.25	1493.50	1.264	0.00	107.88	206.64	2359.06	(0.00)	6.271
08:30-08:45	**D**	303.88	367.59	0.827	0.00	3.52	4.05	57.58	(0.00)	0.861
08:30-08:45	**E**	2494.91	1841.91	1.355	0.00	213.50	376.78	4427.13	(0.00)	9.650
08:45-09:00	**A**	767.73	927.55	0.828	0.00	23.30	5.68	164.28	(0.00)	0.852
08:45-09:00	**B**	1087.77	1676.18	0.649	0.00	4.22	1.88	29.93	(0.00)	0.105
08:45-09:00	**C**	1541.75	1610.65	0.957	0.00	206.64	191.36	2985.01	(0.00)	7.299
08:45-09:00	**D**	248.12	409.61	0.606	0.00	4.05	1.63	28.17	(0.00)	0.417
08:45-09:00	**E**	2037.09	1853.15	1.099	0.00	376.78	422.79	5996.75	(0.00)	12.983
09:00-09:15	**A**	642.94	923.99	0.696	0.00	5.68	2.39	40.07	(0.00)	0.234
09:00-09:15	**B**	910.95	1777.49	0.512	0.00	1.88	1.06	16.41	(0.00)	0.070
09:00-09:15	**C**	1291.14	1742.29	0.741	0.00	191.36	80.84	2041.44	(0.00)	4.723
09:00-09:15	**D**	207.79	453.31	0.458	0.00	1.63	0.87	13.94	(0.00)	0.250
09:00-09:15	**E**	1705.96	1856.62	0.919	0.00	422.79	386.22	6067.57	(0.00)	13.105

A1 - (Default Analysis Set) - D2 - 2026 Base + Committed + Development PM, PM

Data Errors and Warnings

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

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
2026 Base + Committed + Development PM, PM	2026 Base + Committed + Development PM	PM			Yes			16:45	18:15	90	15	ONE HOUR

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay

1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	B6024 Newcastle Avenue	
B	A57 (south)	
C	A60	
D	At Annes Drive	
E	A57 (north)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	3.50	7.00	13.50	40.00	85.00	17.00	
B	7.50	8.00	1.00	30.00	85.00	26.00	
C	3.50	8.80	56.80	20.00	85.00	25.00	
D	4.00	8.00	8.00	22.50	85.00	23.00	
E	7.00	8.80	3.50	30.00	85.00	22.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.486	1754.213
B		((calculated))	((calculated))	0.570	2401.112
C		((calculated))	((calculated))	0.558	2337.003
D		((calculated))	((calculated))	0.473	1728.034
E		((calculated))	((calculated))	0.577	2429.679

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

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
			Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	1101.00	100.000	N/A
B	ONE HOUR	Yes	1389.00	100.000	N/A
C	ONE HOUR	Yes	1087.00	100.000	N/A
D	ONE HOUR	Yes	214.00	100.000	N/A
E	ONE HOUR	Yes	2199.00	100.000	N/A

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
16:45-17:00	A	828.89	828.89	N/A	N/A
16:45-17:00	B	1045.71	1045.71	N/A	N/A
16:45-17:00	C	818.35	818.35	N/A	N/A
16:45-17:00	D	161.11	161.11	N/A	N/A
16:45-17:00	E	1655.52	1655.52	N/A	N/A
17:00-17:15	A	989.78	989.78	N/A	N/A
17:00-17:15	B	1248.68	1248.68	N/A	N/A
17:00-17:15	C	977.19	977.19	N/A	N/A
17:00-17:15	D	192.38	192.38	N/A	N/A
17:00-17:15	E	1976.86	1976.86	N/A	N/A
17:15-17:30	A	1212.22	1212.22	N/A	N/A
17:15-17:30	B	1529.32	1529.32	N/A	N/A
17:15-17:30	C	1196.81	1196.81	N/A	N/A
17:15-17:30	D	235.62	235.62	N/A	N/A
17:15-17:30	E	2421.14	2421.14	N/A	N/A
17:30-17:45	A	1212.22	1212.22	N/A	N/A
17:30-17:45	B	1529.32	1529.32	N/A	N/A
17:30-17:45	C	1196.81	1196.81	N/A	N/A
17:30-17:45	D	235.62	235.62	N/A	N/A
17:30-17:45	E	2421.14	2421.14	N/A	N/A
17:45-18:00	A	989.78	989.78	N/A	N/A
17:45-18:00	B	1248.68	1248.68	N/A	N/A
17:45-18:00	C	977.19	977.19	N/A	N/A
17:45-18:00	D	192.38	192.38	N/A	N/A
17:45-18:00	E	1976.86	1976.86	N/A	N/A
18:00-18:15	A	828.89	828.89	N/A	N/A
18:00-18:15	B	1045.71	1045.71	N/A	N/A

18:00-18:15	**C**	818.35	818.35	N/A	N/A
18:00-18:15	**D**	161.11	161.11	N/A	N/A
18:00-18:15	**E**	1655.52	1655.52	N/A	N/A

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Roundabout 1 (for whole period)

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	0.00	39.00	430.00	70.00	562.00
	B	134.00	0.00	375.00	109.00	771.00
	C	203.00	217.00	0.00	14.00	653.00
	D	39.00	41.00	34.00	0.00	100.00
	E	547.00	712.00	833.00	107.00	0.00

Turning Proportions (Veh) - Roundabout 1 (for whole period)

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	0.00	0.04	0.39	0.06	0.51
	B	0.10	0.00	0.27	0.08	0.56
	C	0.19	0.20	0.00	0.01	0.60
	D	0.18	0.19	0.16	0.00	0.47
	E	0.25	0.32	0.38	0.05	0.00

Vehicle Mix

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

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Total Demand (Veh/hr)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)

A	1.40	15.51	230.01	F	1010.30	1515.45	10312.11	6.80	114.58	11970.15	7.90	0.486	1754.213
B	1.08	2.49	70.16	F	1274.57	1911.86	2269.28	1.19	25.21	2269.50	1.19	0.570	2401.112
C	0.84	0.25	4.84	C	997.45	1496.18	226.22	0.15	2.51	226.25	0.15	0.558	2337.003
D	0.45	0.21	0.80	B	196.37	294.56	42.97	0.15	0.48	42.97	0.15	0.473	1728.034
E	1.20	5.97	217.47	F	2017.84	3026.76	8813.50	2.91	97.93	8902.97	2.94	0.577	2429.679

Main Results

Main results: (16:45-17:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	828.89	207.22	814.96	689.87	1452.50	0.00	1049.01	850.81	0.790	0.00	3.48
B	1045.71	261.43	1037.43	753.87	1513.59	0.00	1538.38	1431.96	0.680	0.00	2.07
C	818.35	204.59	814.25	1245.95	1305.07	0.00	1608.81	1429.52	0.509	0.00	1.02
D	161.11	40.28	160.16	223.63	1895.69	0.00	831.26	413.69	0.194	0.00	0.24
E	1655.52	413.88	1642.35	1555.83	500.01	0.00	2141.11	1903.99	0.773	0.00	3.29

Main results: (17:00-17:15)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	989.78	247.44	895.37	818.37	1719.46	0.00	919.40	850.81	1.077	3.48	27.08
B	1248.68	312.17	1231.78	891.20	1723.64	0.00	1418.65	1431.97	0.880	2.07	6.30
C	977.19	244.30	973.91	1447.81	1507.62	0.00	1495.80	1429.52	0.653	1.02	1.84
D	192.38	48.10	191.77	260.56	2220.97	0.00	677.38	413.69	0.284	0.24	0.39
E	1976.86	494.21	1940.54	1815.45	597.29	0.00	2084.96	1903.99	0.948	3.29	12.37

Main results: (17:15-17:30)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1212.22	303.06	865.39	898.58	1828.96	0.00	866.24	850.81	1.399	27.08	113.79
B	1529.32	382.33	1393.14	963.13	1731.22	0.00	1414.34	1431.96	1.081	6.30	40.34
C	1196.81	299.20	1185.96	1512.77	1611.59	0.00	1437.79	1429.52	0.832	1.84	4.56
D	235.62	58.90	234.12	277.43	2520.11	0.00	535.87	413.69	0.440	0.39	0.77
E	2421.14	605.29	2010.18	2036.88	717.35	0.00	2015.67	1903.99	1.201	12.37	115.11

Main results: (17:30-17:45)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1212.22	303.06	864.38	902.65	1832.52	0.00	864.51	850.81	1.402	113.79	200.75
B	1529.32	382.33	1410.03	965.79	1731.11	0.00	1414.40	1431.96	1.081	40.34	70.16
C	1196.81	299.20	1195.69	1517.73	1623.41	0.00	1431.19	1429.52	0.836	4.56	4.84
D	235.62	58.90	235.50	278.89	2540.21	0.00	526.36	413.69	0.448	0.77	0.80
E	2421.14	605.29	2011.70	2052.24	723.48	0.00	2012.14	1903.99	1.203	115.11	217.47

Main results: (17:45-18:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	989.78	247.44	872.73	866.33	1815.27	0.00	872.88	850.81	1.134	200.75	230.01
B	1248.68	312.17	1381.29	933.35	1754.65	0.00	1400.98	1431.96	0.891	70.16	37.01
C	977.19	244.30	987.85	1526.20	1609.74	0.00	1438.81	1429.52	0.679	4.84	2.17
D	192.38	48.10	193.79	277.01	2320.59	0.00	630.26	413.69	0.305	0.80	0.45
E	1976.86	494.21	2063.42	1896.19	618.18	0.00	2072.91	1903.99	0.954	217.47	195.83

Main results: (18:00-18:15)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	828.89	207.22	869.95	824.32	1813.51	0.00	873.73	850.81	0.949	230.01	219.75
B	1045.71	261.43	1180.83	912.40	1771.07	0.00	1391.62	1431.96	0.751	37.01	3.23
C	818.35	204.59	822.32	1487.34	1464.56	0.00	1519.82	1429.52	0.538	2.17	1.18
D	161.11	40.28	161.82	261.72	2025.15	0.00	770.02	413.69	0.209	0.45	0.27
E	1655.52	413.88	2119.99	1669.12	517.85	0.00	2130.81	1903.99	0.777	195.83	79.72

Queueing Delay Results

Queueing Delay results: (16:45-17:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	45.76	3.05	0.244	B	B
B	29.11	1.94	0.118	A	A
C	14.84	0.99	0.075	A	A
D	3.48	0.23	0.089	A	A
E	45.58	3.04	0.117	A	A

Queueing Delay results: (17:00-17:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	246.00	16.40	1.263	F	E
B	79.99	5.33	0.298	C	B
C	26.37	1.76	0.114	A	A
D	5.71	0.38	0.123	A	A
E	144.90	9.66	0.350	C	C

Queueing Delay results: (17:15-17:30)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	1057.24	70.48	5.067	F	F
B	365.05	24.34	1.187	F	E
C	60.69	4.05	0.229	B	B
D	10.92	0.73	0.198	B	B
E	962.01	64.13	2.018	F	F

Queueing Delay results: (17:30-17:45)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	2359.13	157.28	10.988	F	F
B	830.00	55.33	2.494	F	F
C	70.95	4.73	0.252	C	B
D	11.81	0.79	0.206	B	B
E	2494.57	166.30	4.997	F	F

Queueing Delay results: (17:45-18:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	3230.76	215.38	14.899	F	F
B	803.77	53.58	2.373	F	F
C	34.99	2.33	0.136	A	A
D	6.94	0.46	0.138	A	A
E	3099.81	206.65	5.973	F	F

Queueing Delay results: (18:00-18:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	3373.22	224.88	15.512	F	F
B	161.36	10.76	0.468	D	C
C	18.38	1.23	0.087	A	A
D	4.11	0.27	0.099	A	A
E	2066.63	137.78	3.917	F	F

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	3.50	7.00	13.50	40.00	85.00	17.00		0.486	1754.213
B	7.50	8.00	1.00	30.00	85.00	26.00		0.570	2401.112
C	3.50	8.80	56.80	20.00	85.00	25.00		0.558	2337.003
D	4.00	8.00	8.00	22.50	85.00	23.00		0.473	1728.034
E	7.00	8.80	3.50	30.00	85.00	22.00		0.577	2429.679

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (min)
16:45-17:00	A	828.89	1049.01	0.790	0.00	0.00	3.48	45.76	(0.00)	0.244
16:45-17:00	B	1045.71	1538.38	0.680	0.00	0.00	2.07	29.11	(0.00)	0.118
16:45-17:00	C	818.35	1608.81	0.509	0.00	0.00	1.02	14.84	(0.00)	0.075
16:45-17:00	D	161.11	831.26	0.194	0.00	0.00	0.24	3.48	(0.00)	0.089
16:45-17:00	E	1655.52	2141.11	0.773	0.00	0.00	3.29	45.58	(0.00)	0.117
17:00-17:15	A	989.78	919.40	1.077	0.00	3.48	27.08	246.00	(0.00)	1.263
17:00-17:15	B	1248.68	1418.65	0.880	0.00	2.07	6.30	79.99	(0.00)	0.298
17:00-17:15	C	977.19	1495.80	0.653	0.00	1.02	1.84	26.37	(0.00)	0.114
17:00-17:15	D	192.38	677.38	0.284	0.00	0.24	0.39	5.71	(0.00)	0.123
17:00-17:15	E	1976.86	2084.96	0.948	0.00	3.29	12.37	144.90	(0.00)	0.350
17:15-17:30	A	1212.22	866.24	1.399	0.00	27.08	113.79	1057.24	(0.00)	5.067
17:15-17:30	B	1529.32	1414.34	1.081	0.00	6.30	40.34	365.05	(0.00)	1.187
17:15-17:30	C	1196.81	1437.79	0.832	0.00	1.84	4.56	60.69	(0.00)	0.229
17:15-17:30	D	235.62	535.87	0.440	0.00	0.39	0.77	10.92	(0.00)	0.198
17:15-17:30	E	2421.14	2015.67	1.201	0.00	12.37	115.11	962.01	(0.00)	2.018
17:30-17:45	A	1212.22	864.51	1.402	0.00	113.79	200.75	2359.13	(0.00)	10.988
17:30-17:45	B	1529.32	1414.40	1.081	0.00	40.34	70.16	830.00	(0.00)	2.494
17:30-17:45	C	1196.81	1431.19	0.836	0.00	4.56	4.84	70.95	(0.00)	0.252
17:30-17:45	D	235.62	526.36	0.448	0.00	0.77	0.80	11.81	(0.00)	0.206
17:30-17:45	E	2421.14	2012.14	1.203	0.00	115.11	217.47	2494.57	(0.00)	4.997
17:45-18:00	A	989.78	872.88	1.134	0.00	200.75	230.01	3230.76	(0.00)	14.899
17:45-18:00	B	1248.68	1400.98	0.891	0.00	70.16	37.01	803.77	(0.00)	2.373
17:45-18:00	C	977.19	1438.81	0.679	0.00	4.84	2.17	34.99	(0.00)	0.136
17:45-18:00	D	192.38	630.26	0.305	0.00	0.80	0.45	6.94	(0.00)	0.138
17:45-18:00	E	1976.86	2072.91	0.954	0.00	217.47	195.83	3099.81	(0.00)	5.973

18:00-18:15	**A**	828.89	873.73	0.949	0.00	230.01	219.75	3373.22	(0.00)	15.512
18:00-18:15	**B**	1045.71	1391.62	0.751	0.00	37.01	3.23	161.36	(0.00)	0.468
18:00-18:15	**C**	818.35	1519.82	0.538	0.00	2.17	1.18	18.38	(0.00)	0.087
18:00-18:15	**D**	161.11	770.02	0.209	0.00	0.45	0.27	4.11	(0.00)	0.099
18:00-18:15	**E**	1655.52	2130.81	0.777	0.00	195.83	79.72	2066.63	(0.00)	3.917

A1 - (Default Analysis Set) - D3 - 2026 Base + Com AM, AM

Data Errors and Warnings

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

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
2026 Base + Com AM, AM	2026 Base + Com AM	AM			Yes			07:45	09:15	90	15	ONE HOUR

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	B6024 Newcastle Avenue	
B	A57 (south)	
C	A60	
D	At Annes Drive	
E	A57 (north)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	3.50	7.00	13.50	40.00	85.00	17.00	
B	7.50	8.00	1.00	30.00	85.00	26.00	
C	3.50	8.80	56.80	20.00	85.00	25.00	
D	4.00	8.00	8.00	22.50	85.00	23.00	
E	7.00	8.80	3.50	30.00	85.00	22.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.486	1754.213
B		((calculated))	((calculated))	0.570	2401.112
C		((calculated))	((calculated))	0.558	2337.003
D		((calculated))	((calculated))	0.473	1728.034
E		((calculated))	((calculated))	0.577	2429.679

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

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
			Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	774.00	100.000	N/A
B	ONE HOUR	Yes	1100.00	100.000	N/A
C	ONE HOUR	Yes	1468.00	100.000	N/A
D	ONE HOUR	Yes	276.00	100.000	N/A

E	ONE HOUR	Yes	1867.00	100.000	N/A

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	582.71	582.71	N/A	N/A
07:45-08:00	B	828.14	828.14	N/A	N/A
07:45-08:00	C	1105.19	1105.19	N/A	N/A
07:45-08:00	D	207.79	207.79	N/A	N/A
07:45-08:00	E	1405.58	1405.58	N/A	N/A
08:00-08:15	A	695.81	695.81	N/A	N/A
08:00-08:15	B	988.88	988.88	N/A	N/A
08:00-08:15	C	1319.70	1319.70	N/A	N/A
08:00-08:15	D	248.12	248.12	N/A	N/A
08:00-08:15	E	1678.39	1678.39	N/A	N/A
08:15-08:30	A	852.19	852.19	N/A	N/A
08:15-08:30	B	1211.12	1211.12	N/A	N/A
08:15-08:30	C	1616.30	1616.30	N/A	N/A
08:15-08:30	D	303.88	303.88	N/A	N/A
08:15-08:30	E	2055.61	2055.61	N/A	N/A
08:30-08:45	A	852.19	852.19	N/A	N/A
08:30-08:45	B	1211.12	1211.12	N/A	N/A
08:30-08:45	C	1616.30	1616.30	N/A	N/A
08:30-08:45	D	303.88	303.88	N/A	N/A
08:30-08:45	E	2055.61	2055.61	N/A	N/A
08:45-09:00	A	695.81	695.81	N/A	N/A
08:45-09:00	B	988.88	988.88	N/A	N/A
08:45-09:00	C	1319.70	1319.70	N/A	N/A
08:45-09:00	D	248.12	248.12	N/A	N/A
08:45-09:00	E	1678.39	1678.39	N/A	N/A
09:00-09:15	A	582.71	582.71	N/A	N/A
09:00-09:15	B	828.14	828.14	N/A	N/A
09:00-09:15	C	1105.19	1105.19	N/A	N/A
09:00-09:15	D	207.79	207.79	N/A	N/A
09:00-09:15	E	1405.58	1405.58	N/A	N/A

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	42.00	303.00	30.00	399.00
	B	170.00	0.00	334.00	50.00	546.00
	C	358.00	264.00	0.00	10.00	836.00
	D	112.00	61.00	26.00	0.00	77.00
	E	567.00	876.00	383.00	41.00	0.00

Turning Proportions (Veh) - Roundabout 1 (for whole period)

	To

		A	B	C	D	E
From	A	0.00	0.05	0.39	0.04	0.52
	B	0.15	0.00	0.30	0.05	0.50
	C	0.24	0.18	0.00	0.01	0.57
	D	0.41	0.22	0.09	0.00	0.28
	E	0.30	0.47	0.21	0.02	0.00

Vehicle Mix

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

		To				
		A	B	C	D	E
From	A	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Total Demand (Veh/hr)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.89	0.52	6.91	D	710.24	1065.35	285.05	0.27	3.17	285.10	0.27	0.486	1754.213
B	0.72	0.12	2.47	A	1009.38	1514.07	132.34	0.09	1.47	132.35	0.09	0.570	2401.112
C	1.02	1.32	37.35	F	1347.06	2020.59	941.00	0.47	10.46	941.04	0.47	0.558	2337.003
D	0.73	0.53	2.53	D	253.26	379.89	96.84	0.25	1.08	96.84	0.25	0.473	1728.034
E	1.13	3.39	128.88	F	1713.19	2569.79	4123.94	1.60	45.82	4124.04	1.60	0.577	2429.679

Main Results

Main results: (07:45-08:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	582.71	145.68	578.69	903.38	1235.01	0.00	1154.60	971.21	0.505	0.00	1.00
B	828.14	207.03	825.06	929.85	883.85	0.00	1897.33	1625.66	0.436	0.00	0.77
C	1105.19	276.30	1099.09	782.95	925.95	0.00	1820.35	1382.88	0.607	0.00	1.52
D	207.79	51.95	206.43	98.08	1926.96	0.00	816.47	340.89	0.255	0.00	0.34
E	1405.58	351.39	1396.34	1391.35	742.04	0.00	2001.42	1804.67	0.702	0.00	2.31

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	695.81	173.95	692.00	1077.91	1471.63	0.00	1039.72	971.21	0.669	1.00	1.96
B	988.88	247.22	987.13	1108.35	1055.28	0.00	1799.61	1625.66	0.549	0.77	1.21
C	1319.70	329.93	1313.10	934.95	1107.46	0.00	1719.07	1382.88	0.768	1.52	3.17
D	248.12	62.03	246.97	117.15	2303.41	0.00	638.38	340.89	0.389	0.34	0.63
E	1678.39	419.60	1662.55	1663.39	886.99	0.00	1917.77	1804.67	0.875	2.31	6.27

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	852.19	213.05	835.45	1230.47	1628.86	0.00	963.38	971.21	0.885	1.96	6.14
B	1211.12	302.78	1206.32	1235.46	1228.86	0.00	1700.67	1625.66	0.712	1.21	2.41
C	1616.30	404.07	1533.65	1092.37	1342.81	0.00	1587.76	1382.88	1.018	3.17	23.84
D	303.88	75.97	297.75	137.37	2739.09	0.00	432.28	340.89	0.703	0.63	2.16
E	2055.61	513.90	1808.40	1985.91	1050.93	0.00	1823.15	1804.67	1.128	6.27	68.07

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	852.19	213.05	849.13	1241.23	1638.22	0.00	958.84	971.21	0.889	6.14	6.91
B	1211.12	302.78	1210.87	1244.22	1243.13	0.00	1692.54	1625.66	0.716	2.41	2.47
C	1616.30	404.07	1562.24	1100.35	1353.65	0.00	1581.71	1382.88	1.022	23.84	37.35
D	303.88	75.97	302.40	138.39	2777.49	0.00	414.11	340.89	0.734	2.16	2.53
E	2055.61	513.90	1812.35	2012.79	1067.10	0.00	1813.82	1804.67	1.133	68.07	128.88

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	695.81	173.95	712.25	1178.11	1640.43	0.00	957.77	971.21	0.726	6.91	2.80
B	988.88	247.22	993.59	1231.56	1121.11	0.00	1762.09	1625.66	0.561	2.47	1.29
C	1319.70	329.93	1454.65	987.08	1127.62	0.00	1707.82	1382.88	0.773	37.35	3.61
D	248.12	62.03	255.03	123.63	2458.64	0.00	564.95	340.89	0.439	2.53	0.80
E	1678.39	419.60	1864.76	1759.89	953.78	0.00	1879.23	1804.67	0.893	128.88	82.29

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	582.71	145.68	588.72	1008.64	1467.25	0.00	1041.85	971.21	0.559	2.80	1.29
B	828.14	207.03	830.05	1087.75	968.22	0.00	1849.23	1625.66	0.448	1.29	0.82
C	1105.19	276.30	1113.29	856.07	942.20	0.00	1811.28	1382.88	0.610	3.61	1.59
D	207.79	51.95	209.59	106.01	1949.48	0.00	805.81	340.89	0.258	0.80	0.35
E	1405.58	351.39	1724.79	1407.97	751.10	0.00	1996.19	1804.67	0.704	82.29	2.49

Queueing Delay Results

Queueing Delay results: (07:45-08:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	14.41	0.96	0.103	A	A
B	11.25	0.75	0.056	A	A
C	21.87	1.46	0.083	A	A
D	4.91	0.33	0.098	A	A

E	32.61	2.17	0.098	A	A

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	27.52	1.83	0.171	B	B
B	17.59	1.17	0.074	A	A
C	44.21	2.95	0.145	A	A
D	9.01	0.60	0.153	A	A
E	81.87	5.46	0.222	B	B

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	75.78	5.05	0.423	D	C
B	34.09	2.27	0.120	A	A
C	231.55	15.44	0.699	E	D
D	28.30	1.89	0.428	D	C
E	572.22	38.15	1.376	F	F

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	98.90	6.59	0.518	D	C
B	36.74	2.45	0.124	A	A
C	462.23	30.82	1.317	F	E
D	36.02	2.40	0.526	D	C
E	1477.70	98.51	3.341	F	F

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	47.91	3.19	0.259	C	B
B	20.12	1.34	0.079	A	A
C	156.15	10.41	0.353	C	C
D	13.16	0.88	0.198	B	B
E	1583.84	105.59	3.387	F	F

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	20.54	1.37	0.134	A	A
B	12.54	0.84	0.059	A	A
C	24.99	1.67	0.087	A	A
D	5.44	0.36	0.101	A	A
E	375.72	25.05	0.624	E	D

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	3.50	7.00	13.50	40.00	85.00	17.00		0.486	1754.213
B	7.50	8.00	1.00	30.00	85.00	26.00		0.570	2401.112
C	3.50	8.80	56.80	20.00	85.00	25.00		0.558	2337.003

D	4.00	8.00	8.00	22.50	85.00	23.00		0.473	1728.034
E	7.00	8.80	3.50	30.00	85.00	22.00		0.577	2429.679

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (min)
07:45-08:00	**A**	582.71	1154.60	0.505	0.00	0.00	1.00	14.41	(0.00)	0.103
07:45-08:00	**B**	828.14	1897.33	0.436	0.00	0.00	0.77	11.25	(0.00)	0.056
07:45-08:00	**C**	1105.19	1820.35	0.607	0.00	0.00	1.52	21.87	(0.00)	0.083
07:45-08:00	**D**	207.79	816.47	0.255	0.00	0.00	0.34	4.91	(0.00)	0.098
07:45-08:00	**E**	1405.58	2001.42	0.702	0.00	0.00	2.31	32.61	(0.00)	0.098
08:00-08:15	**A**	695.81	1039.72	0.669	0.00	1.00	1.96	27.52	(0.00)	0.171
08:00-08:15	**B**	988.88	1799.61	0.549	0.00	0.77	1.21	17.59	(0.00)	0.074
08:00-08:15	**C**	1319.70	1719.07	0.768	0.00	1.52	3.17	44.21	(0.00)	0.145
08:00-08:15	**D**	248.12	638.38	0.389	0.00	0.34	0.63	9.01	(0.00)	0.153
08:00-08:15	**E**	1678.39	1917.77	0.875	0.00	2.31	6.27	81.87	(0.00)	0.222
08:15-08:30	**A**	852.19	963.38	0.885	0.00	1.96	6.14	75.78	(0.00)	0.423
08:15-08:30	**B**	1211.12	1700.67	0.712	0.00	1.21	2.41	34.09	(0.00)	0.120
08:15-08:30	**C**	1616.30	1587.76	1.018	0.00	3.17	23.84	231.55	(0.00)	0.699
08:15-08:30	**D**	303.88	432.28	0.703	0.00	0.63	2.16	28.30	(0.00)	0.428
08:15-08:30	**E**	2055.61	1823.15	1.128	0.00	6.27	68.07	572.22	(0.00)	1.376
08:30-08:45	**A**	852.19	958.84	0.889	0.00	6.14	6.91	98.90	(0.00)	0.518
08:30-08:45	**B**	1211.12	1692.54	0.716	0.00	2.41	2.47	36.74	(0.00)	0.124
08:30-08:45	**C**	1616.30	1581.71	1.022	0.00	23.84	37.35	462.23	(0.00)	1.317
08:30-08:45	**D**	303.88	414.11	0.734	0.00	2.16	2.53	36.02	(0.00)	0.526
08:30-08:45	**E**	2055.61	1813.82	1.133	0.00	68.07	128.88	1477.70	(0.00)	3.341
08:45-09:00	**A**	695.81	957.77	0.726	0.00	6.91	2.80	47.91	(0.00)	0.259
08:45-09:00	**B**	988.88	1762.09	0.561	0.00	2.47	1.29	20.12	(0.00)	0.079
08:45-09:00	**C**	1319.70	1707.82	0.773	0.00	37.35	3.61	156.15	(0.00)	0.353
08:45-09:00	**D**	248.12	564.95	0.439	0.00	2.53	0.80	13.16	(0.00)	0.198
08:45-09:00	**E**	1678.39	1879.23	0.893	0.00	128.88	82.29	1583.84	(0.00)	3.387
09:00-09:15	**A**	582.71	1041.85	0.559	0.00	2.80	1.29	20.54	(0.00)	0.134
09:00-09:15	**B**	828.14	1849.23	0.448	0.00	1.29	0.82	12.54	(0.00)	0.059
09:00-09:15	**C**	1105.19	1811.28	0.610	0.00	3.61	1.59	24.99	(0.00)	0.087
09:00-09:15	**D**	207.79	805.81	0.258	0.00	0.80	0.35	5.44	(0.00)	0.101
09:00-09:15	**E**	1405.58	1996.19	0.704	0.00	82.29	2.49	375.72	(0.00)	0.624

A1 - (Default Analysis Set) - D4 - 2026 Base + Com PM, PM

Data Errors and Warnings

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

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
2026 Base + Com PM, PM	2026 Base + Com PM	PM			Yes			16:45	18:15	90	15	ONE HOUR

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	B6024 Newcastle Avenue	
B	A57 (south)	
C	A60	
D	At Annes Drive	
E	A57 (north)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	3.50	7.00	13.50	40.00	85.00	17.00	
B	7.50	8.00	1.00	30.00	85.00	26.00	
C	3.50	8.80	56.80	20.00	85.00	25.00	
D	4.00	8.00	8.00	22.50	85.00	23.00	
E	7.00	8.80	3.50	30.00	85.00	22.00	

Pedestrian Crossings

Arm	Crossing Type

A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.486	1754.213
B		((calculated))	((calculated))	0.570	2401.112
C		((calculated))	((calculated))	0.558	2337.003
D		((calculated))	((calculated))	0.473	1728.034
E		((calculated))	((calculated))	0.577	2429.679

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

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
			Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	1025.00	100.000	N/A
B	ONE HOUR	Yes	1173.00	100.000	N/A
C	ONE HOUR	Yes	952.00	100.000	N/A
D	ONE HOUR	Yes	214.00	100.000	N/A
E	ONE HOUR	Yes	1902.00	100.000	N/A

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
16:45-17:00	A	771.67	771.67	N/A	N/A
16:45-17:00	B	883.10	883.10	N/A	N/A
16:45-17:00	C	716.72	716.72	N/A	N/A
16:45-17:00	D	161.11	161.11	N/A	N/A
16:45-17:00	E	1431.93	1431.93	N/A	N/A
17:00-17:15	A	921.45	921.45	N/A	N/A
17:00-17:15	B	1054.50	1054.50	N/A	N/A
17:00-17:15	C	855.83	855.83	N/A	N/A
17:00-17:15	D	192.38	192.38	N/A	N/A
17:00-17:15	E	1709.86	1709.86	N/A	N/A

17:15-17:30	**A**	1128.55	1128.55	N/A	N/A
17:15-17:30	**B**	1291.50	1291.50	N/A	N/A
17:15-17:30	**C**	1048.17	1048.17	N/A	N/A
17:15-17:30	**D**	235.62	235.62	N/A	N/A
17:15-17:30	**E**	2094.14	2094.14	N/A	N/A
17:30-17:45	**A**	1128.55	1128.55	N/A	N/A
17:30-17:45	**B**	1291.50	1291.50	N/A	N/A
17:30-17:45	**C**	1048.17	1048.17	N/A	N/A
17:30-17:45	**D**	235.62	235.62	N/A	N/A
17:30-17:45	**E**	2094.14	2094.14	N/A	N/A
17:45-18:00	**A**	921.45	921.45	N/A	N/A
17:45-18:00	**B**	1054.50	1054.50	N/A	N/A
17:45-18:00	**C**	855.83	855.83	N/A	N/A
17:45-18:00	**D**	192.38	192.38	N/A	N/A
17:45-18:00	**E**	1709.86	1709.86	N/A	N/A
18:00-18:15	**A**	771.67	771.67	N/A	N/A
18:00-18:15	**B**	883.10	883.10	N/A	N/A
18:00-18:15	**C**	716.72	716.72	N/A	N/A
18:00-18:15	**D**	161.11	161.11	N/A	N/A
18:00-18:15	**E**	1431.93	1431.93	N/A	N/A

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Roundabout 1 (for whole period)

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	0.00	39.00	394.00	70.00	522.00
	B	134.00	0.00	346.00	109.00	584.00
	C	183.00	206.00	0.00	14.00	549.00
	D	39.00	41.00	34.00	0.00	100.00
	E	480.00	634.00	681.00	107.00	0.00

Turning Proportions (Veh) - Roundabout 1 (for whole period)

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	0.00	0.04	0.38	0.07	0.51
	B	0.11	0.00	0.29	0.09	0.50
	C	0.19	0.22	0.00	0.01	0.58
	D	0.18	0.19	0.16	0.00	0.47
	E	0.25	0.33	0.36	0.06	0.00

Vehicle Mix

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

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Total Demand (Veh/hr)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	1.29	8.05	132.90	F	940.56	1410.84	5484.56	3.89	60.94	5534.52	3.92	0.486	1754.213
B	0.91	0.41	8.40	C	1076.37	1614.55	341.34	0.21	3.79	341.40	0.21	0.570	2401.112
C	0.71	0.14	2.35	A	873.57	1310.36	127.26	0.10	1.41	127.27	0.10	0.558	2337.003
D	0.36	0.14	0.56	A	196.37	294.56	32.17	0.11	0.36	32.18	0.11	0.473	1728.034
E	1.03	1.41	53.51	F	1745.31	2617.96	1354.12	0.52	15.05	1354.18	0.52	0.577	2429.679

Main Results

Main results: (16:45-17:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	771.67	192.92	763.45	626.18	1275.37	0.00	1135.01	853.79	0.680	0.00	2.05
B	883.10	220.77	878.43	688.93	1349.89	0.00	1631.69	1453.77	0.541	0.00	1.17
C	716.72	179.18	713.82	1087.94	1140.38	0.00	1700.71	1431.50	0.421	0.00	0.72
D	161.11	40.28	160.31	224.38	1629.82	0.00	957.03	434.16	0.168	0.00	0.20
E	1431.93	357.98	1424.12	1312.70	477.42	0.00	2154.14	1862.77	0.665	0.00	1.95

Main results: (17:00-17:15)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	921.45	230.36	900.25	748.35	1523.80	0.00	1014.39	853.79	0.908	2.05	7.36
B	1054.50	263.63	1049.73	822.83	1601.21	0.00	1488.44	1453.77	0.708	1.17	2.36
C	855.83	213.96	854.05	1295.21	1355.73	0.00	1580.54	1431.50	0.541	0.72	1.17
D	192.38	48.10	191.95	267.28	1942.51	0.00	809.11	434.16	0.238	0.20	0.31
E	1709.86	427.46	1701.00	1563.31	571.15	0.00	2100.05	1862.77	0.814	1.95	4.17

Main results: (17:15-17:30)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1128.55	282.14	881.30	888.15	1788.16	0.00	886.04	853.79	1.274	7.36	69.17
B	1291.50	322.87	1270.69	964.22	1705.24	0.00	1429.14	1453.77	0.904	2.36	7.56
C	1048.17	262.04	1043.64	1459.68	1516.25	0.00	1490.98	1431.50	0.703	1.17	2.30
D	235.62	58.90	234.67	304.98	2254.91	0.00	661.33	434.16	0.356	0.31	0.55
E	2094.14	523.54	1979.69	1792.96	696.62	0.00	2027.64	1862.77	1.033	4.17	32.78

Main results: (17:30-17:45)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1128.55	282.14	873.60	899.10	1812.99	0.00	873.99	853.79	1.291	69.17	132.90
B	1291.50	322.87	1288.14	975.55	1711.05	0.00	1425.83	1453.77	0.906	7.56	8.40
C	1048.17	262.04	1047.95	1473.30	1525.88	0.00	1485.61	1431.50	0.706	2.30	2.35
D	235.62	58.90	235.58	307.92	2265.92	0.00	656.12	434.16	0.359	0.55	0.56
E	2094.14	523.54	2011.23	1800.64	700.86	0.00	2025.19	1862.77	1.034	32.78	53.51

Main results: (17:45-18:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	921.45	230.36	932.62	804.17	1677.77	0.00	939.64	853.79	0.981	132.90	130.11
B	1054.50	263.63	1076.17	893.51	1716.88	0.00	1422.50	1453.77	0.741	8.40	2.98
C	855.83	213.96	860.28	1388.54	1404.52	0.00	1553.32	1431.50	0.551	2.35	1.24
D	192.38	48.10	193.30	283.49	1981.31	0.00	790.75	434.16	0.243	0.56	0.32
E	1709.86	427.46	1904.50	1597.18	577.43	0.00	2096.42	1862.77	0.816	53.51	4.85

Main results: (18:00-18:15)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	771.67	192.92	1118.80	633.23	1291.05	0.00	1127.40	853.79	0.684	130.11	43.33
B	883.10	220.77	888.48	710.03	1699.82	0.00	1432.23	1453.77	0.617	2.98	1.64
C	716.72	179.18	718.34	1234.53	1353.77	0.00	1581.64	1431.50	0.453	1.24	0.84
D	161.11	40.28	161.49	250.72	1821.39	0.00	866.41	434.16	0.186	0.32	0.23
E	1431.93	357.98	1443.23	1501.83	481.05	0.00	2152.05	1862.77	0.665	4.85	2.02

Queueing Delay Results

Queueing Delay results: (16:45-17:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	28.48	1.90	0.158	A	A
B	16.83	1.12	0.079	A	A
C	10.56	0.70	0.061	A	A
D	2.94	0.20	0.075	A	A
E	27.87	1.86	0.081	A	A

Queueing Delay results: (17:00-17:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	88.13	5.88	0.459	D	C
B	33.25	2.22	0.135	A	A
C	16.98	1.13	0.082	A	A
D	4.53	0.30	0.097	A	A
E	57.39	3.83	0.147	A	A

Queueing Delay results: (17:15-17:30)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	578.88	38.59	2.808	F	F
B	93.46	6.23	0.341	C	C
C	32.49	2.17	0.133	A	A
D	7.89	0.53	0.140	A	A
E	307.14	20.48	0.711	E	D

Queueing Delay results: (17:30-17:45)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	1515.68	101.05	6.925	F	F
B	120.84	8.06	0.415	C	C
C	35.02	2.33	0.137	A	A
D	8.28	0.55	0.143	A	A
E	650.13	43.34	1.411	F	F

Queueing Delay results: (17:45-18:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	1972.60	131.51	8.055	F	F
B	51.18	3.41	0.183	B	B
C	19.36	1.29	0.087	A	A
D	5.01	0.33	0.101	A	A
E	279.52	18.63	0.550	D	C

Queueing Delay results: (18:00-18:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	1300.80	86.72	4.673	F	F
B	25.78	1.72	0.111	A	A
C	12.85	0.86	0.070	A	A
D	3.52	0.23	0.085	A	A
E	32.06	2.14	0.086	A	A

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	3.50	7.00	13.50	40.00	85.00	17.00		0.486	1754.213
B	7.50	8.00	1.00	30.00	85.00	26.00		0.570	2401.112
C	3.50	8.80	56.80	20.00	85.00	25.00		0.558	2337.003
D	4.00	8.00	8.00	22.50	85.00	23.00		0.473	1728.034
E	7.00	8.80	3.50	30.00	85.00	22.00		0.577	2429.679

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (min)
16:45-17:00	A	771.67	1135.01	0.680	0.00	0.00	2.05	28.48	(0.00)	0.158
16:45-17:00	B	883.10	1631.69	0.541	0.00	0.00	1.17	16.83	(0.00)	0.079
16:45-17:00	C	716.72	1700.71	0.421	0.00	0.00	0.72	10.56	(0.00)	0.061
16:45-17:00	D	161.11	957.03	0.168	0.00	0.00	0.20	2.94	(0.00)	0.075
16:45-17:00	E	1431.93	2154.14	0.665	0.00	0.00	1.95	27.87	(0.00)	0.081
17:00-17:15	A	921.45	1014.39	0.908	0.00	2.05	7.36	88.13	(0.00)	0.459
17:00-17:15	B	1054.50	1488.44	0.708	0.00	1.17	2.36	33.25	(0.00)	0.135
17:00-17:15	C	855.83	1580.54	0.541	0.00	0.72	1.17	16.98	(0.00)	0.082
17:00-17:15	D	192.38	809.11	0.238	0.00	0.20	0.31	4.53	(0.00)	0.097

17:00-17:15	**E**	1709.86	2100.05	0.814	0.00	1.95	4.17	57.39	(0.00)	0.147
17:15-17:30	**A**	1128.55	886.04	1.274	0.00	7.36	69.17	578.88	(0.00)	2.808
17:15-17:30	**B**	1291.50	1429.14	0.904	0.00	2.36	7.56	93.46	(0.00)	0.341
17:15-17:30	**C**	1048.17	1490.98	0.703	0.00	1.17	2.30	32.49	(0.00)	0.133
17:15-17:30	**D**	235.62	661.33	0.356	0.00	0.31	0.55	7.89	(0.00)	0.140
17:15-17:30	**E**	2094.14	2027.64	1.033	0.00	4.17	32.78	307.14	(0.00)	0.711
17:30-17:45	**A**	1128.55	873.99	1.291	0.00	69.17	132.90	1515.68	(0.00)	6.925
17:30-17:45	**B**	1291.50	1425.83	0.906	0.00	7.56	8.40	120.84	(0.00)	0.415
17:30-17:45	**C**	1048.17	1485.61	0.706	0.00	2.30	2.35	35.02	(0.00)	0.137
17:30-17:45	**D**	235.62	656.12	0.359	0.00	0.55	0.56	8.28	(0.00)	0.143
17:30-17:45	**E**	2094.14	2025.19	1.034	0.00	32.78	53.51	650.13	(0.00)	1.411
17:45-18:00	**A**	921.45	939.64	0.981	0.00	132.90	130.11	1972.60	(0.00)	8.055
17:45-18:00	**B**	1054.50	1422.50	0.741	0.00	8.40	2.98	51.18	(0.00)	0.183
17:45-18:00	**C**	855.83	1553.32	0.551	0.00	2.35	1.24	19.36	(0.00)	0.087
17:45-18:00	**D**	192.38	790.75	0.243	0.00	0.56	0.32	5.01	(0.00)	0.101
17:45-18:00	**E**	1709.86	2096.42	0.816	0.00	53.51	4.85	279.52	(0.00)	0.550
18:00-18:15	**A**	771.67	1127.40	0.684	0.00	130.11	43.33	1300.80	(0.00)	4.673
18:00-18:15	**B**	883.10	1432.23	0.617	0.00	2.98	1.64	25.78	(0.00)	0.111
18:00-18:15	**C**	716.72	1581.64	0.453	0.00	1.24	0.84	12.85	(0.00)	0.070
18:00-18:15	**D**	161.11	866.41	0.186	0.00	0.32	0.23	3.52	(0.00)	0.085
18:00-18:15	**E**	1431.93	2152.05	0.665	0.00	4.85	2.02	32.06	(0.00)	0.086

ARCADY 7

Version: 7.0.0.99 [10 July 2009]
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File: N:\Projects\A078085 - Bassetlaw DC Modelling\calculations\Capacity Assessments\2. A60-A57-B6024-St Annes Dr Rnd\Oct 2012\Imps\A60-A57-B6024 Roundabout imps.arc7
Report generation date: 06/12/2012 14:27:18

» A1 - (Default Analysis Set) - D1 - 2026 Base + Committed + Development AM, AM
» A1 - (Default Analysis Set) - D2 - 2026 Base + Committed + Development PM, PM

File summary

File Description

Title	A60-A57-B6024-St. Annes Dr Roundabout
Location	Bassetlaw
Date	19/02/2010
Status	Preliminary
Client	Bassetlaw DC
Jobnumber	A078085
Enumerator	martin.murphy [35-T-048CS]
Description	23.11.12 RJH: New Flows
Results Upto Date	True

Analysis Options

RFC Threshold	Vehicle Length (m)	Do Queue Variations
0.85	5.75	

Sorting and Display

Show Arm Names	Arm Grouping	Sorting Direction	Sorting Type	Data Matrix Style	Time Style
	Order	Ascending	Numerical	By Destination	Absolute Time

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	min	-Min	perMin

A1 - (Default Analysis Set) - D1 - 2026 Base + Committed + Development AM, AM

Data Errors and Warnings

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

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
2026 Base + Committed + Development AM, AM	2026 Base + Committed + Development AM	AM			Yes			07:45	09:15	90	15	ONE HOUR

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	B6024 Newcastle Avenue	
B	A57 (south)	
C	A60	
D	At Annes Drive	
E	A57 (north)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	3.50	10.50	30.00	40.00	120.00	17.00	
B	7.50	11.00	35.00	30.00	120.00	26.00	
C	3.50	11.50	100.00	20.00	120.00	25.00	
D	4.00	9.00	15.00	22.50	120.00	23.00	
E	7.00	11.50	80.00	30.00	120.00	22.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.563	2433.049
B		((calculated))	((calculated))	0.656	3168.740
C		((calculated))	((calculated))	0.636	3042.320
D		((calculated))	((calculated))	0.494	2002.878
E		((calculated))	((calculated))	0.694	3420.871

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

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
			Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	854.00	100.000	N/A
B	ONE HOUR	Yes	1210.00	100.000	N/A
C	ONE HOUR	Yes	1715.00	100.000	N/A
D	ONE HOUR	Yes	276.00	100.000	N/A
E	ONE HOUR	Yes	2266.00	100.000	N/A

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	642.94	642.94	N/A	N/A
07:45-08:00	B	910.95	910.95	N/A	N/A
07:45-08:00	C	1291.14	1291.14	N/A	N/A
07:45-08:00	D	207.79	207.79	N/A	N/A
07:45-08:00	E	1705.96	1705.96	N/A	N/A
08:00-08:15	A	767.73	767.73	N/A	N/A
08:00-08:15	B	1087.77	1087.77	N/A	N/A
08:00-08:15	C	1541.75	1541.75	N/A	N/A

08:00-08:15	**D**	248.12	248.12	N/A	N/A
08:00-08:15	**E**	2037.09	2037.09	N/A	N/A
08:15-08:30	**A**	940.27	940.27	N/A	N/A
08:15-08:30	**B**	1332.23	1332.23	N/A	N/A
08:15-08:30	**C**	1888.25	1888.25	N/A	N/A
08:15-08:30	**D**	303.88	303.88	N/A	N/A
08:15-08:30	**E**	2494.91	2494.91	N/A	N/A
08:30-08:45	**A**	940.27	940.27	N/A	N/A
08:30-08:45	**B**	1332.23	1332.23	N/A	N/A
08:30-08:45	**C**	1888.25	1888.25	N/A	N/A
08:30-08:45	**D**	303.88	303.88	N/A	N/A
08:30-08:45	**E**	2494.91	2494.91	N/A	N/A
08:45-09:00	**A**	767.73	767.73	N/A	N/A
08:45-09:00	**B**	1087.77	1087.77	N/A	N/A
08:45-09:00	**C**	1541.75	1541.75	N/A	N/A
08:45-09:00	**D**	248.12	248.12	N/A	N/A
08:45-09:00	**E**	2037.09	2037.09	N/A	N/A
09:00-09:15	**A**	642.94	642.94	N/A	N/A
09:00-09:15	**B**	910.95	910.95	N/A	N/A
09:00-09:15	**C**	1291.14	1291.14	N/A	N/A
09:00-09:15	**D**	207.79	207.79	N/A	N/A
09:00-09:15	**E**	1705.96	1705.96	N/A	N/A

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Roundabout 1 (for whole period)

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	0.00	42.00	318.00	30.00	464.00
	B	170.00	0.00	346.00	50.00	644.00
	C	406.00	299.00	0.00	10.00	1000.00
	D	112.00	61.00	26.00	0.00	77.00
	E	625.00	1090.00	510.00	41.00	0.00

Turning Proportions (Veh) - Roundabout 1 (for whole period)

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	0.00	0.05	0.37	0.04	0.54
	B	0.14	0.00	0.29	0.04	0.53
	C	0.24	0.17	0.00	0.01	0.58
	D	0.41	0.22	0.09	0.00	0.28
	E	0.28	0.48	0.23	0.02	0.00

Vehicle Mix

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

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00

	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Total Demand (Veh/hr)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.79	0.24	3.68	B	783.65	1175.47	157.57	0.13	1.75	157.58	0.13	0.563	2433.049
B	0.61	0.07	1.58	A	1110.32	1665.48	89.64	0.05	1.00	89.64	0.05	0.656	3168.740
C	0.92	0.32	9.59	C	1573.71	2360.57	351.39	0.15	3.90	351.41	0.15	0.636	3042.320
D	0.80	0.72	3.43	E	253.26	379.89	111.73	0.29	1.24	111.74	0.29	0.494	2002.878
E	0.96	0.44	17.11	D	2079.32	3118.98	542.43	0.17	6.03	542.45	0.17	0.694	3420.871

Main Results

Main results: (07:45-08:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	642.94	160.73	640.20	984.95	1520.59	0.00	1577.63	1155.16	0.408	0.00	0.68
B	910.95	227.74	908.65	1119.22	1041.58	0.00	2485.07	2012.96	0.367	0.00	0.58
C	1291.14	322.79	1286.41	900.32	1049.91	0.00	2374.43	1672.42	0.544	0.00	1.18
D	207.79	51.95	206.59	98.30	2238.02	0.00	896.22	200.76	0.232	0.00	0.30
E	1705.96	426.49	1700.11	1639.18	805.43	0.00	2861.67	2646.70	0.596	0.00	1.46

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	767.73	191.93	765.75	1177.38	1817.37	0.00	1410.67	1155.17	0.544	0.68	1.18
B	1087.77	271.94	1086.65	1337.71	1245.41	0.00	2351.28	2012.96	0.463	0.58	0.86
C	1541.75	385.44	1537.85	1076.42	1255.63	0.00	2243.56	1672.42	0.687	1.18	2.16
D	248.12	62.03	247.05	117.53	2675.95	0.00	679.68	200.76	0.365	0.30	0.57
E	2037.09	509.27	2031.78	1960.02	962.97	0.00	2752.29	2646.70	0.740	1.46	2.79

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	940.27	235.07	931.42	1422.84	2191.49	0.00	1200.20	1155.17	0.783	1.18	3.39
B	1332.23	333.06	1329.43	1613.90	1509.01	0.00	2178.26	2012.96	0.612	0.86	1.56
C	1888.25	472.06	1862.13	1306.06	1532.39	0.00	2067.51	1672.42	0.913	2.16	8.69
D	303.88	75.97	294.72	142.83	3251.68	0.00	394.99	200.76	0.769	0.57	2.86
E	2494.91	623.73	2449.57	2381.64	1164.76	0.00	2612.19	2646.70	0.955	2.79	14.13

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	940.27	235.07	939.11	1440.56	2221.79	0.00	1183.16	1155.16	0.795	3.39	3.68
B	1332.23	333.06	1332.13	1635.80	1525.10	0.00	2167.70	2012.96	0.615	1.56	1.58
C	1888.25	472.06	1884.66	1317.86	1539.36	0.00	2063.07	1672.42	0.915	8.69	9.59
D	303.88	75.97	301.60	143.95	3280.07	0.00	380.95	200.76	0.798	2.86	3.43
E	2494.91	623.73	2482.99	2402.31	1179.36	0.00	2602.05	2646.70	0.959	14.13	17.11

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	767.73	191.93	777.37	1207.84	1871.80	0.00	1380.05	1155.17	0.556	3.68	1.27
B	1087.77	271.94	1090.58	1376.52	1272.65	0.00	2333.40	2012.96	0.466	1.58	0.88
C	1541.75	385.44	1571.06	1096.95	1266.28	0.00	2236.79	1672.42	0.689	9.59	2.26
D	248.12	62.03	259.37	119.41	2717.92	0.00	658.92	200.76	0.377	3.43	0.61
E	2037.09	509.27	2093.58	1991.24	986.06	0.00	2736.26	2646.70	0.744	17.11	2.98

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	642.94	160.73	645.23	991.80	1531.46	0.00	1571.51	1155.17	0.409	1.27	0.70
B	910.95	227.74	912.13	1127.24	1049.46	0.00	2479.90	2012.96	0.367	0.88	0.58
C	1291.14	322.79	1295.36	906.07	1055.52	0.00	2370.86	1672.42	0.545	2.26	1.21
D	207.79	51.95	209.01	98.89	2252.00	0.00	889.31	200.76	0.234	0.61	0.31
E	1705.96	426.49	1711.91	1649.66	811.35	0.00	2857.56	2646.70	0.597	2.98	1.49

Queueing Delay Results

Queueing Delay results: (07:45-08:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	9.96	0.66	0.064	A	A
B	8.49	0.57	0.038	A	A
C	17.22	1.15	0.055	A	A
D	4.36	0.29	0.087	A	A
E	21.29	1.42	0.051	A	A

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	17.07	1.14	0.093	A	A
B	12.61	0.84	0.047	A	A
C	31.03	2.07	0.085	A	A
D	8.19	0.55	0.138	A	A
E	39.89	2.66	0.083	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	45.76	3.05	0.216	B	B
B	22.59	1.51	0.070	A	A
C	107.66	7.18	0.264	C	B

D	35.74	2.38	0.556	D	C
E	163.11	10.87	0.309	C	B

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	53.73	3.58	0.244	B	B
B	23.60	1.57	0.072	A	A
C	138.32	9.22	0.323	C	B
D	48.21	3.21	0.723	E	D
E	237.48	15.83	0.436	D	C

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	20.31	1.35	0.101	A	A
B	13.47	0.90	0.048	A	A
C	38.57	2.57	0.094	A	A
D	10.49	0.70	0.154	A	A
E	57.57	3.84	0.101	A	A

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	10.74	0.72	0.065	A	A
B	8.88	0.59	0.038	A	A
C	18.59	1.24	0.056	A	A
D	4.74	0.32	0.088	A	A
E	23.08	1.54	0.053	A	A

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	3.50	10.50	30.00	40.00	120.00	17.00		0.563	2433.049
B	7.50	11.00	35.00	30.00	120.00	26.00		0.656	3168.740
C	3.50	11.50	100.00	20.00	120.00	25.00		0.636	3042.320
D	4.00	9.00	15.00	22.50	120.00	23.00		0.494	2002.878
E	7.00	11.50	80.00	30.00	120.00	22.00		0.694	3420.871

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (min)
07:45-08:00	A	642.94	1577.63	0.408	0.00	0.00	0.68	9.96	(0.00)	0.064
07:45-08:00	B	910.95	2485.07	0.367	0.00	0.00	0.58	8.49	(0.00)	0.038
07:45-08:00	C	1291.14	2374.43	0.544	0.00	0.00	1.18	17.22	(0.00)	0.055
07:45-08:00	D	207.79	896.22	0.232	0.00	0.00	0.30	4.36	(0.00)	0.087
07:45-08:00	E	1705.96	2861.67	0.596	0.00	0.00	1.46	21.29	(0.00)	0.051
08:00-08:15	A	767.73	1410.67	0.544	0.00	0.68	1.18	17.07	(0.00)	0.093
08:00-08:15	B	1087.77	2351.28	0.463	0.00	0.58	0.86	12.61	(0.00)	0.047

08:00-08:15	**C**	1541.75	2243.56	0.687	0.00	1.18	2.16	31.03	(0.00)	0.085
08:00-08:15	**D**	248.12	679.68	0.365	0.00	0.30	0.57	8.19	(0.00)	0.138
08:00-08:15	**E**	2037.09	2752.29	0.740	0.00	1.46	2.79	39.89	(0.00)	0.083
08:15-08:30	**A**	940.27	1200.20	0.783	0.00	1.18	3.39	45.76	(0.00)	0.216
08:15-08:30	**B**	1332.23	2178.26	0.612	0.00	0.86	1.56	22.59	(0.00)	0.070
08:15-08:30	**C**	1888.25	2067.51	0.913	0.00	2.16	8.69	107.66	(0.00)	0.264
08:15-08:30	**D**	303.88	394.99	0.769	0.00	0.57	2.86	35.74	(0.00)	0.556
08:15-08:30	**E**	2494.91	2612.19	0.955	0.00	2.79	14.13	163.11	(0.00)	0.309
08:30-08:45	**A**	940.27	1183.16	0.795	0.00	3.39	3.68	53.73	(0.00)	0.244
08:30-08:45	**B**	1332.23	2167.70	0.615	0.00	1.56	1.58	23.60	(0.00)	0.072
08:30-08:45	**C**	1888.25	2063.07	0.915	0.00	8.69	9.59	138.32	(0.00)	0.323
08:30-08:45	**D**	303.88	380.95	0.798	0.00	2.86	3.43	48.21	(0.00)	0.723
08:30-08:45	**E**	2494.91	2602.05	0.959	0.00	14.13	17.11	237.48	(0.00)	0.436
08:45-09:00	**A**	767.73	1380.05	0.556	0.00	3.68	1.27	20.31	(0.00)	0.101
08:45-09:00	**B**	1087.77	2333.40	0.466	0.00	1.58	0.88	13.47	(0.00)	0.048
08:45-09:00	**C**	1541.75	2236.79	0.689	0.00	9.59	2.26	38.57	(0.00)	0.094
08:45-09:00	**D**	248.12	658.92	0.377	0.00	3.43	0.61	10.49	(0.00)	0.154
08:45-09:00	**E**	2037.09	2736.26	0.744	0.00	17.11	2.98	57.57	(0.00)	0.101
09:00-09:15	**A**	642.94	1571.51	0.409	0.00	1.27	0.70	10.74	(0.00)	0.065
09:00-09:15	**B**	910.95	2479.90	0.367	0.00	0.88	0.58	8.88	(0.00)	0.038
09:00-09:15	**C**	1291.14	2370.86	0.545	0.00	2.26	1.21	18.59	(0.00)	0.056
09:00-09:15	**D**	207.79	889.31	0.234	0.00	0.61	0.31	4.74	(0.00)	0.088
09:00-09:15	**E**	1705.96	2857.56	0.597	0.00	2.98	1.49	23.08	(0.00)	0.053

A1 - (Default Analysis Set) - D2 - 2026 Base + Committed + Development PM, PM

Data Errors and Warnings

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

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
2026 Base + Committed + Development PM, PM	2026 Base + Committed + Development PM	PM			Yes			16:45	18:15	90	15	ONE HOUR

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	B6024 Newcastle Avenue	
B	A57 (south)	
C	A60	
D	At Annes Drive	
E	A57 (north)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	3.50	10.50	30.00	40.00	120.00	17.00	
B	7.50	11.00	35.00	30.00	120.00	26.00	
C	3.50	11.50	100.00	20.00	120.00	25.00	
D	4.00	9.00	15.00	22.50	120.00	23.00	
E	7.00	11.50	80.00	30.00	120.00	22.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.563	2433.049
B		((calculated))	((calculated))	0.656	3168.740
C		((calculated))	((calculated))	0.636	3042.320
D		((calculated))	((calculated))	0.494	2002.878
E		((calculated))	((calculated))	0.694	3420.871

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

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
			Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	1101.00	100.000	N/A
B	ONE HOUR	Yes	1389.00	100.000	N/A
C	ONE HOUR	Yes	1087.00	100.000	N/A
D	ONE HOUR	Yes	214.00	100.000	N/A
E	ONE HOUR	Yes	2199.00	100.000	N/A

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
16:45-17:00	A	828.89	828.89	N/A	N/A
16:45-17:00	B	1045.71	1045.71	N/A	N/A
16:45-17:00	C	818.35	818.35	N/A	N/A
16:45-17:00	D	161.11	161.11	N/A	N/A
16:45-17:00	E	1655.52	1655.52	N/A	N/A
17:00-17:15	A	989.78	989.78	N/A	N/A
17:00-17:15	B	1248.68	1248.68	N/A	N/A
17:00-17:15	C	977.19	977.19	N/A	N/A
17:00-17:15	D	192.38	192.38	N/A	N/A
17:00-17:15	E	1976.86	1976.86	N/A	N/A
17:15-17:30	A	1212.22	1212.22	N/A	N/A
17:15-17:30	B	1529.32	1529.32	N/A	N/A
17:15-17:30	C	1196.81	1196.81	N/A	N/A
17:15-17:30	D	235.62	235.62	N/A	N/A
17:15-17:30	E	2421.14	2421.14	N/A	N/A
17:30-17:45	A	1212.22	1212.22	N/A	N/A
17:30-17:45	B	1529.32	1529.32	N/A	N/A
17:30-17:45	C	1196.81	1196.81	N/A	N/A
17:30-17:45	D	235.62	235.62	N/A	N/A
17:30-17:45	E	2421.14	2421.14	N/A	N/A
17:45-18:00	A	989.78	989.78	N/A	N/A
17:45-18:00	B	1248.68	1248.68	N/A	N/A
17:45-18:00	C	977.19	977.19	N/A	N/A
17:45-18:00	D	192.38	192.38	N/A	N/A
17:45-18:00	E	1976.86	1976.86	N/A	N/A

18:00-18:15	**A**	828.89	828.89	N/A	N/A
18:00-18:15	**B**	1045.71	1045.71	N/A	N/A
18:00-18:15	**C**	818.35	818.35	N/A	N/A
18:00-18:15	**D**	161.11	161.11	N/A	N/A
18:00-18:15	**E**	1655.52	1655.52	N/A	N/A

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Roundabout 1 (for whole period)

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	0.00	39.00	430.00	70.00	562.00
	B	134.00	0.00	375.00	109.00	771.00
	C	203.00	217.00	0.00	14.00	653.00
	D	39.00	41.00	34.00	0.00	100.00
	E	547.00	712.00	833.00	107.00	0.00

Turning Proportions (Veh) - Roundabout 1 (for whole period)

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	0.00	0.04	0.39	0.06	0.51
	B	0.10	0.00	0.27	0.08	0.56
	C	0.19	0.20	0.00	0.01	0.60
	D	0.18	0.19	0.16	0.00	0.47
	E	0.25	0.32	0.38	0.05	0.00

Vehicle Mix

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

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Total Demand (Veh/hr)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.99	1.01	20.08	F	1010.30	1515.45	537.24	0.35	5.97	537.27	0.35	0.563	2433.049
B	0.89	0.31	7.52	C	1274.57	1911.86	275.48	0.14	3.06	275.49	0.14	0.656	3168.740
C	0.66	0.10	1.88	A	997.45	1496.18	100.03	0.07	1.11	100.04	0.07	0.636	3042.320
D	0.38	0.15	0.59	A	196.37	294.56	31.14	0.11	0.35	31.14	0.11	0.494	2002.878
E	0.83	0.12	4.83	A	2017.84	3026.76	230.05	0.08	2.56	230.07	0.08	0.694	3420.871

Main Results

Main results: (16:45-17:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	828.89	207.22	824.70	692.80	1459.34	0.00	1612.08	1025.10	0.514	0.00	1.05
B	1045.71	261.43	1042.01	757.37	1526.67	0.00	2166.67	1726.33	0.483	0.00	0.93
C	818.35	204.59	816.00	1254.26	1314.41	0.00	2206.17	1782.43	0.371	0.00	0.59
D	161.11	40.28	160.40	225.04	1905.37	0.00	1060.71	317.93	0.152	0.00	0.18
E	1655.52	413.88	1650.88	1564.51	501.26	0.00	3072.85	2709.49	0.539	0.00	1.16

Main results: (17:00-17:15)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	989.78	247.44	985.61	828.41	1744.99	0.00	1451.39	1025.10	0.682	1.05	2.09
B	1248.68	312.17	1245.57	905.63	1824.97	0.00	1970.87	1726.34	0.634	0.93	1.70
C	977.19	244.30	975.90	1499.44	1571.10	0.00	2042.88	1782.43	0.478	0.59	0.91
D	192.38	48.10	191.98	269.02	2277.98	0.00	876.46	317.93	0.220	0.18	0.28
E	1976.86	494.21	1973.89	1870.45	599.50	0.00	3004.64	2709.49	0.658	1.16	1.90

Main results: (17:15-17:30)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1212.22	303.06	1162.24	1010.68	2130.81	0.00	1234.34	1025.10	0.982	2.09	14.59
B	1529.32	382.33	1509.85	1104.57	2188.48	0.00	1732.27	1726.34	0.883	1.70	6.57
C	1196.81	299.20	1193.16	1811.69	1886.64	0.00	1842.15	1782.43	0.650	0.91	1.82
D	235.62	58.90	234.44	325.01	2754.79	0.00	640.69	317.93	0.368	0.28	0.57
E	2421.14	605.29	2409.92	2257.67	731.57	0.00	2912.95	2709.49	0.831	1.90	4.71

Main results: (17:30-17:45)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1212.22	303.06	1190.26	1015.70	2139.95	0.00	1229.20	1025.10	0.986	14.59	20.08
B	1529.32	382.33	1525.52	1109.93	2220.27	0.00	1711.40	1726.34	0.894	6.57	7.52
C	1196.81	299.20	1196.57	1831.11	1914.69	0.00	1824.31	1782.43	0.656	1.82	1.88
D	235.62	58.90	235.53	328.59	2782.67	0.00	626.90	317.93	0.376	0.57	0.59
E	2421.14	605.29	2420.67	2283.23	734.98	0.00	2910.58	2709.49	0.832	4.71	4.83

Main results: (17:45-18:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	989.78	247.44	1061.10	835.70	1757.41	0.00	1444.40	1025.10	0.685	20.08	2.25
B	1248.68	312.17	1271.17	914.29	1904.23	0.00	1918.84	1726.34	0.651	7.52	1.90
C	977.19	244.30	980.88	1541.57	1633.83	0.00	2002.97	1782.43	0.488	1.88	0.96

D	192.38	48.10	193.58	276.60	2338.11	0.00	846.73	317.93	0.227	0.59	0.30
E	1976.86	494.21	1988.36	1926.94	604.75	0.00	3001.00	2709.49	0.659	4.83	1.95

Main results: (18:00-18:15)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	828.89	207.22	833.58	696.38	1466.33	0.00	1608.15	1025.10	0.515	2.25	1.07
B	1045.71	261.43	1049.51	761.18	1538.73	0.00	2158.75	1726.33	0.484	1.90	0.95
C	818.35	204.59	819.81	1262.87	1325.36	0.00	2199.20	1782.43	0.372	0.96	0.60
D	161.11	40.28	161.57	226.62	1918.55	0.00	1054.19	317.93	0.153	0.30	0.18
E	1655.52	413.88	1658.62	1576.04	504.08	0.00	3070.89	2709.49	0.539	1.95	1.18

Queueing Delay Results

Queueing Delay results: (16:45-17:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	15.16	1.01	0.076	A	A
B	13.54	0.90	0.053	A	A
C	8.63	0.58	0.043	A	A
D	2.61	0.17	0.067	A	A
E	17.00	1.13	0.042	A	A

Queueing Delay results: (17:00-17:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	29.62	1.97	0.128	A	A
B	24.61	1.64	0.082	A	A
C	13.37	0.89	0.056	A	A
D	4.10	0.27	0.088	A	A
E	27.69	1.85	0.058	A	A

Queueing Delay results: (17:15-17:30)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	152.55	10.17	0.612	E	D
B	83.72	5.58	0.251	C	B
C	26.19	1.75	0.092	A	A
D	8.25	0.55	0.147	A	A
E	65.00	4.33	0.117	A	A

Queueing Delay results: (17:30-17:45)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	263.18	17.55	1.011	F	E
B	107.40	7.16	0.312	C	B
C	27.96	1.86	0.096	A	A
D	8.83	0.59	0.153	A	A
E	71.71	4.78	0.122	A	A

Queueing Delay results: (17:45-18:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	60.03	4.00	0.179	B	B
B	31.66	2.11	0.096	A	A

C	14.79	0.99	0.059	A	A
D	4.58	0.31	0.092	A	A
E	30.60	2.04	0.060	A	A

Queueing Delay results: (18:00-18:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	16.71	1.11	0.078	A	A
B	14.56	0.97	0.054	A	A
C	9.09	0.61	0.044	A	A
D	2.77	0.18	0.067	A	A
E	18.04	1.20	0.043	A	A

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	3.50	10.50	30.00	40.00	120.00	17.00		0.563	2433.049
B	7.50	11.00	35.00	30.00	120.00	26.00		0.656	3168.740
C	3.50	11.50	100.00	20.00	120.00	25.00		0.636	3042.320
D	4.00	9.00	15.00	22.50	120.00	23.00		0.494	2002.878
E	7.00	11.50	80.00	30.00	120.00	22.00		0.694	3420.871

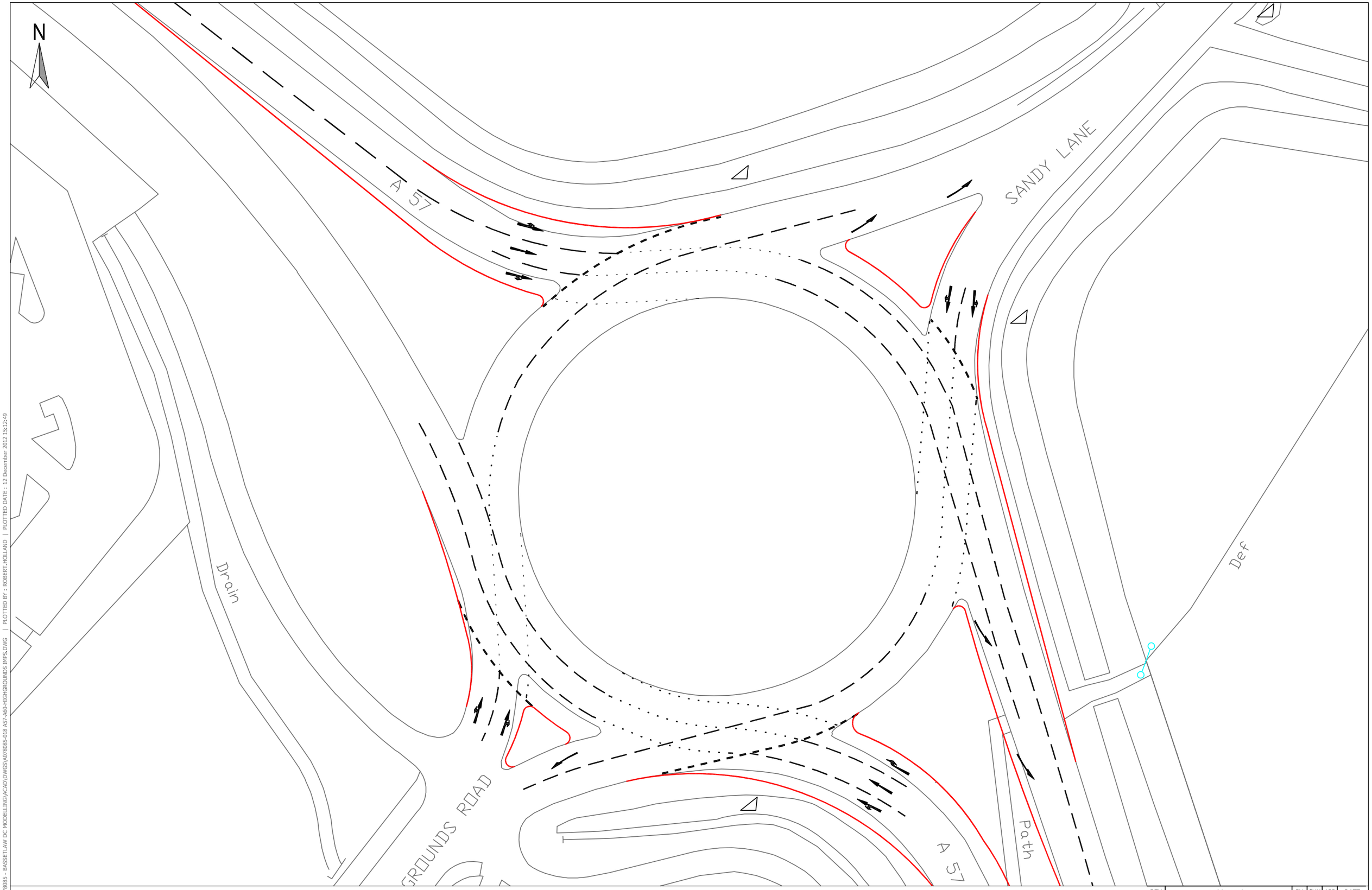
Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (min)
16:45-17:00	A	828.89	1612.08	0.514	0.00	0.00	1.05	15.16	(0.00)	0.076
16:45-17:00	B	1045.71	2166.67	0.483	0.00	0.00	0.93	13.54	(0.00)	0.053
16:45-17:00	C	818.35	2206.17	0.371	0.00	0.00	0.59	8.63	(0.00)	0.043
16:45-17:00	D	161.11	1060.71	0.152	0.00	0.00	0.18	2.61	(0.00)	0.067
16:45-17:00	E	1655.52	3072.85	0.539	0.00	0.00	1.16	17.00	(0.00)	0.042
17:00-17:15	A	989.78	1451.39	0.682	0.00	1.05	2.09	29.62	(0.00)	0.128
17:00-17:15	B	1248.68	1970.87	0.634	0.00	0.93	1.70	24.61	(0.00)	0.082
17:00-17:15	C	977.19	2042.88	0.478	0.00	0.59	0.91	13.37	(0.00)	0.056
17:00-17:15	D	192.38	876.46	0.220	0.00	0.18	0.28	4.10	(0.00)	0.088
17:00-17:15	E	1976.86	3004.64	0.658	0.00	1.16	1.90	27.69	(0.00)	0.058
17:15-17:30	A	1212.22	1234.34	0.982	0.00	2.09	14.59	152.55	(0.00)	0.612
17:15-17:30	B	1529.32	1732.27	0.883	0.00	1.70	6.57	83.72	(0.00)	0.251
17:15-17:30	C	1196.81	1842.15	0.650	0.00	0.91	1.82	26.19	(0.00)	0.092
17:15-17:30	D	235.62	640.69	0.368	0.00	0.28	0.57	8.25	(0.00)	0.147
17:15-17:30	E	2421.14	2912.95	0.831	0.00	1.90	4.71	65.00	(0.00)	0.117
17:30-17:45	A	1212.22	1229.20	0.986	0.00	14.59	20.08	263.18	(0.00)	1.011
17:30-17:45	B	1529.32	1711.40	0.894	0.00	6.57	7.52	107.40	(0.00)	0.312
17:30-17:45	C	1196.81	1824.31	0.656	0.00	1.82	1.88	27.96	(0.00)	0.096
17:30-17:45	D	235.62	626.90	0.376	0.00	0.57	0.59	8.83	(0.00)	0.153
17:30-17:45	E	2421.14	2910.58	0.832	0.00	4.71	4.83	71.71	(0.00)	0.122
17:45-18:00	A	989.78	1444.40	0.685	0.00	20.08	2.25	60.03	(0.00)	0.179
17:45-18:00	B	1248.68	1918.84	0.651	0.00	7.52	1.90	31.66	(0.00)	0.096
17:45-18:00	C	977.19	2002.97	0.488	0.00	1.88	0.96	14.79	(0.00)	0.059

17:45-18:00	**D**	192.38	846.73	0.227	0.00	0.59	0.30	4.58	(0.00)	0.092
17:45-18:00	**E**	1976.86	3001.00	0.659	0.00	4.83	1.95	30.60	(0.00)	0.060
18:00-18:15	**A**	828.89	1608.15	0.515	0.00	2.25	1.07	16.71	(0.00)	0.078
18:00-18:15	**B**	1045.71	2158.75	0.484	0.00	1.90	0.95	14.56	(0.00)	0.054
18:00-18:15	**C**	818.35	2199.20	0.372	0.00	0.96	0.60	9.09	(0.00)	0.044
18:00-18:15	**D**	161.11	1054.19	0.153	0.00	0.30	0.18	2.77	(0.00)	0.067
18:00-18:15	**E**	1655.52	3070.89	0.539	0.00	1.95	1.18	18.04	(0.00)	0.043

A57/A60 Sandy Lane/Highgrounds Rd Roundabout
Sketch & Capacity Assessments



REV	DESCRIPTION	BY	CHK	APP	DATE

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Project: Bassetlaw Transport Study

Drawing Title: Possible Improvements at the A57/A60/ Sandy Lane/Highgrounds Road Roundabout

Scale @ A3	Drawn	Date	Checked	Date	Approved	Date
1:500	DBV	06/12/2012	RJH	06/12/2012	ASG	06/12/2012

Project No.	Office	Type	Drawing No.	Revision
A078085	35	18	018	-

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FILENAME : N:\PROJECTS\A078085 - BASSETLAW DC MODELLING\CAD\DWGS\A078085-018 A57-A60-HIGHGROUNDS IMPS.DWG | PLOTTED BY : ROBERT.HOLLAND | PLOTTED DATE : 12 December 2012 15:12:49

ARCADY 7

Version: 7.0.0.99 [10 July 2009]
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File: N:\Projects\A078085 - Bassetlaw DC Modelling\calculations\Capacity Assessments\3. A57-A60-Highgrounds Rnd\Oct 2012 \Existing\A57-A60-Highgrounds Roundabout.arc7
Report generation date: 06/12/2012 13:07:44

» A1 - (Default Analysis Set) - D1 - 2026 Base + Committed + Development AM, AM
» A1 - (Default Analysis Set) - D2 - 2026 Base + Committed + Development PM, PM
» A1 - (Default Analysis Set) - D3 - 2026 Base + Com AM, AM
» A1 - (Default Analysis Set) - D4 - 2026 Base + Com PM, PM

File summary

File Description

Title	A57-A60-Highgrounds Rnd
Location	Bassetlaw
Date	19/02/2010
Status	Preliminary
Client	Bassetlaw DC
Jobnumber	A078085
Enumerator	martin.murphy [35-T-048CS]
Description	23.11.12 RJH: New Flows
Results Upto Date	False

Analysis Options

RFC Threshold	Vehicle Length (m)	Do Queue Variations
0.85	5.75	

Sorting and Display

Show Arm Names	Arm Grouping	Sorting Direction	Sorting Type	Data Matrix Style	Time Style
	Order	Ascending	Numerical	By Destination	Absolute Time

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	min	-Min	perMin

A1 - (Default Analysis Set) - D1 - 2026 Base + Committed + Development AM, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
2026 Base + Committed + Development AM, AM	2026 Base + Committed + Development AM	AM			Yes			07:45	09:15	90	15	ONE HOUR

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	A60	
B	A57 (south)	
C	Highgrounds Road	
D	A57 (north)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	7.50	7.50	0.00	38.00	80.00	35.00	
B	7.70	8.50	12.00	44.00	80.00	34.00	
C	3.50	7.90	19.00	39.00	80.00	40.00	
D	7.20	7.60	10.00	37.00	80.00	33.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None

C	None
D	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.560	2285.710
B		((calculated))	((calculated))	0.602	2565.283
C		((calculated))	((calculated))	0.485	1806.380
D		((calculated))	((calculated))	0.565	2316.647

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

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
			Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	844.00	100.000	N/A
B	ONE HOUR	Yes	2180.00	100.000	N/A
C	ONE HOUR	Yes	395.00	100.000	N/A
D	ONE HOUR	Yes	2176.00	100.000	N/A

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	635.41	635.41	N/A	N/A
07:45-08:00	B	1641.22	1641.22	N/A	N/A
07:45-08:00	C	297.38	297.38	N/A	N/A
07:45-08:00	D	1638.21	1638.21	N/A	N/A
08:00-08:15	A	758.74	758.74	N/A	N/A
08:00-08:15	B	1959.78	1959.78	N/A	N/A
08:00-08:15	C	355.10	355.10	N/A	N/A
08:00-08:15	D	1956.18	1956.18	N/A	N/A
08:15-08:30	A	929.26	929.26	N/A	N/A
08:15-08:30	B	2400.22	2400.22	N/A	N/A
08:15-08:30	C	434.90	434.90	N/A	N/A
08:15-08:30	D	2395.82	2395.82	N/A	N/A
08:30-08:45	A	929.26	929.26	N/A	N/A
08:30-08:45	B	2400.22	2400.22	N/A	N/A
08:30-08:45	C	434.90	434.90	N/A	N/A

08:30-08:45	**D**	2395.82	2395.82	N/A	N/A
08:45-09:00	**A**	758.74	758.74	N/A	N/A
08:45-09:00	**B**	1959.78	1959.78	N/A	N/A
08:45-09:00	**C**	355.10	355.10	N/A	N/A
08:45-09:00	**D**	1956.18	1956.18	N/A	N/A
09:00-09:15	**A**	635.41	635.41	N/A	N/A
09:00-09:15	**B**	1641.22	1641.22	N/A	N/A
09:00-09:15	**C**	297.38	297.38	N/A	N/A
09:00-09:15	**D**	1638.21	1638.21	N/A	N/A

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Roundabout 1 (for whole period)

		To			
		A	**B**	**C**	**D**
From	**A**	0.00	361.00	121.00	362.00
	B	578.00	0.00	154.00	1448.00
	C	59.00	244.00	0.00	92.00
	D	282.00	1756.00	138.00	0.00

Turning Proportions (Veh) - Roundabout 1 (for whole period)

		To			
		A	**B**	**C**	**D**
From	**A**	0.00	0.43	0.14	0.43
	B	0.27	0.00	0.07	0.66
	C	0.15	0.62	0.00	0.23
	D	0.13	0.81	0.06	0.00

Vehicle Mix

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

		To			
		A	**B**	**C**	**D**
From	**A**	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To			
		A	**B**	**C**	**D**
From	**A**	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Total Demand (Veh/hr)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.74	0.18	2.77	B	774.47	1161.70	151.65	0.13	1.68	151.67	0.13	0.560	2285.710
B	1.10	2.71	123.35	F	2000.41	3000.61	3693.76	1.23	41.04	3693.85	1.23	0.602	2565.283
C	0.69	0.30	2.12	C	362.46	543.69	105.94	0.19	1.18	105.95	0.19	0.485	1806.380
D	1.33	11.27	363.42	F	1996.74	2995.10	16068.50	5.36	178.54	17463.53	5.83	0.565	2316.647

Main Results

Main results: (07:45-08:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	635.41	158.85	632.10	686.38	1591.16	0.00	1395.43	1226.52	0.455	0.00	0.83
B	1641.22	410.30	1631.25	1758.89	464.36	0.00	2285.67	2076.24	0.718	0.00	2.49
C	297.38	74.34	295.54	308.49	1787.12	0.00	938.89	614.39	0.317	0.00	0.46
D	1638.21	409.55	1618.32	1423.45	659.21	0.00	1943.89	1738.87	0.843	0.00	4.97

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	758.74	189.68	756.23	805.88	1814.53	0.00	1270.44	1226.52	0.597	0.83	1.46
B	1959.78	489.94	1943.95	2021.70	549.07	0.00	2234.67	2076.24	0.877	2.49	6.45
C	355.10	88.77	353.59	362.04	2130.98	0.00	771.98	614.39	0.460	0.46	0.84
D	1956.18	489.04	1833.76	1697.92	786.65	0.00	1871.83	1738.87	1.045	4.97	35.57

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	929.26	232.32	924.24	870.61	1837.18	0.00	1257.77	1226.52	0.739	1.46	2.71
B	2400.22	600.06	2158.78	2118.00	643.42	0.00	2177.86	2076.24	1.102	6.45	66.81
C	434.90	108.73	430.23	399.50	2402.70	0.00	640.09	614.39	0.679	0.84	2.00
D	2395.82	598.96	1805.38	1930.53	902.40	0.00	1806.38	1738.87	1.326	35.57	183.18

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	929.26	232.32	929.04	874.87	1836.96	0.00	1257.90	1226.52	0.739	2.71	2.77
B	2400.22	600.06	2174.06	2120.04	645.96	0.00	2176.33	2076.24	1.103	66.81	123.35
C	434.90	108.73	434.44	401.06	2418.95	0.00	632.20	614.39	0.688	2.00	2.12
D	2395.82	598.96	1802.15	1943.71	909.68	0.00	1802.26	1738.87	1.329	183.18	331.60

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	758.74	189.68	763.77	877.68	1813.40	0.00	1271.07	1226.52	0.597	2.77	1.51
B	1959.78	489.94	2214.30	2024.10	553.07	0.00	2232.26	2076.24	0.878	123.35	59.72
C	355.10	88.77	358.60	381.91	2385.47	0.00	648.45	614.39	0.548	2.12	1.25
D	1956.18	489.04	1828.91	1881.89	862.17	0.00	1829.12	1738.87	1.069	331.60	363.42

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)

A	635.41	158.85	637.30	786.82	1840.00	0.00	1256.19	1226.52	0.506	1.51	1.04
B	1641.22	410.30	1869.35	1992.03	485.27	0.00	2273.08	2076.24	0.722	59.72	2.69
C	297.38	74.34	300.10	343.98	2010.64	0.00	830.40	614.39	0.358	1.25	0.56
D	1638.21	409.55	1900.98	1584.90	725.84	0.00	1906.21	1738.87	0.859	363.42	297.73

Queueing Delay Results

Queueing Delay results: (07:45-08:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	12.00	0.80	0.078	A	A
B	35.26	2.35	0.090	A	A
C	6.66	0.44	0.093	A	A
D	65.63	4.38	0.175	B	B

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	20.90	1.39	0.116	A	A
B	84.96	5.66	0.196	B	B
C	12.04	0.80	0.143	A	A
D	329.04	21.94	0.824	E	D

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	37.76	2.52	0.177	B	B
B	567.55	37.84	1.151	F	E
C	27.37	1.82	0.280	C	B
D	1641.58	109.44	3.744	F	F

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	41.15	2.74	0.182	B	B
B	1426.98	95.13	2.708	F	F
C	31.19	2.08	0.302	C	B
D	3860.94	257.40	8.587	F	F

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	23.77	1.58	0.119	A	A
B	1373.02	91.53	2.495	F	F
C	19.86	1.32	0.209	B	B
D	5212.69	347.51	11.270	F	F

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	16.07	1.07	0.097	A	A
B	205.97	13.73	0.263	C	B
C	8.82	0.59	0.114	A	A
D	4958.60	330.57	10.437	F	F

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	7.50	7.50	0.00	38.00	80.00	35.00		0.560	2285.710
B	7.70	8.50	12.00	44.00	80.00	34.00		0.602	2565.283
C	3.50	7.90	19.00	39.00	80.00	40.00		0.485	1806.380
D	7.20	7.60	10.00	37.00	80.00	33.00		0.565	2316.647

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (min)
07:45-08:00	A	635.41	1395.43	0.455	0.00	0.00	0.83	12.00	(0.00)	0.078
07:45-08:00	B	1641.22	2285.67	0.718	0.00	0.00	2.49	35.26	(0.00)	0.090
07:45-08:00	C	297.38	938.89	0.317	0.00	0.00	0.46	6.66	(0.00)	0.093
07:45-08:00	D	1638.21	1943.89	0.843	0.00	0.00	4.97	65.63	(0.00)	0.175
08:00-08:15	A	758.74	1270.44	0.597	0.00	0.83	1.46	20.90	(0.00)	0.116
08:00-08:15	B	1959.78	2234.67	0.877	0.00	2.49	6.45	84.96	(0.00)	0.196
08:00-08:15	C	355.10	771.98	0.460	0.00	0.46	0.84	12.04	(0.00)	0.143
08:00-08:15	D	1956.18	1871.83	1.045	0.00	4.97	35.57	329.04	(0.00)	0.824
08:15-08:30	A	929.26	1257.77	0.739	0.00	1.46	2.71	37.76	(0.00)	0.177
08:15-08:30	B	2400.22	2177.86	1.102	0.00	6.45	66.81	567.55	(0.00)	1.151
08:15-08:30	C	434.90	640.09	0.679	0.00	0.84	2.00	27.37	(0.00)	0.280
08:15-08:30	D	2395.82	1806.38	1.326	0.00	35.57	183.18	1641.58	(0.00)	3.744
08:30-08:45	A	929.26	1257.90	0.739	0.00	2.71	2.77	41.15	(0.00)	0.182
08:30-08:45	B	2400.22	2176.33	1.103	0.00	66.81	123.35	1426.98	(0.00)	2.708
08:30-08:45	C	434.90	632.20	0.688	0.00	2.00	2.12	31.19	(0.00)	0.302
08:30-08:45	D	2395.82	1802.26	1.329	0.00	183.18	331.60	3860.94	(0.00)	8.587
08:45-09:00	A	758.74	1271.07	0.597	0.00	2.77	1.51	23.77	(0.00)	0.119
08:45-09:00	B	1959.78	2232.26	0.878	0.00	123.35	59.72	1373.02	(0.00)	2.495
08:45-09:00	C	355.10	648.45	0.548	0.00	2.12	1.25	19.86	(0.00)	0.209
08:45-09:00	D	1956.18	1829.12	1.069	0.00	331.60	363.42	5212.69	(0.00)	11.270
09:00-09:15	A	635.41	1256.19	0.506	0.00	1.51	1.04	16.07	(0.00)	0.097
09:00-09:15	B	1641.22	2273.08	0.722	0.00	59.72	2.69	205.97	(0.00)	0.263
09:00-09:15	C	297.38	830.40	0.358	0.00	1.25	0.56	8.82	(0.00)	0.114
09:00-09:15	D	1638.21	1906.21	0.859	0.00	363.42	297.73	4958.60	(0.00)	10.437

A1 - (Default Analysis Set) - D2 - 2026 Base + Committed + Development PM, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
2026 Base + Committed + Development PM, PM	2026 Base + Committed + Development PM	PM			Yes			16:45	18:15	90	15	ONE HOUR

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	A60	
B	A57 (south)	
C	Highgrounds Road	
D	A57 (north)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	7.50	7.50	0.00	38.00	80.00	35.00	
B	7.70	8.50	12.00	44.00	80.00	34.00	
C	3.50	7.90	19.00	39.00	80.00	40.00	
D	7.20	7.60	10.00	37.00	80.00	33.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

D	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.560	2285.710
B		((calculated))	((calculated))	0.602	2565.283
C		((calculated))	((calculated))	0.485	1806.380
D		((calculated))	((calculated))	0.565	2316.647

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

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
			Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	902.00	100.000	N/A
B	ONE HOUR	Yes	2052.00	100.000	N/A
C	ONE HOUR	Yes	532.00	100.000	N/A
D	ONE HOUR	Yes	1952.00	100.000	N/A

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
16:45-17:00	A	679.07	679.07	N/A	N/A
16:45-17:00	B	1544.85	1544.85	N/A	N/A
16:45-17:00	C	400.52	400.52	N/A	N/A
16:45-17:00	D	1469.57	1469.57	N/A	N/A
17:00-17:15	A	810.88	810.88	N/A	N/A
17:00-17:15	B	1844.71	1844.71	N/A	N/A
17:00-17:15	C	478.26	478.26	N/A	N/A
17:00-17:15	D	1754.81	1754.81	N/A	N/A
17:15-17:30	A	993.12	993.12	N/A	N/A
17:15-17:30	B	2259.29	2259.29	N/A	N/A
17:15-17:30	C	585.74	585.74	N/A	N/A
17:15-17:30	D	2149.19	2149.19	N/A	N/A
17:30-17:45	A	993.12	993.12	N/A	N/A
17:30-17:45	B	2259.29	2259.29	N/A	N/A
17:30-17:45	C	585.74	585.74	N/A	N/A
17:30-17:45	D	2149.19	2149.19	N/A	N/A

17:45-18:00	**A**	810.88	810.88	N/A	N/A
17:45-18:00	**B**	1844.71	1844.71	N/A	N/A
17:45-18:00	**C**	478.26	478.26	N/A	N/A
17:45-18:00	**D**	1754.81	1754.81	N/A	N/A
18:00-18:15	**A**	679.07	679.07	N/A	N/A
18:00-18:15	**B**	1544.85	1544.85	N/A	N/A
18:00-18:15	**C**	400.52	400.52	N/A	N/A
18:00-18:15	**D**	1469.57	1469.57	N/A	N/A

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Roundabout 1 (for whole period)

		To			
		A	**B**	**C**	**D**
From	**A**	0.00	557.00	166.00	179.00
	B	465.00	0.00	227.00	1360.00
	C	150.00	148.00	0.00	234.00
	D	305.00	1478.00	169.00	0.00

Turning Proportions (Veh) - Roundabout 1 (for whole period)

		To			
		A	**B**	**C**	**D**
From	**A**	0.00	0.62	0.18	0.20
	B	0.23	0.00	0.11	0.66
	C	0.28	0.28	0.00	0.44
	D	0.16	0.76	0.09	0.00

Vehicle Mix

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

		To			
		A	**B**	**C**	**D**
From	**A**	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To			
		A	**B**	**C**	**D**
From	**A**	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Total Demand (Veh/hr)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.75	0.18	2.94	B	827.69	1241.54	157.67	0.13	1.75	157.70	0.13	0.560	2285.710
B	1.01	0.99	38.34	F	1882.95	2824.43	1023.25	0.36	11.37	1023.30	0.36	0.602	2565.283
C	0.77	0.34	3.21	C	488.17	732.26	137.55	0.19	1.53	137.56	0.19	0.485	1806.380
D	1.16	4.46	159.66	F	1791.19	2686.78	5721.61	2.13	63.57	5721.81	2.13	0.565	2316.647

Main Results

Main results: (16:45-17:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	679.07	169.77	675.93	688.51	1341.51	0.00	1535.11	1318.60	0.442	0.00	0.79
B	1544.85	386.21	1537.13	1632.62	384.82	0.00	2333.57	2167.58	0.662	0.00	1.93
C	400.52	100.13	398.17	420.73	1501.23	0.00	1077.67	743.59	0.372	0.00	0.59
D	1469.57	367.39	1458.66	1328.04	571.36	0.00	1993.56	1803.37	0.737	0.00	2.73

Main results: (17:00-17:15)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	810.88	202.72	808.55	821.23	1594.39	0.00	1393.62	1318.60	0.582	0.79	1.37
B	1844.71	461.18	1836.51	1943.68	459.26	0.00	2288.75	2167.58	0.806	1.93	3.98
C	478.26	119.56	476.49	501.96	1793.80	0.00	935.65	743.59	0.511	0.59	1.03
D	1754.81	438.70	1732.55	1587.22	683.07	0.00	1930.40	1803.37	0.909	2.73	8.29

Main results: (17:15-17:30)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	993.12	248.28	987.13	943.43	1717.98	0.00	1324.47	1318.60	0.750	1.37	2.87
B	2259.29	564.82	2171.21	2167.77	537.34	0.00	2241.73	2167.58	1.008	3.98	26.00
C	585.74	146.44	578.34	581.63	2126.91	0.00	773.95	743.59	0.757	1.03	2.88
D	2149.19	537.30	1845.44	1889.28	815.97	0.00	1855.25	1803.37	1.158	8.29	84.23

Main results: (17:30-17:45)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	993.12	248.28	992.82	954.24	1721.40	0.00	1322.55	1318.60	0.751	2.87	2.94
B	2259.29	564.82	2209.92	2174.54	539.69	0.00	2240.31	2167.58	1.008	26.00	38.34
C	585.74	146.44	584.41	587.14	2162.48	0.00	756.69	743.59	0.774	2.88	3.21
D	2149.19	537.30	1847.49	1918.74	828.15	0.00	1848.36	1803.37	1.163	84.23	159.66

Main results: (17:45-18:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	810.88	202.72	816.07	882.17	1735.90	0.00	1314.44	1318.60	0.617	2.94	1.64
B	1844.71	461.18	1980.00	2075.59	476.38	0.00	2278.44	2167.58	0.810	38.34	4.52
C	478.26	119.56	486.15	533.47	1922.91	0.00	872.98	743.59	0.548	3.21	1.24
D	1754.81	438.70	1897.07	1688.06	721.00	0.00	1908.95	1803.37	0.919	159.66	124.09

Main results: (18:00-18:15)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)

A	679.07	169.77	681.22	770.87	1758.69	0.00	1301.69	1318.60	0.522	1.64	1.10
B	1544.85	386.21	1554.70	2010.40	429.51	0.00	2306.66	2167.58	0.670	4.52	2.06
C	400.52	100.13	403.05	466.31	1517.90	0.00	1069.58	743.59	0.374	1.24	0.60
D	1469.57	367.39	1951.48	1342.88	578.08	0.00	1989.77	1803.37	0.739	124.09	3.61

Queueing Delay Results

Queueing Delay results: (16:45-17:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	11.44	0.76	0.070	A	A
B	27.66	1.84	0.075	A	A
C	8.50	0.57	0.088	A	A
D	38.13	2.54	0.110	A	A

Queueing Delay results: (17:00-17:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	19.75	1.32	0.102	A	A
B	55.28	3.69	0.130	A	A
C	14.79	0.99	0.130	A	A
D	103.92	6.93	0.277	C	B

Queueing Delay results: (17:15-17:30)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	39.72	2.65	0.175	B	B
B	258.80	17.25	0.554	D	C
C	38.42	2.56	0.296	C	B
D	704.09	46.94	1.638	F	F

Queueing Delay results: (17:30-17:45)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	43.68	2.91	0.182	B	B
B	486.63	32.44	0.989	F	E
C	46.45	3.10	0.344	C	C
D	1829.48	121.97	4.024	F	F

Queueing Delay results: (17:45-18:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	25.91	1.73	0.122	A	A
B	162.42	10.83	0.287	C	B
C	20.02	1.33	0.158	A	A
D	2128.10	141.87	4.463	F	F

Queueing Delay results: (18:00-18:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	17.15	1.14	0.097	A	A
B	32.45	2.16	0.081	A	A
C	9.37	0.62	0.090	A	A
D	917.88	61.19	1.916	F	F

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	7.50	7.50	0.00	38.00	80.00	35.00		0.560	2285.710
B	7.70	8.50	12.00	44.00	80.00	34.00		0.602	2565.283
C	3.50	7.90	19.00	39.00	80.00	40.00		0.485	1806.380
D	7.20	7.60	10.00	37.00	80.00	33.00		0.565	2316.647

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (min)
16:45-17:00	A	679.07	1535.11	0.442	0.00	0.00	0.79	11.44	(0.00)	0.070
16:45-17:00	B	1544.85	2333.57	0.662	0.00	0.00	1.93	27.66	(0.00)	0.075
16:45-17:00	C	400.52	1077.67	0.372	0.00	0.00	0.59	8.50	(0.00)	0.088
16:45-17:00	D	1469.57	1993.56	0.737	0.00	0.00	2.73	38.13	(0.00)	0.110
17:00-17:15	A	810.88	1393.62	0.582	0.00	0.79	1.37	19.75	(0.00)	0.102
17:00-17:15	B	1844.71	2288.75	0.806	0.00	1.93	3.98	55.28	(0.00)	0.130
17:00-17:15	C	478.26	935.65	0.511	0.00	0.59	1.03	14.79	(0.00)	0.130
17:00-17:15	D	1754.81	1930.40	0.909	0.00	2.73	8.29	103.92	(0.00)	0.277
17:15-17:30	A	993.12	1324.47	0.750	0.00	1.37	2.87	39.72	(0.00)	0.175
17:15-17:30	B	2259.29	2241.73	1.008	0.00	3.98	26.00	258.80	(0.00)	0.554
17:15-17:30	C	585.74	773.95	0.757	0.00	1.03	2.88	38.42	(0.00)	0.296
17:15-17:30	D	2149.19	1855.25	1.158	0.00	8.29	84.23	704.09	(0.00)	1.638
17:30-17:45	A	993.12	1322.55	0.751	0.00	2.87	2.94	43.68	(0.00)	0.182
17:30-17:45	B	2259.29	2240.31	1.008	0.00	26.00	38.34	486.63	(0.00)	0.989
17:30-17:45	C	585.74	756.69	0.774	0.00	2.88	3.21	46.45	(0.00)	0.344
17:30-17:45	D	2149.19	1848.36	1.163	0.00	84.23	159.66	1829.48	(0.00)	4.024
17:45-18:00	A	810.88	1314.44	0.617	0.00	2.94	1.64	25.91	(0.00)	0.122
17:45-18:00	B	1844.71	2278.44	0.810	0.00	38.34	4.52	162.42	(0.00)	0.287
17:45-18:00	C	478.26	872.98	0.548	0.00	3.21	1.24	20.02	(0.00)	0.158
17:45-18:00	D	1754.81	1908.95	0.919	0.00	159.66	124.09	2128.10	(0.00)	4.463
18:00-18:15	A	679.07	1301.69	0.522	0.00	1.64	1.10	17.15	(0.00)	0.097
18:00-18:15	B	1544.85	2306.66	0.670	0.00	4.52	2.06	32.45	(0.00)	0.081
18:00-18:15	C	400.52	1069.58	0.374	0.00	1.24	0.60	9.37	(0.00)	0.090
18:00-18:15	D	1469.57	1989.77	0.739	0.00	124.09	3.61	917.88	(0.00)	1.916

A1 - (Default Analysis Set) - D3 - 2026 Base + Com AM, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
2026 Base + Com AM, AM	2026 Base + Com AM	AM			Yes			07:45	09:15	90	15	ONE HOUR

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	A60	
B	A57 (south)	
C	Highgrounds Road	
D	A57 (north)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	7.50	7.50	0.00	38.00	80.00	35.00	
B	7.70	8.50	12.00	44.00	80.00	34.00	
C	3.50	7.90	19.00	39.00	80.00	40.00	
D	7.20	7.60	10.00	37.00	80.00	33.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

D	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.560	2285.710
B		((calculated))	((calculated))	0.602	2565.283
C		((calculated))	((calculated))	0.485	1806.380
D		((calculated))	((calculated))	0.565	2316.647

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

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
			Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	842.00	100.000	N/A
B	ONE HOUR	Yes	1852.00	100.000	N/A
C	ONE HOUR	Yes	395.00	100.000	N/A
D	ONE HOUR	Yes	1773.00	100.000	N/A

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	633.90	633.90	N/A	N/A
07:45-08:00	B	1394.28	1394.28	N/A	N/A
07:45-08:00	C	297.38	297.38	N/A	N/A
07:45-08:00	D	1334.81	1334.81	N/A	N/A
08:00-08:15	A	756.94	756.94	N/A	N/A
08:00-08:15	B	1664.91	1664.91	N/A	N/A
08:00-08:15	C	355.10	355.10	N/A	N/A
08:00-08:15	D	1593.89	1593.89	N/A	N/A
08:15-08:30	A	927.06	927.06	N/A	N/A
08:15-08:30	B	2039.09	2039.09	N/A	N/A
08:15-08:30	C	434.90	434.90	N/A	N/A
08:15-08:30	D	1952.11	1952.11	N/A	N/A
08:30-08:45	A	927.06	927.06	N/A	N/A
08:30-08:45	B	2039.09	2039.09	N/A	N/A
08:30-08:45	C	434.90	434.90	N/A	N/A
08:30-08:45	D	1952.11	1952.11	N/A	N/A

08:45-09:00	**A**	756.94	756.94	N/A	N/A
08:45-09:00	**B**	1664.91	1664.91	N/A	N/A
08:45-09:00	**C**	355.10	355.10	N/A	N/A
08:45-09:00	**D**	1593.89	1593.89	N/A	N/A
09:00-09:15	**A**	633.90	633.90	N/A	N/A
09:00-09:15	**B**	1394.28	1394.28	N/A	N/A
09:00-09:15	**C**	297.38	297.38	N/A	N/A
09:00-09:15	**D**	1334.81	1334.81	N/A	N/A

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Roundabout 1 (for whole period)

		To			
		A	**B**	**C**	**D**
From	**A**	0.00	360.00	121.00	361.00
	B	575.00	0.00	154.00	1123.00
	C	59.00	244.00	0.00	92.00
	D	279.00	1356.00	138.00	0.00

Turning Proportions (Veh) - Roundabout 1 (for whole period)

		To			
		A	**B**	**C**	**D**
From	**A**	0.00	0.43	0.14	0.43
	B	0.31	0.00	0.08	0.61
	C	0.15	0.62	0.00	0.23
	D	0.16	0.76	0.08	0.00

Vehicle Mix

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

		To			
		A	**B**	**C**	**D**
From	**A**	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To			
		A	**B**	**C**	**D**
From	**A**	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Total Demand (Veh/hr)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.71	0.16	2.42	A	772.63	1158.95	129.39	0.11	1.44	129.40	0.11	0.560	2285.710
B	0.94	0.42	13.35	D	1699.43	2549.14	471.73	0.19	5.24	471.77	0.19	0.602	2565.283
C	0.61	0.22	1.55	B	362.46	543.69	74.79	0.14	0.83	74.80	0.14	0.485	1806.380
D	1.10	2.71	99.94	F	1626.94	2440.40	2854.86	1.17	31.72	2854.94	1.17	0.565	2316.647

Main Results

Main results: (07:45-08:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	633.90	158.48	631.18	683.85	1300.27	0.00	1558.18	1274.01	0.407	0.00	0.68
B	1394.28	348.57	1388.10	1466.91	464.54	0.00	2285.56	2047.22	0.610	0.00	1.55
C	297.38	74.34	295.82	309.35	1543.28	0.00	1057.25	630.13	0.281	0.00	0.39
D	1334.81	333.70	1326.23	1181.21	657.89	0.00	1944.64	1683.91	0.686	0.00	2.14

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	756.94	189.24	755.14	817.02	1551.28	0.00	1417.74	1274.00	0.534	0.68	1.13
B	1664.91	416.23	1659.64	1751.06	555.36	0.00	2230.88	2047.22	0.746	1.55	2.86
C	355.10	88.77	354.12	369.61	1845.39	0.00	910.61	630.13	0.390	0.39	0.63
D	1593.89	398.47	1581.37	1412.60	786.92	0.00	1871.68	1683.91	0.852	2.14	5.27

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	927.06	231.76	922.18	963.13	1747.04	0.00	1308.21	1274.00	0.709	1.13	2.35
B	2039.09	509.77	2004.00	2004.57	664.65	0.00	2165.07	2047.22	0.942	2.86	11.64
C	434.90	108.73	431.58	435.91	2232.74	0.00	722.59	630.13	0.602	0.63	1.46
D	1952.11	488.03	1756.91	1711.07	953.25	0.00	1777.62	1683.91	1.098	5.27	54.07

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	927.06	231.76	926.77	974.19	1758.79	0.00	1301.63	1274.00	0.712	2.35	2.42
B	2039.09	509.77	2032.25	2017.37	668.19	0.00	2162.94	2047.22	0.943	11.64	13.35
C	434.90	108.73	434.57	439.83	2260.61	0.00	709.06	630.13	0.613	1.46	1.55
D	1952.11	488.03	1768.66	1730.86	964.32	0.00	1771.37	1683.91	1.102	54.07	99.94

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	756.94	189.24	760.88	873.23	1774.64	0.00	1292.76	1274.00	0.586	2.42	1.44
B	1664.91	416.23	1705.87	1956.50	579.03	0.00	2216.63	2047.22	0.751	13.35	3.11
C	355.10	88.77	358.59	394.65	1890.24	0.00	888.84	630.13	0.400	1.55	0.67
D	1593.89	398.47	1843.18	1444.13	804.70	0.00	1861.62	1683.91	0.856	99.94	37.61

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)

A	633.90	158.48	636.65	711.65	1428.30	0.00	1486.55	1274.00	0.426	1.44	0.75
B	1394.28	348.57	1400.32	1585.60	479.35	0.00	2276.65	2047.22	0.612	3.11	1.60
C	297.38	74.34	298.48	322.83	1556.84	0.00	1050.67	630.13	0.283	0.67	0.40
D	1334.81	333.70	1476.22	1191.59	663.73	0.00	1941.34	1683.91	0.688	37.61	2.26

Queueing Delay Results

Queueing Delay results: (07:45-08:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	9.93	0.66	0.065	A	A
B	22.34	1.49	0.066	A	A
C	5.66	0.38	0.079	A	A
D	30.39	2.03	0.096	A	A

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	16.42	1.09	0.090	A	A
B	40.66	2.71	0.104	A	A
C	9.19	0.61	0.108	A	A
D	70.34	4.69	0.199	B	B

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	32.97	2.20	0.154	A	A
B	137.77	9.18	0.320	C	B
C	20.47	1.36	0.204	B	B
D	463.87	30.92	1.166	F	E

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	35.95	2.40	0.160	A	A
B	189.34	12.62	0.418	D	C
C	22.79	1.52	0.218	B	B
D	1155.97	77.06	2.708	F	F

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	22.55	1.50	0.114	A	A
B	56.77	3.78	0.126	A	A
C	10.56	0.70	0.114	A	A
D	1031.61	68.77	2.258	F	F

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	11.57	0.77	0.071	A	A
B	24.85	1.66	0.069	A	A
C	6.12	0.41	0.080	A	A
D	102.67	6.84	0.173	B	B

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	7.50	7.50	0.00	38.00	80.00	35.00		0.560	2285.710
B	7.70	8.50	12.00	44.00	80.00	34.00		0.602	2565.283
C	3.50	7.90	19.00	39.00	80.00	40.00		0.485	1806.380
D	7.20	7.60	10.00	37.00	80.00	33.00		0.565	2316.647

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (min)
07:45-08:00	A	633.90	1558.18	0.407	0.00	0.00	0.68	9.93	(0.00)	0.065
07:45-08:00	B	1394.28	2285.56	0.610	0.00	0.00	1.55	22.34	(0.00)	0.066
07:45-08:00	C	297.38	1057.25	0.281	0.00	0.00	0.39	5.66	(0.00)	0.079
07:45-08:00	D	1334.81	1944.64	0.686	0.00	0.00	2.14	30.39	(0.00)	0.096
08:00-08:15	A	756.94	1417.74	0.534	0.00	0.68	1.13	16.42	(0.00)	0.090
08:00-08:15	B	1664.91	2230.88	0.746	0.00	1.55	2.86	40.66	(0.00)	0.104
08:00-08:15	C	355.10	910.61	0.390	0.00	0.39	0.63	9.19	(0.00)	0.108
08:00-08:15	D	1593.89	1871.68	0.852	0.00	2.14	5.27	70.34	(0.00)	0.199
08:15-08:30	A	927.06	1308.21	0.709	0.00	1.13	2.35	32.97	(0.00)	0.154
08:15-08:30	B	2039.09	2165.07	0.942	0.00	2.86	11.64	137.77	(0.00)	0.320
08:15-08:30	C	434.90	722.59	0.602	0.00	0.63	1.46	20.47	(0.00)	0.204
08:15-08:30	D	1952.11	1777.62	1.098	0.00	5.27	54.07	463.87	(0.00)	1.166
08:30-08:45	A	927.06	1301.63	0.712	0.00	2.35	2.42	35.95	(0.00)	0.160
08:30-08:45	B	2039.09	2162.94	0.943	0.00	11.64	13.35	189.34	(0.00)	0.418
08:30-08:45	C	434.90	709.06	0.613	0.00	1.46	1.55	22.79	(0.00)	0.218
08:30-08:45	D	1952.11	1771.37	1.102	0.00	54.07	99.94	1155.97	(0.00)	2.708
08:45-09:00	A	756.94	1292.76	0.586	0.00	2.42	1.44	22.55	(0.00)	0.114
08:45-09:00	B	1664.91	2216.63	0.751	0.00	13.35	3.11	56.77	(0.00)	0.126
08:45-09:00	C	355.10	888.84	0.400	0.00	1.55	0.67	10.56	(0.00)	0.114
08:45-09:00	D	1593.89	1861.62	0.856	0.00	99.94	37.61	1031.61	(0.00)	2.258
09:00-09:15	A	633.90	1486.55	0.426	0.00	1.44	0.75	11.57	(0.00)	0.071
09:00-09:15	B	1394.28	2276.65	0.612	0.00	3.11	1.60	24.85	(0.00)	0.069
09:00-09:15	C	297.38	1050.67	0.283	0.00	0.67	0.40	6.12	(0.00)	0.080
09:00-09:15	D	1334.81	1941.34	0.688	0.00	37.61	2.26	102.67	(0.00)	0.173

A1 - (Default Analysis Set) - D4 - 2026 Base + Com PM, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
2026 Base + Com PM, PM	2026 Base + Com PM	PM			Yes			16:45	18:15	90	15	ONE HOUR

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	A60	
B	A57 (south)	
C	Highgrounds Road	
D	A57 (north)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	7.50	7.50	0.00	38.00	80.00	35.00	
B	7.70	8.50	12.00	44.00	80.00	34.00	
C	3.50	7.90	19.00	39.00	80.00	40.00	
D	7.20	7.60	10.00	37.00	80.00	33.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

D	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.560	2285.710
B		((calculated))	((calculated))	0.602	2565.283
C		((calculated))	((calculated))	0.485	1806.380
D		((calculated))	((calculated))	0.565	2316.647

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

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
			Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	898.00	100.000	N/A
B	ONE HOUR	Yes	1721.00	100.000	N/A
C	ONE HOUR	Yes	532.00	100.000	N/A
D	ONE HOUR	Yes	1658.00	100.000	N/A

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
16:45-17:00	A	676.06	676.06	N/A	N/A
16:45-17:00	B	1295.66	1295.66	N/A	N/A
16:45-17:00	C	400.52	400.52	N/A	N/A
16:45-17:00	D	1248.23	1248.23	N/A	N/A
17:00-17:15	A	807.28	807.28	N/A	N/A
17:00-17:15	B	1547.14	1547.14	N/A	N/A
17:00-17:15	C	478.26	478.26	N/A	N/A
17:00-17:15	D	1490.51	1490.51	N/A	N/A
17:15-17:30	A	988.72	988.72	N/A	N/A
17:15-17:30	B	1894.86	1894.86	N/A	N/A
17:15-17:30	C	585.74	585.74	N/A	N/A
17:15-17:30	D	1825.49	1825.49	N/A	N/A
17:30-17:45	A	988.72	988.72	N/A	N/A
17:30-17:45	B	1894.86	1894.86	N/A	N/A
17:30-17:45	C	585.74	585.74	N/A	N/A
17:30-17:45	D	1825.49	1825.49	N/A	N/A

17:45-18:00	**A**	807.28	807.28	N/A	N/A
17:45-18:00	**B**	1547.14	1547.14	N/A	N/A
17:45-18:00	**C**	478.26	478.26	N/A	N/A
17:45-18:00	**D**	1490.51	1490.51	N/A	N/A
18:00-18:15	**A**	676.06	676.06	N/A	N/A
18:00-18:15	**B**	1295.66	1295.66	N/A	N/A
18:00-18:15	**C**	400.52	400.52	N/A	N/A
18:00-18:15	**D**	1248.23	1248.23	N/A	N/A

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Roundabout 1 (for whole period)

		To			
		A	**B**	**C**	**D**
From	**A**	0.00	555.00	166.00	177.00
	B	463.00	0.00	227.00	1031.00
	C	150.00	148.00	0.00	234.00
	D	304.00	1185.00	169.00	0.00

Turning Proportions (Veh) - Roundabout 1 (for whole period)

		To			
		A	**B**	**C**	**D**
From	**A**	0.00	0.62	0.18	0.20
	B	0.27	0.00	0.13	0.60
	C	0.28	0.28	0.00	0.44
	D	0.18	0.71	0.10	0.00

Vehicle Mix

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

		To			
		A	**B**	**C**	**D**
From	**A**	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To			
		A	**B**	**C**	**D**
From	**A**	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Total Demand (Veh/hr)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.72	0.16	2.51	A	824.02	1236.03	126.04	0.10	1.40	126.05	0.10	0.560	2285.710
B	0.85	0.18	5.47	B	1579.22	2368.83	252.80	0.11	2.81	252.82	0.11	0.602	2565.283
C	0.64	0.18	1.75	B	488.17	732.26	89.22	0.12	0.99	89.22	0.12	0.485	1806.380
D	0.99	0.86	25.68	F	1521.41	2282.11	726.45	0.32	8.07	726.49	0.32	0.565	2316.647

Main Results

Main results: (16:45-17:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	676.06	169.02	673.32	687.26	1124.84	0.00	1656.34	1367.73	0.408	0.00	0.68
B	1295.66	323.91	1290.71	1414.42	383.74	0.00	2334.22	2143.56	0.555	0.00	1.24
C	400.52	100.13	398.52	421.27	1253.18	0.00	1198.07	772.26	0.334	0.00	0.50
D	1248.23	312.06	1241.63	1081.23	570.47	0.00	1994.07	1745.95	0.626	0.00	1.65

Main results: (17:00-17:15)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	807.28	201.82	805.63	821.98	1344.68	0.00	1533.34	1367.73	0.526	0.68	1.10
B	1547.14	386.79	1543.88	1691.32	458.99	0.00	2288.91	2143.56	0.676	1.24	2.05
C	478.26	119.56	477.10	503.83	1499.04	0.00	1078.73	772.26	0.443	0.50	0.79
D	1490.51	372.63	1484.06	1293.54	682.60	0.00	1930.66	1745.95	0.772	1.65	3.26

Main results: (17:15-17:30)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	988.72	247.18	983.56	993.77	1602.01	0.00	1389.35	1367.73	0.712	1.10	2.39
B	1894.86	473.71	1882.04	2030.15	555.42	0.00	2230.84	2143.56	0.849	2.05	5.26
C	585.74	146.44	582.08	609.80	1827.66	0.00	919.21	772.26	0.637	0.79	1.70
D	1825.49	456.37	1763.41	1577.37	832.38	0.00	1845.97	1745.95	0.989	3.26	18.78

Main results: (17:30-17:45)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	988.72	247.18	988.23	1004.29	1631.15	0.00	1373.05	1367.73	0.720	2.39	2.51
B	1894.86	473.71	1894.00	2058.66	560.73	0.00	2227.65	2143.56	0.851	5.26	5.47
C	585.74	146.44	585.55	615.76	1838.97	0.00	913.73	772.26	0.641	1.70	1.75
D	1825.49	456.37	1797.91	1586.98	837.54	0.00	1843.05	1745.95	0.990	18.78	25.68

Main results: (17:45-18:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	807.28	201.82	812.53	845.21	1423.50	0.00	1489.23	1367.73	0.542	2.51	1.20
B	1547.14	386.79	1560.46	1764.74	471.29	0.00	2281.50	2143.56	0.678	5.47	2.14
C	478.26	119.56	481.99	516.96	1514.79	0.00	1071.09	772.26	0.447	1.75	0.82
D	1490.51	372.63	1578.91	1306.98	689.80	0.00	1926.59	1745.95	0.774	25.68	3.58

Main results: (18:00-18:15)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)

A	676.06	169.02	678.06	693.04	1137.25	0.00	1649.39	1367.73	0.410	1.20	0.70
B	1295.66	323.91	1299.18	1428.33	386.99	0.00	2332.26	2143.56	0.556	2.14	1.26
C	400.52	100.13	401.75	424.70	1261.47	0.00	1194.05	772.26	0.335	0.82	0.51
D	1248.23	312.06	1255.73	1088.66	574.56	0.00	1991.76	1745.95	0.627	3.58	1.70

Queueing Delay Results

Queueing Delay results: (16:45-17:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	10.00	0.67	0.061	A	A
B	17.99	1.20	0.057	A	A
C	7.26	0.48	0.075	A	A
D	23.68	1.58	0.079	A	A

Queueing Delay results: (17:00-17:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	16.00	1.07	0.082	A	A
B	29.63	1.98	0.080	A	A
C	11.45	0.76	0.100	A	A
D	45.65	3.04	0.132	A	A

Queueing Delay results: (17:15-17:30)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	33.51	2.23	0.146	A	A
B	70.78	4.72	0.166	A	A
C	23.92	1.59	0.176	B	B
D	196.49	13.10	0.522	D	C

Queueing Delay results: (17:30-17:45)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	37.05	2.47	0.156	A	A
B	80.80	5.39	0.179	B	B
C	26.00	1.73	0.183	B	B
D	337.22	22.48	0.856	F	D

Queueing Delay results: (17:45-18:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	18.73	1.25	0.089	A	A
B	34.15	2.28	0.085	A	A
C	12.76	0.85	0.102	A	A
D	96.72	6.45	0.212	B	B

Queueing Delay results: (18:00-18:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	10.75	0.72	0.062	A	A
B	19.45	1.30	0.058	A	A
C	7.82	0.52	0.076	A	A
D	26.69	1.78	0.082	A	A

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	7.50	7.50	0.00	38.00	80.00	35.00		0.560	2285.710
B	7.70	8.50	12.00	44.00	80.00	34.00		0.602	2565.283
C	3.50	7.90	19.00	39.00	80.00	40.00		0.485	1806.380
D	7.20	7.60	10.00	37.00	80.00	33.00		0.565	2316.647

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (min)
16:45-17:00	A	676.06	1656.34	0.408	0.00	0.00	0.68	10.00	(0.00)	0.061
16:45-17:00	B	1295.66	2334.22	0.555	0.00	0.00	1.24	17.99	(0.00)	0.057
16:45-17:00	C	400.52	1198.07	0.334	0.00	0.00	0.50	7.26	(0.00)	0.075
16:45-17:00	D	1248.23	1994.07	0.626	0.00	0.00	1.65	23.68	(0.00)	0.079
17:00-17:15	A	807.28	1533.34	0.526	0.00	0.68	1.10	16.00	(0.00)	0.082
17:00-17:15	B	1547.14	2288.91	0.676	0.00	1.24	2.05	29.63	(0.00)	0.080
17:00-17:15	C	478.26	1078.73	0.443	0.00	0.50	0.79	11.45	(0.00)	0.100
17:00-17:15	D	1490.51	1930.66	0.772	0.00	1.65	3.26	45.65	(0.00)	0.132
17:15-17:30	A	988.72	1389.35	0.712	0.00	1.10	2.39	33.51	(0.00)	0.146
17:15-17:30	B	1894.86	2230.84	0.849	0.00	2.05	5.26	70.78	(0.00)	0.166
17:15-17:30	C	585.74	919.21	0.637	0.00	0.79	1.70	23.92	(0.00)	0.176
17:15-17:30	D	1825.49	1845.97	0.989	0.00	3.26	18.78	196.49	(0.00)	0.522
17:30-17:45	A	988.72	1373.05	0.720	0.00	2.39	2.51	37.05	(0.00)	0.156
17:30-17:45	B	1894.86	2227.65	0.851	0.00	5.26	5.47	80.80	(0.00)	0.179
17:30-17:45	C	585.74	913.73	0.641	0.00	1.70	1.75	26.00	(0.00)	0.183
17:30-17:45	D	1825.49	1843.05	0.990	0.00	18.78	25.68	337.22	(0.00)	0.856
17:45-18:00	A	807.28	1489.23	0.542	0.00	2.51	1.20	18.73	(0.00)	0.089
17:45-18:00	B	1547.14	2281.50	0.678	0.00	5.47	2.14	34.15	(0.00)	0.085
17:45-18:00	C	478.26	1071.09	0.447	0.00	1.75	0.82	12.76	(0.00)	0.102
17:45-18:00	D	1490.51	1926.59	0.774	0.00	25.68	3.58	96.72	(0.00)	0.212
18:00-18:15	A	676.06	1649.39	0.410	0.00	1.20	0.70	10.75	(0.00)	0.062
18:00-18:15	B	1295.66	2332.26	0.556	0.00	2.14	1.26	19.45	(0.00)	0.058
18:00-18:15	C	400.52	1194.05	0.335	0.00	0.82	0.51	7.82	(0.00)	0.076
18:00-18:15	D	1248.23	1991.76	0.627	0.00	3.58	1.70	26.69	(0.00)	0.082

ARCADY 7

Version: 7.0.0.99 [10 July 2009]
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File: N:\Projects\A078085 - Bassetlaw DC Modelling\calculations\Capacity Assessments\3. A57-A60-Highgrounds Rnd\Oct 2012 \Imps\A57-A60-Highgnds Rbout imps.arc7
Report generation date: 06/12/2012 13:08:57

» A1 - (Default Analysis Set) - D1 - 2026 Base + Committed + Growth AM, AM
» A1 - (Default Analysis Set) - D2 - 2026 Base + Committed + Growth PM, PM

File summary

File Description

Title	A57-A60-Highgrounds Rnd
Location	Bassetlaw
Date	14/01/2011
Status	Preliminary
Client	Bassetlaw DC
Jobnumber	A060696
Enumerator	Rob Holland
Description	23.11.12 RJH: New Flows
Results Upto Date	True

Analysis Options

RFC Threshold	Vehicle Length (m)	Do Queue Variations
0.85	5.75	

Sorting and Display

Show Arm Names	Arm Grouping	Sorting Direction	Sorting Type	Data Matrix Style	Time Style
	Order	Ascending	Numerical	By Destination	Absolute Time

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	min	-Min	perMin

A1 - (Default Analysis Set) - D1 - 2026 Base + Committed + Growth AM, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors

(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
2026 Base + Committed + Growth AM, AM	2026 Base + Committed + Growth AM	AM			Yes			07:45	09:15	90	15	ONE HOUR

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	A60	
B	A57 (south)	
C	Highgrounds Road	
D	A57 (north)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	7.50	8.00	7.00	35.00	83.50	35.00	
B	7.70	11.50	28.00	45.00	77.50	34.00	
C	3.50	8.50	19.00	20.00	83.50	40.00	
D	7.20	11.50	17.50	51.00	77.50	33.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.568	2404.456
B		((calculated))	((calculated))	0.702	3177.534
C		((calculated))	((calculated))	0.474	1817.591
D		((calculated))	((calculated))	0.672	2967.212

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

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
			Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	844.00	100.000	N/A
B	ONE HOUR	Yes	2180.00	100.000	N/A
C	ONE HOUR	Yes	395.00	100.000	N/A
D	ONE HOUR	Yes	2176.00	100.000	N/A

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	635.41	635.41	N/A	N/A
07:45-08:00	B	1641.22	1641.22	N/A	N/A
07:45-08:00	C	297.38	297.38	N/A	N/A
07:45-08:00	D	1638.21	1638.21	N/A	N/A
08:00-08:15	A	758.74	758.74	N/A	N/A
08:00-08:15	B	1959.78	1959.78	N/A	N/A
08:00-08:15	C	355.10	355.10	N/A	N/A
08:00-08:15	D	1956.18	1956.18	N/A	N/A
08:15-08:30	A	929.26	929.26	N/A	N/A
08:15-08:30	B	2400.22	2400.22	N/A	N/A
08:15-08:30	C	434.90	434.90	N/A	N/A
08:15-08:30	D	2395.82	2395.82	N/A	N/A
08:30-08:45	A	929.26	929.26	N/A	N/A
08:30-08:45	B	2400.22	2400.22	N/A	N/A
08:30-08:45	C	434.90	434.90	N/A	N/A
08:30-08:45	D	2395.82	2395.82	N/A	N/A
08:45-09:00	A	758.74	758.74	N/A	N/A

08:45-09:00	**B**	1959.78	1959.78	N/A	N/A
08:45-09:00	**C**	355.10	355.10	N/A	N/A
08:45-09:00	**D**	1956.18	1956.18	N/A	N/A
09:00-09:15	**A**	635.41	635.41	N/A	N/A
09:00-09:15	**B**	1641.22	1641.22	N/A	N/A
09:00-09:15	**C**	297.38	297.38	N/A	N/A
09:00-09:15	**D**	1638.21	1638.21	N/A	N/A

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Roundabout 1 (for whole period)

		To			
		A	**B**	**C**	**D**
From	**A**	0.00	361.00	121.00	362.00
	B	578.00	0.00	154.00	1448.00
	C	59.00	244.00	0.00	92.00
	D	282.00	1756.00	138.00	0.00

Turning Proportions (Veh) - Roundabout 1 (for whole period)

		To			
		A	**B**	**C**	**D**
From	**A**	0.00	0.43	0.14	0.43
	B	0.27	0.00	0.07	0.66
	C	0.15	0.62	0.00	0.23
	D	0.13	0.81	0.06	0.00

Vehicle Mix

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

		To			
		A	**B**	**C**	**D**
From	**A**	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To			
		A	**B**	**C**	**D**
From	**A**	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Total Demand (Veh/hr)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)

A	0.83	0.31	4.65	C	774.47	1161.70	191.73	0.17	2.13	191.74	0.17	0.568	2404.456
B	0.89	0.19	7.49	B	2000.41	3000.61	316.85	0.11	3.52	316.87	0.11	0.702	3177.534
C	0.76	0.43	2.97	D	362.46	543.69	116.91	0.22	1.30	116.92	0.22	0.474	1817.591
D	1.03	1.34	58.58	F	1996.74	2995.10	1418.28	0.47	15.76	1418.32	0.47	0.672	2967.212

Main Results

Main results: (07:45-08:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	635.41	158.85	632.47	689.23	1602.15	0.00	1494.87	1127.60	0.425	0.00	0.73
B	1641.22	410.30	1635.83	1769.25	465.38	0.00	2851.02	2623.44	0.576	0.00	1.35
C	297.38	74.34	295.62	309.66	1791.55	0.00	967.59	431.36	0.307	0.00	0.44
D	1638.21	409.55	1630.90	1426.68	660.49	0.00	2523.60	2277.80	0.649	0.00	1.83

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	758.74	189.68	756.33	823.83	1913.90	0.00	1317.88	1127.60	0.576	0.73	1.34
B	1959.78	489.94	1955.83	2113.88	556.36	0.00	2787.19	2623.45	0.703	1.35	2.33
C	355.10	88.77	353.72	370.13	2142.07	0.00	801.29	431.36	0.443	0.44	0.78
D	1956.18	489.04	1947.83	1705.89	789.90	0.00	2436.68	2277.80	0.803	1.83	3.91

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	929.26	232.32	917.98	989.44	2240.26	0.00	1132.59	1127.59	0.820	1.34	4.16
B	2400.22	600.06	2381.26	2488.90	669.34	0.00	2707.93	2623.45	0.886	2.33	7.07
C	434.90	108.73	427.20	443.83	2606.77	0.00	580.81	431.36	0.749	0.78	2.71
D	2395.82	598.96	2270.64	2074.91	959.06	0.00	2323.07	2277.79	1.031	3.91	35.21

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	929.26	232.32	927.30	999.13	2271.97	0.00	1114.59	1127.59	0.834	4.16	4.65
B	2400.22	600.06	2398.57	2522.59	676.68	0.00	2702.77	2623.45	0.888	7.07	7.49
C	434.90	108.73	433.85	448.40	2626.86	0.00	571.28	431.36	0.761	2.71	2.97
D	2395.82	598.96	2302.35	2091.95	968.75	0.00	2316.56	2277.79	1.034	35.21	58.58

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	758.74	189.68	770.33	860.83	2115.75	0.00	1203.28	1127.59	0.631	4.65	1.75
B	1959.78	489.94	1979.90	2307.45	578.63	0.00	2771.57	2623.45	0.707	7.49	2.45
C	355.10	88.77	363.66	388.09	2170.44	0.00	787.83	431.36	0.451	2.97	0.83
D	1956.18	489.04	2172.68	1730.19	803.90	0.00	2427.28	2277.79	0.806	58.58	4.45

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	635.41	158.85	639.38	694.58	1619.49	0.00	1485.02	1127.60	0.428	1.75	0.75
B	1641.22	410.30	1645.55	1788.42	470.45	0.00	2847.47	2623.44	0.576	2.45	1.37

C	297.38	74.34	298.91	312.46	1803.54	0.00	961.90	431.36	0.309	0.83	0.45
D	1638.21	409.55	1648.48	1436.87	665.59	0.00	2520.18	2277.80	0.650	4.45	1.88

Queueing Delay Results

Queueing Delay results: (07:45-08:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	10.68	0.71	0.069	A	A
B	19.62	1.31	0.049	A	A
C	6.39	0.43	0.089	A	A
D	26.31	1.75	0.067	A	A

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	19.23	1.28	0.106	A	A
B	33.65	2.24	0.072	A	A
C	11.30	0.75	0.134	A	A
D	54.52	3.63	0.121	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	54.62	3.64	0.267	C	B
B	92.89	6.19	0.174	B	B
C	35.47	2.36	0.374	C	C
D	327.66	21.84	0.657	E	D

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	67.04	4.47	0.314	C	B
B	109.85	7.32	0.195	B	B
C	43.16	2.88	0.430	D	C
D	706.59	47.11	1.337	F	F

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	28.48	1.90	0.142	A	A
B	39.72	2.65	0.078	A	A
C	13.62	0.91	0.144	A	A
D	273.65	18.24	0.428	D	C

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	11.69	0.78	0.071	A	A
B	21.12	1.41	0.050	A	A
C	6.98	0.47	0.091	A	A
D	29.55	1.97	0.070	A	A

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	7.50	8.00	7.00	35.00	83.50	35.00		0.568	2404.456
B	7.70	11.50	28.00	45.00	77.50	34.00		0.702	3177.534
C	3.50	8.50	19.00	20.00	83.50	40.00		0.474	1817.591
D	7.20	11.50	17.50	51.00	77.50	33.00		0.672	2967.212

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (min)
07:45-08:00	A	635.41	1494.87	0.425	0.00	0.00	0.73	10.68	(0.00)	0.069
07:45-08:00	B	1641.22	2851.02	0.576	0.00	0.00	1.35	19.62	(0.00)	0.049
07:45-08:00	C	297.38	967.59	0.307	0.00	0.00	0.44	6.39	(0.00)	0.089
07:45-08:00	D	1638.21	2523.60	0.649	0.00	0.00	1.83	26.31	(0.00)	0.067
08:00-08:15	A	758.74	1317.88	0.576	0.00	0.73	1.34	19.23	(0.00)	0.106
08:00-08:15	B	1959.78	2787.19	0.703	0.00	1.35	2.33	33.65	(0.00)	0.072
08:00-08:15	C	355.10	801.29	0.443	0.00	0.44	0.78	11.30	(0.00)	0.134
08:00-08:15	D	1956.18	2436.68	0.803	0.00	1.83	3.91	54.52	(0.00)	0.121
08:15-08:30	A	929.26	1132.59	0.820	0.00	1.34	4.16	54.62	(0.00)	0.267
08:15-08:30	B	2400.22	2707.93	0.886	0.00	2.33	7.07	92.89	(0.00)	0.174
08:15-08:30	C	434.90	580.81	0.749	0.00	0.78	2.71	35.47	(0.00)	0.374
08:15-08:30	D	2395.82	2323.07	1.031	0.00	3.91	35.21	327.66	(0.00)	0.657
08:30-08:45	A	929.26	1114.59	0.834	0.00	4.16	4.65	67.04	(0.00)	0.314
08:30-08:45	B	2400.22	2702.77	0.888	0.00	7.07	7.49	109.85	(0.00)	0.195
08:30-08:45	C	434.90	571.28	0.761	0.00	2.71	2.97	43.16	(0.00)	0.430
08:30-08:45	D	2395.82	2316.56	1.034	0.00	35.21	58.58	706.59	(0.00)	1.337
08:45-09:00	A	758.74	1203.28	0.631	0.00	4.65	1.75	28.48	(0.00)	0.142
08:45-09:00	B	1959.78	2771.57	0.707	0.00	7.49	2.45	39.72	(0.00)	0.078
08:45-09:00	C	355.10	787.83	0.451	0.00	2.97	0.83	13.62	(0.00)	0.144
08:45-09:00	D	1956.18	2427.28	0.806	0.00	58.58	4.45	273.65	(0.00)	0.428
09:00-09:15	A	635.41	1485.02	0.428	0.00	1.75	0.75	11.69	(0.00)	0.071
09:00-09:15	B	1641.22	2847.47	0.576	0.00	2.45	1.37	21.12	(0.00)	0.050
09:00-09:15	C	297.38	961.90	0.309	0.00	0.83	0.45	6.98	(0.00)	0.091
09:00-09:15	D	1638.21	2520.18	0.650	0.00	4.45	1.88	29.55	(0.00)	0.070

A1 - (Default Analysis Set) - D2 - 2026 Base + Committed + Growth PM, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
2026 Base + Committed + Growth PM, PM	2026 Base + Committed + Growth PM	PM			Yes			16:45	18:15	90	15	ONE HOUR

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	A60	
B	A57 (south)	
C	Highgrounds Road	
D	A57 (north)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	7.50	8.00	7.00	35.00	83.50	35.00	
B	7.70	11.50	28.00	45.00	77.50	34.00	
C	3.50	8.50	19.00	20.00	83.50	40.00	
D	7.20	11.50	17.50	51.00	77.50	33.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.568	2404.456
B		((calculated))	((calculated))	0.702	3177.534
C		((calculated))	((calculated))	0.474	1817.591
D		((calculated))	((calculated))	0.672	2967.212

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

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
			Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	902.00	100.000	N/A
B	ONE HOUR	Yes	2052.00	100.000	N/A
C	ONE HOUR	Yes	532.00	100.000	N/A
D	ONE HOUR	Yes	1952.00	100.000	N/A

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
16:45-17:00	A	679.07	679.07	N/A	N/A
16:45-17:00	B	1544.85	1544.85	N/A	N/A
16:45-17:00	C	400.52	400.52	N/A	N/A
16:45-17:00	D	1469.57	1469.57	N/A	N/A
17:00-17:15	A	810.88	810.88	N/A	N/A
17:00-17:15	B	1844.71	1844.71	N/A	N/A
17:00-17:15	C	478.26	478.26	N/A	N/A
17:00-17:15	D	1754.81	1754.81	N/A	N/A
17:15-17:30	A	993.12	993.12	N/A	N/A
17:15-17:30	B	2259.29	2259.29	N/A	N/A
17:15-17:30	C	585.74	585.74	N/A	N/A
17:15-17:30	D	2149.19	2149.19	N/A	N/A
17:30-17:45	A	993.12	993.12	N/A	N/A
17:30-17:45	B	2259.29	2259.29	N/A	N/A
17:30-17:45	C	585.74	585.74	N/A	N/A
17:30-17:45	D	2149.19	2149.19	N/A	N/A
17:45-18:00	A	810.88	810.88	N/A	N/A
17:45-18:00	B	1844.71	1844.71	N/A	N/A
17:45-18:00	C	478.26	478.26	N/A	N/A

17:45-18:00	**D**	1754.81	1754.81	N/A	N/A
18:00-18:15	**A**	679.07	679.07	N/A	N/A
18:00-18:15	**B**	1544.85	1544.85	N/A	N/A
18:00-18:15	**C**	400.52	400.52	N/A	N/A
18:00-18:15	**D**	1469.57	1469.57	N/A	N/A

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Roundabout 1 (for whole period)

		To			
		A	**B**	**C**	**D**
From	**A**	0.00	557.00	166.00	179.00
	B	465.00	0.00	227.00	1360.00
	C	150.00	148.00	0.00	234.00
	D	305.00	1478.00	169.00	0.00

Turning Proportions (Veh) - Roundabout 1 (for whole period)

		To			
		A	**B**	**C**	**D**
From	**A**	0.00	0.62	0.18	0.20
	B	0.23	0.00	0.11	0.66
	C	0.28	0.28	0.00	0.44
	D	0.16	0.76	0.09	0.00

Vehicle Mix

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

		To			
		A	**B**	**C**	**D**
From	**A**	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To			
		A	**B**	**C**	**D**
From	**A**	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Total Demand (Veh/hr)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.77	0.21	3.30	B	827.69	1241.54	149.36	0.12	1.66	149.37	0.12	0.568	2404.456
B	0.81	0.11	4.24	A	1882.95	2824.43	210.20	0.07	2.34	210.21	0.07	0.702	3177.534

C	0.76	0.32	3.02	C	488.17	732.26	129.86	0.18	1.44	129.87	0.18	0.474	1817.591
D	0.89	0.23	7.88	B	1791.19	2686.78	322.56	0.12	3.58	322.58	0.12	0.672	2967.212

Main Results

Main results: (16:45-17:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	679.07	169.77	676.27	690.15	1346.32	0.00	1640.11	1193.50	0.414	0.00	0.70
B	1544.85	386.21	1540.35	1637.15	385.44	0.00	2907.11	2714.91	0.531	0.00	1.13
C	400.52	100.13	398.26	421.63	1504.15	0.00	1103.95	559.62	0.363	0.00	0.56
D	1469.57	367.39	1464.33	1330.27	572.14	0.00	2582.94	2343.46	0.569	0.00	1.31

Main results: (17:00-17:15)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	810.88	202.72	808.97	825.37	1609.90	0.00	1490.47	1193.50	0.544	0.70	1.18
B	1844.71	461.18	1841.98	1957.87	461.01	0.00	2854.09	2714.91	0.646	1.13	1.81
C	478.26	119.56	476.64	504.23	1798.75	0.00	964.17	559.62	0.496	0.56	0.97
D	1754.81	438.70	1750.88	1591.00	684.40	0.00	2507.54	2343.46	0.700	1.31	2.29

Main results: (17:15-17:30)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	993.12	248.28	985.28	1005.50	1957.03	0.00	1293.39	1193.50	0.768	1.18	3.14
B	2259.29	564.82	2249.94	2381.16	561.16	0.00	2783.82	2714.91	0.812	1.81	4.15
C	585.74	146.44	578.18	614.53	2196.57	0.00	775.43	559.62	0.755	0.97	2.86
D	2149.19	537.30	2128.81	1941.03	833.72	0.00	2407.25	2343.46	0.893	2.29	7.39

Main results: (17:30-17:45)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	993.12	248.28	992.47	1012.37	1974.49	0.00	1283.48	1193.50	0.774	3.14	3.30
B	2259.29	564.82	2258.91	2401.45	565.50	0.00	2780.78	2714.91	0.812	4.15	4.24
C	585.74	146.44	585.12	618.44	2205.98	0.00	770.96	559.62	0.760	2.86	3.02
D	2149.19	537.30	2147.21	1951.45	839.64	0.00	2403.27	2343.46	0.894	7.39	7.88

Main results: (17:45-18:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	810.88	202.72	819.14	834.91	1634.43	0.00	1476.54	1193.50	0.549	3.30	1.23
B	1844.71	461.18	1854.25	1986.44	467.14	0.00	2849.79	2714.91	0.647	4.24	1.86
C	478.26	119.56	486.27	509.70	1811.68	0.00	958.04	559.62	0.499	3.02	1.01
D	1754.81	438.70	1776.77	1605.38	692.57	0.00	2502.05	2343.46	0.701	7.88	2.39

Main results: (18:00-18:15)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	679.07	169.77	681.15	694.42	1355.42	0.00	1634.94	1193.50	0.415	1.23	0.72
B	1544.85	386.21	1547.71	1648.44	388.13	0.00	2905.23	2714.91	0.532	1.86	1.14
C	400.52	100.13	402.26	424.17	1511.67	0.00	1100.38	559.62	0.364	1.01	0.58
D	1469.57	367.39	1473.79	1337.88	576.05	0.00	2580.31	2343.46	0.570	2.39	1.33

Queueing Delay Results

Queueing Delay results: (16:45-17:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	10.24	0.68	0.062	A	A
B	16.50	1.10	0.044	A	A
C	8.19	0.55	0.085	A	A
D	19.05	1.27	0.053	A	A

Queueing Delay results: (17:00-17:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	17.10	1.14	0.088	A	A
B	26.33	1.76	0.059	A	A
C	13.98	0.93	0.123	A	A
D	33.00	2.20	0.079	A	A

Queueing Delay results: (17:15-17:30)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	42.87	2.86	0.190	B	B
B	57.78	3.85	0.110	A	A
C	38.13	2.54	0.294	C	B
D	95.50	6.37	0.202	B	B

Queueing Delay results: (17:30-17:45)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	48.63	3.24	0.205	B	B
B	63.08	4.21	0.115	A	A
C	44.35	2.96	0.320	C	B
D	115.27	7.68	0.230	B	B

Queueing Delay results: (17:45-18:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	19.52	1.30	0.092	A	A
B	28.98	1.93	0.061	A	A
C	16.30	1.09	0.129	A	A
D	39.16	2.61	0.085	A	A

Queueing Delay results: (18:00-18:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	11.00	0.73	0.063	A	A
B	17.52	1.17	0.044	A	A
C	8.92	0.59	0.086	A	A
D	20.58	1.37	0.054	A	A

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)

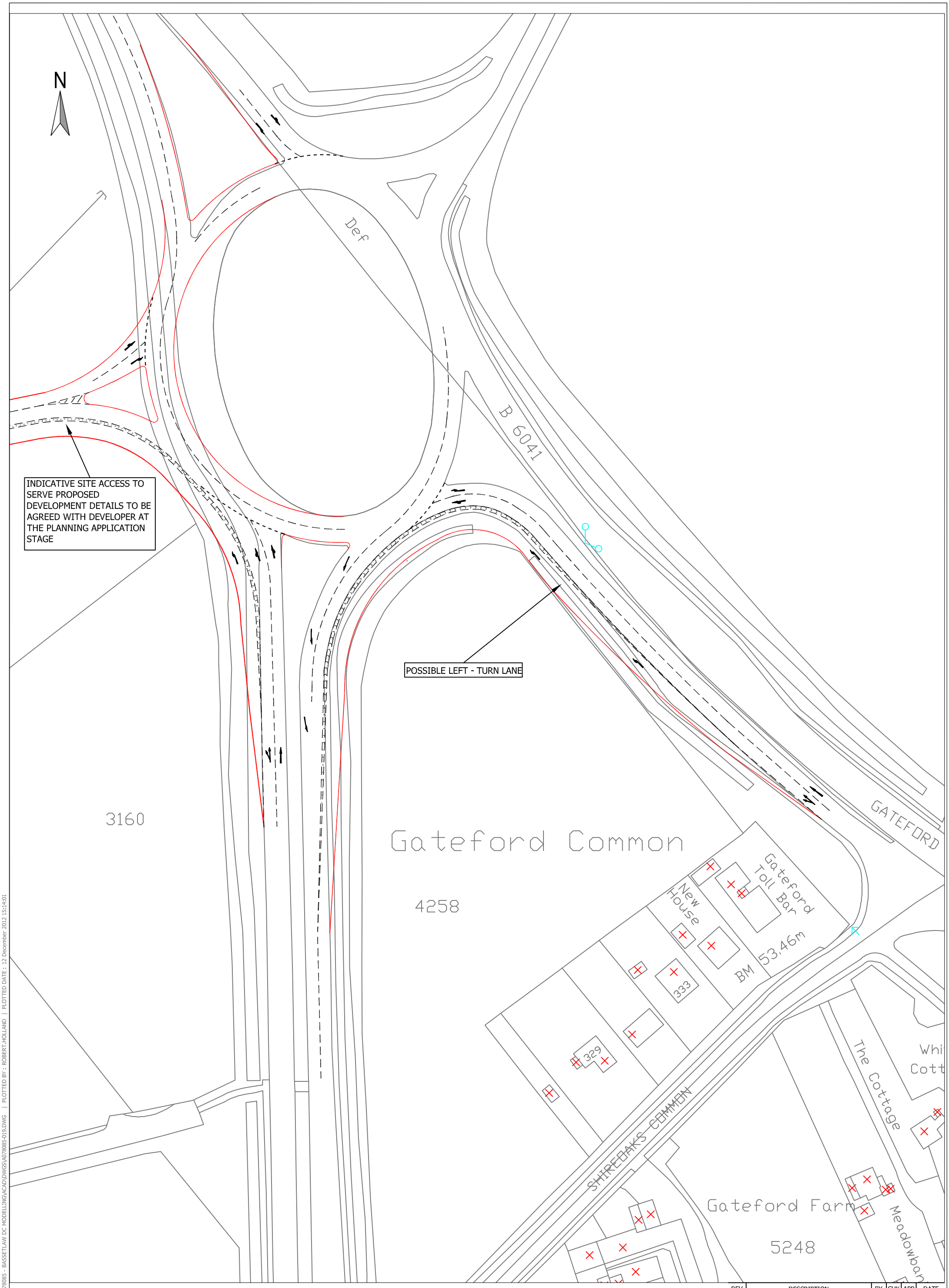
A	7.50	8.00	7.00	35.00	83.50	35.00		0.568	2404.456
B	7.70	11.50	28.00	45.00	77.50	34.00		0.702	3177.534
C	3.50	8.50	19.00	20.00	83.50	40.00		0.474	1817.591
D	7.20	11.50	17.50	51.00	77.50	33.00		0.672	2967.212

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (min)
16:45-17:00	**A**	679.07	1640.11	0.414	0.00	0.00	0.70	10.24	(0.00)	0.062
16:45-17:00	**B**	1544.85	2907.11	0.531	0.00	0.00	1.13	16.50	(0.00)	0.044
16:45-17:00	**C**	400.52	1103.95	0.363	0.00	0.00	0.56	8.19	(0.00)	0.085
16:45-17:00	**D**	1469.57	2582.94	0.569	0.00	0.00	1.31	19.05	(0.00)	0.053
17:00-17:15	**A**	810.88	1490.47	0.544	0.00	0.70	1.18	17.10	(0.00)	0.088
17:00-17:15	**B**	1844.71	2854.09	0.646	0.00	1.13	1.81	26.33	(0.00)	0.059
17:00-17:15	**C**	478.26	964.17	0.496	0.00	0.56	0.97	13.98	(0.00)	0.123
17:00-17:15	**D**	1754.81	2507.54	0.700	0.00	1.31	2.29	33.00	(0.00)	0.079
17:15-17:30	**A**	993.12	1293.39	0.768	0.00	1.18	3.14	42.87	(0.00)	0.190
17:15-17:30	**B**	2259.29	2783.82	0.812	0.00	1.81	4.15	57.78	(0.00)	0.110
17:15-17:30	**C**	585.74	775.43	0.755	0.00	0.97	2.86	38.13	(0.00)	0.294
17:15-17:30	**D**	2149.19	2407.25	0.893	0.00	2.29	7.39	95.50	(0.00)	0.202
17:30-17:45	**A**	993.12	1283.48	0.774	0.00	3.14	3.30	48.63	(0.00)	0.205
17:30-17:45	**B**	2259.29	2780.78	0.812	0.00	4.15	4.24	63.08	(0.00)	0.115
17:30-17:45	**C**	585.74	770.96	0.760	0.00	2.86	3.02	44.35	(0.00)	0.320
17:30-17:45	**D**	2149.19	2403.27	0.894	0.00	7.39	7.88	115.27	(0.00)	0.230
17:45-18:00	**A**	810.88	1476.54	0.549	0.00	3.30	1.23	19.52	(0.00)	0.092
17:45-18:00	**B**	1844.71	2849.79	0.647	0.00	4.24	1.86	28.98	(0.00)	0.061
17:45-18:00	**C**	478.26	958.04	0.499	0.00	3.02	1.01	16.30	(0.00)	0.129
17:45-18:00	**D**	1754.81	2502.05	0.701	0.00	7.88	2.39	39.16	(0.00)	0.085
18:00-18:15	**A**	679.07	1634.94	0.415	0.00	1.23	0.72	11.00	(0.00)	0.063
18:00-18:15	**B**	1544.85	2905.23	0.532	0.00	1.86	1.14	17.52	(0.00)	0.044
18:00-18:15	**C**	400.52	1100.38	0.364	0.00	1.01	0.58	8.92	(0.00)	0.086
18:00-18:15	**D**	1469.57	2580.31	0.570	0.00	2.39	1.33	20.58	(0.00)	0.054

A57/B6041 Gateford Rd Roundabout
Sketch & Capacity Assessments



REV	DESCRIPTION	BY	CHK	APP	DATE

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Project: Bassetlaw Transport Study

Drawing Title: Possible Improvements at the A57/ B6041 Gateford Road Roundabout

Scale @ A3	Drawn	Date	Checked	Date	Approved	Date
1:1000	DBV	12/12/2012	RJH	12/12/2012	ASG	12/12/2012

Project No.	Office	Type	Drawing No.	Revision
A078085	35	18	019	-

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ARCADY 7

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File: N:\Projects\A078085 - Bassetlaw DC Modelling\calculations\Capacity Assessments\4. A57-B6041-Woodsetts Rnd\Oct 2012 \Existing\A57-B6041-Woodsetts Roundabout.arc7
Report generation date: 11/12/2012 17:00:31

» A1 - (Default Analysis Set) - D1 - 2026 Base + Com + Growth AM, AM
» A1 - (Default Analysis Set) - D2 - 2026 Base + Com + Growth PM, PM
» A1 - (Default Analysis Set) - D3 - 2026 Base + Com AM, AM
» A1 - (Default Analysis Set) - D4 - 2026 Base + Com PM, PM

File summary

File Description

Title	A57-B6041-Woodsetts Roundabout
Location	Bassetlaw
Date	29/10/2012
Status	Preliminary
Client	Bassetlaw DC
Jobnumber	A078085
Enumerator	Rob Holland
Description	Junction model obtained from previous project (A060969).
Results Upto Date	False

Analysis Options

RFC Threshold	Vehicle Length (m)	Do Queue Variations
0.85	5.75	

Sorting and Display

Show Arm Names	Arm Grouping	Sorting Direction	Sorting Type	Data Matrix Style	Time Style
	Order	Ascending	Numerical	By Destination	Absolute Time

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	min	-Min	perMin

A1 - (Default Analysis Set) - D1 - 2026 Base + Com + Growth AM, AM

Data Errors and Warnings

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

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
2026 Base + Com + Growth AM, AM	2026 Base + Com + Growth AM	AM			Yes			07:45	09:15	90	15	ONE HOUR

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	A57 (North)	
B	Woodsetts	
C	B6041 Gateford Rd	
D	A57 (South)	
E	Proposed Site Access	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.65	7.50	100.00	30.00	119.00	25.00	
B	2.80	7.50	21.50	20.00	97.00	21.00	
C	7.60	7.80	0.10	20.00	100.00	24.00	
D	7.50	7.50	0.00	50.00	118.00	23.00	
E	3.75	8.00	22.00	50.00	98.00	21.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.533	2274.367
B		((calculated))	((calculated))	0.463	1738.999
C		((calculated))	((calculated))	0.546	2359.104
D		((calculated))	((calculated))	0.554	2394.374
E		((calculated))	((calculated))	0.512	2049.075

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

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
			Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	1634.00	100.000	N/A
B	ONE HOUR	Yes	528.00	100.000	N/A
C	ONE HOUR	Yes	1520.00	100.000	N/A
D	ONE HOUR	Yes	1316.00	100.000	N/A
E	ONE HOUR	Yes	202.00	100.000	N/A

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	1230.16	1230.16	N/A	N/A
07:45-08:00	B	397.51	397.51	N/A	N/A
07:45-08:00	C	1144.34	1144.34	N/A	N/A
07:45-08:00	D	990.75	990.75	N/A	N/A
07:45-08:00	E	152.08	152.08	N/A	N/A
08:00-08:15	A	1468.93	1468.93	N/A	N/A
08:00-08:15	B	474.66	474.66	N/A	N/A
08:00-08:15	C	1366.45	1366.45	N/A	N/A

08:00-08:15	**D**	1183.06	1183.06	N/A	N/A
08:00-08:15	**E**	181.59	181.59	N/A	N/A
08:15-08:30	**A**	1799.07	1799.07	N/A	N/A
08:15-08:30	**B**	581.34	581.34	N/A	N/A
08:15-08:30	**C**	1673.55	1673.55	N/A	N/A
08:15-08:30	**D**	1448.94	1448.94	N/A	N/A
08:15-08:30	**E**	222.41	222.41	N/A	N/A
08:30-08:45	**A**	1799.07	1799.07	N/A	N/A
08:30-08:45	**B**	581.34	581.34	N/A	N/A
08:30-08:45	**C**	1673.55	1673.55	N/A	N/A
08:30-08:45	**D**	1448.94	1448.94	N/A	N/A
08:30-08:45	**E**	222.41	222.41	N/A	N/A
08:45-09:00	**A**	1468.93	1468.93	N/A	N/A
08:45-09:00	**B**	474.66	474.66	N/A	N/A
08:45-09:00	**C**	1366.45	1366.45	N/A	N/A
08:45-09:00	**D**	1183.06	1183.06	N/A	N/A
08:45-09:00	**E**	181.59	181.59	N/A	N/A
09:00-09:15	**A**	1230.16	1230.16	N/A	N/A
09:00-09:15	**B**	397.51	397.51	N/A	N/A
09:00-09:15	**C**	1144.34	1144.34	N/A	N/A
09:00-09:15	**D**	990.75	990.75	N/A	N/A
09:00-09:15	**E**	152.08	152.08	N/A	N/A

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Roundabout 1 (for whole period)

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	0.00	15.00	353.00	1187.00	79.00
	B	71.00	0.00	148.00	309.00	0.00
	C	572.00	66.00	0.00	753.00	129.00
	D	654.00	205.00	295.00	0.00	162.00
	E	47.00	0.00	50.00	105.00	0.00

Turning Proportions (Veh) - Roundabout 1 (for whole period)

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	0.00	0.01	0.22	0.73	0.05
	B	0.13	0.00	0.28	0.59	0.00
	C	0.38	0.04	0.00	0.50	0.08
	D	0.50	0.16	0.22	0.00	0.12
	E	0.23	0.00	0.25	0.52	0.00

Vehicle Mix

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

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00

	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Total Demand (Veh/hr)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.97	0.64	18.23	E	1499.39	2249.08	576.88	0.26	6.41	576.92	0.26	0.533	2274.367
B	0.84	0.52	4.70	D	484.50	726.75	175.35	0.24	1.95	175.36	0.24	0.463	1738.999
C	1.27	6.94	185.29	F	1394.78	2092.17	7137.94	3.41	79.31	7169.59	3.43	0.546	2359.104
D	0.75	0.12	2.93	A	1207.58	1811.38	163.99	0.09	1.82	164.01	0.09	0.554	2394.374
E	0.21	0.07	0.26	A	185.36	278.04	17.21	0.06	0.19	17.21	0.06	0.512	2049.075

Main Results

Main results: (07:45-08:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1230.16	307.54	1223.74	1006.10	540.57	0.00	1986.22	1496.94	0.619	0.00	1.60
B	397.51	99.38	394.98	214.27	1550.04	0.00	1021.13	543.49	0.389	0.00	0.63
C	1144.34	286.08	1135.39	633.83	1311.19	0.00	1642.87	1268.05	0.697	0.00	2.24
D	990.75	247.69	986.91	1761.37	685.20	0.00	2014.78	1959.31	0.492	0.00	0.96
E	152.08	38.02	151.56	277.01	1395.10	0.00	1334.38	858.79	0.114	0.00	0.13

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1468.93	367.23	1463.03	1198.11	646.14	0.00	1929.94	1496.94	0.761	1.60	3.08
B	474.66	118.67	472.60	255.70	1853.48	0.00	880.60	543.49	0.539	0.63	1.15
C	1366.45	341.61	1343.46	758.12	1567.96	0.00	1502.61	1268.05	0.909	2.24	7.98
D	1183.06	295.76	1180.76	2099.22	812.20	0.00	1944.42	1959.31	0.608	0.96	1.53
E	181.59	45.40	181.39	330.10	1662.86	0.00	1197.21	858.79	0.152	0.13	0.18

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1799.07	449.77	1752.57	1344.35	776.39	0.00	1860.51	1496.94	0.967	3.08	14.70
B	581.34	145.33	569.81	298.49	2230.48	0.00	706.00	543.49	0.823	1.15	4.03
C	1673.55	418.39	1325.18	916.89	1883.40	0.00	1330.30	1268.05	1.258	7.98	95.08
D	1448.94	362.24	1443.51	2378.53	830.05	0.00	1934.54	1959.31	0.749	1.53	2.89
E	222.41	55.60	222.08	374.89	1898.66	0.00	1076.41	858.79	0.207	0.18	0.26

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1799.07	449.77	1784.96	1343.55	778.11	0.00	1859.60	1496.94	0.967	14.70	18.23
B	581.34	145.33	578.64	299.07	2264.00	0.00	690.47	543.49	0.842	4.03	4.70
C	1673.55	418.39	1312.70	927.63	1915.02	0.00	1313.03	1268.05	1.275	95.08	185.29
D	1448.94	362.24	1448.80	2401.21	826.51	0.00	1936.50	1959.31	0.748	2.89	2.93
E	222.41	55.60	222.40	376.05	1899.25	0.00	1076.11	858.79	0.207	0.26	0.26

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1468.93	367.23	1528.48	1248.14	654.42	0.00	1925.53	1496.94	0.763	18.23	3.34
B	474.66	118.67	488.28	262.54	1920.36	0.00	849.62	543.49	0.559	4.70	1.30
C	1366.45	341.61	1460.72	778.44	1630.20	0.00	1468.61	1268.05	0.930	185.29	161.72
D	1183.06	295.76	1188.16	2214.28	876.64	0.00	1908.72	1959.31	0.620	2.93	1.65
E	181.59	45.40	181.89	344.13	1720.67	0.00	1167.59	858.79	0.156	0.26	0.19

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1230.16	307.54	1236.83	1194.18	564.61	0.00	1973.40	1496.94	0.623	3.34	1.68
B	397.51	99.38	400.09	236.58	1564.86	0.00	1014.27	543.49	0.392	1.30	0.65
C	1144.34	286.08	1625.08	639.59	1325.36	0.00	1635.13	1268.05	0.700	161.72	41.54
D	990.75	247.69	992.85	2016.81	933.62	0.00	1877.16	1959.31	0.528	1.65	1.13
E	152.08	38.02	152.25	319.94	1606.54	0.00	1226.06	858.79	0.124	0.19	0.14

Queueing Delay Results

Queueing Delay results: (07:45-08:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	23.05	1.54	0.078	A	A
B	9.12	0.61	0.095	A	A
C	31.40	2.09	0.116	A	A
D	14.00	0.93	0.058	A	A
E	1.89	0.13	0.051	A	A

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	43.27	2.88	0.127	A	A
B	16.39	1.09	0.146	A	A
C	97.84	6.52	0.337	C	C
D	22.26	1.48	0.078	A	A
E	2.63	0.18	0.059	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	162.97	10.86	0.437	D	C
B	51.08	3.41	0.411	C	C
C	778.82	51.92	2.484	F	F

D	40.82	2.72	0.121	A	A
E	3.81	0.25	0.070	A	A

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	249.91	16.66	0.640	E	D
B	66.71	4.45	0.516	D	C
C	2102.88	140.19	6.304	F	F
D	43.71	2.91	0.123	A	A
E	3.89	0.26	0.070	A	A

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	71.43	4.76	0.171	B	B
B	21.92	1.46	0.172	B	B
C	2602.58	173.51	6.945	F	F
D	25.81	1.72	0.084	A	A
E	2.82	0.19	0.061	A	A

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	26.24	1.75	0.082	A	A
B	10.12	0.67	0.098	A	A
C	1524.42	101.63	3.773	F	F
D	17.39	1.16	0.068	A	A
E	2.16	0.14	0.056	A	A

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.65	7.50	100.00	30.00	119.00	25.00		0.533	2274.367
B	2.80	7.50	21.50	20.00	97.00	21.00		0.463	1738.999
C	7.60	7.80	0.10	20.00	100.00	24.00		0.546	2359.104
D	7.50	7.50	0.00	50.00	118.00	23.00		0.554	2394.374
E	3.75	8.00	22.00	50.00	98.00	21.00		0.512	2049.075

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (min)
07:45-08:00	A	1230.16	1986.22	0.619	0.00	0.00	1.60	23.05	(0.00)	0.078
07:45-08:00	B	397.51	1021.13	0.389	0.00	0.00	0.63	9.12	(0.00)	0.095
07:45-08:00	C	1144.34	1642.87	0.697	0.00	0.00	2.24	31.40	(0.00)	0.116
07:45-08:00	D	990.75	2014.78	0.492	0.00	0.00	0.96	14.00	(0.00)	0.058
07:45-08:00	E	152.08	1334.38	0.114	0.00	0.00	0.13	1.89	(0.00)	0.051
08:00-08:15	A	1468.93	1929.94	0.761	0.00	1.60	3.08	43.27	(0.00)	0.127
08:00-08:15	B	474.66	880.60	0.539	0.00	0.63	1.15	16.39	(0.00)	0.146

08:00-08:15	**C**	1366.45	1502.61	0.909	0.00	2.24	7.98	97.84	(0.00)	0.337
08:00-08:15	**D**	1183.06	1944.42	0.608	0.00	0.96	1.53	22.26	(0.00)	0.078
08:00-08:15	**E**	181.59	1197.21	0.152	0.00	0.13	0.18	2.63	(0.00)	0.059
08:15-08:30	**A**	1799.07	1860.51	0.967	0.00	3.08	14.70	162.97	(0.00)	0.437
08:15-08:30	**B**	581.34	706.00	0.823	0.00	1.15	4.03	51.08	(0.00)	0.411
08:15-08:30	**C**	1673.55	1330.30	1.258	0.00	7.98	95.08	778.82	(0.00)	2.484
08:15-08:30	**D**	1448.94	1934.54	0.749	0.00	1.53	2.89	40.82	(0.00)	0.121
08:15-08:30	**E**	222.41	1076.41	0.207	0.00	0.18	0.26	3.81	(0.00)	0.070
08:30-08:45	**A**	1799.07	1859.60	0.967	0.00	14.70	18.23	249.91	(0.00)	0.640
08:30-08:45	**B**	581.34	690.47	0.842	0.00	4.03	4.70	66.71	(0.00)	0.516
08:30-08:45	**C**	1673.55	1313.03	1.275	0.00	95.08	185.29	2102.88	(0.00)	6.304
08:30-08:45	**D**	1448.94	1936.50	0.748	0.00	2.89	2.93	43.71	(0.00)	0.123
08:30-08:45	**E**	222.41	1076.11	0.207	0.00	0.26	0.26	3.89	(0.00)	0.070
08:45-09:00	**A**	1468.93	1925.53	0.763	0.00	18.23	3.34	71.43	(0.00)	0.171
08:45-09:00	**B**	474.66	849.62	0.559	0.00	4.70	1.30	21.92	(0.00)	0.172
08:45-09:00	**C**	1366.45	1468.61	0.930	0.00	185.29	161.72	2602.58	(0.00)	6.945
08:45-09:00	**D**	1183.06	1908.72	0.620	0.00	2.93	1.65	25.81	(0.00)	0.084
08:45-09:00	**E**	181.59	1167.59	0.156	0.00	0.26	0.19	2.82	(0.00)	0.061
09:00-09:15	**A**	1230.16	1973.40	0.623	0.00	3.34	1.68	26.24	(0.00)	0.082
09:00-09:15	**B**	397.51	1014.27	0.392	0.00	1.30	0.65	10.12	(0.00)	0.098
09:00-09:15	**C**	1144.34	1635.13	0.700	0.00	161.72	41.54	1524.42	(0.00)	3.773
09:00-09:15	**D**	990.75	1877.16	0.528	0.00	1.65	1.13	17.39	(0.00)	0.068
09:00-09:15	**E**	152.08	1226.06	0.124	0.00	0.19	0.14	2.16	(0.00)	0.056

A1 - (Default Analysis Set) - D2 - 2026 Base + Com + Growth PM, PM

Data Errors and Warnings

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

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
2026 Base + Com + Growth PM, PM	2026 Base + Com + Growth PM	PM			Yes			16:45	18:15	90	15	ONE HOUR

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay

1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	A57 (North)	
B	Woodsetts	
C	B6041 Gateford Rd	
D	A57 (South)	
E	Proposed Site Access	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.65	7.50	100.00	30.00	119.00	25.00	
B	2.80	7.50	21.50	20.00	97.00	21.00	
C	7.60	7.80	0.10	20.00	100.00	24.00	
D	7.50	7.50	0.00	50.00	118.00	23.00	
E	3.75	8.00	22.00	50.00	98.00	21.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.533	2274.367
B		((calculated))	((calculated))	0.463	1738.999
C		((calculated))	((calculated))	0.546	2359.104
D		((calculated))	((calculated))	0.554	2394.374
E		((calculated))	((calculated))	0.512	2049.075

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

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
			Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	1084.00	100.000	N/A
B	ONE HOUR	Yes	430.00	100.000	N/A
C	ONE HOUR	Yes	934.00	100.000	N/A
D	ONE HOUR	Yes	2228.00	100.000	N/A
E	ONE HOUR	Yes	422.00	100.000	N/A

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
16:45-17:00	A	816.09	816.09	N/A	N/A
16:45-17:00	B	323.73	323.73	N/A	N/A
16:45-17:00	C	703.16	703.16	N/A	N/A
16:45-17:00	D	1677.36	1677.36	N/A	N/A
16:45-17:00	E	317.70	317.70	N/A	N/A
17:00-17:15	A	974.49	974.49	N/A	N/A
17:00-17:15	B	386.56	386.56	N/A	N/A
17:00-17:15	C	839.65	839.65	N/A	N/A
17:00-17:15	D	2002.93	2002.93	N/A	N/A
17:00-17:15	E	379.37	379.37	N/A	N/A
17:15-17:30	A	1193.51	1193.51	N/A	N/A
17:15-17:30	B	473.44	473.44	N/A	N/A
17:15-17:30	C	1028.35	1028.35	N/A	N/A
17:15-17:30	D	2453.07	2453.07	N/A	N/A
17:15-17:30	E	464.63	464.63	N/A	N/A
17:30-17:45	A	1193.51	1193.51	N/A	N/A
17:30-17:45	B	473.44	473.44	N/A	N/A
17:30-17:45	C	1028.35	1028.35	N/A	N/A
17:30-17:45	D	2453.07	2453.07	N/A	N/A
17:30-17:45	E	464.63	464.63	N/A	N/A
17:45-18:00	A	974.49	974.49	N/A	N/A
17:45-18:00	B	386.56	386.56	N/A	N/A
17:45-18:00	C	839.65	839.65	N/A	N/A
17:45-18:00	D	2002.93	2002.93	N/A	N/A
17:45-18:00	E	379.37	379.37	N/A	N/A
18:00-18:15	A	816.09	816.09	N/A	N/A
18:00-18:15	B	323.73	323.73	N/A	N/A

18:00-18:15	**C**	703.16	703.16	N/A	N/A
18:00-18:15	**D**	1677.36	1677.36	N/A	N/A
18:00-18:15	**E**	317.70	317.70	N/A	N/A

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Roundabout 1 (for whole period)

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	0.00	30.00	407.00	617.00	30.00
	B	33.00	0.00	171.00	226.00	0.00
	C	396.00	182.00	0.00	326.00	30.00
	D	1192.00	314.00	653.00	0.00	69.00
	E	75.00	0.00	189.00	158.00	0.00

Turning Proportions (Veh) - Roundabout 1 (for whole period)

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	0.00	0.03	0.38	0.57	0.03
	B	0.08	0.00	0.40	0.53	0.00
	C	0.42	0.19	0.00	0.35	0.03
	D	0.54	0.14	0.29	0.00	0.03
	E	0.18	0.00	0.45	0.37	0.00

Vehicle Mix

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

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Total Demand (Veh/hr)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)

A	0.79	0.19	3.72	B	994.70	1492.05	185.56	0.12	2.06	185.58	0.12	0.533	2274.367
B	0.63	0.21	1.64	B	394.58	591.86	84.78	0.14	0.94	84.79	0.14	0.463	1738.999
C	0.60	0.09	1.48	A	857.05	1285.58	85.81	0.07	0.95	85.82	0.07	0.546	2359.104
D	1.24	7.11	250.81	F	2044.45	3066.68	10693.94	3.49	118.82	10940.69	3.57	0.554	2394.374
E	0.65	0.24	1.78	B	387.23	580.85	98.03	0.17	1.09	98.05	0.17	0.512	2049.075

Main Results

Main results: (16:45-17:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	816.09	204.02	812.34	1267.53	1117.90	0.00	1678.47	1417.12	0.486	0.00	0.94
B	323.73	80.93	321.90	393.38	1536.86	0.00	1027.23	613.51	0.315	0.00	0.46
C	703.16	175.79	700.87	1061.77	796.99	0.00	1923.75	1563.44	0.366	0.00	0.57
D	1677.36	419.34	1662.67	994.44	503.43	0.00	2115.48	1782.74	0.793	0.00	3.67
E	317.70	79.43	315.83	96.49	2069.61	0.00	988.83	644.30	0.321	0.00	0.47

Main results: (17:00-17:15)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	974.49	243.62	971.81	1497.09	1321.59	0.00	1569.89	1417.12	0.621	0.94	1.61
B	386.56	96.64	385.37	465.54	1827.86	0.00	892.46	613.50	0.433	0.46	0.75
C	839.65	209.91	838.60	1259.67	953.57	0.00	1838.22	1563.44	0.457	0.57	0.83
D	2002.93	500.73	1952.94	1189.80	602.37	0.00	2060.67	1782.74	0.972	3.67	16.17
E	379.37	94.84	377.69	114.31	2441.00	0.00	798.58	644.30	0.475	0.47	0.89

Main results: (17:15-17:30)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1193.51	298.38	1185.54	1613.77	1439.70	0.00	1506.93	1417.12	0.792	1.61	3.60
B	473.44	118.36	470.08	512.14	2113.10	0.00	760.36	613.50	0.623	0.75	1.59
C	1028.35	257.09	1025.86	1419.75	1163.43	0.00	1723.58	1563.44	0.597	0.83	1.46
D	2453.07	613.27	1982.73	1452.61	736.68	0.00	1986.26	1782.74	1.235	16.17	133.75
E	464.63	116.16	461.23	127.16	2592.25	0.00	721.09	644.30	0.644	0.89	1.74

Main results: (17:30-17:45)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1193.51	298.38	1193.05	1616.75	1443.74	0.00	1504.78	1417.12	0.793	3.60	3.72
B	473.44	118.36	473.24	513.12	2123.67	0.00	755.46	613.50	0.627	1.59	1.64
C	1028.35	257.09	1028.29	1425.89	1171.03	0.00	1719.43	1563.44	0.598	1.46	1.48
D	2453.07	613.27	1984.84	1460.60	738.71	0.00	1985.13	1782.74	1.236	133.75	250.81
E	464.63	116.16	464.45	127.52	2596.04	0.00	719.15	644.30	0.646	1.74	1.78

Main results: (17:45-18:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	974.49	243.62	982.40	1552.15	1368.58	0.00	1544.85	1417.12	0.631	3.72	1.74
B	386.56	96.64	389.90	480.32	1870.66	0.00	872.64	613.50	0.443	1.64	0.81
C	839.65	209.91	842.14	1296.21	964.35	0.00	1832.33	1563.44	0.458	1.48	0.85
D	2002.93	500.73	2050.86	1201.17	605.31	0.00	2059.04	1782.74	0.973	250.81	238.83
E	379.37	94.84	382.31	117.75	2538.42	0.00	748.67	644.30	0.507	1.78	1.05

Main results: (18:00-18:15)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	816.09	204.02	818.70	1506.54	1313.28	0.00	1574.32	1417.12	0.518	1.74	1.09
B	323.73	80.93	324.91	456.58	1675.39	0.00	963.07	613.50	0.336	0.81	0.51
C	703.16	175.79	704.25	1196.50	803.80	0.00	1920.03	1563.44	0.366	0.85	0.58
D	1677.36	419.34	2105.22	1002.02	506.03	0.00	2114.04	1782.74	0.793	238.83	131.86
E	317.70	79.43	319.04	110.48	2500.78	0.00	767.95	644.30	0.414	1.05	0.72

Queueing Delay Results

Queueing Delay results: (16:45-17:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	13.62	0.91	0.069	A	A
B	6.64	0.44	0.085	A	A
C	8.41	0.56	0.049	A	A
D	50.34	3.36	0.129	A	A
E	6.81	0.45	0.089	A	A

Queueing Delay results: (17:00-17:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	23.17	1.54	0.100	A	A
B	10.92	0.73	0.118	A	A
C	12.26	0.82	0.060	A	A
D	178.59	11.91	0.432	D	C
E	12.77	0.85	0.142	A	A

Queueing Delay results: (17:15-17:30)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	49.29	3.29	0.182	B	B
B	22.31	1.49	0.204	B	B
C	21.11	1.41	0.086	A	A
D	1128.15	75.21	2.377	F	F
E	24.24	1.62	0.228	B	B

Queueing Delay results: (17:30-17:45)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	55.08	3.67	0.192	B	B
B	24.37	1.62	0.212	B	B
C	22.04	1.47	0.087	A	A
D	2884.36	192.29	5.823	F	F
E	26.50	1.77	0.235	B	B

Queueing Delay results: (17:45-18:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	27.55	1.84	0.108	A	A
B	12.65	0.84	0.125	A	A
C	13.11	0.87	0.061	A	A
D	3672.31	244.82	7.111	F	F
E	16.56	1.10	0.165	A	A

Queueing Delay results: (18:00-18:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	16.84	1.12	0.080	A	A
B	7.89	0.53	0.094	A	A
C	8.87	0.59	0.049	A	A
D	2780.19	185.35	5.293	F	F
E	11.14	0.74	0.134	A	A

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.65	7.50	100.00	30.00	119.00	25.00		0.533	2274.367
B	2.80	7.50	21.50	20.00	97.00	21.00		0.463	1738.999
C	7.60	7.80	0.10	20.00	100.00	24.00		0.546	2359.104
D	7.50	7.50	0.00	50.00	118.00	23.00		0.554	2394.374
E	3.75	8.00	22.00	50.00	98.00	21.00		0.512	2049.075

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (min)
16:45-17:00	A	816.09	1678.47	0.486	0.00	0.00	0.94	13.62	(0.00)	0.069
16:45-17:00	B	323.73	1027.23	0.315	0.00	0.00	0.46	6.64	(0.00)	0.085
16:45-17:00	C	703.16	1923.75	0.366	0.00	0.00	0.57	8.41	(0.00)	0.049
16:45-17:00	D	1677.36	2115.48	0.793	0.00	0.00	3.67	50.34	(0.00)	0.129
16:45-17:00	E	317.70	988.83	0.321	0.00	0.00	0.47	6.81	(0.00)	0.089
17:00-17:15	A	974.49	1569.89	0.621	0.00	0.94	1.61	23.17	(0.00)	0.100
17:00-17:15	B	386.56	892.46	0.433	0.00	0.46	0.75	10.92	(0.00)	0.118
17:00-17:15	C	839.65	1838.22	0.457	0.00	0.57	0.83	12.26	(0.00)	0.060
17:00-17:15	D	2002.93	2060.67	0.972	0.00	3.67	16.17	178.59	(0.00)	0.432
17:00-17:15	E	379.37	798.58	0.475	0.00	0.47	0.89	12.77	(0.00)	0.142
17:15-17:30	A	1193.51	1506.93	0.792	0.00	1.61	3.60	49.29	(0.00)	0.182
17:15-17:30	B	473.44	760.36	0.623	0.00	0.75	1.59	22.31	(0.00)	0.204
17:15-17:30	C	1028.35	1723.58	0.597	0.00	0.83	1.46	21.11	(0.00)	0.086
17:15-17:30	D	2453.07	1986.26	1.235	0.00	16.17	133.75	1128.15	(0.00)	2.377
17:15-17:30	E	464.63	721.09	0.644	0.00	0.89	1.74	24.24	(0.00)	0.228
17:30-17:45	A	1193.51	1504.78	0.793	0.00	3.60	3.72	55.08	(0.00)	0.192
17:30-17:45	B	473.44	755.46	0.627	0.00	1.59	1.64	24.37	(0.00)	0.212
17:30-17:45	C	1028.35	1719.43	0.598	0.00	1.46	1.48	22.04	(0.00)	0.087
17:30-17:45	D	2453.07	1985.13	1.236	0.00	133.75	250.81	2884.36	(0.00)	5.823
17:30-17:45	E	464.63	719.15	0.646	0.00	1.74	1.78	26.50	(0.00)	0.235
17:45-18:00	A	974.49	1544.85	0.631	0.00	3.72	1.74	27.55	(0.00)	0.108
17:45-18:00	B	386.56	872.64	0.443	0.00	1.64	0.81	12.65	(0.00)	0.125
17:45-18:00	C	839.65	1832.33	0.458	0.00	1.48	0.85	13.11	(0.00)	0.061
17:45-18:00	D	2002.93	2059.04	0.973	0.00	250.81	238.83	3672.31	(0.00)	7.111
17:45-18:00	E	379.37	748.67	0.507	0.00	1.78	1.05	16.56	(0.00)	0.165

18:00-18:15	**A**	816.09	1574.32	0.518	0.00	1.74	1.09	16.84	(0.00)	0.080
18:00-18:15	**B**	323.73	963.07	0.336	0.00	0.81	0.51	7.89	(0.00)	0.094
18:00-18:15	**C**	703.16	1920.03	0.366	0.00	0.85	0.58	8.87	(0.00)	0.049
18:00-18:15	**D**	1677.36	2114.04	0.793	0.00	238.83	131.86	2780.19	(0.00)	5.293
18:00-18:15	**E**	317.70	767.95	0.414	0.00	1.05	0.72	11.14	(0.00)	0.134

A1 - (Default Analysis Set) - D3 - 2026 Base + Com AM, AM

Data Errors and Warnings

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

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
2026 Base + Com AM, AM	2026 Base + Com AM	AM			Yes			07:45	09:15	90	15	ONE HOUR

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	A57 (North)	
B	Woodsetts	
C	B6041 Gateford Rd	
D	A57 (South)	
E	Proposed Site Access	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.65	7.50	100.00	30.00	119.00	25.00	
B	2.80	7.50	21.50	20.00	97.00	21.00	
C	7.60	7.80	0.10	20.00	100.00	24.00	
D	7.50	7.50	0.00	50.00	118.00	23.00	
E	3.75	8.00	22.00	50.00	98.00	21.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.533	2274.367
B		((calculated))	((calculated))	0.463	1738.999
C		((calculated))	((calculated))	0.546	2359.104
D		((calculated))	((calculated))	0.554	2394.374
E		((calculated))	((calculated))	0.512	2049.075

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

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
			Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	519.00	100.000	N/A
B	ONE HOUR	Yes	0.00	100.000	N/A
C	ONE HOUR	Yes	205.00	100.000	N/A
D	ONE HOUR	Yes	196.00	100.000	N/A

E	ONE HOUR	Yes	0.00	100.000	N/A

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	390.73	390.73	N/A	N/A
07:45-08:00	B	0.00	0.00	N/A	N/A
07:45-08:00	C	154.33	154.33	N/A	N/A
07:45-08:00	D	147.56	147.56	N/A	N/A
07:45-08:00	E	0.00	0.00	N/A	N/A
08:00-08:15	A	466.57	466.57	N/A	N/A
08:00-08:15	B	0.00	0.00	N/A	N/A
08:00-08:15	C	184.29	184.29	N/A	N/A
08:00-08:15	D	176.20	176.20	N/A	N/A
08:00-08:15	E	0.00	0.00	N/A	N/A
08:15-08:30	A	571.43	571.43	N/A	N/A
08:15-08:30	B	0.00	0.00	N/A	N/A
08:15-08:30	C	225.71	225.71	N/A	N/A
08:15-08:30	D	215.80	215.80	N/A	N/A
08:15-08:30	E	0.00	0.00	N/A	N/A
08:30-08:45	A	571.43	571.43	N/A	N/A
08:30-08:45	B	0.00	0.00	N/A	N/A
08:30-08:45	C	225.71	225.71	N/A	N/A
08:30-08:45	D	215.80	215.80	N/A	N/A
08:30-08:45	E	0.00	0.00	N/A	N/A
08:45-09:00	A	466.57	466.57	N/A	N/A
08:45-09:00	B	0.00	0.00	N/A	N/A
08:45-09:00	C	184.29	184.29	N/A	N/A
08:45-09:00	D	176.20	176.20	N/A	N/A
08:45-09:00	E	0.00	0.00	N/A	N/A
09:00-09:15	A	390.73	390.73	N/A	N/A
09:00-09:15	B	0.00	0.00	N/A	N/A
09:00-09:15	C	154.33	154.33	N/A	N/A
09:00-09:15	D	147.56	147.56	N/A	N/A
09:00-09:15	E	0.00	0.00	N/A	N/A

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	0.00	163.00	356.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	55.00	0.00	0.00	150.00	0.00
	D	139.00	0.00	57.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Turning Proportions (Veh) - Roundabout 1 (for whole period)

	To

		A	B	C	D	E
From	A	0.00	0.00	0.31	0.69	0.00
	B	0.20	0.20	0.20	0.20	0.20
	C	0.27	0.00	0.00	0.73	0.00
	D	0.71	0.00	0.29	0.00	0.00
	E	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

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

		To				
		A	B	C	D	E
From	A	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Total Demand (Veh/hr)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.26	0.04	0.34	A	476.24	714.37	24.34	0.03	0.27	24.34	0.03	0.533	2274.367
B	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.463	1738.999
C	0.11	0.03	0.12	A	188.11	282.17	8.52	0.03	0.09	8.52	0.03	0.546	2359.104
D	0.09	0.03	0.10	A	179.85	269.78	7.40	0.03	0.08	7.40	0.03	0.554	2394.374
E	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.512	2049.075

Main Results

Main results: (07:45-08:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	390.73	97.68	389.89	145.79	42.84	0.00	2251.53	1592.87	0.174	0.00	0.21
B	0.00	0.00	0.00	0.00	432.73	0.00	1538.59	528.94	0.000	0.00	0.00
C	154.33	38.58	154.04	165.29	267.44	0.00	2213.01	1364.22	0.070	0.00	0.07
D	147.56	36.89	147.29	380.15	41.33	0.00	2371.48	1931.16	0.062	0.00	0.07
E	0.00	0.00	0.00	0.00	188.62	0.00	1952.45	763.87	0.000	0.00	0.00

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	466.57	116.64	466.36	174.34	51.23	0.00	2247.06	1592.87	0.208	0.21	0.26
B	0.00	0.00	0.00	0.00	517.59	0.00	1499.29	528.94	0.000	0.00	0.00
C	184.29	46.07	184.22	197.69	319.89	0.00	2184.36	1364.22	0.084	0.07	0.09
D	176.20	44.05	176.14	454.69	49.43	0.00	2366.99	1931.16	0.074	0.07	0.08
E	0.00	0.00	0.00	0.00	225.57	0.00	1933.52	763.87	0.000	0.00	0.00

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	571.43	142.86	571.11	213.51	62.73	0.00	2240.93	1592.87	0.255	0.26	0.34
B	0.00	0.00	0.00	0.00	633.84	0.00	1445.45	528.94	0.000	0.00	0.00
C	225.71	56.43	225.61	242.10	391.74	0.00	2145.11	1364.22	0.105	0.09	0.12
D	215.80	53.95	215.72	556.82	60.53	0.00	2360.84	1931.16	0.091	0.08	0.10
E	0.00	0.00	0.00	0.00	276.25	0.00	1907.56	763.87	0.000	0.00	0.00

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	571.43	142.86	571.43	213.60	62.76	0.00	2240.91	1592.87	0.255	0.34	0.34
B	0.00	0.00	0.00	0.00	634.19	0.00	1445.29	528.94	0.000	0.00	0.00
C	225.71	56.43	225.71	242.22	391.96	0.00	2144.99	1364.22	0.105	0.12	0.12
D	215.80	53.95	215.80	557.11	60.56	0.00	2360.83	1931.16	0.091	0.10	0.10
E	0.00	0.00	0.00	0.00	276.36	0.00	1907.50	763.87	0.000	0.00	0.00

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	466.57	116.64	466.89	174.49	51.27	0.00	2247.04	1592.87	0.208	0.34	0.26
B	0.00	0.00	0.00	0.00	518.15	0.00	1499.03	528.94	0.000	0.00	0.00
C	184.29	46.07	184.39	197.90	320.25	0.00	2184.17	1364.22	0.084	0.12	0.09
D	176.20	44.05	176.28	455.17	49.47	0.00	2366.97	1931.16	0.074	0.10	0.08
E	0.00	0.00	0.00	0.00	225.75	0.00	1933.43	763.87	0.000	0.00	0.00

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	390.73	97.68	390.94	146.11	42.93	0.00	2251.48	1592.87	0.174	0.26	0.21
B	0.00	0.00	0.00	0.00	433.87	0.00	1538.06	528.94	0.000	0.00	0.00
C	154.33	38.58	154.40	165.71	268.16	0.00	2212.62	1364.22	0.070	0.09	0.08
D	147.56	36.89	147.62	381.14	41.43	0.00	2371.42	1931.16	0.062	0.08	0.07
E	0.00	0.00	0.00	0.00	189.04	0.00	1952.23	763.87	0.000	0.00	0.00

Queueing Delay Results

Queueing Delay results: (07:45-08:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	3.10	0.21	0.032	A	A
B	0.00	0.00	0.000	A	A
C	1.11	0.07	0.029	A	A
D	0.98	0.07	0.027	A	A

E	0.00	0.00	0.000	A	A

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	3.88	0.26	0.034	A	A
B	0.00	0.00	0.000	A	A
C	1.37	0.09	0.030	A	A
D	1.20	0.08	0.027	A	A
E	0.00	0.00	0.000	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	5.06	0.34	0.036	A	A
B	0.00	0.00	0.000	A	A
C	1.75	0.12	0.031	A	A
D	1.49	0.10	0.028	A	A
E	0.00	0.00	0.000	A	A

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	5.12	0.34	0.036	A	A
B	0.00	0.00	0.000	A	A
C	1.76	0.12	0.031	A	A
D	1.51	0.10	0.028	A	A
E	0.00	0.00	0.000	A	A

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	3.98	0.27	0.034	A	A
B	0.00	0.00	0.000	A	A
C	1.40	0.09	0.030	A	A
D	1.22	0.08	0.027	A	A
E	0.00	0.00	0.000	A	A

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	3.19	0.21	0.032	A	A
B	0.00	0.00	0.000	A	A
C	1.14	0.08	0.029	A	A
D	1.00	0.07	0.027	A	A
E	0.00	0.00	0.000	A	A

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.65	7.50	100.00	30.00	119.00	25.00		0.533	2274.367
B	2.80	7.50	21.50	20.00	97.00	21.00		0.463	1738.999
C	7.60	7.80	0.10	20.00	100.00	24.00		0.546	2359.104

D	7.50	7.50	0.00	50.00	118.00	23.00		0.554	2394.374
E	3.75	8.00	22.00	50.00	98.00	21.00		0.512	2049.075

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (min)
07:45-08:00	**A**	390.73	2251.53	0.174	0.00	0.00	0.21	3.10	(0.00)	0.032
07:45-08:00	**B**	0.00	1538.59	0.000	0.00	0.00	0.00	0.00	(0.00)	0.000
07:45-08:00	**C**	154.33	2213.01	0.070	0.00	0.00	0.07	1.11	(0.00)	0.029
07:45-08:00	**D**	147.56	2371.48	0.062	0.00	0.00	0.07	0.98	(0.00)	0.027
07:45-08:00	**E**	0.00	1952.45	0.000	0.00	0.00	0.00	0.00	(0.00)	0.000
08:00-08:15	**A**	466.57	2247.06	0.208	0.00	0.21	0.26	3.88	(0.00)	0.034
08:00-08:15	**B**	0.00	1499.29	0.000	0.00	0.00	0.00	0.00	(0.00)	0.000
08:00-08:15	**C**	184.29	2184.36	0.084	0.00	0.07	0.09	1.37	(0.00)	0.030
08:00-08:15	**D**	176.20	2366.99	0.074	0.00	0.07	0.08	1.20	(0.00)	0.027
08:00-08:15	**E**	0.00	1933.52	0.000	0.00	0.00	0.00	0.00	(0.00)	0.000
08:15-08:30	**A**	571.43	2240.93	0.255	0.00	0.26	0.34	5.06	(0.00)	0.036
08:15-08:30	**B**	0.00	1445.45	0.000	0.00	0.00	0.00	0.00	(0.00)	0.000
08:15-08:30	**C**	225.71	2145.11	0.105	0.00	0.09	0.12	1.75	(0.00)	0.031
08:15-08:30	**D**	215.80	2360.84	0.091	0.00	0.08	0.10	1.49	(0.00)	0.028
08:15-08:30	**E**	0.00	1907.56	0.000	0.00	0.00	0.00	0.00	(0.00)	0.000
08:30-08:45	**A**	571.43	2240.91	0.255	0.00	0.34	0.34	5.12	(0.00)	0.036
08:30-08:45	**B**	0.00	1445.29	0.000	0.00	0.00	0.00	0.00	(0.00)	0.000
08:30-08:45	**C**	225.71	2144.99	0.105	0.00	0.12	0.12	1.76	(0.00)	0.031
08:30-08:45	**D**	215.80	2360.83	0.091	0.00	0.10	0.10	1.51	(0.00)	0.028
08:30-08:45	**E**	0.00	1907.50	0.000	0.00	0.00	0.00	0.00	(0.00)	0.000
08:45-09:00	**A**	466.57	2247.04	0.208	0.00	0.34	0.26	3.98	(0.00)	0.034
08:45-09:00	**B**	0.00	1499.03	0.000	0.00	0.00	0.00	0.00	(0.00)	0.000
08:45-09:00	**C**	184.29	2184.17	0.084	0.00	0.12	0.09	1.40	(0.00)	0.030
08:45-09:00	**D**	176.20	2366.97	0.074	0.00	0.10	0.08	1.22	(0.00)	0.027
08:45-09:00	**E**	0.00	1933.43	0.000	0.00	0.00	0.00	0.00	(0.00)	0.000
09:00-09:15	**A**	390.73	2251.48	0.174	0.00	0.26	0.21	3.19	(0.00)	0.032
09:00-09:15	**B**	0.00	1538.06	0.000	0.00	0.00	0.00	0.00	(0.00)	0.000
09:00-09:15	**C**	154.33	2212.62	0.070	0.00	0.09	0.08	1.14	(0.00)	0.029
09:00-09:15	**D**	147.56	2371.42	0.062	0.00	0.08	0.07	1.00	(0.00)	0.027
09:00-09:15	**E**	0.00	1952.23	0.000	0.00	0.00	0.00	0.00	(0.00)	0.000

A1 - (Default Analysis Set) - D4 - 2026 Base + Com PM, PM

Data Errors and Warnings

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

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
2026 Base + Com PM, PM	2026 Base + Com PM	PM			Yes			16:45	18:15	90	15	ONE HOUR

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	A57 (North)	
B	Woodsetts	
C	B6041 Gateford Rd	
D	A57 (South)	
E	Proposed Site Access	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.65	7.50	100.00	30.00	119.00	25.00	
B	2.80	7.50	21.50	20.00	97.00	21.00	
C	7.60	7.80	0.10	20.00	100.00	24.00	
D	7.50	7.50	0.00	50.00	118.00	23.00	
E	3.75	8.00	22.00	50.00	98.00	21.00	

Pedestrian Crossings

Arm	Crossing Type

A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.533	2274.367
B		((calculated))	((calculated))	0.463	1738.999
C		((calculated))	((calculated))	0.546	2359.104
D		((calculated))	((calculated))	0.554	2394.374
E		((calculated))	((calculated))	0.512	2049.075

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

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
			Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	143.00	100.000	N/A
B	ONE HOUR	Yes	0.00	100.000	N/A
C	ONE HOUR	Yes	190.00	100.000	N/A
D	ONE HOUR	Yes	448.00	100.000	N/A
E	ONE HOUR	Yes	0.00	100.000	N/A

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
16:45-17:00	A	107.66	107.66	N/A	N/A
16:45-17:00	B	0.00	0.00	N/A	N/A
16:45-17:00	C	143.04	143.04	N/A	N/A
16:45-17:00	D	337.28	337.28	N/A	N/A
16:45-17:00	E	0.00	0.00	N/A	N/A
17:00-17:15	A	128.55	128.55	N/A	N/A
17:00-17:15	B	0.00	0.00	N/A	N/A
17:00-17:15	C	170.81	170.81	N/A	N/A
17:00-17:15	D	402.74	402.74	N/A	N/A
17:00-17:15	E	0.00	0.00	N/A	N/A

17:15-17:30	**A**	157.45	157.45	N/A	N/A
17:15-17:30	**B**	0.00	0.00	N/A	N/A
17:15-17:30	**C**	209.19	209.19	N/A	N/A
17:15-17:30	**D**	493.26	493.26	N/A	N/A
17:15-17:30	**E**	0.00	0.00	N/A	N/A
17:30-17:45	**A**	157.45	157.45	N/A	N/A
17:30-17:45	**B**	0.00	0.00	N/A	N/A
17:30-17:45	**C**	209.19	209.19	N/A	N/A
17:30-17:45	**D**	493.26	493.26	N/A	N/A
17:30-17:45	**E**	0.00	0.00	N/A	N/A
17:45-18:00	**A**	128.55	128.55	N/A	N/A
17:45-18:00	**B**	0.00	0.00	N/A	N/A
17:45-18:00	**C**	170.81	170.81	N/A	N/A
17:45-18:00	**D**	402.74	402.74	N/A	N/A
17:45-18:00	**E**	0.00	0.00	N/A	N/A
18:00-18:15	**A**	107.66	107.66	N/A	N/A
18:00-18:15	**B**	0.00	0.00	N/A	N/A
18:00-18:15	**C**	143.04	143.04	N/A	N/A
18:00-18:15	**D**	337.28	337.28	N/A	N/A
18:00-18:15	**E**	0.00	0.00	N/A	N/A

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Roundabout 1 (for whole period)

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	0.00	0.00	40.00	103.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	139.00	0.00	0.00	51.00	0.00
	D	316.00	0.00	132.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Turning Proportions (Veh) - Roundabout 1 (for whole period)

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	0.00	0.00	0.28	0.72	0.00
	B	0.20	0.20	0.20	0.20	0.20
	C	0.73	0.00	0.00	0.27	0.00
	D	0.71	0.00	0.29	0.00	0.00
	E	0.20	0.20	0.20	0.20	0.20

Vehicle Mix

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

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Total Demand (Veh/hr)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.07	0.03	0.08	A	131.22	196.83	5.68	0.03	0.06	5.68	0.03	0.533	2274.367
B	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.463	1738.999
C	0.09	0.03	0.10	A	174.35	261.52	7.36	0.03	0.08	7.36	0.03	0.546	2359.104
D	0.21	0.03	0.27	A	411.09	616.64	19.43	0.03	0.22	19.43	0.03	0.554	2394.374
E	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.512	2049.075

Main Results

Main results: (16:45-17:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	107.66	26.91	107.45	341.88	99.18	0.00	2221.50	1697.97	0.048	0.00	0.05
B	0.00	0.00	0.00	0.00	206.63	0.00	1643.30	561.15	0.000	0.00	0.00
C	143.04	35.76	142.78	129.24	77.40	0.00	2316.83	1310.54	0.062	0.00	0.07
D	337.28	84.32	336.60	115.72	104.45	0.00	2336.51	1608.11	0.144	0.00	0.17
E	0.00	0.00	0.00	0.00	441.06	0.00	1823.12	619.10	0.000	0.00	0.00

Main results: (17:00-17:15)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	128.55	32.14	128.51	408.88	118.62	0.00	2211.14	1697.97	0.058	0.05	0.06
B	0.00	0.00	0.00	0.00	247.13	0.00	1624.55	561.15	0.000	0.00	0.00
C	170.81	42.70	170.75	154.56	92.56	0.00	2308.54	1310.54	0.074	0.07	0.08
D	402.74	100.69	402.58	138.40	124.92	0.00	2325.17	1608.11	0.173	0.17	0.21
E	0.00	0.00	0.00	0.00	527.50	0.00	1778.84	619.10	0.000	0.00	0.00

Main results: (17:15-17:30)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	157.45	39.36	157.38	500.73	145.26	0.00	2196.94	1697.97	0.072	0.06	0.08
B	0.00	0.00	0.00	0.00	302.65	0.00	1598.83	561.15	0.000	0.00	0.00
C	209.19	52.30	209.11	189.29	113.36	0.00	2297.18	1310.54	0.091	0.08	0.10
D	493.26	123.31	493.01	169.49	152.98	0.00	2309.62	1608.11	0.214	0.21	0.27
E	0.00	0.00	0.00	0.00	645.99	0.00	1718.14	619.10	0.000	0.00	0.00

Main results: (17:30-17:45)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	157.45	39.36	157.45	500.96	145.33	0.00	2196.90	1697.97	0.072	0.08	0.08
B	0.00	0.00	0.00	0.00	302.78	0.00	1598.77	561.15	0.000	0.00	0.00
C	209.19	52.30	209.19	189.37	113.40	0.00	2297.16	1310.54	0.091	0.10	0.10
D	493.26	123.31	493.26	169.56	153.04	0.00	2309.59	1608.11	0.214	0.27	0.27
E	0.00	0.00	0.00	0.00	646.30	0.00	1717.98	619.10	0.000	0.00	0.00

Main results: (17:45-18:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	128.55	32.14	128.62	409.27	118.74	0.00	2211.07	1697.97	0.058	0.08	0.06
B	0.00	0.00	0.00	0.00	247.35	0.00	1624.44	561.15	0.000	0.00	0.00
C	170.81	42.70	170.89	154.71	92.64	0.00	2308.50	1310.54	0.074	0.10	0.08
D	402.74	100.69	402.99	138.51	125.02	0.00	2325.12	1608.11	0.173	0.27	0.21
E	0.00	0.00	0.00	0.00	528.00	0.00	1778.58	619.10	0.000	0.00	0.00

Main results: (18:00-18:15)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	107.66	26.91	107.70	342.70	99.42	0.00	2221.37	1697.97	0.048	0.06	0.05
B	0.00	0.00	0.00	0.00	207.13	0.00	1643.07	561.15	0.000	0.00	0.00
C	143.04	35.76	143.10	129.55	77.57	0.00	2316.73	1310.54	0.062	0.08	0.07
D	337.28	84.32	337.44	115.99	104.69	0.00	2336.38	1608.11	0.144	0.21	0.17
E	0.00	0.00	0.00	0.00	442.13	0.00	1822.58	619.10	0.000	0.00	0.00

Queueing Delay Results

Queueing Delay results: (16:45-17:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	0.75	0.05	0.028	A	A
B	0.00	0.00	0.000	A	A
C	0.98	0.07	0.028	A	A
D	2.50	0.17	0.030	A	A
E	0.00	0.00	0.000	A	A

Queueing Delay results: (17:00-17:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	0.92	0.06	0.029	A	A
B	0.00	0.00	0.000	A	A
C	1.19	0.08	0.028	A	A
D	3.11	0.21	0.031	A	A
E	0.00	0.00	0.000	A	A

Queueing Delay results: (17:15-17:30)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	1.15	0.08	0.029	A	A
B	0.00	0.00	0.000	A	A
C	1.49	0.10	0.029	A	A
D	4.02	0.27	0.033	A	A
E	0.00	0.00	0.000	A	A

Queueing Delay results: (17:30-17:45)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	1.16	0.08	0.029	A	A
B	0.00	0.00	0.000	A	A
C	1.50	0.10	0.029	A	A
D	4.07	0.27	0.033	A	A
E	0.00	0.00	0.000	A	A

Queueing Delay results: (17:45-18:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	0.94	0.06	0.029	A	A
B	0.00	0.00	0.000	A	A
C	1.21	0.08	0.028	A	A
D	3.18	0.21	0.031	A	A
E	0.00	0.00	0.000	A	A

Queueing Delay results: (18:00-18:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	0.77	0.05	0.028	A	A
B	0.00	0.00	0.000	A	A
C	1.00	0.07	0.028	A	A
D	2.56	0.17	0.030	A	A
E	0.00	0.00	0.000	A	A

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.65	7.50	100.00	30.00	119.00	25.00		0.533	2274.367
B	2.80	7.50	21.50	20.00	97.00	21.00		0.463	1738.999
C	7.60	7.80	0.10	20.00	100.00	24.00		0.546	2359.104
D	7.50	7.50	0.00	50.00	118.00	23.00		0.554	2394.374
E	3.75	8.00	22.00	50.00	98.00	21.00		0.512	2049.075

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (min)
16:45-17:00	A	107.66	2221.50	0.048	0.00	0.00	0.05	0.75	(0.00)	0.028
16:45-17:00	B	0.00	1643.30	0.000	0.00	0.00	0.00	0.00	(0.00)	0.000
16:45-17:00	C	143.04	2316.83	0.062	0.00	0.00	0.07	0.98	(0.00)	0.028
16:45-17:00	D	337.28	2336.51	0.144	0.00	0.00	0.17	2.50	(0.00)	0.030
16:45-17:00	E	0.00	1823.12	0.000	0.00	0.00	0.00	0.00	(0.00)	0.000
17:00-17:15	A	128.55	2211.14	0.058	0.00	0.05	0.06	0.92	(0.00)	0.029
17:00-17:15	B	0.00	1624.55	0.000	0.00	0.00	0.00	0.00	(0.00)	0.000
17:00-17:15	C	170.81	2308.54	0.074	0.00	0.07	0.08	1.19	(0.00)	0.028
17:00-17:15	D	402.74	2325.17	0.173	0.00	0.17	0.21	3.11	(0.00)	0.031

17:00-17:15	**E**	0.00	1778.84	0.000	0.00	0.00	0.00	0.00	(0.00)	0.000
17:15-17:30	**A**	157.45	2196.94	0.072	0.00	0.06	0.08	1.15	(0.00)	0.029
17:15-17:30	**B**	0.00	1598.83	0.000	0.00	0.00	0.00	0.00	(0.00)	0.000
17:15-17:30	**C**	209.19	2297.18	0.091	0.00	0.08	0.10	1.49	(0.00)	0.029
17:15-17:30	**D**	493.26	2309.62	0.214	0.00	0.21	0.27	4.02	(0.00)	0.033
17:15-17:30	**E**	0.00	1718.14	0.000	0.00	0.00	0.00	0.00	(0.00)	0.000
17:30-17:45	**A**	157.45	2196.90	0.072	0.00	0.08	0.08	1.16	(0.00)	0.029
17:30-17:45	**B**	0.00	1598.77	0.000	0.00	0.00	0.00	0.00	(0.00)	0.000
17:30-17:45	**C**	209.19	2297.16	0.091	0.00	0.10	0.10	1.50	(0.00)	0.029
17:30-17:45	**D**	493.26	2309.59	0.214	0.00	0.27	0.27	4.07	(0.00)	0.033
17:30-17:45	**E**	0.00	1717.98	0.000	0.00	0.00	0.00	0.00	(0.00)	0.000
17:45-18:00	**A**	128.55	2211.07	0.058	0.00	0.08	0.06	0.94	(0.00)	0.029
17:45-18:00	**B**	0.00	1624.44	0.000	0.00	0.00	0.00	0.00	(0.00)	0.000
17:45-18:00	**C**	170.81	2308.50	0.074	0.00	0.10	0.08	1.21	(0.00)	0.028
17:45-18:00	**D**	402.74	2325.12	0.173	0.00	0.27	0.21	3.18	(0.00)	0.031
17:45-18:00	**E**	0.00	1778.58	0.000	0.00	0.00	0.00	0.00	(0.00)	0.000
18:00-18:15	**A**	107.66	2221.37	0.048	0.00	0.06	0.05	0.77	(0.00)	0.028
18:00-18:15	**B**	0.00	1643.07	0.000	0.00	0.00	0.00	0.00	(0.00)	0.000
18:00-18:15	**C**	143.04	2316.73	0.062	0.00	0.08	0.07	1.00	(0.00)	0.028
18:00-18:15	**D**	337.28	2336.38	0.144	0.00	0.21	0.17	2.56	(0.00)	0.030
18:00-18:15	**E**	0.00	1822.58	0.000	0.00	0.00	0.00	0.00	(0.00)	0.000

ARCADY 7

Version: 7.0.0.99 [10 July 2009]
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File: N:\Projects\A078085 - Bassetlaw DC Modelling\calculations\Capacity Assessments\4. A57-B6041-Woodsetts Rnd\Oct 2012 \Imps\A57-B6041-Woodsetts imp.arc7
Report generation date: 12/12/2012 10:21:21

» A1 - (Default Analysis Set) - D1 - 2026 Base + Com + Growth AM, AM
» A1 - (Default Analysis Set) - D2 - 2026 Base + Com + Growth PM, PM

File summary

File Description

Title	A57-B6041-Woodsetts Roundabout
Location	Bassetlaw
Date	19/02/2010
Status	Preliminary
Client	Bassetlaw DC
Jobnumber	A060969
Enumerator	martin.murphy [35-T-048CS]
Description	28.11.12 RJH: New Flows
Results Upto Date	False

Analysis Options

RFC Threshold	Vehicle Length (m)	Do Queue Variations
0.85	5.75	

Sorting and Display

Show Arm Names	Arm Grouping	Sorting Direction	Sorting Type	Data Matrix Style	Time Style
	Order	Ascending	Numerical	By Destination	Absolute Time

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	min	-Min	perMin

A1 - (Default Analysis Set) - D1 - 2026 Base + Com + Growth AM, AM

Data Errors and Warnings

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

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
2026 Base + Com + Growth AM, AM	2026 Base + Com + Growth AM	AM			Yes			07:45	09:15	90	15	ONE HOUR

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	A57 (North)	
B	Woodsetts	
C	B6041 Gateford Rd	
D	A57 (South)	
E	Proposed Site Access	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.65	9.75	90.00	30.00	119.00	25.00	
B	2.80	7.50	21.50	20.00	97.00	21.00	
C	7.60	7.60	0.00	20.00	100.00	24.00	
D	7.50	12.00	35.00	50.00	119.00	23.00	
E	3.75	9.00	22.00	50.00	98.00	21.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.607	2808.477
B		((calculated))	((calculated))	0.463	1738.999
C		((calculated))	((calculated))	0.545	2350.744
D		((calculated))	((calculated))	0.695	3412.226
E		((calculated))	((calculated))	0.528	2161.677

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

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
			Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	1634.00	100.000	N/A
B	ONE HOUR	Yes	528.00	100.000	N/A
C	ONE HOUR	Yes	767.00	100.000	N/A
D	ONE HOUR	Yes	1154.00	100.000	N/A
E	ONE HOUR	Yes	202.00	100.000	N/A

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
07:45-08:00	A	1230.16	1230.16	N/A	N/A
07:45-08:00	B	397.51	397.51	N/A	N/A
07:45-08:00	C	577.44	577.44	N/A	N/A
07:45-08:00	D	868.79	868.79	N/A	N/A
07:45-08:00	E	152.08	152.08	N/A	N/A
08:00-08:15	A	1468.93	1468.93	N/A	N/A
08:00-08:15	B	474.66	474.66	N/A	N/A
08:00-08:15	C	689.52	689.52	N/A	N/A

08:00-08:15	**D**	1037.42	1037.42	N/A	N/A
08:00-08:15	**E**	181.59	181.59	N/A	N/A
08:15-08:30	**A**	1799.07	1799.07	N/A	N/A
08:15-08:30	**B**	581.34	581.34	N/A	N/A
08:15-08:30	**C**	844.48	844.48	N/A	N/A
08:15-08:30	**D**	1270.58	1270.58	N/A	N/A
08:15-08:30	**E**	222.41	222.41	N/A	N/A
08:30-08:45	**A**	1799.07	1799.07	N/A	N/A
08:30-08:45	**B**	581.34	581.34	N/A	N/A
08:30-08:45	**C**	844.48	844.48	N/A	N/A
08:30-08:45	**D**	1270.58	1270.58	N/A	N/A
08:30-08:45	**E**	222.41	222.41	N/A	N/A
08:45-09:00	**A**	1468.93	1468.93	N/A	N/A
08:45-09:00	**B**	474.66	474.66	N/A	N/A
08:45-09:00	**C**	689.52	689.52	N/A	N/A
08:45-09:00	**D**	1037.42	1037.42	N/A	N/A
08:45-09:00	**E**	181.59	181.59	N/A	N/A
09:00-09:15	**A**	1230.16	1230.16	N/A	N/A
09:00-09:15	**B**	397.51	397.51	N/A	N/A
09:00-09:15	**C**	577.44	577.44	N/A	N/A
09:00-09:15	**D**	868.79	868.79	N/A	N/A
09:00-09:15	**E**	152.08	152.08	N/A	N/A

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Roundabout 1 (for whole period)

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	0.00	15.00	353.00	1187.00	79.00
	B	71.00	0.00	148.00	309.00	0.00
	C	572.00	66.00	0.00	0.00	129.00
	D	654.00	205.00	295.00	0.00	0.00
	E	47.00	0.00	50.00	105.00	0.00

Turning Proportions (Veh) - Roundabout 1 (for whole period)

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	0.00	0.01	0.22	0.73	0.05
	B	0.13	0.00	0.28	0.59	0.00
	C	0.75	0.09	0.00	0.00	0.17
	D	0.57	0.18	0.26	0.00	0.00
	E	0.23	0.00	0.25	0.52	0.00

Vehicle Mix

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

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00

	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To				
		A	B	C	D	E
From	A	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Total Demand (Veh/hr)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.77	0.11	3.36	A	1499.39	2249.08	172.77	0.08	1.92	172.78	0.08	0.607	2808.477
B	0.85	0.55	5.03	D	484.50	726.75	185.36	0.26	2.06	185.37	0.26	0.463	1738.999
C	0.65	0.13	1.82	A	703.81	1055.72	94.79	0.09	1.05	94.80	0.09	0.545	2350.744
D	0.47	0.04	0.88	A	1058.93	1588.40	56.01	0.04	0.62	56.01	0.04	0.695	3412.226
E	0.21	0.07	0.26	A	185.36	278.04	16.24	0.06	0.18	16.24	0.06	0.528	2161.677

Main Results

Main results: (07:45-08:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1230.16	307.54	1226.25	1008.81	541.53	0.00	2479.67	1967.05	0.496	0.00	0.98
B	397.51	99.38	394.98	214.79	1552.98	0.00	1019.77	444.55	0.390	0.00	0.63
C	577.44	144.36	575.27	634.81	1313.14	0.00	1634.98	1262.33	0.353	0.00	0.54
D	868.79	217.20	867.11	1200.75	687.67	0.00	2934.17	2427.00	0.296	0.00	0.42
E	152.08	38.02	151.60	156.04	1398.74	0.00	1423.04	294.00	0.107	0.00	0.12

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1468.93	367.23	1466.70	1206.65	647.65	0.00	2415.23	1967.05	0.608	0.98	1.54
B	474.66	118.67	472.59	256.87	1857.48	0.00	878.74	444.55	0.540	0.63	1.15
C	689.52	172.38	688.29	759.27	1570.80	0.00	1494.53	1262.33	0.461	0.54	0.85
D	1037.42	259.36	1036.81	1436.34	822.75	0.00	2840.26	2427.00	0.365	0.42	0.57
E	181.59	45.40	181.41	186.67	1672.89	0.00	1278.28	294.00	0.142	0.12	0.16

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1799.07	449.77	1792.01	1474.40	792.71	0.00	2327.15	1967.05	0.773	1.54	3.30
B	581.34	145.33	567.76	314.29	2270.42	0.00	687.50	444.55	0.846	1.15	4.55
C	844.48	211.12	840.76	925.73	1912.45	0.00	1308.31	1262.33	0.645	0.85	1.78
D	1270.58	317.64	1269.37	1749.46	1003.75	0.00	2714.43	2427.00	0.468	0.57	0.88
E	222.41	55.60	222.04	228.05	2045.07	0.00	1081.74	294.00	0.206	0.16	0.26

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1799.07	449.77	1798.85	1479.37	793.81	0.00	2326.48	1967.05	0.773	3.30	3.36
B	581.34	145.33	579.40	314.87	2277.79	0.00	684.09	444.55	0.850	4.55	5.03
C	844.48	211.12	844.31	930.87	1926.32	0.00	1300.75	1262.33	0.649	1.78	1.82
D	1270.58	317.64	1270.56	1761.44	1009.19	0.00	2710.65	2427.00	0.469	0.88	0.88
E	222.41	55.60	222.40	228.97	2050.78	0.00	1078.72	294.00	0.206	0.26	0.26

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1468.93	367.23	1476.07	1213.87	649.29	0.00	2414.23	1967.05	0.608	3.36	1.57
B	474.66	118.67	489.92	257.71	1867.65	0.00	874.03	444.55	0.543	5.03	1.21
C	689.52	172.38	693.30	766.76	1590.82	0.00	1483.62	1262.33	0.465	1.82	0.88
D	1037.42	259.36	1038.62	1453.58	830.55	0.00	2834.84	2427.00	0.366	0.88	0.58
E	181.59	45.40	181.96	187.97	1681.20	0.00	1273.88	294.00	0.143	0.26	0.17

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

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1230.16	307.54	1232.48	1013.51	543.33	0.00	2478.57	1967.05	0.496	1.57	0.99
B	397.51	99.38	399.77	215.56	1560.25	0.00	1016.40	444.55	0.391	1.21	0.65
C	577.44	144.36	578.74	638.25	1321.76	0.00	1630.28	1262.33	0.354	0.88	0.55
D	868.79	217.20	869.42	1208.42	692.08	0.00	2931.10	2427.00	0.296	0.58	0.42
E	152.08	38.02	152.26	156.92	1404.58	0.00	1419.96	294.00	0.107	0.17	0.12

Queueing Delay Results

Queueing Delay results: (07:45-08:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	14.32	0.95	0.048	A	A
B	9.14	0.61	0.096	A	A
C	7.95	0.53	0.056	A	A
D	6.21	0.41	0.029	A	A
E	1.76	0.12	0.047	A	A

Queueing Delay results: (08:00-08:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	22.40	1.49	0.063	A	A
B	16.46	1.10	0.147	A	A
C	12.41	0.83	0.074	A	A
D	8.50	0.57	0.033	A	A
E	2.44	0.16	0.055	A	A

Queueing Delay results: (08:15-08:30)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	46.40	3.09	0.111	A	A
B	56.37	3.76	0.458	D	C
C	25.28	1.69	0.127	A	A

D	12.91	0.86	0.041	A	A
E	3.79	0.25	0.070	A	A

Queueing Delay results: (08:30-08:45)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	50.01	3.33	0.114	A	A
B	72.52	4.83	0.552	D	C
C	27.11	1.81	0.131	A	A
D	13.17	0.88	0.042	A	A
E	3.87	0.26	0.070	A	A

Queueing Delay results: (08:45-09:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	24.44	1.63	0.064	A	A
B	20.79	1.39	0.162	A	A
C	13.59	0.91	0.076	A	A
D	8.81	0.59	0.033	A	A
E	2.55	0.17	0.055	A	A

Queueing Delay results: (09:00-09:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	15.20	1.01	0.048	A	A
B	10.07	0.67	0.098	A	A
C	8.45	0.56	0.057	A	A
D	6.40	0.43	0.029	A	A
E	1.83	0.12	0.047	A	A

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.65	9.75	90.00	30.00	119.00	25.00		0.607	2808.477
B	2.80	7.50	21.50	20.00	97.00	21.00		0.463	1738.999
C	7.60	7.60	0.00	20.00	100.00	24.00		0.545	2350.744
D	7.50	12.00	35.00	50.00	119.00	23.00		0.695	3412.226
E	3.75	9.00	22.00	50.00	98.00	21.00		0.528	2161.677

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (min)
07:45-08:00	**A**	1230.16	2479.67	0.496	0.00	0.00	0.98	14.32	(0.00)	0.048
07:45-08:00	**B**	397.51	1019.77	0.390	0.00	0.00	0.63	9.14	(0.00)	0.096
07:45-08:00	**C**	577.44	1634.98	0.353	0.00	0.00	0.54	7.95	(0.00)	0.056
07:45-08:00	**D**	868.79	2934.17	0.296	0.00	0.00	0.42	6.21	(0.00)	0.029
07:45-08:00	**E**	152.08	1423.04	0.107	0.00	0.00	0.12	1.76	(0.00)	0.047
08:00-08:15	**A**	1468.93	2415.23	0.608	0.00	0.98	1.54	22.40	(0.00)	0.063
08:00-08:15	**B**	474.66	878.74	0.540	0.00	0.63	1.15	16.46	(0.00)	0.147

08:00-08:15	**C**	689.52	1494.53	0.461	0.00	0.54	0.85	12.41	(0.00)	0.074
08:00-08:15	**D**	1037.42	2840.26	0.365	0.00	0.42	0.57	8.50	(0.00)	0.033
08:00-08:15	**E**	181.59	1278.28	0.142	0.00	0.12	0.16	2.44	(0.00)	0.055
08:15-08:30	**A**	1799.07	2327.15	0.773	0.00	1.54	3.30	46.40	(0.00)	0.111
08:15-08:30	**B**	581.34	687.50	0.846	0.00	1.15	4.55	56.37	(0.00)	0.458
08:15-08:30	**C**	844.48	1308.31	0.645	0.00	0.85	1.78	25.28	(0.00)	0.127
08:15-08:30	**D**	1270.58	2714.43	0.468	0.00	0.57	0.88	12.91	(0.00)	0.041
08:15-08:30	**E**	222.41	1081.74	0.206	0.00	0.16	0.26	3.79	(0.00)	0.070
08:30-08:45	**A**	1799.07	2326.48	0.773	0.00	3.30	3.36	50.01	(0.00)	0.114
08:30-08:45	**B**	581.34	684.09	0.850	0.00	4.55	5.03	72.52	(0.00)	0.552
08:30-08:45	**C**	844.48	1300.75	0.649	0.00	1.78	1.82	27.11	(0.00)	0.131
08:30-08:45	**D**	1270.58	2710.65	0.469	0.00	0.88	0.88	13.17	(0.00)	0.042
08:30-08:45	**E**	222.41	1078.72	0.206	0.00	0.26	0.26	3.87	(0.00)	0.070
08:45-09:00	**A**	1468.93	2414.23	0.608	0.00	3.36	1.57	24.44	(0.00)	0.064
08:45-09:00	**B**	474.66	874.03	0.543	0.00	5.03	1.21	20.79	(0.00)	0.162
08:45-09:00	**C**	689.52	1483.62	0.465	0.00	1.82	0.88	13.59	(0.00)	0.076
08:45-09:00	**D**	1037.42	2834.84	0.366	0.00	0.88	0.58	8.81	(0.00)	0.033
08:45-09:00	**E**	181.59	1273.88	0.143	0.00	0.26	0.17	2.55	(0.00)	0.055
09:00-09:15	**A**	1230.16	2478.57	0.496	0.00	1.57	0.99	15.20	(0.00)	0.048
09:00-09:15	**B**	397.51	1016.40	0.391	0.00	1.21	0.65	10.07	(0.00)	0.098
09:00-09:15	**C**	577.44	1630.28	0.354	0.00	0.88	0.55	8.45	(0.00)	0.057
09:00-09:15	**D**	868.79	2931.10	0.296	0.00	0.58	0.42	6.40	(0.00)	0.029
09:00-09:15	**E**	152.08	1419.96	0.107	0.00	0.17	0.12	1.83	(0.00)	0.047

A1 - (Default Analysis Set) - D2 - 2026 Base + Com + Growth PM, PM

Data Errors and Warnings

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

Analysis Set Details

Name	Description	Include In Report	Use Specific Demand Set	Demand Set	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)		Yes		(D1)		100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Locked	Run Automatically	Use Relationship	Relationship	Start Time (HH:mm)	Finish Time (HH:mm)	Time Period Length (min)	Time Segment Length (min)	Traffic Profile Type
2026 Base + Com + Growth PM, PM	2026 Base + Com + Growth PM	PM			Yes			16:45	18:15	90	15	ONE HOUR

Roundabout Network

Roundabout Type(s)

ID	Name	Arm Order	Roundabout Type	Grade Separated	Large Roundabout	Do Geometric Delay
1	(untitled)	A,B,C,D,E	Standard			

Roundabout Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	((Mini-roundabouts only))	

Arms

Arms

ID	Name	Description
A	A57 (North)	
B	Woodsetts	
C	B6041 Gateford Rd	
D	A57 (South)	
E	Proposed Site Access	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
A	0.00	99999.00		0.00
B	0.00	99999.00		0.00
C	0.00	99999.00		0.00
D	0.00	99999.00		0.00
E	0.00	99999.00		0.00

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
A	4.65	9.75	90.00	30.00	119.00	25.00	
B	2.80	7.50	21.50	20.00	97.00	21.00	
C	7.60	7.60	0.00	20.00	100.00	24.00	
D	7.50	12.00	35.00	50.00	119.00	23.00	
E	3.75	9.00	22.00	50.00	98.00	21.00	

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None
E	None

Arm Slope/ Intercept and Capacity

Slope and Intercept used in model

Arm	Enter Directly	Slope	Intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
A		((calculated))	((calculated))	0.607	2808.477
B		((calculated))	((calculated))	0.463	1738.999
C		((calculated))	((calculated))	0.545	2350.744
D		((calculated))	((calculated))	0.695	3412.226
E		((calculated))	((calculated))	0.528	2161.677

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

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
			Yes	HV Percentages	2.00				Yes	Yes

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)	PHF
A	ONE HOUR	Yes	1084.00	100.000	N/A
B	ONE HOUR	Yes	430.00	100.000	N/A
C	ONE HOUR	Yes	608.00	100.000	N/A
D	ONE HOUR	Yes	2159.00	100.000	N/A
E	ONE HOUR	Yes	422.00	100.000	N/A

Direct/Resultant Flows

Direct Flows Data

Time Segment	Arm	Direct Demand Entry Flow (Veh/hr)	DirectDemandEntryFlowInPCU (PCU/hr)	Direct Demand Exit Flow (Veh/hr)	Direct Demand Pedestrian Flow (Ped/hr)
16:45-17:00	A	816.09	816.09	N/A	N/A
16:45-17:00	B	323.73	323.73	N/A	N/A
16:45-17:00	C	457.73	457.73	N/A	N/A
16:45-17:00	D	1625.41	1625.41	N/A	N/A
16:45-17:00	E	317.70	317.70	N/A	N/A
17:00-17:15	A	974.49	974.49	N/A	N/A
17:00-17:15	B	386.56	386.56	N/A	N/A
17:00-17:15	C	546.58	546.58	N/A	N/A
17:00-17:15	D	1940.90	1940.90	N/A	N/A
17:00-17:15	E	379.37	379.37	N/A	N/A
17:15-17:30	A	1193.51	1193.51	N/A	N/A
17:15-17:30	B	473.44	473.44	N/A	N/A
17:15-17:30	C	669.42	669.42	N/A	N/A
17:15-17:30	D	2377.10	2377.10	N/A	N/A
17:15-17:30	E	464.63	464.63	N/A	N/A
17:30-17:45	A	1193.51	1193.51	N/A	N/A
17:30-17:45	B	473.44	473.44	N/A	N/A
17:30-17:45	C	669.42	669.42	N/A	N/A
17:30-17:45	D	2377.10	2377.10	N/A	N/A
17:30-17:45	E	464.63	464.63	N/A	N/A
17:45-18:00	A	974.49	974.49	N/A	N/A
17:45-18:00	B	386.56	386.56	N/A	N/A
17:45-18:00	C	546.58	546.58	N/A	N/A
17:45-18:00	D	1940.90	1940.90	N/A	N/A
17:45-18:00	E	379.37	379.37	N/A	N/A
18:00-18:15	A	816.09	816.09	N/A	N/A

18:00-18:15	**B**	323.73	323.73	N/A	N/A
18:00-18:15	**C**	457.73	457.73	N/A	N/A
18:00-18:15	**D**	1625.41	1625.41	N/A	N/A
18:00-18:15	**E**	317.70	317.70	N/A	N/A

Turning Proportions

Turning Counts or Proportions (Veh/hr) - Roundabout 1 (for whole period)

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	0.00	30.00	407.00	617.00	30.00
	B	33.00	0.00	171.00	226.00	0.00
	C	396.00	182.00	0.00	0.00	30.00
	D	1192.00	314.00	653.00	0.00	0.00
	E	75.00	0.00	189.00	158.00	0.00

Turning Proportions (Veh) - Roundabout 1 (for whole period)

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	0.00	0.03	0.38	0.57	0.03
	B	0.08	0.00	0.40	0.53	0.00
	C	0.65	0.30	0.00	0.00	0.05
	D	0.55	0.15	0.30	0.00	0.00
	E	0.18	0.00	0.45	0.37	0.00

Vehicle Mix

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

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	1.00	1.00	1.00	1.00	1.00
	B	1.00	1.00	1.00	1.00	1.00
	C	1.00	1.00	1.00	1.00	1.00
	D	1.00	1.00	1.00	1.00	1.00
	E	1.00	1.00	1.00	1.00	1.00

Heavy Vehicle Percentages - Roundabout 1 (for whole period)

		To				
		A	**B**	**C**	**D**	**E**
From	**A**	0.00	0.00	0.00	0.00	0.00
	B	0.00	0.00	0.00	0.00	0.00
	C	0.00	0.00	0.00	0.00	0.00
	D	0.00	0.00	0.00	0.00	0.00
	E	0.00	0.00	0.00	0.00	0.00

Results

Results Summary

Arm	Max RFC	Max Delay (min)	Max Queue (Veh)	Max LOS	Total Demand (Veh/hr)	Total Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (min)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Queueing Total Delay (Veh-min)	Inclusive Queueing Average Delay (min)	Slope	Intercept (PCU/hr)
A	0.66	0.10	1.91	A	994.70	1492.05	103.11	0.07	1.15	103.11	0.07	0.607	2808.477
B	0.68	0.27	2.09	C	394.58	591.86	95.68	0.16	1.06	95.69	0.16	0.463	1738.999
C	0.39	0.06	0.64	A	557.91	836.87	41.14	0.05	0.46	41.14	0.05	0.545	2350.744
D	0.82	0.11	4.46	A	1981.14	2971.70	216.86	0.07	2.41	216.88	0.07	0.695	3412.226
E	0.84	0.64	4.67	E	387.23	580.85	156.08	0.27	1.73	156.08	0.27	0.528	2161.677

Main Results

Main results: (16:45-17:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	816.09	204.02	813.61	1273.10	1122.49	0.00	2126.91	1827.73	0.384	0.00	0.62
B	323.73	80.93	321.90	394.90	1541.20	0.00	1025.22	535.47	0.316	0.00	0.46
C	457.73	114.43	456.48	1065.27	797.82	0.00	1915.87	1547.04	0.239	0.00	0.31
D	1625.41	406.35	1620.91	750.60	503.70	0.00	3062.06	2273.01	0.531	0.00	1.12
E	317.70	79.43	316.01	45.04	2079.57	0.00	1063.52	163.04	0.299	0.00	0.42

Main results: (17:00-17:15)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	974.49	243.62	973.18	1522.47	1342.26	0.00	1993.47	1827.73	0.489	0.62	0.95
B	386.56	96.64	385.33	472.29	1843.14	0.00	885.38	535.47	0.437	0.46	0.76
C	546.58	136.64	546.14	1274.05	954.43	0.00	1830.50	1547.04	0.299	0.31	0.42
D	1940.90	485.22	1938.10	897.92	602.64	0.00	2993.28	2273.01	0.648	1.12	1.82
E	379.37	94.84	377.87	53.88	2486.86	0.00	848.44	163.04	0.447	0.42	0.80

Main results: (17:15-17:30)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1193.51	298.38	1189.79	1858.42	1631.37	0.00	1817.92	1827.73	0.657	0.95	1.88
B	473.44	118.36	468.54	577.30	2243.87	0.00	699.80	535.47	0.677	0.76	1.99
C	669.42	167.36	668.58	1551.07	1161.34	0.00	1717.72	1547.04	0.390	0.42	0.63
D	2377.10	594.28	2366.91	1092.46	737.46	0.00	2899.55	2273.01	0.820	1.82	4.37
E	464.63	116.16	451.33	65.92	3038.46	0.00	557.16	163.04	0.834	0.80	4.12

Main results: (17:30-17:45)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	1193.51	298.38	1193.36	1866.70	1645.15	0.00	1809.56	1827.73	0.660	1.88	1.91
B	473.44	118.36	473.04	579.07	2259.43	0.00	692.59	535.47	0.684	1.99	2.09
C	669.42	167.36	669.40	1562.14	1170.33	0.00	1712.82	1547.04	0.391	0.63	0.64
D	2377.10	594.28	2376.74	1101.00	738.73	0.00	2898.67	2273.01	0.820	4.37	4.46
E	464.63	116.16	462.43	66.06	3049.42	0.00	551.37	163.04	0.843	4.12	4.67

Main results: (17:45-18:00)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	974.49	243.62	978.25	1534.07	1362.40	0.00	1981.24	1827.73	0.492	1.91	0.98
B	386.56	96.64	391.70	474.73	1865.92	0.00	874.84	535.47	0.442	2.09	0.80
C	546.58	136.64	547.42	1290.02	967.60	0.00	1823.33	1547.04	0.300	0.64	0.43

D	1940.90	485.22	1951.28	910.46	604.55	0.00	2991.95	2273.01	0.649	4.46	1.87
E	379.37	94.84	394.72	54.08	2501.75	0.00	840.58	163.04	0.451	4.67	0.84

Main results: (18:00-18:15)

Arm	Demand (Veh/hr)	Arrivals (Veh)	Entry Flow (Veh/hr)	Exit Flow (Veh/hr)	Circulating Flow (Veh/hr)	Pedestrian Demand (Ped/hr)	Capacity (Veh/hr)	Saturation Capacity (Veh/hr)	RFC	Start Queue (Veh)	End Queue (Veh)
A	816.09	204.02	817.48	1279.13	1129.03	0.00	2122.94	1827.73	0.384	0.98	0.63
B	323.73	80.93	325.07	396.60	1549.92	0.00	1021.19	535.47	0.317	0.80	0.47
C	457.73	114.43	458.19	1071.71	803.28	0.00	1912.89	1547.04	0.239	0.43	0.32
D	1625.41	406.35	1628.32	755.71	505.76	0.00	3060.62	2273.01	0.531	1.87	1.14
E	317.70	79.43	319.32	45.23	2088.85	0.00	1058.62	163.04	0.300	0.84	0.43

Queueing Delay Results

Queueing Delay results: (16:45-17:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	9.10	0.61	0.046	A	A
B	6.65	0.44	0.085	A	A
C	4.62	0.31	0.041	A	A
D	16.48	1.10	0.042	A	A
E	6.16	0.41	0.080	A	A

Queueing Delay results: (17:00-17:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	13.92	0.93	0.059	A	A
B	11.07	0.74	0.120	A	A
C	6.27	0.42	0.047	A	A
D	26.60	1.77	0.057	A	A
E	11.49	0.77	0.127	A	A

Queueing Delay results: (17:15-17:30)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	26.93	1.80	0.095	A	A
B	27.23	1.82	0.254	C	B
C	9.34	0.62	0.057	A	A
D	60.75	4.05	0.111	A	A
E	50.52	3.37	0.515	D	C

Queueing Delay results: (17:30-17:45)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	28.52	1.90	0.097	A	A
B	30.79	2.05	0.272	C	B
C	9.56	0.64	0.057	A	A
D	66.42	4.43	0.115	A	A
E	66.79	4.45	0.644	E	D

Queueing Delay results: (17:45-18:00)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	15.04	1.00	0.060	A	A
B	12.73	0.85	0.125	A	A

C	6.56	0.44	0.047	A	A
D	29.17	1.94	0.058	A	A
E	14.46	0.96	0.139	A	A

Queueing Delay results: (18:00-18:15)

Arm	Queueing Total Delay (Veh-min)	Queueing Rate Of Delay (Veh-min/min)	Average Delay Per Arriving Vehicle (min)	Unsignalised Level Of Service	Signalised Level Of Service
A	9.58	0.64	0.046	A	A
B	7.22	0.48	0.086	A	A
C	4.80	0.32	0.041	A	A
D	17.45	1.16	0.042	A	A
E	6.66	0.44	0.081	A	A

Overview: Standard Roundabout Geometry

Standard Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only	Final Slope	Final Intercept (PCU/hr)
A	4.65	9.75	90.00	30.00	119.00	25.00		0.607	2808.477
B	2.80	7.50	21.50	20.00	97.00	21.00		0.463	1738.999
C	7.60	7.60	0.00	20.00	100.00	24.00		0.545	2350.744
D	7.50	12.00	35.00	50.00	119.00	23.00		0.695	3412.226
E	3.75	9.00	22.00	50.00	98.00	21.00		0.528	2161.677

Overview: Time Segment Results

Time Segment Results

Time Segment	Arm	Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Pedestrian Demand (Ped/hr)	Start Queue (Veh)	End Queue (Veh)	Queueing Total Delay (Veh-min)	Geometric Total Delay (Veh-min)	Average Delay Per Arriving Vehicle (min)
16:45-17:00	A	816.09	2126.91	0.384	0.00	0.00	0.62	9.10	(0.00)	0.046
16:45-17:00	B	323.73	1025.22	0.316	0.00	0.00	0.46	6.65	(0.00)	0.085
16:45-17:00	C	457.73	1915.87	0.239	0.00	0.00	0.31	4.62	(0.00)	0.041
16:45-17:00	D	1625.41	3062.06	0.531	0.00	0.00	1.12	16.48	(0.00)	0.042
16:45-17:00	E	317.70	1063.52	0.299	0.00	0.00	0.42	6.16	(0.00)	0.080
17:00-17:15	A	974.49	1993.47	0.489	0.00	0.62	0.95	13.92	(0.00)	0.059
17:00-17:15	B	386.56	885.38	0.437	0.00	0.46	0.76	11.07	(0.00)	0.120
17:00-17:15	C	546.58	1830.50	0.299	0.00	0.31	0.42	6.27	(0.00)	0.047
17:00-17:15	D	1940.90	2993.28	0.648	0.00	1.12	1.82	26.60	(0.00)	0.057
17:00-17:15	E	379.37	848.44	0.447	0.00	0.42	0.80	11.49	(0.00)	0.127
17:15-17:30	A	1193.51	1817.92	0.657	0.00	0.95	1.88	26.93	(0.00)	0.095
17:15-17:30	B	473.44	699.80	0.677	0.00	0.76	1.99	27.23	(0.00)	0.254
17:15-17:30	C	669.42	1717.72	0.390	0.00	0.42	0.63	9.34	(0.00)	0.057
17:15-17:30	D	2377.10	2899.55	0.820	0.00	1.82	4.37	60.75	(0.00)	0.111
17:15-17:30	E	464.63	557.16	0.834	0.00	0.80	4.12	50.52	(0.00)	0.515
17:30-17:45	A	1193.51	1809.56	0.660	0.00	1.88	1.91	28.52	(0.00)	0.097
17:30-17:45	B	473.44	692.59	0.684	0.00	1.99	2.09	30.79	(0.00)	0.272
17:30-17:45	C	669.42	1712.82	0.391	0.00	0.63	0.64	9.56	(0.00)	0.057
17:30-17:45	D	2377.10	2898.67	0.820	0.00	4.37	4.46	66.42	(0.00)	0.115
17:30-17:45	E	464.63	551.37	0.843	0.00	4.12	4.67	66.79	(0.00)	0.644
17:45-18:00	A	974.49	1981.24	0.492	0.00	1.91	0.98	15.04	(0.00)	0.060
17:45-18:00	B	386.56	874.84	0.442	0.00	2.09	0.80	12.73	(0.00)	0.125
17:45-18:00	C	546.58	1823.33	0.300	0.00	0.64	0.43	6.56	(0.00)	0.047

17:45-18:00	**D**	1940.90	2991.95	0.649	0.00	4.46	1.87	29.17	(0.00)	0.058
17:45-18:00	**E**	379.37	840.58	0.451	0.00	4.67	0.84	14.46	(0.00)	0.139
18:00-18:15	**A**	816.09	2122.94	0.384	0.00	0.98	0.63	9.58	(0.00)	0.046
18:00-18:15	**B**	323.73	1021.19	0.317	0.00	0.80	0.47	7.22	(0.00)	0.086
18:00-18:15	**C**	457.73	1912.89	0.239	0.00	0.43	0.32	4.80	(0.00)	0.041
18:00-18:15	**D**	1625.41	3060.62	0.531	0.00	1.87	1.14	17.45	(0.00)	0.042
18:00-18:15	**E**	317.70	1058.62	0.300	0.00	0.84	0.43	6.66	(0.00)	0.081

Gateford Road/Ashes Park Avenue and Gateford Road/Raymoth Lane
Sketch & Capacity Assessments

DO NOT SCALE: CONTRACTOR TO CHECK ALL DIMENSIONS AND REPORT ANY OMISSIONS OR ERRORS

REV	DESCRIPTION	BY	CHK	APP	DATE

EXECUTIVE PARK
AVALON WAY
ANSTEY
LEICESTER
LE7 7GR
TEL: +44 (0)116 234 8000
FAX: +44 (0)116 234 8001
e-mail: leicester@wyg.com

BASSETLAW DISTRICT COUNCIL NORTH NOTTINGHAMSHIRE

Project:
Bassetlaw Transport Study

Drawing Title:
Possible Signal Improvements
Gatesford Road/Ashes Park Avenue/Raymoth Lane

Scale @ A3	Drawn	Date	Checked	Date	Approved	Date
1:1250	AC	4.12.12	ASG	12.12.12	ASG	12.12.12

Project No.	Office	Type	Drawing No.	Revision
A078085	35	18	020	-

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FILENAME : N:\PROJECTS\A078085 - BASSETLAW DC MODELLING\ACAD\DWGS\A078085-020 WORKSOP SIGNALS.DWG | PLOTTED BY : ROBERT.HOLLAND | PLOTTED DATE : 12 December 2012 15:15:04

TRL LIMITED

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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Run with file:-
"N:\Projects\A078085 - Bassetlaw DC Modelling\calculations\Capacity Assessments\5. Gateford Rd-Ashes Park Ave\
Gateford Rd-Ashes Park Ave.vpi"
(drive-on-the-left) at 13:54:52 on Monday, 3 December 2012

.RUN INFORMATION

```
RUN TITLE       : Gateford Road - Ashes Park Avenue
LOCATION        : Worksop
DATE            : 30/10/12
CLIENT          : Bassetlaw District Council
ENUMERATOR      : robert.holland [1066LT]
JOB NUMBER      : A078085
STATUS          : TIA
DESCRIPTION     :
```

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

```
                    MAJOR ROAD (ARM C) ---------------------- MAJOR ROAD (ARM A)
                                                I
                                                I
                                                I
                                                I
                                                I
                                                I
                                          MINOR ROAD (ARM B)
```

ARM A IS Gateford Road (west)
ARM B IS Ashes Park Avenue
ARM C IS Gateford Road (east)

.STREAM LABELLING CONVENTION

```
        STREAM  A-B  CONTAINS TRAFFIC GOING FROM ARM  A TO ARM B
        STREAM  B-AC CONTAINS TRAFFIC GOING FROM ARM  B TO ARM A AND TO ARM  C
        ETC.
```

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.00 M.
- VISIBILITY	(VC-B)100.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 100.0 M.
- VISIBILITY TO RIGHT	(VB-A) 100.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	7.00 M.
WIDTH AT 10 M FROM JUNCTION	3.75 M.
WIDTH AT 15 M FROM JUNCTION	3.50 M.
WIDTH AT 20 M FROM JUNCTION	3.50 M.
- LENGTH OF FLARED SECTION	2 VEHS

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
686.89	0.27	0.27

(NB These values do not allow for any site specific corrections)

.TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

.Demand set: Base + Com + Growth 2026 AM

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

.DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	12.18	18.26	12.18
ARM B	15.00	45.00	75.00	11.69	17.53	11.69
ARM C	15.00	45.00	75.00	11.27	16.91	11.27

.Demand set: Base + Com + Growth 2026 AM

TIME	FROM/TO	TURNING PROPORTIONS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.210	0.790
		0.0	205.0	769.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.584	0.000	0.416
		546.0	0.0	389.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.816	0.184	0.000
		736.0	166.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET Base + Com + Growth 2026 AM
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	4.88	3.18	1.537		0.00	27.26	213.4		5.26
B-A	6.85	4.46	1.537		0.00	37.62	291.9		5.04
C-A	9.23								
C-B	2.08	8.20	0.254		0.00	0.34	4.8		0.16
A-B	2.57								
A-C	9.65								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	5.83	2.52	2.312		27.26	76.90	781.2		28.54
B-A	8.18	3.52	2.321		37.62	107.49	1088.4		28.23
C-A	11.03								
C-B	2.49	7.56	0.329		0.34	0.48	6.9		0.20
A-B	3.07								
A-C	11.52								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	7.14	1.54	4.643		76.90	160.91	1783.6		77.97
B-A	10.02	2.15	4.651		107.49	225.47	2497.2		77.89
C-A	13.51								
C-B	3.05	6.69	0.455		0.48	0.81	11.4		0.27
A-B	3.76								
A-C	14.11								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY	PEDESTRIAN FLOW	START QUEUE	END QUEUE	DELAY (VEH.MIN/	GEOMETRIC DELAY (VEH.MIN/	AVERAGE DELAY PER ARRIVING

08.30-08.45			(RFC)	(PEDS/MIN)	(VEHS)	(VEHS)	TIME SEGMENT)	TIME SEGMENT)	VEHICLE (MIN)
B-C	7.14	1.53	4.664		160.91	245.03	3044.6		75.25
B-A	10.02	2.15	4.669		225.47	343.57	4267.7		75.13
C-A	13.51								
C-B	3.05	6.69	0.455		0.81	0.82	12.3		0.27
A-B	3.76								
A-C	14.11								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	5.83	2.51	2.326		245.03	294.88	4049.3		88.64
B-A	8.18	3.51	2.328		343.57	413.57	5678.5		88.48
C-A	11.03								
C-B	2.49	7.56	0.329		0.82	0.50	7.9		0.20
A-B	3.07								
A-C	11.52								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-C	4.88	3.17	1.540		294.88	320.54	4615.6		97.41
B-A	6.85	4.45	1.541		413.57	449.63	6474.0		97.24
C-A	9.23								
C-B	2.08	8.20	0.254		0.50	0.35	5.4		0.16
A-B	2.57								
A-C	9.65								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	27.3	**********
08.15	76.9	**********
08.30	160.9	**********
08.45	245.0	**********
09.00	294.9	**********
09.15	320.5	**********

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	37.6	**********
08.15	107.5	**********
08.30	225.5	**********
08.45	343.6	**********
09.00	413.6	**********
09.15	449.6	**********

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	0.5	
08.30	0.8	*
08.45	0.8	*
09.00	0.5	
09.15	0.3	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	535.4	357.0	14487.7	27.06	30691.8	57.32
B-A	751.5	501.0	20297.8	27.01	43027.8	57.25
C-A	1013.0	675.4				
C-B	228.5	152.3	48.7	0.21	48.7	0.21
A-B	282.2	188.1				
A-C	1058.5	705.6				
ALL	3869.1	2579.4	34834.2	9.00	73768.3	19.07

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
686.89	0.27	0.27

(NB These values do not allow for any site specific corrections)

.TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

.Demand set: Base + Com + Growth 2026 PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

.DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	16.40	24.60	16.40
ARM B	15.00	45.00	75.00	5.97	8.96	5.97
ARM C	15.00	45.00	75.00	12.98	19.46	12.98

.Demand set: Base + Com + Growth 2026 PM

TIME	FROM/TO	TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.391	0.609
		0.0	513.0	799.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.519	0.000	0.481
		248.0	0.0	230.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.692	0.308	0.000
		718.0	320.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET Base + Com + Growth 2026 PM
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	2.89	4.24	0.681		0.00	1.87	23.3		0.63
B-A	3.11	3.42	0.909		0.00	4.56	47.8		1.30
C-A	9.01								
C-B	4.02	7.07	0.568		0.00	1.25	17.0		0.31
A-B	6.44								
A-C	10.03								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	3.45	1.89	1.819		1.87	25.71	209.3		22.19
B-A	3.72	2.13	1.742		4.56	28.66	250.4		23.43
C-A	10.76								
C-B	4.79	6.22	0.771		1.25	2.88	37.0		0.61
A-B	7.69								
A-C	11.97								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	4.22	0.23	18.189		25.71	85.54	834.4		57.17
B-A	4.55	0.25	18.013		28.66	93.13	913.5		57.37
C-A	13.18								
C-B	5.87	5.04	1.165		2.88	17.94	163.2		2.58

```
I   A-B       9.41                                                                                                   I
I   A-C      14.66                                                                                                   I
I                                                                                                                    I
.--------------------------------------------------------------------------------------------------------------------
.--------------------------------------------------------------------------------------------------------------------
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
I 17.30-17.45                                                                                                        I
I   B-C       4.22      0.00       ***              85.54 148.85     1757.9                         -999.00      I
I   B-A       4.55      0.00       ***              93.13 161.40     1909.0                         -999.00      I
I   C-A      13.18                                                                                                   I
I   C-B       5.87      5.04    1.165               17.94  31.00      367.7                            5.05      I
I   A-B       9.41                                                                                                   I
I   A-C      14.66                                                                                                   I
I                                                                                                                    I
.--------------------------------------------------------------------------------------------------------------------
.--------------------------------------------------------------------------------------------------------------------
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
I 17.45-18.00                                                                                                        I
I   B-C       3.45      1.24    2.782              148.85 181.96     2481.0                          67.27      I
I   B-A       3.72      1.34    2.770              161.40 197.01     2688.1                          67.35      I
I   C-A      10.76                                                                                                   I
I   C-B       4.79      6.22    0.771               31.00  12.59      326.9                            3.72      I
I   A-B       7.69                                                                                                   I
I   A-C      11.97                                                                                                   I
I                                                                                                                    I
.--------------------------------------------------------------------------------------------------------------------
.--------------------------------------------------------------------------------------------------------------------
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
I 18.00-18.15                                                                                                        I
I   B-C       2.89      2.83    1.019              181.96 182.81     2735.7                          64.83      I
I   B-A       3.11      3.06    1.016              197.01 197.78     2961.0                          64.87      I
I   C-A       9.01                                                                                                   I
I   C-B       4.02      7.07    0.568               12.59   1.40       47.0                            0.56      I
I   A-B       6.44                                                                                                   I
I   A-C      10.03                                                                                                   I
I                                                                                                                    I
.--------------------------------------------------------------------------------------------------------------------

 *WARNING* THE ENTRY CAPACITY OF AT LEAST ONE STREAM HAS BECOME ZERO DURING THE PERIOD MODELLED.
           (AG23 REF. 8.4.2(i)).
.
 QUEUE FOR STREAM    B-C
 -------------------------
  TIME          NO. OF
  SEGMENT       VEHICLES
  ENDING        IN QUEUE
   17.00           1.9    **
   17.15          25.7    *************************
   17.30          85.5    ******************************************************************************************
   17.45         148.8    ****************************************************************************************************
   18.00         182.0    ****************************************************************************************************
   18.15         182.8    ****************************************************************************************************
.
 QUEUE FOR STREAM    B-A
 -------------------------
  TIME          NO. OF
  SEGMENT       VEHICLES
  ENDING        IN QUEUE
   17.00           4.6    *****
   17.15          28.7    ******************************
   17.30          93.1    ******************************************************************************************
   17.45         161.4    ****************************************************************************************************
   18.00         197.0    ****************************************************************************************************
   18.15         197.8    ****************************************************************************************************
.
 QUEUE FOR STREAM    C-B
 -------------------------
  TIME          NO. OF
  SEGMENT       VEHICLES
  ENDING        IN QUEUE
   17.00           1.3    *
   17.15           2.9    ***
   17.30          17.9    ******************
   17.45          31.0    *******************************
   18.00          12.6    *************
   18.15           1.4    *
.
                 QUEUEING DELAY INFORMATION OVER WHOLE PERIOD
                 ---------------------------------------------
 ---------------------------------------------------------------------------
 I STREAM I   TOTAL DEMAND  I   * QUEUEING *      I * INCLUSIVE QUEUEING * I
 I        I                I    * DELAY *        I       * DELAY *        I
 I        I----------------------------------------------------------------I
 I        I  (VEH)  (VEH/H) I  (MIN)    (MIN/VEH) I    (MIN)     (MIN/VEH) I
 ---------------------------------------------------------------------------
 I  B-C   I  316.6 I  211.1 I  8041.7 I   25.40   I   13941.8  I   44.04   I
 I  B-A   I  341.4 I  227.6 I  8769.7 I   25.69   I   15153.0  I   44.39   I
 I  C-A   I  988.3 I  658.8 I         I           I            I           I
 I  C-B   I  440.5 I  293.6 I   958.8 I    2.18   I     958.9  I    2.18   I
 I  A-B   I  706.1 I  470.7 I         I           I            I           I
 I  A-C   I 1099.8 I  733.2 I         I           I            I           I
 ---------------------------------------------------------------------------
 I  ALL   I 3892.5 I 2595.0 I 17770.1 I    4.57   I   30053.7  I    7.72   I
 ---------------------------------------------------------------------------
 *WARNING* THE CAPACITY OF AT LEAST ONE STREAM HAS BECOME ZERO DURING THE PERIOD MODELLED.
 * DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
  A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

 *******END OF RUN*******
```

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
686.89	0.27	0.27

(NB These values do not allow for any site specific corrections)

.TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

.Demand set: Base + Com 2026 AM

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

.DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	2.75	4.13	2.75
ARM B	15.00	45.00	75.00	0.79	1.18	0.79
ARM C	15.00	45.00	75.00	1.79	2.68	1.79

.Demand set: Base + Com 2026 AM

TIME	FROM/TO	TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.109	0.891
		0.0	24.0	196.0
		(0.0)	(0.0)	(0.0)
	ARM B	1.000	0.000	0.000
		63.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		143.0	0.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET Base + Com 2026 AM
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.00	10.06	0.000		0.00	0.00	0.0		0.00
B-A	0.79	9.35	0.085		0.00	0.09	1.3		0.12
C-A	1.79								
C-B	0.00	9.74	0.000		0.00	0.00	0.0		0.00
A-B	0.30								
A-C	2.46								

.

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.00	9.88	0.000		0.00	0.00	0.0		0.00
B-A	0.94	9.15	0.103		0.09	0.11	1.7		0.12
C-A	2.14								
C-B	0.00	9.61	0.000		0.00	0.00	0.0		0.00
A-B	0.36								
A-C	2.94								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.00	9.64	0.000		0.00	0.00	0.0		0.00
B-A	1.16	8.86	0.130		0.11	0.15	2.2		0.13
C-A	2.62								
C-B	0.00	9.43	0.000		0.00	0.00	0.0		0.00
A-B	0.44								
A-C	3.60								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.00	9.64	0.000		0.00	0.00	0.0		0.00
B-A	1.16	8.86	0.130		0.15	0.15	2.2		0.13
C-A	2.62								
C-B	0.00	9.43	0.000		0.00	0.00	0.0		0.00
A-B	0.44								
A-C	3.60								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.00	9.88	0.000		0.00	0.00	0.0		0.00
B-A	0.94	9.15	0.103		0.15	0.12	1.8		0.12
C-A	2.14								
C-B	0.00	9.61	0.000		0.00	0.00	0.0		0.00
A-B	0.36								
A-C	2.94								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-C	0.00	10.05	0.000		0.00	0.00	0.0		0.00
B-A	0.79	9.35	0.085		0.12	0.09	1.4		0.12
C-A	1.79								
C-B	0.00	9.74	0.000		0.00	0.00	0.0		0.00
A-B	0.30								
A-C	2.46								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1
09.15	0.1

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * (MIN)	* QUEUEING * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	86.7	57.8	10.6	0.12	10.6	0.12
C-A	196.8	131.2				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	33.0	22.0				
A-C	269.8	179.9				
ALL	586.4	390.9	10.6	0.02	10.6	0.02

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES

WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
686.89	0.27	0.27

(NB These values do not allow for any site specific corrections)

.TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

.Demand set: Base + Com 2026 PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

.DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	2.15	3.23	2.15
ARM B	15.00	45.00	75.00	0.31	0.47	0.31
ARM C	15.00	45.00	75.00	2.06	3.09	2.06

.Demand set: Base + Com 2026 PM

TIME	TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S) FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.331	0.669
		0.0	57.0	115.0
		(0.0)	(0.0)	(0.0)
	ARM B	1.000	0.000	0.000
		25.0	0.0	0.0
		(0.0)	(0.0)	(0.0)
	ARM C	1.000	0.000	0.000
		165.0	0.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET Base + Com 2026 PM
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.00	10.40	0.000		0.00	0.00	0.0		0.00
B-A	0.31	9.55	0.033		0.00	0.03	0.5		0.11
C-A	2.07								
C-B	0.00	9.89	0.000		0.00	0.00	0.0		0.00
A-B	0.72								
A-C	1.44								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY	PEDESTRIAN FLOW	START QUEUE	END QUEUE	DELAY (VEH.MIN/	GEOMETRIC DELAY (VEH.MIN/	AVERAGE DELAY PER ARRIVING

			(RFC)	(PEDS/MIN)	(VEHS)	(VEHS)	TIME SEGMENT)	TIME SEGMENT)	VEHICLE (MIN)
17.00-17.15									
B-C	0.00	10.30	0.000		0.00	0.00	0.0		0.00
B-A	0.37	9.38	0.040		0.03	0.04	0.6		0.11
C-A	2.47								
C-B	0.00	9.78	0.000		0.00	0.00	0.0		0.00
A-B	0.85								
A-C	1.72								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.00	10.16	0.000		0.00	0.00	0.0		0.00
B-A	0.46	9.15	0.050		0.04	0.05	0.8		0.12
C-A	3.03								
C-B	0.00	9.64	0.000		0.00	0.00	0.0		0.00
A-B	1.05								
A-C	2.11								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.00	10.16	0.000		0.00	0.00	0.0		0.00
B-A	0.46	9.15	0.050		0.05	0.05	0.8		0.12
C-A	3.03								
C-B	0.00	9.64	0.000		0.00	0.00	0.0		0.00
A-B	1.05								
A-C	2.11								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.00	10.30	0.000		0.00	0.00	0.0		0.00
B-A	0.37	9.38	0.040		0.05	0.04	0.6		0.11
C-A	2.47								
C-B	0.00	9.78	0.000		0.00	0.00	0.0		0.00
A-B	0.85								
A-C	1.72								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.00	10.40	0.000		0.00	0.00	0.0		0.00
B-A	0.31	9.55	0.033		0.04	0.03	0.5		0.11
C-A	2.07								
C-B	0.00	9.89	0.000		0.00	0.00	0.0		0.00
A-B	0.72								
A-C	1.44								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.1
17.45	0.1
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	34.4	22.9	3.8	0.11	3.8	0.11
C-A	227.1	151.4				

Gateford Rd-Ashes Park Ave

C-B	0.0	0.0	0.0	0.00	0.0	0.00		
A-B	78.5	52.3						
A-C	158.3	105.5						
ALL	498.3	332.2	3.8	0.01	3.8	0.01		

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

TRL LIMITED

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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Run with file:-
"N:\Projects\A078085 - Bassetlaw DC Modelling\calculations\Capacity Assessments\6. Gateford Rd-Raymoth Ln\
Gateford Rd-Raymoth Ln.vpi"
(drive-on-the-left) at 14:05:04 on Monday, 3 December 2012

.RUN INFORMATION

```
RUN TITLE       : Gateford Rd - Raymoth Lane
LOCATION        : Worksop
DATE            : 30/10/12
CLIENT          : Bassetlaw District Council
ENUMERATOR      : robert.holland [1066LT]
JOB NUMBER      : A078085
STATUS          : Preliminary
DESCRIPTION     :
```

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

```
                    MAJOR ROAD (ARM C) ---------------------- MAJOR ROAD (ARM A)
                                                I
                                                I
                                                I
                                                I
                                                I
                                                I
                                          MINOR ROAD (ARM B)
```

ARM A IS Gateford Road (north)
ARM B IS Raymoth Lane
ARM C IS Gateford Road (south)

.STREAM LABELLING CONVENTION

```
STREAM  A-B  CONTAINS TRAFFIC GOING FROM ARM  A TO ARM B
STREAM  B-AC CONTAINS TRAFFIC GOING FROM ARM  B TO ARM A AND TO ARM  C
ETC.
```

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 9.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.00 M.
- VISIBILITY	(VC-B)100.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 100.0 M.
- VISIBILITY TO RIGHT	(VB-A) 100.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	10.00 M.
WIDTH AT 5 M FROM JUNCTION	10.00 M.
WIDTH AT 10 M FROM JUNCTION	8.00 M.
WIDTH AT 15 M FROM JUNCTION	6.00 M.
WIDTH AT 20 M FROM JUNCTION	5.00 M.
- LENGTH OF FLARED SECTION	4 VEHS

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
686.89	0.23	0.23

(NB These values do not allow for any site specific corrections)

.TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

.Demand set: Base + Com + Growth 2026 AM

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

.DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	15.76	23.64	15.76
ARM B	15.00	45.00	75.00	9.19	13.78	9.19
ARM C	15.00	45.00	75.00	5.26	7.89	5.26

.Demand set: Base + Com + Growth 2026 AM

TIME	FROM/TO	TURNING PROPORTIONS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.474	0.526
		0.0	598.0	663.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.746	0.000	0.254
		548.0	0.0	187.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.746	0.254	0.000
		314.0	107.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET Base + Com + Growth 2026 AM
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	2.35	2.31	1.017		0.00	5.73	54.4		2.12
B-A	6.88	6.76	1.017		0.00	10.53	100.7		1.21
C-A	3.94								
C-B	1.34	7.79	0.172		0.00	0.21	3.0		0.15
A-B	7.50								
A-C	8.32								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	2.80	2.13	1.315		5.73	16.50	168.0		6.56
B-A	8.21	5.96	1.377		10.53	44.71	415.7		5.34
C-A	4.70								
C-B	1.60	7.08	0.227		0.21	0.29	4.2		0.18
A-B	8.96								
A-C	9.93								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	3.43	1.69	2.026		16.50	42.63	443.6		17.99
B-A	10.06	4.87	2.064		44.71	122.49	1254.1		17.13
C-A	5.76								
C-B	1.96	6.09	0.322		0.29	0.46	6.6		0.24
A-B	10.97								
A-C	12.17								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY	PEDESTRIAN FLOW	START QUEUE	END QUEUE	DELAY (VEH.MIN/	GEOMETRIC DELAY (VEH.MIN/	AVERAGE DELAY PER ARRIVING

			(RFC)	(PEDS/MIN)	(VEHS)	(VEHS)	TIME SEGMENT)	TIME SEGMENT)	VEHICLE (MIN)
08.30-08.45									
B-C	3.43	1.68	2.048		42.63	68.98	837.1		33.96
B-A	10.06	4.87	2.066		122.49	200.32	2421.0		33.40
C-A	5.76								
C-B	1.96	6.09	0.322		0.46	0.47	7.0		0.24
A-B	10.97								
A-C	12.17								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	2.80	2.05	1.370		68.98	80.34	1119.9		34.54
B-A	8.21	5.96	1.377		200.32	234.07	3257.9		34.11
C-A	4.70								
C-B	1.60	7.08	0.227		0.47	0.30	4.6		0.18
A-B	8.96								
A-C	9.93								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-C	2.35	2.31	1.014		80.34	80.97	1209.8		35.41
B-A	6.88	6.75	1.018		234.07	235.99	3525.5		34.99
C-A	3.94								
C-B	1.34	7.79	0.172		0.30	0.21	3.3		0.16
A-B	7.50								
A-C	8.32								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	5.7	******
08.15	16.5	**********
08.30	42.6	**********
08.45	69.0	**********
09.00	80.3	**********
09.15	81.0	**********

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	10.5	**********
08.15	44.7	**********
08.30	122.5	**********
08.45	200.3	**********
09.00	234.1	**********
09.15	236.0	**********

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.2
08.15	0.3
08.30	0.5
08.45	0.5
09.00	0.3
09.15	0.2

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	257.4	171.6	3832.8	14.89	5249.5	20.40
B-A	754.3	502.9	10974.9	14.55	15098.3	20.02
C-A	432.2	288.1				
C-B	147.3	98.2	28.7	0.20	28.7	0.20
A-B	823.1	548.7				
A-C	912.6	608.4				
ALL	3326.8	2217.9	14836.4	4.46	20376.5	6.12

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
686.89	0.23	0.23

(NB These values do not allow for any site specific corrections)

.TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

.Demand set: Base + Com + Growth 2026 PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

.DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	12.50	18.75	12.50
ARM B	15.00	45.00	75.00	7.64	11.46	7.64
ARM C	15.00	45.00	75.00	10.61	15.92	10.61

.Demand set: Base + Com + Growth 2026 PM

TIME	FROM/TO	TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.627	0.373
		0.0	627.0	373.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.761	0.000	0.239
		465.0	0.0	146.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.755	0.245	0.000
		641.0	208.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET Base + Com + Growth 2026 PM
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	1.83	4.86	0.377		0.00	0.59	8.1		0.32
B-A	5.83	6.56	0.889		0.00	5.13	57.1		0.78
C-A	8.04								
C-B	2.61	8.54	0.305		0.00	0.43	6.2		0.17
A-B	7.87								
A-C	4.68								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	2.19	1.74	1.258		0.59	9.46	81.9		4.11
B-A	6.97	5.71	1.220		5.13	25.55	234.4		3.30
C-A	9.60								
C-B	3.12	7.98	0.390		0.43	0.63	9.0		0.20
A-B	9.39								
A-C	5.59								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	2.68	1.47	1.825		9.46	27.77	279.5		13.72
B-A	8.53	4.54	1.880		25.55	85.51	833.2		12.53
C-A	11.76								
C-B	3.82	7.20	0.530		0.63	1.08	15.2		0.29

```
I   A-B      11.51                                                                                                  I
I   A-C       6.84                                                                                                  I
I                                                                                                                   I
.-------------------------------------------------------------------------------------------------------------------
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I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                              (RFC)    (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
I 17.30-17.45                                                                                                       I
I   B-C       2.68      1.44    1.859               27.77  46.37      556.0                          26.62      I
I   B-A       8.53      4.53    1.884               85.51 145.59     1733.3                          25.79      I
I   C-A      11.76                                                                                                  I
I   C-B       3.82      7.20    0.530                1.08   1.11       16.5                           0.29      I
I   A-B      11.51                                                                                                  I
I   A-C       6.84                                                                                                  I
I                                                                                                                   I
.-------------------------------------------------------------------------------------------------------------------
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I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                              (RFC)    (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
I 17.45-18.00                                                                                                       I
I   B-C       2.19      1.80    1.214               46.37  52.20      739.3                          26.37      I
I   B-A       6.97      5.69    1.224              145.59 164.75     2327.5                          25.87      I
I   C-A       9.60                                                                                                  I
I   C-B       3.12      7.98    0.390                1.11   0.65       10.3                           0.21      I
I   A-B       9.39                                                                                                  I
I   A-C       5.59                                                                                                  I
I                                                                                                                   I
.-------------------------------------------------------------------------------------------------------------------
.-------------------------------------------------------------------------------------------------------------------
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                              (RFC)    (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
I 18.00-18.15                                                                                                       I
I   B-C       1.83      2.07    0.887               52.20  49.27      761.1                          25.00      I
I   B-A       5.83      6.54    0.892              164.75 154.73     2396.1                          24.58      I
I   C-A       8.04                                                                                                  I
I   C-B       2.61      8.54    0.305                0.65   0.45        7.0                           0.17      I
I   A-B       7.87                                                                                                  I
I   A-C       4.68                                                                                                  I
I                                                                                                                   I
.-------------------------------------------------------------------------------------------------------------------
.
QUEUE FOR STREAM    B-C
-------------------------
 TIME          NO. OF
 SEGMENT       VEHICLES
 ENDING        IN QUEUE
  17.00           0.6    *
  17.15           9.5    *********
  17.30          27.8    ****************************
  17.45          46.4    ***********************************************
  18.00          52.2    ****************************************************
  18.15          49.3    ***********************************************
.
QUEUE FOR STREAM    B-A
-------------------------
 TIME          NO. OF
 SEGMENT       VEHICLES
 ENDING        IN QUEUE
  17.00           5.1    *****
  17.15          25.6    **************************
  17.30          85.5    ************************************************************************************
  17.45         145.6    ****************************************************************************************************
  18.00         164.7    ****************************************************************************************************
  18.15         154.7    ****************************************************************************************************
.
QUEUE FOR STREAM    C-B
-------------------------
 TIME          NO. OF
 SEGMENT       VEHICLES
 ENDING        IN QUEUE
  17.00           0.4
  17.15           0.6    *
  17.30           1.1    *
  17.45           1.1    *
  18.00           0.7    *
  18.15           0.4
.
                QUEUEING DELAY INFORMATION OVER WHOLE PERIOD
                ---------------------------------------------
-----------------------------------------------------------------------------
I STREAM I   TOTAL DEMAND  I   * QUEUEING *      I * INCLUSIVE QUEUEING * I
I        I                 I    * DELAY *        I       * DELAY *        I
I        I-----------------------------------------------------------------I
I        I  (VEH)  (VEH/H) I  (MIN)    (MIN/VEH) I    (MIN)     (MIN/VEH) I
-----------------------------------------------------------------------------
I  B-C   I  201.0 I  134.0 I  2425.9 I   12.07   I    3013.2  I   14.99   I
I  B-A   I  640.0 I  426.7 I  7581.6 I   11.85   I    9411.4  I   14.70   I
I  C-A   I  882.3 I  588.2 I         I           I            I           I
I  C-B   I  286.3 I  190.9 I    64.2 I    0.22   I      64.2  I    0.22   I
I  A-B   I  863.0 I  575.3 I         I           I            I           I
I  A-C   I  513.4 I  342.3 I         I           I            I           I
-----------------------------------------------------------------------------
I  ALL   I 3386.0 I 2257.3 I 10071.6 I    2.97   I   12488.8  I    3.69   I
-----------------------------------------------------------------------------
* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******


.SLOPES AND INTERCEPT
 --------------------
 (NB:Streams may be combined, in which case capacity will be adjusted)
```

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
686.89	0.23	0.23

(NB These values do not allow for any site specific corrections)

.TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

.Demand set: Base + Com 2026 AM

TIME PERIOD BEGINS 07.45 AND ENDS 09.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

.DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	2.45	3.68	2.45
ARM B	15.00	45.00	75.00	1.14	1.71	1.14
ARM C	15.00	45.00	75.00	0.69	1.03	0.69

.Demand set: Base + Com 2026 AM

TIME	FROM/TO	TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
07.45 - 09.15	ARM A	0.000	0.173	0.827
		0.0	34.0	162.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.989	0.000	0.011
		90.0	0.0	1.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.964	0.036	0.000
		53.0	2.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET Base + Com 2026 AM
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-C	0.01	10.44	0.001		0.00	0.00	0.0		0.10
B-A	1.13	10.49	0.108		0.00	0.12	1.7		0.11
C-A	0.67								
C-B	0.03	10.88	0.002		0.00	0.00	0.0		0.09
A-B	0.43								
A-C	2.03								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.01	10.29	0.001		0.00	0.00	0.0		0.10
B-A	1.35	10.35	0.130		0.12	0.15	2.2		0.11
C-A	0.79								
C-B	0.03	10.77	0.003		0.00	0.00	0.0		0.09
A-B	0.51								
A-C	2.43								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.02	10.07	0.002		0.00	0.00	0.0		0.10
B-A	1.65	10.16	0.163		0.15	0.19	2.8		0.12
C-A	0.97								
C-B	0.04	10.62	0.003		0.00	0.00	0.1		0.09
A-B	0.62								
A-C	2.97								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.02	10.07	0.002		0.00	0.00	0.0		0.10
B-A	1.65	10.16	0.163		0.19	0.19	2.9		0.12
C-A	0.97								
C-B	0.04	10.62	0.003		0.00	0.00	0.1		0.09
A-B	0.62								
A-C	2.97								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.01	10.29	0.001		0.00	0.00	0.0		0.10
B-A	1.35	10.35	0.130		0.19	0.15	2.3		0.11
C-A	0.79								
C-B	0.03	10.77	0.003		0.00	0.00	0.0		0.09
A-B	0.51								
A-C	2.43								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
09.00-09.15									
B-C	0.01	10.44	0.001		0.00	0.00	0.0		0.10
B-A	1.13	10.49	0.108		0.15	0.12	1.9		0.11
C-A	0.67								
C-B	0.03	10.88	0.002		0.00	0.00	0.0		0.09
A-B	0.43								
A-C	2.03								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.1
08.15	0.1
08.30	0.2
08.45	0.2
09.00	0.2
09.15	0.1

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0
09.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	1.4	0.9	0.1	0.10	0.1	0.10
B-A	123.9	82.6	13.8	0.11	13.8	0.11
C-A	73.0	48.6				
C-B	2.8	1.8	0.3	0.09	0.3	0.09
A-B	46.8	31.2				
A-C	223.0	148.7				
ALL	470.7	313.8	14.2	0.03	14.2	0.03

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
0.00	0.00	0.00	0.00	0.00

* Due to the presence of a flare, data is not available

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
686.89	0.23	0.23

(NB These values do not allow for any site specific corrections)

.TRAFFIC DEMAND DATA

ARM	FLOW SCALE(%)
A	100
B	100
C	100

.Demand set: Base + Com 2026 PM

TIME PERIOD BEGINS 16.45 AND ENDS 18.15

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

.DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

ARM	NUMBER OF MINUTES FROM START WHEN FLOW STARTS TO RISE	TOP OF PEAK IS REACHED	FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	AT TOP OF PEAK	AFTER PEAK
ARM A	15.00	45.00	75.00	1.44	2.16	1.44
ARM B	15.00	45.00	75.00	0.36	0.54	0.36
ARM C	15.00	45.00	75.00	1.74	2.61	1.74

.Demand set: Base + Com 2026 PM

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS / (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
16.45 - 18.15	ARM A	0.000	0.670	0.330
		0.0	77.0	38.0
		(0.0)	(0.0)	(0.0)
	ARM B	0.931	0.000	0.069
		27.0	0.0	2.0
		(0.0)	(0.0)	(0.0)
	ARM C	0.993	0.007	0.000
		138.0	1.0	0.0
		(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET Base + Com 2026 PM
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-C	0.03	11.01	0.002		0.00	0.00	0.0		0.09
B-A	0.34	10.63	0.032		0.00	0.03	0.5		0.10
C-A	1.73								
C-B	0.01	11.11	0.001		0.00	0.00	0.0		0.09
A-B	0.97								
A-C	0.48								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.03	10.96	0.003		0.00	0.00	0.0		0.09
B-A	0.40	10.52	0.038		0.03	0.04	0.6		0.10

C-A	2.07								
C-B	0.01	11.05	0.001		0.00	0.00	0.0		0.09
A-B	1.15								
A-C	0.57								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.04	10.88	0.003		0.00	0.00	0.0		0.09
B-A	0.50	10.38	0.048		0.04	0.05	0.7		0.10
C-A	2.53								
C-B	0.02	10.96	0.002		0.00	0.00	0.0		0.09
A-B	1.41								
A-C	0.70								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.04	10.88	0.003		0.00	0.00	0.1		0.09
B-A	0.50	10.38	0.048		0.05	0.05	0.7		0.10
C-A	2.53								
C-B	0.02	10.96	0.002		0.00	0.00	0.0		0.09
A-B	1.41								
A-C	0.70								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.03	10.96	0.003		0.00	0.00	0.0		0.09
B-A	0.40	10.52	0.038		0.05	0.04	0.6		0.10
C-A	2.07								
C-B	0.01	11.05	0.001		0.00	0.00	0.0		0.09
A-B	1.15								
A-C	0.57								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
18.00-18.15									
B-C	0.03	11.01	0.002		0.00	0.00	0.0		0.09
B-A	0.34	10.63	0.032		0.04	0.03	0.5		0.10
C-A	1.73								
C-B	0.01	11.11	0.001		0.00	0.00	0.0		0.09
A-B	0.97								
A-C	0.48								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0
18.15	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	2.8	1.8	0.3	0.09	0.3	0.09
B-A	37.2	24.8	3.7	0.10	3.7	0.10
C-A	189.9	126.6				
C-B	1.4	0.9	0.1	0.09	0.1	0.09
A-B	106.0	70.7				
A-C	52.3	34.9				

```
                                                        Gateford Rd-Raymoth Ln
I  ALL   I  389.5 I  259.7 I     4.0 I    0.01   I       4.0  I    0.01   I
-----------------------------------------------------------------------------
* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*******END OF RUN*******
```

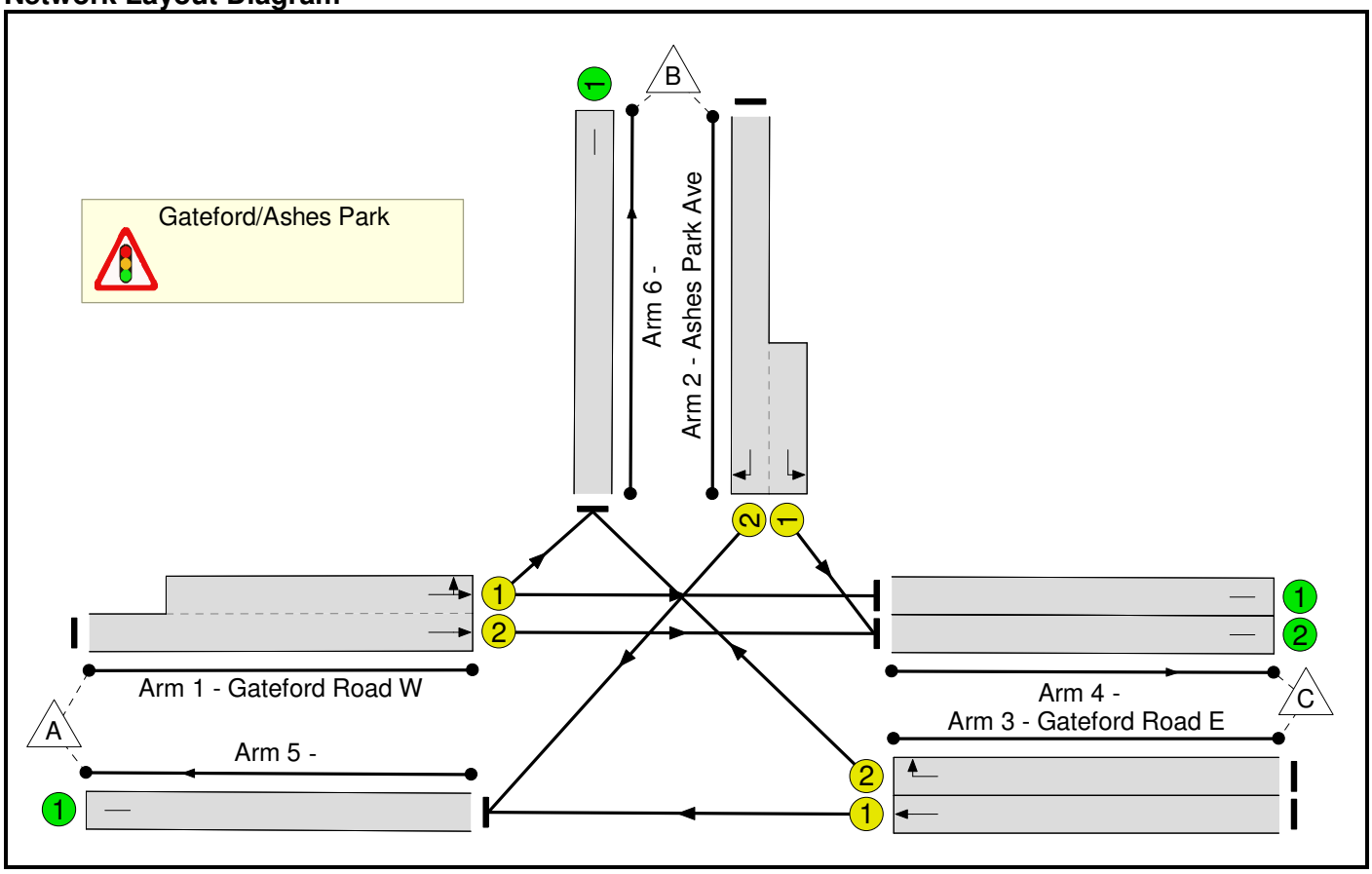
Full Input Data And Results

User and Project Details

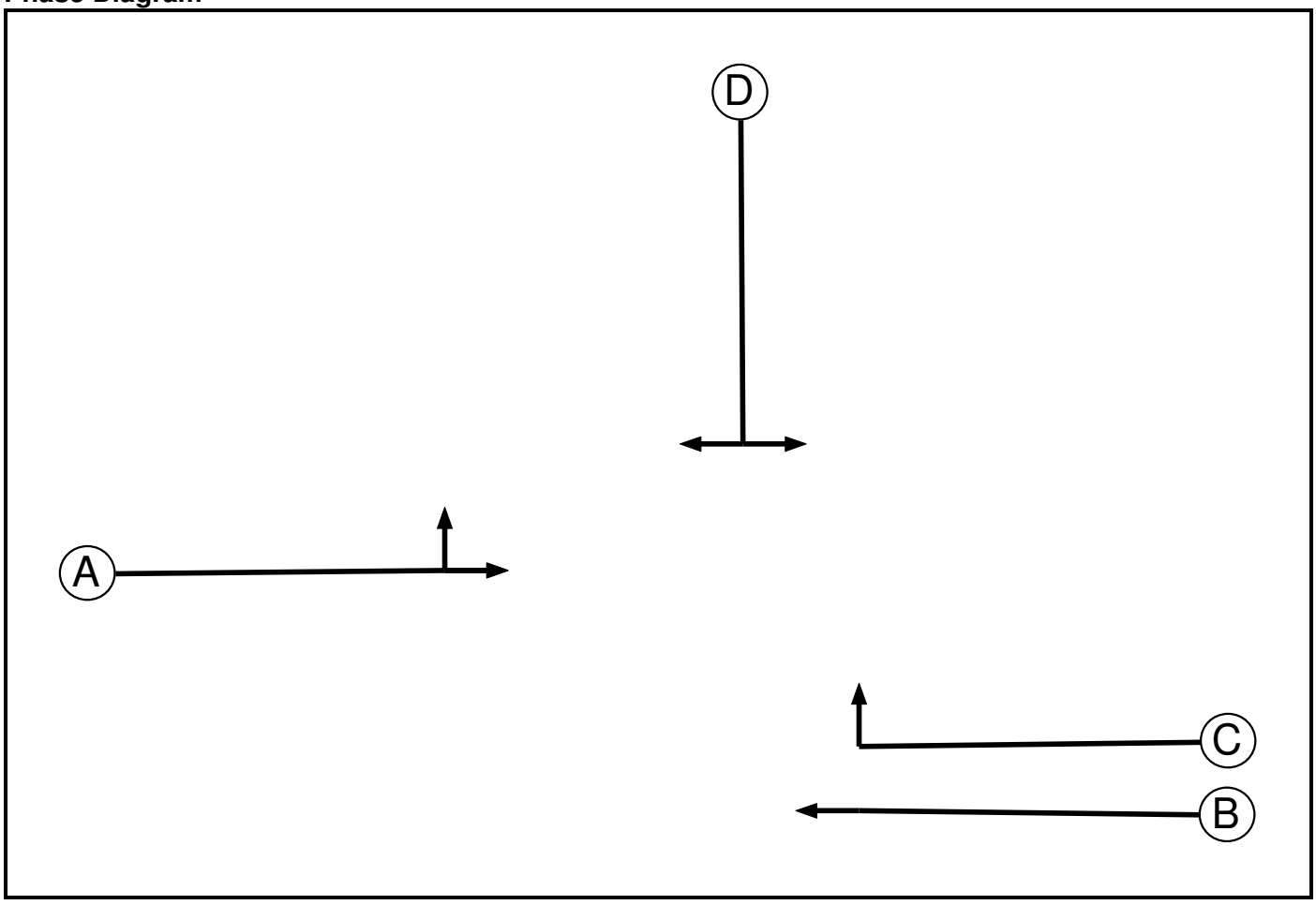
Project:	
Title:	
Location:	
File name:	Gatesford_Ashes 2.lsg3x
Author:	
Company:	
Address:	
Notes:	

Full Input Data And Results

Network Layout Diagram



Phase Diagram



Full Input Data And Results

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

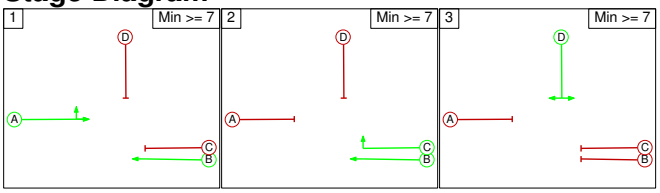
Phase Intergreens Matrix

	Starting Phase				
Terminating Phase		A	B	C	D
	A		-	6	6
	B	-		-	6
	C	6	-		6
	D	6	6	6	

Phases in Stage

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

Stage Diagram



Phase Delays

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

Prohibited Stage Changes

	To Stage			
From Stage		1	2	3
	1		6	6
	2	6		6
	3	6	6	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Gateford/Ashes Park
There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: Gateford/Ashes Park												
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 (Gateford Road W)	U	A	2	3	20.0	Geom	-	3.25	0.00	Y	Arm 4 Ahead	Inf
											Arm 6 Left	15.00
1/2 (Gateford Road W)	U	A	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 4 Ahead	Inf
2/1 (Ashes Park Ave)	U	D	2	3	6.0	Geom	-	3.00	0.00	Y	Arm 4 Left	15.00
2/2 (Ashes Park Ave)	U	D	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Right	15.00
3/1 (Gateford Road E)	U	B	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 5 Ahead	Inf
3/2 (Gateford Road E)	U	C	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 6 Right	15.00
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
4/2	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2026 AM B+C+G'	08:00	09:00	01:00	
2: '2026 PM B+C+G'	17:00	18:00	01:00	

Scenario 1: '2026 AM B+C+G' (FG1: '2026 AM B+C+G', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	205	769	974
	B	546	0	389	935
	C	736	166	0	902
	Tot.	1282	371	1158	2811

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2026 AM B+C+G
Junction: Gateford/Ashes Park	
1/1 (short)	487
1/2 (with short)	974(In) 487(Out)
2/1 (short)	389
2/2 (with short)	935(In) 546(Out)
3/1	736
3/2	166
4/1	282
4/2	876
5/1	1282
6/1	371

Traffic Lane Flows

Junction: Gateford/Ashes Park								
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 (Gateford Road W)	3.25	0.00	Y	Arm 4 Ahead	Inf	57.9 %	1862	1862
				Arm 6 Left	15.00	42.1 %		
1/2 (Gateford Road W)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
2/1 (Ashes Park Ave)	3.00	0.00	Y	Arm 4 Left	15.00	100.0 %	1741	1741
2/2 (Ashes Park Ave)	3.00	0.00	Y	Arm 5 Right	15.00	100.0 %	1741	1741
3/1 (Gateford Road E)	3.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1940	1940
3/2 (Gateford Road E)	3.25	0.00	Y	Arm 6 Right	15.00	100.0 %	1764	1764
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: '2026 PM B+C+G' (FG2: '2026 PM B+C+G', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	513	799	1312
	B	248	0	230	478
	C	718	320	0	1038
	Tot.	966	833	1029	2828

Traffic Lane Flows

Lane	Scenario 2: 2026 PM B+C+G
Junction: Gateford/Ashes Park	
1/1 (short)	656
1/2 (with short)	1312(In) 656(Out)
2/1 (short)	230
2/2 (with short)	478(In) 248(Out)
3/1	718
3/2	320
4/1	143
4/2	886
5/1	966
6/1	833

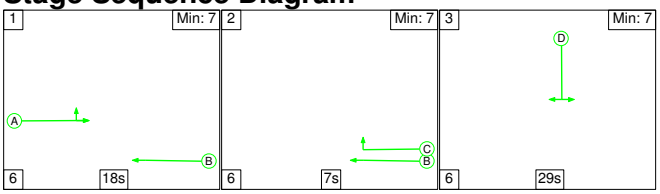
Full Input Data And Results

Traffic Lane Flows

Junction: Gateford/Ashes Park								
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 (Gateford Road W)	3.25	0.00	Y	Arm 4 Ahead	Inf	21.8 %	1799	1799
				Arm 6 Left	15.00	78.2 %		
1/2 (Gateford Road W)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
2/1 (Ashes Park Ave)	3.00	0.00	Y	Arm 4 Left	15.00	100.0 %	1741	1741
2/2 (Ashes Park Ave)	3.00	0.00	Y	Arm 5 Right	15.00	100.0 %	1741	1741
3/1 (Gateford Road E)	3.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1940	1940
3/2 (Gateford Road E)	3.25	0.00	Y	Arm 6 Right	15.00	100.0 %	1764	1764
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2026 AM B+C+G' (FG1: '2026 AM B+C+G', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

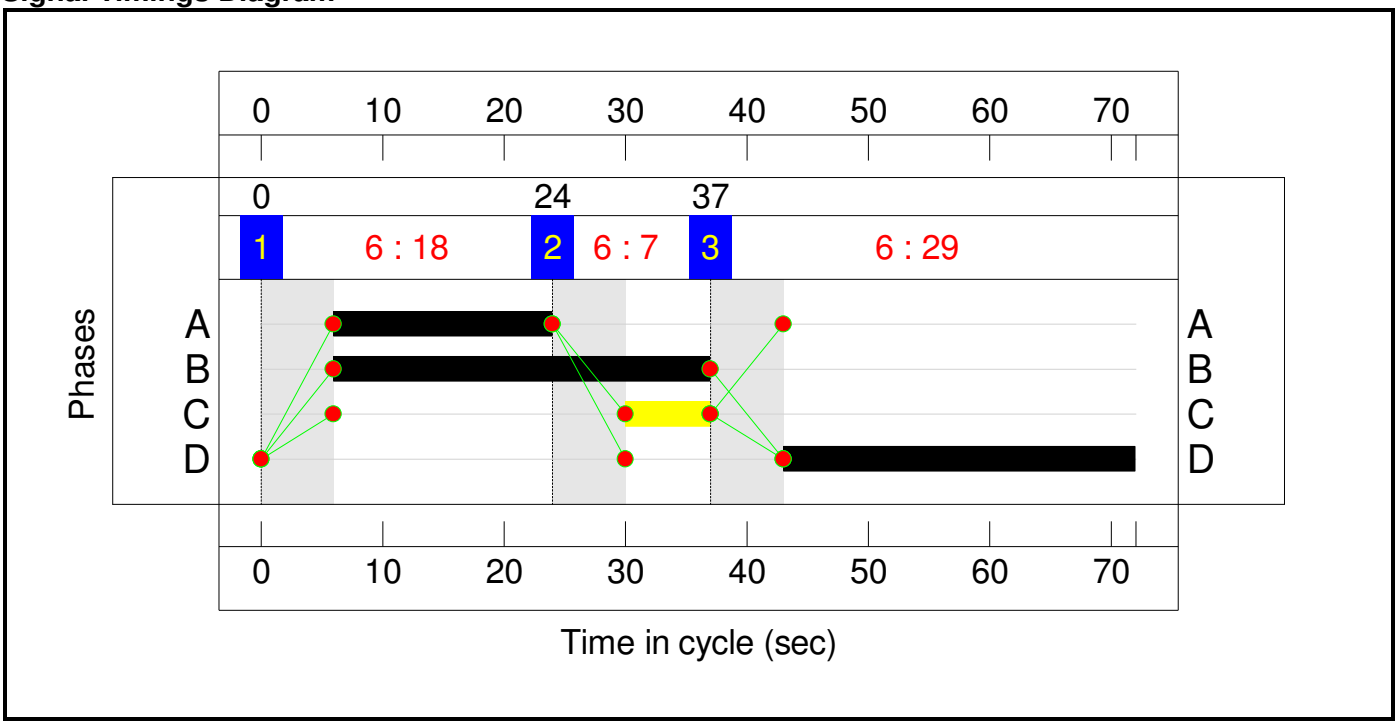


Stage Timings

Stage	1	2	3
Duration	18	7	29
Change Point	0	24	37

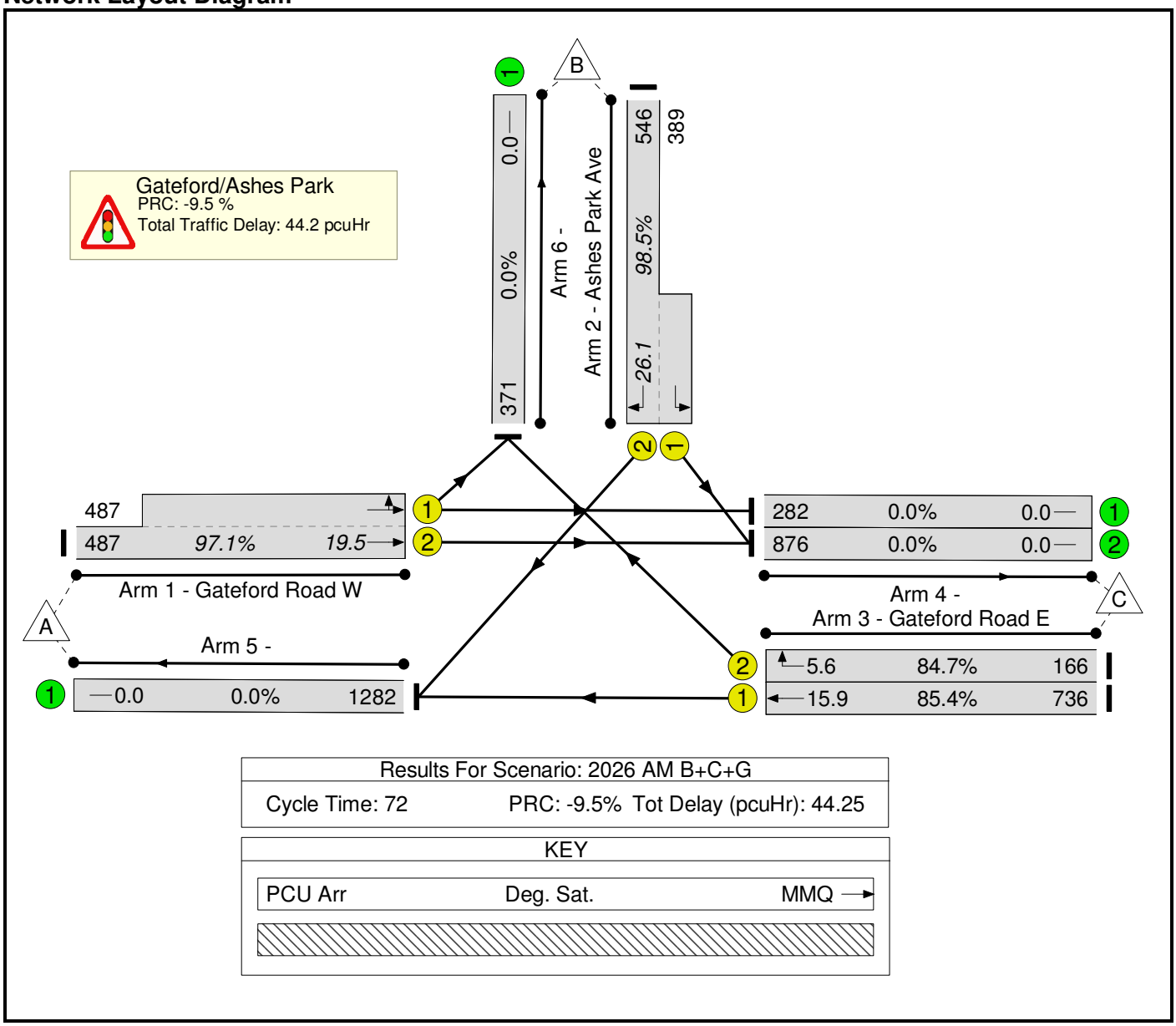
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Results For Scenario: 2026 AM B+C+G	
Cycle Time: 72	PRC: -9.5% Tot Delay (pcuHr): 44.25

KEY		
PCU Arr	Deg. Sat.	MMQ

Full Input Data And Results

Network Results

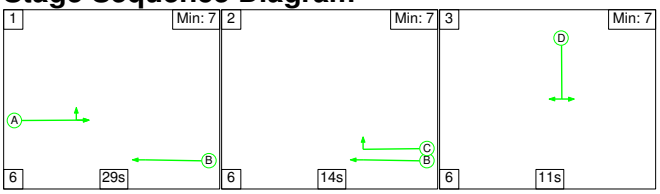
Item	Lane Description	Lane Type	Controller Stream	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**N/A**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**98.5%**	**44.2**	**-**	**-**
Gateford/Ashes Park	**-**	**-**	**N/A**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**98.5%**	**44.2**	**-**	**-**
1/2+1/1	Gateford Road W Ahead Left	U	N/A	A		1	18	-	974	1940:1862	1003	97.1%	17.0	62.9	19.5
2/2+2/1	Ashes Park Ave Left Right	U	N/A	D		1	29	-	935	1741:1741	949	98.5%	17.0	65.3	26.1
3/1	Gateford Road E Ahead	U	N/A	B		1	31	-	736	1940	862	85.4%	6.5	31.6	15.9
3/2	Gateford Road E Right	U	N/A	C		1	7	-	166	1764	196	84.7%	3.8	83.2	5.6

C1 PRC for Signalled Lanes (%): -9.5 Total Delay for Signalled Lanes (pcuHr): 44.25 Cycle Time (s): 72
PRC Over All Lanes (%): -9.5 Total Delay Over All Lanes(pcuHr): 44.25

Full Input Data And Results

Scenario 2: '2026 PM B+C+G' (FG2: '2026 PM B+C+G', Plan 1: 'Network Control Plan 1')

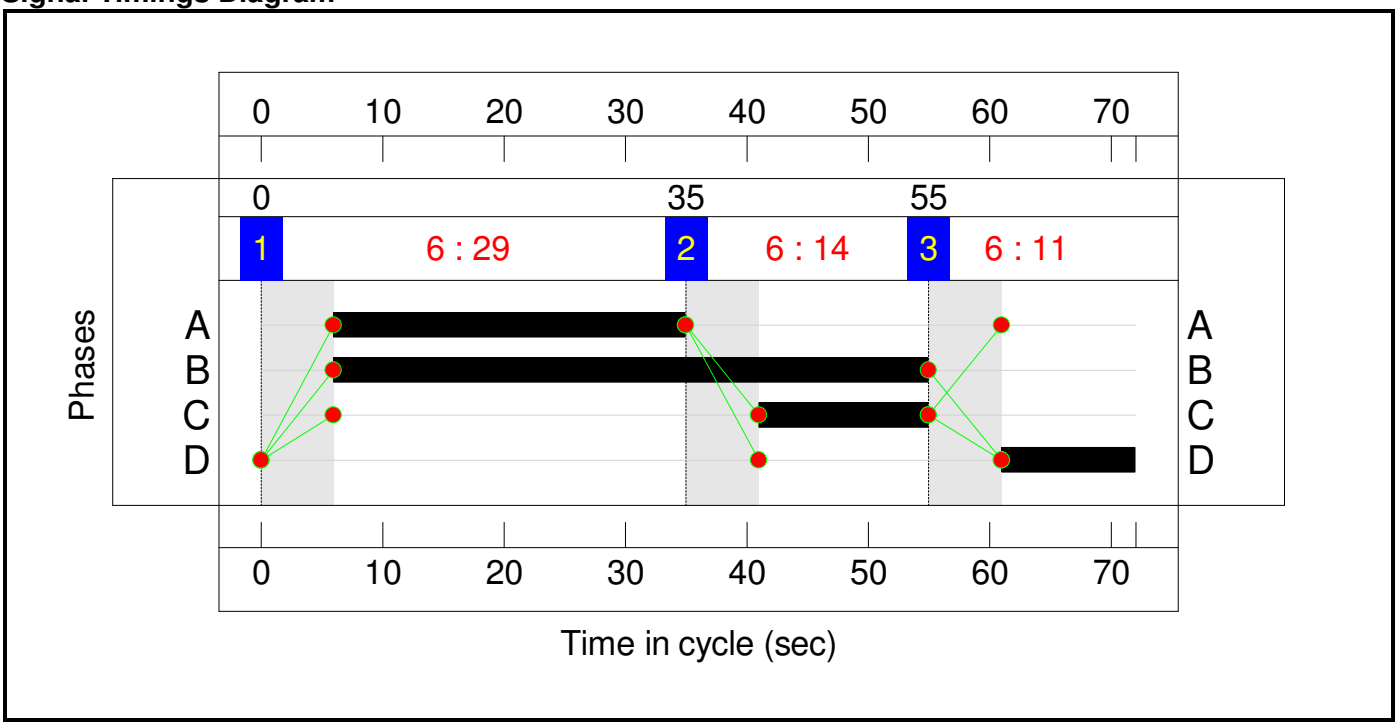
Stage Sequence Diagram



Stage Timings

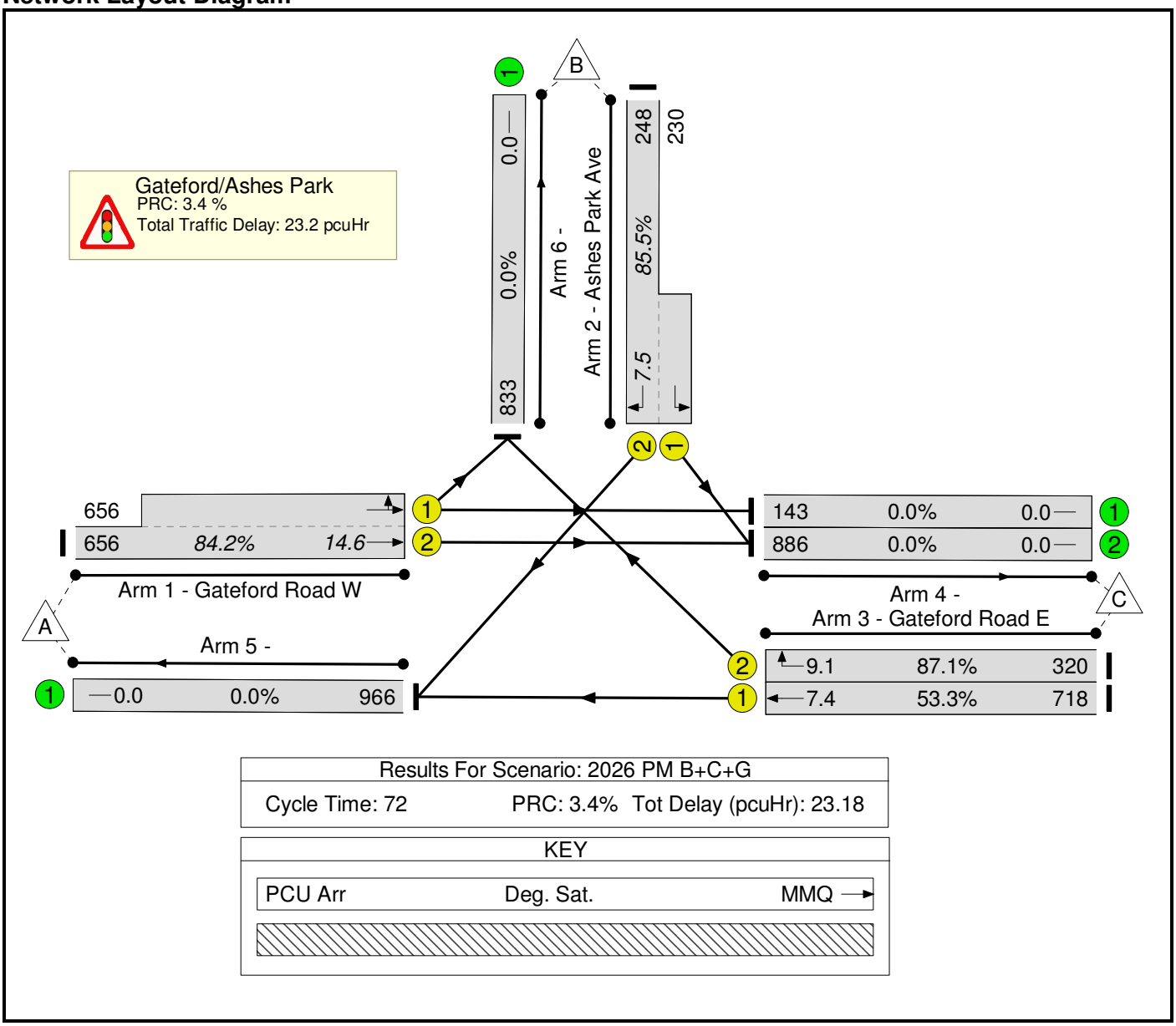
Stage	1	2	3
Duration	29	14	11
Change Point	0	35	55

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Results For Scenario: 2026 PM B+C+G		
Cycle Time: 72	PRC: 3.4%	Tot Delay (pcuHr): 23.18

KEY		
PCU Arr	Deg. Sat.	MMQ

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**N/A**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**87.1%**	**23.2**	**-**	**-**
Gateford/Ashes Park	**-**	**-**	**N/A**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**87.1%**	**23.2**	**-**	**-**
1/2+1/1	Gateford Road W Ahead Left	U	N/A	A		1	29	-	1312	1940:1799	1558	84.2%	9.5	26.1	14.6
2/2+2/1	Ashes Park Ave Left Right	U	N/A	D		1	11	-	478	1741:1741	559	85.5%	6.6	49.7	7.5
3/1	Gateford Road E Ahead	U	N/A	B		1	49	-	718	1940	1347	53.3%	1.6	8.2	7.4
3/2	Gateford Road E Right	U	N/A	C		1	14	-	320	1764	367	87.1%	5.4	61.2	9.1

C1 PRC for Signalled Lanes (%): 3.4 Total Delay for Signalled Lanes (pcuHr): 23.18 Cycle Time (s): 72
PRC Over All Lanes (%): 3.4 Total Delay Over All Lanes(pcuHr): 23.18

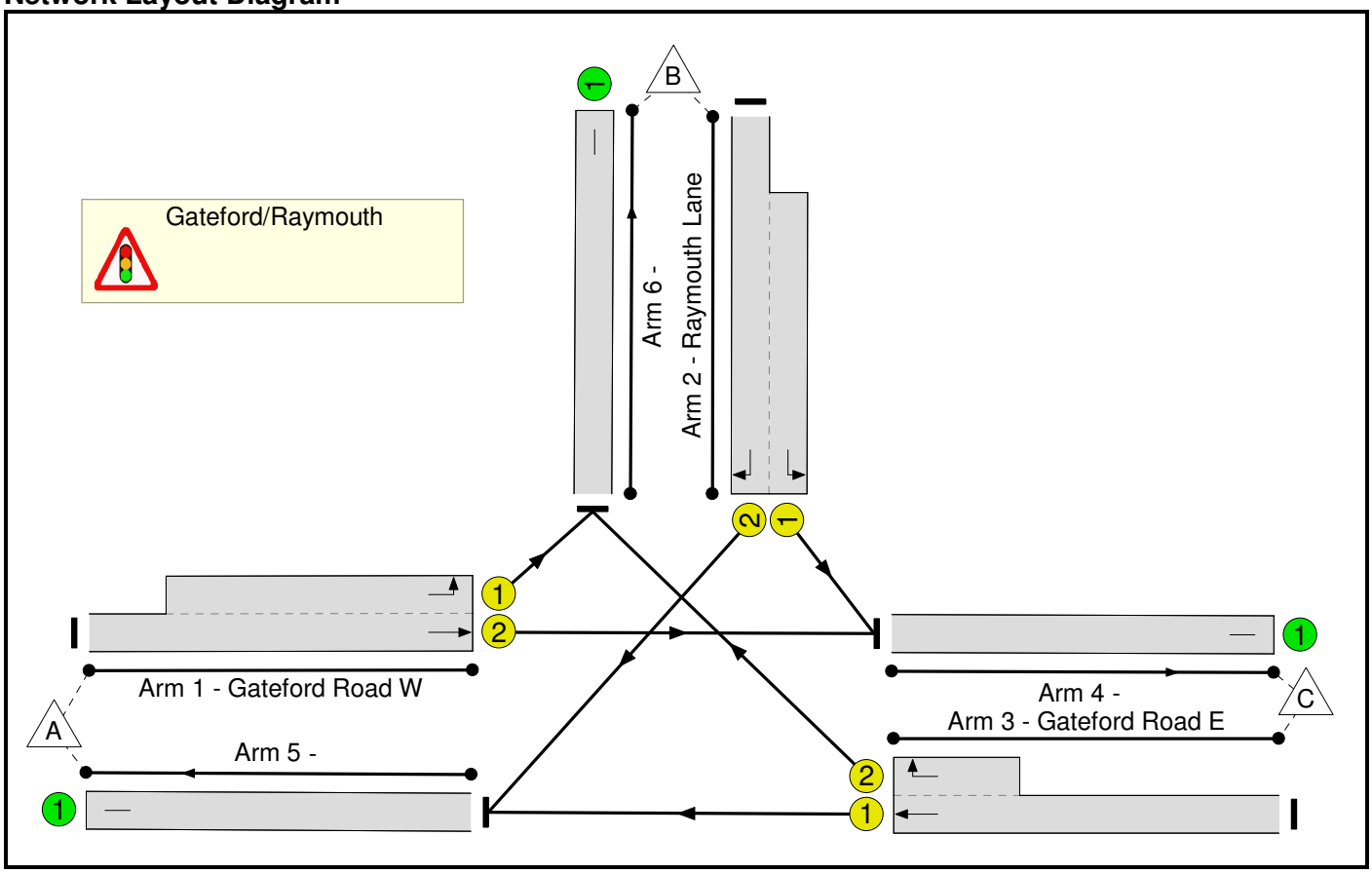
Full Input Data And Results

User and Project Details

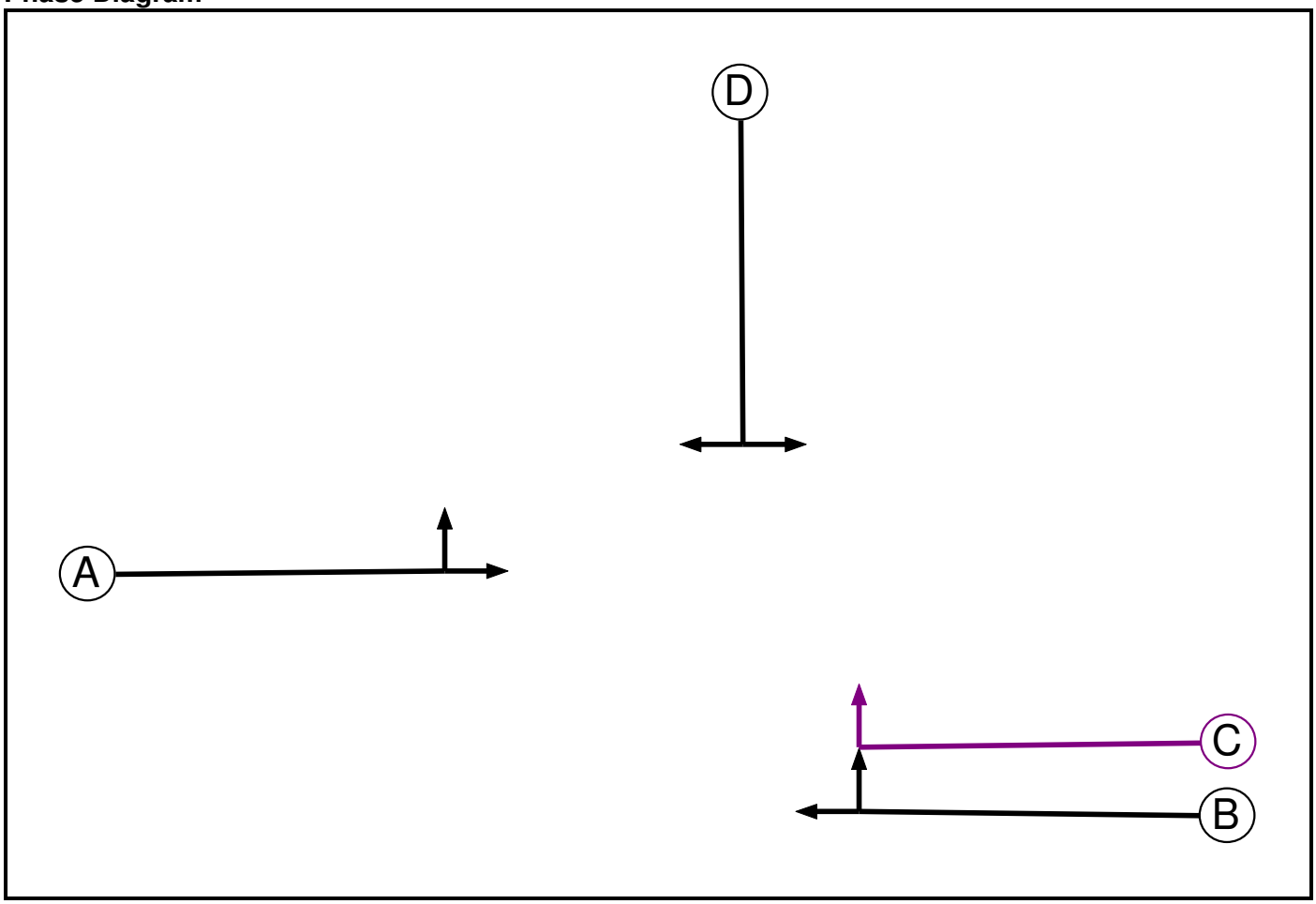
Project:	
Title:	
Location:	
File name:	Gatesford_Raymouth.lsg3x
Author:	
Company:	
Address:	
Notes:	

Full Input Data And Results

Network Layout Diagram



Phase Diagram



Full Input Data And Results

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

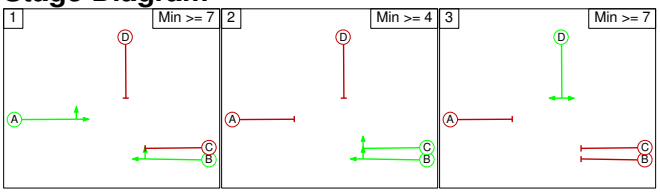
Phase Intergreens Matrix

	Starting Phase				
Terminating Phase		A	B	C	D
	A		-	6	6
	B	-		-	6
	C	6	-		6
	D	6	6	6	

Phases in Stage

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

Stage Diagram



Phase Delays

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

Prohibited Stage Changes

	To Stage			
From Stage		1	2	3
	1		6	6
	2	6		6
	3	6	6	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Gateford/Raymouth
There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: Gateford/Raymouth												
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 (Gateford Road W)	U	A	2	3	15.0	Geom	-	4.00	0.00	Y	Arm 6 Left	30.00
1/2 (Gateford Road W)	U	A	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 4 Ahead	Inf
2/1 (Raymouth Lane)	U	D	2	3	12.0	Geom	-	3.00	0.00	Y	Arm 4 Left	15.00
2/2 (Raymouth Lane)	U	D	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Right	15.00
3/1 (Gateford Road E)	U	B	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 5 Ahead	15.00
3/2 (Gateford Road E)	U	B C	2	3	5.0	Geom	-	3.50	0.00	Y	Arm 6 Right	15.00
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2026 AM B+C+G'	08:00	09:00	01:00	
2: '2026 PM B+C+G'	17:00	18:00	01:00	

Scenario 1: '2026 AM B+C+G' (FG1: '2026 AM B+C+G', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	598	663	1261
	B	548	0	187	735
	C	314	107	0	421
	Tot.	862	705	850	2417

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2026 AM B+C+G
Junction: Gateford/Raymouth	
1/1 (short)	598
1/2 (with short)	1261(In) 663(Out)
2/1 (short)	187
2/2 (with short)	735(In) 548(Out)
3/1 (with short)	421(In) 314(Out)
3/2 (short)	107
4/1	850
5/1	862
6/1	705

Traffic Lane Flows

Junction: Gateford/Raymouth								
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 (Gateford Road W)	4.00	0.00	Y	Arm 6 Left	30.00	100.0 %	1919	1919
1/2 (Gateford Road W)	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
2/1 (Raymouth Lane)	3.00	0.00	Y	Arm 4 Left	15.00	100.0 %	1741	1741
2/2 (Raymouth Lane)	3.00	0.00	Y	Arm 5 Right	15.00	100.0 %	1741	1741
3/1 (Gateford Road E)	3.50	0.00	Y	Arm 5 Ahead	15.00	100.0 %	1786	1786
3/2 (Gateford Road E)	3.50	0.00	Y	Arm 6 Right	15.00	100.0 %	1786	1786
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: '2026 PM B+C+G' (FG2: '2026 PM B+C+G', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	627	373	1000
	B	465	0	146	611
	C	641	208	0	849
	Tot.	1106	835	519	2460

Traffic Lane Flows

Lane	Scenario 2: 2026 PM B+C+G
Junction: Gateford/Raymouth	
1/1 (short)	627
1/2 (with short)	1000(In) 373(Out)
2/1 (short)	146
2/2 (with short)	611(In) 465(Out)
3/1 (with short)	849(In) 641(Out)
3/2 (short)	208
4/1	519
5/1	1106
6/1	835

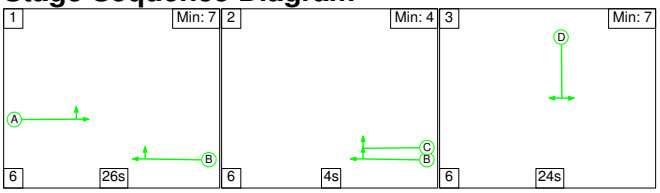
Traffic Lane Flows

Junction: Gateford/Raymouth								
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 (Gateford Road W)	4.00	0.00	Y	Arm 6 Left	30.00	100.0 %	1919	1919
1/2 (Gateford Road W)	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
2/1 (Raymouth Lane)	3.00	0.00	Y	Arm 4 Left	15.00	100.0 %	1741	1741
2/2 (Raymouth Lane)	3.00	0.00	Y	Arm 5 Right	15.00	100.0 %	1741	1741
3/1 (Gateford Road E)	3.50	0.00	Y	Arm 5 Ahead	15.00	100.0 %	1786	1786
3/2 (Gateford Road E)	3.50	0.00	Y	Arm 6 Right	15.00	100.0 %	1786	1786
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 1: '2026 AM B+C+G' (FG1: '2026 AM B+C+G', Plan 1: 'Network Control Plan 1')

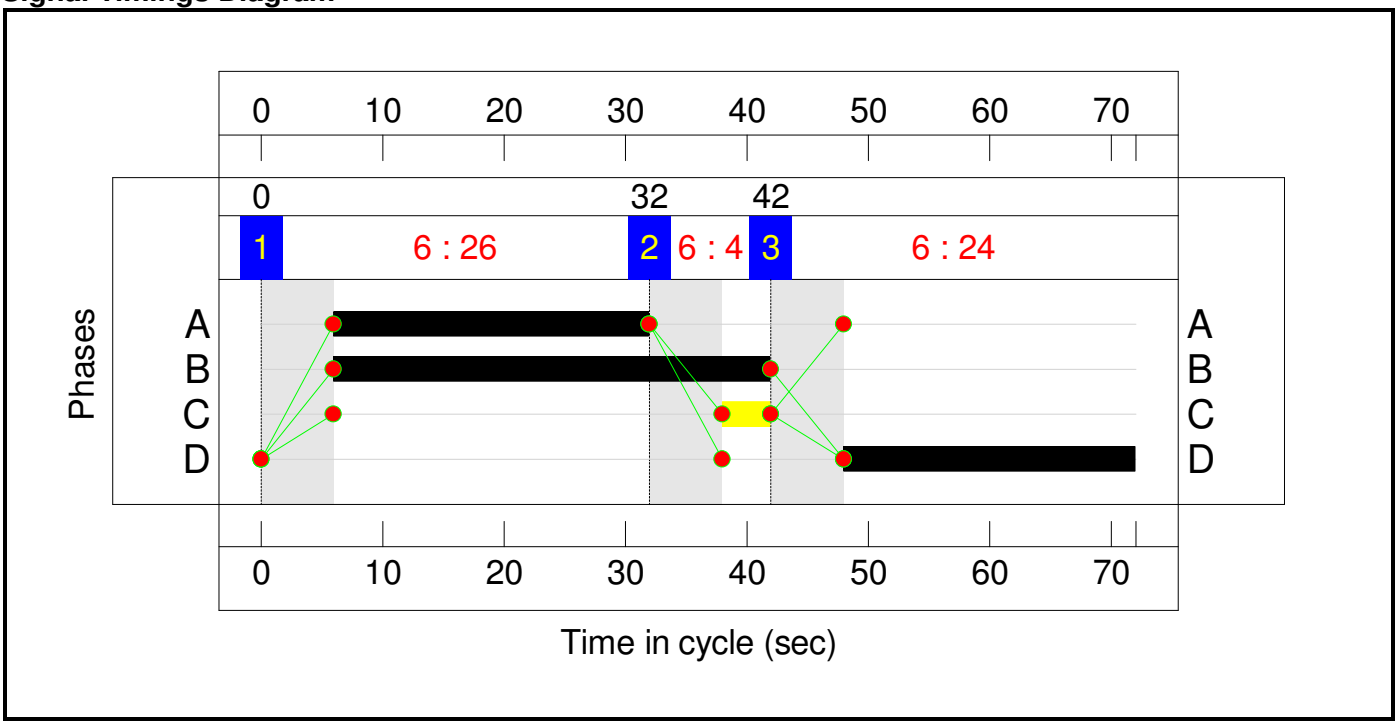
Stage Sequence Diagram



Stage Timings

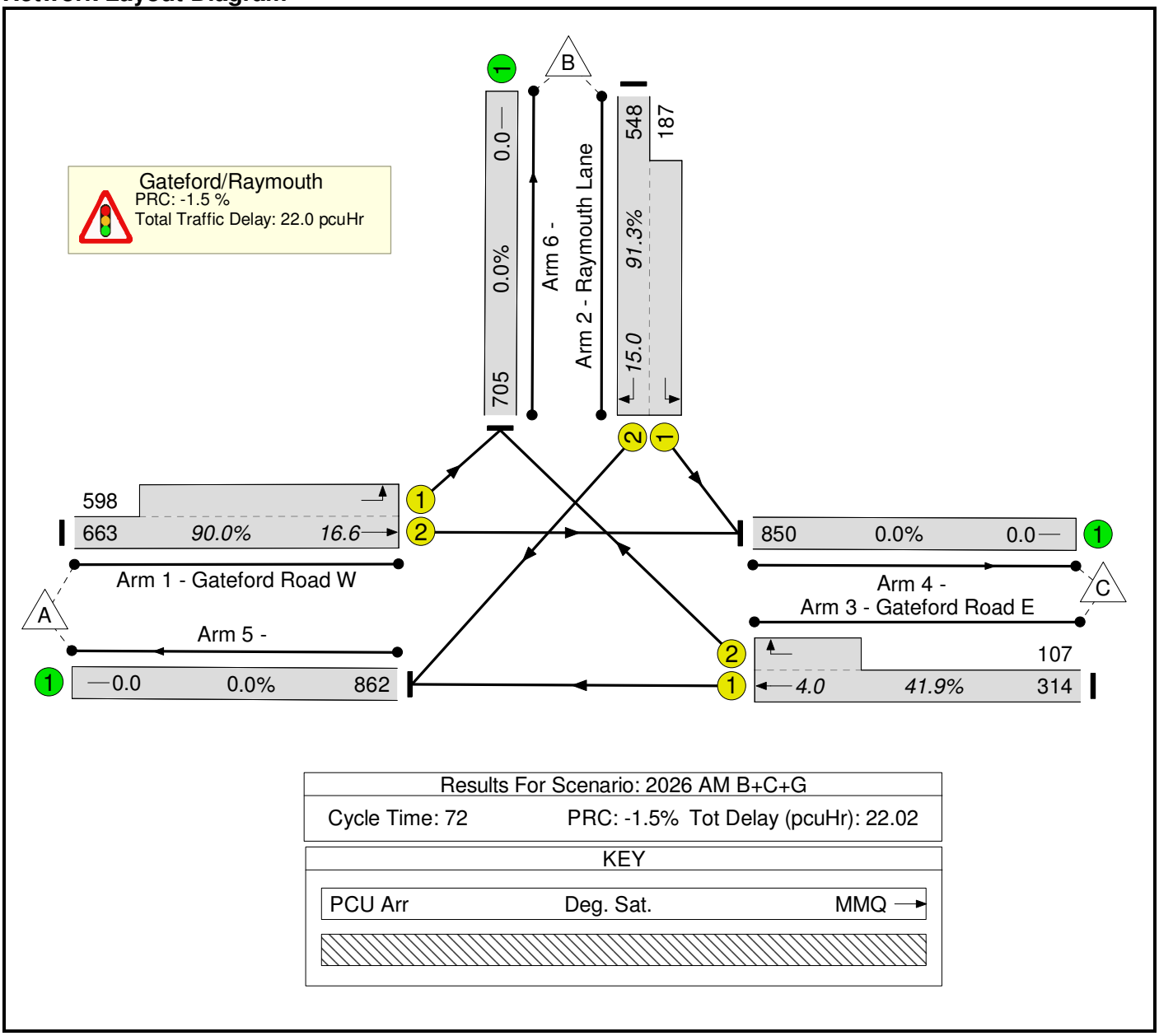
Stage	1	2	3
Duration	26	4	24
Change Point	0	32	42

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

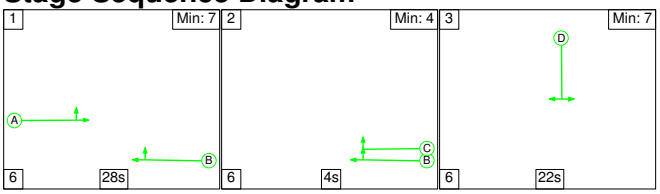
Item	Lane Description	Lane Type	Controller Stream	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**N/A**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**91.3%**	**22.0**	**-**	**-**
Gateford/Raymouth	**-**	**-**	**N/A**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**91.3%**	**22.0**	**-**	**-**
1/2+1/1	Gateford Road W Ahead Left	U	N/A	A		1	26	-	1261	1965:1919	1402	90.0%	11.5	32.9	16.6
2/2+2/1	Raymouth Lane Left Right	U	N/A	D		1	24	-	735	1741:1741	805	91.3%	9.0	43.8	15.0
3/1+3/2	Gateford Road E Ahead Right	U	N/A	B	C	1	36	4	421	1786:1786	1005	41.9%	1.5	13.1	4.0

C1 PRC for Signalled Lanes (%): -1.5 Total Delay for Signalled Lanes (pcuHr): 22.02 Cycle Time (s): 72
PRC Over All Lanes (%): -1.5 Total Delay Over All Lanes(pcuHr): 22.02

Full Input Data And Results

Scenario 2: '2026 PM B+C+G' (FG2: '2026 PM B+C+G', Plan 1: 'Network Control Plan 1')

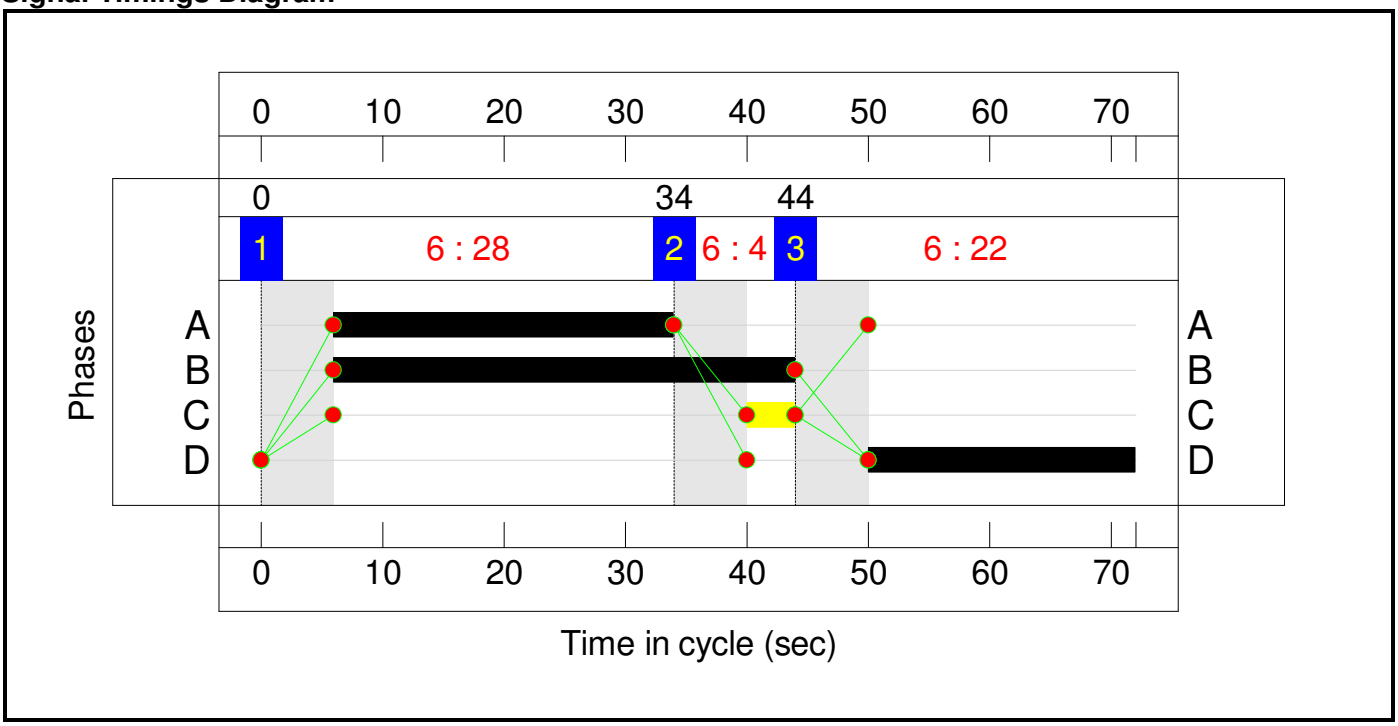
Stage Sequence Diagram



Stage Timings

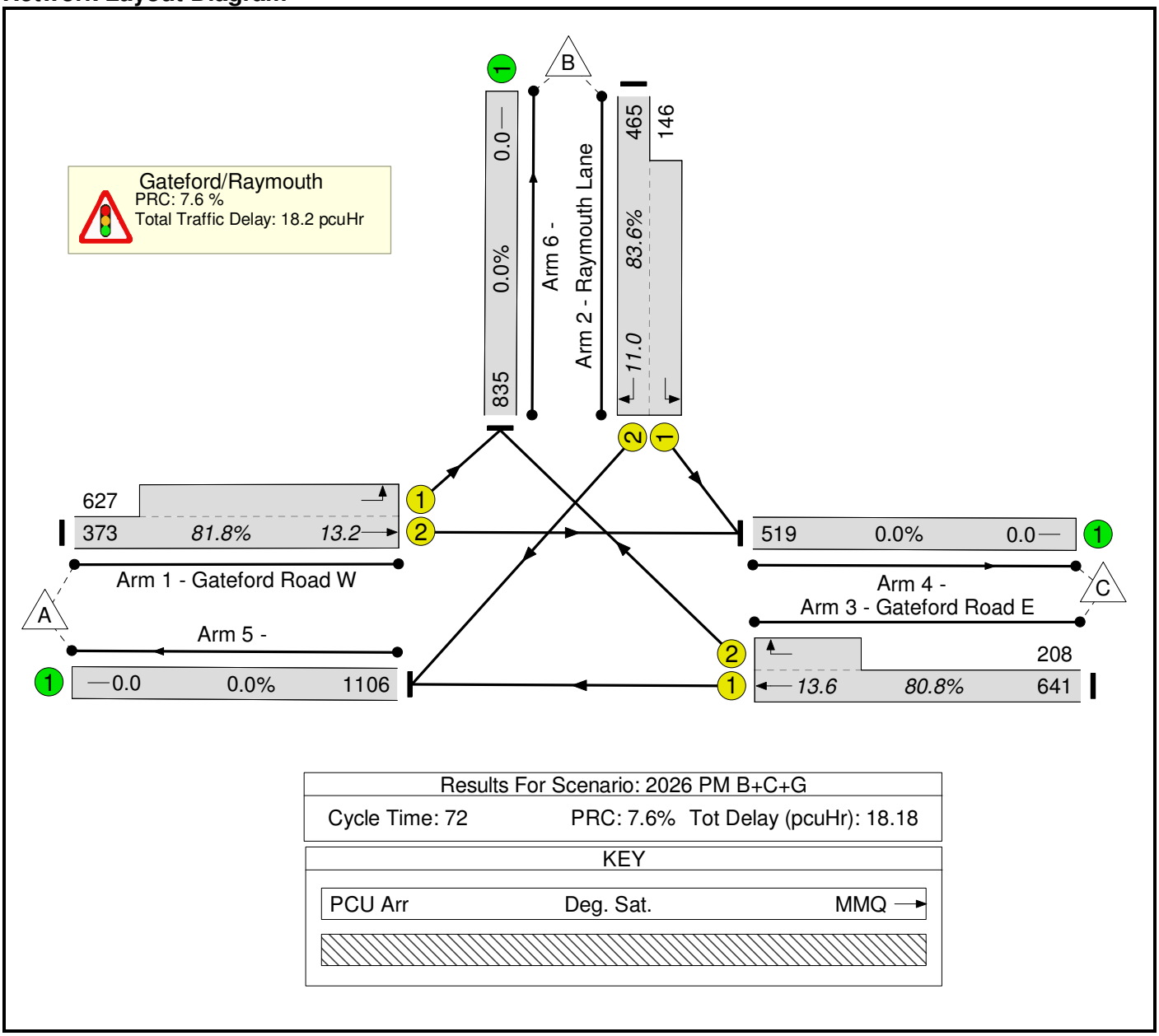
Stage	1	2	3
Duration	28	4	22
Change Point	0	34	44

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



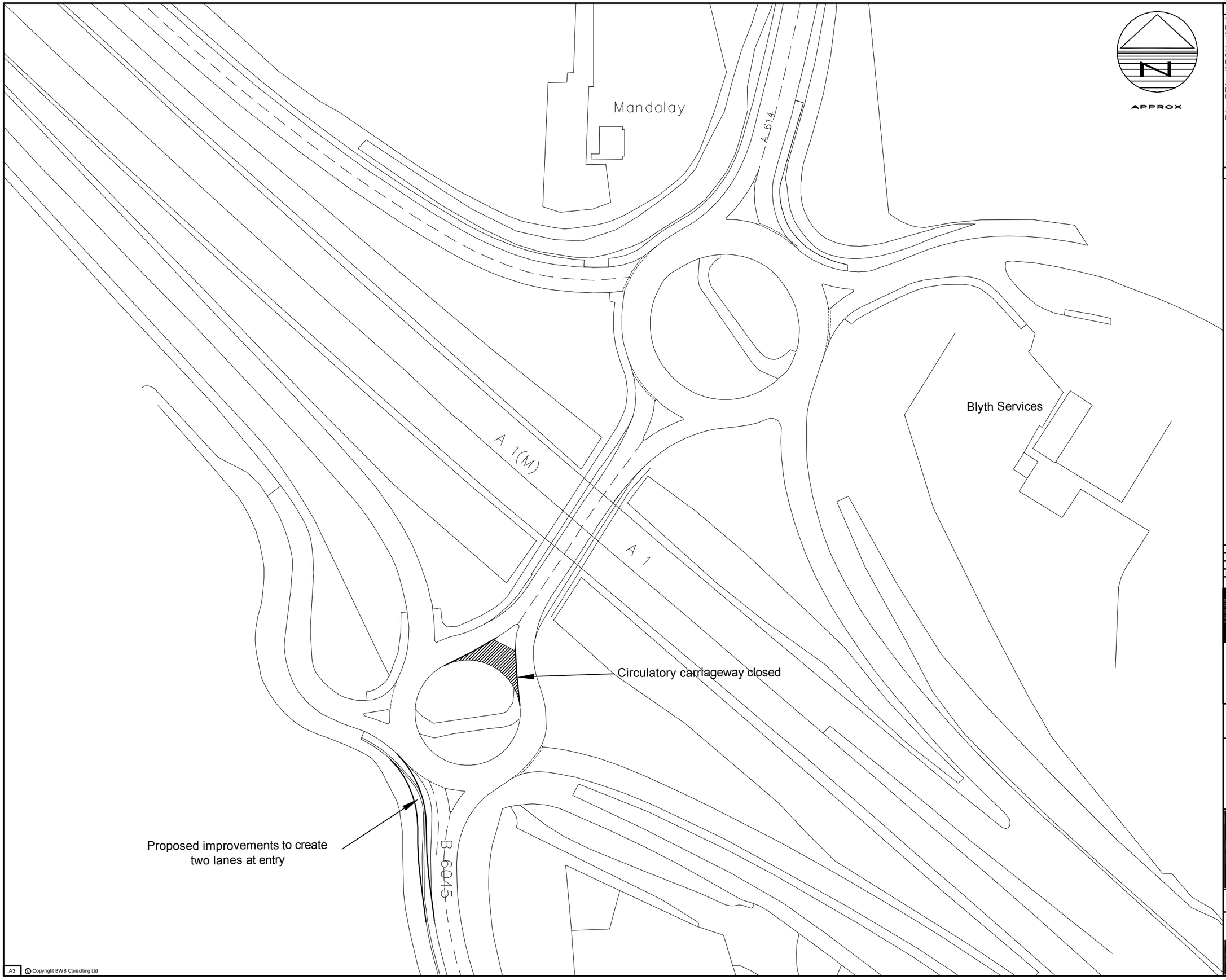
Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**N/A**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**83.6%**	**18.2**	**-**	**-**
Gateford/Raymouth	**-**	**-**	**N/A**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**83.6%**	**18.2**	**-**	**-**
1/2+1/1	Gateford Road W Ahead Left	U	N/A	A		1	28	-	1000	1965:1919	1223	81.8%	7.2	25.8	13.2
2/2+2/1	Raymouth Lane Left Right	U	N/A	D		1	22	-	611	1741:1741	731	83.6%	6.1	36.1	11.0
3/1+3/2	Gateford Road E Ahead Right	U	N/A	B	C	1	38	4	849	1786:1786	1050	80.8%	4.9	20.7	13.6

C1 PRC for Signalled Lanes (%): 7.6 Total Delay for Signalled Lanes (pcuHr): 18.18 Cycle Time (s): 72
PRC Over All Lanes (%): 7.6 Total Delay Over All Lanes(pcuHr): 18.18

Appendix E – Committed Highway Improvements



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KEY

Rev	Date	Description	Drawn	Au
P3	25.03.10	MINOR ALTERATIONS	MT	C
P2	26.11.08	MINOR ALTERATIONS	MT	C
P1	17.08.08	PRELIMINARY ISSUE	MT	C

AMENDMENTS

BWB CONSULTING

Integrated Engineering and Environmental Consultants
3-4 Kayes Walk The Lace Market Nottingham NG1 1PY
T 0115 924 1100 F 0115 950 3966 W bwbconsulting.com
environmental | water | transportation | civil | structural | highways | infrastructure

Client
HARWORTH ESTATES

Project Title
HARWORTH COLLIERY

Drawing Title
PROPOSED HIGHWAY IMPROVEMENTS
A1(T)/A614 JUNCTION

Scale	Date	Drawn	Authorised
1:1000	08.2009	MT	CH

Drawing Status
PRELIMINARY

Drawing No:	Revision
UKC/020/013T	P3

A3

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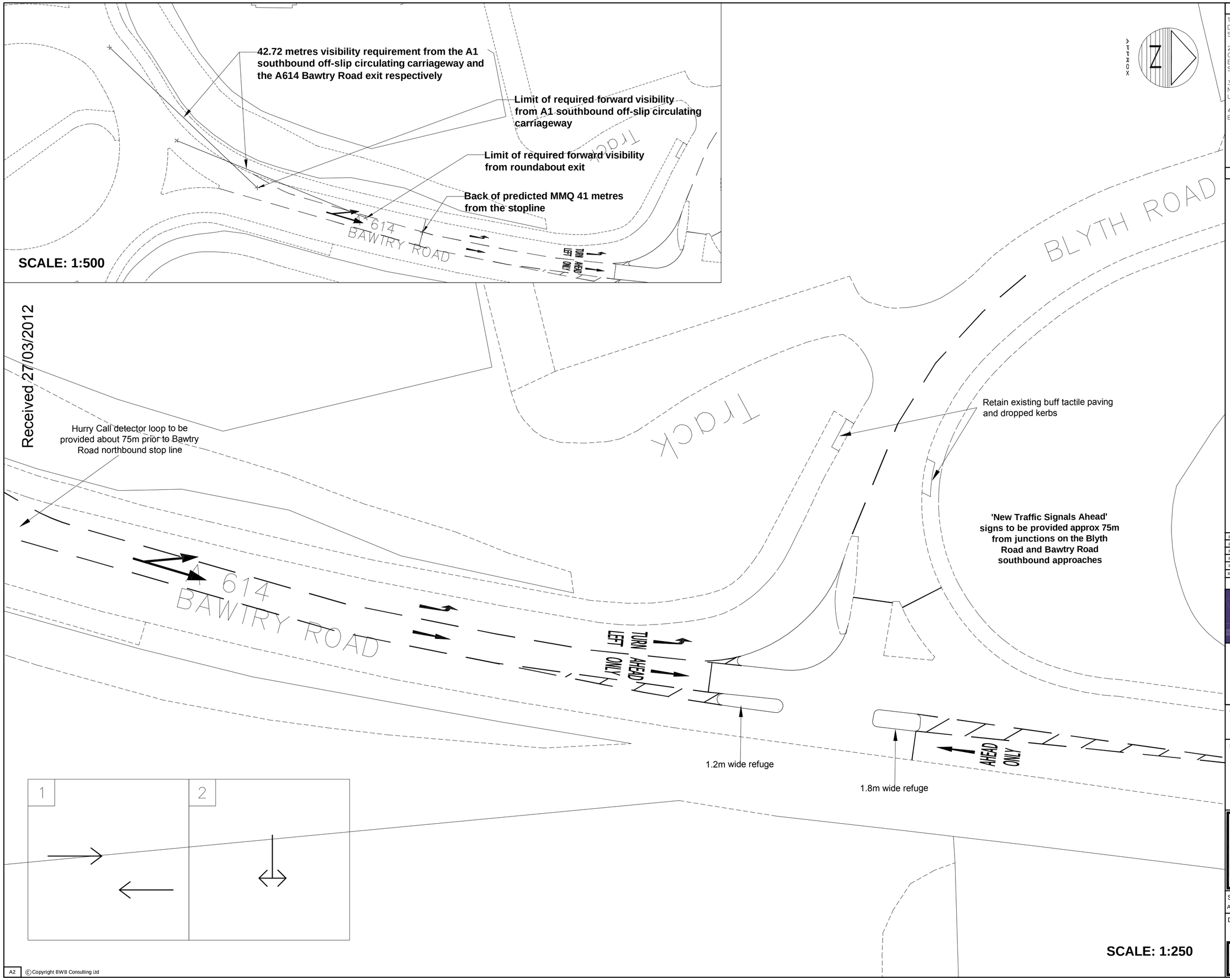

NOTES

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KEY

Rev	Date	Description	Drawn	Auth
P5	21.06.10	REFUGE ADDED	CH	MI
P4	07.06.10	AMMENDMENTS TO ROAD MARKINGS	AJO	DEB
P3	10.03.10	AMMENDMENTS TO REDUCE QUEUING	MH	DEB
P2	03.09.09	AMMENDMENTS TO REFUGES ON BAWTRY ROAD	MT	DEB
P1	14.08.09	PRELIMINARY ISSUE	MT	DEB

AMENDMENTS

BWB CONSULTING
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environmental | water | transportation | civil | structural | highways | infrastructure

Client
UK COAL

Project Title
HARWORTH COLLIERY

Drawing Title
TRAFFIC SIGNALS ARRANGEMENT AT A614 BAWTRY ROAD/BLYTH ROAD JUNCTION

Scale	Date	Drawn	Authorised
AS SHOWN	08.2009	MT	DEB

Drawing Status
PRELIMINARY

Drawing No:	Revision
UKC/020/008	P5

A2

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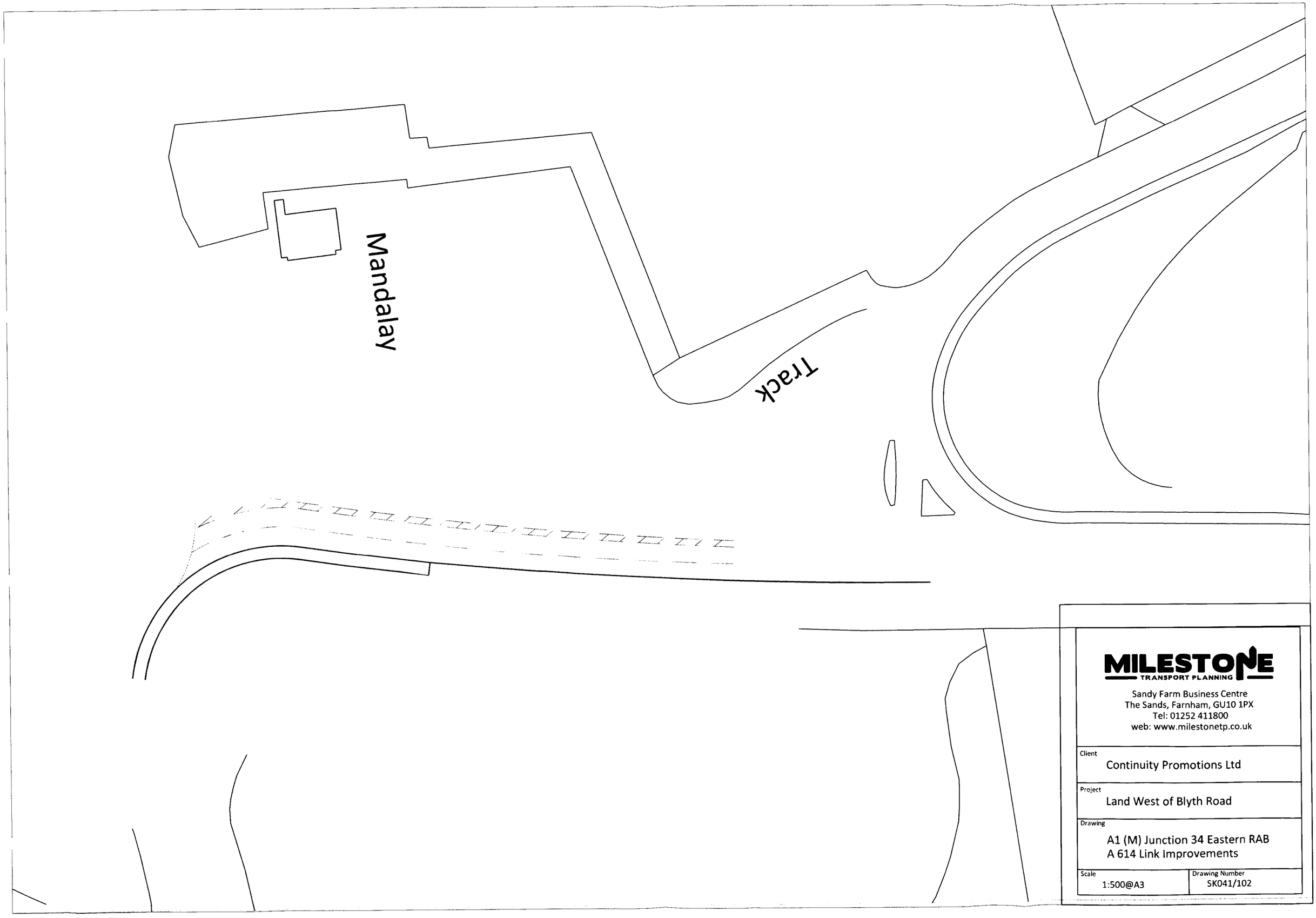


MILESTONE
TRANSPORT PLANNING

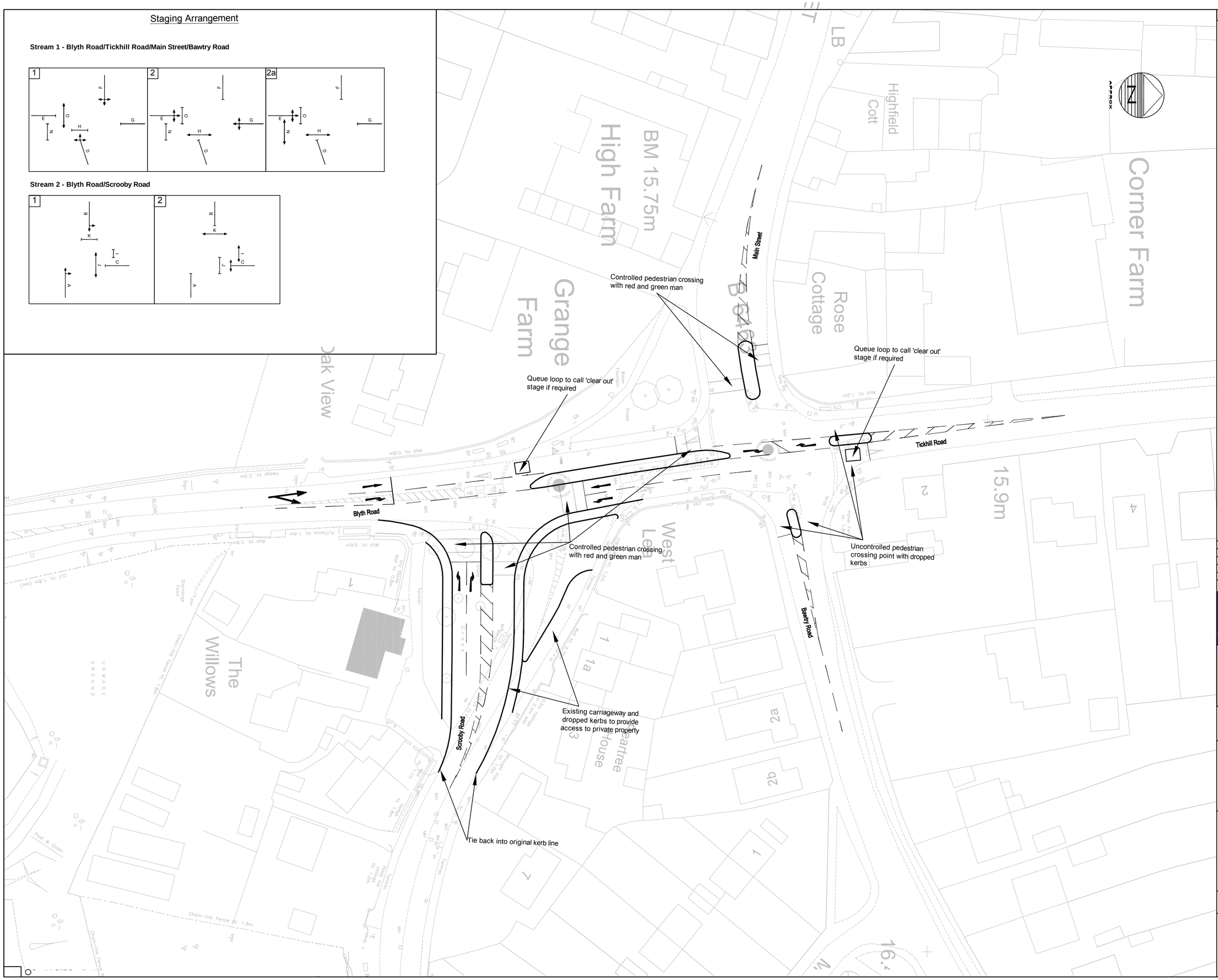
Sandy Farm Business Centre
The Sands, Farnham, GU10 1PX
Tel: 01252 411800
web: www.milestonetp.co.uk

Client
Continuity Promotions Ltd

Project
Land West of Blyth Road

Drawing
A1 (M) Junction 34 Eastern RAB
A 614 Link Improvements

Scale	Drawing Number
1:500@A3	SK041/102



NOTES

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3. ALL DIMENSIONS IN MILLIMETRES UNLESS NOTED OTHERWISE. ALL LEVELS IN METRES UNLESS NOTED OTHERWISE.

4. ANY DISCREPANCIES NOTED ON SITE ARE TO BE REPORTED TO THE ENGINEER IMMEDIATELY.

Rev	Date	Description	Drawn	Auth'd
P4	07.06.10	PEDESTRIAN CROSSING RELOCATED	AJO	CH
P3b	03.03.10	PRELIMINARY ISSUE	MH	CH
P2	03.09.09	PRELIMINARY ISSUE	MT	CH
P1	14.08.09	PRELIMINARY ISSUE	MH	CH

AMENDMENTS

BWB CONSULTING

Integrated Engineering and Environmental Consultants

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T 0115 924 1100 F 0115 950 3966 W bwbconsulting.co
environmental | water | transportation | civil | structural | highways | infrastructure

Client
HARWORTH ESTATES

Project Title
HARWORTH COLLIERY

Drawing Title
PROPOSED BLYTH ROAD/SCROOBY LANE/TICKHILL ROAD/MAIN STREET SIGNAL CONTROLLED JUNCTION LAYOUT

Scale	Date	Drawn	Authorised
1:500 @ A2	08.2009	MH	CH

Drawing Status
PRELIMINARY

Drawing No:	Revision
UKC/020/009T	P4

Appendix F – Preliminary Cost Estimates

Preliminary Estimate of Highway Improvement Costs - A60/A619 Roundabout, Worksop

ITEM DESCRIPTION	RATE	ESTIMATE
Work costs		**£2,000,000**
Accom Works	3%	£60,000
Landscaping	3%	£60,000
Contract Works Cost		**£2,120,000**
Contingencies	10%	£212,000
Works sub total		**£2,332,000**
Supervision	10%	£233,200
Testing	0.5%	£11,660
Topographical Survey	0.5%	£11,660
Soil & drainage Survey	2.50%	£58,300
Works Total		**£2,646,820**
Public Inquiry	1.50%	£39,702
Land/SRO Plans	1.00%	£26,468
Design Fees	9%	£238,214
Part 1 claims	Estimate	£0
Fees Total		**£304,384**
Land Purchase Cost &Fees	Estimate	£0
Land Total		**£0**
BT	Estimate	£0
Severn Trent	Estimate	£0
Others	Estimate	£0
		£0
TOTAL		**£2,951,204**

Notes:

1. Utility costs are unknown and have therefore been excluded.
2. No 'third-party' land costs have been assumed.

Preliminary Estimate of Highway Improvement Costs - A60/A57/B6024 Roundabout, Worksop

ITEM DESCRIPTION	RATE	ESTIMATE
Work costs		**£2,000,000**
Accom Works	3%	£60,000
Landscaping	3%	£60,000
Contract Works Cost		**£2,120,000**
Contingencies	10%	£212,000
Works sub total		**£2,332,000**
Supervision	10%	£233,200
Testing	0.5%	£11,660
Topographical Survey	0.5%	£11,660
Soil & drainage Survey	2.50%	£58,300
Works Total		**£2,646,820**
Public Inquiry	1.50%	£39,702
Land/SRO Plans	1.00%	£26,468
Design Fees	9%	£238,214
Part 1 claims	Estimate	£0
Fees Total		**£304,384**
Land Purchase Cost &Fees	Estimate	£0
Land Total		**£0**
BT	Estimate	£0
Severn Trent	Estimate	£0
Others	Estimate	£0
		£0
TOTAL		**£2,951,204**

Notes:

1. Utility costs are unknown and have therefore been excluded.
2. No 'third-party' land costs have been assumed.

Preliminary Estimate of Highway Improvement Costs
A57/A60 Sandy Lane Roundabout, Worksop

ITEM DESCRIPTION	RATE	ESTIMATE
Work costs		**£1,000,000**
Accom Works	3%	£30,000
Landscaping	3%	£30,000
Contract Works Cost		**£1,060,000**
Contingencies	10%	£106,000
Works sub total		**£1,166,000**
Supervision	10%	£116,600
Testing	0.5%	£5,830
Topographical Survey	0.5%	£5,830
Soil & drainage Survey	2.50%	£29,150
Works Total		**£1,323,410**
Public Inquiry	1.50%	£19,851
Land/SRO Plans	1.00%	£13,234
Design Fees	9%	£119,107
Part 1 claims	Estimate	£0
Fees Total		**£152,192**
Land Purchase Cost &Fees	Estimate	£0
Land Total		**£0**
BT	Estimate	£0
Severn Trent	Estimate	£0
Others	Estimate	£0
		£0
TOTAL		**£1,475,602**

Notes:

1. Utility costs are unknown and have therefore been excluded.
2. No 'third-party' land costs have been assumed.

Preliminary Estimate of Highway Improvement Costs - A57/Claylands Ave Roundabout, Worksop

ITEM DESCRIPTION	RATE	ESTIMATE
Work costs		**£1,000,000**
Accom Works	3%	£30,000
Landscaping	3%	£30,000
Contract Works Cost		**£1,060,000**
Contingencies	10%	£106,000
Works sub total		**£1,166,000**
Supervision	10%	£116,600
Testing	0.5%	£5,830
Topographical Survey	0.5%	£5,830
Soil & drainage Survey	2.50%	£29,150
Works Total		**£1,323,410**
Public Inquiry	1.50%	£19,851
Land/SRO Plans	1.00%	£13,234
Design Fees	9%	£119,107
Part 1 claims	Estimate	£0
Fees Total		**£152,192**
Land Purchase Cost &Fees	Estimate	£0
Land Total		**£0**
BT	Estimate	£0
Severn Trent	Estimate	£0
Others	Estimate	£0
		£0
TOTAL		**£1,475,602**

Notes:

1. Utility costs are unknown and have therefore been excluded.
2. No 'third-party' land costs have been assumed.

Preliminary Estimate of Highway Improvement Costs
A57/B6041 Gateford Road Roundabout, Worksop

ITEM DESCRIPTION	RATE	ESTIMATE
Work costs		**£2,000,000**
Accom Works	3%	£60,000
Landscaping	3%	£60,000
Contract Works Cost		**£2,120,000**
Contingencies	10%	£212,000
Works sub total		**£2,332,000**
Supervision	10%	£233,200
Testing	0.5%	£11,660
Topographical Survey	0.5%	£11,660
Soil & drainage Survey	2.50%	£58,300
Works Total		**£2,646,820**
Public Inquiry	1.50%	£39,702
Land/SRO Plans	1.00%	£26,468
Design Fees	9%	£238,214
Part 1 claims	Estimate	£0
Fees Total		**£304,384**
Land Purchase Cost &Fees	Estimate	£0
Land Total		**£0**
BT	Estimate	£0
Severn Trent	Estimate	£0
Others	Estimate	£0
		£0
TOTAL		**£2,951,204**

Notes:

1. Utility costs are unknown and have therefore been excluded.
2. No 'third-party' land costs have been assumed.

Preliminary Estimate of Highway Improvement Costs
B6041 Gateford Road/Ashes Park Avenue, Worksop

ITEM DESCRIPTION	RATE	ESTIMATE
Work costs		**£500,000**
Accom Works	3%	£15,000
Landscaping	3%	£15,000
Contract Works Cost		**£530,000**
Contingencies	10%	£53,000
Works sub total		**£583,000**
Supervision	10%	£58,300
Testing	0.5%	£2,915
Topographical Survey	0.5%	£2,915
Soil & drainage Survey	2.50%	£14,575
Works Total		**£661,705**
Public Inquiry	1.50%	£9,926
Land/SRO Plans	1.00%	£6,617
Design Fees	9%	£59,553
Part 1 claims	Estimate	£0
Fees Total		**£76,096**
Land Purchase Cost &Fees	Estimate	£0
Land Total		**£0**
BT	Estimate	£0
Severn Trent	Estimate	£0
Others	Estimate	£0
		£0
TOTAL		**£737,801**

Notes:

1. Utility costs are unknown and have therefore been excluded.
2. No 'third-party' land costs have been assumed.

Preliminary Estimate of Highway Improvement Costs
B6041 Gateford Road/Raymoth Lane, Worksop

ITEM DESCRIPTION	RATE	ESTIMATE
Work costs		**£500,000**
Accom Works	3%	£15,000
Landscaping	3%	£15,000
Contract Works Cost		**£530,000**
Contingencies	10%	£53,000
Works sub total		**£583,000**
Supervision	10%	£58,300
Testing	0.5%	£2,915
Topographical Survey	0.5%	£2,915
Soil & drainage Survey	2.50%	£14,575
Works Total		**£661,705**
Public Inquiry	1.50%	£9,926
Land/SRO Plans	1.00%	£6,617
Design Fees	9%	£59,553
Part 1 claims	Estimate	£0
Fees Total		**£76,096**
Land Purchase Cost &Fees	Estimate	£0
Land Total		**£0**
BT	Estimate	£0
Severn Trent	Estimate	£0
Others	Estimate	£0
		£0
TOTAL		**£737,801**

Notes:

1. Utility costs are unknown and have therefore been excluded.
2. No 'third-party' land costs have been assumed.

Preliminary Estimate of Highway Improvement Costs - B1164/A6075 Junction, Tuxford

ITEM DESCRIPTION	RATE	ESTIMATE
Work costs		**£500,000**
Accom Works	3%	£15,000
Landscaping	3%	£15,000
Contract Works Cost		**£530,000**
Contingencies	10%	£53,000
Works sub total		**£583,000**
Supervision	10%	£58,300
Testing	0.5%	£2,915
Topographical Survey	0.5%	£2,915
Soil & drainage Survey	2.50%	£14,575
Works Total		**£661,705**
Public Inquiry	1.50%	£9,926
Land/SRO Plans	1.00%	£6,617
Design Fees	9%	£59,553
Part 1 claims	Estimate	£0
Fees Total		**£76,096**
Land Purchase Cost &Fees	Estimate	£0
Land Total		**£0**
BT	Estimate	£0
Severn Trent	Estimate	£0
Others	Estimate	£0
		£0
TOTAL		**£737,801**

Notes:

1. Utility costs are unknown and have therefore been excluded.
2. No 'third-party' land costs have been assumed.

Preliminary Estimate of Highway Improvement Costs - A620/A638 Roundabout, Retford

ITEM DESCRIPTION	RATE	ESTIMATE
Work costs		**£700,000**
Accom Works	3%	£21,000
Landscaping	3%	£21,000
Contract Works Cost		**£742,000**
Contingencies	10%	£74,200
Works sub total		**£816,200**
Supervision	10%	£81,620
Testing	0.5%	£4,081
Topographical Survey	0.5%	£4,081
Soil & drainage Survey	2.50%	£20,405
Works Total		**£926,387**
Public Inquiry	1.50%	£13,896
Land/SRO Plans	1.00%	£9,264
Design Fees	9%	£83,375
Part 1 claims	Estimate	£0
Fees Total		**£106,535**
Land Purchase Cost &Fees	Estimate	£0
Land Total		**£0**
BT	Estimate	£0
Severn Trent	Estimate	£0
Others	Estimate	£0
		£0
TOTAL		**£1,032,922**

Notes:

1. Utility costs are unknown and have therefore been excluded.
2. No 'third-party' land costs have been assumed.

Preliminary Estimate of Highway Improvement Costs - A620/A638 Arlington Way, Retford

ITEM DESCRIPTION	RATE	ESTIMATE
Work costs		**£65,000**
Accom Works	3%	£1,950
Landscaping	3%	£1,950
Contract Works Cost		**£68,900**
Contingencies	10%	£6,890
Works sub total		**£75,790**
Supervision	10%	£7,579
Testing	0.5%	£379
Topographical Survey	0.5%	£379
Soil & drainage Survey	2.50%	£1,895
Works Total		**£86,022**
Public Inquiry	1.50%	£1,290
Land/SRO Plans	1.00%	£860
Design Fees	9%	£7,742
Part 1 claims	Estimate	£0
Fees Total		**£9,892**
Land Purchase Cost &Fees	Estimate	£0
Land Total		**£0**
BT	Estimate	£0
Severn Trent	Estimate	£0
Others	Estimate	£0
		£0
TOTAL		**£95,914**

Notes:

1. Utility costs are unknown and have therefore been excluded.
2. No 'third-party' land costs have been assumed.

Preliminary Estimate of Highway Improvement Costs - A1/A614/B6045 Blyth Junction, Harworth

ITEM DESCRIPTION	RATE	ESTIMATE
Work costs		**£65,000**
Accom Works	3%	£1,950
Landscaping	3%	£1,950
Contract Works Cost		**£68,900**
Contingencies	10%	£6,890
Works sub total		**£75,790**
Supervision	10%	£7,579
Testing	0.5%	£379
Topographical Survey	0.5%	£379
Soil & drainage Survey	2.50%	£1,895
Works Total		**£86,022**
Public Inquiry	1.50%	£1,290
Land/SRO Plans	1.00%	£860
Design Fees	9%	£7,742
Part 1 claims	Estimate	£0
Fees Total		**£9,892**
Land Purchase Cost &Fees	Estimate	£0
Land Total		**£0**
BT	Estimate	£0
Severn Trent	Estimate	£0
Others	Estimate	£0
		£0
TOTAL		**£95,914**

Notes:

1. Utility costs are unknown and have therefore been excluded.
2. No 'third-party' land costs have been assumed.

Preliminary Estimate of Highway Improvement Costs - A614/Blyth Road Junction, Harworth

ITEM DESCRIPTION	RATE	ESTIMATE
Work costs		**£500,000**
Accom Works	3%	£15,000
Landscaping	3%	£15,000
Contract Works Cost		**£530,000**
Contingencies	10%	£53,000
Works sub total		**£583,000**
Supervision	10%	£58,300
Testing	0.5%	£2,915
Topographical Survey	0.5%	£2,915
Soil & drainage Survey	2.50%	£14,575
Works Total		**£661,705**
Public Inquiry	1.50%	£9,926
Land/SRO Plans	1.00%	£6,617
Design Fees	9%	£59,553
Part 1 claims	Estimate	£0
Fees Total		**£76,096**
Land Purchase Cost &Fees	Estimate	£0
Land Total		**£0**
BT	Estimate	£0
Severn Trent	Estimate	£0
Others	Estimate	£0
		£0
TOTAL		**£737,801**

Notes:

1. Utility costs are unknown and have therefore been excluded.
2. No 'third-party' land costs have been assumed.

Preliminary Estimate of Highway Improvement Costs
Blyth Rd/Scrooby Rd/Main St/Bawtry Rd, Harworth

ITEM DESCRIPTION	RATE	ESTIMATE
Work costs		**£1,000,000**
Accom Works	3%	£30,000
Landscaping	3%	£30,000
Contract Works Cost		**£1,060,000**
Contingencies	10%	£106,000
Works sub total		**£1,166,000**
Supervision	10%	£116,600
Testing	0.5%	£5,830
Topographical Survey	0.5%	£5,830
Soil & drainage Survey	2.50%	£29,150
Works Total		**£1,323,410**
Public Inquiry	1.50%	£19,851
Land/SRO Plans	1.00%	£13,234
Design Fees	9%	£119,107
Part 1 claims	Estimate	£0
Fees Total		**£152,192**
Land Purchase Cost &Fees	Estimate	£0
Land Total		**£0**
BT	Estimate	£0
Severn Trent	Estimate	£0
Others	Estimate	£0
		£0
TOTAL		**£1,475,602**

Notes:

1. Utility costs are unknown and have therefore been excluded.
2. No 'third-party' land costs have been assumed.

Preliminary Estimate of Highway Improvement Costs - A614/Scrooby Road Junction, Harworth

ITEM DESCRIPTION	RATE	ESTIMATE
Work costs		**£350,000**
Accom Works	3%	£10,500
Landscaping	3%	£10,500
Contract Works Cost		**£371,000**
Contingencies	10%	£37,100
Works sub total		**£408,100**
Supervision	10%	£40,810
Testing	0.5%	£2,041
Topographical Survey	0.5%	£2,041
Soil & drainage Survey	2.50%	£10,203
Works Total		**£463,194**
Public Inquiry	1.50%	£6,948
Land/SRO Plans	1.00%	£4,632
Design Fees	9%	£41,687
Part 1 claims	Estimate	£0
Fees Total		**£53,267**
Land Purchase Cost &Fees	Estimate	£0
Land Total		**£0**
BT	Estimate	£0
Severn Trent	Estimate	£0
Others	Estimate	£0
		£0
TOTAL		**£516,461**

Notes:

1. Utility costs are unknown and have therefore been excluded.
2. No 'third-party' land costs have been assumed.