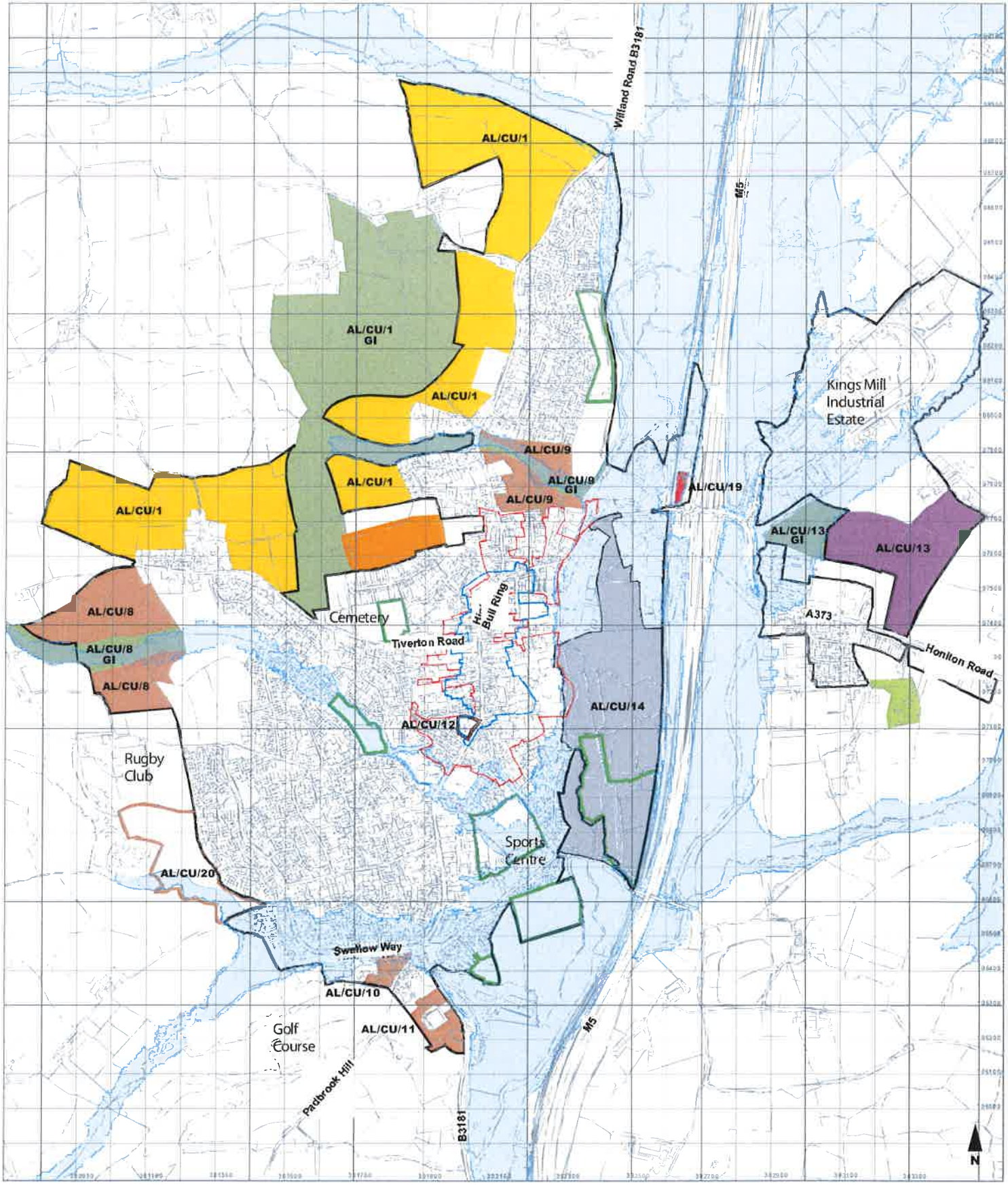

Rugby Ground
Playing Field
Kia- Ora Farm and Fishing Lakes
Potential Area for CCA Playing Fields and Associated Leisure Facilities
Colebrooke Lane
Herons Farm
Cole Brook
Padbrook Park Golf Course
Site Boundary
Residential - Lower Density
Residential - Medium Density
Mixed Use- Neighbourhood Centre
Primary School- Potential Relocation of Willowbank
Proposed Key Frontage
Potential Landmark Building
Childrens' Play Area & Walking Zone- 100m
Proposed Public Open Space
Existing Trees/ Planting
Proposed Tree
Existing Water Feature
Flood Plain
Potential Vehicle Access Point
Potential Pedestrian/Cycle Access Point
Principal Access Route
Minor Access Route
Amendment
Date
Concept Masterplan
Job No/Drawing No
13035/Sk/03
Job Title
Colebrooke Lane
Scale
1:2500 @A3
Do not scale
Date
01/09
Drawn
CP
Drawing Title
Masterplan 2
All dimensions to be checked on site
pad Design Ltd - 10 Osborne Road - Southville - Bristol BS3 1PR - 0117 9510051
pad

APPENDIX B

LDP ALLOWCATION PLAN



- Settlement Limit
- Residential
- Contingency Housing Site
- Mixed Use
- Green Infrastructure
- Employment
- Town Centre Boundary
- Community Use
- Railway Station Car Park
- Area for Eastern Relief Road
- Conservation Area
- Important Land for Sport and Recreation
- Ancient Monument
- County Wildlife Site
- Floodplain

Mid Devon Local Development Framework

Proposals Map

Cullompton

Scale 1:10,000

January 2011

APPENDIX C

PUBLIC TRANSPORT INFORMATION

CULLOMPTON TOWN CIRCULAR — DARTLINE 350

CULLOMPTON - KENTISBEARE — DARTLINE 350

ROUTE: CROW BRIDGE, Shortlands Road, Tiverton Road, Langlands Road, Maintoba Gardens, Orchard Way, Colebrooke Lane, Swallow Way, Fulford Drive, Exeter Road, Meadow Lane, Sports Centre, Duke Street, Chestnut Avenue, Rivermead, Duke Street, Meadow Lane. Exeter Road, Exeter Hill, Fore Street, High Street, Higher Street, Willand Road, Saxon Way, Norman Drive, Millenium Way, Tesco, Station Road, A373, Post Cross, Kentisbeare.
Returns via Parsons Close

Monday - Friday (Except Public Holidays)

CROW BRIDGE	0930	1030	1131
LANGLANDS ROAD	0933	1033	1134
CULM VALLEY SPORTS CENTRE	0937	1037	1138
CULLOMPTON, Memorial	**0944**	**1044**	**1145**
HEALTH CENTRE	0946	1046	1147
TESCO	0951	1051	1152
KENTISBEARE, Post Office	**0959**	-	**1200**
KENTISBEARE, Parsons Close	1000	-	1201

KENTISBEARE, Post Office	**0959**	-	**1200**
KENTISBEARE, Parsons Close	1000	-	1201
TESCO	1008	1109	1209
HEALTH CENTRE	1013	1114	1214
CULLOMPTON, Market House	**1016**	**1117**	**1217**
CULM VALLEY SPORTS CENTRE	R	R	R
LANGLANDS ROAD	1024	1125	1225
CROW BRIDGE	1029	1130	1230

CODE: R - CALLS TO SET DOWN ON REQUEST BY PASSENGERS ON THE BUS

NOTE: ♿ - MOST JOURNEYS ARE NORMALLY OPERATED BY LOW FLOOR FULLY ACCESSIBLE VEHICLES

HOLCOMBE ROGUS - EXETER Via Cullompton — REDWOODS 675

Thursday only (Except Public Holidays)

HOLCOMBE ROGUS, Whitebrook Terrace	**0905**
HOLCOMBE ROGUS, Prince Of Wales	0907
WESTLEIGH, Shelter	0915
BURLESCOMBE, Ayshford Arms	0919
CULMSTOCK, Millmoor	0928
CRADDOCK, Phone Box	0933
ASHILL, Phone Box	0936
KENTISBEARE, Post Office	0946
KENTISBEARE, Parsons Close	0947
CULLOMPTON, Market House	**0957**
BRADNINCH, Guildhall	1004
ELLERHAYES	1012
POLTIMORE, Post Box	1023
PINHOE, Heart Of Oak	1028
EXETER, Bus Station Stand 1	**1039**

EXETER, Bus Station Stand 1	**1330**
PINHOE, Lloyds Bank	1341
POLTIMORE, Post Box	1346
ELLERHAYES	1357
BRADNINCH, Guildhall	1405
CULLOMPTON, War Memorial	**1412**
KENTISBEARE, Parsons Close	1421
KENTISBEARE, Post Office	1422
ASHILL, Phone Box	1432
CRADDOCK, Phone Box	1435
CULMSTOCK, Millmoor	1440
BURLESCOMBE, Ayshford Arms	1449
WESTLEIGH, Shelter	1453
HOLCOMBE ROGUS, Prince Of Wales	1501
HOLCOMBE ROGUS, Whitebrook Terrace	**1503**

This service is financially supported by Devon County Council

HONITON - CULLOMPTON Via Kentisbeare — STAGECOACH 694

CULLOMPTON - HONITON Via Plymtree, Feniton — STAGECOACH 694

Monday - Saturday (Except Public Holidays)

	NF	F
HONITON, Dowell Street Car Park	**0845**	**0845**
AWLISCOMBE, Nap View	0850	0850
DULFORD, Phone Box	0900	0900
KENTISBEARE, Post Office	0905	0905
KENTISBEARE, Parsons Close	0906	0906
CULLOMPTON, Market House	**0915**	**0915**
WESTCOTT, Merry Harriers	0922	0922
LANGFORD GREEN	0925	0925
PLYMTREE, Church	**0930**	**0930**
NORMANS GREEN, Shelter	0932	0932
LUTON, Post Box	0940	0940
PAYHEMBURY, Stores	0943	0943
COLESTOCKS, Moor View	0945	0945
FENITON, Wells Avenue	**0950**	**0950**
FENITON, Village Green	0954	0954
BUCKERELL, Church	-	1001
WESTON, Otter Inn	-	1006
HONITON, Lace Walk	1008	1018
HONITON, Red Cow	**1010**	**1020**

	NF	F
HONITON, Congregational Church	**1215**	**1215**
HONITON, Job Centre	1217	1217
WESTON, Otter Inn	-	1225
BUCKERELL, Church	-	1229
FENITON, Village Green	1229	1234
FENITON, Wells Avenue	**1232**	**1237**
COLESTOCKS, Moor View	1237	1242
PAYHEMBURY, Stores	1239	1244
LUTON, Post Box	1242	1247
NORMANS GREEN, Shelter	1250	1255
PLYMTREE, Church	**1252**	**1257**
LANGFORD GREEN	1257	1302
WESTCOTT, Merry Harriers	1300	1305
CULLOMPTON, War Memorial	**1310**	**1315**
KENTISBEARE, Parsons Close	1319	1324
KENTISBEARE, Post Office	1320	1325
DULFORD, Phone Box	1325	1330
AWLISCOMBE, Nap View	1335	1340
HONITON, Lace Walk	**1340**	**1345**

CODE: F - FRIDAY ONLY NF - NOT FRIDAY

NOTE: ♿ - MOST JOURNEYS ARE NORMALLY OPERATED BY LOW FLOOR FULLY ACCESSIBLE VEHICLES

This service is financially supported by Devon County Council

Exeter • Bradninch • Cullompton • Willand • Uffculme • Sampford Peverell • Halberton • Tiverton 1
Exeter • Bradninch • Swallow Way • Cullompton • Willand • Halberton • Tiverton 1A
Exeter • Bradninch • Cullompton • Millennium Way • Willand 1B

low floor easy access buses

MONDAYS TO FRIDAY except Bank Holidays

Service No.	1	1A	1 SD	1 SH	1B SH	1 SH	1 SD	1B SD	1B SH	1A SD	1A SH	1	1B
Exeter Bus Station	0612	0642	0705	0705	0710	0730	0730	0745	0750	0805	0810	0830	0850
Whipton Village Shops	0617	0647	0710	0713	0718	0739	0739	0754	0759	0814	0819	0839	0859
Pinhoe Lloyds Bank	0622	0652	0715	0717	0723	0744	0744	0802	0804	0822	0824	0844	0904
Clyst Vale, Community College	↓	↓	↓	↓	↓	↓	↓	0808	↓	0828	↓	↓	↓
Broadclyst Shelter	0627	0657	0720	0722	0728	0751	0751	0811	0811	0831	0831	0851	0911
Bradninch, Guildhall	0639	0709	0732	0734	0740	0803	0803	0823	0823	0843	0843	0903	0923
Cullompton School	↓	↓	↓	↓	↓	↓	0813	↓	↓	↓	↓	↓	↓
Cullompton, Fulford Drive Lay by	↓	0716	↓	↓	↓	↓	↓	↓	↓	0850	0850	↓	↓
Cullompton Memorial	0649	0723	0745	0746	0752	0815	0817	0835	0835	0857	0857	0915	0935
Cullompton Tesco	↓	↓	↓	↓	0753	↓	↓			↓	↓	↓	0936
Kings Oak Lea Roundabout	0651	0725	0747	0748	↓	0817	0819			0859	0859	0917	↓
Willand Post Office		0728	0750	0751	↓	0820	0822			0902	0902	0920	↓
Willand Somerlea		0731	0753	0754	0802	0824	0826			0906	0906	0924	0945
Uffculme The Ostler		↓	0803	0804		0834	↓			↓	↓	0934	
Uffculme School			↓	↓		↓	0835					↓	
Tiverton Parkway Railway Station			0813	0814		0844	↓					0944	
Richmond Close			0816	0817		0847	0847					0947	
Sampford Peverell The Globe		↓	0818	0819		0849	0849			↓	↓	0949	
Halberton Village Hall		0737	0823	0824		0854	0854			0912	0912	0954	
Tiverton Bus Station		0749	0835	0836		0906	0906			0924	0924	1006	
Petroc Tiverton Campus			0845										

then at these times each hour

Service No.	IA	I	IB
Exeter Bus Station	10	30	50
Whipton Village Shops	19	39	59
Pinhoe Lloyds Bank	24	44	04
Clyst Vale, Community College	↓	↓	↓
Broadclyst Shelter	31	51	11
Bradninch, Guildhall	43	03	23
Cullompton School	↓	↓	↓
Cullompton, Fulford Drive Lay by	50	↓	↓
Cullompton Memorial	57	15	35
Cullompton Tesco	↓	↓	36
Kings Oak Lea Roundabout	59	17	↓
Willand Post Office	02	20	↓
Willand Somerlea	06	24	45
Uffculme The Ostler		34	
Uffculme School		↓	
Tiverton Parkway Railway Station		44	
Richmond Close		47	
Sampford Peverell The Globe	↓	49	
Halberton Village Hall	12	54	
Tiverton Bus Station	24	06	

until

Service No.	IA	I	IB
Exeter Bus Station	1310	1330	1350
Whipton Village Shops	1319	1339	1359
Pinhoe Lloyds Bank	1324	1344	1404
Clyst Vale, Community College	↓	↓	↓
Broadclyst Shelter	1331	1351	1411
Bradninch, Guildhall	1343	1403	1423
Cullompton School	↓	↓	↓
Cullompton, Fulford Drive Lay by	1350	↓	↓
Cullompton Memorial	1357	1415	1435
Cullompton Tesco	↓	↓	1436
Kings Oak Lea Roundabout	1359	1417	↓
Willand Post Office	1402	1420	↓
Willand Somerlea	1406	1424	1445
Uffculme The Ostler		1434	
Uffculme School		↓	
Tiverton Parkway Railway Station		1444	
Richmond Close		1447	
Sampford Peverell The Globe	↓	1449	
Halberton Village Hall	1412	1454	
Tiverton Bus Station	1424	1506	

Service No.	1A	1 SD	1A SD	1 SH	1 SD	1B SH	1B SD	1A	1	1B	1A	1	1B	1A	1	1B	1A	1	1
Exeter Bus Station	1410			1430	1430	1450	1450	1510	1530	1555	1610	1630	1650	1710	1730	1750	1810	1840	1930
Whipton Village Shops	1419			1439	1439	1459	1459	1521	1541	1606	1621	1641	1701	1721	1741	1759	1815	1845	1935
Pinhoe Lloyds Bank	1424			1444	1444	1504	1504	1527	1547	1612	1627	1647	1707	1727	1747	1804	1820	1850	1940
Broadclyst Shelter	1431			1451	1451	1511	1511	1534	1554	1619	1634	1654	1714	1734	1754	1811	1825	1855	1945
Bradninch, Guildhall	1443			1503	1503	1523	1523	1546	1606	1631	1646	1706	1726	1746	1806	1823	1836	1906	1956
Cullompton School	↓	1510			1510	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
Cullompton, Fulford Drive Lay by	1450	↓		↓	↓	↓	↓	1553	↓	↓	1653	↓	↓	1753	↓	↓	1843	↓	↓
Cullompton Memorial	1457	1515		1515	1515	1535	1535	1600	1618	1643	1700	1718	1738	1800	1818	1835	1850	1916	2006
Cullompton Tesco	↓	↓		↓	↓	1536		↓	↓	1644	↓	↓	1739	↓	↓	1836	↓	↓	↓
Kings Oak Lea Roundabout	1459	1517		1517	1517	↓		1602	1620	↓	1702	1720	↓	1802	1820	↓	1852	1918	2008
Willand Post Office	1502	1520		1520	1520	↓		1605	1623	↓	1705	1723	↓	1805	1823	↓	1855	1921	2011
Willand Somerlea	1506	1523		1524	1524	1545		1608	1626	1653	1708	1726	1748	1808	1826	1845	1858	1924	2014
Uffculme The Ostler	↓	↓		1534	↓			↓	1636		↓	1736		↓	1836			1932	
Uffculme School		1528	1540	↓	1540				↓			↓			↓			↓	
Tiverton Parkway Railway Station				1544	↓				1646			1746			1846			1941	
Richmond Close				1547	1550				1649			1749			1849			1944	
Sampford Peverell The Globe	↓		↓	1549	1552			↓	1651		↓	1751		↓	1851			1946	
Halberton Village Hall	1512		1551	1554	1557			1614	1656		1714	1756		1814	1856			1951	
Tiverton Bus Station	1524		1603	1606	1608			1626	1708		1726	1808		1824	1906			2001	

then at these times each hour

Service No.	1
Exeter Bus Station	30
Whipton Village Shops	35
Pinhoe Lloyds Bank	40
Broadclyst Shelter	45
Bradninch, Guildhall	56
Cullompton Memorial	06
Kings Oak Lea Roundabout	08
Willand Post Office	11
Willand Somerlea	14
Uffculme The Ostler	

until

Service No.	1	1
Exeter Bus Station	2230	2315
Whipton Village Shops	2235	2320
Pinhoe Lloyds Bank	2240	2325
Broadclyst Shelter	2245	2330
Bradninch, Guildhall	2256	2341
Cullompton Memorial	2306	2351
Kings Oak Lea Roundabout	2308	2353
Willand Post Office	2311	2356
Willand Somerlea	2314	2359
Uffculme The Ostler		0004

Service 1 From Exeter Bus Station *via Paris Street, Sidwell Street, Blackboy Road, Pinhoe Road, main Road, Pinn Hill, Westclyst, B3181, Broadclyst Budlake, Beare, Hele Turn, Station Road, Hele Mill, Hele Road, Bradninch, Fore Street, Cullompton Hill, Bow Hill, Padbrook Hill, Exeter Road Roundabout, Exeter Road, Exeter Hill, Fore Street, Cullompton, High Street, Willand Road, Willand Old Village, Meadow Park, Somerville Road, South View Road, Uffculme Road, Commercial Road, Uffculme Square, Bridge Street, Wellands Close, Bridge Street, Uffculme Square, Commercial Road, Bridewell Avenue, B3181, Leonard Moor Cross (certain journeys operate via Uffculme School), Waterloo Cross, A361, Tiverton Parkway, Sampford Peverell, Lower Town, Whitnyge Road, Richmond Close, Turnpike, Halberton High Street, Post Hill, Blundells Road, Great Western Way and Phoenix Lane to* ***Tiverton Bus Station***

Service 1A From Exeter Bus Station *via Service 1 Cullompton Exeter Road Roundabout then via Swallow Way, Crow Bridge, Langlands Road, Tiverton Road, Fore Street, High Street, then via Service 1 route to Willand South View Road, then via Station Road, Willand Road, Halberton High Street and then as Service 1 to* ***Tiverton Bus Station***

Service 1B From Exeter Bus Station *via Service 1 route to Cullompton High Street then via Station Road, Millennium Way, B3181, Willand, Silver Street, Meadow Park and Somerville Road to* ***Willand Somerlea***

SATURDAYS

Service No.	1	1B	1A	1	1B
Exeter Bus Station	0705	0735	0810	0830	0850
Whipton Village Shops	0713	0743	0819	0839	0859
Pinhoe Lloyds Bank	0717	0747	0824	0844	0904
Broadclyst Shelter	0722	0752	0831	0851	0911
Bradninch, Guildhall	0734	0804	0843	0903	0923
Cullompton, Fulford Drive Lay by	↓	↓	0850	↓	↓
Cullompton Memorial	0746	0816	0857	0915	0935
Cullompton Tesco	↓	0817	↓	↓	0936
Kings Oak Lea Roundabout	0748	↓	0859	0917	↓
Willand Post Office	0751	↓	0902	0920	↓
Willand Somerlea	0754	0826	0906	0924	0945
Uffculme The Ostler	0804		↓	0934	
Tiverton Parkway Railway Station	0814			0944	
Richmond Close	0817			0947	
Sampford Peverell The Globe	0819		↓	0949	
Halberton Village Hall	0824		0912	0954	
Tiverton Bus Station	0836		0924	1006	

then at these times each hour

Service No.	1A	1	1B
Exeter Bus Station	10	30	50
Whipton Village Shops	19	39	59
Pinhoe Lloyds Bank	24	44	04
Broadclyst Shelter	31	51	11
Bradninch, Guildhall	43	03	23
Cullompton, Fulford Drive Lay by	50	↓	↓
Cullompton Memorial	57	15	35
Cullompton Tesco	↓	↓	36
Kings Oak Lea Roundabout	59	17	↓
Willand Post Office	02	20	↓
Willand Somerlea	06	24	45
Uffculme The Ostler		34	
Tiverton Parkway Railway Station		44	
Richmond Close		47	
Sampford Peverell The Globe	↓	49	
Halberton Village Hall	12	54	
Tiverton Bus Station	24	06	

until

Service No.	1A	1	1B	1A	1	1B	1A	1	1B	1A	1	1B
Exeter Bus Station	1410	1430	1450	1510	1530	1550	1610	1630	1650	1710	1730	1750
Whipton Village Shops	1419	1439	1459	1521	1541	1601	1621	1641	1701	1721	1741	1759
Pinhoe Lloyds Bank	1424	1444	1504	1527	1547	1607	1627	1647	1707	1727	1747	1804
Broadclyst Shelter	1431	1451	1511	1534	1554	1614	1634	1654	1714	1734	1754	1811
Bradninch, Guildhall	1443	1503	1523	1546	1606	1626	1646	1706	1726	1746	1806	1823
Cullompton, Fulford Drive Lay by	1450	↓	↓	1553	↓	↓	1653	↓	↓	1753	↓	↓
Cullompton Memorial	1457	1515	1535	1600	1618	1638	1700	1718	1738	1800	1818	1835
Cullompton Tesco	↓	↓	1536	↓	↓	1639	↓	↓	1739	↓	↓	↓
Kings Oak Lea Roundabout	1459	1517	↓	1602	1620	↓	1702	1720	↓	1802	1820	↓
Willand Post Office	1502	1520	↓	1605	1623	↓	1705	1723	↓	1805	1823	↓
Willand Somerlea	1506	1524	1545	1608	1626	1648	1708	1726	1748	1808	1826	1845
Uffculme The Ostler		1534			1636			1736			1836	
Tiverton Parkway Railway Station		1544			1646			1746			1846	
Richmond Close		1547			1649			1749			1849	
Sampford Peverell The Globe	↓	1549		↓	1651		↓	1751		↓	1851	
Halberton Village Hall	1512	1554		1614	1656		1714	1756		1814	1856	
Tiverton Bus Station	1524	1606		1626	1708		1726	1808		1824	1906	

Service No.	1	1B	1A	1	1B
Exeter Bus Station	1730	1750	1810	1840	1930
Whipton Village Shops	1741	1759	1815	1845	1935
Pinhoe Lloyds Bank	1747	1804	1820	1850	1940
Broadclyst Shelter	1754	1811	1825	1855	1945
Bradninch, Guildhall	1806	1823	1836	1906	1956
Cullompton, Fulford Drive Lay by	↓	↓	1843	↓	↓
Cullompton Memorial	1818	1835	1850	1916	2006
Cullompton Tesco	↓	1836	↓	↓	↓
Kings Oak Lea Roundabout	1820	↓	1852	1918	2008
Willand Post Office	1823	↓	1855	1921	2011
Willand Somerlea	1826	1845	1858	1924	2014
Uffculme The Ostler	1836			1932	
Tiverton Parkway Railway Station	1846			1941	
Richmond Close	1849			1944	
Sampford Peverell The Globe	1851			1946	
Halberton Village Hall	1856			1951	
Tiverton Bus Station	1906			2001	

then at these times each hour

Service No.	1
Exeter Bus Station	30
Whipton Village Shops	35
Pinhoe Lloyds Bank	40
Broadclyst Shelter	45
Bradninch, Guildhall	56
Cullompton Memorial	06
Kings Oak Lea Roundabout	08
Willand Post Office	11
Willand Somerlea	14
Uffculme The Ostler	
Tiverton Parkway Railway Station	
Richmond Close	
Sampford Peverell The Globe	
Halberton Village Hall	
Tiverton Bus Station	

until

Service No.	1	1
Exeter Bus Station	2230	2315
Whipton Village Shops	2235	2320
Pinhoe Lloyds Bank	2240	2325
Broadclyst Shelter	2245	2330
Bradninch, Guildhall	2256	2341
Cullompton Memorial	2306	2351
Kings Oak Lea Roundabout	2308	2353
Willand Post Office	2311	2356
Willand Somerlea	2314	2359
Uffculme The Ostler		0004

During the Christmas and New Year period, timetables are subject to alteration, please refer to the Stagecoach website or Travel Shops for full details.

SD Mondays to Fridays during School Terms
SH Mondays to Fridays during School Holidays

SUNDAYS AND BANK HOLIDAYS

Service No.	1	1	1	1	1	1	1	1	1
Exeter Bus Station	0930	1015	1215	1415	1615	1815	1930	2130	2315
Whipton Village Shops	0936	1021	1221	1421	1621	1821	1935	2135	2320
Pinhoe Lloyds Bank	0941	1026	1226	1426	1626	1826	1940	2140	2325
Broadclyst Shelter	0946	1031	1231	1431	1631	1831	1945	2145	2330
Bradninch, Guildhall	0957	1042	1242	1442	1642	1842	1956	2156	2341
Cullompton Memorial	1008	1053	1253	1453	1653	1853	2006	2206	2351
Kings Oak Lea Roundabout	1010	1055	1255	1455	1655	1855	2008	2208	2353
Willand Post Office	1014	1059	1259	1459	1659	1859	2011	2211	2356
Willand Somerlea	1017	1102	1302	1502	1702	1902	2014	2214	2359
Uffculme The Ostler		1112	1312	1512	1712	1912			0004
Tiverton Parkway Railway Station		1122	1322	1522	1722	1922			
Sampford Peverell The Globe		1127	1327	1527	1727	1927			
Halberton Village Hall		1132	1332	1532	1732	1932			
Tiverton Bus Station		1142	1342	1542	1742	1942			

low floor easy access buses

Low Floor easy-access buses are normally operated on these services, however an alternative type of bus may be used in the event of non-availability.

Journeys between Tiverton and Cullompton are operated under contract to Devon County Council

Tiverton • Halberton • Sampford Peverell • Uffculme • Willand • Cullompton • Bradninch • Exeter 1/1C
Tiverton • Halberton • Willand • Cullompton • Swallow Way • Bradninch • Exeter 1A
Willand • Millennium Way • Cullompton • Bradninch • Exeter 1B

low floor easy access buses

MONDAYS TO FRIDAY except Bank Holidays

Service No.	1	1	1C	1A	1C	1A SD	1 SH	1A SD	1A	1 SD	1B SD	1B SH	1A SD	1A SH	1A	1B	1		1A	1B	I
Tiverton Bus Station			0622	0710	0702	0748		0805			0805	0810	0835	0852	0912		0930		12		30
Petroc Tiverton Campus			▼	▼	▼	▼		▼			▼	▼	0850	▼	▼		▼		▼		▼
Halberton Village Hall			0632	0720	0712	0758		0815			0815	0820	0902	0902	0922		0940		22		40
Sampford Peverell The Globe			0637	|	0717	|	▼			0820	0825	|	|	|		0945		|		45
Richmond Close			0639	|	0719	|				0822	0827	|	|	|		0947		|		47
Tiverton Parkway Railway Station			0642	|	0722	|				▼	0830	|	|	|		0950		|		50
Uffculme School			▼	|	▼	|				0835	▼	|	|	|		▼		|		▼
Uffculme The Ostler			0656	▼	0736	▼		▼			0844	0844	▼	▼	▼		1004	then	▼		04
Willand Somerlea			0702	0726	0742	0804	0806	0821		0840	0850	0850	0908	0908	0928	0950	1010	at	28	50	10
Willand Silver Street			▼	▼	▼	▼	▼	0825		▼	▼	▼	▼	▼	▼	▼	▼	these	▼	▼	▼
Uffculme School			▼	▼	▼	▼	▼	0835		▼	▼	▼	▼	▼	▼	▼	▼	times	▼	▼	▼
Willand Post Office			0705	0729	0745	0807	0809			0843	▼	▼	0911	0911	0931	▼	1013	each	31	▼	13
Kings Oak Lea Roundabout	0635	0655	0708	0732	0748	0810	0812			0846	▼	▼	0914	0914	0934	▼	1016	hour	34	▼	16
Cullompton Tesco	▼	▼	▼	▼	▼	▼	▼			▼	0859	0859	▼	▼	▼	0959	▼		▼	59	▼
Cullompton Memorial	0640	0700	0714	0739	0755	0817	0819		0840	0852	0902	0902	0920	0920	0940	1002	1022		40	02	22
Cullompton, Fulford Drive Lay by	▼	▼	0719	▼	0801	▼	▼		0845	▼	▼	▼	0925	0925	0945	▼	▼		45	▼	▼
Cullompton School	▼	▼	▼	▼	▼	0822	▼		▼	▼	▼	▼	▼	▼	▼	▼	▼		▼	▼	▼
Bradninch, Guildhall	0650	0710	0727	0749	0809	0829	0829		0852	0902	0912	0912	0932	0932	0952	1012	1032		52	12	32
Broadclyst Shelter	0702	0722	0739	0801	0821	0841	0841		0904	0914	0924	0924	0944	0944	1004	1024	1044		04	24	44
Pinhoe Heart of Oak	0708	0728	0745	0808	0828	0848	0848		0910	0920	0930	0930	0950	0950	1010	1030	1050		10	30	50
Whipton Village Shops	0712	0732	0750	0813	0833	0853	0853		0915	0925	0935	0935	0955	0955	1015	1035	1055		15	35	55
Exeter Bus Station	0720	0740	0801	0824	0844	0904	0904		0924	0934	0944	0944	1004	1004	1024	1044	1104		24	44	04

Service No.		IA	IB	I	IA	IB SH	IB SD	I SD	I	IA SH	IA SD	IB SD	IB SH	I	IA	IB	I	SD	IA
Tiverton Bus Station		1312		1330	1412				1430	1512		1510		1530	1612		1630		1720
Petroc Tiverton Campus		▼		▼	▼				▼	▼		▼		▼	▼		▼	1640	▼
Halberton Village Hall		1322		1340	1422				1440	1522		1520		1540	1622		1640	1655	1730
Sampford Peverell The Globe		|		1345	|			1445	|		1525		1545	|		1645	1700	|
Richmond Close		|		1347	|			1447	|		|		1547	|		1647	|	|
Tiverton Parkway Railway Station		|		1350	|			1450	|		▼		1550	|		1650	|	|
Uffculme School		|		▼	|			▼	|		1540		▼	|		▼	▼	|
Uffculme The Ostler		▼		1404	▼				1504	▼		▼		1604	▼		1704	1715	▼
Willand Somerlea		1328	1350	1410	1428	1450	1450		1510	1528		1550	1550	1610	1628	1655	1710	▼	1736
Willand Silver Street	until	▼		▼	▼				▼	▼				▼	▼		▼	1719	▼
Willand Post Office		1331		1413	1431				1513	1531				1613	1631		1713	1721	1739
Kings Oak Lea Roundabout		1334	▼	1416	1434	▼	▼		1516	1534		▼	▼	1616	1634	▼	1716	1724	1742
Cullompton Tesco		▼	1359	▼	▼	1459	1459		▼	▼		1559	1559	▼	▼	1704	▼	▼	▼
Cullompton Memorial		1340	1402	1422	1440	1502	1502		1522	1540	1540	1602	1602	1622	1640	1707	1722	1726	1748
Cullompton, Fulford Drive Lay by		1345	|	|	1445	|	▼		|	1545	1545	|	|	|	1645	|	|	1753
Cullompton School		▼	▼	▼	▼	▼	1510		▼	▼	▼	▼	▼	▼	▼		▼	▼	▼
Bradninch, Guildhall		1352	1412	1432	1452	1512	1516		1532	1552	1552	1612	1612	1632	1652	1717	1732	▼	1800
Broadclyst Shelter		1404	1424	1444	1504	1524	1528		1544	1604	1604	1624	1624	1644	1704	1729	1744	1738	1812
Clyst Vale, Community College		▼	▼	▼	▼	▼	1530	1530	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼
Pinhoe Heart of Oak		1410	1430	1450	1510	1530	1535	1535	1550	1610	1610	1630	1630	1650	1710	1734	1750	1743	1818
Whipton Village Shops		1415	1435	1455	1515	1535	1540	1540	1555	1615	1615	1635	1635	1655	1715	1738	1755	1747	1823
Exeter Bus Station		1424	1444	1504	1524	1544	1549	1549	1604	1624	1624	1644	1644	1704	1724	1746	1804	1755	1832

Service No.	1B	1	1	1		I		I
Tiverton Bus Station		1740	1840					
Halberton Village Hall		1750	1850					
Sampford Peverell The Globe		1755	1855					
Richmond Close		1757	1857					
Tiverton Parkway Railway Station		1800	1900					
Uffculme The Ostler		1815	1915					
Willand Somerlea	1755	1820	1920	2020	then at these times each hour	20	until	2320
Willand Post Office	|	1822	1922	2022		22		2322
Kings Oak Lea Roundabout	▼	1824	1924	2024		24		2324
Cullompton Tesco	1804	▼	▼	▼		▼		▼
Cullompton Memorial	1807	1830	1930	2030		30		2330
Bradninch, Guildhall	1817	1840	1940	2040		40		2340
Broadclyst Shelter	1829	1849	1949	2049		49		2349
Pinhoe Heart of Oak	1834	1854	1954	2054		54		2354
Whipton Village Shops	1838	1858	1958	2058		58		2358
Exeter Bus Station	1846	1905	2005	2105		05		0005

Service 1 From Tiverton Bus Station *via Phoenix Lane, Great Western Way, Blundells Road, Post Hill, Halberton High Street, Turnpike, Whitnyge Road, Richmond Close, Sampford Peverell, Lower Town, Tiverton Parkway, A361, Waterloo Cross, Leonard Moor Cross, (certain journeys serve Uffculme School), B3181, Bridewell Avenue, Commercial Road, Uffculme Square, Bridge Street, Wellands Close, Bridge Street, Uffculme Square, Commercial Road, Uffculme Road, South View Road, Somerville Road, Meadow Park, Willand Old Village, Willand Road, Cullompton, High Street, Fore Street, Exeter Hill, Exeter Road, Exeter Road Roundabout, Padbrook Hill, Bow Hill, Cullomptom Hill, Bradninch, Fore Street, Hele Road, Hele Mill, Station Road, Hele Turn, B3181, Beare, Budlake, Broadclyst, Westclyst, Pinn Hill, Main Road, Pinhoe Road, Blackboy Road, Sidwell Street and Cheeke Street to* ***Exeter Bus Station.***

Service 1A From Tiverton Bus Station *via Phoenix Lane, Great Western Way, Blundells Road, Post Hill, Halberton High Street, Willand Road, Station Road, South View Road and then as Service 1 to Cullompton High Street then via Fore Street, Tiverton Road, Langlands Road, Crow Bridge, Swallow Way to Exeter Road Roundabout then as Service 1 to* ***Exeter Bus Station***

Service 1B From Willand Somerlea *via Somerville Road, Meadow Park, Silver Street, B3181, Millennium Way, Station Road, Cullompton, High Street - then as Service 1 to* ***Exeter Bus Station***

SD Mondays to Fridays during School Terms
SH Mondays to Fridays during School Holidays

low floor easy access buses — Low Floor easy-access buses are normally operated on these services, however an alternative type of bus may be used in the event of non-availability

SATURDAYS

Service No.	1	1	1	1	1	1B	1A	1A	1B	1		1A	1B	1		1A	1B	1	1A	1B
Tiverton Bus Station		0640				0810	0852	0912		0930		12		30		1512		1530	1612	
Halberton Village Hall		0650				0820	0902	0922		0940		22		40		1522		1540	1622	
Sampford Peverell The Globe		0655				0825	|	|		0945		|		45		|		1545	|	
Richmond Close		0657				0827	|	|		0947		|		47		|		1547	|	
Tiverton Parkway Railway Station		0700				0830	|	|		0950		|		50		|		1550	|	
Uffculme The Ostler		0715				0844	▼	▼		1004	then	▼		04		▼		1604	▼	
Willand Somerlea		0720	0750	0810	0830	0850	0908	0928	0950	1010	at	28	50	10		1528	1550	1610	1628	1650
Willand Post Office		0723	0753	0813	0833	▼	0911	0931	▼	1013	these	31	▼	13		1531	▼	1613	1631	▼
Kings Oak Lea Roundabout	0701	0726	0756	0816	0836	▼	0914	0934	▼	1016	times	34	▼	16	until	1534	▼	1616	1634	▼
Cullompton Tesco	▼	▼	▼	▼	▼	0859	▼	▼	0959	▼	each	▼	59	▼		▼	1559	▼	▼	1659
Cullompton Memorial	0706	0735	0802	0822	0842	0902	0920	0940	1002	1022	hour	40	02	22		1540	1602	1622	1640	1702
Cullompton, Fulford Drive Lay by	▼	▼	▼	▼	▼	▼	0925	0945	▼	▼		45	▼	▼		1545	▼	▼	1645	▼
Bradninch, Guildhall	0716	0745	0812	0832	0852	0912	0932	0952	1012	1032		52	12	32		1552	1612	1632	1652	1712
Broadclyst Shelter	0728	0755	0824	0844	0904	0924	0944	1004	1024	1044		04	24	44		1604	1624	1644	1704	1724
Pinhoe Heart of Oak	0734	0800	0830	0850	0910	0930	0950	1010	1030	1050		10	30	50		1610	1630	1650	1710	1729
Whipton Village Shops	0738	0804	0835	0855	0915	0935	0955	1015	1035	1055		15	35	55		1615	1635	1655	1715	1733
Exeter Bus Station	0746	0816	0844	0904	0924	0944	1004	1024	1044	1104		24	44	04		1624	1644	1704	1724	1741

Service No.	1	1A	1B	1	1	1		1		1
Tiverton Bus Station	1630	1720		1740	1840					
Halberton Village Hall	1640	1730		1750	1850					
Sampford Peverell The Globe	1645	|		1755	1855					
Richmond Close	1647	|		1757	1857					
Tiverton Parkway Railway Station	1650	|		1800	1900					
Uffculme The Ostler	1704	▼		1815	1915					
Willand Somerlea	1710	1736	1755	1820	1920	2020	then at these times each hour	20	until	2320
Willand Post Office	1713	1739		1822	1922	2022		22		2322
Kings Oak Lea Roundabout	1716	1742	▼	1824	1924	2024		24		2324
Cullompton Tesco	▼	▼	1804	▼	▼	▼		▼		▼
Cullompton Memorial	1722	1748	1807	1830	1930	2030		30		2330
Cullompton, Fulford Drive Lay by	▼	1753	▼	▼	▼	▼		▼		▼
Bradninch, Guildhall	1732	1800	1817	1840	1940	2040		40		2340
Broadclyst Shelter	1744	1812	1829	1849	1949	2049		49		2349
Pinhoe Heart of Oak	1750	1818	1834	1854	1954	2054		54		2354
Whipton Village Shops	1755	1823	1838	1858	1958	2058		58		2358
Exeter Bus Station	1804	1832	1846	1905	2005	2105		05		0005

SUNDAYS AND BANK HOLIDAYS

Service No.	1	1	1	1	1	1	1	1
Tiverton Bus Station			1150	1350	1550	1750		
Halberton Village Hall			1200	1400	1600	1800		
Sampford Peverell The Globe			1205	1405	1605	1805		
Tiverton Parkway Railway Station			1210	1410	1610	1810		
Uffculme The Ostler			1225	1425	1625	1825		
Willand Somerlea	0920	1030	1230	1430	1630	1830	2020	2220
Willand Post Office	0923	1033	1233	1433	1633	1833	2022	2222
Kings Oak Lea Roundabout	0926	1036	1236	1436	1636	1836	2024	2224
Cullompton Memorial	0932	1042	1242	1442	1642	1842	2030	2230
Bradninch, Guildhall	0942	1052	1252	1452	1652	1852	2040	2240
Broadclyst Shelter	0952	1102	1302	1502	1702	1902	2049	2249
Pinhoe Heart of Oak	0957	1107	1307	1507	1707	1907	2054	2254
Whipton Village Shops	1001	1111	1311	1511	1711	1911	2058	2258
Exeter Bus Station	1009	1119	1319	1519	1719	1919	2105	2305

During the Christmas and New Year period, timetables are subject to alteration, please refer to the Stagecoach website or Travel Shops for full details.

Journeys between Tiverton and Cullompton are operated under contract to Devon County Council

APPENDIX D

ARCADY RESULTS FOR SWALLOW WAY/EXETER ROAD ROUNDABOUT

Junctions 8

ARCADY 8 - Roundabout Module

Filename: Exeter Road-Swallow Way.arc8
Path: S:\C9841 - Colebrooke Lane, Cullompton\Calculations\Traffic\Arcady
Report generation date: 25/06/2013 15:07:59

File summary

File Description

Title	Exeter Road/Swallow Way Roundabout
Location	Cullompton
Site Number	C9841 - Colebrooke Lane, Cullompton
Date	18/06/2012
Version	Preliminary
Status	Existing Layout
Identifier	SR
Client	Genesis Town Planning
Jobnumber	C9841
Enumerator	CARDIFF\sradford
Description	

Analysis Options

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

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Existing Layout - Base Year 2013, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Existing Layout	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
Base Year 2013, AM	Base Year 2013	AM		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3,4				2.42	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Exeter Road (North)	
2	Exeter Road (South)	
3	Bowhill	
4	Swallow Way	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00
4	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	7.00	8.00	30.00	37.50	30.00	60.00	
2	4.50	8.00	20.00	12.50	30.00	50.00	
3	3.00	8.00	25.00	10.00	30.00	60.00	
4	3.00	7.00	35.00	62.50	30.00	60.00	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.735	2200.146
2		(calculated)	(calculated)	0.656	1841.551
3		(calculated)	(calculated)	0.580	1552.365
4		(calculated)	(calculated)	0.630	1669.173

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
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	276.00	100.000
2	ONE HOUR	✓	198.00	100.000
3	ONE HOUR	✓	120.00	100.000
4	ONE HOUR	✓	159.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	0.000	175.000	73.000	28.000
	2	175.000	0.000	8.000	15.000
	3	106.000	2.000	0.000	12.000
	4	63.000	70.000	26.000	0.000

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

		To			
		1	2	3	4
From	1	0.00	0.63	0.26	0.10
	2	0.88	0.00	0.04	0.08
	3	0.88	0.02	0.00	0.10
	4	0.40	0.44	0.16	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.015	1.000	1.031
	2	1.039	1.000	1.000	1.027
	3	1.010	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	1.500	0.000	3.100
	2	3.900	0.000	0.000	2.700
	3	1.000	0.000	0.000	0.000
	4	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
1	0.15	2.01	0.17	A	253.26	379.69	12.32	1.95	0.14	12.32	1.95
2	0.13	2.45	0.15	A	181.69	272.53	10.77	2.37	0.12	10.77	2.37
3	0.09	2.85	0.10	A	110.11	165.17	7.58	2.75	0.08	7.58	2.75
4	0.12	2.78	0.14	A	145.90	218.85	9.72	2.66	0.11	9.72	2.66

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (Veh/hr)	Junction 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)	Delay (s)	LOS
1	207.79	51.95	207.35	258.28	73.57	0.00	2119.24	1928.90	0.098	0.00	0.11	1.882	A
2	149.06	37.27	148.68	185.53	95.40	0.00	1715.86	1270.33	0.087	0.00	0.09	2.297	A
3	90.34	22.59	90.08	80.37	163.71	0.00	1441.12	694.92	0.063	0.00	0.07	2.664	A
4	119.70	29.93	119.37	41.31	212.48	0.00	1531.66	537.02	0.078	0.00	0.08	2.549	A

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

Arm	Total Demand (Veh/hr)	Junction 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)	Delay (s)	LOS
1	248.12	62.03	248.02	309.09	88.05	0.00	2108.73	1928.90	0.118	0.11	0.13	1.934	A
2	178.00	44.50	177.91	221.95	114.12	0.00	1703.92	1270.33	0.104	0.09	0.12	2.358	A
3	107.88	26.97	107.82	96.15	195.88	0.00	1421.92	694.92	0.076	0.07	0.08	2.739	A
4	142.94	35.73	142.86	49.42	254.28	0.00	1504.61	537.02	0.095	0.08	0.10	2.643	A

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

Arm	Total Demand (Veh/hr)	Junction 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)	Delay (s)	LOS
1	303.88	75.97	303.74	378.51	107.83	0.00	2094.37	1928.89	0.145	0.13	0.17	2.010	A
2	218.00	54.50	217.87	271.80	139.76	0.00	1687.58	1270.33	0.129	0.12	0.15	2.449	A
3	132.12	33.03	132.03	117.75	239.89	0.00	1395.68	694.92	0.095	0.08	0.10	2.848	A
4	175.06	43.77	174.94	60.52	311.40	0.00	1467.65	537.02	0.119	0.10	0.13	2.784	A

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

Arm	Total Demand (Veh/hr)	Junction 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)	Delay (s)	LOS
1	303.88	75.97	303.88	378.75	107.90	0.00	2094.32	1928.89	0.145	0.17	0.17	2.010	A
2	218.00	54.50	218.00	271.95	139.83	0.00	1687.53	1270.33	0.129	0.15	0.15	2.449	A
3	132.12	33.03	132.12	117.81	240.02	0.00	1395.60	694.92	0.095	0.10	0.10	2.848	A
4	175.06	43.77	175.06	60.56	311.59	0.00	1467.52	537.02	0.119	0.13	0.14	2.784	A

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

Arm	Total Demand (Veh/hr)	Junction 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)	Delay (s)	LOS
1	248.12	62.03	248.26	309.48	88.17	0.00	2108.64	1928.90	0.118	0.17	0.13	1.934	A
2	178.00	44.50	178.12	222.19	114.24	0.00	1703.84	1270.33	0.104	0.15	0.12	2.359	A
3	107.88	26.97	107.97	96.25	196.11	0.00	1421.79	694.92	0.076	0.10	0.08	2.741	A
4	142.94	35.73	143.06	49.48	254.60	0.00	1504.40	537.02	0.095	0.14	0.11	2.646	A

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

Arm	Total Demand (Veh/hr)	Junction 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)	Delay (s)	LOS
1	207.79	51.95	207.69	259.14	73.83	0.00	2119.05	1928.90	0.098	0.13	0.11	1.882	A
2	149.06	37.27	149.15	186.05	95.66	0.00	1715.69	1270.33	0.087	0.12	0.10	2.297	A
3	90.34	22.59	90.40	80.60	164.21	0.00	1440.82	694.92	0.063	0.08	0.07	2.667	A
4	119.70	29.93	119.78	41.43	213.19	0.00	1531.20	537.02	0.078	0.11	0.09	2.550	A

Queueing Delay Results for each time segment

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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1.61	0.11	1.882	A	A
2	1.40	0.09	2.297	A	A
3	0.99	0.07	2.664	A	A
4	1.25	0.08	2.549	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1.98	0.13	1.934	A	A
2	1.73	0.12	2.358	A	A
3	1.21	0.08	2.739	A	A
4	1.55	0.10	2.643	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	2.52	0.17	2.010	A	A
2	2.20	0.15	2.449	A	A
3	1.55	0.10	2.848	A	A
4	2.00	0.13	2.784	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	2.54	0.17	2.010	A	A
2	2.22	0.15	2.449	A	A
3	1.56	0.10	2.848	A	A
4	2.03	0.14	2.784	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	2.02	0.13	1.934	A	A
2	1.77	0.12	2.359	A	A
3	1.25	0.08	2.741	A	A
4	1.60	0.11	2.648	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1.65	0.11	1.882	A	A
2	1.44	0.10	2.297	A	A
3	1.02	0.07	2.667	A	A
4	1.29	0.09	2.550	A	A

Queue Variation Results for each time segment

Queue Variation results: (07:45-08:00)

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.11	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.09	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.07	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.08	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:00-08:15)

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.13	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.12	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.08	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.10	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:15-08:30)

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.17	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.15	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.10	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.13	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:30-08:45)

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.17	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.15	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.10	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.14	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:45-09:00)

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.13	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.12	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.08	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.11	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (09:00-09:15)

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.11	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.10	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.07	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.09	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Existing Layout - Base Year 2013, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Existing Layout	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
Base Year 2013, PM	Base Year 2013	PM		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3,4				2.48	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Exeter Road (North)	
2	Exeter Road (South)	
3	Bowhill	
4	Swallow Way	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00
4	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	7.00	8.00	30.00	37.50	30.00	60.00	
2	4.50	8.00	20.00	12.50	30.00	50.00	
3	3.00	8.00	25.00	10.00	30.00	60.00	
4	3.00	7.00	35.00	62.50	30.00	60.00	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.735	2200.146
2		(calculated)	(calculated)	0.656	1841.551
3		(calculated)	(calculated)	0.560	1552.365
4		(calculated)	(calculated)	0.630	1669.173

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
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	347.00	100.000
2	ONE HOUR	✓	315.00	100.000
3	ONE HOUR	✓	130.00	100.000
4	ONE HOUR	✓	90.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	0.000	165.000	119.000	63.000
	2	245.000	0.000	3.000	67.000
	3	100.000	4.000	0.000	26.000
	4	46.000	25.000	19.000	0.000

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

		To			
		1	2	3	4
From	1	0.00	0.48	0.34	0.18
	2	0.78	0.00	0.01	0.21
	3	0.77	0.03	0.00	0.20
	4	0.51	0.28	0.21	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	0.000	0.000	0.000
	2	0.000	0.000	0.000	0.000
	3	0.000	0.000	0.000	0.000
	4	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
1	0.18	2.02	0.21	A	318.41	477.62	15.53	1.95	0.17	15.53	1.95
2	0.20	2.67	0.26	A	289.05	433.57	18.26	2.53	0.20	18.26	2.53
3	0.11	3.08	0.12	A	119.29	178.94	8.74	2.93	0.10	8.74	2.93
4	0.07	2.71	0.07	A	82.59	123.88	5.38	2.61	0.06	5.38	2.61

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (Veh/hr)	Junction 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)	Delay (s)	LOS
1	261.24	65.31	260.69	293.55	36.04	0.00	2173.66	1906.01	0.120	0.00	0.14	1.881	A
2	237.15	59.29	236.52	145.73	151.00	0.00	1742.46	1078.49	0.136	0.00	0.16	2.389	A
3	97.87	24.47	97.57	105.92	281.60	0.00	1388.97	731.74	0.070	0.00	0.08	2.787	A
4	67.76	16.94	67.57	117.15	262.02	0.00	1504.20	772.45	0.045	0.00	0.05	2.505	A

Main results: (17:00-17:15)

Arm	Total Demand (Veh/hr)	Junction 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)	Delay (s)	LOS
1	311.95	77.99	311.82	351.30	43.13	0.00	2168.45	1906.00	0.144	0.14	0.17	1.938	A
2	283.18	70.79	283.02	174.33	180.62	0.00	1723.02	1078.48	0.164	0.16	0.20	2.499	A
3	116.87	29.22	116.79	126.70	336.94	0.00	1356.86	731.74	0.086	0.08	0.09	2.902	A
4	80.91	20.23	80.86	140.17	313.56	0.00	1471.74	772.45	0.055	0.05	0.06	2.587	A

Main results: (17:15-17:30)

Arm	Total Demand (Veh/hr)	Junction 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)	Delay (s)	LOS
1	382.05	95.51	381.87	430.19	52.81	0.00	2161.33	1906.00	0.177	0.17	0.21	2.023	A
2	346.82	86.71	346.58	213.49	221.19	0.00	1696.39	1078.49	0.204	0.20	0.26	2.666	A
3	143.13	35.78	143.02	155.16	412.61	0.00	1312.95	731.74	0.109	0.09	0.12	3.076	A
4	99.09	24.77	99.03	171.65	383.98	0.00	1427.41	772.45	0.069	0.06	0.07	2.709	A

Main results: (17:30-17:45)

Arm	Total Demand (Veh/hr)	Junction 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)	Delay (s)	LOS
1	382.05	95.51	382.05	430.50	52.85	0.00	2161.30	1906.00	0.177	0.21	0.21	2.023	A
2	346.82	86.71	346.82	213.60	221.30	0.00	1696.32	1078.49	0.204	0.26	0.26	2.667	A
3	143.13	35.78	143.13	155.24	412.88	0.00	1312.79	731.74	0.109	0.12	0.12	3.077	A
4	99.09	24.77	99.09	171.76	384.25	0.00	1427.24	772.45	0.069	0.07	0.07	2.709	A

Main results: (17:45-18:00)

Arm	Total Demand (Veh/hr)	Junction 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)	Delay (s)	LOS
1	311.95	77.99	312.13	351.80	43.19	0.00	2168.40	1906.00	0.144	0.21	0.17	1.940	A
2	283.18	70.79	283.42	174.51	180.80	0.00	1722.90	1078.48	0.164	0.26	0.20	2.500	A
3	116.87	29.22	116.98	126.84	337.39	0.00	1356.60	731.74	0.086	0.12	0.09	2.903	A
4	80.91	20.23	80.97	140.35	314.02	0.00	1471.46	772.45	0.055	0.07	0.06	2.588	A

Main results: (18:00-18:15)

Arm	Total Demand (Veh/hr)	Junction 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)	Delay (s)	LOS
1	261.24	65.31	261.37	294.57	36.16	0.00	2173.57	1906.01	0.120	0.17	0.14	1.884	A
2	237.15	59.29	237.31	146.13	151.40	0.00	1742.20	1078.49	0.136	0.20	0.16	2.393	A
3	97.87	24.47	97.94	106.21	282.50	0.00	1388.45	731.74	0.070	0.09	0.08	2.791	A
4	67.76	16.94	67.80	117.52	262.93	0.00	1503.63	772.45	0.045	0.06	0.05	2.508	A

Queueing Delay Results for each time segment

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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	2.02	0.13	1.881	A	A
2	2.32	0.15	2.389	A	A
3	1.12	0.07	2.787	A	A
4	0.70	0.05	2.505	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	2.49	0.17	1.938	A	A
2	2.91	0.19	2.499	A	A
3	1.39	0.09	2.902	A	A
4	0.86	0.06	2.587	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	3.18	0.21	2.023	A	A
2	3.80	0.25	2.666	A	A
3	1.81	0.12	3.076	A	A
4	1.10	0.07	2.709	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	3.21	0.21	2.023	A	A
2	3.85	0.26	2.667	A	A
3	1.83	0.12	3.077	A	A
4	1.12	0.07	2.709	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	2.55	0.17	1.940	A	A
2	2.99	0.20	2.500	A	A
3	1.44	0.10	2.903	A	A
4	0.88	0.06	2.588	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	2.07	0.14	1.884	A	A
2	2.40	0.16	2.393	A	A
3	1.15	0.08	2.791	A	A
4	0.72	0.05	2.508	A	A

Queue Variation Results for each time segment

Queue Variation results: (16:45-17:00)

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.14	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.16	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.08	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.05	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (17:00-17:15)

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.17	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.20	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.09	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.06	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (17:15-17:30)

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.21	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.26	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.12	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.07	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (17:30-17:45)

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.21	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.26	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.12	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.07	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (17:45-18:00)

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.17	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.20	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.09	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.06	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (18:00-18:15)

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.14	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.16	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.08	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.05	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Existing Layout - Testing Year 2023 + Dev, AM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Existing Layout	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
Testing Year 2023 + Dev, AM Peak	Testing Year 2023 + Dev	AM Peak		ONE HOUR	07:45	09:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3,4				2.91	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Exeter Road (North)	
2	Exeter Road (South)	
3	Bowhill	
4	Swallow Way	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00
4	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	7.00	8.00	30.00	37.50	30.00	60.00	
2	4.50	8.00	20.00	12.50	30.00	50.00	
3	3.00	8.00	25.00	10.00	30.00	60.00	
4	3.00	7.00	35.00	62.50	30.00	60.00	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.735	2200.146
2		(calculated)	(calculated)	0.656	1841.551
3		(calculated)	(calculated)	0.580	1552.365
4		(calculated)	(calculated)	0.630	1669.173

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
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	312.00	100.000
2	ONE HOUR	✓	296.00	100.000
3	ONE HOUR	✓	137.00	100.000
4	ONE HOUR	✓	392.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	0.000	198.000	82.000	32.000
	2	198.000	0.000	9.000	89.000
	3	120.000	2.000	0.000	15.000
	4	71.000	290.000	31.000	0.000

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

		To			
		1	2	3	4
From	1	0.00	0.63	0.26	0.10
	2	0.67	0.00	0.03	0.30
	3	0.88	0.01	0.00	0.11
	4	0.18	0.74	0.08	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.015	1.000	1.031
	2	1.039	1.000	1.000	1.027
	3	1.010	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	1.500	0.000	3.100
	2	3.900	0.000	0.000	2.700
	3	1.000	0.000	0.000	0.000
	4	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
1	0.18	2.29	0.22	A	286.30	429.44	15.51	2.17	0.17	15.51	2.17
2	0.19	2.66	0.24	A	271.61	407.42	17.23	2.54	0.19	17.23	2.54
3	0.11	3.05	0.13	A	125.71	188.57	9.16	2.91	0.10	9.16	2.91
4	0.30	3.56	0.43	A	359.71	539.56	29.27	3.25	0.33	29.27	3.25

Main Results for each time segment

Main results: (07:45-08:00)

Arm	Total Demand (Veh/hr)	Junction 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)	Delay (s)	LOS
1	234.89	58.72	234.36	292.01	242.38	0.00	1996.63	1743.65	0.118	0.00	0.13	2.043	A
2	222.84	55.71	222.25	367.84	108.89	0.00	1711.07	1337.23	0.130	0.00	0.15	2.416	A
3	103.14	25.79	102.82	91.61	239.53	0.00	1396.30	660.71	0.074	0.00	0.08	2.783	A
4	295.12	73.78	294.15	102.12	240.23	0.00	1513.70	709.90	0.195	0.00	0.24	2.947	A

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

Arm	Total Demand (Veh/hr)	Junction 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)	Delay (s)	LOS
1	280.48	70.12	280.35	349.49	290.14	0.00	1961.96	1743.64	0.143	0.13	0.17	2.140	A
2	266.10	66.52	265.95	440.21	130.28	0.00	1697.40	1337.23	0.157	0.15	0.19	2.514	A
3	123.16	30.79	123.08	109.61	286.62	0.00	1368.27	660.71	0.090	0.08	0.10	2.890	A
4	352.40	88.10	352.12	122.20	287.51	0.00	1483.10	709.90	0.238	0.24	0.31	3.183	A

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

Arm	Total Demand (Veh/hr)	Junction 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)	Delay (s)	LOS
1	343.52	85.88	343.31	427.97	355.25	0.00	1914.70	1743.64	0.179	0.17	0.22	2.290	A
2	325.90	81.48	325.68	539.03	159.54	0.00	1678.71	1337.23	0.194	0.19	0.24	2.660	A
3	150.84	37.71	150.72	134.23	350.99	0.00	1329.95	660.71	0.113	0.10	0.13	3.052	A
4	431.60	107.90	431.14	149.64	352.08	0.00	1441.31	709.90	0.299	0.31	0.43	3.561	A

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

Arm	Total Demand (Veh/hr)	Junction 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)	Delay (s)	LOS
1	343.52	85.88	343.52	428.29	355.63	0.00	1914.43	1743.64	0.179	0.22	0.22	2.291	A
2	325.90	81.48	325.90	539.50	159.65	0.00	1678.64	1337.23	0.194	0.24	0.24	2.660	A
3	150.84	37.71	150.84	134.32	351.22	0.00	1329.82	660.71	0.113	0.13	0.13	3.052	A
4	431.60	107.90	431.60	149.74	352.32	0.00	1441.15	709.90	0.299	0.43	0.43	3.565	A

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

Arm	Total Demand (Veh/hr)	Junction 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)	Delay (s)	LOS
1	280.48	70.12	280.69	350.03	290.74	0.00	1961.52	1743.64	0.143	0.22	0.17	2.143	A
2	266.10	66.52	266.31	440.97	130.46	0.00	1697.29	1337.23	0.157	0.24	0.19	2.517	A
3	123.16	30.79	123.27	109.77	287.00	0.00	1368.04	660.71	0.090	0.13	0.10	2.891	A
4	352.40	88.10	352.65	122.36	287.92	0.00	1482.64	709.90	0.238	0.43	0.31	3.186	A

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

Arm	Total Demand (Veh/hr)	Junction 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)	Delay (s)	LOS
1	234.89	58.72	235.02	293.08	243.40	0.00	1995.89	1743.65	0.118	0.17	0.13	2.044	A
2	222.84	55.71	222.99	369.19	109.23	0.00	1710.85	1337.23	0.130	0.19	0.15	2.419	A
3	103.14	25.79	103.22	91.91	240.31	0.00	1395.84	660.71	0.074	0.10	0.08	2.784	A
4	295.12	73.78	295.40	102.45	241.08	0.00	1513.15	709.90	0.195	0.31	0.24	2.958	A

Queueing Delay Results for each time segment

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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	1.97	0.13	2.043	A	A
2	2.21	0.15	2.416	A	A
3	1.17	0.08	2.783	A	A
4	3.55	0.24	2.947	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	2.47	0.16	2.140	A	A
2	2.75	0.18	2.514	A	A
3	1.46	0.10	2.890	A	A
4	4.59	0.31	3.183	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	3.24	0.22	2.290	A	A
2	3.56	0.24	2.660	A	A
3	1.89	0.13	3.052	A	A
4	6.27	0.42	3.561	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	3.27	0.22	2.291	A	A
2	3.60	0.24	2.660	A	A
3	1.91	0.13	3.052	A	A
4	6.39	0.43	3.565	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	2.54	0.17	2.143	A	A
2	2.83	0.19	2.517	A	A
3	1.51	0.10	2.891	A	A
4	4.77	0.32	3.186	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	2.02	0.13	2.044	A	A
2	2.28	0.15	2.419	A	A
3	1.21	0.08	2.784	A	A
4	3.70	0.25	2.958	A	A

Queue Variation Results for each time segment

Queue Variation results: (07:45-08:00)

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.13	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.15	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.08	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.24	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:00-08:15)

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.17	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.19	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.10	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.31	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:15-08:30)

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.22	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.24	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.13	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.43	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:30-08:45)

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.22	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.24	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.13	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.43	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (08:45-09:00)

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.17	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.19	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.10	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.31	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (09:00-09:15)

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.13	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.15	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.08	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.24	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Existing Layout - Testing Year 2023 + Dev, PM Peak

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set(s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
Existing Layout	ARCADY		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
Testing Year 2023 + Dev, PM Peak	Testing Year 2023 + Dev	PM Peak		ONE HOUR	16:45	18:15	90	15				✓		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3,4				2.92	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Exeter Road (North)	
2	Exeter Road (South)	
3	Bowhill	
4	Swallow Way	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00
4	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	7.00	8.00	30.00	37.50	30.00	60.00	
2	4.50	8.00	20.00	12.50	30.00	50.00	
3	3.00	8.00	25.00	10.00	30.00	60.00	
4	3.00	7.00	35.00	62.50	30.00	60.00	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.735	2200.146
2		(calculated)	(calculated)	0.656	1841.551
3		(calculated)	(calculated)	0.580	1552.365
4		(calculated)	(calculated)	0.630	1669.173

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
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (Veh/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	391.00	100.000
2	ONE HOUR	✓	504.00	100.000
3	ONE HOUR	✓	149.00	100.000
4	ONE HOUR	✓	221.00	100.000

Turning Proportions

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

		To			
		1	2	3	4
From	1	0.000	186.000	134.000	71.000
	2	277.000	0.000	3.000	224.000
	3	113.000	5.000	0.000	31.000
	4	52.000	147.000	22.000	0.000

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

		To			
		1	2	3	4
From	1	0.00	0.48	0.34	0.18
	2	0.55	0.00	0.01	0.44
	3	0.76	0.03	0.00	0.21
	4	0.24	0.67	0.10	0.00

Vehicle Mix

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

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	0.000	0.000	0.000
	2	0.000	0.000	0.000	0.000
	3	0.000	0.000	0.000	0.000
	4	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)	Total Queueing Delay (Veh-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (Veh-min/min)	Inclusive Total Queueing Delay (Veh-min)	Inclusive Average Queueing Delay (s)
1	0.21	2.21	0.26	A	358.79	536.18	18.82	2.10	0.21	18.82	2.10
2	0.33	3.21	0.49	A	462.48	693.72	33.90	2.93	0.38	33.91	2.93
3	0.14	3.52	0.16	A	136.73	205.09	11.17	3.27	0.12	11.17	3.27
4	0.17	3.12	0.21	A	202.79	304.19	14.84	2.93	0.16	14.84	2.93

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (Veh/hr)	Junction 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)	Delay (s)	LOS
1	294.37	73.59	293.72	331.74	130.60	0.00	2104.15	1670.56	0.140	0.00	0.16	1.988	A
2	379.44	94.86	378.32	253.81	170.51	0.00	1729.66	1207.16	0.219	0.00	0.28	2.661	A
3	112.18	28.04	111.80	119.42	429.40	0.00	1303.21	680.06	0.086	0.00	0.09	3.021	A
4	166.38	41.60	165.88	244.74	296.46	0.00	1482.51	912.34	0.112	0.00	0.13	2.734	A

Main results: (17:00-17:15)

Arm	Total Demand (Veh/hr)	Junction 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)	Delay (s)	LOS
1	351.50	87.88	351.34	397.07	156.32	0.00	2085.24	1670.56	0.169	0.16	0.20	2.076	A
2	453.09	113.27	452.77	303.69	203.97	0.00	1707.70	1207.16	0.265	0.28	0.36	2.868	A
3	133.95	33.49	133.85	142.87	513.87	0.00	1254.19	680.06	0.107	0.09	0.12	3.212	A
4	198.67	49.67	198.54	292.88	354.84	0.00	1445.75	912.34	0.137	0.13	0.16	2.886	A

Main results: (17:15-17:30)

Arm	Total Demand (Veh/hr)	Junction 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)	Delay (s)	LOS
1	430.50	107.62	430.25	486.19	191.41	0.00	2059.45	1670.56	0.209	0.20	0.26	2.209	A
2	554.91	138.73	554.39	371.89	249.78	0.00	1677.63	1207.16	0.331	0.36	0.49	3.203	A
3	164.05	41.01	163.89	174.95	629.21	0.00	1187.26	680.06	0.138	0.12	0.16	3.517	A
4	243.33	60.83	243.12	358.62	434.48	0.00	1395.61	912.34	0.174	0.16	0.21	3.123	A

Main results: (17:30-17:45)

Arm	Total Demand (Veh/hr)	Junction 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)	Delay (s)	LOS
1	430.50	107.62	430.50	486.65	191.58	0.00	2059.33	1670.56	0.209	0.26	0.26	2.209	A
2	554.91	138.73	554.91	372.14	249.93	0.00	1677.53	1207.16	0.331	0.49	0.49	3.206	A
3	164.05	41.01	164.05	175.06	629.78	0.00	1186.94	680.06	0.138	0.16	0.16	3.518	A
4	243.33	60.83	243.32	358.93	434.90	0.00	1395.35	912.34	0.174	0.21	0.21	3.124	A

Main results: (17:45-18:00)

Arm	Total Demand (Veh/hr)	Junction 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)	Delay (s)	LOS
1	351.50	87.88	351.74	397.80	156.58	0.00	2085.05	1670.56	0.169	0.26	0.20	2.078	A
2	453.09	113.27	453.61	304.11	204.22	0.00	1707.54	1207.16	0.265	0.49	0.36	2.873	A
3	133.95	33.49	134.11	143.04	514.78	0.00	1253.67	680.06	0.107	0.16	0.12	3.215	A
4	198.67	49.67	198.88	293.38	355.51	0.00	1445.33	912.34	0.137	0.21	0.16	2.890	A

Main results: (18:00-18:15)

Arm	Total Demand (Veh/hr)	Junction 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)	Delay (s)	LOS
1	294.37	73.59	294.53	333.05	131.10	0.00	2103.78	1670.56	0.140	0.20	0.16	1.991	A
2	379.44	94.86	379.76	254.63	171.00	0.00	1729.34	1207.16	0.219	0.36	0.28	2.667	A
3	112.18	28.04	112.28	119.77	430.98	0.00	1302.29	680.06	0.086	0.12	0.09	3.027	A
4	166.38	41.60	166.51	245.62	297.63	0.00	1481.77	912.34	0.112	0.16	0.13	2.736	A

Queueing Delay Results for each time segment

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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	2.40	0.16	1.988	A	A
2	4.13	0.28	2.661	A	A
3	1.38	0.09	3.021	A	A
4	1.86	0.12	2.734	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	3.00	0.20	2.076	A	A
2	5.32	0.35	2.868	A	A
3	1.76	0.12	3.212	A	A
4	2.35	0.16	2.886	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	3.91	0.26	2.209	A	A
2	7.26	0.48	3.203	A	A
3	2.36	0.16	3.517	A	A
4	3.11	0.21	3.123	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	3.96	0.26	2.209	A	A
2	7.39	0.49	3.206	A	A
3	2.40	0.16	3.518	A	A
4	3.16	0.21	3.124	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	3.08	0.21	2.078	A	A
2	5.52	0.37	2.873	A	A
3	1.83	0.12	3.215	A	A
4	2.43	0.16	2.890	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 (s)	Unsignalised Level Of Service	Signalised Level Of Service
1	2.47	0.16	1.991	A	A
2	4.29	0.29	2.667	A	A
3	1.44	0.10	3.027	A	A
4	1.93	0.13	2.736	A	A

Queue Variation Results for each time segment

Queue Variation results: (16:45-17:00)

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.16	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.28	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.09	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.13	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (17:00-17:15)

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.20	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.36	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.12	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.16	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (17:15-17:30)

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.26	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.49	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.16	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.21	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (17:30-17:45)

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.26	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.49	0.00	0.00	0.00	1.00			N/A	N/A
3	0.16	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.21	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (17:45-18:00)

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.20	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.36	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.12	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.16	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

Queue Variation results: (18:00-18:15)

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile Message	Marker Message	Probability Of Reaching Or Exceeding Marker	Probability Of Exactly Reaching Marker
1	0.16	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
2	0.28	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
3	0.09	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A
4	0.13	N/A	N/A	N/A	N/A	Percentiles could not be calculated. This may be because the mean queue is very small or very big.		N/A	N/A

APPENDIX E

PICADY RESULTS FOR EXETER ROAD/COLEBROOKE LANE (EAST) T-JUNCTION

TRL LIMITED

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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EMAIL: software@trl.co.uk

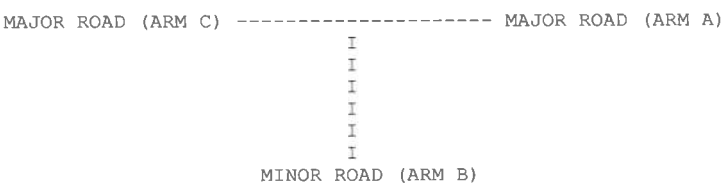
Run with file:-
"S:\C9841 - Colebrooke Lane, Cullompton\Calculations\Traffic\Picady\Colebrook Lane-High Street.vpi"
(drive-on-the-left) at 15:17:55 on Tuesday, 25 June 2013

RUN INFORMATION

RUN TITLE	: Colebrooke Lane/Exeter Road Junction
LOCATION	: Cullumpton
DATE	: 20/06/13
CLIENT	: Genesis Town Planning
ENUMERATOR	: sradford [JUBB-9274]
JOB NUMBER	: C9841 - Colebrooke Lane, Cullompton
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Exeter Rd South
ARM B IS Colebrook Ln
ARM C IS Exeter Rd 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) 6.00 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)	YES (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 25.0 M.
- VISIBILITY TO RIGHT	(VB-A) 28.0 M.
- LANE 1 WIDTH	(WB-C) 3.00 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.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
641.56	0.25	0.10

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
499.45	0.23	0.09	0.14	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
631.87	0.24	0.24

(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: Year 2013 Baseline Condition AM Peak

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	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	4.57	6.86	4.57
ARM B	15.00	45.00	75.00	1.33	1.99	1.33
ARM C	15.00	45.00	75.00	3.90	5.85	3.90

Demand set: Year 2013 Baseline Condition AM Peak

TIME	FROM/TO	ARM A	ARM B	ARM C
07.45 - 09.15				
	ARM A	0.000	0.027	0.973
		0.0	10.0	356.0
		(0.0)	(10.0)	(10.0)
	ARM B	0.264	0.000	0.736
		28.0	0.0	78.0
		(10.0)	(0.0)	(10.0)
	ARM C	0.885	0.115	0.000
		276.0	36.0	0.0
		(10.0)	(10.0)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
DEFAULT PROPORTIONS OF HEAVY VEHICLES ARE USED

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET Year 2013 Baseline Condition AM Peak
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-AC	1.33	7.66	0.174		0.00	0.21	3.0		0.16
C-AB	0.65	10.81	0.060		0.00	0.10	1.4		0.10
C-A	3.26								
A-B	0.13								
A-C	4.47								

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-AC	1.59	7.39	0.215		0.21	0.27	3.9		0.17
C-AB	0.86	11.11	0.077		0.10	0.14	2.1		0.10
C-A	3.82								
A-B	0.15								
A-C	5.33								

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-AC	1.95	7.00	0.278		0.27	0.38	5.5		0.20
C-AB	1.17	11.51	0.102		0.14	0.21	3.1		0.10
C-A	4.55								
A-B	0.18								
A-C	6.53								

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-AC	1.95	7.00	0.278		0.38	0.38	5.7		0.20
C-AB	1.18	11.51	0.102		0.21	0.21	3.1		0.10
C-A	4.55								
A-B	0.18								
A-C	6.53								

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-AC	1.59	7.38	0.215		0.38	0.28	4.3		0.17
C-AB	0.86	11.11	0.077		0.21	0.14	2.2		0.10
C-A	3.81								
A-B	0.15								
A-C	5.33								

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-AC	1.33	7.66	0.174		0.28	0.21	3.3		0.16
C-AB	0.65	10.81	0.060		0.14	0.10	1.5		0.10
C-A	3.26								
A-B	0.13								
A-C	4.47								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.2
08.15	0.3
08.30	0.4
08.45	0.4
09.00	0.3
09.15	0.2

QUEUE FOR STREAM C-AB

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	0.1
09.15	0.1

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-AC	145.9	97.3	25.7	0.18	25.7	0.18
C-AB	80.6	53.7	13.5	0.17	13.5	0.17
C-A	348.9	232.6				
A-B	13.8	9.2				
A-C	490.0	326.7				
ALL	1079.1	719.4	39.1	0.04	39.2	0.04

* 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
641.56	0.25	0.10

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
499.45	0.23	0.09	0.14	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
631.87	0.24	0.24

(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: Year 2013 Baseline Condition PM Peak

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	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	4.96	7.44	4.96
ARM B	15.00	45.00	75.00	0.57	0.86	0.57
ARM C	15.00	45.00	75.00	5.19	7.78	5.19

Demand set: Year 2013 Baseline Condition PM Peak

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 0.0 (0.0)	0.071 28.0 (10.0)	0.929 369.0 (10.0)
	ARM B	0.217 10.0 (10.0)	0.000 0.0 (0.0)	0.783 36.0 (10.0)
	ARM C	0.812 337.0 (10.0)	0.188 78.0 (10.0)	0.000 0.0 (0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
DEFAULT PROPORTIONS OF HEAVY VEHICLES ARE USED

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET Year 2013 Baseline Condition PM Peak
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-AC	0.58	7.64	0.076		0.00	0.08	1.2		0.14
C-AB	1.56	11.28	0.138		0.00	0.25	3.7		0.10
C-A	3.65								
A-B	0.35								
A-C	4.63								

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-AC	0.69	7.32	0.094		0.08	0.10	1.5		0.15
C-AB	2.05	11.65	0.176		0.25	0.35	5.2		0.10
C-A	4.17								
A-B	0.42								
A-C	5.53								

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-AC	0.84	6.88	0.123		0.10	0.14	2.0		0.17
C-AB	2.87	12.17	0.236		0.35	0.53	8.0		0.11
C-A	4.74								
A-B	0.51								
A-C	6.77								

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-AC	0.84	6.88	0.123		0.14	0.14	2.1		0.17
C-AB	2.88	12.18	0.236		0.53	0.54	8.1		0.11
C-A	4.74								
A-B	0.51								
A-C	6.77								

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-AC	0.69	7.32	0.094		0.14	0.11	1.6		0.15
C-AB	2.06	11.66	0.177		0.54	0.36	5.4		0.10
C-A	4.16								
A-B	0.42								
A-C	5.53								

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-AC	0.58	7.63	0.076		0.11	0.08	1.3		0.14
C-AB	1.57	11.29	0.139		0.36	0.26	3.9		0.10
C-A	3.64								
A-B	0.35								
A-C	4.63								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.1	
17.15	0.1	
17.30	0.1	
17.45	0.1	
18.00	0.1	
18.15	0.1	

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.2	
17.15	0.3	
17.30	0.5	*
17.45	0.5	*
18.00	0.4	
18.15	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-AC	63.3	42.2	9.7	0.15	9.7	0.15
C-AB	194.7	129.8	34.3	0.18	34.3	0.18
C-A	376.5	251.0				
A-B	38.5	25.7				
A-C	507.9	338.6				
ALL	1181.0	787.3	44.0	0.04	44.0	0.04

* 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
641.56	0.25	0.10

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
499.45	0.23	0.09	0.14	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
631.87	0.24	0.24

(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: Year 2023 + Dev AM Peak

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	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	5.16	7.74	5.16
ARM B	15.00	45.00	75.00	3.81	5.72	3.81
ARM C	15.00	45.00	75.00	5.19	7.78	5.19

Demand set: Year 2023 + Dev AM Peak

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 0.0 (0.0)	0.027 11.0 (10.0)	0.973 402.0 (10.0)
	ARM B	0.105 32.0 (10.0)	0.000 0.0 (0.0)	0.895 273.0 (10.0)
	ARM C	0.752 312.0 (10.0)	0.248 103.0 (10.0)	0.000 0.0 (0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
DEFAULT PROPORTIONS OF HEAVY VEHICLES ARE USED

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET Year 2023 + Dev AM Peak
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-AC	3.83	7.98	0.480		0.00	0.89	12.4		0.23
C-AB	2.00	11.02	0.181		0.00	0.32	4.8		0.11
C-A	3.21								
A-B	0.14								
A-C	5.04								

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-AC	4.57	7.68	0.595		0.89	1.40	19.6		0.31
C-AB	2.62	11.34	0.231		0.32	0.45	6.9		0.11
C-A	3.60								
A-B	0.16								
A-C	6.02								

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-AC	5.60	7.27	0.770		1.40	2.93	38.1		0.53
C-AB	3.67	11.83	0.311		0.45	0.72	10.8		0.12
C-A	3.94								
A-B	0.20								
A-C	7.38								

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-AC	5.60	7.26	0.770		2.93	3.11	45.5		0.58
C-AB	3.68	11.83	0.311		0.72	0.72	11.0		0.12
C-A	3.94								
A-B	0.20								
A-C	7.38								

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-AC	4.57	7.68	0.595		3.11	1.54	25.4		0.34
C-AB	2.63	11.35	0.231		0.72	0.47	7.1		0.12
C-A	3.59								
A-B	0.16								
A-C	6.02								

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-AC	3.83	7.98	0.480		1.54	0.95	15.1		0.25
C-AB	2.01	11.03	0.182		0.47	0.33	5.0		0.11
C-A	3.20								
A-B	0.14								
A-C	5.04								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.9	*
08.15	1.4	*
08.30	2.9	***
08.45	3.1	***
09.00	1.5	**
09.15	0.9	*

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	0.3	
08.15	0.5	
08.30	0.7	*
08.45	0.7	*
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-AC	419.8	279.9	156.2	0.37	156.2	0.37
C-AB	249.0	166.0	45.5	0.18	45.5	0.18
C-A	322.2	214.8				
A-B	15.1	10.1				
A-C	553.3	368.9				
ALL	1559.5	1039.7	201.7	0.13	201.7	0.13

* 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
641.56	0.25	0.10

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
499.45	0.23	0.09	0.14	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
631.87	0.24	0.24

(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: Year 2023 + Dev PM Peak

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	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	5.61	8.42	5.61
ARM B	15.00	45.00	75.00	1.94	2.91	1.94
ARM C	15.00	45.00	75.00	7.50	11.25	7.50

Demand set: Year 2023 + Dev PM Peak

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15				
	ARM A	0.000	0.071	0.929
		0.0	32.0	417.0
		(0.0)	(10.0)	(10.0)
	ARM B	0.071	0.000	0.929
		11.0	0.0	144.0
		(10.0)	(0.0)	(10.0)
	ARM C	0.635	0.365	0.000
		381.0	219.0	0.0
		(10.0)	(10.0)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
DEFAULT PROPORTIONS OF HEAVY VEHICLES ARE USED

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET Year 2023 + Dev PM Peak
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-AC	1.94	7.95	0.245		0.00	0.32	4.6		0.17
C-AB	4.69	11.54	0.406		0.00	0.96	14.0		0.14
C-A	2.84								
A-B	0.40								
A-C	5.23								
17.00-17.15									
B-AC	2.32	7.61	0.305		0.32	0.43	6.3		0.19
C-AB	6.29	11.99	0.525		0.96	1.58	23.9		0.18
C-A	2.70								
A-B	0.48								
A-C	6.25								
17.15-17.30									
B-AC	2.84	7.11	0.400		0.43	0.65	9.3		0.23
C-AB	9.05	12.63	0.716		1.58	3.58	53.1		0.27
C-A	1.96								
A-B	0.59								
A-C	7.65								
17.30-17.45									
B-AC	2.84	7.10	0.400		0.65	0.66	9.8		0.23
C-AB	9.13	12.69	0.719		3.58	3.78	58.9		0.29
C-A	1.88								
A-B	0.59								
A-C	7.65								

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)
17.45-18.00									
B-AC	2.32	7.60	0.306		0.66	0.45	7.0		0.19
C-AB	6.37	12.07	0.528		3.78	1.73	27.5		0.19
C-A	2.62								
A-B	0.48								
A-C	6.25								

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-AC	1.94	7.94	0.245		0.45	0.33	5.1		0.17
C-AB	4.73	11.57	0.409		1.73	1.01	15.4		0.15
C-A	2.80								
A-B	0.40								
A-C	5.23								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.4	
17.30	0.7	*
17.45	0.7	*
18.00	0.4	
18.15	0.3	

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	1.0	*
17.15	1.6	**
17.30	3.6	****
17.45	3.8	****
18.00	1.7	**
18.15	1.0	*

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-AC	213.3	142.2	42.1	0.20	42.1	0.20
C-AB	603.9	402.6	192.7	0.32	192.7	0.32
C-A	221.9	148.0				
A-B	44.0	29.4				
A-C	574.0	382.6				
ALL	1657.2	1104.8	234.7	0.14	234.8	0.14

* 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.

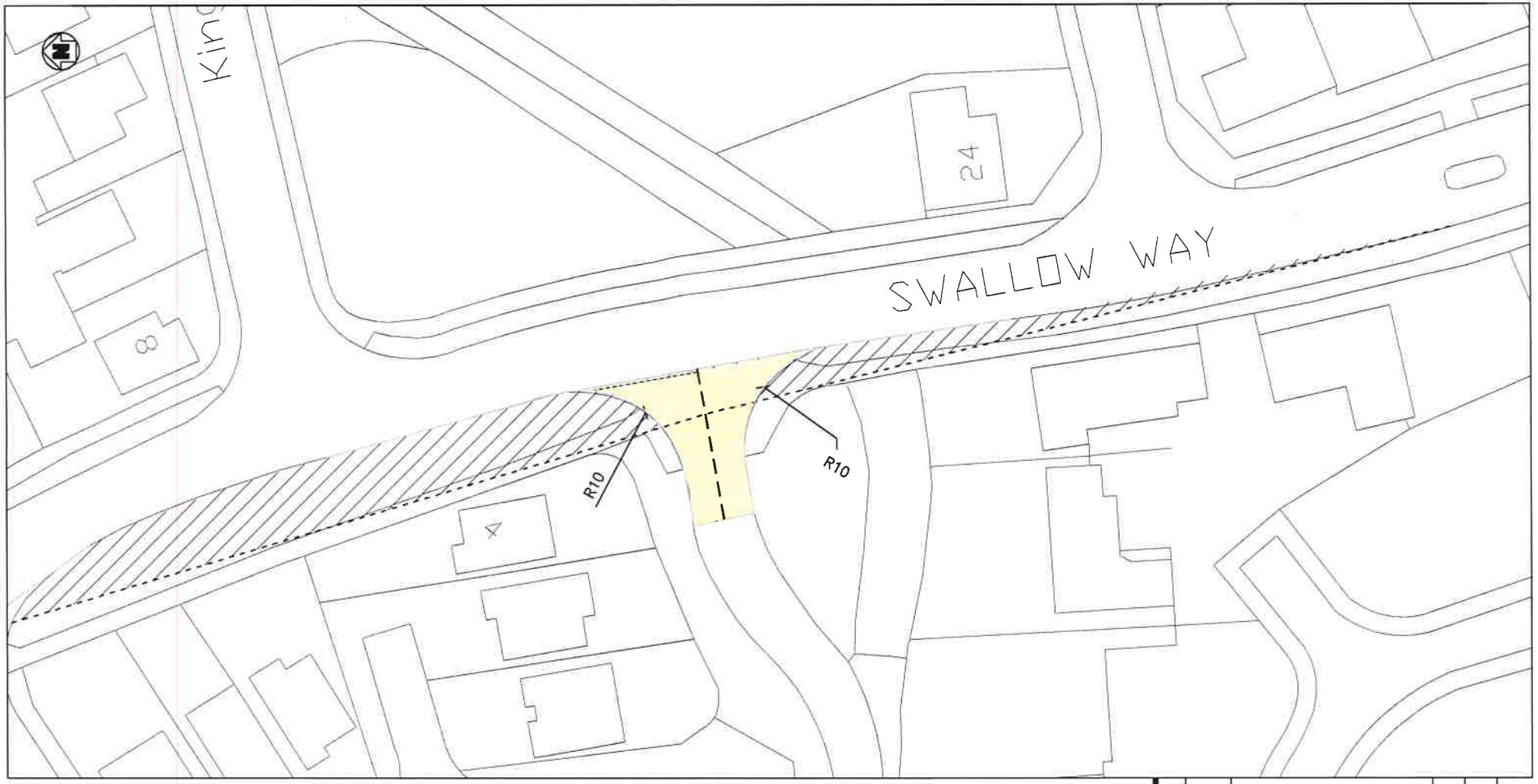
*******END OF RUN*******

========== end of file ==========

Printed at 15:18:04 on 25/06/2013]

APPENDIX F

CONCEPT HIGHWAY ACCESS



KEY

PROPOSED CARRIAGEWAY

4.5 x 7.5m VISIBILITY SPLAY

REV	DATE	DESCRIPTION	DR'N	CH'K	APP'D ENG
A	25.06.13	FIRST ISSUE	MP	SR	MH

Issue Status

- [ ] CONCEPT
- [ ] PRELIMINARY
- [ ] TENDER
- [ ] CONSTRUCTION
- [ ] H&S FILE ISSUE

CONSULTING ENGINEERS LIMITED

BRISTOL FARNBOROUGH CARDIFF PLYMOUTH

Job

COLEBROOKE LANE CULLOMPTON SWALLOW WAY/COLEBROOKE LANE JUNCTION IMPROVEMENT

Detail

Scale @ A3	Job No.	Dwg No.	rev.
1:250	C9841	H001	02

TRL LIMITED

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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EMAIL: software@trl.co.uk

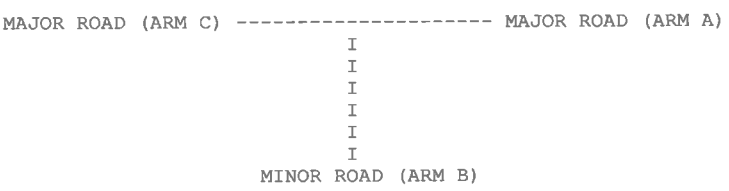
Run with file:-
"S:\C9841 - Colebrooke Lane, Cullompton\Calculations\Traffic\Picady\Colebrook Lane-Swallow Way.vpi"
(drive-on-the-left) at 10:56:35 on Thursday, 27 June 2013

RUN INFORMATION

RUN TITLE	: Colebrook Lane/Exeter Road Junction
LOCATION	: Cullompton
DATE	: 20/06/13
CLIENT	: Genesis Town Planning
ENUMERATOR	: sradford [JUBB-9274]
JOB NUMBER	: C9841 - Colebrooke Lane, Cullompton
STATUS	: Preliminary
DESCRIPTION	:

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Swallow Way South
ARM B IS Colebrooke Ln
ARM C IS Swallow Way 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)	7.00 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)		YES (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C)	25.0 M.
- VISIBILITY TO RIGHT	(VB-A)	33.0 M.
- LANE 1 WIDTH	(WB-C)	3.00 M.
- LANE 2 WIDTH	(WB-A)	0.00 M.

.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
644.71	0.24	0.09

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
501.90	0.22	0.09	0.14	0.32

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
631.87	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: Year 2023 + Dev AM Peak

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	1.69	2.53	1.69
ARM B	15.00	45.00	75.00	4.61	6.92	4.61
ARM C	15.00	45.00	75.00	4.32	6.49	4.32

Demand set: Year 2023 + Dev AM Peak

TIME	FROM/TO	ARM A	ARM B	ARM C
07.45 - 09.15		TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S)		
	ARM A	0.000 0.0 (0.0)	0.326 44.0 (3.0)	0.674 91.0 (5.0)
	ARM B	0.350 129.0 (3.0)	0.000 0.0 (0.0)	0.650 240.0 (3.0)
	ARM C	0.763 264.0 (5.0)	0.237 82.0 (3.0)	0.000 0.0 (0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET Year 2023 + Dev AM Peak
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-AC	4.63	8.76	0.529		0.00	1.08	15.0		0.23
C-AB	1.42	11.99	0.118		0.00	0.19	2.8		0.09
C-A	2.92								
A-B	0.55								
A-C	1.14								

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-AC	5.53	8.61	0.642		1.08	1.70	23.7		0.32
C-AB	1.81	12.35	0.146		0.19	0.25	3.7		0.09
C-A	3.38								
A-B	0.66								
A-C	1.36								

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-AC	6.77	8.40	0.806		1.70	3.55	45.9		0.54
C-AB	2.41	12.84	0.188		0.25	0.34	5.2		0.10
C-A	3.94								
A-B	0.81								
A-C	1.67								

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-AC	6.77	8.40	0.806		3.55	3.80	55.5		0.59
C-AB	2.41	12.84	0.188		0.34	0.35	5.2		0.10
C-A	3.94								
A-B	0.81								
A-C	1.67								

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-AC	5.53	8.61	0.642		3.80	1.90	31.4		0.35
C-AB	1.81	12.35	0.146		0.35	0.25	3.8		0.10
C-A	3.38								
A-B	0.66								
A-C	1.36								

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-AC	4.63	8.76	0.529		1.90	1.16	18.5		0.25
C-AB	1.42	12.00	0.119		0.25	0.19	2.9		0.09
C-A	2.92								
A-B	0.55								
A-C	1.14								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.00	1.1	*
08.15	1.7	**
08.30	3.5	****
08.45	3.8	****
09.00	1.9	**
09.15	1.2	*

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.00	0.2
08.15	0.2
08.30	0.3
08.45	0.3
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-AC	507.9	338.6	190.0	0.37	190.1	0.37
C-AB	169.1	112.8	23.5	0.14	23.5	0.14
C-A	307.1	204.7				
A-B	60.6	40.4				
A-C	125.3	83.5				
ALL	1170.0	780.0	213.6	0.18	213.6	0.18

* 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
644.71	0.24	0.09

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
501.90	0.22	0.09	0.14	0.32

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
631.87	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: Year 2023 + Dev PM Peak

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	NUMBER OF MINUTES FROM START WHEN TOP OF PEAK IS REACHED	NUMBER OF MINUTES FROM START WHEN FLOW STOPS FALLING	RATE OF FLOW (VEH/MIN) BEFORE PEAK	RATE OF FLOW (VEH/MIN) AT TOP OF PEAK	RATE OF FLOW (VEH/MIN) AFTER PEAK
ARM A	15.00	45.00	75.00	4.09	6.13	4.09
ARM B	15.00	45.00	75.00	2.59	3.88	2.59
ARM C	15.00	45.00	75.00	3.99	5.98	3.99

Demand set: Year 2023 + Dev PM Peak

TIME	FROM/TO	ARM A	ARM B	ARM C
16.45 - 18.15				
	ARM A	0.000	0.278	0.722
		0.0	91.0	236.0
		(0.0)	(3.0)	(5.0)
	ARM B	0.348	0.000	0.652
		72.0	0.0	135.0
		(3.0)	(0.0)	(3.0)
	ARM C	0.533	0.467	0.000
		170.0	149.0	0.0
		(5.0)	(3.0)	(0.0)

TURNING PROPORTIONS
TURNING COUNTS
(PERCENTAGE OF H.V.S)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
THE PERCENTAGE OF HEAVY VEHICLES VARIES OVER TURNING MOVEMENTS

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET Year 2023 + Dev PM Peak
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-AC	2.60	8.21	0.316		0.00	0.45	6.5		0.18
C-AB	2.33	10.69	0.218		0.00	0.33	4.9		0.12
C-A	1.67								
A-B	1.14								
A-C	2.96								

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-AC	3.10	7.95	0.390		0.45	0.63	9.0		0.21
C-AB	2.92	10.80	0.271		0.33	0.45	6.8		0.13
C-A	1.85								
A-B	1.36								
A-C	3.54								

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-AC	3.80	7.58	0.501		0.63	0.97	13.8		0.26
C-AB	3.83	10.96	0.349		0.45	0.67	10.1		0.14
C-A	2.03								
A-B	1.67								
A-C	4.33								

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-AC	3.80	7.58	0.501		0.97	0.99	14.7		0.26
C-AB	3.83	10.96	0.349		0.67	0.68	10.3		0.14
C-A	2.02								
A-B	1.67								
A-C	4.33								

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-AC	3.10	7.95	0.390		0.99	0.65	10.3		0.21
C-AB	2.93	10.81	0.271		0.68	0.47	7.0		0.13
C-A	1.85								
A-B	1.36								
A-C	3.54								

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-AC	2.60	8.21	0.316		0.65	0.47	7.3		0.18
C-AB	2.34	10.70	0.219		0.47	0.34	5.1		0.12
C-A	1.66								
A-B	1.14								
A-C	2.96								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.5	
17.15	0.6	*
17.30	1.0	*
17.45	1.0	*
18.00	0.7	*
18.15	0.5	

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.00	0.3	
17.15	0.5	
17.30	0.7	*
17.45	0.7	*
18.00	0.5	
18.15	0.3	

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-AC	284.9	189.9	61.6	0.22	61.6	0.22
C-AB	272.8	181.8	44.3	0.16	44.3	0.16
C-A	166.3	110.9				
A-B	125.3	83.5				
A-C	324.8	216.6				
ALL	1174.1	782.7	105.9	0.09	106.0	0.09

* 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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