Land at Sully Sports and Social Club Site, Vale of Glamorgan

Transport Assessment
Including a Transport Implementation Strategy

St Modwen & Sully Sports and Social Club



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Executive Summary

This Transport Assessment (TA) has been prepared for St Modwen & Sully Sports and Social Club in support of the proposed development on land at Sully Sports and Social Club in the Vale of Glamorgan. The development proposals concern the provision of up to 200 new homes; a 50 pitch touring caravan park; convenience food retail store and the re-provision of sports facilities and the local library on the 14.56ha site. The application for the residential components of the development have been submitted in outline, whilst the development relating to the sports facilities are submitted in full.

This TA provides baseline information about the existing access arrangements and land use for the site; conditions on the local highway network in terms of traffic flows and safety; and, provision for sustainable travel modes. A traffic impact assessment has been undertaken of the proposed development which demonstrates that the development trips can be accommodated on the local highway network without significant impact on its efficient operation. A framework Travel Plan for the site has been submitted in support of this application, to enable sustainable development to be delivered. The key initiatives from this framework Travel Plan are summarised in the Transport Implementation Strategy in **Appendix A** of this TA.

This TA provides a robust assessment of the traffic and transportation impacts of the development on the local highway network, demonstrating that the development can be accommodated and that there are no highway grounds for refusal.

1. Introduction

1.1. Overview

Atkins have been appointed by St Modwen & Sully Sports and Social Club to provide planning advice in relation to transport in support of a proposed residential development in Sully, Vale of Glamorgan. The development proposals concern the provision of up to 200 dwellings on a 6.25ha section on the western portion of the development site. The eastern portion of the site will accommodate sports facilities which will be re-provided, in addition to a caravan park, and a retail store.

1.2. Approach

The Welsh Government's Technical Advice Note (TAN) 18: Transport (2007) indicates that a Transport Assessment (TA) is required in support of residential developments of the proposed scale. An initial Scoping Note, setting out our intended approach in accordance with the TAN 18 guidance was forwarded to the Local Highway Authority (LHA) on 30th June 2014.

In April 2015, the development proposals were updated to include for the provision of the caravan park and a small retail store. An amended scope was sent to the LHA on 11th May 2015, although further comments were not received prior to the submission of the planning application. A further amendment to the proposed access arrangements was made in June 2015, with a third site access proposed from South Road to achieve an improved site layout for the residential development.

1.3. Report Structure

This report will comprise of six chapters as follows;

2. Baseline Conditions

This section comprises the existing use of the development site and an audit of existing transport provision and conditions in the vicinity of the site for all modes.

3. Policy Context

This will include consideration of relevant National, Regional and Local transport and land use policy guidance.

4. Development Proposals

This section of the report will provide a description of the development proposals including layout, access and parking arrangements.

5. Transport Impact Assessment

This section will provide a capacity assessment of junctions on the local highway network which will accommodate the additional development traffic, identifying any impacts and constraints.

6. Summary and Conclusions

A **Transport Implementation Strategy (TIS)** will also be prepared to demonstrate how the proposed development contributes to the objectives of the emerging Local Development Plan (LDP). The TIS is included in **Appendix A**.

2. Baseline Conditions

2.1. Overview

This section of the TA provides a description of the existing use of the development site and an audit of existing transport provision and conditions within its vicinity. It comprises;

- A description of the road hierarchy, layout and traffic flows in the vicinity of the site,
- A review of personal injury accident data on the local highway network,
- An audit of current provision for pedestrians, cyclists and public transport users; and,
- An audit existing local amenities in the vicinity of the site.

Where deficiencies in existing transport provision are identified, these will be addressed in the TIS in **Appendix A.**

2.2. Location & Use of Existing Site

2.2.1. Site Location & Layout

The proposed development will occupy a 14.56ha site overlooking the Bristol Channel. The site is currently used as a sports ground (D2 land use) for a variety of sports including football, rugby, bowls and snooker. In addition, many social events and activities are held throughout the year including games nights, functions such as receptions and parties, quizzes and bingo.

The site is located to the south-east of the village of Sully as shown in **Figure 2.1.** It is bound by South Road (B4267) to the north, the back gardens of residential properties on Clevedon Avenue to the west, and Beach Road to the east. The site overlooks Sully Bay, with the Wales Coastal Path running along the southern boundary.



Figure 2.1 - Development Site Location and Existing Layout

Residential areas are located to the north and west of the site, with the Island View Caravan Park located to the south-east.

2.2.2. Vehicular Access Points

The primary access point for vehicles is from South Road, via a three arm priority junction, as shown in Figure 2.1 and 2.2.

Figure 2.2 – Primary Vehicular Access to Existing Site (South Road)



This junction leads to a parking area located to the north-west of the site which serves Sully Library, the football / rugby club and the social club.

An access road extends eastwards from this parking area along the northern boundary of the site, connecting to a secondary gated vehicular access from Beach Road to the north-east, as shown in **Figure 2.1** and **2.3**. This access road provides links to the indoor bowls arena building and adjacent car park.



Figure 2.3 – Secondary Vehicular Access – Gated (Beach Road)

There are currently approximately 150 car parking spaces on site, comprising 72 marked spaces adjacent to the indoor bowls arena and an informal, unmarked, parking area adjacent to the site access and sports clubhouse, with an approximate capacity for c.75 vehicles. Overspill parking is possible on the grassed areas which fall outside of the marked pitches.

2.2.3. Pedestrian Access

Pedestrians are able to access the site via;

- The main vehicular access on South Road (north-west of site).
- A pedestrian access to the south-east of the site connecting to Beach Road; and,
- From Clevedon Avenue / Somerset View to the south-west.

The latter two of these access points serve the Wales Coastal Path as shown in **Figure 2.4.** It is designated as a Public Right of Way. To the west, it provides a traffic free pedestrian link to residential areas of Smithies Avenue and Minehead Avenue. To the east, it links to Beach Road and St Mary's Well Bay Road.

Signage indicates that the playing fields which form part of the development site are not to be used by dog-walkers.



Figure 2.4 - Pedestrian Access Points & Provision

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2.3. Road Layout

2.3.1. Overview

Vehicular access to the village of Sully is primarily provided by the B4267 which is aligned east to west, connecting to the towns of Penarth and Barry respectively. Swanbridge Road and Cog Road provide access to the settlement from the north via Sully Road which connects to Cogan, a neighbourhood of Penarth.

Eight study junctions were identified through scoping discussions with the LHA.

Three of the junctions are located to the west of the site, as identified below;

- A4231 (Barry Docks Link Road) / B4267 (Sully Moors Road) / A4055 (Cardiff Road)
 This is a four arm conventional roundabout junction formed between Cardiff Road (A4055) aligned east to west, Barry Docks Link Road A4231 (connecting from the north) and Sully Moors Road B4267 (connecting from the south). It is known locally as the McDonald's roundabout due to the presence of a drive-thru located to the north-west of the junction,
- 2. B4267 (Sully Moors Road / South Road) / Hayes Road

 This is a three arm conventional roundabout junction formed between South Road B4267 (connecting from the east), Hayes Road (connecting from the south) and Sully Moors Road B4267 (connecting from the west),

3. B4267 (South Road) / Cog Road

This is three arm priority junction formed between the B4267 aligned east to west and Cog Road (connecting from the north),

The location of these three junctions is shown in **Figure 2.5.**

Existing manual turning count data was available for the first of these junctions, based on 12 hour traffic surveys undertaken in December 2012. Additional manual turning counts were undertaken in January 2015 for the remaining two junctions. All survey data was collected during school term time.

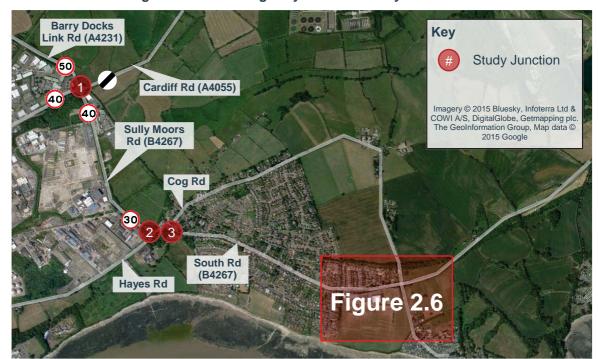


Figure 2.5 - Local Highway Network/ Study Junctions

An additional five junctions in the immediate vicinity of the site were also identified by the LHA. The location of these is shown in **Figure 2.6.**

Manual Classified Count surveys were undertaken at these five junctions on Tuesday 8th July 2014 between 07:30 and 09:30 in the AM period and 16:30 and 18:30 in the PM period. The library was open on the day of the surveys between 15:00 and 18:00 and therefore these trips will have been captured in the surveys.

4. B4267 (South Road) / Cleveland Avenue

This is a three arm priority junction formed between South Road (aligned east-west) and Cleveland Avenue connecting from the south. White lining is used to narrow the carriageway on South Road, to enable the give way on Cleveland Avenue to be pulled into the carriageway to improve visibility.

5. South Road / Existing Site Access

This is a three arm priority junction formed between South Road (aligned east-west) and the site access (connecting from the south). A zebra crossing is provided immediately to the west of this junction.

6. South Road / Highbridge Close

This is a three arm priority junction formed between South Road (aligned east-west) and Highbridge Close (connecting from the north).

7. South Road / Swanbridge Grove

This is a three arm priority junction formed between South Road (aligned east-west) and Swanbridge Grove (connecting from the north).

8. B4267 / Beach Road / Swanbridge Road Crossroads

This is a four arm crossroads junction formed between South Road (aligned east-west), Beach Road (connecting from the south) and Swanbridge Road (connecting from the north).

Winsford Rd Close Grove

South Rd (B4267)

South Rd (B4267)

Clevedon Ave

Clevedon Ave

Beach Rd

Beach Rd

Figure 2.6 - Local Highway Network Arrangement and Study Junction Locations

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2.3.2. Peak Hours

Table 2.1 shows the total flows across all junctions included in the traffic surveys. It indicates that the local peak hours are 08:00-09:00 and 16:30-17:30.

AM	Total Traffic Flow
07:30 - 07:45	1836
07:45 - 08:00	2560
08:00 - 08:15	2868
08:15 - 08:30	3173
08:30 - 08:45	2853
08:45 - 09:00	2699
09:00 - 09:15	2797
09:15 - 09:30	2384

Table 2.1 - Local Traffic Flows Across Study Junctions

PM	Total Traffic Flow
16:30 - 16:45	2681
16:45 – 17:00	2668
17:00 – 17:15	2962
17:15 – 17:30	3028
17:30 – 17:45	2494
17:45 – 18:00	2587
18:00 – 18:15	2248
18:15 – 18:30	2239

2.4. Local Road Network

The following section provides an audit of highway provision on roads providing access to the site.

2.4.1. B4267

The B4267 links Cardiff to Barry via Penarth and Sully. To the east of the site, this section of carriageway is known as Lavernock Road. To the west of the crossroads junction formed with Beach Road and Swanbridge Road, it is known as South Road.

The carriageway is approximately 7.3m width, with a single general traffic lane in each direction. The carriageway surface can be rated as good, with no significant defects in proximity to the site. To the east, the road is subject to a 40mph limit. A gateway feature on the approach to Sully marks the start of a 30mph restriction through the village. This 30mph limit is applicable on the section of carriageway past the development site.

A shared use path is provided on the northern side of the carriageway. The road is lit along its entire length. The road is adjoined by residential and commercial frontages through the village.

An Automatic Traffic Count (ATC) survey was undertaken between Tuesday 8th and Monday 14th July 2014 on the B4267 to the east of the site access junction. The local weekday peak hours were identified as 08:00 to 09:00 (AM) and 16:00 to 17:00 (PM). The PM Peak was slightly earlier than the 17:00 to 18:00 peak hour identified by the Manual Turning Count surveys. Peak hour two way flows are summarised in **Table 2.2**.

As shown, a directional bias is evident with the majority of trips travelling eastbound in the AM Peak and westbound in the PM Peak. The highest recorded travel demand is 601 vehicles westbound in the PM Peak which is equivalent to 10 vehicles per minute.

 Time Period
 Eastbound
 Westbound
 Two Way

 AM Peak
 08:00-09:00
 561 (55%)
 454 (45%)
 1,015

 PM Peak
 16:00-17:00
 475 (44%)
 601 (56%)
 1,076

Table 2.2 - B4267 Surveyed Traffic Flows (Weekday Average July 2014)

The ATC also recorded traffic speeds as summarised in **Table 2.3.** Average speeds were slightly above the 30mph speed limit, although these results do not indicate a significant speeding problem on this section of carriageway.

The recorded speeds are likely to be a result of the relatively straight road alignment and lack of direct frontages on to the carriageway, creating a country road feel in this location. There are several committed developments in the vicinity of the development site, which is likely to generate additional traffic demand on the B4267 which in itself will reduce traffic speeds on this section of carriageway. The extension of the existing urban area on to the development site will create additional frontages (the retail store, etc) which is likely to reduce speeds.

 Measure
 Eastbound
 Westbound
 Two Way

 Average
 32.0
 30.4
 31.0

 85th Percentile
 35.8
 34.7
 35.3

Table 2.3 - B4267 Surveyed Traffic Speeds (7 Day Survey)

The existing carriageway arrangement is shown in Figure 2.7.

Figure 2.7 - Existing Site Access Junction with South Road





2.4.2. Beach Road

Beach Road connects to the B4267 via a crossroad junction to the north-east of the development site. It provides access to Sully Island, Sully Sound and Swanbridge Bay to the south, in addition to the Caravan Parks and Public House located on the coastline.

The carriageway is tree lined for most of its length without footway provision. No street lighting is present.

Beach Road has an approximate width of 4-5m, with passing places present. The carriageway surface can be rated as moderate to poor with potholes present in places, as shown in **Figure 2.8**. It is subject to national speed limit, with 'SLOW' markings present on the carriageway on the approach to several tight bends. Several residential accesses are formed with the road in addition to the two car park accesses.

SLOW ARAS

Figure 2.8 - Beach Road

Table 2.4 summarises two way flows on Beach Road in peak hours from manual traffic count surveys undertaken on Tuesday 8th July 2014 at the junction formed with South Road and Swanbridge Road. As shown, traffic demand on this section of carriageway is relatively low with a demand of less than 1 vehicle per minute in each direction.

Table 2.4 - Beach Road Surveyed Traffic Flows (Tuesday 8th July 2014)

Time Period		Northbound	Southbound	Two Way
AM Peak	08:00-09:00	24	17	41
PM Peak	17:00-18:00	30	51	81

2.4.3. Swanbridge Road

Swanbridge Road is a rural distributor road, aligned north to south, connecting to Cog Road / Sully Road to the north and South Road / Beach Road to the south. The road also provides access to a handful of residential properties which adjoin the road.

A 4.6m height restriction applies due to the presence of a bridge associated with a dismantled railway. Due to the arched nature of the bridge, high vehicles are required to use the centre of the road, reducing it to single lane running.

Swanbridge Road is subject to a 30mph speed limit. The route is unlit, with no footway provision. The carriageway is approximately 7m in width in proximity to the South Road junction, narrowing to approximately 5m further north.

Table 2.5 summarises two way flows on Swanbridge Road in peak hours from manual traffic count surveys undertaken on Tuesday 8th July 2014. As shown, traffic demand on this section of carriageway is relatively low with a demand of less than 1 vehicle per minute in each direction.

Table 2.5 - Swanbridge Road Surveyed Traffic Flows (Tuesday 8th July 2014)

Time Period		Northbound	Southbound	Two Way
AM Peak	08:00-09:00	41	54	95
PM Peak	17:00-18:00	51	48	99

The carriageway arrangement at the junction Swanbridge Road forms with South Road and Beach Road is shown in **Figure 2.9.**

Figure 2.9 - South Road / Beach Road / Swanbridge Road Crossroads Junction



2.4.4. Cleveland Avenue

Cleveland Avenue is a residential road, which provides access to Smithies Avenue and Somerset View to the west of the development site. The carriageway is aligned north to south, connecting with South Road at its northern end via a 3 arm priority junction.

Table 2.6 summarises two way flows on Cleveland Avenue in peak hours from manual traffic count surveys undertaken on Tuesday 8th July 2014.

Table 2.6 - Cleveland Avenue Surveyed Traffic Flows (Tuesday 8th July 2014)

Time Period		Northbound	Southbound	Two Way
AM Peak	08:00-09:00	27	15	42
PM Peak	17:00-18:00	18	29	47

The recorded traffic flows have a directional bias, with more departures in the AM peak and arrivals in the PM peak. Traffic flows in either direction are light (up to 1 vehicle every 2 minutes).

The carriageway layout is shown in **Figure 2.10.** The carriageway is approximately 7.3m wide, with a footway provided along both sides of the entire length of the road. The carriageway is lit and subject to a 30mph speed limit.



Figure 2.10 - Cleveland Avenue Junction with South Road

2.4.5. Swanbridge Grove / Winsford Road / Highbridge Clsoe

Swanbridge Grove and Winsford Road are residential streets to the north of the development site:

- Swanbridge Grove is aligned north to south, providing access to residential dwellings at
 its northern end and forming a three arm priority junction with South Road at its southern
 end.
- Highbridge Close is aligned east to west. The western end connects to Winsford Road
 which forms a crescent, linking back to Highbridge Close via a priority junction. The
 eastern end forms a cul-de-sac. A southern spur of Highbridge Close connects to South
 Road
- A further section of unnamed carriageway links Highbridge Close to Swanbridge Grove, aligned east-west and running parallel to South Road. This forms part of the cycle route running along the northern edge of South Road.

These roads are all lit and subject to a 30mph speed limit. Footways are generally provided on both sides of the carriageway. The junction arrangement formed by the South Road / Highbridge Close junction is shown in **Figure 2.11**.

Figure 2.11 - South Road / Highbridge Close Junction



2.5. Personal Injury Accident Data

Personal Injury Accident (PIA) data was reviewed for the five year period from 01/10/2009 to 30/09/2014 for the highway study area identified by VoGC during scoping discussions. The full PIA data is included in **Appendix B**. It revealed that:

- Across this period there were 48 accidents, with 74 casualties; and
- The vast majority (43) of these accidents were identified as 'slight'. Four accidents were recorded as 'serious' and the final accident was identified as 'fatal'.

The location of these incidents is contained in Figure 2.12.

Figure 2.12 - Location of Recorded PIA Incidents

In the immediate vicinity of the site, a total of three 'slight' incidents were recorded. All of these incidents occurred on the B4267 South Road, with two occurring in 2013, and one in 2012.

Two of the three collisions were reported occurring at the crossroads junction formed by the B4267 South Road, Beach Road and Swanbridge Road;

- The first occurred on Saturday 4th February 2012 at 00:01, involving a car and a goods vehicle (3.5 tonnes or under). This resulted in three casualties (all 'slight'). The records indicate that the goods vehicle was travelling north to south across the junction, travelling from Swanbridge Road to Beach Road, but failed to see a car travelling from west to east along the B4267 Sully Road and collided; and
- The second collision occurred on Monday 3rd June 2013, on a fine and dry day at 14:03. It was reported that a car travelling west to east along the B4267 Sully Road, failed to notice a car ahead of them slowing down to turn right into Beach Road, subsequently colliding into their rear. Three casualties were reported, all recorded as 'slight'.

The third collision occurred on Wednesday 3rd April 2013, at 16:46 on a fine day, in dry conditions, west of Clevedon Avenue. The accident was recorded as 'slight' and involved a single car travelling west to east, leaving the carriageway and colliding with a telegraph pole. One casualty was reported.

Three further 'slight' collisions were reported occurring on the B4267 South Road to the north-west of the site. The first accident was reported at 12:00 on Thursday 22nd December 2011. The weather was reported as fine and dry, with a car pulling out of Minehead Avenue into the carriageway and colliding with a motorcycle. It was reported that the car driver's view was obstructed by roadworks. One 'slight' casualty was reported.

The second accident was reported occurring on Sunday 3rd March 2014 at 09:06, where it was recorded that a car pulled out into the path of an oncoming pedal cyclist. The pedal cyclist was the only 'slight' causality reported.

The final collision occurred at the junction with Burnham Avenue on Wednesday 17th July 2013 at 16:06. It was stated that a car collided with another car, which subsequently collided with a third car. Two 'slight' casualties were noted.

A further three 'slight' accidents were reported on the B4267 South Road, near the roundabout with B4267 Sully Moors Road / Hayes Road, and five 'slight' accidents on the roundabout itself.

In respect to the four 'serious' accidents, one occurred north of the site on Sully Road, one on the A4231 (Barry Docks Link Road) / B4267 (Sully Moors Road) / A4055 (Cardiff Road) roundabout, and the remaining two located in close proximity to one another on the A4055 Cardiff Road. All of these collisions are distant from the proposed development site.

One 'fatal' accident was reported on Cardiff Road (A4055). The accident occurred on Sunday 16th October 2011 at 09:21 on a fine and dry day. A car travelling west towards Barry collided with a retaining bridge wall on its near side before colliding with an adult pedestrian also walking on its nearside, before then colliding with another car. Four casualties were reported, comprising the fatality and three recorded as sustaining 'slight' injuries. This accident is the only recorded accident involving a pedestrian. It did not occur within the vicinity of the site. Indeed, its location is beyond convenient walking distance of the site.

Overall, the frequency, severity, spatial distribution and different causal circumstance of these collisions does not suggest that there is an existing safety issue on local roads or at local junctions. Based on the review of accident causations on the highway network in the vicinity of the development site, it is not anticipated that the development will have a detrimental impact on the local safety record.

2.6. Provision for Pedestrians & Cyclists

2.6.1. Overview

Figure 2.13 shows the existing pedestrian provision in the vicinity of the site. Footways are provided on both sides of South Road on the northern boundary of the site (with the northern path forming a shared use route with cyclists). A zebra crossing is provided immediately to the west of the existing site access. No footways are provided on Beach Road or Swanbridge Road, although it is anticipated that there will only be limited pedestrian demand on these routes associated with the development (associated with accessing the pub and coastal walks at the southern end of Beach Road). Alternative, partially traffic free routes are available to pedestrians to reach the pub and Sully Sound.

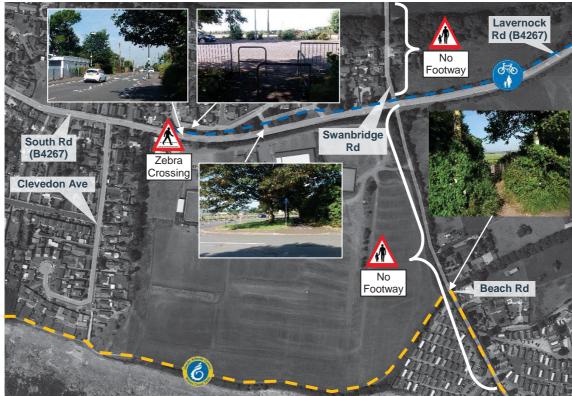


Figure 2.13 - Existing Provision for Pedestrians and Cyclists

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2.6.2. Cycle Routes

The shared use path on the northern side of the B4267 extends eastwards to connect to Cosmeston Country Park and Penarth.

2.6.3. Access to Local Amenities

Figure 2.15 shows the location of existing village amenities which can be accessed on foot or by bike from the proposed residential development. As identified in **Chapter 1**, the proposed development will include for a small retail store (food convenience) which will be benefit both the new residents and existing dwellings and caravans in the local vicinity.

As identified in **Chapter 3**, further residential development is proposed in Sully at a site opposite to Cog Road, which will support the further development of village amenities and services. Existing amenities are summarised in **Table 2.7** Distances are measured from the site access junction.

Table 2.7 - Sully Village Amenities

Map Key	Amenity	Location	Distance	Walking Time	Cycling Time
1	Sully Primary School	Burnham Ave, CF64 5SU	800m	10 mins	3 mins
2	GP Surgery	South Road. CF64 5TG	850m	10 mins	3 mins
3	Sully Library	South Road, CF64 5SP	50m	1 min	1 min
4	One-Stop Convenience Store	South Road, CF64 5SL	600m	7 mins	2 mins
5	Sully Post Office	South Road. CF64 5SN	350m	4 mins	1 min
6	Sully Sports Club	South Road, CF64 5SP	200m	1 min	1 min
7	Bus Stop Provision	South Road (near Beach Rd Jn)	270m	3 mins	1 min
8	Opticians	South Road, CF64 5SL	600m	7 mins	2 mins
9	Hairdresser (The Salon)	Cog Road, CF64 5TD	1.3km	16 mins	4 mins
10	Public House (Captain's Wife)	Beach Road, Cf64 5UG (route via Coastal Path)	800m	10 mins	3 mins

The location of these amenities is shown in Figure 2.14.

SULLY Key Location of Amenity WANBRIDGE **Development Site** 1km 'As crow flies' from Main Site Access

Figure 2.14 - Sully Village Amenity Locations

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There are no secondary schools within the village, but provision is available in the adjacent settlements of Barry (6.5km) and Penarth (4.7km). The following school bus services operate from South Road to local primary and secondary schools providing access by local residents;

Primary Schools

o P133 – Sully to St Joseph's Primary School, Lower Penarth,

Secondary Schools

- o S51 Sully to Sir Richard Gwyn School, Palmerstown,
- S76A Sully to Ysgol Bro Morgannwg, Penarth

The closest large supermarket to the development site is Waitrose in Palmerstown, Barry, which is approximately 3.5km away. As indicated in the following section, a regular bus service also runs to Morrisons in Barry. Supermarkets (Asda) currently provide deliveries to the CF64 (Sully) postcode which new residents will be able to use to order groceries online (see Framework Travel Plan).

2.7. Provision for Public Transport Users

South Road is the main bus corridor through the settlement, with bus services providing links to Barry, Penarth and Cardiff. The closest bus stops to the development site are provided in either direction on South Road in proximity between the Swanbridge Road and Swanbridge Grove junctions as shown in **Figure 2.15.**



Figure 2.15 - Bus Stop Provision in Proximity to the Site

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Both of these stops comprise a shelter and timetable information. A bus layby is present at the westbound stop. **Table 2.8** summarises the existing bus schedule. In addition to those listed, there are several school buses which also serve these stops.

Route Number	Route	Weekday Service Frequency	Evening Services	Saturday Service	Sunday Service	
86	Barry – Sully - Dinas Powys – Culverhouse Cross	One service in each direction - Thurs only	N/A	One service in each direction - Sat only	N/A	
88	Penarth – Sully - Barry	Hourly in each direction	N/A	Hourly in each direction	N/A	
94 / 94B	Cardiff – Penarth – Sully – Barry Morrisons	2 per hour in each direction	Until 23:25	2 per hour in each direction	Hourly in each direction	

Table 2.8 - Existing Bus Services

The closest station to the site is at Cadoxton which is approximately 4km away using local roads. This is approximately a 14 minute cycle ride.

2.8. Existing Mode Characteristics

Table 2.9 summarises the method of travel to work by existing residents of the Sully Ward, as recorded on the 2011 Census¹. Of the 3,356 residents aged 16 to 74, 1,108 were not in employment and 142 worked mainly from home. Of the 2,106 residents who travel for work, 80% drive, with a further 5% travelling as a car / van passenger. Travel by train accounts for 3%, indicating that some residents must travel to a local station before interchanging to this mode.

Table 2.9 - Sully Ward Method of Travel to Work (2011)

Mode of Travel	Persons	Percentage Share
Train	70	3%
Bus, Minibus & Coach	71	3%
Taxi	3	0%
Motorcycle, Scooter & Moped	14	1%
Driving a Car / Van	1,682	80%
Passenger in Car / Van	115	5%
Bicycle	42	2%
On Foot	80	4%
Other Mode	29	1%
Total	2,106	100%

¹ Data refers to travel mode on 27th March 2011. © Crown copyright 2014 Office for National Statistics licensed under the Open Government Licence v.2.0:

^{*}Bus services as of autumn 2014

It is envisaged that new residents for the proposed development will adopt similar commuting characteristics to those existing. TRICS rates will be used to determine the forecast levels of trip generation in **Chapter 4.** Existing 'Travel to work' mode data will be used to inform the targets in the Travel Plan. A Framework Travel Plan has been submitted in support of this application.

2.9. Public Consultation

A public consultation event was held in Sully on 12th May 2015 to discuss the proposals. In terms of transport, the impact of increased traffic was the main concern, especially the cumulative impact from several developments in the area. Some participants indicated that they considered there to be an existing acute traffic problems at key nodes around Sully at peak times. Concern was also expressed about any increased traffic demand on Beach Road, although they were reassured that this would form an emergency only access.

In terms of the layout of the site, the following queries / comments were received;

- Query whether sufficient car parking would be provided for the sports facility to accommodate the tournaments / events – particularly if there were combined football, rugby, bowls and social club events (Weddings, etc),
- Requirement for demarcation between the caravan park access road and sports pitches for the safety of children,
- Concern over on-street parking related to the residential site,
- Concern regarding touring caravan traffic negotiating the sports facility car park to reach the site.
- Concern that the retail store may attract on-road parking in its vicinity.

The comments received emphasise the need to provide sufficient car parking on the development site to prevent on-street parking demand occurring on the surrounding highway which could directly impact on its operation.

A further concern related to erosion of the cliffs which could potentially impact on the coastal path running along the southern boundary in the future. A sufficient buffer will be provided to enable the path to be re-provided further back from the cliff if required by future erosion.

2.10. Site Usage

2.10.1. Sports & Leisure

The existing site accommodates a range of sports and recreational activities. Its facilities comprise;

- 4 football pitches,
- 2 rugby pitches,
- An outdoor bowls club,
- An astro-turf training pitch,
- 8 rink indoor bowls arena,
- Changing rooms and showering facilities,
- Club facilities comprising a bar serving food, drink and snacks, with pool tables and darts; and,
- A main function room.

The site accommodates training for Sully Sports Football Club which comprises a men's team, women's team and several junior boy's and girl's teams. Training takes place on the five senior football pitches, three mini pitches and the astro-turf at the existing site. Home fixtures are played at Burham Avenue which is to the west of the settlement, rather than at the sports site. These are predominately played on a Saturday (on alternating weeks), with kick off at 14:00.

A full breakdown of the existing usage of the site can be found in **Appendix C**. This summarises the number of people who arrive at the site for each hourly period (from 09:00 to 21:00).

The current operations of the sports site does not impact on the local highway network during the AM peak, as the facility is operational from 10:00 onwards. Usage of the site across the evening highway peak is more significant, with the Sports Bar operating into the evening (18:00 onwards). A changeover in the private hire of the Function Suite and the continuation of sporting activities such as indoor bowls and casual AGP usage often take place during the PM peak on the highway network.

The most substantial and intensive use of the facility as a whole falls on the weekends, with high levels of usage between 10:00 and 14:00. The Function Suite has a capacity for 150 individuals, meaning there is potential for high arrival numbers associated with this site usage alone.

The figures summarised in **Appendix C** provide an estimation of average weekly use during the main sports seasons. There may be occasions when the club hosts a tournament or has a particularly popular local derby match when numbers may be slightly higher.

2.10.2. Car Boot Sale

In addition to the sports and recreational facilities, Sully Sports and Social Club host a large car boot sale every Sunday between the months of April and September (weather permitting) on the sports grounds. This event attracts large crowds and is promoted as one of the largest car boot sales in Wales.

The event caters for over 500 vehicles, with entry for sellers beginning at 06:30. Entry for buyers is permitted from 07:30. The organisers ask buyers and sellers to vacate the sports ground by 14:00. All cars access the site via the main entrance off South Road, with car park marshals on-site to direct traffic.

Unfortunately the car boot sale was cancelled on the Sunday that the ATC survey was undertaken due to bad weather, therefore it is not possible to identify traffic flows associated with this event.

Figure 2.16 shows the scale of the event, courtesy of images used on the organiser's website.



Figure 2.16 - Sully Sports and Social Club Car Boot Sale

It is unclear whether the car boot sale will continue to operate from the site once it has been redeveloped. However, even if the event continues, there will be less site area available and therefore it will be on a much smaller scale than that which currently operates, therefore any current traffic impact associated with this event is anticipated to reduce as a result of the redevelopment of the site.

2.10.3. **Camping**

It is understood that the site is also used for camping outside of the football and rugby seasons. The traffic generation associated with use of the site for camping is less than that associated with the sports use.

2.10.4. Library

Sully Library is open on Tuesday and Thursday afternoons from 15:00 to 18:00 and Saturday mornings from 09:00 to 13:00. The facility is accommodated in a prefabricated building. The car park has a barrier as shown in **Figure 2.17** which is currently secured when the library is closed. Adjacent to the library site, there is a disabled parking space and sufficient space for up to two further vehicles in unmarked bays. No dedicated cycle parking is evident at the library site, although potential exists to chain bikes to posts and railing on-site.

The library building is small and is not considered to be a significant local trip attractor. The adjacent settlements of Barry and Penarth both have their own library provision and therefore the site on South Road only serves the existing community. All of the dwellings within the settlement boundary of the village are within 1.3km which is considered reasonable walking distance.



Figure 2.17 - Sully Library Access & Parking



2.11. Summary

This section of the Transport Assessment has presented an audit of existing transport provision in the vicinity of the development site. It has identified existing peak periods of demand on the local highway network; provision for sustainable modes and it has analysed recent personal injury accident data. A description of the existing site uses and associated travel demand has been presented to set a context for the development proposals.

3. Policy Context

3.1. Introduction

This section of the TA reviews national, regional and local transport policy guidance of relevance to the proposed development. It includes consideration of;

- Planning Policy Wales
- Technical Advice Note (TAN) 18: Transport
- SEWTA Regional Transport Plan
- Vale of Glamorgan Local Development Plan (LDP)

3.2. National Guidance

3.2.1. Overview

At a national level, there are several relevant high level plans and strategies which have been produced by the Welsh Government in relation to transport. These include the **Wales Transport Strategy** (2008) and **National Transport Plan** (2010) which seek to improve public transport and integration between modes. The proposed development site is located next to a local bus corridor, providing regular connections to both Cardiff and Barry. The proposed development provides opportunities for greater patronage of these existing services, making them more economically viable or to enable frequencies to be increase, thus contributing to the overarching aims of these national policy documents.

3.2.2. Planning Policy Wales (PPW)

PPW was updated in February 2014 and sets of the current land use policies of the Welsh Government. Chapter 8 relates to Transport and seeks to support sustainable development through minimising the need to travel and encouraging the use of more sustainable and healthy forms of transport. In relation to land use development, it indicates the Welsh Government's objective for transport is to;

- Reduce the need to travel, especially by private car, by locating development where there is good access by public transport, walking and cycling, and
- Locate development near to other related uses to encourage multi-purpose trips and reduce the length of journeys.

3.2.3. Transport Advice Note (TAN) 18: Transport

Technical Advice Notes provide detailed planning advice which should be taken into account by Local Planning Authorities when preparing Development Plans. TAN 18 describes how to integrate land use and transport planning, indicating how transport impacts should be assessed and mitigated.

It indicates that new development should;

- Be located where there is, or will be, good access by public transport, walking and cycling, thereby minimising the need for travel and fostering social inclusion,
- Include appropriate provision for pedestrians, cycling, public transport, traffic management and parking / servicing, and
- Include good quality design of street that provide a safe public realm and distinct sense of place.

3.2.4. Summary

The proposed development will conform to the requirements of PPW and TAN18, being located in proximity to existing bus routes through the village, enabling a frequent connection to amenities and employment opportunities in nearby urban centres. The location of the development also enables access to local village amenities on foot or by bike.

3.3. Regional Guidance

3.3.1. Overview

SEWTA was the South East Wales Transport Alliance which was a consortium of 10 local authorities who collaborated to improve regional transport. In 2010, they published a Regional Transport Plan (RTP). However SEWTA was disbanded in March 2014, with duties placed on Local Transport Authorities to produce Local Transport Plans.

3.3.2. **SEWTA RTP**

The 2010 RTP sought to;

- Improve access to services, facilities and employment, particularly by public transport, walking and cycling, and
- Ensure that land use development in south east Wales is supported by sustainable transport measures.

3.4. Local Guidance

3.4.1. Overview

The Vale of Glamorgan (VoG) UDP is the adopted land use plan, which will soon be replaced by the emerging LDP. Now that SEWTA has disbanded, the VoG is also currently preparing a Local Transport Plan, although no draft versions have been published to date.

3.4.2. Vale of Glamorgan Unitary Development Plan (UDP)

The adopted UDP covers the period from 1996 to 2011. The Council's transportation policy objectives of relevance to these development proposals identified in the UDP include;

- Ensuring developments are accessible by means of transport other than the private car, and
- Ensuring that adequate parking facilities are provided in accordance with the Council's approved parking guidelines.

The UDP identifies the potential for a future cycle route linking Lower Penarth to Sully via a former railway line. This railway line connects to Swanbridge Road in the close proximity of the development site.

3.4.3. Vale of Glamorgan Local Development Plan (LDP)

The VoG LDP sets out the vision, objectives, strategy and policies for managing development in the county between 2011 and 2026. Both the Deposit Plan and Alternative Site Plan have been consulted on. Cabinet will consider its response to the representations made in Spring 2015 before it is submitted to the Welsh Government.

The Proposals Map (Nov 2013) of the Deposit Plan allocates the whole of the development site as 'Green Wedge'. Policy MG18 indicates that "Green Wedges have been identified to prevent coalescence of settlements and to retain the openness of land." The site identifies this as the 'South Penarth to Sully Green Wedge'. However, it is noted that in relation to minor rural settlements, the LDP indicates that proposals will be favoured which "seek to protect and enhance the viability, accessibility or community value of existing village facilities and transport services." The proposals will support the viability of local amenities and services, and the residential development will be directly adjacent to the existing built up area. Furthermore, the retention of part of the site for sports and recreation will ensure that a portion of green space is retained.

In relation to new residential development, Policy MD1 indicates that development will be favoured where it "has access to or will promote the use of sustainable modes of transport." Policy MD3 stipulates that "New developments should give "priority to pedestrians, cyclists and

public transport users." The location of the site provides clear opportunities for residents to use these modes to access services, employment and amenities.

3.4.4. Vale of Glamorgan Local Transport Plan (LTP)

The VoG Council is required to submit a LTP by the end of December 2014, with its adoption due by the end of March 2015. The guidance issued by the Welsh Government for the preparation of the plans allows local transport authorities to update schemes or priorities identified in their adopted Regional Transport Plans.

3.4.5. Summary

The review of local policy has identified that the development will in part contravene the proposed green wedge status of the forthcoming LDP land allocations. However, it has been demonstrated that in terms of location, the development has potential to support existing village amenities and public transport services, supporting the overall viability of the settlement.

4. Development Proposals

4.1. Overview

This section of the report will provide a description of the development proposals including layout, access and parking arrangements.

4.2. Development Proposals

4.2.1. Extent of Development

Western Section

The proposed development comprises the provision of up to 200 residential houses (2-4 bedrooms) on the west of the existing 14.56ha sports ground site, as shown in **Figure 4.1.** The existing prefabricated library will be retained to the north-west of the site and served by the existing site access. An outline planning application has been submitted for the 6.25ha western section of the site.

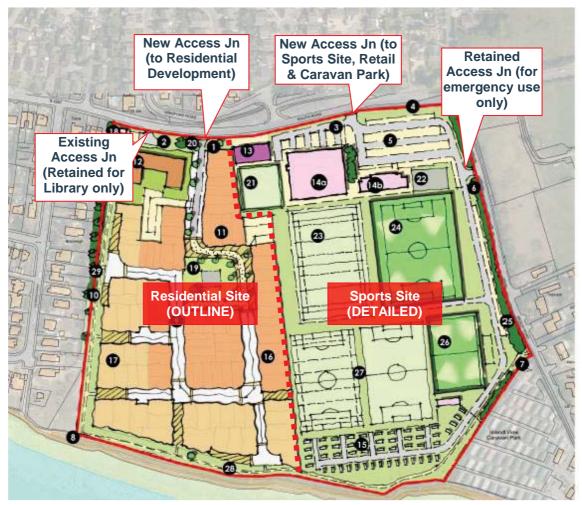


Figure 4.1 – Development Site Extent and Location (Proposed Access Points)

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Eastern Section

The eastern section of the site will include the re-provided sports facilities, in addition to a 50 pitch touring caravan park and a food convenience store. A detailed application has been submitted in support of this 8.31ha section of the site. **Table 4.1** provides a summary of the proposed sports provision and provides a comparison with that existing at the site.

The extent of the proposed sports provision is largely equivalent to that which currently exists on the site (albeit it will be condensed into a smaller area). It is understood that there are currently three mini-football pitches and one 9-a-side grass pitch which will not be re-provided. However, the existing 5-a-side pitch will be re-provided as an enlarged 9-a-side 3G pitch.

Overall, it is felt that existing and proposed sports elements of the development are comparable and unlikely to result in any significant changes in travel demand (both in terms of volume and the times of users being on-site).

Proposed Sports Provision	Existing Provision
3x full size football pitches	Equivalent to existing provision
1x rugby pitch	Equivalent to existing provision
1x 9v9 football pitch (3G surface)	Improvement on existing 5-a-side football pitch
Bowling green & pavilion	Equivalent to existing provision
Indoor bowling area	Retained in current form
Sports & Social Clubhouse	Equivalent to existing provision
Parking Facilities for c.275 vehicles (exc caravan park)	Increase on c.125 spaces existing, but will also serve the retail store and there is some loss of existing on-grass overspill parking

Table 4.1 – Proposed Sports Provision (compared to existing)

The existing car boot sale identified in **Section 2** does not form part of the formal planning application. If the event continues, it is likely to be on a reduced scale given the smaller area available to accommodate it. Accordingly, it is anticipated that traffic generation associated with the car boot sale would reduce significantly from that existing .

In addition to the sports facilities, the site will also include a caravan park with provision for 50 touring caravans and a single storey retail store (465m²).

4.2.2. Vehicular Access & Parking

Sports Club, Caravan Site & Retail Access

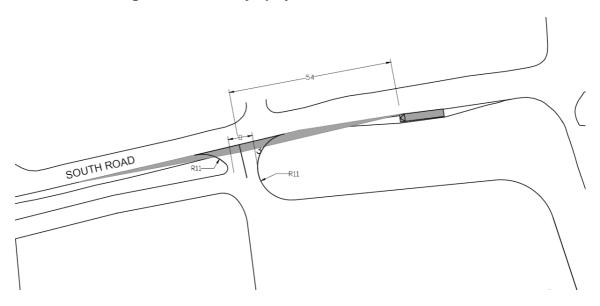
It is proposed that the sports club and retail unit will be served by a new access junction to the north-east of the site. This will form a right left staggered arrangement with Swanbridge Grove as shown in **Figure 4.2**.

There is currently minimal traffic demand associated with the Swanbridge Grove arm of this junction, with;

- 4 vehicles egressing this junction and 2 accessing it in the AM Peak hour; and,
- 4 vehicles egressing this junction and 6 accessing it in the PM Peak hour

A bus stop and bay is located to the east of the proposed access. **Figure 4.2** shows that an adequate visibility splay can be achieved to the right (54m) even when a bus is parked in the layby. The length of this splay accords with *Table 7.1* of Manual for Streets based on the recorded 85th percentile speed of 35.8mph, however removal of some of the tree line is likely to be required to achieve this splay.

Figure 4.2 – Visibility Splay to From New Access Junction



This access will form a new staggered four arm priority junction with Swanbridge Grove. This access leads directly to a parking area, with 215 spaces provided. Of these, 34 standard spaces and 2 disabled spaces are provided to the west of the junction immediately adjacent to the retail unit. The remaining spaces are provided to the north-east of the site, adjacent to the retained indoor bowls facility and new club house / changing rooms building. Twelve of the 215 car parking spaces are designated for mobility impaired users (c. 5.6% of total provision).

A further 62 spaces will be provided at right angles to the access road running along the eastern boundary of the site, adjacent to the eastern hedgerow. These spaces are located in close proximity to the sports pitches. Five of these spaces are designated for disabled users. The carriageway will be of sufficient width to accommodate turning manoeuvres into and out of these spaces and tracking will be provided to demonstrate this in support of a future reserved matters application.

The proposed level of car parking represents a significant increase from the existing levels. There are currently approximately 150 spaces provided in marked and unmarked areas adjacent to the existing buildings. However, additional overspill parking can currently take place on the grass and there is evidence of this provided on Google Streetview.

The provision of c.275 spaces represents an increase of 125 on the existing provision. Of these 24 will designated for the use of the retail store in accordance with the CSS All Wales Parking Standards (2008)² are summarised in Table 4.2. All standards have assumed the site is classified as Zone 4-5 (Near Urban - Countryside).

Table 4.2 - CSS Parking Standards for Retail Development

Land Use	Standards	Proposed	Parking Standard
Shops and small supermarkets (201m² to 1000m²)	Operational: 2 commercial vehicle spaces	465m²	2 commercial
	Non-Operational: 1 space per 20 m²	403111-	24 car parking spaces

² CSS All Wales Parking Standards (2008)

http://www.valeofglamorgan.gov.uk/en/our_council/minutes, agendas_and_reports/reports/cabinet/2013/13-07-29/County-Surveyors-Society-

Additional turning space is provided for delivery and service vehicles adjacent to the store and tracking will be provided to demonstrate manoeuvres of vehicles using this facility.

A further 12 spaces are designated for users of the existing indoor bowls centre, with further overspill parking available in the general Sports and Leisure parking to the north-east of the site.

The provision of c.250 spaces for the Sports and Leisure Club site, seeks to ensure that all of the parking demand associated with the site is internalised to prevent this demand spilling on to the surrounding highway network.

Trip rates are identified for 'Fitness Clubs, Leisure Clubs and Sports Clubs' at;

"1 commercial vehicle space and 1 car parking space per 2 facility users."

Additional spaces are also required for the clubhouse bar, which has provision for;

• "1 space per 3 staff and 1 space per 5m2 of public area."

The clubhouse has 2 function rooms and 2 bars with a total GFA of 331m². A total of 66 parking spaces can be provided for this use within the parking standards.

Whilst the total number of sports club users is not known, the provision of c.250 spaces for the clubhouse and sports facilities would provide for a residual 190 car parking spaces for the sports site when all of the sports club function rooms are being used. This would accommodate 374 sports club users at peak times (using the parking standards as guidance) which is considered sufficient for the site, given some activities will run concurrently (see **Appendix C** for existing usage demand profile). The level of proposed parking should alleviate the concerns expressed by local residents in relation to parking at the Public consultation event held in May 2015 (see **Chapter 2**). A parking management strategy will be used to ensure the effective use of this provision (see the Transport Implementation Strategy in **Appendix A**).

Some amendments to the car parking layout will be needed to achieve efficient access and manoeuvrability of a car towing a caravan through the car parking area to reach the south of the site. It is envisaged that visitors to the caravan park will use the convenience food store located on South Road as part of the development for basic groceries.

A turning head will be located both within the caravan park and on the service road running between the all-weather sports pitches to enable refuse collections and access by emergency vehicles (i.e. fire engines).

There will be no vehicular through access from the sports site into the residential site to the west, except for an emergency access to a sports pitch as shown on the site layout plan (**Figure 4.3**). This access will be controlled by a gate.

The existing gated access from the site on to Beach Road will be retained for emergency vehicular access only. The existed gate will be retained to control access.

The layout of internal access roads is shown in **Figure 4.3.**

.250 spaces for New vehicular access junction sports club Retail Store. Pedestrian including bowls access directly from the street (IV) Retail parking 144 Turning head to be provided adjacent to retail store for deliveries and servicing for 24 vehicles 23 Turning head to be provided for maintenance and emergency access (16) Emergency access to sports pitch via residential site (gated) Turning head to be provided for servicing Access route to and emergency access caravan site

Figure 4.3 - Site Layout and Internal Access Roads (Sports, Retail & Caravan Site)

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Cycle parking will be provided throughout the site in overlooked, legible and convenient locations. The following levels of provision are proposed;

- 20 spaces adjacent to the entrance to the Clubhouse,
- 10 spaces adjacent to the Indoor Bowls Centre,
- 10 spaces adjacent to the retail unit,

Although not formal cycle parking provision, additional space is available adjacent to each of the sports pitches for players and spectators to park and lock up their bikes.

Residential & Library

The residential units will be served by a new site access junction to the north of the site. This junction will comprise a standard 3 arm priority junction on the B4267. Good levels of visibility can be achieved at the proposed location of this vehicular access, with no existing obstructions present on South Road.

This new junction will connect to an internal spine road, which loops back onto itself as shown in **Figure 4.4.** The vehicular loop road will be designed to encourage a low speed environment with priority for pedestrians and cyclists.

The highway arrangement within the site has been designed in accordance with Manual for Streets principles, with a clear user hierarchy, giving priority to pedestrians and cyclists. This has been achieved through the provision of shared surfaces and cul-de-sacs which limit through traffic of vehicles, but which have dedicated pedestrian and cycle linkages to ensure permeability.

The library will continue to be served from the existing site access junction. It is not proposed to make any geometrical alterations to this access junction. As shown by the review of PIA data in **Chapter 2**, this junction currently has a good safety record, with no incidents recorded in its vicinity over the last 5 years. Due to the limited size and catchment of the library, there are no proposals to increase the existing levels of library parking from the 1 standard and 1 disabled space provided. On the rare occasion that additional vehicular parking is required, it will be possible to accommodate this on-street on quiet surrounding residential roads.

As part of the redevelopment of the site, potential does however exist to provide two Sheffield bike stands in front of the library for use by staff and patrons. The developer is willing to provide these as part of the alterations to the site.

21 **Turning** heads for servicing and occasional deliveries Main vehicular access route through the site Emergency access to sports pitch via 17 residential site Turning heads for servicing and occasional deliveries Pedestrian linkages to existing footpaths

Figure 4.4 - Site Layout and Internal Access Roads (Residential & Library Site)

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(2-4 beds)

TOTAL = 600

Residential parking will be provided in accordance with the 2008 CSS All Wales Parking Standards (zones 2-6). As this section of the site has only been submitted in outline, the exact number of units and mix of number of bedrooms per dwelling has not yet been confirmed. The calculation provided in **Table 4.2** is for indicative purposes only and assumes 200 x 3 bedroom houses will be provided.

Land Use Standards Units Proposed Parking Standard

Houses Residents: 1 space per bedroom 200 200 x 3 = 600

Table 4.2 – CSS Parking Standards for Residential Development

(max 3 spaces)

Visitors: 1 space per 5 units		40
	Total	640 max

This provision will take the form of private driveways, shared on-street provision for visitors and private garages. Gates will be provided to rear gardens to enable access by bicycles to sheds and garages for secure storage of bicycles. Where dwellings do not comprise a private garden or garage, alternative cycle parking provision will be provided via on-street stands or bike stores in shared parking courts

4.2.3. Pedestrian & Cyclist Access

Pedestrians and cyclists will be able to access the development via all of the vehicular access points, and also via dedicated provision at the following locations;

- From the public right of way along the coastline (linking to Beach Road and Cleveldon Avenue),
- Via a footway running along the westerns site boundary, providing a more direct route to properties to the west of the site from South Road than using the internal vehicular loop road

These accesses are shown in Figure 4.5.

Segregated Pedestrian / **Direct** Pedestrian / Cycle Site Pedestrian / **Cycle Site** Access from Cycle Access on **South Road Retail Frontage Access from** South Road via Library 1 Ø Pedestrian / Cycle Pedestrian / Cycle Site Access from **Site Access from Coastal Path** Coastal Path

Figure 4.5 – Proposed Pedestrian / Cycle Access

Pedestrian access to the retail store will be taken directly from the footway on the southern side of South Road. Cycle parking will be provided in a convenient and overlooked location adjacent to the retail store.

Footways of 2m width will be provided adjacent to internal access roads in both the residential and sports site.

4.2.4. Staging & Phasing

It is proposed that work will commence on the sports site in 2016 and on the residential site in 2017. No residential units will be occupied until the sports site is completed. Assuming a build rate of 30-50 units per annum, it is anticipated that the residential development will be completed between 2021 and 2023.

4.3. Committed Development

4.3.1. Overview

As part of the scoping discussions, the VoG Council advised on 06/08/2014 that the following committed developments should be considered;

- Barry Waterfront
- Penarth Heights
- St Cyres Penarth Learning Community, Sully Road,
- Port Road Wenvoe

The trip generation and distribution from each of the TAs in support of these developments is summarised in the following text and will be included within the traffic impact analysis. It has been assumed that all committed development trip are PCUs (equivalent to an average car).

4.3.2. Barry Waterfront

The Barry Waterfront development (2009/00945/OUT and 2009/00947/OUT) comprises residential, retail, educational and leisure land uses on a brownfield site of approximately 43 hectares. A TA was produced by Arup in 2009 in support of the development proposals. It indicates that the development is expected to be fully completed by 2020. *Figures 6.2* and *6.3* of their TA show the proposed trip distribution. These trips have been included in the traffic analysis as shown in **Figure 4.6**.

Barry Waterfront

Vehs

Cardiff Road (A4231)

Barry Waterfront

Vehs

Cardiff Road (A4055 Key Link not applicable to all scenarios

Sully Moors Road

Sully Moors Road

Cog Road

South Road

Road

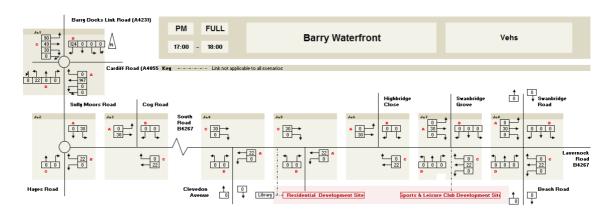
Avenue

Clevedon

Avenue

Death Road

Figure 4.6 - Barry Waterfront Development Trips



Forecast trips to and from Sully Moors Road have been routed along South Road through the study junctions.

4.3.3. Penarth Heights

The Penarth Heights development (2007/00295/FUL) comprises 377 residential units within the existing urban area of Penarth. A TA was prepared in 2005 in support of the development proposals.

The development flow diagrams only extend as for as the Cardiff Road / Redlands Road junction. In the AM peak hour it is forecast that 3 vehicular trips to and 7 from the development will be on Cardiff Road. In the PM peak hour it is forecast that 8 vehicular trips to and 3 from the development will be on Cardiff Road. It has been assumed that all of these trips continue on Cardiff Road once they reach the roundabout junction formed with the A4231 and B4267.

4.3.4. St Cyres Penarth Learning Community

As part of the VoG School Investment Strategy, there is a plan to redevelop St. Cyres Comprehensive School in Penarth (2012/00367/RG3). The proposals will bring together existing educational provision based on several sites to a single site to create a 'Learning Community'. A TA was prepared in support of the proposals in April 2012. An Opening Year of 2014 is stated for the development.

The extent of the traffic modelling does not extend close to the study junctions which have been identified by the VoG for Sully Sports and Leisure development. However, some trips are assigned to Sully Road and these have been distributed to Swanbridge Road and Cog Road equally in the AM Peak, with the assumption that they originate in Sully. As the PM peak hour for the school is 15:00-16:00, no traffic has been assigned to the local highway network from this development within the 17:00-18:00 peak hour scenario. This is shown in **Figure 4.7.**

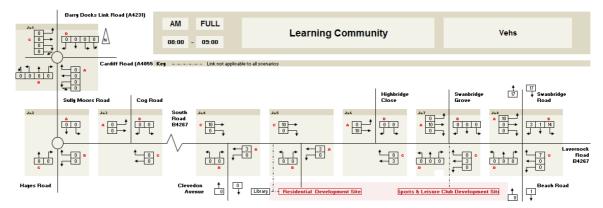
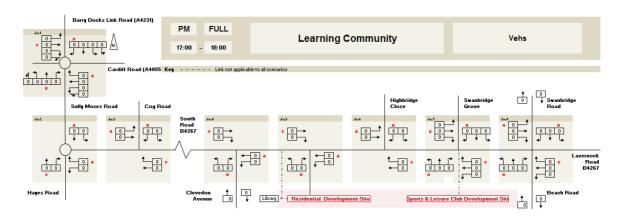


Figure 4.7 – Learning Community Trips



It is likely that some trips will be routed along the A4055 connecting to Barry, through the junction formed with the A4231 and B4267. However, the traffic flows forecast included in the Arup TA in support of the Learning Community development did not extend as far as this junction suggesting that the VoG considered that the overall impact would not be significant at this junction. Many school trips may already be on the highway network at this location.

4.3.5. Port Road, Wenvoe

A TA was prepared in 2012 in support of the Land to the West of Port Road development (2013/00884/OUT). The development comprises approximately 140 residential dwellings comprising a mix of private and affordable homes. The TA indicates that it is expected that the development will be completed by 2015.

The TA considered movements from the site to and from the A4050, with modelling at the junctions formed with Old Port Road / Morfa Lane and St. Andrew's Road. Using average trip generation rates from TRICS, in the AM Peak it was forecast there would be 23 departures travelling southbound on the A4050 and 10 arrivals travelling northbound. In the PM Peak it was forecast that there would be 17 departures travelling southbound and 23 arrivals travelling northbound. These movements were not distributed on to the study junctions defined for this TA.

To provide a robust assessment it has been assumed that 50% continue on the A4050 to the north of Barry and 50% use the A4231 Barry Docks Link Road. These have been distributed in accordance with the base traffic distributions at this junction, as shown in **Figure 4.8.** These flows have been distributed in accordance with baseline turning movements as far as the Cog Road junction and then all traffic through Sully has been assumed to use the B4267 past the site.

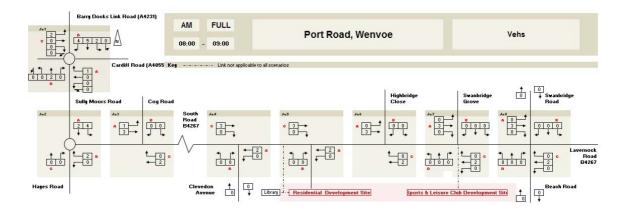
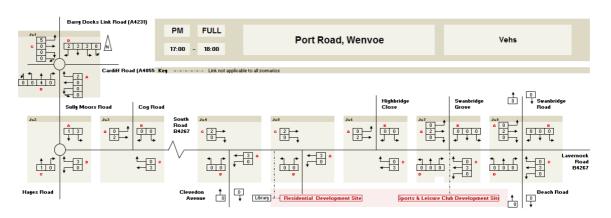


Figure 4.8 - Port Road Development Assumed Traffic Distribution



4.3.6. Land adjacent to Swanbridge Road, Sully

Taylor Wimpey have an option to purchase land to the south of Cog Road, to the north-east of Sully, from the existing landowners subject to planning permission being granted for residential development (2013/01279/OUT). An outline planning application for up to 350 dwellings was submitted in December 2013. It is understood that a portion of land to the south is also earmarked for housing, although the whole development will not exceed 500 units. The proposed development site covers an area of 50 acres and is currently in agricultural use.

A TA was submitted in support of the planning application for the residential development in December 2013. It indicated that there would be 2 site access junctions, one on Cog Road and one on Swanbridge Road. There will be amendments to the layout of Cog Road and the extension of the 30mph speed limit.

The TA used TRICS to estimate the potential trip generation and demand from the development, validated against a neighbouring cul-de-sac (Bassett Road). For the AM peak, the calculation based on 350 properties lead to an expectation for 54 arrivals and 130 departures. For the PM peak, 134 arrivals and 72 departures were calculated.

In terms of the direction of this traffic, the TA used Census 2001 information to outline an anticipated distribution of traffic. According to this, the TA anticipated that 50% of vehicles leaving the development site would travel via Swanbridge Road eastwards towards Lavernock Road junction. 40% of development traffic was anticipated to use Cog Road westbound towards the Cog Road / South Road junction. Finally, 10% of development traffic was assumed to use Sully Road (north).

The flows associated with the site itself have not been provided separately to the baseline flow (2013). However, the TA formulates a percentage impact of traffic associated with the site on surrounding key junctions. In 2013, 2018 and 2026, the impact of the development was determined to be 4% maximum. The TA forecast there would be capacity issues at the Cog Road / South Road junction but argued that the assessment had been overly robust by applying both a traffic growth factor to baseline flows and also including committed development trips. The Vectos TA argued that this constituted 'double counting' and in reality the operation of this junction would not be impacted to an extent as to warrant improvement measures to mitigate for the development traffic .

The committed development flows forecast to be associated with this development are shown in **Figure 4.9.** These were calculated from traffic flows in the 2013 Vectos TA (Figs 6.7, 6.8, 6.13 and 6.14).

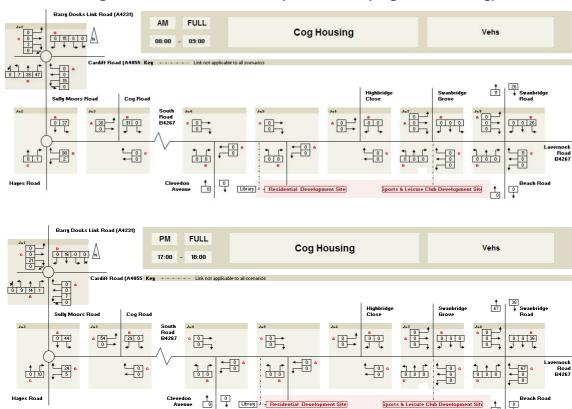


Figure 4.9 – Committed Development Flows (Cog Road Housing)

4.4. Trip Generation

Residential Houses - Privately Owned

Table 4.3 summarises the average residential trip rates that were extracted for the proposed development from the TRICS database. Weekday trip rates were extracted for 'Residential Houses – Privately Owned.' All UK regions were included except for Greater London. Only 'Neighbourhood Centre' surveys were included in the first instance as the development is located within a village and not part of a larger urban area such as a town or city. However, only 3 survey sites were available.

Table 4.3 – Vehicles – Average Trip Rates (Houses Privately Owned) – Neighbourhood Centre Only [Weekday]

	AM Peak 08:00-09:00			PM Peak 17:00-18:00			
	Arrivals	Departures	Two Way	Arrivals	Departures	Two-Way	
Trip Rate per Unit	0.098	0.260	0.358	0.316	0.189	0.505	
Trips Per 200 Units	20	52	72	63	38	101	

These trip rates are lower than those used in for the COG site by Vectos (included as committed development). As a sensitivity, TRICS rates were also extracted for 'Edge of Town' survey sites in addition to 'Neighbourhood Centre.' These are summarised in **Table 4.4** and are comparable to those used for other committed developments, such as those used for the COG housing site which were based on observed vehicular trips from an existing cul-de-sac in the vicinity to the development site.

Table 4.4 – Vehicles – Average Trip Rates (Houses Privately Owned) – Neighbourhood Centre / Edge of Town [Weekday]

AM Peak 08:00-09:00	PM Peak 17:00-18:00

	Arrivals		Two Way	Arrivals	Departures	Two-Way
Trip Rate per Unit	0.144	0.413	0.557	0.408	0.227	0.635
Trips Per 200 Units	29	83	111	82	45	127

These higher residential trip rates have been used to provide for a robust assessment. In TRICS, the PM Peak for traffic generated by residential development is 17:00-18:00. These worst-case flows have been applied to the local peak of 16:30-17:30.

Retail

The development proposals also include a 465m² retail unit. The exact type of retail unit is still to be confirmed and may comprise a mix of occupiers (for example a small pharmacy and a convenience store). For the purpose of this assessment, it has been assumed that the full retail GFA will comprise a 'Convenience Store' (A1 land use) as this is likely to provide a robust trip rate for the eventual retail mix. Trip rates were derived from TRICS for 'Edge of Town,' 'Neighbourhood Centre' and 'Suburban Area' sites, as summarised in **Table 4.5**. Sites in the UK, excluding greater London were used, with 11 sites forming the sample.

Table 4.5 - Average Trip Rates (Convenience Store) - Neighbourhood Centre / Edge of Town / Suburban Area [Weekday]

Vehicles	AM I	Peak 08:00-0	9:00	PM Peak 17:00-18:00			
vernicles	Arrivals	Departures	Two Way	Arrivals	Departures	Two-Way	
Trip Rate per 100 m ²	7.656	7.215	14.871	9.269	8.895	18.164	
Trips Per 465 m ²	36	34	69	43	41	84	

It is envisaged that the retail food-store will attract a lot of 'pass-by trips' i.e. those trips which are already present on the road network passing the site on journeys between other origins and destinations. If it is convenient, these drivers may stop off at this retail store as part of the trips that they were already making.

New residents of the housing development or visitors to the caravan park may also make 'linked trips. These are new development trips that will have multiple destinations. For example, new residents commuting to work may stop off at the convenience store to buy lunch on their way to work; or tourists may call in to buy some teabags on the way back to their caravan after a day out visiting local tourist attractions.

The current 'TRICS Research Report 14/1: Pass-By & Diverted Trips' guidance acknowledges that 'convenience stores are likely to produce pass-by trips'. Indeed, whilst now superseded, 'TRICS Research Report 95/2 Pass-By and Diverted Trips: A Resume' indicated that 'the proportion of trips generally accepted to be non-primary is 30%'.

The presence of a main distributor road (B4267 South Rd) adjacent to the store is likely to result in a significant amount of 'pass-by' and 'linked' vehicular trips. A convenience store is already present to the western side of Sully and so it is anticipated that this store will primarily serve the local residential catchment of residential streets on the eastern side of the settlement, in addition to patrons of the new and existing caravan parks.

To provide a robust assessment, it has been assumed that 30% of the retail store trips are 'pass by'. The current guidance does not provide guidance percentages to be associated with 'linked trips'. To provide a robust and consistent approach, it has been assumed that 30% of trips associated with the store are 'diverted trips'.

The revised primary trip rates and those for 'linked' and 'pass-by' trips are shown in Table 4.6.

Table 4.6 - Convenience Store Weekday Peak Vehicular Trips

Vehicles	AM I	Peak 08:00-0	9:00	PM Peak 17:00-18:00			
venicles	Arrivals	Departures	Two Way	Arrivals	Departures	Two-Way	
Primary trips (40%)	14	14	28	17	16	34	
Pass-by trips (30%)	11	10	21	13	12	25	
Linked trips (30%)	11	10	21	13	12	25	

Table 4.7 shows the anticipated movements to the retail store by sustainable modes based on TRICS rates. It demonstrates that the majority of trips will be made on foot. Overall, the forecast mode split in the AM and PM peak periods based on arrivals will be as follows;

- Car 39%
- Bike 3%
- Foot 58%

Table 4.7 - Convenience Store Weekday Peak Sustainable Trips

Mode	AM I	Peak 08:00-0	9:00	PM Peak 17:00-18:00			
Cyclists	Arrivals	Departures Two Way		Arrivals	Departures	Two-Way	
Trip Rate per 100 m ²	0.756	0.725	1.481	0.403	0.374	0.777	
Trips Per 465 m ²	4	3 7		2	2	4	
Pedestrians							
Trip Rate per 100 m ²	11.752	11.594	23.346	13.587	13.472	27.059	
Trips Per 465 m ²	55	54	109	63	63	126	

Caravan Park

The development proposals also include an allocation for up to 50 touring caravans. It is envisaged that the majority of trips associated with this aspect of the development will not occur in the weekday AM and PM peak periods. The tourists who use this site are more likely to arrive and depart on weekends, during school holidays or outside of weekday peak periods.

There are no appropriate survey sites for this aspect of the development included in the TRICS database. However, the July 2014 traffic survey data of the Beach Road / Swanbridge Road / B4267 South Road / B4267 Lavernock Road junction enables traffic forecast to be determined on a 'first principles' basis.

Beach Road is currently utilised as an access road for a few residential dwellings, a public house called 'The Captain's Table', the Spinney Park Holiday and Leisure Park,³ and Island View Caravan Park⁴. It is therefore envisaged that the majority of traffic utilising Beach Road would be associated with both caravan parks. Spinney Park Holiday and Leisure Park, and Island View Caravan Park each accommodate a total of 90 and 89 static caravans respectively.

For a robust assessment, the surveyed vehicles utilising Beach Road have been wholly attributed to the 179 static caravans therefore providing a trip rate associated with caravan use. This process is summarised in **Table 4.8**. For the purpose of capacity modelling, it has also been assumed that all of the AM Peak departures and PM Peak arrivals comprise 2 Passenger Carrying Units (PCUs) which are equivalent to a car. This is to provide a robust assessment by representing cars towing caravans.

³ http://www.spinneyholidaypark.co.uk/spinney

⁴ http://www.islandviewpark.co.uk/island-view

Table 4.8 - Vehicles - Average Trip Rates (Caravan Park) [Weekday]

	AM I	Peak 08:00-0	9:00	PM I	Peak 17:00-1	8:00
	Arrivals	Departures	Two Way	Arrivals	Departures	Two-Way
July 2014 Traffic Survey (Arm C - Beach Road)	17	24	41	51	30	81
No. of Vehicles / No. of Caravans (179) = (Trip rate per unit)	0.095	0.134	0.229	0.285	0.168	0.453
Trips Per 50 Units	5	7	11	14	8	23
PCUs (caravan towing)	`		19	28	8	36

Sports Site

It is assumed that the trips associated with the sports facilities will be unchanged from the existing situation given that the proposed provision is comparable to that existing. A localised reassignment of trips from the existing site access junction to the new access is required. The existing vehicular movements at the sports site access are summarised in **Table 4.9.** As identified in **Chapter 2** and **Appendix D** there are minimal traffic movements associated with the Sports and Leisure site during the weekday peak periods and in particular during the AM Peak as sports activities do not commence until 10am.

Table 4.9 – Existing Weekday Peak Movements at Existing Sports Site Access

		AM F	Peak 08:00-0	9:00	PM Peak 17:00-18:00			
		Arrivals	Departures	Two Way	Arrivals	Departures	Two-Way	
	Sports & Leisure Site	11	5	16	16	10	26	

Library Site

The library currently has limited opening times (Tues & Thurs 15:00-18:00 and Sat 09:00-13:00) and provides only a limited collection of books due to the small size of the prefabricated building in which it is accommodated. The site is within reasonable walking and cycling distance of the whole of the settlement and it is proposed that it will retain its existing site access arrangements. It is anticipated that library trips associated will be unchanged from those existing as there are no changes proposed to the size of the building or provision of car parking.

Total Vehicular Trips

Table 4.10 summarises the total vehicular trips forecast at each of the site access points.

Table 4.10 – Total Vehicular Trips [Weekday] (including Pass-By and Linked)

Land Use	AM I	Peak 08:00-0	9:00	PM Peak 17:00-18:00							
Land USE	Arrivals	Departures	Two Way	Arrivals	Departures	Two-Way					
Western Residential Site Vehicular Access											
200 Residential Units	29	83	111	82	45	127					
Total	29	83	111	82	45	127					
	Eastern	Sports, Retail	and Caravan	Site Access							
Sports Club*	11	5	16	16	10	26					
Convenience Store	36	34	69	43	41	84					
Caravan Site 5		7	11	14	8	23					
Total	53	50	101	77	60	138					

* Reassigned

4.5. Development Trip Distribution

4.5.1. Overview

The following text summarises the trip distribution assumptions which have been made for each land use. These resulting flows on the highway network are shown in the traffic flows diagrams included in **Appendix D.**

As many of the study junctions in proximity to the site serve existing dwellings, they provide a good indication of existing trip distributions for the residential component of the development. The surveyed flows to and from the existing site access junction are predominately linked to the sports and leisure club and therefore provide a good indication of distributions for these trips.

4.5.2. Residential Trips

Table 4.11 shows the existing baseline turning proportions at the junctions formed by Clevedon Avenue, Highbridge Close and Swanbridge Grove with South Road in the AM and PM Peak hours. These three junctions each primarily serve residential dwellings and therefore they provide a good indication of existing residential vehicular trip distributions. These distributions will be used for residential trips associated with the development.

Beyond these junctions initial junctions formed with South Road, trips will be distributed on the wider highway network in accordance with baseline turning proportions.

		AM Peak				PM Peak			
Residential Road	Arri	Arrivals		Departures		vals	Departures		
	West	East	West	East	West	East	West	East	
Clevedon Avenue	13	6	11	19	6	19	6	13	
Highbridge Grove	7	1	14	6	13	11	8	4	
Swanbridge Grove	1	1	1	3	3	3	3	1	
TOTAL	21	8	26	28	22	33	17	18	
Distribution	72%	28%	48%	52%	40%	60%	49%	51%	

Table 4.11 – Residential Distributions

4.5.3. Sports & Leisure Trips

As the sports and leisure facilities will remain on the western section of the site which currently accommodates them, it is not anticipated that there will be any change to the origins and destinations of trips associated with the use of these amenities. It is anticipated that trips generated from the adjacent residential development will be undertaken on foot or by bike.

4.5.4. Retail Trips

The retail trips are made up of Primary, Linked and Pass-By Trips. It is assumed that all of these will pass through the new vehicular access junction formed with South Road which will connect to the parking area adjacent to the store. However, only the primary trips are distributed on the wider network as the linked and pass-by trips are already present at other junctions. The retail trips are confined to the junctions formed by Clevedon Avenue and Beach Road with South Road as the store will only serve a local 'convenience' catchment and it is not envisaged that vehicular traffic will be attracted from the wider highway network (there is already a convenience store serving the west of the settlement).

4.5.5. Caravan Park Trips

As Beach Road currently serves existing caravan sites, it has been assumed that the same turning proportions that were observed at this junction in the traffic surveys provides a good indication of likely movements by tourists using the new caravan park. The vehicular trips associated with this site have therefore been distributed to and from the west, north and east in accordance with the surveyed flows at the South Road / Beach Road / Swanbridge Road

junction. These movements and turning proportions are summarised in **Table 4.12.** Any trips to and from the west have then been distributed in accordance with baseline turning proportions once they reach the Cog Road junction.

Table 4.12 - Trip Distribution, Caravan Park Site

			M			PM						
	Arrivals			De	partur	es	Arrivals			Departures		
	West	North	East	West	North	East	West	North	East	West	North	East
Baseline Flows	12	2	4	16	0	8	21	1	24	13	1	14
Turning Proportions	67%	11%	22%	67%	0%	33%	46%	2%	52%	46%	4%	50%
Development Flows	3	1	1	5	0	2	6	0	7	4	0	4
TOTAL		5		7			14			8		

4.6. Traffic Growth

The traffic survey at the Cardiff Road / Sully Moors Road was undertaken in 2012, with the surveys at the remaining junctions were undertaken in 2014 and 2015. The Tempro adjusted NTM growth factors identified in **Table 4.13** have been applied to the survey data to equalise baseline flows to 2015. The growth rates were derived for an average day, for car drivers using The Vale of Glamorgan local growth figure.

Table 4.13 – Tempro / NTM Growth Factors Applied

	Junction	Year of Survey	Growth Factor Applied
1	Sully Moors Road / Cardiff Road	2012	1.0187
2	Sully Moors Road / Hayes Road	2015	-
3	Cog Road / South Road333	2015	-
4	Clevedon Ave / South Road	2014	1.0048
5	Existing Site Access / South Road	2014	1.0048
6	Highbridge Close / South Road	2014	1.0048
7	Swanbridge Grove / South Road	2014	1.0048
8	Swanbridge Road / South Road / Beach Road	2014	1.0048

The Sports and Leisure facilities will be completed before work commences on the residential development. It is envisaged that the residential development will be completed between 2021 and 2023. The caravan park is not anticipated to open before the sports and leisure facilities are operational.

The traffic impact modelling will consider the residential Opening Year of 2023 and also a Design Year of 2028 (5 years). The following scenarios will be tested, initially to show percentage impact;

- 2023 (Opening Year): No Development (Base + Committed traffic flows)
- 2023 (Opening Year): With Development (Base + Committed + Development traffic flows)
- 2028 (Design Year): No Development (Base + Committed traffic flows)
- 2023 (Design Year): With Development (Base + Committed + Development traffic flows)

Where a percentage impact of 3% is forecast, full capacity modelling of the junction will be undertaken in accordance with the Scoping comments received from the VoGC.

Table 4.14 summarises the Tempro adjusted NTM growth rates that have been used to factor base traffic to the Opening (2023) and Design (2028) Years. Applying both traffic growth factors

and adding committed development introduces an element of double counting as part of the growth will come from future development comprising both this development and other committed developments. The forecast traffic flows in the Opening and Design Year therefore represent a 'worst case scenario' as they overestimate traffic demand and can be assumed to be very robust.

Table 4.14 - Opening and Design Year Traffic Growth Factors

Period of Growth	Factor Used
2015 - 2023	1.1168
2015 - 2028	1.1974
2023 - 2028	1.0721

5. Traffic Impact Assessment

5.1. Overview

This section of the TA presents an assessment of the likely impact of the development proposals on the local highway network. Modelling has been undertaken for the weekday AM and PM peak periods. No weekend modelling has been undertaken as trip generation associated with the new land uses on the site will be of a lower magnitude than on weekdays. Whilst the Sports and Social Club is likely to have the highest trip demand on a weekend, this is an existing use and these trips are already accommodated on the local highway network.

5.2. Traffic Impact

Table 5.1 sets out the calculated traffic impact at each of the study junctions. Where traffic increases more than 3%, the Vale of Glamorgan have requested that a full capacity assessment is undertaken. Modelling is therefore required for all junctions, except for the McDonald's Roundabout (Junction 1 - A4231 (Barry Docks Link Road) / B4267 (Sully Moors Road) / A4055 (Cardiff Road)) where the traffic impact is forecast to be just 1%.

Table 5.1 - Study Junctions Total Flow Through Junction (PCUs)

	Α	AM Peak Hour (08:00-09:00)						PM Peak Hour (16:30-17:30)				
		2023		2028		2023			2028			
Junction	No Dev	With Dev	% Impact	No Dev	With Dev	% Impact	No Dev	With Dev	% Impact	No Dev	With Dev	% Impact
Jct 1 - A4231 (Barry Docks Link Rd) / B4267 (Sully Moors Rd) / A4055 (Cardiff Rd)	4559	4612	1%	4847	4901	1%	4320	4369	1%	4591	4640	1%
Jct 2 - B4267 (Sully Moors Rd / South Rd) / Hayes Rd	2118	2187	3%	2258	2327	3%	1697	1763	4%	1809	1875	3%
Jct 3 - B4267 (South Rd) / Cog Rd	1945	2018	4%	2072	2145	3%	1452	1523	5%	1547	1617	4%
Jct 4 - B4267 (South Rd) / Cleveland Av	1401	1487	6%	1498	1583	5%	1344	1434	6%	1437	1527	6%
Jct 5 - South Rd / Existing Site Access Junction	1390	1518	9%	1486	1614	8%	1336	1490	11%	1429	1583	10%
Jct 6 - South Rd / Highbridge Cl	1389	1464	5%	1485	1560	5%	1333	1450	8%	1425	1542	8%
Jct 7 - South Rd / Swanbridge Grove	1366	1514	11%	1461	1608	10%	1308	1519	16%	1398	1609	15%
Jct 8 – B4267 / Beach Rd / Swanbridge Rd Crossroads	1505	1578	5%	1605	1678	4%	1499	1605	7%	1595	1702	6%

5.3. Junction Capacity Modelling

5.3.1. Overview

Capacity modelling has been undertaken using TRL Junctions software (all junctions have been modelled utilising PICADY, with the exception of Junction 2 (roundabout) which has been modelled using ARCADY.

5.3.2. Modelling Assumptions

At the time of writing, the geometrical parameters of Junction 7 (South Road / Swanbridge Grove / Sports and Leisure Proposed Access) has not been finalised. It has been modelled as a Right-Left stagger incorporating Swanbridge Grove, assuming it will comprise a single lane.

All junctions were modelled in the AM and PM peak periods for the 'Opening' and 'Design Years'. The 'One Hour' flow profile has been used to provide a robust assessment, as this creates a 'peak within a peak' during the modelled hour, rather than assuming a flat profile of arrivals at the junction.

5.3.3. Capacity Modelling Results

The results are summarised in **Tables 5.2** and **5.3**. The Ratio of Flow (RFC) value is used to determine whether traffic demand can be accommodated by the capacity of a junction. It is industry standard to use an RFC value of 0.85 as the threshold for indicating when delays are likely to start to be manifest due to demand approaching the theoretical capacity of the junction. The Level of Service (LOS) rating has also been included from the Highway Capacity Manual. This rates the performance of the junction from A (being the best – free flow) to F (congested). The maximum queue length is also shown (PCU).

PM Peak Hour (16:30-17:30) AM Peak Hour (08:00-09:00) With Dev With Dev No Dev No Dev **Junction** Queue Max Queue Max Queue Max Queue RFC RFC RFC LOS LOS LOS Max LOS Jct 2 - B4267 (Sully Moors Rd / South Rd) / 0.52 1.07 0.53 Α 1.12 0.39 Α 0.65 0.41 Α 0.70 Hayes Rd Jct 3 - B4267 (South 0.99 F 4.65 1.07 5.98 0.40 0.66 0.73 F C 0.43 C Rd) / Cog Rd Jct 4 - B4267 (South 0.11 В 0.13 0.12 В 0.14 0.08 В 0.09 0.09 В 0.09 Rd) / Cleveland Av Jct 5 - South Rd / **Existing Site Access** 0.02 Α 0.03 0.20 C 0.25 0.04 Α 0.06 0.15 Α 0.41 Junction Jct 6 - South Rd / 0.07 0.09 0.05 80.0 C 0.08 0.08 C Α 0.07 0.05 Α Highbridge Cl Jct 7 - South Rd / Swanbridge Grove / 0.00 Α 0.00 0.17 В 0.21 0.01 Α 0.01 0.20 В 0.25 Sports & Leisure **Proposed Access** Jct 8 - B4267 / Beach 0.22 0.28 0.23 0.30 0.23 0.30 0.24 0.31 Rd / Swanbridge Rd Α B Α B Crossroads

Table 5.2 – Junction Capacity Modelling 2023 Opening Year

For each junction the arm with the worst RFC and corresponding LOS and Max Queue are shown in **Tables 5.2** and **5.3**. Where capacity issues are forecast, further analysis is provided in

the following text on the arms and movements which are over capacity at these junctions. The junction modelling output can be found in **Appendix E**.

The only junction that is forecast to exceed its theoretical capacity (RFC >0.85) in 2023 and 2028 is Junction 3, (B4267 South Road / Cog Road priority junction). This junction is forecast to exceed capacity in all AM Peak scenarios;

No capacity issues were forecast to occur in the PM Peak hour (16:30-17:30).

The results of the capacity modelling at this junction are similar to those presented by Vectos in their COG Housing TA (*Table 7.8, December 2013*). They assumed that 40% of the trips generated by the COG site would be distributed on to Cog Road to the junction formed with South Road. Overall the trips associated with the COG site account for 6.4% of the forecast traffic through this junction, compared to the 3.5% forecast to be associated with the Sully Sports and Leisure site development.

Table 5.3 – Junction Capacity Modelling 2028 Design Year

AM Peak Hour (08:00-09:00)

PM Peak

	AM Peak Hour (08:00-09:00)					PM Peak Hour (16:30-17:30)						
	No Dev		W	With Dev		No Dev			With Dev			
Junction	RFC	SOT	Max Queue	RFC	SOT	Max Queue	RFC	SOT	Max Queue	RFC	SOT	Max Queue
Jct 2 - B4267 (Sully Moors Rd / South Rd) / Hayes Rd	0.56	А	1.26	0.57	А	1.31	0.42	А	0.72	0.44	А	0.78
Jct 3 - B4267 (South Rd) / Cog Rd	1.17	F	8.18	1.27	F	10.42	0.45	С	0.81	0.48	D	0.91
Jct 4 - B4267 (South Rd) / Cleveland Av	0.13	В	0.15	0.15	С	0.17	0.09	В	0.10	0.10	С	0.11
Jct 5 - South Rd / Existing Site Access Junction	0.02	А	0.03	0.22	С	0.28	0.05	А	0.08	0.16	А	0.48
Jct 6 - South Rd / Highbridge Cl	0.09	С	0.09	0.09	С	0.10	0.05	А	0.08	0.06	А	0.09
Jct 7 - South Rd / Swanbridge Grove / Sports & Leisure Proposed Access	0.01	С	0.01	0.18	В	0.22	0.02	С	0.02	0.22	С	0.27
Jct 8 – B4267 / Beach Rd / Swanbridge Rd Crossroads	0.24	В	0.31	0.25	В	0.32	0.24	В	0.32	0.25	В	0.32

5.3.4. Junction 3 - B4267 (South Road) / Cog Road Priority Junction

The modelling presented in the preceding tables includes both committed development and a traffic growth factor (applied to the baseline flows). As identified in Chapter 4, this is a robust approach which includes an element of 'double counting' which serves to overestimate future traffic demand, representing a 'worst case' scenario.

Furthermore, the modelling has only considered movements at the 3 arm priority formed between Cog Road and South Road. However, as shown in **Figure 5.1**, a second priority junction is present immediately to the east via a section of carriageway in front of a church graveyard which effectively forms a bypass of the junction.

Cog Road Alternative Route Junction South Road Modelled

Figure 5.1 - South Road / Cog Road Junction Arrangement

Imagery © 2014 The GeoInformation Group. Map data © 2014 Google

Table 5.4 presents the results of a sensitivity test which omits the traffic growth factor, but retains the other committed development trips. The results indicate that when the double counting is omitted, the RFC for the AM scenarios is restored to within the 0.85 threshold of theoretical capacity with more manageable maximum queue lengths.

Table 5.4 – Junction 3 Capacity Modelling Opening & Design Year

	AM Peak Hour (08:00-09:00)					PM Peak Hour (16:30-17:30)						
		Dev / I			With Dev / No Growth		No Dev / No Growth			With Dev / No Growth		
Junction	RFC	SOT	Max Queue	RFC	SOT	Max Queue	RFC	SOT	Max Queue	RFC	SOT	Max Queue
Jct 3 - B4267 (South Rd) / Cog Rd	0.78	F	3.17	0.84	F	4.05	0.34	С	0.51	0.36	С	0.55
		Su	mmar	y of Ca	pacity	for eac	h arm					
Cog Road left turn	0.28	С	0.37	0.38	D	0.58	0.07	A	0.08	0.08	Α	0.09
Cog Road right turn	0.78	F	3.17	0.84	F	4.05	0.34	С	0.51	0.36	С	0.55
South Road (east) ahead	0.12	А	0.28	0.13	А	0.34	0.18	А	0.50	0.20	А	0.57

The results shown in Table 5.4 are felt to represent a more realistic scenario of future traffic demand. The highest RFCs in the AM Peak were forecast for movement B-A which is the opposed right turn from Cog Road to the B4267 South Road west. Approximately half of the

vehicles making this movement are baseline traffic flows and half are committed trips associated with the Cog Road residential development.

If capacity issues begin to be manifest at this junction, it is likely that traffic travelling between Cog Road and South Road (east) will reassign to the alternative route past the church, hence freeing up capacity at the main priority junction.

It is noted that whilst the provision of 350 units has been applied for through the planning application process on the Cog Road site, the proposed allocation for the site is 500 dwellings. Should future applications come forward for additional residential development, effective mitigation could be achieved at this junction using the available land within the highway boundary. For example, there is sufficient highway land available to increase the flare length for turning movements from Cog Road, or to formalise the use of the alternative route running past the church.

Based on the committed development proposals to date, it is not considered that any mitigation measures are required and the Sully Sport and Leisure development traffic can be accommodated without significant impact on the operation of this junction.

6. Summary & Recommendations

6.1. Overview

This TA has been prepared in support of the proposed redevelopment of the Sully Sports and Leisure site to provide up to 200 houses, a 50 pitch caravan park, local convenience store and reprovided sports facilities including a clubhouse with a function room and changing facilities. The development is expected to be completed between 2021 and 2023.

The report included;

- An audit of existing transport provision and conditions in the vicinity of the site and has
 demonstrated that the site is highly accessible by sustainable modes being located adjacent to
 the key bus corridor through the settlement and a shared use path linking to the wider footway
 and cycleway network in the village and connecting to surrounding settlements,
- A review of relevant planning policy which seeks to integrate transport and land use and to
 maximise the use of sustainable travel modes. The development will comprise a mixed use of
 complimentary uses. The new residential units will support existing bus services on South
 Road. Whilst the new retail provision will provide amenity to new residents, the caravan park
 and existing residents in the local neighbourhood and users of the existing caravan parks.
- Details of the engagement that has been undertaken with the local community through the Public Consultation exercise. The concerns relating to parking demand, highway capacity and continuing access to the coastal path have been alleviated through; the provision of adequate on-site parking; a robust traffic impact assessment; and, reassurance that sufficient land will be reserved to maintain the coastal path is coastal erosion occurs.

6.2. Key Findings and Recommendations

The TA has included a detailed and robust traffic impact assessment encompassing 8 study junctions which were identified as part of the scoping discussions with VoGC.

In accordance with the agreed scope, junction capacity modelling has been undertaken using industry standard software at 7 of the 8 junctions where the percentage impact of the development traffic was forecast to be 3% or greater. This modelling was undertaken for the 2023 Opening and 2028 Design Years using a 'worst case' approach which provides for a robust assessment. It showed that all junctions have sufficient spare capacity to accommodate the forecast levels of development traffic, with the exception of the priority junction formed between Cog Road and South Road.

A sensitivity test was undertaken which removed the 'double counting' which was inherent in the worst case methodology used which forecast junction operation within its theoretical capacity, with manageable queue lengths. Furthermore, the modelling undertaken focused solely on the main priority junction formed between Cog Road and South Road. A secondary junction is present 50m from the main junction, which will provide additional capacity.

No junction improvements are therefore considered necessary at the Cog Road / South Road junction.

Several measures have been identified in the Transport Implementation Strategy in **Appendix A** to effectively mitigate the impacts of the proposed development on the surrounding highway network, comprising;

- Travel Plans for each of the 3 main land uses on site,
- A Construction Traffic Management Plan to limit disruption during works on-site,
- A Parking Management Strategy to avoid queues blocking back on to the surrounding highway,

Application for a TRO for parking restrictions on South Road along the site frontage to prevent
any parking demand over spilling on to surrounding streets (eg. parking linked to convenience
store customers).

Overall, it is felt that this package of mitigation measures are both proportionate and adequate to enable the proposed development to proceed, without causing any undue impacts to the surrounding highway network. There are therefore no considered to be any highway grounds to recommend refusal for this application.

Appendices

Appendix A. Transport Implementation Strategy

A.1. Introduction

Technical Advice Note (TAN) 18: Transport, indicates that the transport assessment process should include the production of a Transport Implementation Strategy (TIS). The TIS should set objectives and targets relating to managing travel demand for the development and set out the infrastructure, demand management measures and financial contributions necessary to achieve them.

A.2. Framework Travel Plan

For the proposed development, the primary mechanism for managing travel demand is via a Travel Plan. A framework plan has been produced which will inform the production of full plans for each of the three main land use once the site becomes operational. The residential, sports and caravan sites will each have very different travel demand profiles and will therefore need to be covered by individual travel plans. However, given the proximity of these land uses and the shared access in the case of the latter two, it is important that there is coordination and cooperation to effectively manage periods of peak demand and to collaborate on initiatives which have wider benefits.

An overarching Framework Travel Plan has been produced and is accompanies this application. This includes the following overarching aims;

- Mitigate against potential traffic and transportation impacts from the proposed development,
- Ensure integration of the proposed developments within their local context; and,
- Influence the travel behaviour of all users of the site away from use of the private car, particularly for single occupancy use.

The following initiatives are proposed for each of the land uses;

Sports and Leisure Site

- Promote the use of minibuses for use by visiting sports teams and their supporters,
- Ensure changing and locker facilities are made available to staff to encourage them to cycle to work,
- Provide travel information on their website and in literature which also provides details of provision for bike parking on site, etc,
- A travel information board for sports club users,
- Staggered events which spread traffic demand and avoids generating movements during peak hours on the surrounding highway network.

Residential Site

- Provision of a travel information pack for new residents, including details of local bus services, car sharing schemes, grocery delivery options, high speed broadband providers, etc,
- Provide a map showing local cycle and pedestrian provision and how this links to local amenities such as shops and schools,
- Promotion of opportunities to use sustainable modes by sales staff in the on-site showhome and in sales literature, with the opportunity to provide personalised travel planning to new residents using existing web-based tools.

Caravan Site

- Provide signposting within the site to key destinations on-site (e.g. fingerpost signs to local pub, local shop, etc),

- Include a welcome pack which provides information of sustainable travel options to key local tourist destinations.

Funding will be provided (via a S106 agreement as part of the planning permission) for the delivery of the residential travel plan from first occupation.

The sports and caravan park land uses will be responsible for managing the implementation of their own travel plans as part of their overall operation of activities.

A.3. Construction Traffic Management Plan

Further traffic management measures required for the site will include a Construction Traffic Management Plan (CTMP) which it is expected will form a planning condition. This will be prepared in collaboration with the appointed contractor and will cover the following;

- Proposed routing for construction traffic and delivery vehicles,
- Any temporary access arrangements,
- Details of wheel cleaning / washing facilities (to prevent mud and other material from migrating on to the adjacent highway),
- Use of appropriately trained, qualified and certificated banksmen for managing movements of HGVs.
- Proposed compound arrangements for construction worker parking,
- Before work commencement highway condition survey,
- Strategy for liaising with local residents throughout the construction process,
- Details of times for construction traffic and delivery vehicles (which will be kept outside of network peak and school peak periods).

All construction traffic will be routed to the site via South Road, with no HGVs using Beach Road.

A.4. Parking Management Strategy

The Sports and Leisure site has c.275 car parking spaces. The magnitude of provision has been determined to prevent any demand over-spilling on to the surrounding highway network, thus internalising all of this parking on-site. The existing site has c.150 car parking spaces, so the proposed increase in provision is c.125. This reflects opportunities at the existing site for over-spill parking to use some of the grassed areas which are not part of the marked pitches at present, which will no longer be possible for the new site layout.

It also includes provision for the retail unit. Approximately 24 spaces are provided adjacent to the retail building. Seventeen of the proposed spaces on site will be designated for disabled users. Ample cycle parking will also be provided in convenient and secure locations throughout the site.

The following measures are proposed to manage car parking;

- Retail parking provision is to be appropriately signed and legible. Approximately 24 spaces will
 be provided for use by customers and staff. Potential controls may need to be introduced, such
 as limits on periods of parking to prevent use by other site users. For example a 2 hour limited
 waiting period could be used and this can be managed by a private company. The occupier of
 the retail unit will be responsible for arranging appropriate management in accordance with their
 needs.
- Retail deliveries will be timed where possible to avoid peak periods on the local highway network
 and to avoid any peak periods of demand for the retail store, particularly by HGVs. Deliveries will
 also be scheduled to avoid being on-site at the same time as refuse collections are scheduled,
- The sports site, through the Travel Plan, will schedule sporting events in order to distribute travel
 demand over the course of the day where possible and to try to avoid vehicle movements being
 generated during local peak periods. When large events are being hosted (for example a
 summer open day), parking wardens will be used to direct cars to areas of the site with available

provision to prevent queues of vehicles looking for spaces from queuing back on to South Road. In these instances, the one-way system which is currently used to manage the car boot sale traffic may be used (access via South Road and egress via Beach Road gated access).

During periods of high traffic demand at the Sports and Leisure site, management measures will
need to be put into place to ensure that parking only occurs in designated marked spaces and no
ad-hoc parking occurs in other areas. This is especially important as access to the caravan park
will be via the car park and therefore the access road needs to be kept clear at all times to
enable vehicles towing caravans to manoeuvre safely. Furthermore refuse vehicle collections
where possible should be scheduled to occur outside of peak times of movement associated with
the sports site or caravan site.

A.5. Mitigation Measures & Obligations

The TA has demonstrated that all of the junctions in the vicinity of the site are able to accommodate the additional traffic associated with the proposed development site. The South Road / Cog Road junction which is shown to be operating close to capacity in the AM Peak, although the proposed development is forecast to add minimal trips on to this junction (circa 3%), with other committed developments significantly increasing traffic demand at this junction. It is therefore considered that no junction improvements are required as a result of traffic generated by the proposed development at the Sports and Leisure club site.

The developer of the Sports and Leisure site is prepared to implement the following package of mitigation measures associated with potential impacts from the development;

- Provision of parking restrictions on the southern side of South Road (through a TRO) to prevent any on-street parking which could impact on visibility splays,
- Provision of a new uncontrolled pedestrian crossing point in proximity to the retail store /
 Sports and Leisure site access to facilitate access to and from the footway on the northern
 side of the site (arrangement and alignment to be agreed in discussion with the Local
 Highway Authority),
- Provision of cycle parking at the existing library site as part of the works to stop up the
 existing access road to the existing Sports and Leisure facilities.

It is envisaged that provision of these measures will form planning conditions and be delivered via S278 and S106 obligations.

Appendix B. Personal Injury Accident Data



SEVERITY District The Vale of Glamorgan		Sully	Area	Grid Reference 314891 / 168304				
SLIGHT Ref.No 0199029								
5EIGIT				Police Officer Attend: Yes				
Date 19/03/2010 Day Friday Time 08:20	Road [J Location Sullymoors Road, S	Sully, Vale of Glamorgan					
Time 08:20 Weather Fine without high winds								
Road Surface Dry			rs Road. V2 Stopped Due to Stationary Tra	ffic, V1 Failed to Stop and Collided with Rear of V2.				
Street Lighting Daylight	of Accid	lent						
SITE DETAILS	ı							
Speed Limit 30 MPH		SPECIAL SITE CONDITIONS						
Carriageway Roundabout		None						
Junction Detail Roundabout								
Junction Control Give way or uncontrolled		CARRIAGEWAY HAZARDS						
2nd Road Number U								
Pedestrian Facilities None within 50 metres		None						
No physical crossing facility wi	thin 50 m							
VEHICLES INVOLVED 2		<u> </u>	CASUALTIES INVOLV	ED 2				
Veh.No. 1 Vehicle type Car		Make Model	Cas No 1 Cas Class Driver o	r Rider Veh ref No 2				
Manoeuvre Going ahead other			Severity SLIGHT Age 55 y					
	owing? No	o tow or articulation		Car Passenger? Not a passenger PSV Passenger? Not a passenger				
Skidded No skidding, jack-knifing or overturning			Seat Belt Unknown	Cycle Helmet				
Veh location at impact (restricted lane) On main carriag		in restricted lane	Ped Movement Not applicable					
Junct. location of veh. at 1st impact Leaving rounda	bout		Ped Location Not applicable	Ped Location Not applicable Ped Direction to Not applicable				
Veh left carriageway? Did not leave carriageway								
Hit object in c'way? None Hit object off c'way? None			School Pupil Other					
First point of impact Front			Roadworker injured	***				
Veh registration no. Other veh.hit (ref.	no) 2	Hit and run Not hit and r	Cas No 2 Cas Class Passenge					
Drivers age 17 yrs Sex Male Breath test Not	requested	Driving Lic	Severity SLIGHT Age 13 y					
Left Hand Drive Unknown Foreign veh. Not	foreign reg	gistered vehicle		nger PSV Passenger? Not a passenger				
Journey purpose Taking pupil to/from school			Seat Belt Unknown	Cycle Helmet				
Veh.No. 2 Vehicle type Car		Make Model	Ped Movement Not applicable Ped Location Not applicable					
Manoeuvre Slowing or stopping	vrsima O DT		Ped Direction to Not applicable					
		o tow or articulation	School Pupil Yes on way to or	from school				
Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) On main carriage	seway not	in restricted lane	Roadworker injured					
Junct. location of veh. at 1st impact Leaving rounda		in restricted fanc	Other Details					
Veh left carriageway? Did not leave carriageway								
Hit object in c'way? None								
Hit object off c'way? None								
First point of impact Back								
Veh registration no. Other veh.hit (ref.		Hit and run Not hit and r	un					
Drivers age 55 yrs Sex Female Breath test Not Left Hand Drive Unknown Foreign veh. Not		Driving Lic						
Left Hand Drive Unknown Foreign veh. Not Journey purpose Taking pupil to/from school	roreign re	gistered vehicle						
Taking pupit to/from school								
Full Details		08-	June-2015	Accident Ref.No 0199029				

SEVERITY District The Vale of Glamorgan Ref.No 0199258 Date 29/03/2010 Day Monday		Sully Area	Grid Reference 314930 / 169350 Police Officer Attend: Yes
Time 20:32 Weather Fine without high winds Road Surface Wet/Damp Street Lighting Dark: street lights present and lit SITE DETAILS Speed Limit 30 MPH Carriageway Junction Detail Single carriageway Not at or within 20 metres of junction Control 2nd Road Number	of Accident SPECIAL SITE COND None	t Carriageway and Collided with Tree	
Pedestrian Facilities None within 50 metres No physical crossing facility with VEHICLES INVOLVED 1	thin 50 m	CASHAI	LTIES INVOLVED 2
Skidded Veh location at impact (restricted lane) On main carriag Junct. location of veh. at 1st impact Not at or within Veh left carriageway? Left carriageway nearside Hit object in c'way? None Hit object off c'way? Tree First point of impact Offside Veh registration no. Drivers age 22 yrs Sex Male On main carriage Non at or within Not at or wi	wing? No tow or articulation geway not in restricted lane 20m of junction	Severity SERIOUS Car Passenger? Not Seat Belt Under Ped Movement Not Not hit and run Severity SERIOUS Seat Belt Under Ped Movement Not Not School Pupil On Roadworker injured Cas No 2 Cas Con Severity SLIGHT Car Passenger? From Seat Belt Under Ped Movement Not Ped Location Not Ped Direction to Not Not Severity SLIGHT	ot a passenger PSV Passenger? Not a passenger Cycle Helmet of applicable of applicable of applicable ther Class Passenger Veh ref No 1 Age 20 yrs Sex Female Post code ront seat passenger PSV Passenger? Not a passenger nknown Cycle Helmet of applicable of applicable
Full Details		08-June-2015	Accident Ref.No 0199258

Weather Fine without high winds Road Surface Dry	Sully Are Road B4267 Location B4267 South Road June Description V1 Has Entered Road Attempting to 0 of Accident	Police Officer Attend: Yes				
SITE DETAILS Speed Limit Carriageway Junction Detail Junction Control 2nd Road Number Pedestrian Facilities No physical crossing facility within	SPECIAL SITE CONDITIONS None CARRIAGEWAY HAZARDS None					
VEHICLES INVOLVED 2 Veh.No. 1 Vehicle type Van/Goods < 3.5t	Make Model	CASUALTIES INVOLVED 3 Cas No 1 Cas Class Driver or Rider Veh ref No 1				
Manoeuvre Going ahead other Veh. direction from North to South Towin Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) On main carriagewa Junct. location of veh. at 1st impact Entering main road Veh left carriageway? Left carriageway nearside Hit object in c'way? None Hit object off c'way? Road sign/traffic signal First point of impact Front	g? No tow or articulation ay not in restricted lane	Severity SLIGHT Age 28 yrs Sex Male Post code Car Passenger? Not a passenger PSV Passenger? Not a passenger Seat Belt Unknown Cycle Helmet Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable School Pupil Other Roadworker injured				
Veh registration no. Drivers age 28 yrs Sex Male Left Hand Drive Unknown Journey purpose Other Veh.No. 2 Vehicle type Car Manoeuvre Going ahead other	e Driving Lic eign registered vehicle Make Model g? No tow or articulation	Cas No 2 Cas Class Passenger Veh ref No 1 Severity SLIGHT Age 31 yrs Sex Female Post code Car Passenger? Not a passenger PSV Passenger? Not a passenger Seat Belt Unknown Cycle Helmet Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable School Pupil Other Roadworker injured				
Junct. location of veh. at 1st impact Mid junction - on rovel left carriageway? Left carriageway offside Hit object in c'way? None Hit object off c'way? None First point of impact Front Veh registration no. Drivers age 19 yrs Sex Male Mid junction - on rovel in pact of the pack of the pac	oundabout or main road 1 Hit and run Not hit and run	Cas No 3 Cas Class Driver or Rider Veh ref No 2 Severity SLIGHT Age 19 yrs Sex Male Post code Car Passenger? Not a passenger PSV Passenger? Not a passenger Seat Belt Unknown Cycle Helmet Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable School Pupil Other Roadworker injured				
Full Details	08-June	e-2015 Accident Ref.No 0214371				

Other Details

Full Details 08-June-2015 Accident Ref.No 0214371

SEVERITY District The Vale of Glamorgan	Sully Are	ea	Grid Reference 314510 / 169150
SLIGHT Ref.No 0214641			Police Officer Attend: Yes
Date 12/02/2012 Day Sunday Time 21:30 Weather Fine without high winds Road Surface Wet/Damp Street Lighting Dark: street lights present and lit SITE DETAILS	Road A4055 Location A4055, Cardiff Round R Description as V2 in Process of Negotating Round of Accident Causing it to Spin.	•	oundabout. Front of V2 Has Clipped Rear Offside of V1
Speed Limit 40 MPH Carriageway Roundabout Junction Detail Roundabout	SPECIAL SITE CONDITIONS None		
Junction Control 2nd Road Number Pedestrian Facilities A4231 None within 50 metres No physical crossing facility with	CARRIAGEWAY HAZARDS None		
VEHICLES INVOLVED 2		CASUALTIES INVOLVE	D 1
Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) On main carriage Junct. location of veh. at 1st impact Mid junction - or Veh left carriageway? Did not leave carriageway Hit object in c'way? None Hit object off c'way? None First point of impact Offside Veh registration no. Drivers age 18 yrs Sex Female Left Hand Drive Unknown Foreign veh. Not for Journey purpose Other Veh.No. 2 Vehicle type Car	o) 2 Hit and run Not hit and run	Cas No 1 Cas Class Passenger Severity SLIGHT Age 26 yr Car Passenger? Rear seat passeng Seat Belt Unknown Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable School Pupil Other Roadworker injured Other Details	
Veh. direction from North to South Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) On main carriage Junct. location of veh. at 1st impact Mid junction - or Veh left carriageway? Did not leave carriageway Hit object in c'way? None Hit object off c'way? None First point of impact Front Veh registration no. Drivers age 28 yrs Sex Male Tov Mid junction - or Mid junction - or Mid junction - or Mid junction - or Other veh.hit (ref.n. Breath test Negati	n roundabout or main road o) 1 Hit and run Not hit and run		

SEVERITY District The Vale of Glamorgan Ref.No 0214825		Sully Area	Grid Reference 314610 / 168710 Police Officer Attend: Yes
Date 22/02/2012 Day Wednesday Time 12:15 Weather Principles of the color of the col	Road U Location Su	illy Moors Road, Barry	
Weather Raining without high winds Road Surface Wet/Damp Street Lighting Daylight	Description V1 Failed to Bra	ake in Time and Collided with Rear of V	72.
SITE DETAILS Speed Limit Carriageway Junction Detail Junction Control 2nd Road Number Pedestrian Facilities Single carriageway T or staggered junction Give way or uncontrolled U None within 50 metres No physical crossing facility w	SPECIAL SITE CO None CARRIAGEWAY F None		
Skidded Skidded Veh location at impact (restricted lane) On main carria Junct. location of veh. at 1st impact Approaching junct. location of veh.	Make owing? No tow or articulation geway not in restricted lane unction or waiting	Model Cas No 1 Severity SLIC Car Passenger? Seat Belt Ped Movement Ped Location	PSV Passenger? Not a passenger Unknown Cycle Helmet Not applicable Not applicable Other
Journey purpose Other Veh.No. 2 Vehicle type Van/Goods < 3.5t Manoeuvre Turning right Veh. direction from South to East Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) On main carriad Junct. location of veh. at 1st impact Approaching juttle Veh left carriageway? Did not leave carriageway Hit object in c'way? None Hit object off c'way? None First point of impact Back Veh registration no. Other veh.hit (restricted lane) Drivers age 46 yrs Sex Male Breath test Neg	pative Driving Land Foreign registered vehicle Make Owing? No tow or articulation g geway not in restricted lane unction or waiting Eno) 1 Hit and ru	Cas No 2 Severity SLIC Car Passenger? Seat Belt Ped Movement Ped Location Ped Direction t School Pupil Roadworker in Other Details	Cas Class Passenger Veh ref No 2 GHT Age 58 yrs Sex Male Post code ? Not a passenger PSV Passenger? Not a passenger Unknown Cycle Helmet t Not applicable Not applicable to Not applicable Other

SEVERITY District The Vale of Glamorgan SLIGHT Ref.No 0215177	Sully Area	Grid Reference 313950 / 168860
SLIGITI Rem to 0213177		Police Officer Attend: Yes
Date 07/03/2012 Day Wednesday Time 09:00	Road A4055 Location A4055 Cardiff Road, Barry	
Weather Fine without high winds Road Surface Wet/Damp Street Lighting Daylight	Description V1 Turned right into Mot Servicing Station and Collided with V2. of Accident	
SITE DETAILS Speed Limit Carriageway Junction Detail Junction Control 2	ction SPECIAL SITE CONDITIONS None CARRIAGEWAY HAZARDS	
2nd Road Number Pedestrian Facilities None within 50 metres No physical crossing facility wi	None None	
VEHICLES INVOLVED 2	CASUALTIES INV	VOLVED 1
Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) On main carriag Junct. location of veh. at 1st impact Not at or within Veh left carriageway? Did not leave carriageway Hit object in c'way? None Hit object off c'way? None First point of impact Front Veh registration no. Drivers age 84 yrs Sex Male Breath test Not Left Hand Drive Unknown Foreign veh. Not Journey purpose Other Veh.No. 2 Vehicle type Car Manoeuvre Going ahead other	Car Passenger? Not a passenger your application of junction Seway not in restricted lane 20m of junction Ped Movement Not application your application of junction Ped Location Not application your application your application of the ped Direction to Not application your appl	e 67 yrs Sex Female Post code enger PSV Passenger? Not a passenger Cycle Helmet able able
Junct. location of veh. at 1st impact Veh left carriageway? Hit object in c'way? Hit object off c'way? First point of impact Veh registration no. Drivers age 67 yrs Not at or within Not at or w	20m of junction	

Full Details 08-June-2015 Accident Ref.No 0215177

SEVERITY District The Vale of Glamorgan	Sully A	rea	Grid Reference 314480 / 169178
SLIGHT Ref.No 0215510			
5215510			Police Officer Attend: Yes
Date 23/03/2012 Day Friday	Road A4050 Location A4050 Barry Link Ro	and Rarry	
Time 14:10	Road A4050 Location A4050 Barry Link Ro	au, Barry	
Weather Fine without high winds	Description V2 Travelling in Direction of Weny	oe when an Unsecure Item from V1 Has F	Fallen off and Struck Vehicle 2 Smashing Windscreen and
Road Surface Dry	of Accident Causing Injury to Driver. Unable to		and of and place ventere 2 smalling windstreen and
Street Lighting Daylight			
SITE DETAILS	ODECLAL CITE COMPLETIONS		
Speed Limit 50 MPH	SPECIAL SITE CONDITIONS		
Carriageway Dual carriageway Junction Detail Not at or within 20 metres of juncti	None		
Junction Detail Not at or within 20 metres of juncti	1011		
2nd Road Number	CARRIAGEWAY HAZARDS		
Pedestrian Facilities None within 50 metres	None		
No physical crossing facility within	n 50 m		
The physical crossing facility within			
VEHICLES INVOLVED 2		CASUALTIES INVOLV	ED 1
Veh.No. 1 Vehicle type 0.00	Make Model	Cas No 1 Cas Class Driver or	Rider Veh ref No 2
Manoeuvre Going ahead other		Severity SLIGHT Age 23 y	rs Sex Male Post code
Veh. direction from South to North Towi	ing? No tow or articulation	Car Passenger? Not a passenger	PSV Passenger? Not a passenger
Skidded No skidding, jack-knifing or overturning		Seat Belt Unknown	Cycle Helmet
Veh location at impact (restricted lane) On main carriagew		Ped Movement Not applicable	•
Junct. location of veh. at 1st impact Not at or within 20 Veh left carriageway? Did not leave carriageway	Um of junction	Ped Location Not applicable	
Hit object in c'way? None		Ped Direction to Not applicable	
Hit object off c'way? None		School Pupil Other	
First point of impact Did not impact		Roadworker injured Other Details	
Veh registration no. Other veh.hit (ref.no)		Other Details	
Drivers age ? yrs Sex Not knov Breath test Driver			
	reign registered vehicle		
Journey purpose Other Veh.No. 2 Vehicle type Car	Make Model	-	
Manoeuvre Going ahead other	IVIARC IVIOUCI		
	ing? No tow or articulation		
Skidded No skidding, jack-knifing or overturning	2.0 to n of articulation		
Veh location at impact (restricted lane) On main carriagew			
Junct. location of veh. at 1st impact Not at or within 20			
Veh left carriageway? Did not leave carriageway			
Hit object in c'way? None			
Hit object off c'way? None First point of impact Front			
First point of impact Front Veh registration no. Other veh.hit (ref.no)) 1 Hit and run Not hit and run		
Drivers age 23 yrs Sex Male Breath test Not rec	,	`	
	reign registered vehicle		
Journey purpose Commuting to/from work			
Full Datails	00 I	ne 2015	Accident Ref No. 0015510

SEVERITY District The Vale of Glamorgan		Sully A	Area	Grid Reference 314510 / 169120
SLIGHT Ref.No 090196397				Police Officer Attend: Yes
Date 11/12/2009 Day Friday Time 14:26	Road U	Location Sully Moors Road, S	ully, Vale of Glamorgan	
Weather Fine without high winds Road Surface Dry Street Lighting Daylight	Description of Accide	on V1 Collided with V2 which Shuntent	ed into V3	
SITE DETAILS Speed Limit Carriageway Junction Detail Junction Control 2nd Road Number Pedestrian Facilities Single carriageway Not at or within 20 metres of junction Control 2nd Road Number	nction	SPECIAL SITE CONDITIONS Roadworks CARRIAGEWAY HAZARDS None		
No physical crossing facility with VEHICLES INVOLVED 3	thin 50 m		CASUALTIES INVOLV	
Skidded No skidding, jack-knifing or overturnin Veh location at impact (restricted lane) On main carria Junct. location of veh. at 1st impact Not at or within Veh left carriageway? Did not leave carriageway Hit object in c'way? None Hit object off c'way? None First point of impact Veh registration no. Drivers age 26 yrs Left Hand Drive Unknown Foreign veh. Not Journey purpose Journey as part of work Veh.No. 2 Vehicle type Car Manoeuvre Waiting to go ahead but held up	g geway not in a 20m of june a 20m of june cowing? No g geway not in a 20m of june a 20m of june cowing?	Hit and run Not hit and run Driving Lic stered vehicle Make Model tow or articulation restricted lane ction Hit and run Not hit and run Driving Lic		yrs Sex Male Post code

Veh.No. 3 Vehicle type Car Make Model Manoeuvre Waiting to go ahead but held up Veh. direction from East to West Towing? Other tow Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) On main carriageway not in restricted lane Junct. location of veh. at 1st impact Not at or within 20m of junction Veh left carriageway? Did not leave carriageway Hit object in c'way? None Hit object off c'way? None First point of impact Back Other veh.hit (ref.no) 2 Hit and run Not hit and run Veh registration no. Drivers age 54 yrs Breath test Not requested Driving Lic Sex Male Left Hand Drive Foreign veh. Not foreign registered vehicle Unknown Journey purpose Other

dded Overturned	SPECIAL SITE CONDITIONS None CARRIAGEWAY HAZARDS None thin 50 m		ught Fire.
	20m of junction	Cas No 1 Cas Class Driver or Rider Veh ref No 1 Severity SERIOUS Age 24 yrs Sex Male Post code Car Passenger? Not a passenger PSV Passenger? Not a passenger Seat Belt Unknown Cycle Helmet Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable School Pupil Other Roadworker injured Other Details	

SEVERITY District The Vale of Glamorgan	Su	lly Area	Grid Reference 314462 / 169152	
SLIGHT Ref.No 100200241			Police Officer Attend: Yes	
Date 06/05/2010 Day Thursday Time 12:40	Road A4055 Location Cardiff Road, Ba	urry		
Weather Raining without high winds Road Surface Wet/Damp Street Lighting Daylight	Description V3 Stopped at Temporary Traf of Accident	fic Light, V1 Not Aware Hit Rear of V2 Pushin	ng it into V3.	
SITE DETAILS Speed Limit 40 MPH Carriageway Single carriageway Junction Detail Roundabout	SPECIAL SITE CONDITIONS Roadworks			
Junction Control 2nd Road Number Pedestrian Facilities A4231 None within 50 metres No physical crossing facility with	CARRIAGEWAY HAZARDS None			
VEHICLES INVOLVED 3		CASUALTIES INVOLV	VED 2	
Veh.No. 1 Vehicle type Car Manoeuvre Slowing or stopping Veh. direction from Northeast to Southwest Too Skidded Skidded Veh location at impact (restricted lane) On main carriage Junct. location of veh. at 1st impact Approaching jun Veh left carriageway? Did not leave carriageway Hit object in c'way? None Hit object off c'way? None First point of impact Front		Severity SLIGHT Age 27 of Car Passenger? Not a passenger Seat Belt Unknown Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable School Pupil Other Roadworker injured	Car Passenger? Not a passenger Seat Belt Unknown Cycle Helmet Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable School Pupil Other Roadworker injured	
Veh registration no. Drivers age 44 yrs Sex Male Left Hand Drive Unknown Journey purpose Other Veh.No. 2 Vehicle type Car Manoeuvre Slowing or stopping Veh. direction from Northeast to Southwest Too Skidded Skidded Veh location at impact (restricted lane) Junct. location of veh. at 1st impact Veh left carriageway? Left carriageway nearside	requested Driving Lic foreign registered vehicle Make Model wing? No tow or articulation eway not in restricted lane	Cas No 2 Cas Class Driver of Severity SLIGHT Age 48 YOU Car Passenger? Not a passenger Seat Belt Unknown Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable School Pupil Other Roadworker injured Other Details	yrs Sex Male Post code	
Hit object in c'way? None Hit object off c'way? None First point of impact Veh registration no. Drivers age 27 yrs Left Hand Drive Journey purpose None Offside Other veh.hit (ref.r. Breath test Nega Foreign veh. Not foreign ve		d run		
Full Details		08-June-2015	Accident Ref.No 100200241	

Veh.No. 3 Vehicle type Car Make Model Manoeuvre Waiting to go ahead but held up Veh. direction from Northeast to Southwest Towing? No tow or articulation Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) On main carriageway not in restricted lane Junct. location of veh. at 1st impact Approaching junction or waiting Veh left carriageway? Did not leave carriageway Hit object in c'way? None Hit object off c'way? None First point of impact Back Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run Drivers age 48 yrs Breath test Negative Driving Lic Sex Male Left Hand Drive Foreign veh. Not foreign registered vehicle Unknown Journey purpose Other

Date 27/07/2010 Day Tuesday Time 18:05 Road U Location South Road Junction with Sully Moors Road, Sully, Vale of Glamorgan Fine without high winds Dry Street Lighting Daylight Daylight Street Lighting Daylight Daylight Street Lighting Daylight Street Lighting Daylight Daylight Street Lighting Daylight Daylight Daylight Daylight Street Lighting Daylight Daylig	SEVERITY District The Vale of Glamorgan	Sully Ar	ea	Grid Reference 314930 / 168280
Time 18.05 Weather Fine without high winds Road Surface Road Surface Street Lighting Daylight STE DETAILS Speed Limit 30 MPH Roundabout Junction Control Give way or uncontrolled 2nd Road Number U Pedestrian Facilities None within 50 metres No physical crossing facility within 50 m VEHICLES INVOLVED 3 Veh. in Control Give way or uncontrolled 2nd Road Number U Veh. More Control Maneeuvre Going ahead other Going ahead other Going ahead other Web Icetation at latingaet Greys Way Hit object in Cway? None Divers age 28 yrs First point of impact Veh. None Other veh. Int control Other veh. Int control Other veh. Not foreign registered vehicle Jounct. Journey purpose Veh. No. 2 Whice to gar and the control Other veh. Not foreign registered vehicle Jounct. Journey purpose Veh. No. 2 Whice to gar and the control Other veh. Not foreign registered vehicle Jounct. Journey purpose Veh. No. 2 Whice to gar and the control Other veh. Int control of veh. at 1 timpact Veh. Journey purpose Veh. Saidded No skidding, jack-kinfing or overturning Veh. Joean of the clave carriageway Veh. Journey purpose Veh. Saidded No skidding, jack-kinfing or overturning Veh. Joean of the clave carriageway Veh. Journey purpose Veh. Saidded No skidding, jack-kinfing or overturning Veh. Joean of the Joean of Veh. at 1 timpact Veh. Joean of Joean of Veh. At 1 timpact Veh. Joean of Joean of Veh. At 1 timpact Veh. Joean of Joean of Veh. At 1 timpact Veh. Joean of Joean of Veh. At 1 timpact Veh. Joean of Joean of Veh. At 1 timpact Veh. Joean of Joean of Veh. At 1 timpact Veh. Joean of Joean of Veh. At 1 timpact Veh. Joean of Joean of Veh. At 1 timpact Veh. Joean of Joean of Veh. At 1 timpact Veh. Joean of Veh	l			
Speed Limit 30 MPH SPECIAL SITE CONDITIONS None Single carriageway Single carriag	Time 18:05 Weather Fine without high winds Road Surface Dry Street Lighting Daylight	Description V1 Has Failed to Notice Stationary V	•	-
Veh.No. Vehicle type Car	Speed Limit 30 MPH Carriageway Single carriageway Junction Detail Roundabout Junction Control Give way or uncontrolled 2nd Road Number U Pedestrian Facilities None within 50 metres	None CARRIAGEWAY HAZARDS None	_	
Junct. location of veh. at 1st impact Approaching junction or waiting Veh left carriageway? Did not leave carriageway Hit object off c'way? None Hit object off ciway? None First point of impact Back Other Details Other Details	Veh.No. 1 Vehicle type Car Manoeuvre Going ahead other Veh. direction from East to West Tow. Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) On main carriage of Junct. location of veh. at 1st impact Approaching junct. Veh left carriageway? Did not leave carriageway Hit object in c'way? None Hit object off c'way? None First point of impact Front Veh registration no. Other veh.hit (ref.no. Drivers age 28 yrs Sex Female Left Hand Drive Unknown Foreign veh. Not f	ng? No tow or articulation vay not in restricted lane tion or waiting 1 2 Hit and run Not hit and run quested Driving Lic reign registered vehicle Make Model ng? No tow or articulation	Cas No 1 Cas Class Driver or Severity SLIGHT Age 28 yr Car Passenger? Not a passenger Seat Belt Unknown Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable School Pupil Other Roadworker injured Cas No 2 Cas Class Driver or Severity SLIGHT Age 67 yr Car Passenger? Not a passenger Seat Belt Unknown Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable School Pupil Other	Rider Veh ref No 1 rs Sex Female Post code PSV Passenger? Not a passenger Cycle Helmet Rider Veh ref No 3 rs Sex Female Post code PSV Passenger? Not a passenger
Veh registration no. Other veh.hit (ref.no) 1 Hit and run Not hit and run Drivers age 47 yrs Sex Female Breath test Not requested Driving Lic Left Hand Drive Unknown Foreign veh. Not foreign registered vehicle Journey purpose Other	Junct. location of veh. at 1st impact Veh left carriageway? Hit object in c'way? Hit object off c'way? First point of impact Veh registration no. Drivers age 47 yrs Left Hand Drive None Back Other veh.hit (ref.no Breath test Not red.) Other veh. Not for) 1 Hit and run Not hit and run puested Driving Lic	ÿ	

Veh.No. 3 Vehicle type Car Make Model Manoeuvre Waiting to go ahead but held up Veh. direction from East to West Towing? No tow or articulation Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) On main carriageway not in restricted lane Junct. location of veh. at 1st impact Approaching junction or waiting Veh left carriageway? Did not leave carriageway Hit object in c'way? None Hit object off c'way? None First point of impact Back Other veh.hit (ref.no) 2 Veh registration no. Hit and run Not hit and run Drivers age 67 yrs Breath test Not requested Driving Lic Sex Female Left Hand Drive Foreign veh. Not foreign registered vehicle Unknown Journey purpose Other

Full Details 08-June-2015 Accident Ref.No 100202435

SEVERITY District The Vale of Glamorgan	Sully Area		Grid Reference 314490 / 169170
SLIGHT Ref.No 100204504			Police Officer Attend: Yes
Date 20/10/2010 Day Wednesday Time 16:00	load A4231 Location Barry Docks Link Road	I Junction with Cardiff Road, Barry	
Street Lighting Daylight	Description V1 Has Misjudged V2 Pulling Away a f Accident	at Junction and Collided with Rear of V2	2.
SITE DETAILS Speed Limit 30 MPH Carriageway Roundabout Junction Detail Roundabout	SPECIAL SITE CONDITIONS None		
Junction Control 2nd Road Number Pedestrian Facilities A4055 None within 50 metres No physical crossing facility within	CARRIAGEWAY HAZARDS None		
VEHICLES INVOLVED 2 Veh.No. 1 Vehicle type Car	Make Model	CASUALTIES INVOLVI Cas No 1 Cas Class Passenge	
Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) On main carriageway Junct. location of veh. at 1st impact Approaching junction Veh left carriageway? Did not leave carriageway Hit object in c'way? None Hit object off c'way? None First point of impact Front Veh registration no. Other veh.hit (ref.no) Drivers age 18 yrs Sex Male Breath test Not required.	on or waiting 2 Hit and run Not hit and run	Severity SLIGHT Age 74 y Car Passenger? Front seat passen Seat Belt Unknown Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable School Pupil Other Roadworker injured Other Details	rs Sex Female Post code ager PSV Passenger? Not a passenger Cycle Helmet
Manoeuvre Moving off Veh. direction from North to East Towing Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) On main carriagewa Junct. location of veh. at 1st impact Entering roundabou Veh left carriageway? Did not leave carriageway Hit object in c'way? None Hit object off c'way? None First point of impact Back Veh registration no. Other veh.hit (ref.no) Drivers age 42 yrs Sex Female Breath test Not requ	2? No tow or articulation by not in restricted lane t 1 Hit and run Not hit and run		

SEVERITY District The Vale of Glamorgan		Sully	Area	Grid Reference 314210 / 168990
SLIGHT Ref.No 100205137				51.210 100550
SEIGHT 100203137				Police Officer Attend: Yes
Date 19/11/2010 Day Friday				
Time 13:20	Road A	A4055 Location Cardiff Road, Barry	,	
Weather Fine without high winds	D .	Vi Dullad out of Con Shownoon in	ata Dath of VO	
Road Surface Wet/Damp	of Accie	tion Vi Pulled out of Car Showroom ir	no Paul of V2.	
Street Lighting Daylight	0171001	dent		
SITE DETAILS				
Speed Limit 40 MPH		SPECIAL SITE CONDITIONS		
Carriageway Dual carriageway		None		
Junction Detail Using private drive or entrance				
Junction Control Give way or uncontrolled		CARRIAGEWAY HAZARDS		
2nd Road Number U		None		
Pedestrian Facilities None within 50 metres	.1. 50			
No physical crossing facility wi	thin 50 m			
VEHICLES INVOLVED 2			CASUALTIES INVOLV	/ED 1
Veh.No. 1 Vehicle type Car		Make Model	Cas No 1 Cas Class Passeng	er Veh ref No 2
Manoeuvre Turning left		Make Model	Severity SLIGHT Age 36 v	·
Turning left	owing? N	o tow or articulation		
Skidded No skidding, jack-knifing or overturning	_	o tow of afficulation		nger PSV Passenger? Not a passenger
Veh location at impact (restricted lane) On main carriage		in restricted lane	Seat Belt Unknown Ped Movement Not applicable	Cycle Helmet
Junct. location of veh. at 1st impact Entering main i			Ped Location Not applicable	
Veh left carriageway? Did not leave carriageway			Ped Direction to Not applicable	
Hit object in c'way? None			School Pupil Other	
Hit object off c'way? None			Roadworker injured	
First point of impact Offside	` •	TT's 1 av street	Other Details	
Veh registration no. Drivers age 21 yrs Sex Male Other veh.hit (ref Breath test Neg		Hit and run Not hit and ru Driving Lic	ın	
Left Hand Drive Unknown Foreign veh. Not				
Journey purpose Other	1010151110	Bistoria remeie		
Veh.No. 2 Vehicle type Car		Make Model		
Manoeuvre Going ahead other				
		o tow or articulation		
Skidded No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane) On main carriage				
Junct. location of veh. at 1st impact Approaching ju	nction or v	vaiting		
Veh left carriageway? Did not leave carriageway				
Hit object in c'way? None Hit object off c'way? None				
First point of impact Nearside				
Veh registration no. Other veh.hit (ref	.no) 1	Hit and run Not hit and ru	ın	
Drivers age 48 yrs Sex Male Breath test Not		Driving Lic		
Left Hand Drive Unknown Foreign veh. Not				
Journey purpose Other				
Full Details		06	June-2015	Accident Ref No. 100205137

SEVERITY District The Vale of Glamorgan		Sully	Area	Grid Reference	315710 / 168680
SLIGHT Ref.No 110208574				Police Officer Attend:	
				Police Officer Attend:	No - reported over the counter
Date 07/04/2011 Day Thursday Time 09:15	Road 1	U Location Cog Road Junction	with Conybeare Road, Sully, Vale of Glamo	organ	
Weather Fine without high winds					
Road Surface Dry			d Has Clipped Back Wheel of Pushbike Cau	sing Cyclist to Fall to the	e Ground.
Street Lighting Daylight	of Acci	dent			
SITE DETAILS	L				
Speed Limit 30 MPH		SPECIAL SITE CONDITIONS			
Carriageway Single carriageway		None			
Junction Detail T or staggered junction					
Junction Control Give way or uncontrolled		CARRIAGEWAY HAZARDS			
2nd Road Number U		None			
Pedestrian Facilities None within 50 metres		110110			
No physical crossing facility wi	thin 50 m				
VEHICLES INVOLVED 2			CASUALTIES INVOLV	ED 1	
Veh.No. 1 Vehicle type Car		Make Model	Cas No 1 Cas Class Driver o	r Rider Veh re	of No.
Manoeuvre Turning right		wake widei	Severity SLIGHT Age 67 y		ef No 2 Post code
	owing? N	o tow or articulation			
Skidded No skidding, jack-knifing or overturning	-	o tow of articulation	Car Passenger? Not a passenger	PSV Passenger? No	ot a passenger
Veh location at impact (restricted lane) On main carriage		in restricted lane	Seat Belt Not applicable Ped Movement Not applicable	Cycle Helmet	
Junct. location of veh. at 1st impact Cleared junctio			Ped Location Not applicable		
Veh left carriageway? Did not leave carriageway			Ped Direction to Not applicable		
Hit object in c'way? None			School Pupil Other		
Hit object off c'way? None			Roadworker injured		
First point of impact Front		TT's 1 av street	Other Details		
Veh registration no. Drivers age 45 yrs Sex Male Other veh.hit (ref Breath test Not		Hit and run Not hit and ru Driving Lic	un		
Left Hand Drive Unknown Foreign veh. Not					
Journey purpose Other	. Torongii IC	Sistered veinere			
Veh.No. 2 Vehicle type Pedal Cycle		Make Model	\dashv		
Manoeuvre Going ahead other					
	owing? N	o tow or articulation			
Skidded No skidding, jack-knifing or overturning					
Veh location at impact (restricted lane) On main carriag					
Junct. location of veh. at 1st impact Cleared junctio	n or waitin	g			
Veh left carriageway? Did not leave carriageway					
Hit object in c'way? None Hit object off c'way? None					
Hit object off c'way? None First point of impact Back					
Veh registration no. Other veh.hit (ref	.no) 1	Hit and run Not hit and ru	un		
Drivers age 67 yrs Sex Male Breath test Not					
Left Hand Drive Unknown Foreign veh. Not					
Journey purpose Other					
Full Details		06	June-2015	Accide	nt Ref No. 110208574

SEVERITY District The Vale of Glamorgan SLIGHT Ref.No 110208805	Sully Ar	rea	Grid Reference 314360 / 169120
SLIGHT Ref.No 110208805			Police Officer Attend: Yes
Date 27/04/2011 Day Wednesday Time 16:40	Road A4055 Location A4055, Cardiff Road,	Barry	
Weather Fine without high winds Road Surface Dry Street Lighting Daylight	Description Vehicle One Has Changed Lane Inor of Accident	der to Turn right and Has Struck Vehicle	Γwo.
SITE DETAILS Speed Limit 40 MPH Carriageway Dual carriageway Junction Detail Other junction	SPECIAL SITE CONDITIONS None		
Junction Control 2nd Road Number Pedestrian Facilities No physical crossing facility within	CARRIAGEWAY HAZARDS None		
VEHICLES INVOLVED 2	•	CASUALTIES INVOLVE	ED 2
Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) On main carriager Junct. location of veh. at 1st impact Approaching junct Veh left carriageway? Did not leave carriageway Hit object in c'way? None Hit object off c'way? None First point of impact Did not impact Veh registration no. Drivers age 65 yrs Sex Female Breath test Not re	etion or waiting Diving Lic Hit and run Not hit and run Driving Lic	Cas No 1 Cas Class Driver or Severity SLIGHT Age 65 yr Car Passenger? Not a passenger Seat Belt Unknown Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable School Pupil Other Roadworker injured Cas No 2 Cas Class Driver or Severity SLIGHT Age 50 yr	PSV Passenger? Not a passenger Cycle Helmet Rider Veh ref No 2 PSS Sex Female Post code
Left Hand Drive Journey purpose Other Veh.No. 2 Vehicle type Car Manoeuvre Going ahead other Veh. direction from Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) Junct. location of veh. at 1st impact Veh left carriageway? Hit object in c'way? Hit object off c'way? First point of impact Veh registration no. Drivers age 50 yrs Vehicle type Car Going ahead other Tow On main carriagew Approaching junct Approaching jun	Make Model ing? No tow or articulation way not in restricted lane tion or waiting Hit and run Not hit and run	Car Passenger? Not a passenger Seat Belt Unknown Ped Movement Not applicable Ped Location Not applicable Ped Direction to School Pupil Other Roadworker injured Other Details	PSV Passenger? Not a passenger Cycle Helmet
Full Details	08 Inc	ne-2015	Accident Ref.No 110208805

SEVERITY District The Vale of Glamorgan		Sully	Area	Grid Reference 313830 / 168800
District The vale of Glamorgan				Grid Reference 313830 / 168800
SLIGHT Ref.No 110209783				Police Officer Attend: Yes
Date 26/06/2011 Day Sunday	Road	A4055 Location A4055, Cardiff Roa	nd Barry	
Time 19:17	Koau /	A4033 Location A4033, Cardin Roa	id, Barry	
Weather Fine without high winds	Darania	Line Vahiola One Has Collided Wittyh	the Dear of Vahiele Three Whilst it was Stati	ionary at a Zebra Crossing. Vehicle Two Has then Collided
Road Surface Dry	of Accid	dent with the Rear of Vehicle One.	the Real of Vehicle Three Willist it was Stati	ionary at a Zeora Crossing. Vehicle 1 wo rias their Confided
Street Lighting Daylight	Of Accid	with the real of vehicle one.		
SITE DETAILS				
Speed Limit 30 MPH		SPECIAL SITE CONDITIONS		
Carriageway Single carriageway		None		
Junction Detail Not at or within 20 metres of jun	ction			
Junction Control		CARRIACEWAY HAZARDS		
2nd Road Number		CARRIAGEWAY HAZARDS		
Pedestrian Facilities None within 50 metres		None		
Zebra crossing				
VEHICLES INVOLVED 3			CASUALTIES INVOLVI	ED 2
Veh.No. 1 Vehicle type Car		Make Model	Cas No 1 Cas Class Driver or	Rider Veh ref No 2
Manoeuvre Going ahead other			Severity SLIGHT Age 18 y	
Veh. direction from West to East To	wing? N	o tow or articulation	Car Passenger? Not a passenger PSV Passenger? Not a passenger	
Skidded No skidding, jack-knifing or overturning			Seat Belt Unknown	Cycle Helmet
Veh location at impact (restricted lane) On main carriag			Ped Movement Not applicable	
Junct. location of veh. at 1st impact Not at or within	20m of ju	inction	Ped Location Not applicable	
Veh left carriageway? Did not leave carriageway			Ped Direction to Not applicable	
Hit object in c'way? None			School Pupil Other	
Hit object off c'way? None			Roadworker injured	
First point of impact Front Veh registration no. Other veh.hit (ref.)	no) 3	Hit and run Not hit and ru	Cas No 2 Cas Class Driver or	
Drivers age 20 yrs Sex Male Breath test Nega		Driving Lic	Severity SLIGHT Age 49 y	rs Sex Male Post code
Left Hand Drive Unknown Foreign veh. Not			Car Passenger? Not a passenger	PSV Passenger? Not a passenger
Journey purpose Other	υ.		Seat Belt Unknown	Cycle Helmet
Veh.No. 2 Vehicle type Car		Make Model	Ped Movement Not applicable	
Manoeuvre Going ahead other			Ped Location Not applicable	
	wing? N	o tow or articulation	Ped Direction to Not applicable	
Skidded No skidding, jack-knifing or overturning			School Pupil Other	
Veh location at impact (restricted lane) On main carriag			Roadworker injured	
Junct. location of veh. at 1st impact Not at or within	20m of ju	inction	Other Details	
Veh left carriageway? Did not leave carriageway				
Hit object in c'way? None				
Hit object off c'way? None First point of impact Front				
First point of impact Front Veh registration no. Other veh.hit (ref.)	no) 1	Hit and run Not hit and ru	un	
Drivers age 18 yrs Sex Male Breath test Not a		Driving Lic	uii	
Left Hand Drive Unknown Foreign veh. Not				
Journey purpose Other	8 19			
Full Details		08-	June-2015	Accident Ref.No 110209783

Veh.No. 3 Vehicle type Car Make Model Manoeuvre Going ahead other Veh. direction from West to East Towing? No tow or articulation Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) On main carriageway not in restricted lane Junct. location of veh. at 1st impact Not at or within 20m of junction Veh left carriageway? Did not leave carriageway Hit object in c'way? None Hit object off c'way? None First point of impact Back Hit and run Not hit and run Veh registration no. Other veh.hit (ref.no) 1 Drivers age 49 yrs Sex Male Breath test Negative Driving Lic Left Hand Drive Foreign veh. Not foreign registered vehicle Unknown

Journey purpose

Other

Full Details 08-June-2015 Accident Ref.No 110209783

SEVERITY District The Vale of Glamorgan	Sully A	rea	Grid Reference 314480 / 169160
SLIGHT Ref.No 110209901			511.00 105100
			Police Officer Attend: No - reported over the counter
Date 12/06/2011 Day Sunday Time 07:30	Road A4231 Location Barry Docks Link Ro	ad J/W Cardiff Road, Barry	
Weather Raining without high winds	Description V1 Collided with Cyclist on Round	about and Etc	
Road Surface Wet/Damp	of Accident	about and Pts.	
Street Lighting Daylight			
SITE DETAILS Speed Limit 50 MBH	SPECIAL SITE CONDITIONS		
Speed Limit 50 MPH Carriageway Slip road			
Carriageway Slip road Junction Detail Roundabout	None		
Junction Control Give way or uncontrolled			
2nd Road Number A4055	CARRIAGEWAY HAZARDS		
Pedestrian Facilities None within 50 metres	None		
No physical crossing facility wit	hin 50 m		
VEHICLES INVOLVED 2	1	CASUALTIES INVOLV	ED 1
Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) Junct. location of veh. at 1st impact Veh left carriageway? Did not leave carriageway Hit object in c'way? None Hit object off c'way? None First point of impact Veh registration no. Drivers age 45 yrs Left Hand Drive Unknown Journey purpose Veh.No. 2 Vehicle type Pedal Cycle Manoeuvre Going ahead other Veh. direction from West to East Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) Junct. location of veh. at 1st impact Veh left carriageway? Hit object in c'way? Hit object off c'way? First point of impact Veh registration no. Drivers age 25 yrs Sex Male Breath test Mid junction - or Other veh.hit (ref.: Ot	eway not in restricted lane and 100) 2 Hit and run Hit and Run 101 er not contacted Driving Lic 102 foreign registered vehicle 103 Make Model 104 Model 105 Make Model 106 Model 107 Model 108 Model 109 Model 1	Cas No 1 Cas Class Driver of Severity SLIGHT Age 25 y Car Passenger? Not a passenger Seat Belt Not applicable Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable School Pupil Other Roadworker injured Other Details	

SEVERITY District The Vale of Glamorgan		Sully	Area	Grid Reference 316320 / 168750
SLIGHT Ref.No 110210539				Police Officer Attend: Yes
				Fonce Officer Attend. 103
Date 07/07/2011 Day Thursday Time 20:00	Road 1	U Location Cog Road Junction	with Sully Road, Sully, Vale of Glamorgan	
Weather Fine without high winds				
Road Surface Wet/Damp	Descrip of Accid		hilst Looking left to See If Merging Traffic	was Approaching and Collided Causing Damage.
Street Lighting Daylight	of Accid	dent		
SITE DETAILS				
Speed Limit 30 MPH		SPECIAL SITE CONDITIONS		
Carriageway Single carriageway		None		
Junction Detail T or staggered junction				
Junction Control Give way or uncontrolled 2nd Road Number U		CARRIAGEWAY HAZARDS		
Pedestrian Facilities None within 50 metres		None		
No physical crossing facility w	ithin 50 m			
140 physical crossing facility w	iann 50 m			
VEHICLES INVOLVED 2			CASUALTIES INVOLV	ED 1
Veh.No. 1 Vehicle type Car		Make Model	Cas No 1 Cas Class Driver of	r Rider Veh ref No 1
Manoeuvre Going ahead other			Severity SLIGHT Age 59 y	
Veh. direction from Northeast to Southwest T	owing? N	o tow or articulation	Car Passenger? Not a passenger	PSV Passenger? Not a passenger
Skidded No skidding, jack-knifing or overturnin			Seat Belt Unknown	Cycle Helmet
Veh location at impact (restricted lane) On main carria			Ped Movement Not applicable	•
Junct. location of veh. at 1st impact Cleared junction	n or waitin	ng	Ped Location Not applicable	
Veh left carriageway? Did not leave carriageway Hit object in c'way? None			Ped Direction to Not applicable	
Hit object off c'way? None			School Pupil Other	
First point of impact Front			Roadworker injured	
Veh registration no. Other veh.hit (ref	(.no) 2	Hit and run Not hit and ru	Other Details	
Drivers age 59 yrs Sex Female Breath test Not				
	foreign re	gistered vehicle		
Journey purpose Other		M 1 1 1		
Veh.No. 2 Vehicle type Car Manoeuvre Going ahead other		Make Model		
l come anome coner	owing? N	o tow or articulation		
Skidded No skidding, jack-knifing or overturnin		o tow of afficulation		
Veh location at impact (restricted lane) On main carria		in restricted lane		
Junct. location of veh. at 1st impact Approaching ju				
Veh left carriageway? Left carriageway nearside		-		
Hit object in c'way? None				
Hit object off c'way? None				
First point of impact Offside	(no) 1	Hit and my NI-4 Life 1		
Veh registration no. Other veh.hit (ref Drivers age 19 yrs Sex Male Breath test Not		Hit and run Not hit and ru Driving Lic	III	
		gistered vehicle		
Journey purpose Other				
Full Details		00	June-2015	Accident Ref No. 110210520

	Sully A	rea	Grid Reference 314890 / 169313
SEVERITY District The Vale of Glamorgan	~	, and the second	
FATAL Ref.No 110211716			Police Officer Attend: Yes
Date 16/10/2011 Day Sunday	Road A4055 Location A4055 Cardiff Road, I	Dinas Powys Vale of Glamorgan	
Time 09:21	Road A4055 Econion 111055 Cardin Road,	Dinas Fowys, vare of Giamorgan	
Weather Fine without high winds	Description Vehicle 1 Travelling Along Cardiff l	Road Towards Barry, Vehicle 1 Collides w	rith Retaining Bridge Wall to its N/S Before Colliding with a
Road Surface Dry	of Accident Female Pedestrain Who was Walkin		
Street Lighting Daylight			
SITE DETAILS			
Speed Limit 60 MPH	SPECIAL SITE CONDITIONS		
Carriageway Single carriageway	None		
Junction Detail Not at or within 20 metres of jun	ction		
Junction Control	CARRIAGEWAY HAZARDS		
2nd Road Number	None		
Pedestrian Facilities None within 50 metres			
No physical crossing facility with	thin 50 m		
VEHICLES INVOLVED 2		CASUALTIES INVOLVI	ED 4
Skidded Skidded Veh location at impact (restricted lane) On main carriag Junct. location of veh. at 1st impact Not at or within Veh left carriageway? Left carriageway nearside and restricted lane Bridge - side Hit object in c'way? Bridge - side Hit object off c'way? Other permanent object First point of impact Front Veh registration no. Other veh.hit (ref. Drivers age 24 yrs Sex Male Breath test Neg Left Hand Drive Unknown Foreign veh. Not Journey purpose Commuting to/from work Veh.No. 2 Vehicle type Car Manoeuvre Going ahead other Veh. direction from West to East To Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) On main carriag Junct. location of veh. at 1st impact Not at or within Veh left carriageway? Did not leave carriageway Hit object in c'way? None	20m of junction ebounded no) 2 Hit and run Not hit and run ative Driving Lic foreign registered vehicle Make Model wing? No tow or articulation geway not in restricted lane	Cas No 1 Cas Class Driver or Severity SLIGHT Age 24 yr Car Passenger? Not a passenger Seat Belt Unknown Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable School Pupil Other Roadworker injured Cas No 2 Cas Class Pedestria Severity FATAL Age 25 yr Car Passenger? Not a passenger Seat Belt Unknown Ped Movement Unknown or other Ped Location On footway or very Ped Direction to West bound School Pupil Other Roadworker injured Not applicable Cas No 3 Cas Class Driver or Severity SLIGHT Age 55 yr Car Passenger? Not a passenger	rs Sex Male Post code PSV Passenger? Not a passenger Cycle Helmet n Veh ref No 1 rs Sex Female Post code PSV Passenger? Not a passenger Cycle Helmet er
Hit object off c'way? None First point of impact Offside Veh registration no. Drivers age 55 yrs Sex Male Other veh.hit (ref. Breath test Neg		Seat Belt Unknown Ped Movement Not applicable	Cycle Helmet
Full Details	00 L.	no 2015	Accident Def No. 110211716
ruii Detaiis	U8-Jui	ne-2015	Accident Ref.No 110211716

Cas No 4 Cas Class Passenger Veh ref No Severity SLIGHT Age 47 yrs Sex Female Post code Car Passenger? Front seat passenger PSV Passenger? Not a passenger Seat Belt Unknown Cycle Helmet Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable School Pupil Other Roadworker injured

Other Details

Full Details 08-June-2015 Accident Ref.No 110211716

SEVERITY District The Vale of Glamorgan		Sully	Area	Grid Reference 314510 / 169157
SLIGHT Ref.No 110213652				01.010 10910
				Police Officer Attend: Yes
Date 12/12/2011 Day Monday	Road	A4055 Location A4055 Cardiff Road	Inc Sully Road Barry	
Time 17:57	Troug 1	114055 200000 11.000 0000111000	rone, buily roud, buily.	
Weather Raining with high winds	Descrip	otion V1 Pulled out onto R/About as V2	2 Also Entered R/About and Whilst on R/Ab	bout, V1 Struck O/S/R of V2 Causing V2 to Spin.
Road Surface Wet/Damp	of Accie			
Street Lighting Dark: street lights present and lit SITE DETAILS				
Speed Limit 30 MPH		SPECIAL SITE CONDITIONS		
Carriageway Roundabout		None		
Junction Detail Roundabout		None		
Junction Control Give way or uncontrolled				
2nd Road Number B4267		CARRIAGEWAY HAZARDS		
Pedestrian Facilities None within 50 metres		None		
No physical crossing facility wit	thin 50 m			
VEHICLES INVOLVED 2		<u>l</u>	CASUALTIES INVOLV	ED 1
Veh.No. 1 Vehicle type Car		Make Model	Cas No 1 Cas Class Driver of	r Rider Veh ref No 2
Manoeuvre Moving off		wiake wiodei	Severity SLIGHT Age 53 y	
	wing? N	o tow or articulation		
Skidded No skidding, jack-knifing or overturning	_		Car Passenger? Not a passenger Seat Belt Unknown	PSV Passenger? Not a passenger Cycle Helmet
Veh location at impact (restricted lane) On main carriag	eway not	in restricted lane	Ped Movement Not applicable	Cycle Heimet
Junct. location of veh. at 1st impact Entering rounda	bout		Ped Location Not applicable	
Veh left carriageway? Did not leave carriageway			Ped Direction to Not applicable	
Hit object in c'way? None Hit object off c'way? None			School Pupil Other	
Hit object off c'way? None First point of impact Front			Roadworker injured	
Veh registration no. Other veh.hit (ref.)	no) 2	Hit and run Not hit and ru	Other Details	
Drivers age 76 yrs Sex Male Breath test Nega		Driving Lic		
Left Hand Drive Unknown Foreign veh. Not	foreign re	gistered vehicle		
Journey purpose Other			_	
Veh.No. 2 Vehicle type Car		Make Model		
Manoeuvre Moving off Veh. direction from East to West To	wing? N	a taxy as asticulation		
Skidded Skidded and overturned	wing: N	o tow or articulation		
Veh location at impact (restricted lane) On main carriag	reway not	in restricted lane		
Junct. location of veh. at 1st impact Entering rounda				
Veh left carriageway? Did not leave carriageway				
Hit object in c'way? None				
Hit object off c'way? None				
First point of impact Offside	ma) 1	Hit and man NI ality 1		
Veh registration no. Drivers age 53 yrs Sex Female Breath test Not		Hit and run Not hit and ru Driving Lic	in	
Left Hand Drive Unknown Foreign veh. Not				
Journey purpose Commuting to/from work		6 ,		
- 1 1				
Full Details		00.1		Accident Ref No. 110213652

SEVERITY District The Vale of Glamorgan	Sully Are	ea	Grid Reference 315450 / 168190
SLIGHT Ref.No 110213823			Police Officer Attend: Yes
Date 22/12/2011 Day Thursday Time 12:00 Weather Fine without high winds Road Surface Dry Street Lighting Daylight	Road U Location South Road Junction w Description of Accident	ith Minehead Avenue, Sully, Vale of Glar and Collided with V2. D1's View was Ob	<u>l</u> morgan
SITE DETAILS Speed Limit Carriageway Junction Detail Junction Control 2nd Road Number Pedestrian Facilities Single carriageway T or staggered junction Give way or uncontrolled U None within 50 metres No physical crossing facility with	SPECIAL SITE CONDITIONS Roadworks CARRIAGEWAY HAZARDS None		
Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) On main carriage Junct. location of veh. at 1st impact Cleared junction Veh left carriageway? Did not leave carriageway Hit object in c'way? None Hit object off c'way? None First point of impact Offside Veh registration no. Drivers age 77 yrs Sex Female Breath test Negal Left Hand Drive Unknown Foreign veh. Not for Journey purpose Other Veh.No. 2 Vehicle type M/cycle 125 - 500cc	or waiting O) 2 Hit and run Not hit and run	CASUALTIES INVOLVE Cas No 1 Cas Class Driver or Severity SLIGHT Age 26 yr Car Passenger? Not a passenger Seat Belt Not applicable Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable School Pupil Other Roadworker injured Other Details	Rider Veh ref No 2
Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) On main carriage Junct. location of veh. at 1st impact Approaching junct Veh left carriageway? Did not leave carriageway Hit object in c'way? None Hit object off c'way? None First point of impact Front Veh registration no. Drivers age 26 yrs Sex Male On main carriage Approaching junct On main carriage Approaching junct Approaching junct Approaching junct On main carriage Approaching junct Other veh.hit (ref.n. Breath test Not ref.n.	o) 1 Hit and run Not hit and run		

SEVERITY District The Vale of Glamorgan		Sully A	rea	Grid Reference 315050 / 168280
SLIGHT Ref.No 110213910				Police Officer Attend: Yes
				Fonce Officer Attend. 163
Date 28/12/2011 Day Wednesday Time 13:54	Road]	B4267 Location B4267 Junction with	Cog Road, Sully	
Weather Fine without high winds		VI Delled and from Con Dand into	D-41 - £ V/2 W/L - 41 €	ich and Translling in the Open site Direction Miner Leiner
Road Surface Wet/Damp		dent Damage to All Vehicles	Path of V2 who then Swerved into V3 wh	ich was Travelling in the Opposite Direction. Minor Injury,
Street Lighting Daylight	Of Accid	dent Banage to In Venicies		
SITE DETAILS				
Speed Limit 30 MPH		SPECIAL SITE CONDITIONS		
Carriageway Single carriageway		None		
Junction Detail T or staggered junction Junction Control Give way or uncontrolled				
2nd Road Number U		CARRIAGEWAY HAZARDS		
Pedestrian Facilities None within 50 metres		None		
No physical crossing facility w	ithin 50 m			
- Physical crossing facility w	101111 50 111			
VEHICLES INVOLVED 3			CASUALTIES INVOLV	ED 2
Veh.No. 1 Vehicle type Van/Goods < 3.5t		Make Model	Cas No 1 Cas Class Driver or	r Rider Veh ref No 2
Manoeuvre Turning right			Severity SLIGHT Age 78 y	
Veh. direction from North to West T	owing? N	o tow or articulation	Car Passenger? Not a passenger Seat Belt Unknown Ped Movement Not applicable PSV Passenger? Not a passenger Cycle Helmet	
Skidded No skidding, jack-knifing or overturnin	ıg			
Veh location at impact (restricted lane) On main carria Junct. location of veh. at 1st impact Entering main		in restricted lane		
Junct. location of veh. at 1st impact Entering main Veh left carriageway? Did not leave carriageway	Toau		Ped Location Not applicable	
Hit object in c'way? None			Ped Direction to Not applicable School Pupil Other	
Hit object off c'way? None			Roadworker injured	
First point of impact Nearside			Cas No. 2 Cas Class Driver or	r Rider Veh ref No 3
Veh registration no. Drivers age 44 yrs Sex Male Other veh.hit (ref Breath test Neg		Hit and run Not hit and rur Driving Lic	Severity SLIGHT Age 54 y	
Drivers age 44 yrs Sex Male Breath test Neg Left Hand Drive Unknown Foreign veh. No			Car Passenger? Not a passenger	PSV Passenger? Not a passenger
Journey purpose Other	t roreign re	gistered veinere	Seat Belt Unknown	Cycle Helmet
Veh.No. 2 Vehicle type Car		Make Model	Ped Movement Not applicable	
Manoeuvre Going ahead other			Ped Location Not applicable	
		o tow or articulation	Ped Direction to Not applicable School Pupil Other	
Skidded No skidding, jack-knifing or overturnin		in restricted lane	Roadworker injured	
Veh location at impact (restricted lane) On main carria Junct. location of veh. at 1st impact Mid junction -			Other Details	
Veh left carriageway? Did not leave carriageway	on roundat	out of main road		
Hit object in c'way? None				
Hit object off c'way? None				
First point of impact Offside	S \ 2	III. and St. 11.		
Veh registration no. Drivers age 78 yrs Sex Male Other veh.hit (ref Breath test Neg		Hit and run Not hit and rur Driving Lic	1	
Left Hand Drive Unknown Foreign veh. Not				
Journey purpose Other				
Full Details		00 1:	ne-2015	Accident Ref No. 110213010

Veh.No. 3 Vehicle type Car Make Model Manoeuvre Going ahead other Veh. direction from West to East Towing? No tow or articulation Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) On main carriageway not in restricted lane Junct. location of veh. at 1st impact Approaching junction or waiting Veh left carriageway? Did not leave carriageway Hit object in c'way? None Hit object off c'way? None First point of impact Front Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run Drivers age 54 yrs Breath test Not provided (medical re Driving Lic Sex Male Left Hand Drive Foreign veh. Not foreign registered vehicle Unknown Journey purpose Other

SEVERITY District The Vale of Glamorgan		Sully	Area	Grid Reference 314900 / 168290
SLIGHT Ref.No 1200105				21.500 100250
SLIGHT Remove 1200105				Police Officer Attend: Yes
Date 15/04/2012 Day Sunday	Road F	24267 Location B4267 Sully Moor	s Road, Junction with Hayes Road, Sully, Va	ale of Glamorgan
Time 10:33	Roud L	14207 Eccation B 1207, Suny 11001	s Road, Julietion with Hayes Road, July, ve	are of Glamorgan
Weather Fine without high winds	Descript	tion V1 Failed to See V2 and Collided	into the Back of V2 Causing Injury	
Road Surface Dry	of Accid			
Street Lighting Daylight				
SITE DETAILS Speed Limit 30 MPH		SPECIAL SITE CONDITIONS		
-				
Carriageway Single carriageway Junction Detail Roundabout		None		
Junction Control Give way or uncontrolled				
2nd Road Number U		CARRIAGEWAY HAZARDS		
Pedestrian Facilities None within 50 metres		None		
No physical crossing facility with	hin 50 m			
Two physical crossing facility wit	50 111			
VEHICLES INVOLVED 2			CASUALTIES INVOLV	ED 2
Veh.No. 1 Vehicle type Car		Make Model	Cas No 2 Cas Class Driver or	r Rider Veh ref No 2
Manoeuvre Going ahead other			Severity SLIGHT Age 64 y	rrs Sex Male Post code
Veh. direction from Northwest to Southeast To	wing? No	tow or articulation	Car Passenger? Not a passenger PSV Passenger? Not a passenger	
Skidded No skidding, jack-knifing or overturning	<u>, </u>		Seat Belt Unknown	Cycle Helmet
Veh location at impact (restricted lane) On main carriag			Ped Movement Not applicable	•
Junct. location of veh. at 1st impact Approaching jun	nction or w	vaiting	Ped Location Not applicable	
Veh left carriageway? Did not leave carriageway Hit object in c'way? None			Ped Direction to Not applicable	
Hit object in c'way? None Hit object off c'way? None			School Pupil Other	
First point of impact Front			Roadworker injured	
Veh registration no. Other veh.hit (ref.)	no) 2	Hit and run Not hit and ru	Cas No 3 Cas Class Passenge	
Drivers age 46 yrs Sex Male Breath test Not i		Driving Lic	Seventy SLIGHT Age 62 y	
Left Hand Drive Unknown Foreign veh. Not	foreign reg	gistered vehicle		nger PSV Passenger? Not a passenger
Journey purpose Other			Seat Belt Unknown	Cycle Helmet
Veh.No. 2 Vehicle type Car		Make Model	Ped Movement Not applicable Ped Location Not applicable	
Manoeuvre Slowing or stopping	. 0		Ped Location Not applicable Ped Direction to Not applicable	
		tow or articulation	School Pupil Other	
Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) On main carriag		in restricted lone	Roadworker injured	
Junct. location of veh. at 1st impact Entering rounda		in resulcted falle	Other Details	
Veh left carriageway? Did not leave carriageway	ioout			
Hit object in c'way? None				
Hit object off c'way? None				
First point of impact Back				
Veh registration no. Other veh.hit (ref.:		Hit and run Not hit and ru	ın	
Drivers age 64 yrs Sex Male Breath test Not		Driving Lic		
Left Hand Drive Unknown Foreign veh. Not	toreign reg	gistered vehicle		
Journey purpose Other			_	
Full Details		00.1	June-2015	Accident Ref.No 1200105
EDD DEIAUS		08-	nine=7013	Accident Kel No. 1200105

SEVERITY District The Vale of Glamorgan		Sully	Area	Grid Reference 314490 / 169170
SLIGHT Ref.No 1200703				511.70 107170
551611				Police Officer Attend: Yes
Date 22/07/2012 Day Sunday	D J A	4222 Iti Dd-bt A 4222) D	1
Time 15:40	Road A	A4232 Location Roundabout A4232	2, Вагту	
Weather Fine without high winds	Di	: V1 Has Evitad the Dah Deelised	ha Has Mada a Mistaka and Attempted a III	Turn than Hitting a Matarbika Along Sida Him
Road Surface Dry	of Accid		ne has wade a wiistake and Attempted a C	Turn then Hitting a Motorbike Along Side Him
Street Lighting Daylight	Of Accid	Cit		
SITE DETAILS				
Speed Limit 50 MPH		SPECIAL SITE CONDITIONS		
Carriageway Roundabout		None		
Junction Detail Roundabout				
Junction Control Give way or uncontrolled		CARRIAGEWAY HAZARDS		
2nd Road Number A4055		None		
Pedestrian Facilities None within 50 metres	11. 50			
No physical crossing facility wit	thin 50 m			
VEHICLES INVOLVED 2		<u>.</u>	CASUALTIES INVOLV	ED 1
Veh.No. 1 Vehicle type Car		Make Model	Cas No 2 Cas Class Driver or	r Rider Veh ref No 2
Manoeuvre U turn		wake wiodei	Severity SLIGHT Age 50 y	
	wing? No	tow or articulation	•	
Skidded No skidding, jack-knifing or overturning	-	tow of articulation	Car Passenger? Not a passenger	PSV Passenger? Not a passenger
Veh location at impact (restricted lane) On main carriag	eway not i	n restricted lane	Seat Belt Not applicable Ped Movement Not applicable	Cycle Helmet
Junct. location of veh. at 1st impact Leaving roundal	bout		Ped Location Not applicable	
Veh left carriageway? Did not leave carriageway			Ped Direction to Not applicable	
Hit object in c'way? None			School Pupil Other	
Hit object off c'way? None			Roadworker injured	
First point of impact Offside Veh registration no. Other veh.hit (ref.i	no) 2	Hit and run Not hit and r	Other Details	
Drivers age 68 yrs Sex Male Breath test Not 1		Driving Lic	un	
Left Hand Drive Unknown Foreign veh. Not				
Journey purpose Other	5 6			
Veh.No. 2 Vehicle type M/cycle > 500cc		Make Model		
Manoeuvre Going ahead other				
	-	tow or articulation		
Skidded No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane) On main carriag Junct. location of veh. at 1st impact Leaving roundal		n restricted lane		
Veh left carriageway? Did not leave carriageway	Dout			
Hit object in c'way? None				
Hit object off c'way? None				
First point of impact Front				
Veh registration no. Other veh.hit (ref.i		Hit and run Not hit and r	run	
Drivers age 50 yrs Sex Male Breath test Not 1		Driving Lic		
Left Hand Drive Unknown Foreign veh. Not	toreign reg	gistered vehicle		
Journey purpose Other			\dashv	
Full Details		00	June-2015	Accident Ref No. 1200703

SEVERITY District The Vale of Glamorgan		Sully	Area	Grid Reference 314900 / 168230
District The vale of Glamorgan				Grid Reference 314900 / 168230
SLIGHT Ref.No 1200898				Police Officer Attend: Yes
Date 02/09/2012 Day Sunday	Road [J Location Hayes Road, Penar	th	•
Time 20:30				
Weather Fine without high winds	Descrin	tion V1 Has Exited Junction V2 Trave	elling Along Main Road and Collided with C	Offside of Vehicle V1
Road Surface Dry	of Accid			
Street Lighting Dark: street lights present and lit				
SITE DETAILS				
Speed Limit 40 MPH		SPECIAL SITE CONDITIONS		
Carriageway Single carriageway		None		
Junction Detail T or staggered junction				
Junction Control Give way or uncontrolled		CARRIAGEWAY HAZARDS		
2nd Road Number U		None		
Pedestrian Facilities None within 50 metres		Tione		
No physical crossing facility wit	hin 50 m			
VEHICLES INVOLVED 2			CASUALTIES INVOLV	ED 2
Veh.No. 1 Vehicle type Car		Make Model	Cas No 1 Cas Class Driver or	r Rider Veh ref No 1
Manoeuvre Turning left		Wake Woder	Severity SLIGHT Age 56 y	
	wing? No	o tow or articulation	•	
Skidded No skidding, jack-knifing or overturning			Car Passenger? Not a passenger Seat Belt Unknown	PSV Passenger? Not a passenger Cycle Helmet
Veh location at impact (restricted lane) On main carriag		in restricted lane	Ped Movement Not applicable	Cycle Heimet
	n roundab	out or main road	Ped Location Not applicable	
Veh left carriageway? Did not leave carriageway			Ped Direction to Not applicable	
Hit object in c'way? None			School Pupil Other	
Hit object off c'way? None			Roadworker injured	
First point of impact Front Veh registration no. Other veh.hit (ref.)	no) 2	Hit and run Not hit and r	Cas No 2 Cas Class Driver or	
Drivers age 56 yrs Sex Female Breath test Nega		Driving Lic	Severity SLIGHT Age 42 y	rs Sex Male Post code
Left Hand Drive Unknown Foreign veh. Not			Car Passenger? Not a passenger	PSV Passenger? Not a passenger
Journey purpose Commuting to/from work	5 -7		Seat Belt Unknown	Cycle Helmet
Veh.No. 2 Vehicle type Car		Make Model	Ped Movement Not applicable	
Manoeuvre Going ahead other			Ped Location Not applicable	
		tow or articulation	Ped Direction to Not applicable	
Skidded No skidding, jack-knifing or overturning	5		School Pupil Other	
Veh location at impact (restricted lane) On main carriag			Roadworker injured	
Junct. location of veh. at 1st impact Approaching jun	nction or v	vaiting	Other Details	
Veh left carriageway? Did not leave carriageway				
Hit object in c'way? None Hit object off c'way? None				
Hit object off c'way? None First point of impact Nearside				
Veh registration no. Other veh.hit (ref.)	no) 1	Hit and run Not hit and r	un	
Drivers age 42 yrs Sex Male Breath test Nega		Driving Lic		
Left Hand Drive Unknown Foreign veh. Not				
Journey purpose Other				
Full Details		08-	June-2015	Accident Ref.No 1200898

SEVERITY District The Vale of Glamorgan	Sully Are	ea	Gil Defenses 214500 / 160100
The vale of Glamorgan			Grid Reference 314580 / 169180
SLIGHT Ref.No 1200985			Police Officer Attend: Yes
Date 06/09/2012 Day Thursday Roa	d A4055 Location Cardiff Road, Dinas Po	wvs	
Time 14:37	A A-055 Location Caram Road, Dinas 1 o	.,,,	
Weather Fine without high winds Description	cription Veh 1 Passed Veh 2 which was Travel	lling in Opposite Direction. as They Pass	ed, Offside Wing Mirrors Collided. Wing Mirror of Veh 1
Road Surface Dry Street Lighting Daylight			ght Arm of Driver of Veh 1. Veh 2 Had Wing Mirror
Street Lighting Daylight SITE DETAILS	Knocked Off. both Drivers Stopped a	nd Exchanged Details.	
Speed Limit 60 MPH	SPECIAL SITE CONDITIONS		
Carriageway Single carriageway	None		
Junction Detail Not at or within 20 metres of junction	None		
Junction Control	CARRIA CEWAY HAZARRO		
2nd Road Number	CARRIAGEWAY HAZARDS		
Pedestrian Facilities None within 50 metres	None -		
No physical crossing facility within 50	m		
VEHICLES INVOLVED 2	<u> </u>	CASUALTIES INVOLVI	ED 1
Veh.No. 1 Vehicle type Car	Make Model	Cas No 1 Cas Class Driver or	Rider Veh ref No 1
Manoeuvre Going ahead other	1.10.001	Severity SLIGHT Age 23 yr	
	No tow or articulation	Car Passenger? Not a passenger	PSV Passenger? Not a passenger
Skidded Skidded		Seat Belt Unknown	Cycle Helmet
Veh location at impact (restricted lane) On main carriageway i		Ped Movement Not applicable	-,
Junct. location of veh. at 1st impact Not at or within 20m o	f junction	Ped Location Not applicable	
Veh left carriageway? Did not leave carriageway Hit object in c'way? None		Ped Direction to Not applicable	
Hit object off c'way? None		School Pupil Other	
First point of impact Offside		Roadworker injured	
Veh registration no. Other veh.hit (ref.no)	2 Hit and run Not hit and run	Other Details	
Drivers age 23 yrs Sex Male Breath test Not request			
Left Hand Drive Unknown Foreign veh. Not foreign	registered vehicle		
Journey purpose Other Veh.No. 2 Vehicle type Car	Make Model	4	
Manoeuvre Going ahead other	Mare Model		
Going anead other	No tow or articulation		
Skidded No skidding, jack-knifing or overturning	110 to W Of afficulation		
Veh location at impact (restricted lane) On main carriageway i	not in restricted lane		
Junct. location of veh. at 1st impact Not at or within 20m o			
Veh left carriageway? Did not leave carriageway			
Hit object in c'way? None			
Hit object off c'way? None First point of impact Offside			
First point of impact Offside Veh registration no. Other veh.hit (ref.no)	1 Hit and run Not hit and run		
Drivers age 60 yrs Sex Male Breath test Not request			
Left Hand Drive Unknown Foreign veh. Not foreign			
Journey purpose Other			
Full Details	00 Iun	2015	Accident Ref No. 1200095

SEVERITY District The Vale of Glamorgan		Sully A	Area	Grid Reference 314300 / 169030	
SLIGHT Ref.No 1201001				21.800 10,080	
				Police Officer Attend: Yes	
Date 23/09/2012 Day Sunday	Road	A4055 Location A4055 - Cardiff Roa	d, Barry (500M East of Roundabout by Mo	edonalds)	
Time 19:42		111035	., , (,	
Weather Raining without high winds	Descrip	otion V1 Travelling Behind V2, V2 Slov	ved & Braked but Heavy Persistent Rain Pr	revented Effective Braking & V2 Collided into Rear of	V1.
Road Surface Wet/Damp	of Accid	_	•	Ç .	
Street Lighting Daylight SITE DETAILS		T T			
Speed Limit 20 MPH		SPECIAL SITE CONDITIONS			
Carriageway Dual carriageway					
Junction Detail Not at or within 20 metres of jun	ection	None			
Junction Control	Cuon				
2nd Road Number		CARRIAGEWAY HAZARDS			
Pedestrian Facilities None within 50 metres		None			
No physical crossing facility with	thin 50 m				
, , , , , , , , , , , , , , , , , , ,					
VEHICLES INVOLVED 2			CASUALTIES INVOLV	ED 1	
Veh.No. 1 Vehicle type Car		Make Model	Cas No 1 Cas Class Driver of	r Rider Veh ref No 1	
Manoeuvre Slowing or stopping			Severity SLIGHT Age 19 y		
	wing? N	o tow or articulation	Car Passenger? Not a passenger	PSV Passenger? Not a passenger	
Skidded No skidding, jack-knifing or overturning			Seat Belt Unknown	Cycle Helmet	
Veh location at impact (restricted lane) On main carriag			Ped Movement Not applicable	- 3 · · · · · · · · · · · · · · · · · · ·	
Junct. location of veh. at 1st impact Not at or within	20m of ju	unction	Ped Location Not applicable		
Veh left carriageway? Did not leave carriageway			Ped Direction to Not applicable		
Hit object in c'way? None Hit object off c'way? None			School Pupil Other		
Hit object off c'way? None First point of impact Front			Roadworker injured		
Veh registration no. Other veh.hit (ref.	no) 2	Hit and run Not hit and ru	Other Details		
Drivers age 19 yrs Sex Male Breath test Neg.		Driving Lic			
Left Hand Drive Unknown Foreign veh. Not	foreign re	gistered vehicle			
Journey purpose Other					
Veh.No. 2 Vehicle type Car		Make Model			
Manoeuvre Slowing or stopping		e a a a			
	owing? N	o tow or articulation			
Skidded Skidded Veh location at impact (restricted lane) On main carriag	teman not	in restricted lane			
Junct. location of veh. at 1st impact Not at or within					
Veh left carriageway? Did not leave carriageway	u	***************************************			
Hit object in c'way? None					
Hit object off c'way? None					
First point of impact Back					
Veh registration no. Other veh.hit (ref.		Hit and run Not hit and ru	n		
Drivers age 31 yrs Sex Male Breath test Neg		Driving Lic			
Left Hand Drive Unknown Foreign veh. Not Journey purpose Other	roreign re	gistered vehicle			
Journey purpose Other					
Full Details		00.1	une-2015	Accident Ref No. 1201001	

SEVERITY District The Vale of Glamorgan Ref.No 1201099		Suli	ly Area		Grid Reference 31 Police Officer Attend: You	14550 / 169010 'es
Date 08/10/2012 Day Monday Time 11:00 Weather Raining without high winds Road Surface Wet/Damp Street Lighting Daylight		B4267 Location Sully Moors Road otion V1 Has Collided with Rear of S dent		y V2.		
SITE DETAILS Speed Limit Carriageway Junction Detail Junction Control 2nd Road Number Pedestrian Facilities Vone within 50 metres No physical crossing facility within 50 metres	thin 50 m	SPECIAL SITE CONDITIONS None CARRIAGEWAY HAZARDS None				
Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) On main carriaguant. location of veh. at 1st impact Approaching just Veh left carriageway? Did not leave carriageway Hit object in c'way? None Hit object off c'way? None First point of impact Veh registration no. Drivers age 49 yrs Left Hand Drive Unknown Foreign veh. Not Journey purpose Other Veh.No. 2 Vehicle type Car Manoeuvre Waiting to turn right	ggeway not unction or value foreign regeway not unction or value for some foreign reger foreign re	Hit and run Not hit and Driving Lic gistered vehicle Make Model to tow or articulation in restricted lane waiting Hit and run Not hit and Driving Lic	Ĺ	Cas No 1 Cas Class Driver or Severity SLIGHT Age 49 y Car Passenger? Not a passenger Seat Belt Unknown Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable School Pupil Other Roadworker injured Cas No 3 Cas Class Passenge Severity SLIGHT Age 8 yrs Car Passenger? Front seat passen Seat Belt Unknown Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable Ped Direction to Not applicable Ped Direction to Not applicable School Pupil Other Roadworker injured Other Details	Rider Veh ref Nors Sex Female Post Passenger? Not a Cycle Helmet	o 1 st code
Full Details		00	8-June-2	0015	A saidant D	Lef.No 1201099

VEHICLES INVOLVED 1 Veh.No. 1 Vehicle type Car Make Model Manocurve Going ahead other Veh. direction from North to South Towing? No tow or articulation Skidded Skidded and overturned Veh location at impact (restricted lane) On main carriageway not in restricted lane Junct. location of veh. at 1st impact Veh fit object of c-way? Other permanent object First point of impact Veh registration no. Drivers age 32 yrs Left Hand Driv Unknown Other veh.hit (ref.no) 0 Breath test Negative Journey purpose Cas No 1 Cas Class Driver or Rider Veh ref No 1 Severity SLIGHT Age 32 yrs Sex Male Post code Veh ref No 1 Severity SLIGHT Age 32 yrs Sex Male Post code Veh ref No 1 Severity SLIGHT Age 32 yrs Sex Male Post code Veh ref No 1 Severity SLIGHT Age 32 yrs Sex Male Post code Veh ref No 1 Severity SLIGHT Age 32 yrs Sex Male Post code Veh ref No 1 Severity SLIGHT Age 32 yrs Sex Male Post code Veh ref No 1 Severity SLIGHT Age 32 yrs Sex Male Post code Veh ref No 1 Severity SLIGHT Age 32 yrs Sex Male Post code Veh ref No 1 Severity SLIGHT Age 32 yrs Sex Male Post code Veh ref No 1 Severity SLIGHT Age 32 yrs Sex Male Post code Veh ref No 1 Severity SLIGHT Age 32 yrs Sex Male Post code Veh ref No 1 Severity SLIGHT Age 32 yrs Sex Male Post code Veh ref No 1 Severity SLIGHT Age 32 yrs Sex Male Post code Veh ref No 1 Severity SLIGHT Age 32 yrs Sex Male Post code Veh ref No 1 Severity SLIGHT Age 32 yrs Sex Male Post code Veh ref No 1 Severity SLIGHT Age 32 yrs Sex Male Post code Veh ref No 1 Severity SLIGHT Age 32 yrs Sex Male Post code Veh ref No 1 Severity SLIGHT Age 32 yrs Sex Male Post code Veh ref No 1 Severity SLIGHT Age 32 yrs Sex Male Post code Veh deliverity Not a passenger Veh deliverity N	SEVERITY SLIGHT District Ref.No 1300011 Date 26/12/2012 Day Wednesday Time 09:22 Weather Raining without high winds Road Surface Wet/Damp Street Lighting Daylight SITE DETAILS Speed Limit Carriageway Single carriageway Junction Detail Junction Control 2nd Road Number Pedestrian Facilities None within 50 metres No physical crossing facility within 20 metres No physical crossing facility within 20 metres No physical crossing facility within 20 metres	Road A4231 Location A4231 Barry I Description V1 Slipped on Wet Road, Or of Accident SPECIAL SITE CONDITIONS None CARRIAGEWAY HAZARDS None	Dock Link Road, Barry, Vale of Glamorgan (Opverturned on C/Way down to Adjoining Field.	Grid Reference 314480 / 169190 Police Officer Attend: Yes pp. Mcdonalds).
Full Details 08-June-2015 Accident Ref.No 1300011	Veh.No. 1 Vehicle type Car Manoeuvre Going ahead other Veh. direction from North to South To Skidded Skidded and overturned Veh location at impact (restricted lane) On main carriag Junct. location of veh. at 1st impact Not at or within Veh left carriageway? Left carriageway nearside Hit object in c'way? None Hit object off c'way? Other permanent object First point of impact Nearside Veh registration no. Other veh.hit (ref. Drivers age 32 yrs Sex Male Breath test Neg Left Hand Drive Unknown Foreign veh. Not Journey purpose Commuting to/from work	owing? No tow or articulation geway not in restricted lane a 20m of junction Sino) 0 Hit and run Not hit a gative Driving Lic	Cas No 1 Cas Class Driver Severity SLIGHT Age 32 Car Passenger? Not a passenge Seat Belt Unknown Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable School Pupil Other Roadworker injured Other Details	r or Rider Veh ref No 1 2 yrs Sex Male Post code er PSV Passenger? Not a passenger Cycle Helmet

		Sully	Area	Grid Reference 316640 / 169510
SEVERITY District The Vale of Glamorgan SLIGHT Ref.No 1300215				Grid Reference 316640 / 169510
SLIGHT Ref.No 1300215				Police Officer Attend: Yes
Date 05/02/2013 Day Tuesday	Road 1	Location Sully Road, Penarth	Apparox Half a Mile Form Junction with C	log Road, Penarth.
Time 09:36		,,		
Weather Fine without high winds	Descrip	tion V1 Has Skidded . Misjudging the	Bend Colliding with V2 Heading in the Opp	posite Direction
Road Surface Wet/Damp	of Acci		8	
Street Lighting Daylight				
SITE DETAILS		CDECIAL CUEE CONDUCTIONS		
Speed Limit 60 MPH		SPECIAL SITE CONDITIONS		
Carriageway Single carriageway		None		
Junction Detail Not at or within 20 metres of j	inction			
Junction Control 2nd Road Number		CARRIAGEWAY HAZARDS		
Pedestrian Facilities None within 50 metres		None		
	vithin 50			
No physical crossing facility v	viunin 50 m			
VEHICLES INVOLVED 2			CASUALTIES INVOLVI	ED 2
Vala No. 1 Valaisla triii - C		Molro M - J-1	Cos No. 2 Cos Class D.	
Veh.No. 1 Vehicle type Car Manoeuvre Going ahead left hand bend		Make Model	Cas No 2 Cas Class Driver or	
come uneue tett name come	Towing? M	a tarry an antiquilation	Severity SLIGHT Age 30 y	
Skidded Skidded	rowing: IN	o tow or articulation	Car Passenger? Not a passenger	PSV Passenger? Not a passenger
Veh location at impact (restricted lane) On main carri	ageway not	in restricted lane	Seat Belt Unknown Ped Movement Not applicable	Cycle Helmet
Junct. location of veh. at 1st impact Not at or with				
Veh left carriageway? Did not leave carriageway	<u>-</u>		Ped Location Not applicable Ped Direction to Not applicable	
Hit object in c'way? None			School Pupil Other	
Hit object off c'way? None			Roadworker injured	
First point of impact Offside			Cas No. 2 Cas Class Dossango	r Veh ref No 2
Veh registration no. Other veh.hit (re		Hit and run Not hit and ru	Severity SLIGHT Age 21 y	
Drivers age 20 yrs Sex Male Breath test No.		Driving Lic		
	ot foreign re	gistered vehicle	Car Passenger? Not a passenger Seat Belt Unknown	PSV Passenger? Not a passenger Cycle Helmet
Journey purpose Other Veh.No. 2 Vehicle type Van/Goods < 3.5t		Make Model	Ped Movement Not applicable	Cycle Heimet
Manoeuvre Going ahead right hand bend		1410del	Ped Location Not applicable	
	Towing? N	o tow or articulation	Ped Direction to Not applicable	
Skidded No skidding, jack-knifing or overturni		o tow or articulation	School Pupil Other	
Veh location at impact (restricted lane) On main carri	ageway not	in restricted lane	Roadworker injured	
Junct. location of veh. at 1st impact Not at or with			Other Details	
Veh left carriageway? Did not leave carriageway	3			
Hit object in c'way? None				
Hit object off c'way? None				
First point of impact Front	c \ .	TT: 1 37 11		
Veh registration no. Other veh.hit (no Breath test No		Hit and run Not hit and ru Driving Lic	n	
		gistered vehicle		
Journey purpose Journey as part of work	n ioreign le	gistered vehicle		
Journey as part of work			-	
Full Details		00 1	une-2015	Accident Ref.No 1300215

SEVERITY SLIGHT District Ref.No 1300615 Date 03/04/2013 Day Wednesday Time 16:46 Weather Fine without high winds Road Surface Dry Street Lighting Daylight	Road B4267 Location B4267 - South Road Description V1 left Carriageway & Collided w of Accident	, Sully	Grid Reference 315960 / 167930 Police Officer Attend: Yes
SITE DETAILS Speed Limit Carriageway Single carriageway Not at or within 20 metres of junction Control 2nd Road Number Pedestrian Facilities None within 50 metres No physical crossing facility with	CARRIAGEWAY HAZARDS None		
Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) Junct. location of veh. at 1st impact Not at or within Veh left carriageway? Left carriageway offside Hit object in c'way? Hit object off c'way? First point of impact Veh registration no. Drivers age 50 yrs Left Hand Drive Unknown Journey purpose Other Not at or within No	geway not in restricted lane a 20m of junction ano) 0 Hit and run Not hit and ru	CASUALTIES INVOLV. Cas No 1 Cas Class Driver or Severity SLIGHT Age 50 y Car Passenger? Not a passenger Seat Belt Unknown Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable School Pupil Other Roadworker injured Other Details	r Rider Veh ref No 1 yrs Sex Female Post code PSV Passenger? Not a passenger Cycle Helmet
Full Details	08-J	une-2015	Accident Ref.No 1300615

Street Lighting Daylight SITE DETAILS Speed Limit 30 MPH Carriageway Single carriageway Junction Detail Crossroads Junction Control Give way or uncontrolled 2nd Road Number B4267 Pedestrian Facilities None within 50 metres No physical crossing facility within 50 m VEHICLES INVOLVED 2 Veh.No. 1 Vehicle type Car Make Model Manoeuvre Going ahead other Veh. direction from West to East Towing? No tow or articulation Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) On main carriageway not in restricted lane Junct. location of veh. at 1st impact Approaching junction or waiting Veh left carriageway? Did not leave carriageway Hit object in c'way? None Hit object off c'way? None	CASUALTIES INVOLVED Cas No 2 Cas Class Driver or Rider Veh ref No 2 Severity SLIGHT Age 42 yrs Sex Male Post code Car Passenger? Not a passenger PSV Passenger? Not a passenger
Speed Limit 30 MPH Carriageway Single carriageway Junction Detail Crossroads Junction Control Give way or uncontrolled 2nd Road Number B4267 Pedestrian Facilities None within 50 metres No physical crossing facility within 50 m VEHICLES INVOLVED 2 Veh.No. 1 Vehicle type Car Make Model Manoeuvre Going ahead other Veh. direction from West to East Towing? No tow or articulation Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) On main carriageway not in restricted lane Junct. location of veh. at 1st impact Approaching junction or waiting Veh left carriageway? Did not leave carriageway Hit object in c'way? None Single carriageway None CARRIAGEWAY HAZARDS None CARRIAGEWAY HAZARDS None	Cas No 2 Cas Class Driver or Rider Veh ref No 2 Severity SLIGHT Age 42 yrs Sex Male Post code Car Passenger? Not a passenger PSV Passenger? Not a passenger
2nd Road Number B4267 Pedestrian Facilities None within 50 metres No physical crossing facility within 50 m VEHICLES INVOLVED 2 Veh.No. 1 Vehicle type Car Make Model Manoeuvre Going ahead other Veh. direction from West to East Towing? No tow or articulation Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) On main carriageway not in restricted lane Junct. location of veh. at 1st impact Approaching junction or waiting Veh left carriageway? Did not leave carriageway None Hit object off c'way? None	Cas No 2 Cas Class Driver or Rider Veh ref No 2 Severity SLIGHT Age 42 yrs Sex Male Post code Car Passenger? Not a passenger PSV Passenger? Not a passenger
Veh.No. 1 Vehicle type Car Make Model Manoeuvre Going ahead other Veh. direction from West to East Towing? No tow or articulation Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) On main carriageway not in restricted lane Junct. location of veh. at 1st impact Approaching junction or waiting Veh left carriageway? Did not leave carriageway Hit object in c'way? None Hit object off c'way? None	Cas No 2 Cas Class Driver or Rider Veh ref No 2 Severity SLIGHT Age 42 yrs Sex Male Post code Car Passenger? Not a passenger PSV Passenger? Not a passenger
First point of impact Veh registration no. Drivers age 75 yrs Left Hand Drive Journey purpose Veh.No. 2 Vehicle type Car Manoeuvre Veh. direction from Vest to East Veh registration no. Dother veh.hit (ref.no) 2 Breath test Negative Foreign veh. Not foreign registered vehicle Driving Lic Driving Lic Foreign veh. Not foreign registered vehicle Make Make Model Towing? No tow or articulation	Seat Belt Unknown Cycle Helmet Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable School Pupil Other Roadworker injured Cas No 3 Cas Class Passenger Veh ref No 1 Severity SLIGHT Age 84 yrs Sex Female Post code Car Passenger? Front seat passenger PSV Passenger? Not a passenger Seat Belt Unknown Cycle Helmet Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable School Pupil Other
Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) Junct. location of veh. at 1st impact Approaching junction or waiting Veh left carriageway? Did not leave carriageway Hit object in c'way? None Hit object off c'way? None First point of impact Back Veh registration no. Drivers age 42 yrs Left Hand Drive Unknown Journey purpose Other On main carriageway not in restricted lane Approaching junction or waiting Ap	Roadworker injured Cas No 4 Cas Class Passenger Veh ref No 2 Severity SLIGHT Age 41 yrs Sex Female Post code Car Passenger? Front seat passenger PSV Passenger? Not a passenger Seat Belt Unknown Cycle Helmet Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable School Pupil Other

Other Details

SEVERITY District The Vale of Glamorgan		Sully	Area	Crid Poferance 214600 / 160240
District The vale of Glamorgan				Grid Reference 314690 / 169240
SLIGHT Ref.No 1300923				Police Officer Attend: Yes
Date 02/06/2013 Day Sunday	Road A	A4055 Location A4055 Cardiff Road	l Between Barry Mcdonalds Roundabout and	l Dinas Powys
Time 07:49	1	11000	,	
Weather Fine without high winds	Descrip	tion V1 Stopped at Lavby Just After a	Bend, V2 on Rounding the Bend Swerved to	Avoid V1 and Entered a Ditch on the Side of the Road
Road Surface Dry	of Accid		zena. 72 en 11eanamg ale zena 5 %el vea te	7.17 old 1.1 and Entered a Brief on the Brief of the 110ad
Street Lighting Daylight				
SITE DETAILS				
Speed Limit 40 MPH		SPECIAL SITE CONDITIONS		
Carriageway Single carriageway		None		
Junction Detail Not at or within 20 metres of junction	ction			
Junction Control		CARRIAGEWAY HAZARDS		
2nd Road Number				
Pedestrian Facilities None within 50 metres		None		
No physical crossing facility wit	hin 50 m			
VEHICLES INVOLVED 2			CASUALTIES INVOLVE	ED 2
Veh.No. 1 Vehicle type Car		Make Model	Cas No 3 Cas Class Passenge	r Veh ref No 2
Manoeuvre Parked		Wide Wiodei	Severity SLIGHT Age 44 yr	
Turked	wino? N	o tow or articulation		
Skidded No skidding, jack-knifing or overturning		o tow of afficulation	The state of the s	ger PSV Passenger? Not a passenger
Veh location at impact (restricted lane) On main carriag	eway not	in restricted lane	Seat Belt Unknown Ped Movement Not applicable	Cycle Helmet
Junct. location of veh. at 1st impact Not at or within			Ped Location Not applicable	
Veh left carriageway? Did not leave carriageway	v		Ped Direction to Not applicable	
Hit object in c'way? None			School Pupil Other	
Hit object off c'way? None			Roadworker injured	
First point of impact Front			Cas No. A Cas Class Passanga	r Veh ref No 2
Veh registration no. Other veh.hit (ref.)		Hit and run Not hit and ru	Severity SLIGHT Age 7 yrs	
Drivers age 36 yrs Sex Male Breath test Nega Left Hand Drive Unknown Foreign veh. Not		Driving Lic		ger PSV Passenger? Not a passenger
2	ioreign ie	gistered venicle	Seat Belt Unknown	Cycle Helmet
Journey purpose Other Veh.No. 2 Vehicle type Car		Make Model	Ped Movement Not applicable	Cycle Helmet
Manoeuvre Going ahead other		17IUGE1	Ped Location Not applicable	
	wing? N	o tow or articulation	Ped Direction to Not applicable	
Skidded Skidded and overturned		o to of articulation	School Pupil Other	
Veh location at impact (restricted lane) On main carriag	eway not	in restricted lane	Roadworker injured	
Junct. location of veh. at 1st impact Not at or within			Other Details	
Veh left carriageway? Left carriageway offside	3			
Hit object in c'way? None				
Hit object off c'way? None				
First point of impact Front				
Veh registration no. Other veh.hit (ref.)		Hit and run Not hit and ru	ın	
Drivers age 43 yrs Sex Male Breath test Nega		Driving Lic		
Left Hand Drive Unknown Foreign veh. Not	ioreign re	gistered venicle		
Journey purpose Other			\dashv	
Full Details		00	June-2015	Accident Ref.No 1300923
FUIL DETAILS		08-	nine-2013	Accident Kellino 1300923

SEVERITY District The Vale of Glamorgan		Sully	Area	Grid Reference 314480 / 169140
SLIGHT Ref.No 1300992				Police Officer Attend: Yes
				Police Officer Attend: 108
Date 14/06/2013 Day Friday Time 10:49	Road	A4055 Location A4055 Cardiff Road	Junction with Sully Moors Road, Barry	
Weather Raining without high winds				
Road Surface Wet/Damp	Descrip	ntion V1 Has Entered Roundabout to Tu dent Spin in Road.	irn Right, V2 Has Entered Roundabout to C	Go Straight Ahead. V1 Has Collided with V2 Causing V1 to
Street Lighting Daylight	Of Acci	dent Spin in Road.		
SITE DETAILS				
Speed Limit 50 MPH		SPECIAL SITE CONDITIONS		
Carriageway Roundabout		None		
Junction Detail Roundabout Junction Control Give way or uncontrolled				
Junction Control Give way or uncontrolled 2nd Road Number U		CARRIAGEWAY HAZARDS		
Pedestrian Facilities None within 50 metres		None		
No physical crossing facility w	ithin 50 m			
1.0 physical crossing facility w	50 111			
VEHICLES INVOLVED 2			CASUALTIES INVOLV	ED 1
Veh.No. 1 Vehicle type Car		Make Model	Cas No 1 Cas Class Driver of	r Rider Veh ref No 1
Manoeuvre Turning right			Severity SLIGHT Age 53 y	
	owing? N	o tow or articulation	Car Passenger? Not a passenger	PSV Passenger? Not a passenger
Skidded No skidding, jack-knifing or overturning			Seat Belt Unknown	Cycle Helmet
Veh location at impact (restricted lane) On main carria			Ped Movement Not applicable	·
Junct. location of veh. at 1st impact Mid junction - Veh left carriageway? Did not leave carriageway	on roundat	oout or main road	Ped Location Not applicable	
Hit object in c'way? None			Ped Direction to Not applicable	
Hit object in c way? None			School Pupil Other	
First point of impact Offside			Roadworker injured Other Details	
Veh registration no. Other veh.hit (ref		Hit and run Not hit and ru	in Other Details	
Drivers age 53 yrs Sex Female Breath test Neg		Driving Lic		
Left Hand Drive Unknown Foreign veh. No	t foreign re	gistered vehicle		
Journey purpose Journey as part of work		Make Model	_	
Veh.No. 2 Vehicle type Car Manoeuvre Going ahead other		wiake Wiodei		
	owing? N	o tow or articulation		
Skidded No skidding, jack-knifing or overturnin		o tow of articulation		
Veh location at impact (restricted lane) On main carria		in restricted lane		
Junct. location of veh. at 1st impact Mid junction -				
Veh left carriageway? Did not leave carriageway				
Hit object in c'way? None				
Hit object off c'way? None				
First point of impact Front Veh registration no. Other veh.hit (rei	fno) 1	Hit and run Not hit and ru	n	
Drivers age 43 yrs Sex Male Breath test Neg		Driving Lic		
		gistered vehicle		
Journey purpose Other				
Full Details		08-1	une-2015	Accident Ref No. 1300002

Date 17/07/2013 Day Wednesday Time 16:06 Weather Fine without high winds Road Surface Street Lighting Daylight SITE DETAILS Speed Limit Carriageway Junction Detail Junction Control Provided Wednesday Road B4267 Location South Road J/W Burnh Description Vehicle 1 Has Collided with V2 Cause of Accident SPECIAL SITE CONDITIONS None CARRIAGEWAY HAZARDS	
Speed Limit 30 MPH SPECIAL SITE CONDITIONS Carriageway Single carriageway None Junction Detail T or staggered junction Junction Control Give way or uncontrolled	
2nd Road Number Pedestrian Facilities Vone within 50 metres Zebra crossing CARRIAGEWAY HAZARDS None None	
Veh.No. 1 Vehicle type Car Make Model Manoeuvre Going ahead other Veh. direction from Northwest to Southeast Towing? No tow or articulation Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) Unct. location of veh. at 1st impact Veh left carriageway? Did not leave carriageway Hit object in c'way? None First point of impact Veh registration no. Drivers age 41 yrs Journey purpose Veh.No. 2 Vehicle type Car Manoeuvre Going ahead other Veh. direction from Northwest to Southeast Northwest to Southeast Towing? No tow or articulation Other veh.hit (ref.no) 2 Hit and run Not hit and run Drivers age 41 yrs Left Hand Drive Unknown Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) Junct. location of veh. at 1st impact Veh left carriageway? Hit object in c'way? Northwest to Southeast Towing? No tow or articulation Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) Junct. location of veh. at 1st impact Veh left carriageway? Hit object in c'way? First point of impact Veh registration no. Drivers age 64 yrs Sex Male Breath test Negative Driving Lic On main carriageway not in restricted lane Approaching junction or waiting Veh left carriageway? None Front Other veh.hit (ref.no) 1 Hit and run Not hit and run Drivers age 64 yrs Sex Male Breath test Negative Driving Lic Not hit and run Not hit and run Not hit and run Not hit and run Drivers age 64 yrs Sex Male Driving Lic Dri	Cas No 1 Cas Class Driver or Rider Veh ref No 1 Severity SLIGHT Age 41 yrs Sex Female Post code Car Passenger? Not a passenger PSV Passenger? Not a passenger Seat Belt Unknown Cycle Helmet Ped Movement Not applicable Ped Location Not applicable School Pupil Other Roadworker injured Cas No 2 Cas Class Driver or Rider Veh ref No 2 Severity SLIGHT Age 64 yrs Sex Male Post code Car Passenger? Not a passenger PSV Passenger? Not a passenger Seat Belt Unknown Cycle Helmet Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable Ped Direction to Not applicable Ped Direction to Not applicable School Pupil Other Roadworker injured Other Details

Veh.No. 3 Vehicle type Car Make Model Manoeuvre Slowing or stopping Veh. direction from Northwest to Southeast Towing? No tow or articulation Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) On main carriageway not in restricted lane Junct. location of veh. at 1st impact Approaching junction or waiting Veh left carriageway? Did not leave carriageway Hit object in c'way? None Hit object off c'way? None First point of impact Back Veh registration no. Other veh.hit (ref.no) 2 Hit and run Not hit and run Drivers age 39 yrs Breath test Negative Driving Lic Sex Female Left Hand Drive Foreign veh. Not foreign registered vehicle Unknown Journey purpose Other

SEVERITY District The Vale of Glamorgan	Sully Are	ea	Grid Reference 314500 / 169150
SERIOUS Ref.No 1302044			Police Officer Attend: Yes
Date 08/11/2013 Day Friday Time 20:42 Weather Raining without high winds Road Surface Wet/Damp Street Lighting Dark: street lights present and lit SITE DETAILS	of Accident Sustained	oout as V2 was Already Travelling on Ro	undabout. V1 Has Collided with Nearside of V2 - Injury
Speed Limit 40 MPH Carriageway Roundabout Junction Detail Roundabout	SPECIAL SITE CONDITIONS None		
Junction Control 2nd Road Number Pedestrian Facilities No physical crossing facility within	CARRIAGEWAY HAZARDS None		
VEHICLES INVOLVED 2	·	CASUALTIES INVOLVE	ED 1
Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) On main carriagev Junct. location of veh. at 1st impact Entering roundabe Veh left carriageway? Did not leave carriageway Hit object in c'way? None Hit object off c'way? None First point of impact Front Veh registration no. Drivers age 62 yrs Sex Male Breath test Negati Left Hand Drive Unknown Foreign veh. Not fo Journey purpose Other Veh.No. 2 Vehicle type Car Manoeuvre Going ahead other Veh. direction from Northwest to Southeast Town Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) Junct. location of veh. at 1st impact Mid junction - on	Driving Lic reign registered vehicle Make Model mg? No tow or articulation way not in restricted lane	Cas No 1 Cas Class Driver or Severity SERIOUS Age 62 yr Car Passenger? Not a passenger Seat Belt Unknown Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable School Pupil Other Roadworker injured Other Details	
Veh left carriageway? Did not leave carriageway Hit object in c'way? None Hit object off c'way? None First point of impact Veh registration no. Drivers age 52 yrs Left Hand Drive Unknown Foreign veh. Regist Journey purpose Other			

SEVERITY District The Vale of Glamorgan SLIGHT Ref.No 1302131		Sull	y Area	Grid Reference 314210 / 168990 Police Officer Attend: Yes
Date 16/11/2013 Day Saturday Time 08:59 Weather Fine without high winds		A4055 Location A4055 - Cardiff R		
Road Surface Wet/Damp Street Lighting Daylight SITE DETAILS	of Accid	_		
Speed Limit 40 MPH Carriageway Single carriageway Junction Detail T or staggered junction		SPECIAL SITE CONDITIONS None		
Junction Control 2nd Road Number Pedestrian Facilities Wone within 50 metres No physical crossing facility was a controlled.	ithin 50 m	CARRIAGEWAY HAZARDS None		
VEHICLES INVOLVED 2	101111 30 III		CASUALTIES INVO	DLVED 2
Veh.No. 1 Vehicle type Car Manoeuvre Going ahead other Veh. direction from Northeast to Southwest Skidded Skidded Veh location at impact (restricted lane) On main carria Junct. location of veh. at 1st impact Approaching j Veh left carriageway? Left carriageway nearside Hit object in c'way? None Hit object off c'way? None First point of impact Nearside	igeway not		Cas No 1 Cas Class Drive Severity SLIGHT Age 3 Car Passenger? Not a passeng Seat Belt Unknown Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable School Pupil Other Roadworker injured	22 yrs Sex Male Post code ger PSV Passenger? Not a passenger Cycle Helmet e e e
Veh registration no. Drivers age 32 yrs Sex Male Left Hand Drive Unknown Journey purpose Other Veh.No. 2 Vehicle type Car Manoeuvre Going ahead other Veh. direction from Northeast to West Skidded Skidded Veh location at impact (restricted lane) Junct. location of veh. at 1st impact Other veh.hit (re Breath test Po Foreign veh. No	sitive t foreign re Cowing? Notes		run Cas No 2 Cas Class Drive Severity SLIGHT Age 3 Car Passenger? Not a passeng Seat Belt Unknown Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable School Pupil Other Roadworker injured Other Details	66 yrs Sex Male Post code ger PSV Passenger? Not a passenger Cycle Helmet e e
Veh left carriageway? Hit object in c'way? Hit object off c'way? Hit object off c'way? First point of impact Veh registration no. Drivers age 36 yrs Left Hand Drive Journey purpose Did not leave carriageway None Offside Other veh.hit (re Breath test Ne Unknown Foreign veh. No	gative	Hit and run Not hit and Driving Lic gistered vehicle	run	
Full Details		00	3-June-2015	Accident Ref.No 1302131

SEVERITY District The Vale of Glamorgan		Sully	Area	Grid Reference 314350 / 169110
SLIGHT Ref.No 1302280				011000 107110
				Police Officer Attend: Yes
Date 18/12/2013 Day Wednesday Time 17:39	Road A	A4055 Location Cardiff Road, Near	to Sully View Junction, Barry, Vale of Glam	norgan
Weather Raining with high winds				
Road Surface Wet/Damp		_	Stationary and Pulled out into Offside Lane i	into Path of V2. Injuries to Driver of V2
Street Lighting Dark: street lights present and lit	of Accid	lent		
SITE DETAILS				
Speed Limit 40 MPH		SPECIAL SITE CONDITIONS		
Carriageway Dual carriageway		None		
Junction Detail T or staggered junction				
Junction Control Give way or uncontrolled		CARRIAGEWAY HAZARDS		
2nd Road Number U		None		
Pedestrian Facilities None within 50 metres	.: 50			
No physical crossing facility with	iin 50 m			
VEHICLES INVOLVED 2			CASUALTIES INVOLV	ED 1
Veh.No. 1 Vehicle type Car		Make Model	Cas No 2 Cas Class Driver or	r Rider Veh ref No 2
Manoeuvre Changing lane to right			Severity SLIGHT Age 33 y	
l	ving? No	o tow or articulation	Car Passenger? Not a passenger	PSV Passenger? Not a passenger
Skidded No skidding, jack-knifing or overturning			Seat Belt Unknown	Cycle Helmet
Veh location at impact (restricted lane) On main carriage			Ped Movement Not applicable	•
Junct. location of veh. at 1st impact Approaching junct. Veh left carriageway? Did not leave carriageway	ction or v	vaiting	Ped Location Not applicable	
Hit object in c'way? None			Ped Direction to Not applicable	
Hit object off c'way? None			School Pupil Other Roadworker injured	
First point of impact Back			Other Details	
Veh registration no. Other veh.hit (ref.no.		Hit and run Not hit and ru	in State Betans	
Drivers age 29 yrs Sex Male Breath test Negat Left Hand Drive Unknown Foreign veh. Not fe		Driving Lic		
Left Hand Drive Unknown Foreign veh. Not for Journey purpose Commuting to/from work	oreign re	gistered venicle		
Veh.No. 2 Vehicle type Car		Make Model		
Manoeuvre Going ahead other				
	ving? No	o tow or articulation		
Skidded No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane) On main carriage				
Junct. location of veh. at 1st impact Approaching junc	ction or v	vaiting		
Veh left carriageway? Did not leave carriageway Hit object in c'way? None				
Hit object off c'way? None				
First point of impact Front				
Veh registration no. Other veh.hit (ref.ne		Hit and run Not hit and ru	ın	
Drivers age 33 yrs Sex Female Breath test Negat		Driving Lic		
Left Hand Drive Unknown Foreign veh. Not for	oreign re	gistered vehicle		
Journey purpose Commuting to/from work			\dashv	
Full Details		00.3	June-2015	Accident Ref No. 1302280

SEVERITY District The Vale of Glamorgan	Sull	y Area	Grid Reference 314390 / 169300
SLIGHT Ref.No 1302355			
			Police Officer Attend: Yes
Date 17/12/2013 Day Tuesday Time 17:18	Road A4231 Location A4231, Barry		
Weather Fine without high winds Road Surface Wet/Damp	Description Cyclist (V2) Knocked off Bike b	y V1 - Injury Sustained	
Street Lighting Dark: no street lighting	of Accident		
SITE DETAILS			
Speed Limit 30 MPH	SPECIAL SITE CONDITIONS		
Carriageway Single carriageway Junction Detail Not at or within 20 metres of jur	None nction		
Junction Control 2nd Road Number	CARRIAGEWAY HAZARDS		
	None		
Pedestrian Facilities None within 50 metres No physical crossing facility wi			
VEHICLES INVOLVED 2		CASUALTIES INVOLV	/ED 1
Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane)	owing? No tow or articulation g geway not in restricted lane n 20m of junction ano) 0 Hit and run Hit and Run over not contacted Driving Lic foreign registered vehicle Make Model owing? No tow or articulation g geway not in restricted lane n 20m of junction ano) 1 Hit and run Not hit and		yrs Sex Male Post code

SEVERITY District The Vale of Glamorgan		Sully	Area	Grid Reference 315010 / 169450
SLIGHT Ref.No 1302417				
SEIGHT ROLL 1502117				Police Officer Attend: Yes
Date 06/12/2013 Day Friday	DI	A 4055 Leasting Condiff Deed Disease	- D	
Time 13:25	Road A	A4055 Location Cardiff Road, Dinas	s Powys	
Weather Raining without high winds	Dagaming	tion V2 Has Come to a Stop in Heavy	Traffic, V1 Has Failed to Notice and Collide	ad with Daar
Road Surface Wet/Damp	of Accid		Traine, vi fras railed to Notice and Como	eu with Real.
Street Lighting Daylight	of Accid	iont .		
SITE DETAILS				
Speed Limit 60 MPH		SPECIAL SITE CONDITIONS		
Carriageway Single carriageway		None		
Junction Detail Not at or within 20 metres of junc	ction			
Junction Control		CARRIAGEWAY HAZARDS		
2nd Road Number		None		
Pedestrian Facilities None within 50 metres				
No physical crossing facility with	hin 50 m			
VEHICLES INVOLVED 2			CASUALTIES INVOLV	ED 1
Veh.No. 1 Vehicle type Car		Make Model	Cas No 2 Cas Class Driver or	r Rider Veh ref No 2
Manoeuvre Moving off		wake wiodei	Severity SLIGHT Age 51 y	
	wing? No	tow or articulation	,	
Skidded No skidding, jack-knifing or overturning	-	stow of articulation	Car Passenger? Not a passenger Seat Belt Unknown	PSV Passenger? Not a passenger
Veh location at impact (restricted lane) On main carriageway not in restricted lane		Seat Belt Unknown Ped Movement Not applicable	Cycle Helmet	
Junct. location of veh. at 1st impact Not at or within 2			Ped Location Not applicable	
Veh left carriageway? Did not leave carriageway			Ped Direction to Not applicable	
Hit object in c'way? None			School Pupil Other	
Hit object off c'way? None			Roadworker injured	
First point of impact Front Veh registration no. Other veh.hit (ref.n) 2	Hit and myn NI-4 hit d	Other Details	
Veh registration no. Drivers age 27 yrs Sex Male Other veh.hit (ref.n Breath test Nega		Hit and run Not hit and ru Driving Lic	un	
Left Hand Drive Unknown Foreign veh. Not f				
Journey purpose Other				
Veh.No. 2 Vehicle type Car		Make Model		
Manoeuvre Slowing or stopping				
	_	tow or articulation		
Skidded No skidding, jack-knifing or overturning				
Veh location at impact (restricted lane) On main carriage				
Junct. location of veh. at 1st impact Not at or within 1	∠∪m of ju	nction		
Veh left carriageway? Did not leave carriageway Hit object in c'way? None				
Hit object off c'way? None				
First point of impact Back				
Veh registration no. Other veh.hit (ref.n		Hit and run Not hit and ru	un	
Drivers age 51 yrs Sex Male Breath test Nega		Driving Lic		
Left Hand Drive Unknown Foreign veh. Not f	foreign reg	gistered vehicle		
Journey purpose Taking pupil to/from school				
			Juna 2015	Accident Ref No. 1202417

SEVERITY District The Vale of Glamorgan	Sully Ar	rea	Grid Reference 314508 / 169149
SLIGHT Ref.No 1400372			Police Officer Attend: Yes
			Tonce Officer Attend. 163
Date 17/02/2014 Day Monday Time 18:00	Road A4055 Location CARDIFF ROAD JUN	NCTION SULLY MOORS ROAD BAF	RRY
Time 18:00 Weather Other			
Road Surface Wet/Damp	Description V1 MOVED OFF AND FAILED TO	SEE V2 IN FRONT AND COLLIDED W	VITH THEM
Street Lighting Dark: street lights present and lit	of Accident		
SITE DETAILS			
Speed Limit 40 MPH	SPECIAL SITE CONDITIONS		
Carriageway Roundabout	None		
Junction Detail Roundabout			
Junction Control Give way or uncontrolled 2nd Road Number B4267	CARRIAGEWAY HAZARDS		
Pedestrian Facilities None within 50 metres	None		
No physical crossing facility with	——————————————————————————————————————		
Two physical crossing facility with	MI 50 III	1	
VEHICLES INVOLVED 2		CASUALTIES INVOLVE	ED 1
Veh.No. 1 Vehicle type Car	Make 000000000 Model 00000000	Cas No 2 Cas Class Driver or	Rider Veh ref No 2
Manoeuvre Moving off		Severity SLIGHT Age 32 yr	
Veh. direction from East to West Tow	wing? No tow or articulation	Car Passenger? Not a passenger	PSV Passenger? Not a passenger
Skidded No skidding, jack-knifing or overturning		Seat Belt Not applicable	Cycle Helmet Yes
Veh location at impact (restricted lane) On main carriage		Ped Movement Not applicable	•
Junct. location of veh. at 1st impact Approaching jun Veh left carriageway? Did not leave carriageway	nction or waiting	Ped Location Not applicable	
Hit object in c'way? None		Ped Direction to Not applicable	
Hit object off c'way? None		School Pupil Other Roadworker injured	
First point of impact Front		Other Details	
Veh registration no. Other veh.hit (ref.no) 0 Hit and run Not hit and run Drivers age 48 yrs Sex Male Breath test Not requested Driving Lic		<u>Simer Beimin</u>	
Drivers age 48 yrs Sex Male Breath test Not r Left Hand Drive No Foreign veh.	requested Driving Lic		
Journey purpose Commuting to/from work			
Veh.No. 2 Vehicle type Pedal Cycle	Make 000000000 Model 00000000	0	
Manoeuvre Moving off			
	wing? No tow or articulation		
Skidded No skidding, jack-knifing or overturning			
Veh location at impact (restricted lane) On main carriage Junct. location of veh. at 1st impact Approaching jun			
Veh left carriageway? Did not leave carriageway	iction of waiting		
Hit object in c'way? None			
Hit object off c'way? None			
First point of impact Back			
Veh registration no. Drivers age 32 yrs Sex Male Other veh.hit (ref.n. Breath test Not A			
Left Hand Drive No Foreign veh.	Applicable Driving Lic		
Journey purpose Other			
711 0000		1	
Full Details	OQ_Iun	ne-2015	Accident Ref No. 1400372

SEVERITY District The Vale of Glamorgan SLIGHT Ref.No 1400499	Sully Area		Grid Reference 315459 / 168196
SLIGHT RCI.NO 1400499			Police Officer Attend: Yes
Date 16/03/2014 Day Sunday Time 09:06	Road B4267 Location SOUTH ROAD SU	JLLY	
Weather Fine without high winds Road Surface Dry Street Lighting Daylight	Description V1 HAS PULLED OUT INTO PATH of Accident	H OF ONCOMING V2 A PEDAL CYCL	IST.
SITE DETAILS Speed Limit 30 MPH Carriageway Single carriageway Junction Detail T or staggered junction	SPECIAL SITE CONDITIONS None		
Junction Control 2nd Road Number Pedestrian Facilities None within 50 metres No physical crossing facility with	CARRIAGEWAY HAZARDS None iin 50 m		
VEHICLES INVOLVED 2	,	CASUALTIES INVOLVI	ED 1
Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) On main carriage Junct. location of veh. at 1st impact Approaching juncy Veh left carriageway? Did not leave carriageway Hit object in c'way? None Hit object off c'way? None First point of impact Front Veh registration no. Other veh.hit (ref.n. Drivers age 90 yrs Sex Male Breath test Not re Left Hand Drive No Foreign veh. Journey purpose Other Veh.No. 2 Vehicle type Pedal Cycle Manoeuvre Going ahead other	Make 000000000 Model 000000000 Wing? No tow or articulation way not in restricted lane ection or waiting Ohio Hit and run Not hit and run	Severity SLIGHT Age 26 y. Car Passenger? Not a passenger Seat Belt Not applicable Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable School Pupil Other Roadworker injured Other Details	

SEVERITY District The Vale of Glamorgan SLIGHT Ref.No 1400510	Sully Area	Grid Reference 313	8852 / 167795
SLIGHT Relative 1400310		Police Officer Attend: Yes	S
Date 17/03/2014 Day Monday Time 10:23	Road U Location HAYES ROAD SUL	LLY.	
Weather Fine without high winds Road Surface Dry Street Lighting Daylight	Description V1 HAS PULLED OUT JUNCTION I of Accident	NTO PATH OF V2 CAUSING DAMAGE.	
SITE DETAILS Speed Limit 20 MPH Carriageway Roundabout Junction Detail Roundabout	SPECIAL SITE CONDITIONS None		
Junction Control Give way or uncontrolled 2nd Road Number U Pedestrian Facilities None within 50 metres No physical crossing facility with	CARRIAGEWAY HAZARDS None		
VEHICLES INVOLVED 2	,	CASUALTIES INVOLVED 1	
Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) Junct. location of veh. at 1st impact Veh left carriageway? Did not leave carriageway Hit object in c'way? None Hit object off c'way? None First point of impact Veh registration no. Drivers age 80 yrs Left Hand Drive Journey purpose Not Known Veh.No. 2 Vehicle type Car Manoeuvre Going ahead other Veh. direction from Northeast to Southwest Veh location at impact (restricted lane) Junct. location of veh. at 1st impact Veh left carriageway? Hit object in c'way? Hit object off c'way? First point of impact Veh registration no. On main carriag Entering rounda On main carriag Breath test Not Foreign veh. On main carriag Con main carriag Entering rounda On main carriag Fintering rounda On main carriag Con main carriag Con main carriag Entering rounda On main carriag Fintering rounda On main carriag Con main car	eway not in restricted lane bout no) 0 Hit and run Not hit and run provided (medical re Driving Lic Make 000000000 Model 000000000 wing? No tow or articulation eway not in restricted lane bout	Cas No 1 Cas Class Driver or Rider Veh ref No Severity SLIGHT Age 80 yrs Sex Female Post Car Passenger? Not a passenger PSV Passenger? Not a p Seat Belt Worn but not indepe Cycle Helmet Not a compete Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable School Pupil Other Roadworker injured Other Details	code assenger

SEVERITY District The Vale of Glamorgan		Sull	ly Area		Grid Reference	316357 / 168807
SERIOUS Ref.No 1400760					Police Officer Attend:	Yes
Date 27/04/2014 Day Sunday Time 22:37 Weather Fine without high winds	Road 1			ARTH VALE OF GLAMORGAN		
Road Surface Wet/Damp Street Lighting Dark: no street lighting		otion V1 WAS TRAVELLING THRO dent A POSITIVE ROAD SIDE BRE			BANKMENT AND ROI	LLED OVER. DRIVER PROVIDED
SITE DETAILS Speed Limit 60 MPH Carriageway Single carriageway Junction Detail Not at or within 20 metres of jun Junction Control 2nd Road Number Pedestrian Facilities None within 50 metres No physical crossing facility within 50 metres		SPECIAL SITE CONDITIONS None CARRIAGEWAY HAZARDS None				
VEHICLES INVOLVED 1				CASUALTIES INVOLVI	ED 2	
Veh.No. 1 Vehicle type Car Manoeuvre Going ahead other Veh. direction from Northeast to Southwest To Skidded Skidded and overturned Veh location at impact (restricted lane) On main carriag Junct. location of veh. at 1st impact Not at or within Veh left carriageway? Did not leave carriageway Hit object in c'way? None Hit object off c'way? None First point of impact Nearside Veh registration no. Other veh.hit (ref. Drivers age 41 yrs Sex Female Breath test Posi Left Hand Drive No Foreign veh. Journey purpose Not Known	neway not 20m of ju		run	Ped Movement Ped Location Not applicable Not applicable Not applicable Not applicable Not applicable Not applicable School Pupil Other Roadworker injured Cas No 2 Cas Class Passenge Severity SLIGHT Age 7 yrs	rs Sex Female PSV Passenger? No epe Cycle Helmet No r Veh re	Post code of a passenger of a cyclist ef No 1 Post code of a passenger
Full Details		08	8-June-2	2015	Accide	nt Ref.No 1400760

SEVERITY District The Vale of Glamorgan		Sull	ly Area		Grid Reference 315174 / 168267
SLIGHT Ref.No 1401253					Police Officer Attend: Yes
Date 08/07/2014 Day Tuesday Time 17:14	Road J	B4267 Location			
Weather Raining without high winds Road Surface Wet/Damp Street Lighting Daylight	Descrip of Accid				
SITE DETAILS Speed Limit 30 MPH Carriageway Single carriageway Function Detail Not at or within 20 metres of justice and Road Number Pedestrian Facilities None within 50 metres No physical crossing facility were served.		SPECIAL SITE CONDITIONS None CARRIAGEWAY HAZARDS None		CASUALTIES INVOLVI	ED 2
Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) On main carriagument. Iocation of veh. at 1st impact Not at or with the Veh left carriageway? Did not leave carriageway. Hit object in c'way? None Hit object off c'way? None First point of impact Front Veh registration no. Drivers age 38 yrs Sex Female Breath test New Left Hand Drive No Foreign veh. Journey purpose Not Known Veh.No. 2 Vehicle type Car Manoeuvre Parked	geway not n 20m of ju f.no) 0 gative Cowing? Not n 20m of ju f.no) 0	Hit and run Not hit and Driving Lic Make 0000000000 Model 000000 tow or articulation in restricted lane	00000 <u>C</u>	Ped Movement Ped Location Not applicable Not applicable Not applicable Not applicable Not applicable School Pupil Other Roadworker injured Cas No 2 Cas Class Driver or Severity SLIGHT Age 40 y Car Passenger? Not a passenger	PSV Passenger? Not a passenger lepe Cycle Helmet Not a cyclist r Rider Veh ref No 2
Full Details		Λι.	8-June-2	0015	Accident Ref.No 1401253

Full Details 08-June-2015 Accident Ref.No 1401253

SEVERITY District	The Vole of Clemenson		Sully	y Area	Grid Reference 314511 / 169152
	C				Grid Reference 314511 / 169152
SLIGHT Ref.No	1401432				Police Officer Attend: Yes
Date 02/0	08/2014 Day Saturday	Pond A	A4055 Location		
Time 20:3	30	Koau P	A4055 Location		
	e without high winds	Descript	tion		
Road Surface Dry		of Accid			
	ylight				
	SITE DETAILS				
Speed Limit	30 MPH		SPECIAL SITE CONDITIONS		
Carriageway	Roundabout		None		
Junction Detail	Roundabout				
Junction Control	Give way or uncontrolled		CARRIAGEWAY HAZARDS		
2nd Road Number	A4231		None		
Pedestrian Facilities	None within 50 metres		None		
	No physical crossing facility wit	hin 50 m			
VEHICLES INVOLV	TED 2			CASUALTIES INVOLV	ED 1
Manoeuvre Veh. direction from M Skidded No skid Veh location at impact Junct. location of veh. Veh left carriageway? Hit object in c'way? Hit object off c'way? First point of impact Veh registration no. Drivers age 28 yrs Left Hand Drive Journey purpose Veh.No. 2 Vehi Manoeuvre Veh. direction from M Skidded No skid	dding, jack-knifing or overturning t (restricted lane) On main carriag at 1st impact Mid junction - o Did not leave carriageway None None Offside Other veh.hit (ref.) Sex Male Breath test Nega No Foreign veh. Other icle type M/cycle <= 50cc Going ahead other	eway not in roundab	Hit and run Not hit and a Driving Lic Make 0000000000 Model 000000 to tow or articulation	Severity SLIGHT Age 49 y Car Passenger? Not a passenger Seat Belt Not applicable Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable School Pupil Other Roadworker injured Other Details	
Junct. location of veh.	at 1st impact Mid junction - o				
Veh left carriageway?	Did not leave carriageway				
Hit object in c'way? Hit object off c'way?	None				
First point of impact	None Front				
Veh registration no. Drivers age 65 yrs	Other veh.hit (ref.: Sex Male Breath test Nega	no) 0	Hit and run Not hit and a Driving Lic	run	
Left Hand Drive	No Foreign veh.				
Journey purpose	Other			 	
Full Details			08	-June-2015	Accident Ref.No 1401432
				· ·	V 44 1101102

SEVERITY District The Vale of Glamorgan		Sully A	rea	Grid Reference 314981 / 169419
SLIGHT Ref.No 1401587				
SELGIII STATES				Police Officer Attend: Yes
Date 28/08/2014 Day Thursday	Road	A4055 Location		•
Time 13:00	Road 1	A4033 Location		
Weather Fine without high winds	Descrip	ation		
Road Surface Dry	of Acci			
Street Lighting Daylight				
SITE DETAILS		CDECLAL CITE CONDITIONS		
Speed Limit 60 MPH		SPECIAL SITE CONDITIONS		
Carriageway Junction Detail Single carriageway Not at or within 20 metres of junc	otion	None		
Junction Control	LIOII			
2nd Road Number		CARRIAGEWAY HAZARDS		
Pedestrian Facilities None within 50 metres		None		
No physical crossing facility with	nin 50 m			
- To physical crossing facility with	50 111		T	
VEHICLES INVOLVED 2			CASUALTIES INVOLV	ED 1
Veh.No. 1 Vehicle type Car		Make 000000000 Model 00000000	0 Cas No 2 Cas Class Driver or	r Rider Veh ref No 2
Manoeuvre Going ahead other			Severity SLIGHT Age 51 y	
I -	wing? N	o tow or articulation	Car Passenger? Not a passenger	PSV Passenger? Not a passenger
Skidded No skidding, jack-knifing or overturning			·	lepe Cycle Helmet Not a cyclist
Veh location at impact (restricted lane) On main carriage			Ped Movement Not applicable	epe eyele Hemiet Hot a eyelist
Junct. location of veh. at 1st impact Not at or within	20m of ju	unction	Ped Location Not applicable	
Veh left carriageway? Did not leave carriageway			Ped Direction to Not applicable	
Hit object in c'way? None Hit object off c'way? None			School Pupil Other	
Hit object off c'way? None First point of impact Front			Roadworker injured	
Veh registration no. Other veh.hit (ref.n	10) ()	Hit and run Not hit and run	Other Details	
Drivers age 58 yrs Sex Male Breath test Nega		Driving Lic		
Left Hand Drive No Foreign veh.				
Journey purpose Other				
Veh.No. 2 Vehicle type Car		Make 000000000 Model 00000000	00	
Manoeuvre Slowing or stopping	rim ~0 3.7			
		o tow or articulation		
Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) On main carriage		in restricted lane		
Junct. location of veh. at 1st impact Not at or within 2				
Veh left carriageway? Did not leave carriageway	_0111 O1 JU	****		
Hit object in c'way? None				
Hit object off c'way? None				
First point of impact Back				
Veh registration no. Other veh.hit (ref.n		Hit and run Not hit and run		
Drivers age 51 yrs Sex Male Breath test Nega Left Hand Drive No Foreign veh.	tive	Driving Lic		
Left Hand Drive No Foreign veh. Journey purpose Other				
Journey purpose Other			┥	
Full Details		00 Iv	ne-2015	Accident Ref No. 1/01587

SEVERITY District The Vale of Glamorgan Ref.No 1401693 Date 18/09/2014 Day Thursday	Sully A	rea	Grid Reference 314901 / 168277 Police Officer Attend: Yes
Time 13:10 Weather Fine without high winds	Road U Location Description of Accident		
Speed Limit 40 MPH Carriageway Single carriageway Junction Detail Roundabout Junction Control Give way or uncontrolled 2nd Road Number B4267 Pedestrian Facilities None within 50 metres	SPECIAL SITE CONDITIONS None CARRIAGEWAY HAZARDS None		
No physical crossing facility within	n 50 m		
Skidded No skidding, jack-knifing or overturning Veh location at impact (restricted lane) On main carriagev Junct. location of veh. at 1st impact Mid junction - on a Veh left carriageway? Did not leave carriageway Hit object in c'way? None Hit object off c'way? Lamp post First point of impact Front Veh registration no. Drivers age 20 yrs Sex Male Breath test Negativ Left Hand Drive No Foreign veh. Journey purpose Not Known	roundabout or main road Hit and run Not hit and run	Severity SLIGHT Age 20 y Car Passenger? Not a passenger Seat Belt Worn and indeper Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable School Pupil Other Roadworker injured Cas No 2 Cas Class Passenges Severity SLIGHT Age 20 y Car Passenger? Front seat passer Seat Belt Worn and indeper Ped Movement Not applicable Ped Location Not applicable Ped Direction to Not applicable Ped Direction to Not applicable School Pupil Other Roadworker injured Cas No 3 Cas Class Passenge Severity SLIGHT Age 19 y Car Passenger? Rear seat passenge	r Rider Veh ref No 1 rrs Sex Male Post code PSV Passenger? Not a passenger ende Cycle Helmet Not a cyclist er Veh ref No 1 rrs Sex Male Post code nger PSV Passenger? Not a passenger ende Cycle Helmet Not a cyclist er Veh ref No 1
Full Details	08-Ju	ne-2015	Accident Ref.No 1401693

Other Details Accident Ref.No 1401693 Full Details

Appendix C. Sully Sports & Social Club Existing Site Usage

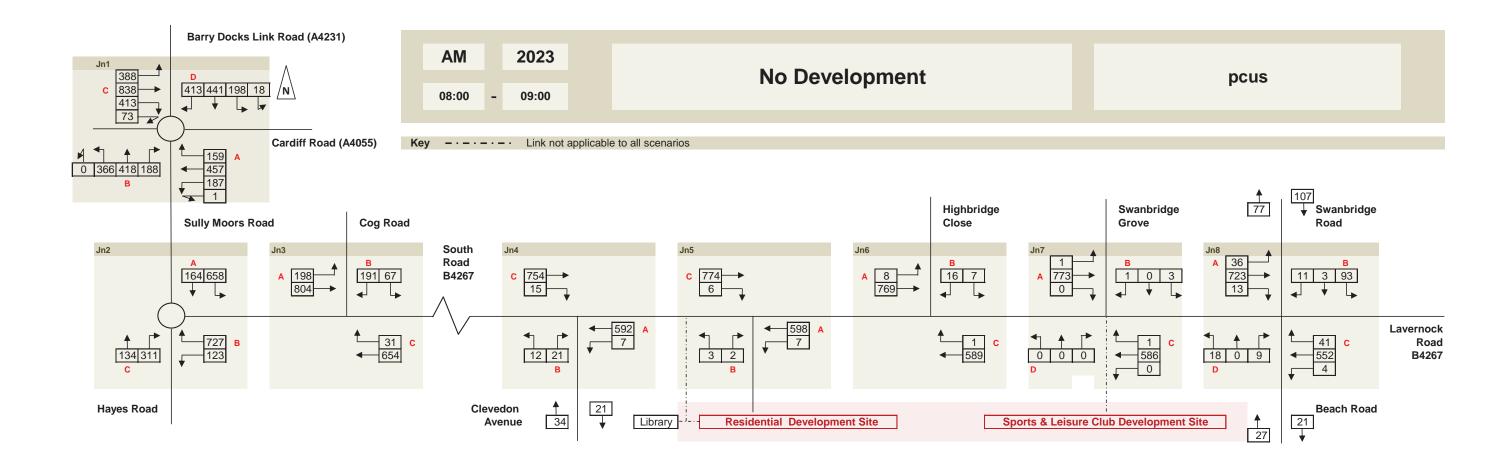
	Hourly usage figures								Key					
Harris	0	40	44	40	4	2	2:-:	4	F	C	7	0	0	Indees Devide
Hours Monday	9am	10am	11am	12pm	1pm	2pm	3pm	4pm	5pm	6pm	7pm	8pm	9pm	Indoor Bowls FC matches & training
Wildiday					1									FC matches & training
Main Pitch (3G AGP)		20	20			20			25	25	25	25	25	RFC matches & training
Small sided AGP									16	16	16	16	16	Casual AGP use
Rugby Pitch														Function hire
Senior Pitch 1														Sports bar general use
Senior Pitch 2														
Indoor bowls		60		60		60		40		50	50	50		
Sports Bar			L					-		30	40	40	30	
Function Suite		100	4		1 -	100	5			101		10		
Total	0	120	20	60	0	130	0	40	41	161	131	131	71	
T de	1													
Tuesday Main Pitch (3G AGP)		20	20		ī	20			25	25	25	25	25	
Small sided AGP		20	20			20			16	16	16	16	16	
Rugby Pitch									10	10	10	30	10	
Senior Pitch 1]	l	
Senior Pitch 2														
Indoor bowls	1	60		60		60		40		50	50	50		
Sports Bar	1	30		30		- 50		.0		30	40	40	30	
Function Suite	1		4	0			5	0		30		10		
Total	0	120	20	60	0	130	0	40	41	161	161	131	71	
													•	
Wednesday														
Main Pitch (3G AGP)	L	20	20			20			25	25	25	25	25	
Small sided AGP	L								16	16	16	16	16	
Rugby Pitch														
Senior Pitch 1														
Senior Pitch 2														
Indoor bowls		60		60		60		40		50	50	50		
Sports Bar										30	40	40	30	
Function Suite			4				5					10		
Total	0	120	20	60	0	130	0	40	41	161	131	131	71	
Thursday														
Main Pitch (3G AGP)		20	20			20			25	25	25	25	25	
Small sided AGP									16	16	16	16	16	
Rugby Pitch														
Senior Pitch 1			-											
Senior Pitch 2		00		00		00		40		F0	50	50		
Indoor bowls		60		60		60		40		50	50	50	00	
Sports Bar	1		1					0		30	40		30	
Function Suite Total	0	120	20	60	0	130	0	0 40	41	161		121	71	
Total	U	120	20	00	U	130	U	40	41	101	131	131	/ 1	
Friday														
Main Pitch (3G AGP)		20	20		l	20			20	20	20		I	
Small sided AGP		20	20			20			10	10	10			
Rugby Pitch									10	10	10			
Senior Pitch 1	1													
Senior Pitch 2	1													
Indoor bowls	1	60		60		60		40		50	50	50		
Sports Bar										30	40	40	30	
Function Suite			4				5				4	10		
Total	0	120	20	60	0	130	0	40	30	150	120	90	30	
Saturday														
Main Pitch (3G AGP)		90	90	90	40			30						
Small sided AGP		30	30	50	50		20		20					
Rugby Pitch							3	0						
Senior Pitch 1			[[3	0						
Senior Pitch 2	1	50	50	50	50			0						
Indoor bowls			60			20								
Sports Bar	1	25	30	30	30	60	60	60	60	60	60	50	25	
Function Suite	1					JJ				50				
Total	0	195	260	220	170	350	80	60	80	60	60	50	25	
			,									,		
Sunday														
Main Pitch (3G AGP)	1	40	40	40	40			30						
Small sided AGP	1	15	15	15	15	15	15	15						
Rugby Pitch	1	30	30	30	30							1		
Senior Pitch 1	1						3	0				İ		
Senior Pitch 2	1						Ĭ							
Indoor bowls			80		80	40								
Sports Bar	1	100	70	50	30	100	70	70	50	50	50	50	25	
Function Suite														
	0	40F	235	135	195	24 <i>E</i>	165	85	80 50	50	50	50	25	
Total	0	185	∠35	135	195	215	165	გე	อบ	ວປ	່ວດ	50	Z 5	

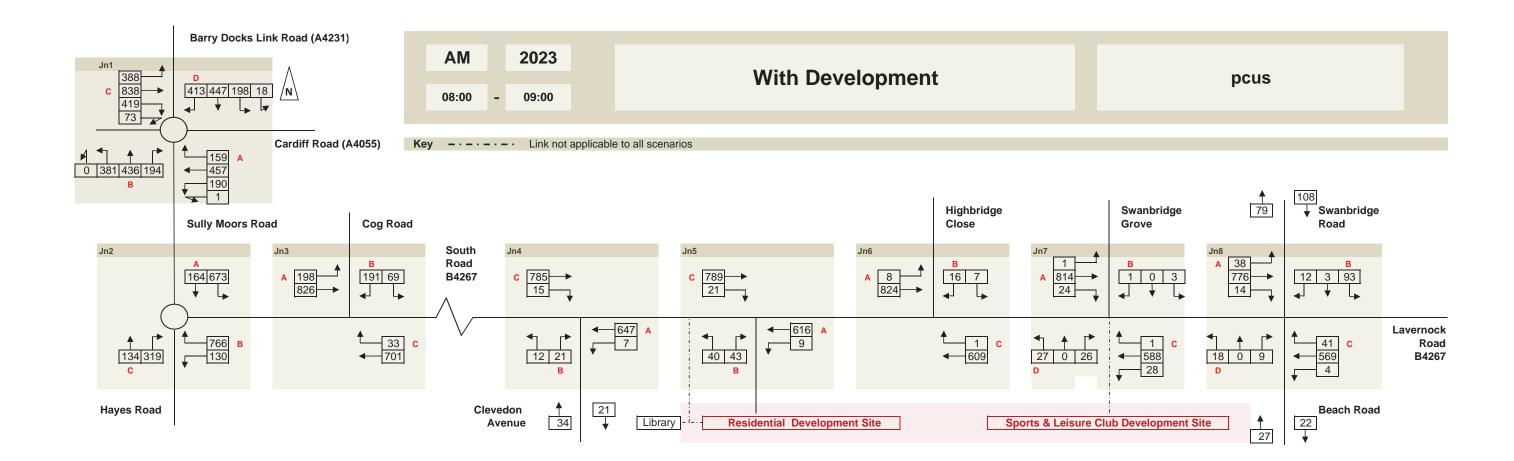
 $\frac{\textbf{Assumptions}}{\textbf{AGP} \text{ users generally are dropped off for an hour then picked back up}}$

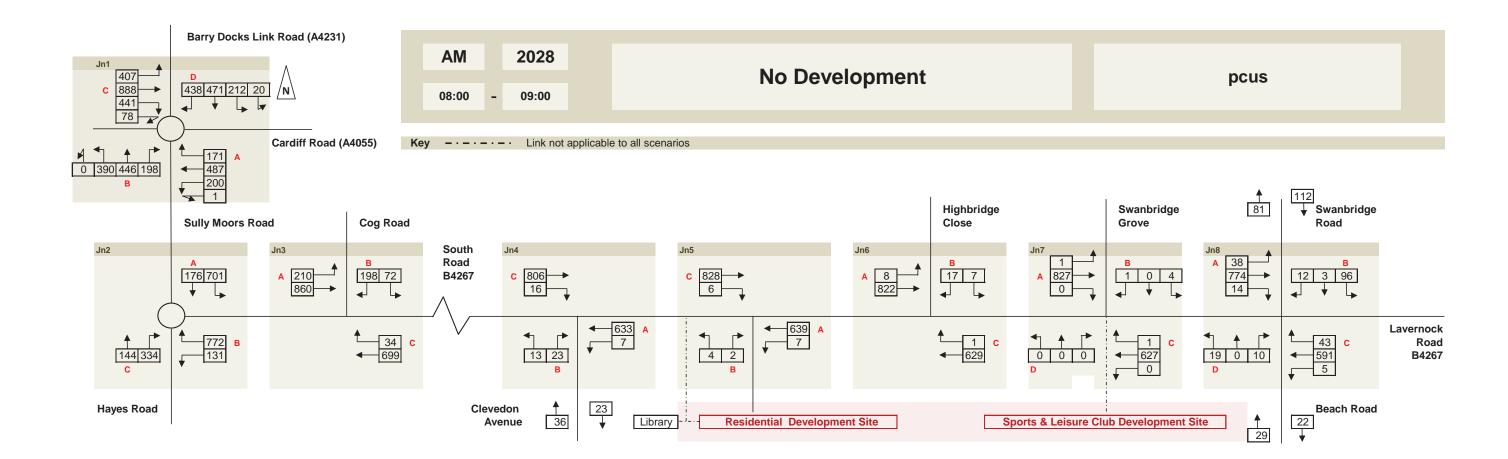
It is assumed that lounge bar users stay for an hour whilst function room users stay for the duration of the event.

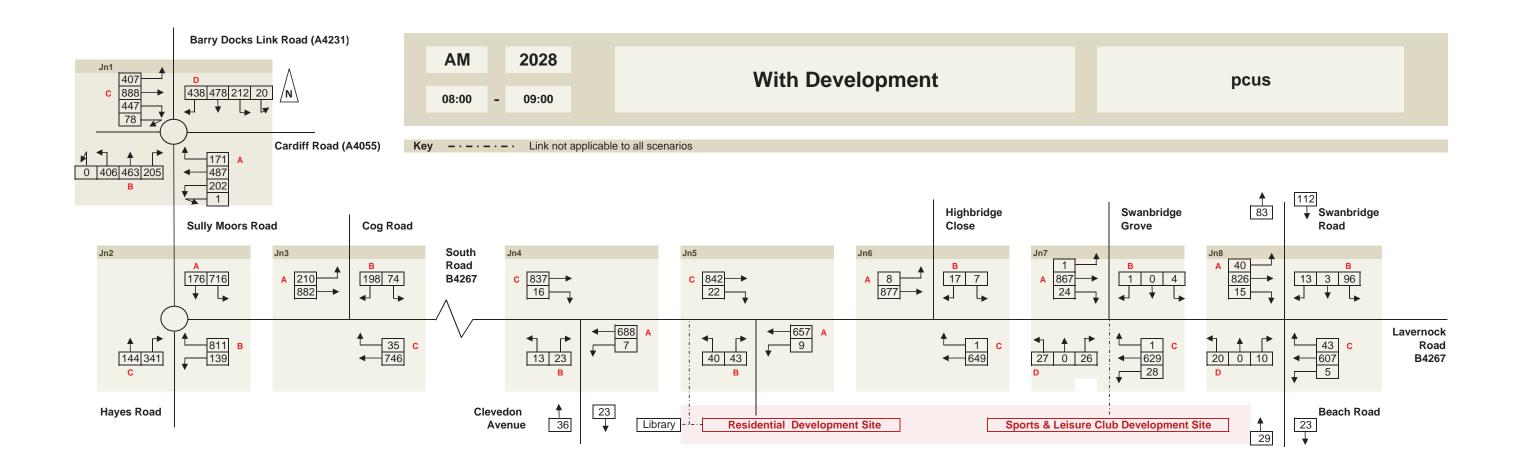
Staff assumed to be included

Appendix D. Traffic Flow Diagrams

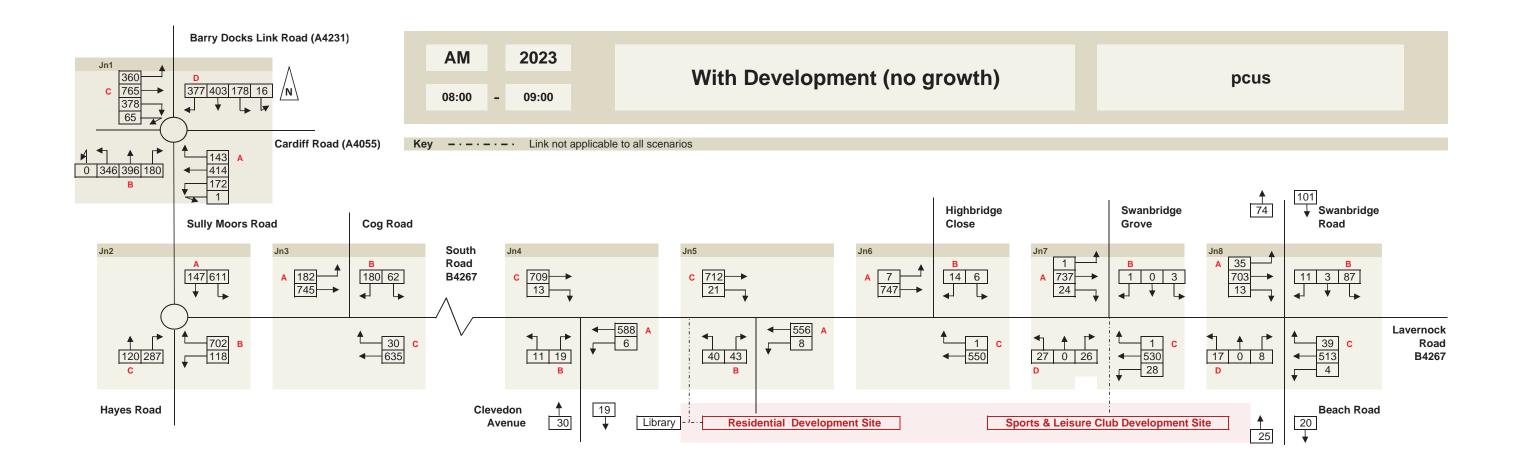


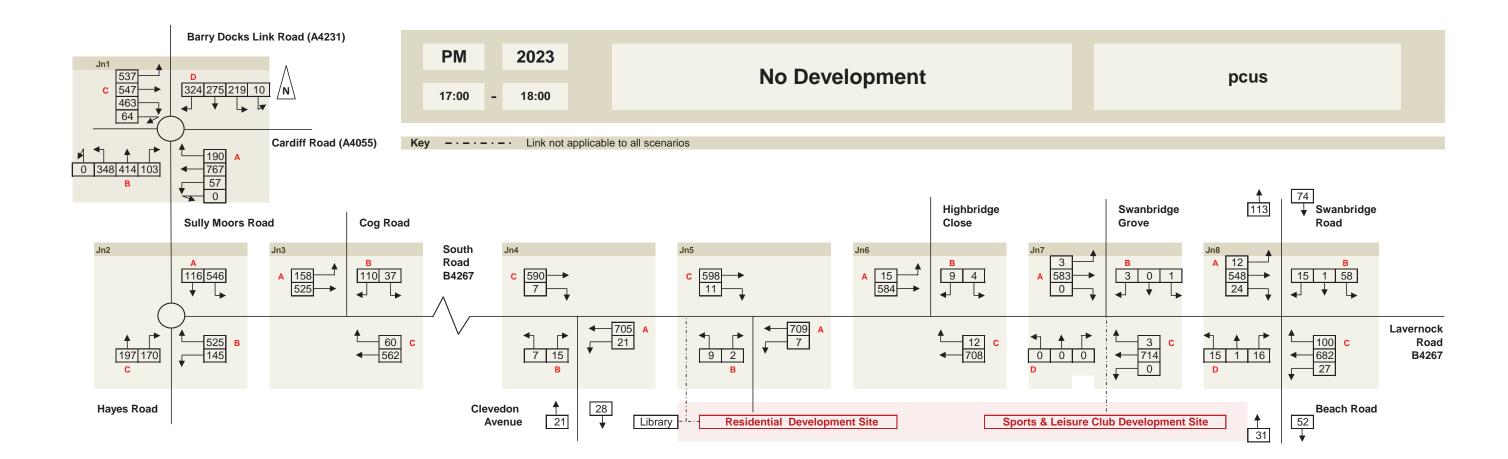


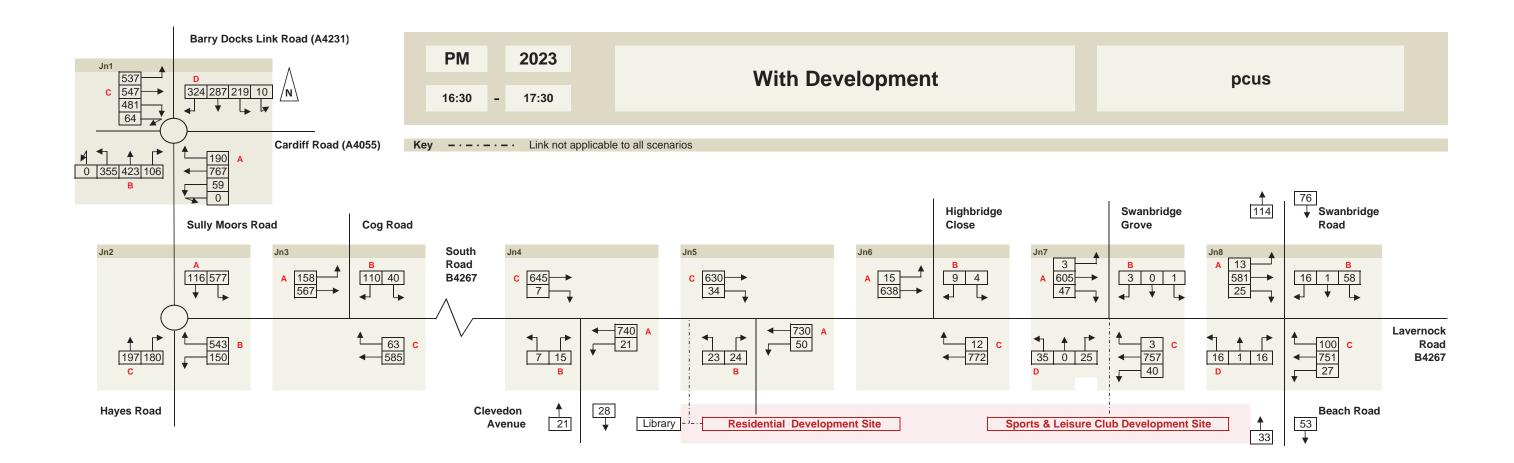




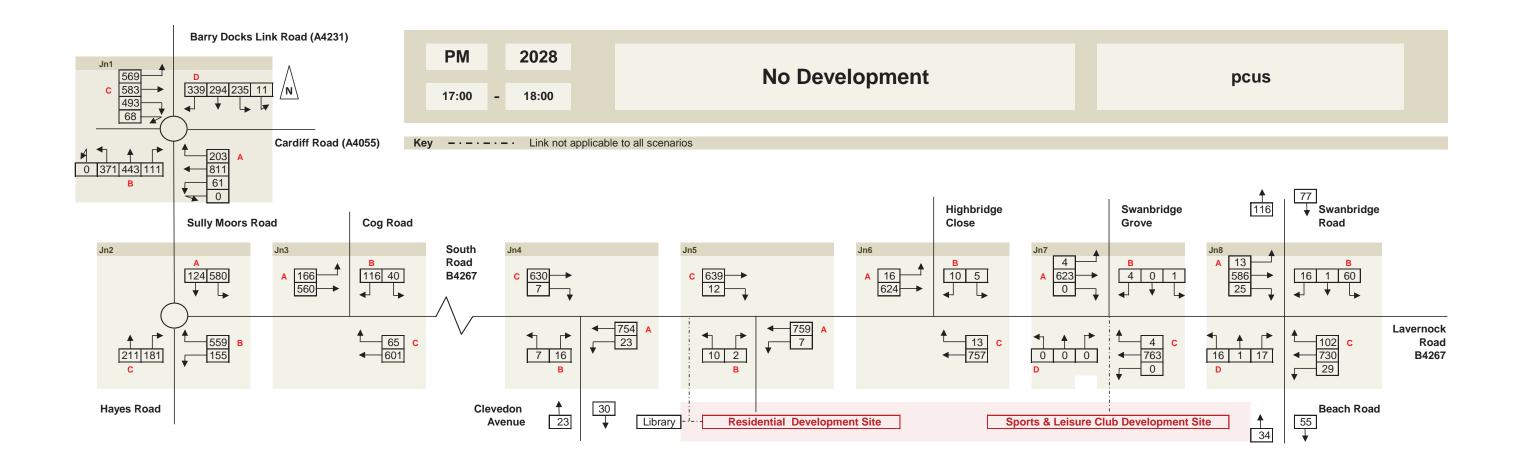
Run 22/06/15

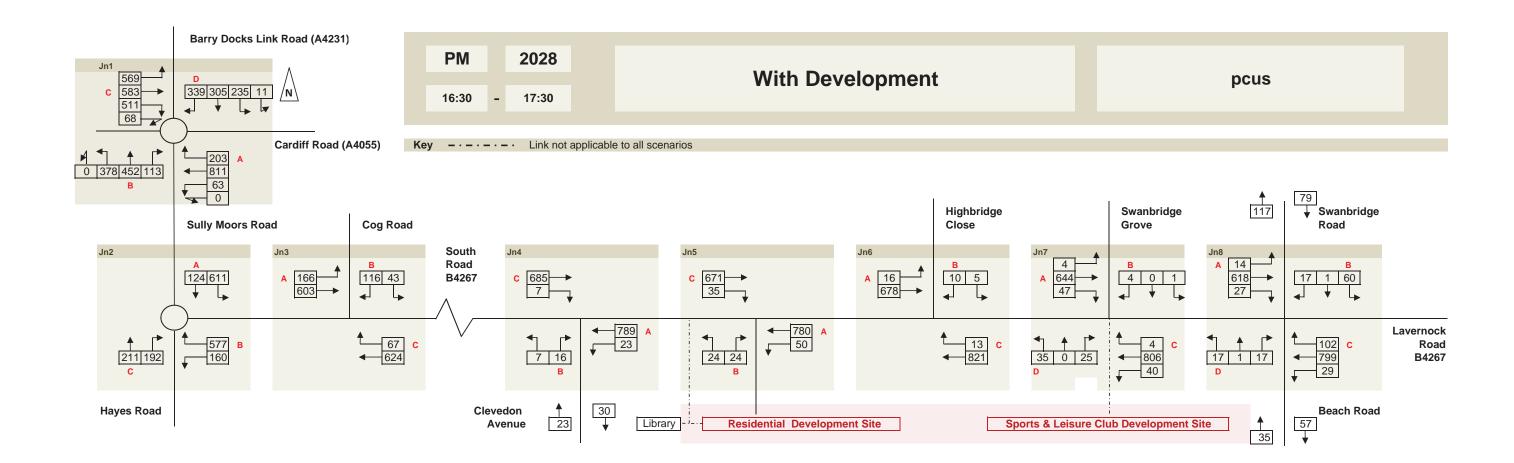




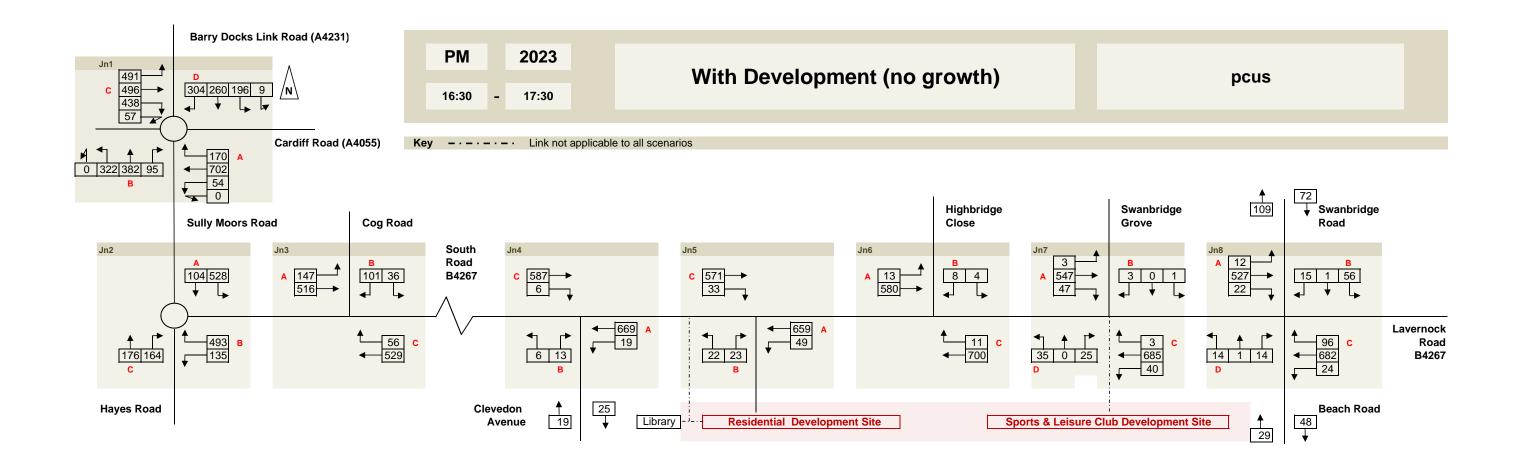


Run 22/06/15





Run 22/06/15



Run 22/06/15

Appendix E. Junction Modelling



Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.4.487 [15039,24/03/2014] © Copyright TRL Limited, 2015

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Filename: Jn8 - B4267 Beach Road - Swanbridge Rd Crossroads.arc8

Path: P:\GBCFA\TP\HB\Projects\5133321 - Sully Sport & Social Club - TAYL3270\04 - Analysis\Junction Modelling

Report generation date: 25/06/2015 13:13:13

- » (Default Analysis Set) 2023 With Development, AM
- » (Default Analysis Set) 2023 With Development, PM
- » (Default Analysis Set) 2028 With Development, AM
- » (Default Analysis Set) 2028 With Development, PM
- » (Default Analysis Set) 2023 No Development, AM
- » (Default Analysis Set) 2023 No Development, PM
- » (Default Analysis Set) 2028 No Development, AM
- » (Default Analysis Set) 2028 No Development, PM

Summary of junction performance

		AM		
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2023 \	Nith Devel	opme	ent
Stream B-ACD	0.09	10.41	0.08	В
Stream A-B	-	-	-	_
Stream A-C	-	ı	-	-
Stream A-D	0.12	9.67	0.11	Α
Stream D-AB	0.30	10.29	0.23	В
Stream D-BC	0.08	19.59	0.07	С
Stream C-ABD	0.09	4.00	0.06	Α
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-

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

"D5 - 2023 With Development, AM " model duration: 07:45 - 09:15

"D6 - 2023 With Development, PM" model duration: 16:45 - 18:15

"D7 - 2028 With Development, AM" model duration: 07:45 - 09:15

"D8 - 2028 With Development, PM" model duration: 16:45 - 18:15

"D9 - 2023 No Development, AM" model duration: 07:45 - 09:15

"D10 - 2023 No Development, PM" model duration: 16:45 - 18:15

"D11 - 2028 No Development, AM" model duration: 07:45 - 09:15

"D12 - 2028 No Development, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.4.487 at 25/06/2015 13:13:09



File summary

Title	(untitled)
Location	
Site Number	
Date	09/10/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	TAYL3270
Description	

Analysis Options

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

Units

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

(Default Analysis Set) - 2023 With Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 With Development, AM	2023 With Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 Beach Road / Swanbridge Road	Crossroads	Two-way	A,B,C,D	9.45	А

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown



Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B427 Lavernock Rd		Major
В	В	Beach Road		Minor
С	С	B4267 South Rd		Major
D	D	Swanbridge Rd		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
Α	7.75		0.00		2.20	82.40		
С	7.75		0.00		2.20	101.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane	4.10								✓		7	16
D	One lane plus flare				10.00	4.94	3.30	3.30	3.30	√	1.00	10	14

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	621.682	-	-	-	-	-	-	0.223	0.318	0.223	-	-	-
1	B-A	541.529	0.091	0.230	0.230	-	-	-	0.145	0.329	-	0.230	0.230	0.115
1	B-C	703.832	0.100	0.252	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	541.529	0.091	0.230	0.230	-	-	-	0.145	0.329	0.145	-	-	-
1	B-D, offside lane	541.529	0.091	0.230	0.230	-	-	-	0.145	0.329	0.145	-	-	-
1	C-B	632.453	0.226	0.226	0.323	-	-	-	-	-	-	-	-	-
1	D-A	685.379	-	-	-	-	-	-	0.245	-	0.097	-	-	-
1	D-B, nearside lane	528.369	0.141	0.141	0.321	-	-	-	0.225	0.225	0.089	-	-	-
1	D-B, offside lane	480.132	0.128	0.128	0.292	-	-	-	0.204	0.204	0.081	-	-	-
1	D-C	480.132	-	0.128	0.292	0.102	0.204	0.204	0.204	0.204	0.081	-	-	-

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

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

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



Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	614.00	100.000
В	ONE HOUR	✓	27.00	100.000
С	ONE HOUR	✓	828.00	100.000
D	ONE HOUR	✓	108.00	100.000

Turning Proportions

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

		То								
		Α	В	С	D					
	Α	0.000	4.000	569.000	41.000					
From	В	9.000	0.000	18.000	0.000					
	С	776.000	14.000	0.000	38.000					
	D	93.000	3.000	12.000	0.000					

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

		То							
		Α	В	C	D				
	Α	0.00	0.01	0.93	0.07				
From	В	0.33	0.00	0.67	0.00				
	С	0.94	0.02	0.00	0.05				
	D	0.86	0.03	0.11	0.00				

Vehicle Mix

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

		То							
		Α	В	С	D				
	Α	1.000	1.000	1.000	1.000				
From	В	1.000	1.000	1.000	1.000				
	С	1.000	1.000	1.000	1.000				
	D	1.000	1.000	1.000	1.000				



Heavy Vehicle Percentages - Junction 1 (for whole period)

		То					
		Α	В	С	D		
	Α	0.0	0.0	0.0	0.0		
From	В	0.0	0.0	0.0	0.0		
	С	0.0	0.0	0.0	0.0		
	D	0.0	0.0	0.0	0.0		

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.08	10.41	0.09	В
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.11	9.67	0.12	Α
D-AB	0.23	10.29	0.30	В
D-BC	0.07	19.59	0.08	С
C-ABD	0.06	4.00	0.09	Α
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	20.33	20.15	0.00	469.39	0.043	0.04	8.007	Α
A-B	3.01	3.01	0.00	-	-	-	-	-
A-C	428.37	428.37	0.00	-	-	-	-	-
A-D	30.87	30.60	0.00	481.96	0.064	0.07	7.970	Α
D-AB	71.18	70.56	0.00	528.61	0.135	0.15	7.849	Α
D-BC	10.13	9.98	0.00	288.58	0.035	0.04	12.915	В
C-ABD	24.89	24.75	0.00	924.40	0.027	0.03	4.001	Α
C-D	27.94	27.94	0.00	-	-	-	-	-
C-A	570.54	570.54	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	24.27	24.22	0.00	431.70	0.056	0.06	8.833	Α
A-B	3.60	3.60	0.00	-	-	-	-	-
A-C	511.52	511.52	0.00	-	-	-	-	-
A-D	36.86	36.78	0.00	454.80	0.081	0.09	8.612	Α
D-AB	85.01	84.81	0.00	497.76	0.171	0.20	8.713	Α
D-BC	12.08	12.02	0.00	250.90	0.048	0.05	15.067	С
C-ABD	39.75	39.67	0.00	1009.22	0.039	0.06	3.712	Α
C-D	32.89	32.89	0.00	-	-	-	-	-
C-A	671.71	671.71	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	29.73	29.62	0.00	375.55	0.079	0.08	10.403	В
A-B	4.40	4.40	0.00	-	-	-	-	-
A-C	626.48	626.48	0.00	-	-	-	-	-
A-D	45.14	45.01	0.00	417.28	0.108	0.12	9.667	Α
D-AB	104.16	103.80	0.00	453.95	0.229	0.29	10.271	В
D-BC	14.75	14.64	0.00	198.55	0.074	0.08	19.563	С
C-ABD	62.04	61.90	0.00	1091.20	0.057	0.09	3.497	Α
C-D	39.66	39.66	0.00	-	-	-	-	-
C-A	809.94	809.94	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	29.73	29.73	0.00	375.42	0.079	0.09	10.413	В
A-B	4.40	4.40	0.00	-	-	-	-	-
A-C	626.48	626.48	0.00	-	-	-	-	-
A-D	45.14	45.14	0.00	417.25	0.108	0.12	9.674	Α
D-AB	104.16	104.15	0.00	453.81	0.230	0.30	10.295	В
D-BC	14.75	14.75	0.00	198.46	0.074	0.08	19.595	С
C-ABD	62.11	62.11	0.00	1091.25	0.057	0.09	3.498	Α
C-D	39.66	39.66	0.00	-	-	-	-	-
C-A	809.88	809.88	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	24.27	24.37	0.00	431.52	0.056	0.06	8.843	Α
A-B	3.60	3.60	0.00	-	-	-	-	-
A-C	511.52	511.52	0.00	-	-	-	-	-
A-D	36.86	36.98	0.00	454.75	0.081	0.09	8.621	Α
D-AB	85.01	85.36	0.00	497.57	0.171	0.21	8.742	Α
D-BC	12.08	12.19	0.00	250.80	0.048	0.05	15.093	С
C-ABD	39.83	39.96	0.00	1009.30	0.039	0.06	3.713	Α
C-D	32.89	32.89	0.00	-	-	-	-	-
C-A	671.64	671.64	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	20.33	20.39	0.00	469.16	0.043	0.05	8.022	Α
A-B	3.01	3.01	0.00	-	-	-	-	-
A-C	428.37	428.37	0.00	-	-	-	-	-
A-D	30.87	30.95	0.00	481.90	0.064	0.07	7.985	Α
D-AB	71.18	71.39	0.00	528.42	0.135	0.16	7.881	Α
D-BC	10.13	10.19	0.00	288.43	0.035	0.04	12.940	В
C-ABD	24.99	25.07	0.00	924.41	0.027	0.03	4.003	Α
C-D	27.93	27.93	0.00	-	-	-	-	-
C-A	570.44	570.44	0.00	-	-	-	-	-

(Default Analysis Set) - 2023 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 With Development, PM	2023 With Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

June	ction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
,	1	B4267 Beach Road / Swanbridge Road	Crossroads	Two-way	A,B,C,D	9.45	Α

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B427 Lavernock Rd		Major
В	В	Beach Road		Minor
С	С	B4267 South Rd		Major
D	D	Swanbridge Rd		Minor



Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
Α	7.75		0.00		2.20	82.40		
С	7.75		0.00		2.20	101.00	✓	0.00

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

Minor Arm Geometry

A	ırm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
	В	One lane	4.10								✓		7	16
	D	One lane plus flare				10.00	4.94	3.30	3.30	3.30	√	1.00	10	14

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	621.682	-	-	-	-	-	-	0.223	0.318	0.223	-	-	-
1	B-A	541.529	0.091	0.230	0.230	-	-	-	0.145	0.329	-	0.230	0.230	0.115
1	B-C	703.832	0.100	0.252	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	541.529	0.091	0.230	0.230	-	-	-	0.145	0.329	0.145	-	-	-
1	B-D, offside lane	541.529	0.091	0.230	0.230	-	-	-	0.145	0.329	0.145	-	-	-
1	C-B	632.453	0.226	0.226	0.323	-	-	-	-	-	-	-	-	-
1	D-A	679.885	-	-	-	-	-	-	0.243	-	0.096	-	-	-
1	D-B, nearside lane	524.134	0.140	0.140	0.318	-	-	-	0.223	0.223	0.088	-	-	-
1	D-B, offside lane	490.720	0.131	0.131	0.298	-	-	-	0.209	0.209	0.083	-	-	-
1	D-C	490.720	-	0.131	0.298	0.104	0.209	0.209	0.209	0.209	0.083	-	-	-

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time		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				✓	✓

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

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



Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	878.00	100.000
В	ONE HOUR	✓	33.00	100.000
С	ONE HOUR	✓	619.00	100.000
D	ONE HOUR	✓	75.00	100.000

Turning Proportions

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

		То									
		Α	В	С	D						
	Α	0.000	27.000	751.000	100.000						
From	В	16.000	0.000	16.000	1.000						
	С	581.000	25.000	0.000	13.000						
	D	58.000	1.000	16.000	0.000						

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

		То							
		Α	В	С	D				
	Α	0.00	0.03	0.86	0.11				
From	В	0.48	0.00	0.48	0.03				
-	С	0.94	0.04	0.00	0.02				
	D	0.77	0.01	0.21	0.00				

Vehicle Mix

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

			То		
		Α	В	С	D
	Α	1.000	1.000	1.000	1.000
From	В	1.000	1.000	1.000	1.000
	С	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

			То		
		Α	В	С	D
	Α	0.0	0.0	0.0	0.0
From	В	0.0	0.0	0.0	0.0
	С	0.0	0.0	0.0	0.0
	D	0.0	0.0	0.0	0.0



Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.13	14.45	0.14	В
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.24	10.08	0.31	В
D-AB	0.13	8.20	0.15	Α
D-BC	0.09	19.55	0.10	С
C-ABD	0.10	4.81	0.22	Α
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	24.84	24.58	0.00	396.74	0.063	0.07	9.666	Α
A-B	20.33	20.33	0.00	-	-	-	-	-
A-C	565.39	565.39	0.00	-	-	-	-	-
A-D	75.29	74.61	0.00	516.18	0.146	0.17	8.140	Α
D-AB	44.06	43.72	0.00	562.31	0.078	0.08	6.937	Α
D-BC	12.41	12.23	0.00	293.98	0.042	0.04	12.769	В
C-ABD	38.99	38.69	0.00	789.06	0.049	0.07	4.797	Α
C-D	9.35	9.35	0.00	-	-	-	-	-
C-A	417.68	417.68	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	29.67	29.57	0.00	351.45	0.084	0.09	11.180	В
A-B	24.27	24.27	0.00	-	-	-	-	-
A-C	675.13	675.13	0.00	-	-	-	-	-
A-D	89.90	89.70	0.00	495.63	0.181	0.22	8.863	Α
D-AB	52.62	52.52	0.00	538.41	0.098	0.11	7.409	Α
D-BC	14.81	14.74	0.00	255.48	0.058	0.06	14.951	В
C-ABD	58.96	58.77	0.00	839.52	0.070	0.12	4.611	Α
C-D	10.89	10.89	0.00	-	-	-	-	-
C-A	486.62	486.62	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	36.33	36.12	0.00	285.60	0.127	0.14	14.418	В
A-B	29.73	29.73	0.00	-	-	-	-	-
A-C	826.87	826.87	0.00	-	-	-	-	-
A-D	110.10	109.76	0.00	467.27	0.236	0.30	10.062	В
D-AB	64.46	64.31	0.00	503.83	0.128	0.15	8.188	Α
D-BC	18.12	17.98	0.00	202.40	0.090	0.10	19.489	С
C-ABD	91.89	91.51	0.00	894.78	0.103	0.22	4.483	Α
C-D	12.90	12.90	0.00	-	-	-	-	-
C-A	576.74	576.74	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	36.33	36.33	0.00	285.41	0.127	0.14	14.452	В
A-B	29.73	29.73	0.00	-	-	-	-	-
A-C	826.87	826.87	0.00	-	-	-	-	-
A-D	110.10	110.09	0.00	467.18	0.236	0.31	10.081	В
D-AB	64.46	64.46	0.00	503.59	0.128	0.15	8.197	Α
D-BC	18.12	18.11	0.00	202.23	0.090	0.10	19.552	С
C-ABD	92.09	92.08	0.00	894.92	0.103	0.22	4.488	Α
C-D	12.90	12.90	0.00	-	-	-	-	-
C-A	576.54	576.54	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	29.67	29.87	0.00	351.18	0.084	0.09	11.212	В
A-B	24.27	24.27	0.00	-	-	-	-	-
A-C	675.13	675.13	0.00	-	-	-	-	-
A-D	89.90	90.23	0.00	495.49	0.181	0.22	8.891	Α
D-AB	52.62	52.76	0.00	538.08	0.098	0.11	7.422	Α
D-BC	14.81	14.95	0.00	255.24	0.058	0.06	14.988	В
C-ABD	59.17	59.55	0.00	839.72	0.070	0.13	4.620	Α
C-D	10.88	10.88	0.00	-	-	-	-	-
C-A	486.41	486.41	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	24.84	24.95	0.00	396.38	0.063	0.07	9.694	Α
A-B	20.33	20.33	0.00	-	-	-	-	-
A-C	565.39	565.39	0.00	-	-	-	-	-
A-D	75.29	75.49	0.00	516.05	0.146	0.17	8.175	Α
D-AB	44.06	44.15	0.00	562.00	0.078	0.09	6.955	Α
D-BC	12.41	12.48	0.00	293.68	0.042	0.04	12.804	В
C-ABD	39.21	39.41	0.00	789.04	0.050	0.08	4.806	Α
C-D	9.34	9.34	0.00	-	-	-	-	-
C-A	417.46	417.46	0.00	-	-	-	-	-



(Default Analysis Set) - 2028 With Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 With Development, AM	2028 With Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 Beach Road / Swanbridge Road	Crossroads	Two-way	A,B,C,D	9.84	Α

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B427 Lavernock Rd		Major
В	В	Beach Road		Minor
С	С	B4267 South Rd		Major
D	D	Swanbridge Rd		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
Α	7.75		0.00		2.20	82.40		
С	7.75		0.00		2.20	101.00	✓	0.00

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



Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane	4.10								✓		7	16
D	One lane plus flare				10.00	4.94	3.30	3.30	3.30	✓	1.00	10	14

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	621.682	-	-	-	-	-	-	0.223	0.318	0.223	-	-	-
1	B-A	541.529	0.091	0.230	0.230	-	-	-	0.145	0.329	-	0.230	0.230	0.115
1	B-C	703.832	0.100	0.252	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	541.529	0.091	0.230	0.230	-	-	-	0.145	0.329	0.145	-	-	-
1	B-D, offside lane	541.529	0.091	0.230	0.230	-	-	-	0.145	0.329	0.145	-	-	-
1	C-B	632.453	0.226	0.226	0.323	-	-	-	-	-	-	-	-	-
1	D-A	685.131	-	-	-	-	-	-	0.245	-	0.097	-	-	-
1	D-B, nearside lane	528.178	0.141	0.141	0.321	-	-	-	0.225	0.225	0.089	-	-	-
1	D-B, offside lane	480.611	0.129	0.129	0.292	-	-	-	0.204	0.204	0.081	-	-	-
1	D-C	480.611	-	0.129	0.292	0.102	0.204	0.204	0.204	0.204	0.081	-	-	-

The slopes and intercepts shown above do NOT include any corrections or 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 (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	655.00	100.000
В	ONE HOUR	✓	30.00	100.000
С	ONE HOUR	✓	881.00	100.000
D	ONE HOUR	✓	112.00	100.000

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

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



Turning Proportions

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

			То		
		Α	В	С	D
	Α	0.000	5.000	607.000	43.000
From	В	10.000	0.000	20.000	0.000
	С	826.000	15.000	0.000	40.000
	D	96.000	3.000	13.000	0.000

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

		То										
		Α	В	С	D							
	Α	0.00	0.01	0.93	0.07							
From	В	0.33	0.00	0.67	0.00							
	С	0.94	0.02	0.00	0.05							
	D	0.86	0.03	0.12	0.00							

Vehicle Mix

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

		То									
		Α	В	С	D						
	Α	1.000	1.000	1.000	1.000						
From	В	1.000	1.000	1.000	1.000						
	С	1.000	1.000	1.000	1.000						
	D	1.000	1.000	1.000	1.000						

Heavy Vehicle Percentages - Junction 1 (for whole period)

			То		
		Α	В	С	D
	Α	0.0	0.0	0.0	0.0
From	В	0.0	0.0	0.0	0.0
	С	0.0	0.0	0.0	0.0
	D	0.0	0.0	0.0	0.0



Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.09	11.20	0.10	В
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.12	10.09	0.13	В
D-AB	0.25	10.90	0.32	В
D-BC	0.09	21.91	0.10	С
C-ABD	0.07	3.94	0.12	Α
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	22.59	22.38	0.00	457.29	0.049	0.05	8.274	Α
A-B	3.76	3.76	0.00	-	-	-	-	-
A-C	456.98	456.98	0.00	-	-	-	-	-
A-D	32.37	32.08	0.00	473.01	0.068	0.07	8.160	Α
D-AB	73.44	72.79	0.00	518.45	0.142	0.16	8.067	Α
D-BC	10.88	10.72	0.00	276.32	0.039	0.04	13.545	В
C-ABD	27.97	27.82	0.00	941.34	0.030	0.04	3.941	Α
C-D	29.34	29.34	0.00	-	-	-	-	-
C-A	605.95	605.95	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	26.97	26.90	0.00	416.35	0.065	0.07	9.243	Α
A-B	4.49	4.49	0.00	-	-	-	-	-
A-C	545.68	545.68	0.00	-	-	-	-	-
A-D	38.66	38.57	0.00	444.11	0.087	0.09	8.875	Α
D-AB	87.72	87.50	0.00	485.40	0.181	0.22	9.043	Α
D-BC	12.97	12.90	0.00	236.12	0.055	0.06	16.122	С
C-ABD	45.69	45.58	0.00	1032.80	0.044	0.06	3.646	Α
C-D	34.47	34.47	0.00	-	-	-	-	-
C-A	711.84	711.84	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	33.03	32.90	0.00	354.65	0.093	0.10	11.184	В
A-B	5.51	5.51	0.00	-	-	-	-	-
A-C	668.32	668.32	0.00	-	-	-	-	-
A-D	47.34	47.20	0.00	404.19	0.117	0.13	10.080	В
D-AB	107.48	107.07	0.00	438.03	0.245	0.32	10.865	В
D-BC	15.83	15.69	0.00	180.24	0.088	0.09	21.858	С
C-ABD	80.02	79.79	0.00	1144.70	0.070	0.12	3.380	Α
C-D	41.11	41.11	0.00	-	-	-	-	-
C-A	848.87	848.87	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	33.03	33.03	0.00	354.48	0.093	0.10	11.198	В
A-B	5.51	5.51	0.00	-	-	-	-	-
A-C	668.32	668.32	0.00	-	-	-	-	-
A-D	47.34	47.34	0.00	404.13	0.117	0.13	10.089	В
D-AB	107.48	107.47	0.00	437.83	0.245	0.32	10.897	В
D-BC	15.83	15.83	0.00	180.12	0.088	0.10	21.909	С
C-ABD	80.13	80.13	0.00	1144.80	0.070	0.12	3.381	Α
C-D	41.10	41.10	0.00	-	-	-	-	-
C-A	848.76	848.76	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	26.97	27.10	0.00	416.13	0.065	0.07	9.258	Α
A-B	4.49	4.49	0.00	-	-	-	-	-
A-C	545.68	545.68	0.00	-	-	-	-	-
A-D	38.66	38.80	0.00	444.03	0.087	0.10	8.886	Α
D-AB	87.72	88.12	0.00	485.14	0.181	0.22	9.077	Α
D-BC	12.97	13.11	0.00	235.98	0.055	0.06	16.162	С
C-ABD	45.79	46.01	0.00	1032.94	0.044	0.07	3.651	Α
C-D	34.47	34.47	0.00	-	-	-	-	-
C-A	711.75	711.75	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	22.59	22.66	0.00	457.02	0.049	0.05	8.288	Α
A-B	3.76	3.76	0.00	-	-	-	-	-
A-C	456.98	456.98	0.00	-	-	-	-	-
A-D	32.37	32.46	0.00	472.94	0.068	0.07	8.174	Α
D-AB	73.44	73.67	0.00	518.22	0.142	0.17	8.101	Α
D-BC	10.88	10.95	0.00	276.16	0.039	0.04	13.579	В
C-ABD	28.09	28.20	0.00	941.36	0.030	0.04	3.942	Α
C-D	29.34	29.34	0.00	-	-	-	-	-
C-A	605.83	605.83	0.00	-	-	-	-	-



(Default Analysis Set) - 2028 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 With Development, PM	2028 With Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 Beach Road / Swanbridge Road	Crossroads	Two-way	A,B,C,D	9.76	Α

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B427 Lavernock Rd		Major
В	В	Beach Road		Minor
С	С	B4267 South Rd		Major
D	D	Swanbridge Rd		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
Α	7.75		0.00		2.20	82.40		
С	7.75		0.00		2.20	101.00	✓	0.00

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

Minor Arm Geometry

Arı	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
E	One lane	4.10								✓		7	16
С	One lane plus flare				10.00	4.94	3.30	3.30	3.30	√	1.00	10	14



Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	621.682	-	-	-	-	-	-	0.223	0.318	0.223	-	-	-
1	B-A	541.529	0.091	0.230	0.230	-	-	-	0.145	0.329	-	0.230	0.230	0.115
1	B-C	703.832	0.100	0.252	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	541.529	0.091	0.230	0.230	-	-	-	0.145	0.329	0.145	-	-	-
1	B-D, offside lane	541.529	0.091	0.230	0.230	-	-	-	0.145	0.329	0.145	-	-	-
1	C-B	632.453	0.226	0.226	0.323	-	-	-	-	-	-	-	-	-
1	D-A	679.628	-	-	-	-	-	-	0.243	-	0.096	-	-	-
1	D-B, nearside lane	523.936	0.140	0.140	0.318	-	-	-	0.223	0.223	0.088	-	-	-
1	D-B, offside lane	491.215	0.131	0.131	0.298	-	-	-	0.209	0.209	0.083	-	-	-
1	D-C	491.215	-	0.131	0.298	0.104	0.209	0.209	0.209	0.209	0.083	-	-	-

The slopes and intercepts shown above do NOT include any corrections or 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 (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	930.00	100.000
В	ONE HOUR	✓	35.00	100.000
С	ONE HOUR	✓	659.00	100.000
D	ONE HOUR	✓	78.00	100.000

Turning Proportions

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

		То										
		Α	В	С	D							
	Α	0.000	29.000	799.000	102.000							
From	В	17.000	0.000	17.000	1.000							
	С	618.000	27.000	0.000	14.000							
	D	60.000	1.000	17.000	0.000							

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

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



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

			То		
		Α	В	С	D
	Α	0.00	0.03	0.86	0.11
From	В	0.49	0.00	0.49	0.03
	С	0.94	0.04	0.00	0.02
	D	0.77	0.01	0.22	0.00

Vehicle Mix

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

			То		
		Α	В	С	D
	Α	1.000	1.000	1.000	1.000
From	В	1.000	1.000	1.000	1.000
	С	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		То								
		Α	В	C	D					
	Α	0.0	0.0	0.0	0.0					
From	В	0.0	0.0	0.0	0.0					
	С	0.0	0.0	0.0	0.0					
	D	0.0	0.0	0.0	0.0					

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.15	16.05	0.17	С
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.25	10.44	0.32	В
D-AB	0.14	8.48	0.16	Α
D-BC	0.10	21.67	0.11	С
C-ABD	0.12	4.70	0.29	Α
C-D	-	-	-	-
C-A	-	-	-	-



Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	26.35	26.06	0.00	383.09	0.069	0.07	10.075	В
A-B	21.83	21.83	0.00	-	-	-	-	-
A-C	601.53	601.53	0.00	-	-	-	-	-
A-D	76.79	76.09	0.00	509.34	0.151	0.18	8.296	Α
D-AB	45.56	45.21	0.00	554.61	0.082	0.09	7.062	Α
D-BC	13.16	12.97	0.00	282.63	0.047	0.05	13.340	В
C-ABD	47.33	46.96	0.00	814.17	0.058	0.09	4.692	Α
C-D	9.94	9.94	0.00	-	-	-	-	-
C-A	438.85	438.85	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	31.46	31.35	0.00	334.40	0.094	0.10	11.870	В
A-B	26.07	26.07	0.00	-	-	-	-	-
A-C	718.28	718.28	0.00	-	-	-	-	-
A-D	91.70	91.48	0.00	487.43	0.188	0.23	9.087	Α
D-AB	54.42	54.32	0.00	528.94	0.103	0.11	7.582	Α
D-BC	15.70	15.62	0.00	241.79	0.065	0.07	15.911	С
C-ABD	68.02	67.81	0.00	855.98	0.079	0.15	4.570	Α
C-D	11.62	11.62	0.00	-	-	-	-	-
C-A	512.79	512.79	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	38.54	38.27	0.00	263.02	0.147	0.17	15.998	С
A-B	31.93	31.93	0.00	-	-	-	-	-
A-C	879.72	879.72	0.00	-	-	-	-	-
A-D	112.30	111.94	0.00	457.23	0.246	0.32	10.414	В
D-AB	66.67	66.50	0.00	491.32	0.136	0.16	8.468	Α
D-BC	19.21	19.03	0.00	185.50	0.104	0.11	21.600	С
C-ABD	113.41	112.84	0.00	927.48	0.122	0.29	4.423	Α
C-D	13.56	13.56	0.00	-	-	-	-	-
C-A	598.61	598.61	0.00	-	-	-	-	-

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

							l =	
Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	38.54	38.53	0.00	262.77	0.147	0.17	16.052	С
A-B	31.93	31.93	0.00	-	-	-	-	-
A-C	879.72	879.72	0.00	-	-	-	-	-
A-D	112.30	112.29	0.00	457.10	0.246	0.32	10.440	В
D-AB	66.67	66.66	0.00	490.99	0.136	0.16	8.483	Α
D-BC	19.21	19.21	0.00	185.28	0.104	0.11	21.674	С
C-ABD	113.72	113.71	0.00	927.76	0.123	0.29	4.430	Α
C-D	13.55	13.55	0.00	-	-	-	-	-
C-A	598.30	598.30	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	31.46	31.72	0.00	334.07	0.094	0.11	11.916	В
A-B	26.07	26.07	0.00	-	-	-	-	-
A-C	718.28	718.28	0.00	-	-	-	-	-
A-D	91.70	92.05	0.00	487.24	0.188	0.23	9.119	Α
D-AB	54.42	54.58	0.00	528.51	0.103	0.12	7.597	Α
D-BC	15.70	15.88	0.00	241.50	0.065	0.07	15.967	С
C-ABD	68.32	68.88	0.00	856.30	0.080	0.15	4.579	Α
C-D	11.61	11.61	0.00	-	-	-	-	-
C-A	512.50	512.50	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	26.35	26.47	0.00	382.68	0.069	0.07	10.111	В
A-B	21.83	21.83	0.00	-	-	-	-	-
A-C	601.53	601.53	0.00	-	-	-	-	-
A-D	76.79	77.01	0.00	509.18	0.151	0.18	8.335	Α
D-AB	45.57	45.67	0.00	554.25	0.082	0.09	7.079	Α
D-BC	13.16	13.24	0.00	282.29	0.047	0.05	13.383	В
C-ABD	47.64	47.86	0.00	814.22	0.059	0.10	4.701	Α
C-D	9.93	9.93	0.00	-	-	-	-	-
C-A	438.55	438.55	0.00	-	-	-	-	-

(Default Analysis Set) - 2023 No Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 No Development, AM	2023 No Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 Beach Road / Swanbridge Road	Crossroads	Two-way	A,B,C,D	9.21	Α

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown



Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B427 Lavernock Rd		Major
В	В	Beach Road		Minor
С	С	B4267 South Rd		Major
D	D	Swanbridge Rd		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
Α	7.75		0.00		2.20	82.40		
С	7.75		0.00		2.20	101.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane	4.10								✓		7	16
D	One lane plus flare				10.00	4.94	3.30	3.30	3.30	√	1.00	10	14

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	621.682	-	-	-	-	-	-	0.223	0.318	0.223	-	-	-
1	B-A	541.529	0.091	0.230	0.230	-	-	-	0.145	0.329	-	0.230	0.230	0.115
1	B-C	703.832	0.100	0.252	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	541.529	0.091	0.230	0.230	-	-	-	0.145	0.329	0.145	-	-	-
1	B-D, offside lane	541.529	0.091	0.230	0.230	-	-	-	0.145	0.329	0.145	-	-	-
1	C-B	632.453	0.226	0.226	0.323	-	-	-	-	-	-	-	-	-
1	D-A	685.883	-	-	-	-	-	-	0.246	-	0.097	-	-	-
1	D-B, nearside lane	528.758	0.141	0.141	0.321	-	-	-	0.225	0.225	0.089	-	-	-
1	D-B, offside lane	479.161	0.128	0.128	0.291	-	-	-	0.204	0.204	0.081	-	-	-
1	D-C	479.161	-	0.128	0.291	0.102	0.204	0.204	0.204	0.204	0.081	-	-	-

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

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

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



Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	597.00	100.000
В	ONE HOUR	✓	27.00	100.000
С	ONE HOUR	✓	772.00	100.000
D	ONE HOUR	✓	107.00	100.000

Turning Proportions

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

	То								
		Α	В	С	D				
	Α	0.000	4.000	552.000	41.000				
From	В	9.000	0.000	18.000	0.000				
	С	723.000	13.000	0.000	36.000				
	D	93.000	3.000	11.000	0.000				

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

	То							
		Α	В	С	D			
	Α	0.00	0.01	0.92	0.07			
From	В	0.33	0.00	0.67	0.00			
	С	0.94	0.02	0.00	0.05			
	D	0.87	0.03	0.10	0.00			

Vehicle Mix

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

		То								
		Α	В	С	D					
	Α	1.000	1.000	1.000	1.000					
From	В	1.000	1.000	1.000	1.000					
	С	1.000	1.000	1.000	1.000					
	D	1.000	1.000	1.000	1.000					



Heavy Vehicle Percentages - Junction 1 (for whole period)

	То						
		Α	В	С	D		
	Α	0.0	0.0	0.0	0.0		
From	В	0.0	0.0	0.0	0.0		
	С	0.0	0.0	0.0	0.0		
	D	0.0	0.0	0.0	0.0		

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.08	10.04 0.08		В
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.10	9.33	0.12	Α
D-AB	0.22	9.83	0.28	А
D-BC	0.06	18.07	0.07	С
C-ABD	0.05	4.09	0.08	Α
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	20.33	20.15	0.00	476.80	0.043	0.04	7.884	Α
A-B	3.01	3.01	0.00	-	-	-	-	-
A-C	415.57	415.57	0.00	-	-	-	-	-
A-D	30.87	30.60	0.00	491.41	0.063	0.07	7.808	Α
D-AB	71.18	70.57	0.00	539.50	0.132	0.15	7.667	Α
D-BC	9.38	9.25	0.00	298.08	0.031	0.03	12.459	В
C-ABD	22.06	21.94	0.00	902.90	0.024	0.03	4.086	Α
C-D	26.52	26.52	0.00	-	-	-	-	-
C-A	532.62	532.62	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	24.27	24.22	0.00	441.14	0.055	0.06	8.633	Α
A-B	3.60	3.60	0.00	-	-	-	-	-
A-C	496.24	496.24	0.00	-	-	-	-	-
A-D	36.86	36.78	0.00	466.09	0.079	0.09	8.385	Α
D-AB	85.00	84.82	0.00	510.84	0.166	0.20	8.447	Α
D-BC	11.19	11.14	0.00	262.46	0.043	0.04	14.324	В
C-ABD	30.30	30.25	0.00	951.11	0.032	0.04	3.909	Α
C-D	31.48	31.48	0.00	-	-	-	-	-
C-A	632.23	632.23	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	29.73	29.63	0.00	388.49	0.077	0.08	10.030	В
A-B	4.40	4.40	0.00	-	-	-	-	-
A-C	607.76	607.76	0.00	-	-	-	-	-
A-D	45.14	45.02	0.00	431.12	0.105	0.12	9.321	Α
D-AB	104.14	103.81	0.00	470.34	0.221	0.28	9.812	Α
D-BC	13.67	13.57	0.00	212.97	0.064	0.07	18.046	С
C-ABD	53.26	53.12	0.00	1057.96	0.050	0.08	3.582	Α
C-D	37.79	37.79	0.00	-	-	-	-	-
C-A	758.94	758.94	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	29.73	29.73	0.00	388.37	0.077	0.08	10.037	В
A-B	4.40	4.40	0.00	-	-	-	-	-
A-C	607.76	607.76	0.00	-	-	-	-	-
A-D	45.14	45.14	0.00	431.09	0.105	0.12	9.327	Α
D-AB	104.14	104.13	0.00	470.23	0.221	0.28	9.833	Α
D-BC	13.67	13.66	0.00	212.89	0.064	0.07	18.069	С
C-ABD	53.31	53.31	0.00	1058.01	0.050	0.08	3.585	Α
C-D	37.79	37.79	0.00	-	-	-	-	-
C-A	758.89	758.89	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	24.27	24.37	0.00	440.99	0.055	0.06	8.644	Α
A-B	3.60	3.60	0.00	-	-	-	-	-
A-C	496.24	496.24	0.00	-	-	-	-	-
A-D	36.86	36.98	0.00	466.05	0.079	0.09	8.393	Α
D-AB	85.01	85.33	0.00	510.68	0.166	0.20	8.471	Α
D-BC	11.19	11.28	0.00	262.37	0.043	0.05	14.341	В
C-ABD	30.35	30.49	0.00	951.16	0.032	0.04	3.912	Α
C-D	31.48	31.48	0.00	-	-	-	-	-
C-A	632.18	632.18	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	20.33	20.38	0.00	476.58	0.043	0.04	7.893	Α
A-B	3.01	3.01	0.00	-	-	-	-	-
A-C	415.57	415.57	0.00	-	-	-	-	-
A-D	30.87	30.94	0.00	491.37	0.063	0.07	7.821	Α
D-AB	71.18	71.37	0.00	539.34	0.132	0.15	7.697	Α
D-BC	9.38	9.43	0.00	297.95	0.031	0.03	12.481	В
C-ABD	22.15	22.19	0.00	902.88	0.025	0.03	4.089	Α
C-D	26.52	26.52	0.00	-	-	-	-	-
C-A	532.54	532.54	0.00	-	-	-	-	-

(Default Analysis Set) - 2023 No Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 No Development, FM	2023 No Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 Beach Road / Swanbridge Road	Crossroads	Two-way	A,B,C,D	9.14	Α

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B427 Lavernock Rd		Major
В	В	Beach Road		Minor
С	С	B4267 South Rd		Major
D	D	Swanbridge Rd		Minor



Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
Α	7.75		0.00		2.20	82.40		
С	7.75		0.00		2.20	101.00	✓	0.00

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

Minor Arm Geometry

Ar	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
E	One lane	4.10								✓		7	16
	One lane plus flare				10.00	4.94	3.30	3.30	3.30	√	1.00	10	14

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	621.682	-	-	-	-	-	-	0.223	0.318	0.223	-	-	-
1	B-A	541.529	0.091	0.230	0.230	-	-	-	0.145	0.329	-	0.230	0.230	0.115
1	B-C	703.832	0.100	0.252	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	541.529	0.091	0.230	0.230	-	-	-	0.145	0.329	0.145	-	-	-
1	B-D, offside lane	541.529	0.091	0.230	0.230	-	-	-	0.145	0.329	0.145	-	-	-
1	C-B	632.453	0.226	0.226	0.323	-	-	-	-	-	-	-	-	-
1	D-A	680.539	-	-	-	-	-	-	0.244	-	0.096	-	-	-
1	D-B, nearside lane	524.638	0.140	0.140	0.319	-	-	-	0.223	0.223	0.088	-	-	-
1	D-B, offside lane	489.460	0.131	0.131	0.297	-	-	-	0.208	0.208	0.082	-	-	-
1	D-C	489.460	-	0.131	0.297	0.104	0.208	0.208	0.208	0.208	0.082	-	-	-

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

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

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



Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	809.00	100.000
В	ONE HOUR	✓	32.00	100.000
С	ONE HOUR	✓	584.00	100.000
D	ONE HOUR	✓	74.00	100.000

Turning Proportions

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

			То		
		Α	В	С	D
	Α	0.000	27.000	682.000	100.000
From	В	16.000	0.000	15.000	1.000
	С	548.000	24.000	0.000	12.000
	D	58.000	1.000	15.000	0.000

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

			То		
		Α	В	С	D
	Α	0.00	0.03	0.84	0.12
From	В	0.50	0.00	0.47	0.03
	С	0.94	0.04	0.00	0.02
	D	0.78	0.01	0.20	0.00

Vehicle Mix

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

			То		
		Α	В	С	D
	Α	1.000	1.000	1.000	1.000
From	В	1.000	1.000	1.000	1.000
	С	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

			То		
		Α	В	С	D
	Α	0.0	0.0	0.0	0.0
From	В	0.0	0.0	0.0	0.0
	С	0.0	0.0	0.0	0.0
	D	0.0	0.0	0.0	0.0



Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.11	13.20	0.13	В
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.23	9.84	0.30	А
D-AB	0.13	7.98	0.14	Α
D-BC	0.08	17.75	0.08	С
C-ABD	0.09	4.83	0.19	Α
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	24.09	23.84	0.00	409.59	0.059	0.06	9.327	Α
A-B	20.33	20.33	0.00	-	-	-	-	-
A-C	513.45	513.45	0.00	-	-	-	-	-
A-D	75.29	74.62	0.00	522.12	0.144	0.17	8.032	Α
D-AB	44.06	43.72	0.00	569.75	0.077	0.08	6.839	Α
D-BC	11.66	11.50	0.00	305.58	0.038	0.04	12.235	В
C-ABD	35.77	35.51	0.00	781.65	0.046	0.07	4.824	Α
C-D	8.65	8.65	0.00	-	-	-	-	-
C-A	395.24	395.24	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	28.77	28.68	0.00	367.97	0.078	0.08	10.608	В
A-B	24.27	24.27	0.00	-	-	-	-	-
A-C	613.10	613.10	0.00	-	-	-	-	-
A-D	89.90	89.70	0.00	502.72	0.179	0.22	8.713	Α
D-AB	52.61	52.52	0.00	547.45	0.096	0.11	7.274	Α
D-BC	13.91	13.85	0.00	269.58	0.052	0.05	14.074	В
C-ABD	53.06	52.91	0.00	828.11	0.064	0.11	4.644	Α
C-D	10.11	10.11	0.00	-	-	-	-	-
C-A	461.83	461.83	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	35.23	35.06	0.00	308.01	0.114	0.13	13.181	В
A-B	29.73	29.73	0.00	-	-	-	-	-
A-C	750.90	750.90	0.00	-	-	-	-	-
A-D	110.10	109.78	0.00	475.96	0.231	0.30	9.822	Α
D-AB	64.45	64.31	0.00	515.53	0.125	0.14	7.975	Α
D-BC	17.02	16.91	0.00	219.97	0.077	0.08	17.719	С
C-ABD	81.22	80.91	0.00	880.11	0.092	0.18	4.507	Α
C-D	12.04	12.04	0.00	-	-	-	-	-
C-A	549.74	549.74	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	35.23	35.23	0.00	307.84	0.114	0.13	13.205	В
A-B	29.73	29.73	0.00	-	-	-	-	-
A-C	750.90	750.90	0.00	-	-	-	-	-
A-D	110.10	110.09	0.00	475.89	0.231	0.30	9.841	Α
D-AB	64.45	64.45	0.00	515.35	0.125	0.14	7.983	Α
D-BC	17.02	17.02	0.00	219.82	0.077	0.08	17.751	С
C-ABD	81.37	81.36	0.00	880.21	0.092	0.19	4.509	Α
C-D	12.03	12.03	0.00	-	-	-	-	-
C-A	549.59	549.59	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	28.77	28.94	0.00	367.72	0.078	0.09	10.630	В
A-B	24.27	24.27	0.00	-	-	-	-	-
A-C	613.10	613.10	0.00	-	-	-	-	-
A-D	89.90	90.21	0.00	502.61	0.179	0.22	8.737	Α
D-AB	52.61	52.75	0.00	547.18	0.096	0.11	7.285	Α
D-BC	13.91	14.02	0.00	269.37	0.052	0.06	14.103	В
C-ABD	53.24	53.54	0.00	828.24	0.064	0.11	4.650	Α
C-D	10.11	10.11	0.00	-	-	-	-	-
C-A	461.66	461.66	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	24.09	24.18	0.00	409.25	0.059	0.06	9.350	Α
A-B	20.33	20.33	0.00	-	-	-	-	-
A-C	513.45	513.45	0.00	-	-	-	-	-
A-D	75.29	75.49	0.00	522.00	0.144	0.17	8.065	Α
D-AB	44.06	44.15	0.00	569.48	0.077	0.08	6.855	Α
D-BC	11.66	11.72	0.00	305.28	0.038	0.04	12.267	В
C-ABD	35.96	36.12	0.00	781.60	0.046	0.07	4.830	Α
C-D	8.65	8.65	0.00	-	-	-	-	-
C-A	395.06	395.06	0.00	-	-	-	-	-



(Default Analysis Set) - 2028 No Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 No Development, AM	2028 No Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 Beach Road / Swanbridge Road	Crossroads	Two-way	A,B,C,D	9.60	Α

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B427 Lavernock Rd		Major
В	В	Beach Road		Minor
С	С	B4267 South Rd		Major
D	D	Swanbridge Rd		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
Α	7.75		0.00		2.20	82.40		
С	7.75		0.00		2.20	101.00	✓	0.00

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



Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane	4.10								✓		7	16
D	One lane plus flare				10.00	4.94	3.30	3.30	3.30	√	1.00	10	14

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	621.682	-	-	-	-	-	-	0.223	0.318	0.223	-	-	-
1	B-A	541.529	0.091	0.230	0.230	-	-	-	0.145	0.329	-	0.230	0.230	0.115
1	B-C	703.832	0.100	0.252	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	541.529	0.091	0.230	0.230	-	-	-	0.145	0.329	0.145	-	-	-
1	B-D, offside lane	541.529	0.091	0.230	0.230	-	-	-	0.145	0.329	0.145	-	-	-
1	C-B	632.453	0.226	0.226	0.323	-	-	-	-	-	-	-	-	-
1	D-A	685.614	-	-	-	-	-	-	0.245	-	0.097	-	-	-
1	D-B, nearside lane	528.550	0.141	0.141	0.321	-	-	-	0.225	0.225	0.089	-	-	-
1	D-B, offside lane	479.679	0.128	0.128	0.291	-	-	-	0.204	0.204	0.081	-	-	-
1	D-C	479.679	-	0.128	0.291	0.102	0.204	0.204	0.204	0.204	0.081	-	-	-

The slopes and intercepts shown above do NOT include any corrections or 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 (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	639.00	100.000
В	ONE HOUR	✓	29.00	100.000
С	ONE HOUR	✓	826.00	100.000
D	ONE HOUR	✓	111.00	100.000

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

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



Turning Proportions

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

		То								
		Α	В	С	D					
	Α	0.000	5.000	591.000	43.000					
From	В	10.000	0.000	19.000	0.000					
	С	774.000	14.000	0.000	38.000					
	D	96.000	3.000	12.000	0.000					

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

			То		
		Α	В	С	D
	Α	0.00	0.01	0.92	0.07
From	В	0.34	0.00	0.66	0.00
	С	0.94	0.02	0.00	0.05
	D	0.86	0.03	0.11	0.00

Vehicle Mix

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

		То							
		Α	В	С	D				
	Α	1.000	1.000	1.000	1.000				
From	В	1.000	1.000	1.000	1.000				
	С	1.000	1.000	1.000	1.000				
	D	1.000	1.000	1.000	1.000				

Heavy Vehicle Percentages - Junction 1 (for whole period)

	То							
		Α	В	С	D			
	Α	0.0	0.0	0.0	0.0			
From	В	0.0	0.0	0.0	0.0			
	С	0.0	0.0	0.0	0.0			
	D	0.0	0.0	0.0	0.0			



Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.09	10.85	0.10	В
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.11	9.72	0.13	Α
D-AB	0.24	10.38	0.31	В
D-BC	0.08	20.03	0.08	С
C-ABD	0.06	4.02	0.09	А
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	21.83	21.64	0.00	461.16	0.047	0.05	8.187	Α
A-B	3.76	3.76	0.00	-	-	-	-	-
A-C	444.94	444.94	0.00	-	-	-	-	-
A-D	32.37	32.09	0.00	482.29	0.067	0.07	7.991	Α
D-AB	73.44	72.80	0.00	529.16	0.139	0.16	7.877	Α
D-BC	10.13	9.98	0.00	285.78	0.035	0.04	13.046	В
C-ABD	24.98	24.84	0.00	920.53	0.027	0.03	4.019	Α
C-D	27.93	27.93	0.00	-	-	-	-	-
C-A	568.95	568.95	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	26.07	26.01	0.00	422.05	0.062	0.07	9.089	Α
A-B	4.49	4.49	0.00	-	-	-	-	-
A-C	531.30	531.30	0.00	-	-	-	-	-
A-D	38.66	38.57	0.00	455.20	0.085	0.09	8.637	Α
D-AB	87.71	87.50	0.00	498.30	0.176	0.21	8.758	Α
D-BC	12.08	12.02	0.00	247.61	0.049	0.05	15.277	С
C-ABD	39.95	39.87	0.00	1004.89	0.040	0.06	3.729	Α
C-D	32.88	32.88	0.00	-	-	-	-	-
C-A	669.72	669.72	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	31.93	31.81	0.00	363.74	0.088	0.10	10.842	В
A-B	5.51	5.51	0.00	-	-	-	-	-
A-C	650.70	650.70	0.00	-	-	-	-	-
A-D	47.34	47.21	0.00	417.77	0.113	0.13	9.712	Α
D-AB	107.46	107.09	0.00	454.38	0.237	0.31	10.354	В
D-BC	14.75	14.63	0.00	194.57	0.076	0.08	19.994	С
C-ABD	62.54	62.39	0.00	1086.47	0.058	0.09	3.514	Α
C-D	39.63	39.63	0.00	-	-	-	-	-
C-A	807.27	807.27	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	31.93	31.93	0.00	363.60	0.088	0.10	10.853	В
A-B	5.51	5.51	0.00	-	-	-	-	-
A-C	650.70	650.70	0.00	-	-	-	-	-
A-D	47.34	47.34	0.00	417.74	0.113	0.13	9.718	Α
D-AB	107.46	107.45	0.00	454.24	0.237	0.31	10.380	В
D-BC	14.75	14.75	0.00	194.48	0.076	0.08	20.029	С
C-ABD	62.61	62.60	0.00	1086.52	0.058	0.09	3.515	Α
C-D	39.63	39.63	0.00	-	-	-	-	-
C-A	807.21	807.21	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	26.07	26.19	0.00	421.86	0.062	0.07	9.100	Α
A-B	4.49	4.49	0.00	-	-	-	-	-
A-C	531.30	531.30	0.00	-	-	-	-	-
A-D	38.66	38.79	0.00	455.15	0.085	0.09	8.648	Α
D-AB	87.71	88.08	0.00	498.10	0.176	0.22	8.787	Α
D-BC	12.08	12.19	0.00	247.50	0.049	0.05	15.305	С
C-ABD	40.03	40.17	0.00	1004.97	0.040	0.06	3.731	Α
C-D	32.88	32.88	0.00	-	-	-	-	-
C-A	669.65	669.65	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	21.83	21.90	0.00	460.91	0.047	0.05	8.201	Α
A-B	3.76	3.76	0.00	-	-	-	-	-
A-C	444.94	444.94	0.00	-	-	-	-	-
A-D	32.37	32.46	0.00	482.24	0.067	0.07	8.006	Α
D-AB	73.44	73.65	0.00	528.96	0.139	0.16	7.911	Α
D-BC	10.13	10.19	0.00	285.62	0.035	0.04	13.072	В
C-ABD	25.08	25.16	0.00	920.53	0.027	0.04	4.022	Α
C-D	27.93	27.93	0.00	-	-	-	-	-
C-A	568.85	568.85	0.00	-	-	-	-	-



(Default Analysis Set) - 2028 No Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 No Development, PM	2028 No Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 Beach Road / Swanbridge Road	Crossroads	Two-way	A,B,C,D	9.50	Α

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B427 Lavernock Rd		Major
В	В	Beach Road		Minor
С	С	B4267 South Rd		Major
D	D	Swanbridge Rd		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
Α	7.75		0.00		2.20	82.40		
С	7.75		0.00		2.20	101.00	✓	0.00

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



Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane	4.10								✓		7	16
D	One lane plus flare				10.00	4.94	3.30	3.30	3.30	√	1.00	10	14

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	621.682	-	-	-	-	-	-	0.223	0.318	0.223	-	-	-
1	B-A	541.529	0.091	0.230	0.230	-	-	-	0.145	0.329	-	0.230	0.230	0.115
1	B-C	703.832	0.100	0.252	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	541.529	0.091	0.230	0.230	-	-	-	0.145	0.329	0.145	-	-	-
1	B-D, offside lane	541.529	0.091	0.230	0.230	-	-	-	0.145	0.329	0.145	-	-	-
1	C-B	632.453	0.226	0.226	0.323	-	-	-	-	-	-	-	-	-
1	D-A	680.254	-	-	-	-	-	-	0.244	-	0.096	-	-	-
1	D-B, nearside lane	524.418	0.140	0.140	0.319	-	-	-	0.223	0.223	0.088	-	-	-
1	D-B, offside lane	490.010	0.131	0.131	0.298	-	-	-	0.208	0.208	0.082	-	-	-
1	D-C	490.010	-	0.131	0.298	0.104	0.208	0.208	0.208	0.208	0.082	-	-	-

The slopes and intercepts shown above do NOT include any corrections or 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 (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	861.00	100.000
В	ONE HOUR	✓	34.00	100.000
С	ONE HOUR	✓	624.00	100.000
D	ONE HOUR	✓	77.00	100.000

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

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



Turning Proportions

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

		То										
		Α	В	С	D							
	Α	0.000	29.000	730.000	102.000							
From	В	17.000	0.000	16.000	1.000							
	С	586.000	25.000	0.000	13.000							
	D	60.000	1.000	16.000	0.000							

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

		То									
		Α	В	С	D						
	Α	0.00	0.03	0.85	0.12						
From	В	0.50	0.00	0.47	0.03						
	С	0.94	0.04	0.00	0.02						
	D	0.78	0.01	0.21	0.00						

Vehicle Mix

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

		То							
		Α	В	С	D				
	Α	1.000	1.000	1.000	1.000				
From	В	1.000	1.000	1.000	1.000				
	С	1.000	1.000	1.000	1.000				
	D	1.000	1.000	1.000	1.000				

Heavy Vehicle Percentages - Junction 1 (for whole period)

		То						
		Α	В	С	D			
	Α	0.0	0.0	0.0	0.0			
From	В	0.0	0.0	0.0	0.0			
	С	0.0	0.0	0.0	0.0			
	D	0.0	0.0	0.0	0.0			



Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.13	14.46	0.15	В
A-B -				-
A-C -		-	-	-
A-D	0.24	10.18	0.32	В
D-AB	0.13	8.25	0.15	Α
D-BC	0.09	19.47	0.10	С
C-ABD	0.10	4.78	0.22	Α
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	25.60	25.32	0.00	396.37	0.065	0.07	9.695	Α
A-B	21.83	21.83	0.00	-	-	-	-	-
A-C	549.58	549.58	0.00	-	-	-	-	-
A-D	76.79	76.10	0.00	515.35	0.149	0.17	8.196	Α
D-AB	45.56	45.21	0.00	561.88	0.081	0.09	6.963	Α
D-BC	12.41	12.23	0.00	294.30	0.042	0.04	12.754	В
C-ABD	39.05	38.76	0.00	793.57	0.049	0.07	4.768	Α
C-D	9.35	9.35	0.00	-	-	-	-	-
C-A	421.38	421.38	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	30.57	30.46	0.00	351.54	0.087	0.09	11.208	В
A-B	26.07	26.07	0.00	-	-	-	-	-
A-C	656.26	656.26	0.00	-	-	-	-	-
A-D	91.70	91.49	0.00	494.63	0.185	0.22	8.925	Α
D-AB	54.41	54.32	0.00	537.86	0.101	0.11	7.442	Α
D-BC	14.81	14.74	0.00	255.98	0.058	0.06	14.920	В
C-ABD	59.08	58.89	0.00	844.99	0.070	0.12	4.580	Α
C-D	10.89	10.89	0.00	-	-	-	-	-
C-A	490.99	490.99	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	37.43	37.22	0.00	286.49	0.131	0.15	14.430	В
A-B	31.93	31.93	0.00	-	-	-	-	-
A-C	803.74	803.74	0.00	-	-	-	-	-
A-D	112.30	111.95	0.00	466.04	0.241	0.31	10.156	В
D-AB	66.66	66.50	0.00	503.14	0.132	0.15	8.242	Α
D-BC	18.12	17.98	0.00	203.17	0.089	0.10	19.439	С
C-ABD	91.95	91.58	0.00	901.17	0.102	0.21	4.448	Α
C-D	12.92	12.92	0.00	-	-	-	-	-
C-A	582.17	582.17	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	37.43	37.43	0.00	286.29	0.131	0.15	14.465	В
A-B	31.93	31.93	0.00	-	-	-	-	-
A-C	803.74	803.74	0.00	-	-	-	-	-
A-D	112.30	112.30	0.00	465.95	0.241	0.32	10.179	В
D-AB	66.66	66.66	0.00	502.91	0.133	0.15	8.251	Α
D-BC	18.12	18.11	0.00	202.99	0.089	0.10	19.472	С
C-ABD	92.15	92.14	0.00	901.31	0.102	0.22	4.454	Α
C-D	12.91	12.91	0.00	-	-	-	-	-
C-A	581.97	581.97	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	30.57	30.78	0.00	351.25	0.087	0.10	11.242	В
A-B	26.07	26.07	0.00	-	-	-	-	-
A-C	656.26	656.26	0.00	-	-	-	-	-
A-D	91.70	92.04	0.00	494.49	0.185	0.23	8.952	Α
D-AB	54.41	54.57	0.00	537.53	0.101	0.11	7.458	Α
D-BC	14.81	14.94	0.00	255.74	0.058	0.06	14.960	В
C-ABD	59.29	59.66	0.00	845.18	0.070	0.12	4.588	Α
C-D	10.89	10.89	0.00	-	-	-	-	-
C-A	490.78	490.78	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	25.60	25.70	0.00	395.99	0.065	0.07	9.724	Α
A-B	21.83	21.83	0.00	-	-	-	-	-
A-C	549.58	549.58	0.00	-	-	-	-	-
A-D	76.79	77.00	0.00	515.22	0.149	0.18	8.220	Α
D-AB	45.56	45.66	0.00	561.58	0.081	0.09	6.981	Α
D-BC	12.41	12.48	0.00	293.98	0.042	0.04	12.793	В
C-ABD	39.27	39.47	0.00	793.54	0.049	0.08	4.777	Α
C-D	9.34	9.34	0.00	-	-	-	-	-
C-A	421.16	421.16	0.00	-	-	-	-	-



Junctions 8

PICADY 8 - Priority Intersection Module

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Filename: Jn7 - South Road - Swanbridge Grove - Sports and Leisure Club Proposed Access.arc8

Path: P:\GBCFA\TP\HB\Projects\5133321 - Sully Sport & Social Club - TAYL3270\04 - Analysis\Junction Modelling

Report generation date: 25/06/2015 12:54:46

- » (Default Analysis Set) 2023 With Development, AM
- » (Default Analysis Set) 2023 With Development, PM
- » (Default Analysis Set) 2028 With Development, AM
- » (Default Analysis Set) 2028 With Development, PM
- » (Default Analysis Set) 2023 No Development, AM
- » (Default Analysis Set) 2023 No Development, PM
- » (Default Analysis Set) 2028 No Development, AM
- » (Default Analysis Set) 2028 No Development, PM

Summary of junction performance

		AM		
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2023 \	Nith Devel	opme	ent
Stream B-ACD	0.21	12.76	0.17	В
Stream A-BCD	0.00	4.45	0.00	Α
Stream A-B	-	ı	-	-
Stream A-C	-	-	-	-
Stream D-A	0.00	0.00	0.00	Α
Stream D-BC	0.00	0.00	0.00	Α
Stream C-ABD	0.23	4.02	0.11	Α
Stream C-D	-	-	-	-
Stream C-A	-	-	-	-

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

"D5 - 2023 With Development, AM " model duration: 07:45 - 09:15

"D6 - 2023 With Development, PM" model duration: 16:45 - 18:15

"D7 - 2028 With Development, AM" model duration: 07:45 - 09:15

"D8 - 2028 With Development, PM" model duration: 16:45 - 18:15

"D9 - 2023 No Development, AM" model duration: 07:45 - 09:15

"D10 - 2023 No Development, PM" model duration: 16:45 - 18:15 "D11 - 2028 No Development, AM" model duration: 07:45 - 09:15

"D12 - 2028 No Development, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.4.487 at 25/06/2015 12:54:42



File summary

Title	(untitled)		
Location			
Site Number			
Date	09/10/2014		
Version			
Status	(new file)		
Identifier			
Client			
Jobnumber			
Enumerator	TAYL3270		
Description			

Analysis Options

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

Units

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

(Default Analysis Set) - 2023 With Development, AM

Data Errors and Warnings

Severity Area Item		Item	Description
Warning	Minor arm flare		Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 With Development, AM	2023 With Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Swanbridge Grove / Sports & Leisure Club Development Site Proposed Access	OS-NS Stagger (UK RL Stagger)	Two-way	A,B,C,D	7.32	А



Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (East)		Major
В	В	Sports & Leisure Club Development Site Proposed Access		Minor
С	С	B4267 South Rd (West)		Major
D	D	Swanbridge Grove		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
Α	6.90		0.00		2.20	119.00	✓	0.00
С	6.85		0.00		2.20	94.00	✓	0.00

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

Minor Arm Geometry

,	Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
	В	One lane	4.45								✓		9	11
	D	One lane plus flare				8.70	3.30	3.30	3.30	3.30	√	1.00	19	27

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	642.877	-	-	-	0.239	0.239	0.239	-	0.239	-	-
1	B-AD	556.578	0.098	0.247	-	-	-	0.155	0.353	0.155	0.098	0.247
1	B-C	722.444	0.107	0.270	-	-	-	-	-	-	0.107	0.270
1	C-B	628.400	0.234	0.234	-	-	-	-	-	-	0.234	0.234
1	D-A	727.561	-	-	-	0.271	0.107	0.271	-	0.107	-	-
1	D-BC	522.362	0.145	0.145	0.330	0.231	0.091	0.231	-	0.091	-	-

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

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

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



Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)	
Α	ONE HOUR	✓	617.00	100.000	
В	ONE HOUR	✓	53.00	100.000	
С	ONE HOUR	✓	839.00	100.000	
D	ONE HOUR	✓	4.00	100.000	

Turning Proportions

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

			То		
		Α	В	С	D
	Α	0.000	28.000	588.000	1.000
From	В	26.000	0.000	27.000	0.000
	С	814.000	24.000	0.000	1.000
	D	3.000	0.000	1.000	0.000

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

		То							
		Α	В	С	D				
	Α	0.00	0.05	0.95	0.00				
From	В	0.49	0.00	0.51	0.00				
	С	0.97	0.03	0.00	0.00				
	D	0.75	0.00	0.25	0.00				

Vehicle Mix

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

		То							
		Α	В	С	D				
From	Α	1.000	1.000	1.000	1.000				
	В	1.000	1.000	1.000	1.000				
	С	1.000	1.000	1.000	1.000				
	D	1.000	1.000	1.000	1.000				



Heavy Vehicle Percentages - Junction 1 (for whole period)

	То						
		Α	В	С	D		
	Α	0.0	0.0	0.0	0.0		
From	В	0.0	0.0	0.0	0.0		
	С	0.0	0.0	0.0	0.0		
	D	0.0	0.0	0.0	0.0		

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.17	12.76	0.21	В
A-BCD	CD 0.00 4.45		0.00	А
A-B	-В		-	-
A-C	A-C		-	-
D-A	0.00	0.00	0.00	А
D-BC	0.00	0.00	0.00	Α
C-ABD	0.11	4.02	0.23	Α
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	39.90	39.51	0.00	439.51	0.091	0.10	8.993	Α
A-BCD	1.56	1.56	0.00	811.61	0.002	0.00	4.443	Α
A-B	21.04	21.04	0.00	-	-	-	-	-
A-C	441.90	441.90	0.00	-	-	-	-	-
D-A	0.00	0.00	0.00	556.19	0.000	0.00	0.000	Α
D-BC	0.00	0.00	0.00	308.51	0.000	0.00	0.000	Α
C-ABD	47.85	47.54	0.00	944.55	0.051	0.08	4.012	Α
C-D	0.72	0.72	0.00	-	-	-	-	-
C-A	583.07	583.07	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	47.65	47.51	0.00	399.13	0.119	0.13	10.233	В
A-BCD	2.16	2.16	0.00	845.74	0.003	0.00	4.267	Α
A-B	25.11	25.11	0.00	-	-	-	-	-
A-C	527.40	527.40	0.00	-	-	-	-	-
D-A	0.00	0.00	0.00	522.82	0.000	0.00	0.000	Α
D-BC	0.00	0.00	0.00	266.91	0.000	0.00	0.000	Α
C-ABD	68.76	68.60	0.00	1006.63	0.068	0.12	3.840	Α
C-D	0.84	0.84	0.00	-	-	-	-	-
C-A	684.64	684.64	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	58.35	58.08	0.00	340.50	0.171	0.20	12.733	В
A-BCD	3.22	3.22	0.00	892.11	0.004	0.00	4.049	Α
A-B	30.73	30.73	0.00	-	-	-	-	-
A-C	645.38	645.38	0.00	-	-	-	-	-
D-A	0.00	0.00	0.00	476.78	0.000	0.00	0.000	Α
D-BC	0.00	0.00	0.00	209.47	0.000	0.00	0.000	Α
C-ABD	117.60	117.16	0.00	1111.72	0.106	0.23	3.620	Α
C-D	0.99	0.99	0.00	-	-	-	-	-
C-A	805.17	805.17	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	58.35	58.35	0.00	340.42	0.171	0.21	12.762	В
A-BCD	3.22	3.22	0.00	892.03	0.004	0.00	4.050	Α
A-B	30.73	30.73	0.00	-	-	-	-	-
A-C	645.38	645.38	0.00	-	-	-	-	-
D-A	0.00	0.00	0.00	476.64	0.000	0.00	0.000	Α
D-BC	0.00	0.00	0.00	209.35	0.000	0.00	0.000	Α
C-ABD	117.82	117.81	0.00	1111.97	0.106	0.23	3.626	Α
C-D	0.99	0.99	0.00	-	-	-	-	-
C-A	804.95	804.95	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	47.65	47.92	0.00	399.03	0.119	0.14	10.262	В
A-BCD	2.16	2.16	0.00	845.62	0.003	0.00	4.267	Α
A-B	25.11	25.11	0.00	-	-	-	-	-
A-C	527.40	527.40	0.00	-	-	-	-	-
D-A	0.00	0.00	0.00	522.63	0.000	0.00	0.000	Α
D-BC	0.00	0.00	0.00	266.74	0.000	0.00	0.000	Α
C-ABD	68.97	69.41	0.00	1006.95	0.068	0.12	3.844	Α
C-D	0.84	0.84	0.00	-	-	-	-	-
C-A	684.43	684.43	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	39.90	40.05	0.00	439.42	0.091	0.10	9.018	Α
A-BCD	1.57	1.57	0.00	811.50	0.002	0.00	4.446	Α
A-B	21.04	21.04	0.00	-	-	-	-	-
A-C	441.90	441.90	0.00	-	-	-	-	-
D-A	0.00	0.00	0.00	556.03	0.000	0.00	0.000	Α
D-BC	0.00	0.00	0.00	308.37	0.000	0.00	0.000	Α
C-ABD	48.11	48.27	0.00	944.76	0.051	0.08	4.017	Α
C-D	0.72	0.72	0.00	-	-	-	-	-
C-A	582.82	582.82	0.00	-	-	-	-	-

(Default Analysis Set) - 2023 With Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare		Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 With Development, PM	2023 With Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Swanbridge Grove / Sports & Leisure Club Development Site Proposed Access	OS-NS Stagger (UK RL Stagger)	Two-way	A,B,C,D	7.46	А

Junction Network Options

Driving Side	Lighting				
Left	Normal/unknown				



Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (East)		Major
В	В	Sports & Leisure Club Development Site Proposed Access		Minor
С	С	B4267 South Rd (West)		Major
D	D	Swanbridge Grove		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
Α	6.90		0.00		2.20	119.00	✓	0.00
С	6.85		0.00		2.20	94.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane	4.45								✓		9	11
D	One lane plus flare				8.70	3.30	3.30	3.30	3.30	√	1.00	19	27

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	642.877	-	-	-	0.239	0.239	0.239	-	0.239	-	-
1	B-AD	556.578	0.098	0.247	-	-	-	0.155	0.353	0.155	0.098	0.247
1	B-C	722.444	0.107	0.270	-	-	-	-	-	-	0.107	0.270
1	C-B	628.400	0.234	0.234	-	-	-	-	-	-	0.234	0.234
1	D-A	727.561	-	-	-	0.271	0.107	0.271	-	0.107	-	-
1	D-BC	522.362	0.145	0.145	0.330	0.231	0.091	0.231	-	0.091	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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



Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	800.00	100.000
В	ONE HOUR	✓	60.00	100.000
С	ONE HOUR	✓	655.00	100.000
D	ONE HOUR	✓	4.00	100.000

Turning Proportions

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

	То									
		Α	В	С	D					
	Α	0.000	40.000	757.000	3.000					
From	В	25.000	0.000	35.000	0.000					
	С	605.000	47.000	0.000	3.000					
	D	1.000	0.000	3.000	0.000					

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

		То								
		Α	В	С	D					
	Α	0.00	0.05	0.95	0.00					
From	В	0.42	0.00	0.58	0.00					
	С	0.92	0.07	0.00	0.00					
	D	0.25	0.00	0.75	0.00					

Vehicle Mix

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

			То		
		Α	В	С	D
	Α	1.000	1.000	1.000	1.000
From	В	1.000	1.000	1.000	1.000
	С	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

			То		
		Α	С	D	
	Α	0.0	0.0	0.0	0.0
From	В	0.0	0.0	0.0	0.0
	С	0.0	0.0	0.0	0.0
	D	0.0	0.0	0.0	0.0



Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.20	13.72	0.25	В
A-BCD	0.01	3.94	0.01	А
A-B	-	-	-	-
A-C -		-	-	-
D-A	0.00	0.00	0.00	А
D-BC	0.00	0.00	0.00	Α
C-ABD	0.19	4.88	0.64	Α
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	45.17	44.71	0.00	435.55	0.104	0.11	9.201	Α
A-BCD	5.24	5.21	0.00	919.97	0.006	0.01	3.935	Α
A-B	29.96	29.96	0.00	-	-	-	-	-
A-C	567.08	567.08	0.00	-	-	-	-	-
D-A	0.00	0.00	0.00	598.85	0.000	0.00	0.000	Α
D-BC	0.00	0.00	0.00	324.59	0.000	0.00	0.000	Α
C-ABD	78.21	77.44	0.00	817.31	0.096	0.19	4.866	Α
C-D	2.05	2.05	0.00	-	-	-	-	-
C-A	412.86	412.86	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	53.94	53.77	0.00	392.01	0.138	0.16	10.637	В
A-BCD	7.23	7.22	0.00	969.00	0.007	0.01	3.742	Α
A-B	35.73	35.73	0.00	-	-	-	-	-
A-C	676.22	676.22	0.00	-	-	-	-	-
D-A	0.00	0.00	0.00	573.70	0.000	0.00	0.000	Α
D-BC	0.00	0.00	0.00	286.06	0.000	0.00	0.000	Α
C-ABD	110.64	110.16	0.00	859.47	0.129	0.31	4.809	Α
C-D	2.36	2.36	0.00	-	-	-	-	-
C-A	475.83	475.83	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	66.06	65.70	0.00	328.75	0.201	0.25	13.665	В
A-BCD	10.69	10.67	0.00	1032.45	0.010	0.01	3.522	Α
A-B	43.67	43.67	0.00	-	-	-	-	-
A-C	826.46	826.46	0.00	-	-	-	-	-
D-A	0.00	0.00	0.00	539.05	0.000	0.00	0.000	Α
D-BC	0.00	0.00	0.00	232.89	0.000	0.00	0.000	Α
C-ABD	178.80	177.52	0.00	929.24	0.192	0.63	4.802	Α
C-D	2.68	2.68	0.00	-	-	-	-	-
C-A	539.69	539.69	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	66.06	66.05	0.00	328.52	0.201	0.25	13.715	В
A-BCD	10.70	10.70	0.00	1032.29	0.010	0.01	3.525	Α
A-B	43.67	43.67	0.00	-	-	-	-	-
A-C	826.45	826.45	0.00	-	-	-	-	-
D-A	0.00	0.00	0.00	538.73	0.000	0.00	0.000	Α
D-BC	0.00	0.00	0.00	232.61	0.000	0.00	0.000	Α
C-ABD	179.51	179.47	0.00	929.99	0.193	0.64	4.818	Α
C-D	2.67	2.67	0.00	-	-	-	-	-
C-A	538.98	538.98	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	53.94	54.29	0.00	391.72	0.138	0.16	10.681	В
A-BCD	7.24	7.25	0.00	968.75	0.007	0.01	3.746	Α
A-B	35.73	35.73	0.00	-	-	-	-	-
A-C	676.21	676.21	0.00	-	-	-	-	-
D-A	0.00	0.00	0.00	573.26	0.000	0.00	0.000	Α
D-BC	0.00	0.00	0.00	285.68	0.000	0.00	0.000	Α
C-ABD	111.32	112.59	0.00	860.44	0.129	0.33	4.832	Α
C-D	2.36	2.36	0.00	-	-	-	-	-
C-A	475.15	475.15	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	45.17	45.35	0.00	435.32	0.104	0.12	9.235	Α
A-BCD	5.26	5.26	0.00	919.80	0.006	0.01	3.936	Α
A-B	29.96	29.96	0.00	-	-	-	-	-
A-C	567.06	567.06	0.00	-	-	-	-	-
D-A	0.00	0.00	0.00	598.56	0.000	0.00	0.000	Α
D-BC	0.00	0.00	0.00	324.34	0.000	0.00	0.000	Α
C-ABD	78.83	79.33	0.00	817.88	0.096	0.20	4.882	Α
C-D	2.04	2.04	0.00	-	-	-	-	-
C-A	412.24	412.24	0.00	-	-	-	-	-



(Default Analysis Set) - 2028 With Development, AM

Data Errors and Warnings

Severity	Area	ltem	Description
Warning	Minor arm flare		Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 With Development, AM	2028 With Development	АМ		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Swanbridge Grove / Sports & Leisure Club Development Site Proposed Access	OS-NS Stagger (UK RL Stagger)	Two-way	A,B,C,D	7.59	А

Junction Network Options

Driving Side	Lighting		
Left	Normal/unknown		

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (East)		Major
В	В	Sports & Leisure Club Development Site Proposed Access		Minor
С	С	B4267 South Rd (West)		Major
D	D	Swanbridge Grove		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
Α	6.90		0.00		2.20	119.00	✓	0.00
С	6.85		0.00		2.20	94.00	✓	0.00

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



Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane	4.45								✓		9	11
D	One lane plus flare				8.70	3.30	3.30	3.30	3.30	√	1.00	19	27

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	642.877	-	-	-	0.239	0.239	0.239	-	0.239	-	-
1	B-AD	556.578	0.098	0.247	-	-	-	0.155	0.353	0.155	0.098	0.247
1	B-C	722.444	0.107	0.270	-	-	-	-	-	-	0.107	0.270
1	C-B	628.400	0.234	0.234	-	-	-	-	-	-	0.234	0.234
1	D-A	682.002	-	-	-	0.254	0.100	0.254	-	0.100	-	-
1	D-BC	531.816	0.148	0.148	0.336	0.235	0.093	0.235	-	0.093	-	-

The slopes and intercepts shown above do NOT include any corrections or 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 (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	658.00	100.000
В	ONE HOUR	✓	53.00	100.000
С	ONE HOUR	✓	892.00	100.000
D	ONE HOUR	✓	5.00	100.000

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

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



Turning Proportions

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

			То		
		Α	В	С	D
	Α	0.000	28.000	629.000	1.000
From	В	26.000	0.000	27.000	0.000
	С	867.000	24.000	0.000	1.000
	D	4.000	0.000	1.000	0.000

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

			То		
		Α	В	С	D
	Α	0.00	0.04	0.96	0.00
From	В	0.49	0.00	0.51	0.00
	С	0.97	0.03	0.00	0.00
	D	0.80	0.00	0.20	0.00

Vehicle Mix

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

			То		
		Α	В	С	D
	Α	1.000	1.000	1.000	1.000
From	В	1.000	1.000	1.000	1.000
	С	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

			То		
		Α	В	С	D
	Α	0.0	0.0	0.0	0.0
From	В	0.0	0.0	0.0	0.0
	С	0.0	0.0	0.0	0.0
	D	0.0	0.0	0.0	0.0



Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.18	13.85	0.22	В
A-BCD	0.00	4.38	0.00	А
A-B	-	-	-	-
A-C	-	-	-	-
D-A	0.01	8.43	0.01	А
D-BC	0.01	18.79	0.01	С
C-ABD	0.11	3.94	0.26	Α
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Stream	Total Delliand (FCO/III)	Elitry Flow (FCO/III)	redestriali Dellialid (red/ili)	Capacity (FCO/III)	KFC	Ella Quede (FCO)	Delay (S)	LUS
B-ACD	39.90	39.49	0.00	425.88	0.094	0.10	9.308	Α
A-BCD	1.64	1.63	0.00	823.77	0.002	0.00	4.378	Α
A-B	21.04	21.04	0.00	ı	-	-	-	-
A-C	472.69	472.69	0.00	ı	-	-	-	-
D-A	3.01	2.99	0.00	510.91	0.006	0.01	7.087	Α
D-BC	0.75	0.74	0.00	300.13	0.003	0.00	12.024	В
C-ABD	50.90	50.57	0.00	965.26	0.053	0.08	3.935	Α
C-D	0.72	0.72	0.00	-	-	-	-	-
C-A	619.93	619.93	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	47.65	47.49	0.00	382.22	0.125	0.14	10.751	В
A-BCD	2.29	2.28	0.00	860.06	0.003	0.00	4.196	Α
A-B	25.11	25.11	0.00	-	-	-	-	-
A-C	564.13	564.13	0.00	-	-	-	-	-
D-A	3.60	3.59	0.00	477.56	0.008	0.01	7.594	Α
D-BC	0.90	0.89	0.00	255.07	0.004	0.00	14.162	В
C-ABD	73.90	73.73	0.00	1030.68	0.072	0.13	3.764	Α
C-D	0.84	0.84	0.00	-	-	-	-	-
C-A	727.15	727.15	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	58.35	58.03	0.00	318.34	0.183	0.22	13.813	В
A-BCD	3.46	3.45	0.00	909.08	0.004	0.00	3.974	Α
A-B	30.73	30.73	0.00	-	-	-	-	-
A-C	690.29	690.29	0.00	-	-	-	-	-
D-A	4.40	4.39	0.00	431.47	0.010	0.01	8.429	Α
D-BC	1.10	1.09	0.00	192.84	0.006	0.01	18.775	С
C-ABD	129.87	129.35	0.00	1143.27	0.114	0.26	3.551	Α
C-D	0.98	0.98	0.00	-	-	-	-	-
C-A	851.26	851.26	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	58.35	58.35	0.00	318.25	0.183	0.22	13.850	В
A-BCD	3.46	3.46	0.00	908.99	0.004	0.00	3.975	Α
A-B	30.73	30.73	0.00	-	-	-	-	-
A-C	690.29	690.29	0.00	-	-	-	-	-
D-A	4.40	4.40	0.00	431.31	0.010	0.01	8.432	Α
D-BC	1.10	1.10	0.00	192.69	0.006	0.01	18.789	С
C-ABD	130.14	130.13	0.00	1143.56	0.114	0.26	3.557	Α
C-D	0.98	0.98	0.00	-	-	-	-	-
C-A	850.99	850.99	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	47.65	47.96	0.00	382.10	0.125	0.14	10.785	В
A-BCD	2.29	2.29	0.00	859.92	0.003	0.00	4.198	Α
A-B	25.11	25.11	0.00	-	-	-	-	-
A-C	564.13	564.13	0.00	-	-	-	-	-
D-A	3.60	3.61	0.00	477.33	0.008	0.01	7.601	Α
D-BC	0.90	0.91	0.00	254.87	0.004	0.00	14.175	В
C-ABD	74.15	74.66	0.00	1031.05	0.072	0.13	3.766	Α
C-D	0.84	0.84	0.00	-	-	-	-	-
C-A	726.90	726.90	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	39.90	40.06	0.00	425.78	0.094	0.10	9.338	Α
A-BCD	1.65	1.65	0.00	823.66	0.002	0.00	4.380	Α
A-B	21.04	21.04	0.00	-	-	-	-	-
A-C	472.69	472.69	0.00	-	-	-	-	-
D-A	3.01	3.02	0.00	510.74	0.006	0.01	7.089	Α
D-BC	0.75	0.76	0.00	299.98	0.003	0.00	12.033	В
C-ABD	51.17	51.36	0.00	965.49	0.053	0.08	3.941	Α
C-D	0.71	0.71	0.00	-	-	-	-	-
C-A	619.66	619.66	0.00	-	-	-	-	-



(Default Analysis Set) - 2028 With Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare		Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 With Development, PM	2028 With Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Swanbridge Grove / Sports & Leisure Club Development Site Proposed Access	OS-NS Stagger (UK RL Stagger)	Two-way	A,B,C,D	7.77	А

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (East)		Major
В	В	Sports & Leisure Club Development Site Proposed Access		Minor
С	С	B4267 South Rd (West)		Major
D	D	Swanbridge Grove		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
Α	6.90		0.00		2.20	119.00	✓	0.00
С	6.85		0.00		2.20	94.00	✓	0.00

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



Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane	4.45								✓		9	11
D	One lane plus flare				8.70	3.30	3.30	3.30	3.30	√	1.00	19	27

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	642.877	-	-	-	0.239	0.239	0.239	-	0.239	-	-
1	B-AD	556.578	0.098	0.247	-	-	-	0.155	0.353	0.155	0.098	0.247
1	B-C	722.444	0.107	0.270	-	-	-	-	-	-	0.107	0.270
1	C-B	628.400	0.234	0.234	-	-	-	-	-	-	0.234	0.234
1	D-A	685.852	-	-	-	0.255	0.101	0.255	-	0.101	-	-
1	D-BC	528.831	0.147	0.147	0.334	0.234	0.093	0.234	-	0.093	-	-

The slopes and intercepts shown above do NOT include any corrections or 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 (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	850.00	100.000
В	ONE HOUR	✓	60.00	100.000
С	ONE HOUR	√	695.00	100.000
D	ONE HOUR	✓	5.00	100.000

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

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



Turning Proportions

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

		То								
		Α	В	С	D					
	Α	0.000	40.000	806.000	4.000					
From	В	25.000	0.000	35.000	0.000					
	С	644.000	47.000	0.000	4.000					
	D	1.000	0.000	4.000	0.000					

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

	То						
		Α	В	С	D		
	Α	0.00	0.05	0.95	0.00		
From	В	0.42	0.00	0.58	0.00		
	С	0.93	0.07	0.00	0.01		
	D	0.20	0.00	0.80	0.00		

Vehicle Mix

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

		То							
		Α	В	С	D				
	Α	1.000	1.000	1.000	1.000				
From	В	1.000	1.000	1.000	1.000				
	С	1.000	1.000	1.000	1.000				
	D	1.000	1.000	1.000	1.000				

Heavy Vehicle Percentages - Junction 1 (for whole period)

		То						
		Α	В	С	D			
	Α	0.0	0.0	0.0	0.0			
From	В	0.0	0.0	0.0	0.0			
	С	0.0	0.0	0.0	0.0			
	D	0.0	0.0	0.0	0.0			



Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.22	15.07	0.27	С
A-BCD	0.01	3.88	0.02	А
A-B	-	-	-	-
A-C	-	-	-	-
D-A	0.00	7.30	0.00	А
D-BC	0.02	16.94	0.02	С
C-ABD	0.21	4.82	0.73	Α
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	45.17	44.70	0.00	421.18	0.107	0.12	9.551	Α
A-BCD	7.31	7.28	0.00	935.67	0.008	0.01	3.877	Α
A-B	29.91	29.91	0.00	-	-	-	-	-
A-C	602.70	602.70	0.00	-	-	-	-	-
D-A	0.75	0.75	0.00	555.62	0.001	0.00	6.487	Α
D-BC	3.01	2.97	0.00	315.99	0.010	0.01	11.499	В
C-ABD	82.68	81.85	0.00	831.33	0.099	0.21	4.804	Α
C-D	2.72	2.72	0.00	-	-	-	-	-
C-A	437.84	437.84	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	53.94	53.75	0.00	374.19	0.144	0.17	11.227	В
A-BCD	10.16	10.15	0.00	986.74	0.010	0.01	3.685	Α
A-B	35.65	35.65	0.00	-	-	-	-	-
A-C	718.32	718.32	0.00	-	-	-	-	-
D-A	0.90	0.90	0.00	530.00	0.002	0.00	6.803	Α
D-BC	3.60	3.58	0.00	274.52	0.013	0.01	13.287	В
C-ABD	118.37	117.84	0.00	876.57	0.135	0.34	4.752	Α
C-D	3.13	3.13	0.00	-	-	-	-	-
C-A	503.30	503.30	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	66.06	65.64	0.00	305.27	0.216	0.27	14.994	В
A-BCD	15.16	15.13	0.00	1052.37	0.014	0.02	3.469	Α
A-B	43.53	43.53	0.00	-	-	-	-	-
A-C	877.18	877.18	0.00	-	-	-	-	-
D-A	1.10	1.10	0.00	494.49	0.002	0.00	7.295	Α
D-BC	4.40	4.38	0.00	217.29	0.020	0.02	16.907	С
C-ABD	196.07	194.55	0.00	952.65	0.206	0.72	4.763	Α
C-D	3.51	3.51	0.00	-	-	-	-	-
C-A	565.63	565.63	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	66.06	66.05	0.00	304.99	0.217	0.27	15.066	С
A-BCD	15.17	15.17	0.00	1052.19	0.014	0.02	3.473	Α
A-B	43.53	43.53	0.00	-	-	-	-	-
A-C	877.16	877.16	0.00	-	-	-	-	-
D-A	1.10	1.10	0.00	494.11	0.002	0.00	7.301	Α
D-BC	4.40	4.40	0.00	216.95	0.020	0.02	16.936	С
C-ABD	196.96	196.90	0.00	953.54	0.207	0.73	4.780	Α
C-D	3.51	3.51	0.00	-	-	-	-	-
C-A	564.74	564.74	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	53.94	54.35	0.00	373.83	0.144	0.17	11.281	В
A-BCD	10.18	10.20	0.00	986.46	0.010	0.01	3.686	Α
A-B	35.65	35.65	0.00	-	-	-	-	-
A-C	718.31	718.31	0.00	-	-	-	-	-
D-A	0.90	0.90	0.00	529.48	0.002	0.00	6.809	Α
D-BC	3.60	3.62	0.00	274.06	0.013	0.01	13.315	В
C-ABD	123.03	124.47	0.00	884.68	0.139	0.37	4.756	Α
C-D	3.10	3.10	0.00	-	-	-	-	-
C-A	498.67	498.67	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	45.17	45.37	0.00	420.91	0.107	0.12	9.590	Α
A-BCD	7.34	7.35	0.00	935.48	0.008	0.01	3.880	Α
A-B	29.91	29.91	0.00	-	-	-	-	-
A-C	602.68	602.68	0.00	-	-	-	-	-
D-A	0.75	0.75	0.00	555.28	0.001	0.00	6.491	Α
D-BC	3.01	3.03	0.00	315.69	0.010	0.01	11.516	В
C-ABD	83.38	84.01	0.00	831.99	0.100	0.22	4.823	Α
C-D	2.72	2.72	0.00	-	-	-	-	-
C-A	437.13	437.13	0.00	-	-	-	-	-



(Default Analysis Set) - 2023 No Development, AM

Data Errors and Warnings

Severity	Severity Area Item		Description
Warning	Minor arm flare		Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 No Development, AM	2023 No Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Swanbridge Grove / Sports & Leisure Club Development Site Proposed Access	OS-NS Stagger (UK RL Stagger)	Two-way	A,B,C,D	4.47	А

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (East)		Major
В	В	Sports & Leisure Club Development Site Proposed Access		Minor
С	С	B4267 South Rd (West)		Major
D	D	Swanbridge Grove		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
Α	6.90		0.00		2.20	119.00	✓	0.00
С	6.85		0.00		2.20	94.00	✓	0.00

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



Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane	4.45								✓		9	11
D	One lane plus flare				8.70	3.30	3.30	3.30	3.30	✓	1.00	19	27

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	642.877	-	-	-	0.239	0.239	0.239	-	0.239	-	-
1	B-AD	556.578	0.098	0.247	-	-	-	0.155	0.353	0.155	0.098	0.247
1	B-C	722.444	0.107	0.270	-	-	-	-	-	-	0.107	0.270
1	C-B	628.400	0.234	0.234	-	-	-	-	-	-	0.234	0.234
1	D-A	727.561	-	-	-	0.271	0.107	0.271	-	0.107	-	-
1	D-BC	522.362	0.145	0.145	0.330	0.231	0.091	0.231	-	0.091	-	-

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	587.00	100.000
В	ONE HOUR	✓	0.00	100.000
С	ONE HOUR	✓	774.00	100.000
D	ONE HOUR	✓	4.00	100.000

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



Turning Proportions

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

			То		
		Α	В	С	D
	Α	0.000	0.000	586.000	1.000
From	В	0.000	0.000	0.000	0.000
	С	773.000	0.000	0.000	1.000
	D	3.000	0.000	1.000	0.000

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

		То							
From		Α	В	С	D				
	Α	0.00	0.00	1.00	0.00				
	В	0.25	0.25	0.25	0.25				
	С	1.00	0.00	0.00	0.00				
	D	0.75	0.00	0.25	0.00				

Vehicle Mix

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

		То							
		Α	В	С	D				
From	Α	1.000	1.000	1.000	1.000				
	В	1.000	1.000	1.000	1.000				
	С	1.000	1.000	1.000	1.000				
	D	1.000	1.000	1.000	1.000				

Heavy Vehicle Percentages - Junction 1 (for whole period)

		То						
		Α	В	С	D			
From	Α	0.0	0.0	0.0	0.0			
	В	0.0	0.0	0.0	0.0			
	С	0.0	0.0	0.0	0.0			
	D	0.0	0.0	0.0	0.0			



Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.00	0.00	0.00	Α
A-BCD	0.00	4.47	0.00	А
А-В	-	-	-	-
A-C	-	-	-	-
D-A	D-A 0.00 0.00 0.00		0.00	А
D-BC	0.00	0.00	0.00	А
C-ABD	0.00	0.00	0.00	А
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	448.83	0.000	0.00	0.000	Α
A-BCD	1.50	1.49	0.00	806.58	0.002	0.00	4.471	Α
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	440.42	440.42	0.00	-	-	-	-	-
D-A	0.00	0.00	0.00	569.85	0.000	0.00	0.000	Α
D-BC	0.00	0.00	0.00	323.44	0.000	0.00	0.000	Α
C-ABD	0.00	0.00	0.00	524.96	0.000	0.00	0.000	Α
C-D	0.75	0.75	0.00	-	-	-	-	-
C-A	581.95	581.95	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	411.36	0.000	0.00	0.000	Α
A-BCD	2.05	2.05	0.00	839.67	0.002	0.00	4.297	Α
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	525.65	525.65	0.00	-	-	-	-	-
D-A	0.00	0.00	0.00	539.24	0.000	0.00	0.000	Α
D-BC	0.00	0.00	0.00	284.83	0.000	0.00	0.000	Α
C-ABD	0.00	0.00	0.00	504.88	0.000	0.00	0.000	Α
C-D	0.90	0.90	0.00	-	-	-	-	-
C-A	694.91	694.91	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	357.42	0.000	0.00	0.000	Α
A-BCD	3.02	3.02	0.00	884.64	0.003	0.00	4.083	Α
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	643.28	643.28	0.00	-	-	-	-	-
D-A	0.00	0.00	0.00	496.92	0.000	0.00	0.000	Α
D-BC	0.00	0.00	0.00	231.45	0.000	0.00	0.000	Α
C-ABD	0.00	0.00	0.00	477.12	0.000	0.00	0.000	Α
C-D	1.10	1.10	0.00	-	-	-	-	-
C-A	851.09	851.09	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	357.42	0.000	0.00	0.000	Α
A-BCD	3.02	3.02	0.00	884.64	0.003	0.00	4.084	Α
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	643.28	643.28	0.00	-	-	-	-	-
D-A	0.00	0.00	0.00	496.92	0.000	0.00	0.000	Α
D-BC	0.00	0.00	0.00	231.45	0.000	0.00	0.000	Α
C-ABD	0.00	0.00	0.00	477.12	0.000	0.00	0.000	Α
C-D	1.10	1.10	0.00	-	-	-	-	-
C-A	851.09	851.09	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	411.36	0.000	0.00	0.000	Α
A-BCD	2.06	2.06	0.00	839.67	0.002	0.00	4.297	Α
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	525.65	525.65	0.00	-	-	-	-	-
D-A	0.00	0.00	0.00	539.24	0.000	0.00	0.000	Α
D-BC	0.00	0.00	0.00	284.83	0.000	0.00	0.000	Α
C-ABD	0.00	0.00	0.00	504.88	0.000	0.00	0.000	Α
C-D	0.90	0.90	0.00	-	-	-	-	-
C-A	694.91	694.91	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	448.83	0.000	0.00	0.000	Α
A-BCD	1.51	1.51	0.00	806.58	0.002	0.00	4.473	Α
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	440.42	440.42	0.00	-	-	-	-	-
D-A	0.00	0.00	0.00	569.85	0.000	0.00	0.000	Α
D-BC	0.00	0.00	0.00	323.44	0.000	0.00	0.000	Α
C-ABD	0.00	0.00	0.00	524.96	0.000	0.00	0.000	Α
C-D	0.75	0.75	0.00	-	-	-	-	-
C-A	581.95	581.95	0.00	-	-	-	-	-



(Default Analysis Set) - 2023 No Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare		Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 No Development, FM	2023 No Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Swanbridge Grove / Sports & Leisure Club Development Site Proposed Access	OS-NS Stagger (UK RL Stagger)	Two-way	A,B,C,D	4.07	А

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (East)		Major
В	В	Sports & Leisure Club Development Site Proposed Access		Minor
С	С	B4267 South Rd (West)		Major
D	D	Swanbridge Grove		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
Α	6.90		0.00		2.20	119.00	✓	0.00
С	6.85		0.00		2.20	94.00	✓	0.00

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



Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane	4.45								✓		9	11
D	One lane plus flare				8.70	3.30	3.30	3.30	3.30	√	1.00	19	27

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	642.877	-	-	-	0.239	0.239	0.239	-	0.239	-	-
1	B-AD	556.578	0.098	0.247	-	-	-	0.155	0.353	0.155	0.098	0.247
1	B-C	722.444	0.107	0.270	-	-	-	-	-	-	0.107	0.270
1	C-B	628.400	0.234	0.234	-	-	-	-	-	-	0.234	0.234
1	D-A	727.561	-	-	-	0.271	0.107	0.271	-	0.107	-	-
1	D-BC	522.362	0.145	0.145	0.330	0.231	0.091	0.231	-	0.091	-	-

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	717.00	100.000
В	ONE HOUR	✓	0.00	100.000
С	ONE HOUR	✓	586.00	100.000
D	ONE HOUR	✓	4.00	100.000

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

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



Turning Proportions

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

		То								
		Α	В	С	D					
	Α	0.000	0.000	714.000	3.000					
From	В	0.000	0.000	0.000	0.000					
	С	583.000	0.000	0.000	3.000					
	D	1.000	0.000	3.000	0.000					

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

		То								
		Α	В	С	D					
	Α	0.00	0.00	1.00	0.00					
From	В	0.25	0.25	0.25	0.25					
	С	0.99	0.00	0.00	0.01					
	D	0.25	0.00	0.75	0.00					

Vehicle Mix

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

			То		
		Α	В	С	D
	Α	1.000	1.000	1.000	1.000
From	В	1.000	1.000	1.000	1.000
	С	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

			То		
		Α	В	С	D
	Α	0.0	0.0	0.0	0.0
From	В	0.0	0.0	0.0	0.0
	С	0.0	0.0	0.0	0.0
	D	0.0	0.0	0.0	0.0



Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.00	0.00 0.00		Α
A-BCD	0.01	4.07	0.01	А
A-B	-	-	-	-
A-C	-	-	-	-
D-A	0.00	0.00	0.00	А
D-BC	0.00	0.00	0.00	А
C-ABD	0.00	0.00	0.00	А
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	440.06	0.000	0.00	0.000	Α
A-BCD	4.86	4.84	0.00	890.14	0.005	0.01	4.066	Α
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	534.94	534.94	0.00	-	-	-	-	-
D-A	0.00	0.00	0.00	608.44	0.000	0.00	0.000	Α
D-BC	0.00	0.00	0.00	341.85	0.000	0.00	0.000	Α
C-ABD	0.00	0.00	0.00	502.36	0.000	0.00	0.000	Α
C-D	2.26	2.26	0.00	-	-	-	-	-
C-A	438.91	438.91	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	401.56	0.000	0.00	0.000	Α
A-BCD	6.64	6.63	0.00	935.17	0.007	0.01	3.876	Α
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	637.93	637.93	0.00	-	-	-	-	-
D-A	0.00	0.00	0.00	585.31	0.000	0.00	0.000	Α
D-BC	0.00	0.00	0.00	306.81	0.000	0.00	0.000	Α
C-ABD	0.00	0.00	0.00	477.90	0.000	0.00	0.000	Α
C-D	2.70	2.70	0.00	-	-	-	-	-
C-A	524.11	524.11	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	346.66	0.000	0.00	0.000	Α
A-BCD	9.68	9.67	0.00	994.14	0.010	0.01	3.655	Α
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	779.75	779.75	0.00	-	-	-	-	-
D-A	0.00	0.00	0.00	553.35	0.000	0.00	0.000	Α
D-BC	0.00	0.00	0.00	258.37	0.000	0.00	0.000	Α
C-ABD	0.00	0.00	0.00	444.07	0.000	0.00	0.000	Α
C-D	3.30	3.30	0.00	-	-	-	-	-
C-A	641.89	641.89	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	346.66	0.000	0.00	0.000	Α
A-BCD	9.69	9.69	0.00	994.14	0.010	0.01	3.658	Α
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	779.75	779.75	0.00	-	-	-	-	-
D-A	0.00	0.00	0.00	553.35	0.000	0.00	0.000	Α
D-BC	0.00	0.00	0.00	258.37	0.000	0.00	0.000	Α
C-ABD	0.00	0.00	0.00	444.07	0.000	0.00	0.000	Α
C-D	3.30	3.30	0.00	-	-	-	-	-
C-A	641.89	641.89	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	401.56	0.000	0.00	0.000	Α
A-BCD	6.64	6.65	0.00	935.18	0.007	0.01	3.876	Α
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	637.93	637.93	0.00	-	-	-	-	-
D-A	0.00	0.00	0.00	585.31	0.000	0.00	0.000	Α
D-BC	0.00	0.00	0.00	306.81	0.000	0.00	0.000	Α
C-ABD	0.00	0.00	0.00	477.89	0.000	0.00	0.000	Α
C-D	2.70	2.70	0.00	-	-	-	-	-
C-A	524.11	524.11	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	440.06	0.000	0.00	0.000	Α
A-BCD	4.87	4.88	0.00	890.15	0.005	0.01	4.067	Α
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	534.92	534.92	0.00	-	-	-	-	-
D-A	0.00	0.00	0.00	608.44	0.000	0.00	0.000	Α
D-BC	0.00	0.00	0.00	341.85	0.000	0.00	0.000	Α
C-ABD	0.00	0.00	0.00	502.36	0.000	0.00	0.000	Α
C-D	2.26	2.26	0.00	-	-	-	-	-
C-A	438.91	438.91	0.00	-	-	-	-	-



(Default Analysis Set) - 2028 No Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare		Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 No Development, AM	2028 No Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Swanbridge Grove / Sports & Leisure Club Development Site Proposed Access	OS-NS Stagger (UK RL Stagger)	Two-way	A,B,C,D	8.00	А

Junction Network Options

Driving Side	Lighting			
Left	Normal/unknown			

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (East)		Major
В	В	Sports & Leisure Club Development Site Proposed Access		Minor
С	С	B4267 South Rd (West)		Major
D	D	Swanbridge Grove		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
Α	6.90		0.00		2.20	119.00	✓	0.00
С	6.85		0.00		2.20	94.00	✓	0.00

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



Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane	4.45								✓		9	11
D	One lane plus flare				8.70	3.30	3.30	3.30	3.30	√	1.00	19	27

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	642.877	-	-	-	0.239	0.239	0.239	-	0.239	-	-
1	B-AD	556.578	0.098	0.247	-	-	-	0.155	0.353	0.155	0.098	0.247
1	B-C	722.444	0.107	0.270	-	-	-	-	-	-	0.107	0.270
1	C-B	628.400	0.234	0.234	-	-	-	-	-	-	0.234	0.234
1	D-A	682.002	-	-	-	0.254	0.100	0.254	-	0.100	-	-
1	D-BC	531.816	0.148	0.148	0.336	0.235	0.093	0.235	-	0.093	-	-

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	628.00	100.000
В	ONE HOUR	✓	0.00	100.000
С	ONE HOUR	√	828.00	100.000
D	ONE HOUR	✓	5.00	100.000

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

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



Turning Proportions

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

		То									
		Α	В	С	D						
	Α	0.000	0.000	627.000	1.000						
From	В	0.000	0.000	0.000	0.000						
	С	827.000	0.000	0.000	1.000						
	D	4.000	0.000	1.000	0.000						

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

		То								
		Α	В	С	D					
	Α	0.00	0.00	1.00	0.00					
From	В	0.25	0.25	0.25	0.25					
	С	1.00	0.00	0.00	0.00					
	D	0.80	0.00	0.20	0.00					

Vehicle Mix

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

		То								
		Α	В	С	D					
	Α	1.000	1.000	1.000	1.000					
From	В	1.000	1.000	1.000	1.000					
	С	1.000	1.000	1.000	1.000					
	D	1.000	1.000	1.000	1.000					

Heavy Vehicle Percentages - Junction 1 (for whole period)

			То		
		Α	В	С	D
	Α	0.0	0.0	0.0	0.0
From	В	0.0	0.0	0.0	0.0
	С	0.0	0.0	0.0	0.0
	D	0.0	0.0	0.0	0.0



Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.00	0.00	0.00	Α
A-BCD	BCD 0.00 4.4		0.00	Α
A-B	-	-	-	-
A-C	-	-	-	-
D-A	0.01	8.08	0.01	Α
D-BC	0.01	16.83	0.01	С
C-ABD	0.00	0.00	0.00	Α
C-D	-	-	-	-
C-A -		-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	435.26	0.000	0.00	0.000	Α
A-BCD	1.58	1.57	0.00	818.56	0.002	0.00	4.406	Α
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	471.22	471.22	0.00	-	-	-	-	-
D-A	3.01	2.99	0.00	523.53	0.006	0.01	6.915	Α
D-BC	0.75	0.74	0.00	315.17	0.002	0.00	11.449	В
C-ABD	0.00	0.00	0.00	517.54	0.000	0.00	0.000	Α
C-D	0.75	0.75	0.00	-	-	-	-	-
C-A	622.61	622.61	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	394.63	0.000	0.00	0.000	Α
A-BCD	2.17	2.17	0.00	853.81	0.003	0.00	4.226	Α
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	562.39	562.39	0.00	-	-	-	-	-
D-A	3.60	3.59	0.00	492.74	0.007	0.01	7.358	Α
D-BC	0.90	0.90	0.00	273.11	0.003	0.00	13.224	В
C-ABD	0.00	0.00	0.00	496.02	0.000	0.00	0.000	Α
C-D	0.90	0.90	0.00	-	-	-	-	-
C-A	743.46	743.46	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	335.76	0.000	0.00	0.000	Α
A-BCD	3.24	3.24	0.00	901.47	0.004	0.00	4.007	Α
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	688.20	688.20	0.00	-	-	-	-	-
D-A	4.40	4.39	0.00	450.12	0.010	0.01	8.076	Α
D-BC	1.10	1.09	0.00	214.97	0.005	0.01	16.832	С
C-ABD	0.00	0.00	0.00	466.27	0.000	0.00	0.000	Α
C-D	1.10	1.10	0.00	-	-	-	-	-
C-A	910.54	910.54	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	335.76	0.000	0.00	0.000	Α
A-BCD	3.24	3.24	0.00	901.47	0.004	0.00	4.009	Α
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	688.20	688.20	0.00	-	-	-	-	-
D-A	4.40	4.40	0.00	450.12	0.010	0.01	8.076	Α
D-BC	1.10	1.10	0.00	214.97	0.005	0.01	16.832	С
C-ABD	0.00	0.00	0.00	466.27	0.000	0.00	0.000	Α
C-D	1.10	1.10	0.00	-	-	-	-	-
C-A	910.54	910.54	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	394.63	0.000	0.00	0.000	Α
A-BCD	2.18	2.18	0.00	853.81	0.003	0.00	4.228	Α
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	562.38	562.38	0.00	-	-	-	-	-
D-A	3.60	3.61	0.00	492.74	0.007	0.01	7.362	Α
D-BC	0.90	0.91	0.00	273.11	0.003	0.00	13.227	В
C-ABD	0.00	0.00	0.00	496.02	0.000	0.00	0.000	Α
C-D	0.90	0.90	0.00	-	-	-	-	-
C-A	743.46	743.46	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	435.26	0.000	0.00	0.000	Α
A-BCD	1.58	1.58	0.00	818.56	0.002	0.00	4.407	Α
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	471.21	471.21	0.00	-	-	-	-	-
D-A	3.01	3.02	0.00	523.53	0.006	0.01	6.915	Α
D-BC	0.75	0.76	0.00	315.16	0.002	0.00	11.451	В
C-ABD	0.00	0.00	0.00	517.54	0.000	0.00	0.000	Α
C-D	0.75	0.75	0.00	-	-	-	-	-
C-A	622.61	622.61	0.00	-	-	-	-	-



(Default Analysis Set) - 2028 No Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare		Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 No Development, FM	2028 No Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Swanbridge Grove / Sports & Leisure Club Development Site Proposed Access	OS-NS Stagger (UK RL Stagger)	Two-way	A,B,C,D	6.99	А

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (East)		Major
В	В	Sports & Leisure Club Development Site Proposed Access		Minor
С	С	B4267 South Rd (West)		Major
D	D	Swanbridge Grove		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
Α	6.90		0.00		2.20	119.00	✓	0.00
С	6.85		0.00		2.20	94.00	✓	0.00

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



Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane	4.45								✓		9	11
D	One lane plus flare				8.70	3.30	3.30	3.30	3.30	√	1.00	19	27

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1	A-D	642.877	-	-	-	0.239	0.239	0.239	-	0.239	-	-
1	B-AD	556.578	0.098	0.247	-	-	-	0.155	0.353	0.155	0.098	0.247
1	B-C	722.444	0.107	0.270	-	-	-	-	-	-	0.107	0.270
1	C-B	628.400	0.234	0.234	-	-	-	-	-	-	0.234	0.234
1	D-A	685.852	-	-	-	0.255	0.101	0.255	-	0.101	-	-
1	D-BC	528.831	0.147	0.147	0.334	0.234	0.093	0.234	-	0.093	-	-

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	767.00	100.000
В	ONE HOUR	✓	0.00	100.000
С	ONE HOUR	✓	627.00	100.000
D	ONE HOUR	✓	5.00	100.000

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

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



Turning Proportions

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

		То								
		Α	В	С	D					
	Α	0.000	0.000	763.000	4.000					
From	В	0.000	0.000	0.000	0.000					
	С	623.000	0.000	0.000	4.000					
	D	1.000	0.000	4.000	0.000					

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

		То								
		Α	В	С	D					
	Α	0.00	0.00	0.99	0.01					
From	В	0.25	0.25	0.25	0.25					
	С	0.99	0.00	0.00	0.01					
	D	0.20	0.00	0.80	0.00					

Vehicle Mix

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

		То								
		Α	В	С	D					
	Α	1.000	1.000	1.000	1.000					
From	В	1.000	1.000	1.000	1.000					
	С	1.000	1.000	1.000	1.000					
	D	1.000	1.000	1.000	1.000					

Heavy Vehicle Percentages - Junction 1 (for whole period)

			То		
		Α	В	С	D
From	Α	0.0	0.0	0.0	0.0
	В	0.0	0.0	0.0	0.0
	С	0.0	0.0	0.0	0.0
	D	0.0	0.0	0.0	0.0



Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.00	0.00	0.00	Α
A-BCD	0.01	4.00	0.02	А
A-B	-	-	-	-
A-C	-	-	-	-
D-A	0.00	7.10	0.00	Α
D-BC	0.02	15.10	0.02	С
C-ABD	0.00	0.00	0.00	Α
C-D	-	-	-	-
C-A	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	425.67	0.000	0.00	0.000	Α
A-BCD	6.79	6.76	0.00	906.17	0.008	0.01	4.002	Α
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	570.64	570.64	0.00	-	-	-	-	-
D-A	0.75	0.75	0.00	564.51	0.001	0.00	6.384	Α
D-BC	3.01	2.98	0.00	333.29	0.009	0.01	10.897	В
C-ABD	0.00	0.00	0.00	493.01	0.000	0.00	0.000	Α
C-D	3.01	3.01	0.00	-	-	-	-	-
C-A	469.03	469.03	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	383.94	0.000	0.00	0.000	Α
A-BCD	9.34	9.33	0.00	953.49	0.010	0.01	3.811	Α
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	680.17	680.17	0.00	-	-	-	-	-
D-A	0.90	0.90	0.00	540.82	0.002	0.00	6.666	Α
D-BC	3.60	3.58	0.00	295.33	0.012	0.01	12.339	В
C-ABD	0.00	0.00	0.00	466.72	0.000	0.00	0.000	Α
C-D	3.60	3.60	0.00	-	-	-	-	-
C-A	560.06	560.06	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	324.13	0.000	0.00	0.000	Α
A-BCD	13.76	13.74	0.00	1015.02	0.014	0.02	3.594	Α
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	830.72	830.72	0.00	-	-	-	-	-
D-A	1.10	1.10	0.00	507.93	0.002	0.00	7.102	Α
D-BC	4.40	4.38	0.00	242.85	0.018	0.02	15.093	С
C-ABD	0.00	0.00	0.00	430.38	0.000	0.00	0.000	Α
C-D	4.40	4.40	0.00	-	-	-	-	-
C-A	685.94	685.94	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	324.12	0.000	0.00	0.000	Α
A-BCD	13.77	13.77	0.00	1015.03	0.014	0.02	3.597	Α
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	830.71	830.71	0.00	-	-	-	-	-
D-A	1.10	1.10	0.00	507.91	0.002	0.00	7.102	Α
D-BC	4.40	4.40	0.00	242.85	0.018	0.02	15.096	С
C-ABD	0.00	0.00	0.00	430.37	0.000	0.00	0.000	Α
C-D	4.40	4.40	0.00	-	-	-	-	-
C-A	685.94	685.94	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	383.93	0.000	0.00	0.000	Α
A-BCD	9.35	9.37	0.00	953.50	0.010	0.01	3.815	Α
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	680.16	680.16	0.00	-	-	-	-	-
D-A	0.90	0.90	0.00	540.80	0.002	0.00	6.669	Α
D-BC	3.60	3.62	0.00	295.33	0.012	0.01	12.343	В
C-ABD	0.00	0.00	0.00	466.70	0.000	0.00	0.000	Α
C-D	3.60	3.60	0.00	-	-	-	-	-
C-A	560.06	560.06	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-ACD	0.00	0.00	0.00	425.65	0.000	0.00	0.000	Α
A-BCD	6.81	6.82	0.00	906.19	0.008	0.01	4.002	Α
A-B	0.00	0.00	0.00	-	-	-	-	-
A-C	570.62	570.62	0.00	-	-	-	-	-
D-A	0.75	0.75	0.00	564.49	0.001	0.00	6.387	Α
D-BC	3.01	3.02	0.00	333.28	0.009	0.01	10.900	В
C-ABD	0.00	0.00	0.00	492.99	0.000	0.00	0.000	Α
C-D	3.01	3.01	0.00	-	-	-	-	-
C-A	469.03	469.03	0.00	-	-	-	-	-



Junctions 8

PICADY 8 - Priority Intersection Module

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Filename: Jn6 - South Road - Highbridge Close.arc8

Path: P:\GBCFA\TP\HB\Projects\5133321 - Sully Sport & Social Club - TAYL3270\04 - Analysis\Junction Modelling

Report generation date: 25/06/2015 12:23:23

- » (Default Analysis Set) 2023 With Development, AM
- » (Default Analysis Set) 2023 With Development, PM
- » (Default Analysis Set) 2028 With Development, AM
- » (Default Analysis Set) 2028 With Development, PM
- » (Default Analysis Set) 2023 No Development, AM
- » (Default Analysis Set) 2023 No Development, PM
- » (Default Analysis Set) 2028 No Development, AM
- » (Default Analysis Set) 2028 No Development, PM

Summary of junction performance

		AM		
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2023 \	Nith Devel	opme	ent
Stream B-C	0.02	8.66	0.02	Α
Stream B-A	0.09	17.98	0.08	С
Stream C-AB	0.00	4.55	0.00	Α
Stream C-A	-	-	-	-
Stream A-B	-	1	-	-
Stream A-C	-	-	-	-

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

"D5 - 2023 With Development, AM " model duration: 07:45 - 09:15

"D6 - 2023 With Development, PM" model duration: 16:45 - 18:15

"D7 - 2028 With Development, AM" model duration: 07:45 - 09:15

"D8 - 2028 With Development, PM" model duration: 16:45 - 18:15

"D9 - 2023 No Development, AM" model duration: 07:45 - 09:15

"D10 - 2023 No Development, PM" model duration: 16:45 - 18:15

"D11 - 2028 No Development, AM" model duration: 07:45 - 09:15 "D12 - 2028 No Development. PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.4.487 at 25/06/2015 12:23:20



File summary

Title	(untitled)
Location	
Site Number	
Date	09/10/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	TAYL3270
Description	

Analysis Options

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

Units

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

(Default Analysis Set) - 2023 With Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 With Development, AM	2023 With Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Highbridge Close	T-Junction	Two-way	A,B,C	14.08	В

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown



Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (West)		Major
В	В	Highbridge Close		Minor
С	С	B4267 South Rd (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	6.80		0.00		2.20	73.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane plus flare				10.00	4.80	3.30	3.30	3.30	✓	1.00	34	28

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	for	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	534.915	0.094	0.238	0.150	0.340
1	B-C	656.365	0.097	0.245	-	-
1	C-B	616.238	0.230	0.230	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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



Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	832.00	100.000
В	ONE HOUR	✓	23.00	100.000
С	ONE HOUR	✓	610.00	100.000

Turning Proportions

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

	То					
		Α	В	С		
F	Α	0.000	8.000	824.000		
From	В	16.000	0.000	7.000		
	C	609.000	1.000	0.000		

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

	То				
		Α	В	С	
From	Α	0.00	0.01	0.99	
FIOIII	В	0.70	0.00	0.30	
	С	1.00	0.00	0.00	

Vehicle Mix

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

	То					
		Α	В	С		
From	Α	1.000	1.000	1.000		
From	В	1.000	1.000	1.000		
	С	1.000	1.000	1.000		

Heavy Vehicle Percentages - Junction 1 (for whole period)

	То				
		Α	В	С	
Fram	Α	0.0	0.0	0.0	
From	В	0.0	0.0	0.0	
	U	0.0	0.0	0.0	



Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.02	8.66	0.02	Α
B-A	0.08	17.98	0.09	С
C-AB	0.00	4.55	0.00	А
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	5.27	5.23	0.00	498.72	0.011	0.01	7.294	Α
B-A	12.05	11.89	0.00	318.08	0.038	0.04	11.751	В
C-AB	1.59	1.58	0.00	793.55	0.002	0.00	4.545	Α
C-A	457.65	457.65	0.00	-	-	-	-	-
A-B	6.02	6.02	0.00	-	-	-	-	-
A-C	620.35	620.35	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	6.29	6.28	0.00	467.45	0.013	0.01	7.806	Α
B-A	14.38	14.32	0.00	276.01	0.052	0.05	13.753	В
C-AB	2.20	2.19	0.00	829.03	0.003	0.00	4.353	Α
C-A	546.18	546.18	0.00	-	-	-	-	-
A-B	7.19	7.19	0.00	-	-	-	-	-
A-C	740.76	740.76	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	7.71	7.69	0.00	423.64	0.018	0.02	8.654	Α
B-A	17.62	17.49	0.00	217.82	0.081	0.09	17.958	С
C-AB	3.28	3.28	0.00	877.03	0.004	0.00	4.119	Α
C-A	668.34	668.34	0.00	-	-	-	-	-
A-B	8.81	8.81	0.00	-	-	-	-	-
A-C	907.24	907.24	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	7.71	7.71	0.00	423.48	0.018	0.02	8.658	Α
B-A	17.62	17.61	0.00	217.84	0.081	0.09	17.979	С
C-AB	3.28	3.28	0.00	877.03	0.004	0.00	4.121	Α
C-A	668.34	668.34	0.00	-	-	-	-	-
A-B	8.81	8.81	0.00	-	-	-	-	-
A-C	907.24	907.24	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	6.29	6.31	0.00	467.17	0.013	0.01	7.811	Α
B-A	14.38	14.51	0.00	276.06	0.052	0.06	13.769	В
C-AB	2.20	2.20	0.00	829.03	0.003	0.00	4.355	Α
C-A	546.18	546.18	0.00	-	-	-	-	-
A-B	7.19	7.19	0.00	-	-	-	-	-
A-C	740.76	740.76	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	5.27	5.28	0.00	498.43	0.011	0.01	7.299	Α
B-A	12.05	12.11	0.00	318.13	0.038	0.04	11.765	В
C-AB	1.59	1.60	0.00	793.55	0.002	0.00	4.547	Α
C-A	457.65	457.65	0.00	-	-	-	-	-
A-B	6.02	6.02	0.00	-	-	-	-	-
A-C	620.35	620.35	0.00	-	-	-	-	-

(Default Analysis Set) - 2023 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 With Development, PM	2023 With Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Highbridge Close	T-Junction	Two-way	A,B,C	6.53	Α



Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (West)		Major
В	В	Highbridge Close		Minor
С	С	B4267 South Rd (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	6.80		0.00		2.20	73.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane plus flare				10.00	4.80	3.30	3.30	3.30	✓	1.00	34	28

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	534.753	0.094	0.238	0.149	0.339
1	B-C	656.880	0.097	0.246	-	-
1	С-В	616.238	0.230	0.230	-	-

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

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

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



General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	653.00	100.000
В	ONE HOUR	✓	13.00	100.000
С	ONE HOUR	✓	784.00	100.000

Turning Proportions

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

		То					
		Α	В	С			
F	Α	0.000	15.000	638.000			
From	В	9.000	0.000	4.000			
	C	772.000	12.000	0.000			

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

		То					
		Α	В	С			
F	Α	0.00	0.02	0.98			
From	В	0.69	0.00	0.31			
	С	0.98	0.02	0.00			

Vehicle Mix

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

		То				
		Α	В	С		
From	Α	1.000	1.000	1.000		
FIOIII	В	1.000	1.000	1.000		
	С	1.000	1.000	1.000		

Heavy Vehicle Percentages - Junction 1 (for whole period)

		Т	o	
		Α	В	С
From	Α	0.0	0.0	0.0
FIOIII	В	0.0	0.0	0.0
	C	0.0	0.0	0.0



Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.01	7.61	0.01	Α
B-A	0.04	16.01	0.04	С
C-AB	0.05	4.14	0.08	А
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	3.01	2.99	0.00	535.02	0.006	0.01	6.765	Α
B-A	6.78	6.69	0.00	329.61	0.021	0.02	11.146	В
C-AB	21.18	21.06	0.00	891.16	0.024	0.03	4.137	Α
C-A	569.06	569.06	0.00	-	-	-	-	-
A-B	11.29	11.29	0.00	-	-	-	-	-
A-C	480.32	480.32	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	3.60	3.59	0.00	510.94	0.007	0.01	7.094	Α
B-A	8.09	8.06	0.00	289.79	0.028	0.03	12.776	В
C-AB	29.31	29.26	0.00	940.29	0.031	0.04	3.951	Α
C-A	675.49	675.49	0.00	-	-	-	-	-
A-B	13.48	13.48	0.00	-	-	-	-	-
A-C	573.55	573.55	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	4.40	4.40	0.00	477.41	0.009	0.01	7.609	Α
B-A	9.91	9.85	0.00	234.72	0.042	0.04	16.005	С
C-AB	52.40	52.26	0.00	1050.58	0.050	0.08	3.605	А
C-A	810.80	810.80	0.00	-	-	-	-	-
A-B	16.52	16.52	0.00	-	-	-	-	-
A-C	702.45	702.45	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	4.40	4.40	0.00	477.29	0.009	0.01	7.611	Α
B-A	9.91	9.91	0.00	234.72	0.042	0.04	16.013	С
C-AB	52.45	52.45	0.00	1050.65	0.050	0.08	3.609	Α
C-A	810.75	810.75	0.00	-	-	-	-	-
A-B	16.52	16.52	0.00	-	-	-	-	-
A-C	702.45	702.45	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	3.60	3.60	0.00	510.71	0.007	0.01	7.098	Α
B-A	8.09	8.15	0.00	289.79	0.028	0.03	12.783	В
C-AB	29.35	29.49	0.00	940.38	0.031	0.04	3.954	Α
C-A	675.45	675.45	0.00	-	-	-	-	-
A-B	13.48	13.48	0.00	-	-	-	-	-
A-C	573.55	573.55	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	3.01	3.02	0.00	534.77	0.006	0.01	6.771	Α
B-A	6.78	6.81	0.00	329.62	0.021	0.02	11.152	В
C-AB	21.26	21.31	0.00	891.22	0.024	0.03	4.138	Α
C-A	568.98	568.98	0.00	-	-	-	-	-
A-B	11.29	11.29	0.00	-	-	-	-	-
A-C	480.32	480.32	0.00	-	-	-	-	-

(Default Analysis Set) - 2028 With Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 With Development, AM	2028 With Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Highbridge Close	T-Junction	Two-way	A,B,C	15.62	С



Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (West)		Major
В	В	Highbridge Close		Minor
С	С	B4267 South Rd (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	6.80		0.00		2.20	73.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane plus flare				10.00	4.80	3.30	3.30	3.30	✓	1.00	34	28

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	535.527	0.094	0.238	0.150	0.340
1	B-C	654.410	0.097	0.245	-	-
1	C-B	616.238	0.230	0.230	-	-

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

Traffic Flows

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn		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				✓	✓

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

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



General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	885.00	100.000
В	ONE HOUR	✓	24.00	100.000
С	ONE HOUR	✓	650.00	100.000

Turning Proportions

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

		То							
		Α	В	С					
From	Α	0.000	8.000	877.000					
	В	17.000	0.000	7.000					
	C	649.000	1.000	0.000					

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

		То						
		Α	В	С				
F	Α	0.00	0.01	0.99				
From	В	0.71	0.00	0.29				
	С	1.00	0.00	0.00				

Vehicle Mix

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

		То							
		Α	В	С					
From	Α	1.000	1.000	1.000					
	В	1.000	1.000	1.000					
	С	1.000	1.000	1.000					

Heavy Vehicle Percentages - Junction 1 (for whole period)

		То								
From		Α	В	С						
	Α	0.0	0.0	0.0						
	В	0.0	0.0	0.0						
	C	0.0	0.0	0.0						



Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.02	9.02	0.02	Α
B-A	0.09	20.12	0.10	С
C-AB	0.00	4.48	0.00	А
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	5.27	5.23	0.00	487.04	0.011	0.01	7.471	Α
B-A	12.80	12.63	0.00	304.44	0.042	0.04	12.332	В
C-AB	1.67	1.66	0.00	805.81	0.002	0.00	4.476	Α
C-A	487.69	487.69	0.00	-	-	-	-	-
A-B	6.02	6.02	0.00	-	-	-	-	-
A-C	660.25	660.25	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	6.29	6.28	0.00	453.73	0.014	0.01	8.045	Α
B-A	15.28	15.21	0.00	259.61	0.059	0.06	14.724	В
C-AB	2.33	2.32	0.00	843.44	0.003	0.00	4.279	Α
C-A	582.01	582.01	0.00	-	-	-	-	-
A-B	7.19	7.19	0.00	-	-	-	-	-
A-C	788.41	788.41	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	7.71	7.69	0.00	406.80	0.019	0.02	9.020	Α
B-A	18.72	18.55	0.00	197.59	0.095	0.10	20.090	С
C-AB	3.52	3.52	0.00	894.09	0.004	0.00	4.042	Α
C-A	712.14	712.14	0.00	-	-	-	-	-
A-B	8.81	8.81	0.00	-	-	-	-	-
A-C	965.60	965.60	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	7.71	7.71	0.00	406.59	0.019	0.02	9.024	Α
B-A	18.72	18.71	0.00	197.61	0.095	0.10	20.121	С
C-AB	3.52	3.52	0.00	894.09	0.004	0.00	4.042	Α
C-A	712.14	712.14	0.00	-	-	-	-	-
A-B	8.81	8.81	0.00	-	-	-	-	-
A-C	965.60	965.60	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	6.29	6.31	0.00	453.40	0.014	0.01	8.053	Α
B-A	15.28	15.44	0.00	259.66	0.059	0.06	14.752	В
C-AB	2.33	2.33	0.00	843.45	0.003	0.00	4.279	Α
C-A	582.01	582.01	0.00	-	-	-	-	-
A-B	7.19	7.19	0.00	-	-	-	-	-
A-C	788.41	788.41	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	5.27	5.28	0.00	486.72	0.011	0.01	7.476	Α
B-A	12.80	12.87	0.00	304.49	0.042	0.04	12.349	В
C-AB	1.67	1.68	0.00	805.82	0.002	0.00	4.478	Α
C-A	487.68	487.68	0.00	-	-	-	-	-
A-B	6.02	6.02	0.00	-	-	-	-	-
A-C	660.25	660.25	0.00	-	-	-	-	-

(Default Analysis Set) - 2028 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 With Development, PM	2028 With Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Highbridge Close	T-Junction	Two-way	A,B,C	6.49	Α



Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (West)		Major
В	В	Highbridge Close		Minor
С	С	B4267 South Rd (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	6.80		0.00		2.20	73.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane plus flare				10.00	4.80	3.30	3.30	3.30	✓	1.00	34	28

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	557.656	0.098	0.248	0.156	0.354
1	B-C	660.833	0.098	0.247	-	-
1	C-B	616.238	0.230	0.230	-	-

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

Traffic Flows

Defaul Vehicle Mix	 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				✓	✓

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

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



General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	694.00	100.000
В	ONE HOUR	✓	15.00	100.000
С	ONE HOUR	✓	834.00	100.000

Turning Proportions

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

	То						
		Α	В	С			
F	Α	0.000	16.000	678.000			
From	В	10.000	0.000	5.000			
	C	821.000	13.000	0.000			

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

	То				
		Α	В	С	
Erom	Α	0.00	0.02	0.98	
From	В	0.67	0.00	0.33	
	С	0.98	0.02	0.00	

Vehicle Mix

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

	То					
		Α	В	С		
From	Α	1.000	1.000	1.000		
	В	1.000	1.000	1.000		
	С	1.000	1.000	1.000		

Heavy Vehicle Percentages - Junction 1 (for whole period)

	То				
		Α	В	С	
Eram	Α	0.0	0.0	0.0	
From	В	0.0	0.0	0.0	
	C	0.0	0.0	0.0	



Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.01	7.78	0.01	Α
B-A	0.05	16.82	0.05	С
C-AB	0.06	4.08	0.09	Α
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	3.76	3.74	0.00	530.47	0.007	0.01	6.834	Α
B-A	7.53	7.44	0.00	330.17	0.023	0.02	11.152	В
C-AB	24.06	23.93	0.00	907.53	0.027	0.03	4.074	Α
C-A	603.81	603.81	0.00	-	-	-	-	-
A-B	12.05	12.05	0.00	-	-	-	-	-
A-C	510.43	510.43	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	4.49	4.49	0.00	504.64	0.009	0.01	7.196	Α
B-A	8.99	8.95	0.00	286.04	0.031	0.03	12.990	В
C-AB	38.93	38.85	0.00	994.06	0.039	0.05	3.768	Α
C-A	710.82	710.82	0.00	-	1	-	1	-
A-B	14.38	14.38	0.00	-	-	-	-	-
A-C	609.51	609.51	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	5.51	5.49	0.00	468.58	0.012	0.01	7.773	Α
B-A	11.01	10.94	0.00	224.98	0.049	0.05	16.813	С
C-AB	61.67	61.52	0.00	1077.16	0.057	0.09	3.544	А
C-A	856.58	856.58	0.00	-	-	-	-	-
A-B	17.62	17.62	0.00	-	-	-	-	-
A-C	746.49	746.49	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	5.51	5.50	0.00	468.43	0.012	0.01	7.776	Α
B-A	11.01	11.01	0.00	225.00	0.049	0.05	16.822	С
C-AB	61.73	61.73	0.00	1077.23	0.057	0.09	3.547	Α
C-A	856.52	856.52	0.00	-	-	-	-	-
A-B	17.62	17.62	0.00	-	-	-	-	-
A-C	746.49	746.49	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	4.49	4.51	0.00	504.39	0.009	0.01	7.201	Α
B-A	8.99	9.06	0.00	286.11	0.031	0.03	12.996	В
C-AB	39.00	39.15	0.00	994.19	0.039	0.06	3.772	Α
C-A	710.74	710.74	0.00	-	-	-	-	-
A-B	14.38	14.38	0.00	-	-	-	-	-
A-C	609.51	609.51	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	3.76	3.77	0.00	530.20	0.007	0.01	6.837	Α
B-A	7.53	7.57	0.00	330.25	0.023	0.02	11.159	В
C-AB	24.16	24.25	0.00	907.62	0.027	0.03	4.075	Α
C-A	603.72	603.72	0.00	-	-	-	-	-
A-B	12.05	12.05	0.00	-	-	-	-	-
A-C	510.43	510.43	0.00	-	-	-	-	-

(Default Analysis Set) - 2023 No Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 No Development, AM	2023 No Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Highbridge Close	T-Junction	Two-way	A,B,C	13.12	В



Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (West)		Major
В	В	Highbridge Close		Minor
С	С	B4267 South Rd (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	6.80		0.00		2.20	73.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane plus flare				10.00	4.80	3.30	3.30	3.30	✓	1.00	34	28

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	534.915	0.094	0.238	0.150	0.340
1	B-C	656.365	0.097	0.245	-	-
1	C-B	616.238	0.230	0.230	-	-

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

Traffic Flows

Defau Vehic Mix	 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				✓	✓

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

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



General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	777.00	100.000
В	ONE HOUR	✓	23.00	100.000
С	ONE HOUR	✓	590.00	100.000

Turning Proportions

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

		То					
		Α	В	С			
F	Α	0.000	8.000	769.000			
From	В	16.000	0.000	7.000			
	C	589.000	1.000	0.000			

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

		То					
		Α	В	С			
From	Α	0.00	0.01	0.99			
FIOIII	В	0.70	0.00	0.30			
	С	1.00	0.00	0.00			

Vehicle Mix

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

		То					
		Α	В	С			
From	Α	1.000	1.000	1.000			
FIOIII	В	1.000	1.000	1.000			
	С	1.000	1.000	1.000			

Heavy Vehicle Percentages - Junction 1 (for whole period)

		То						
		Α	В	С				
Fram	Α	0.0	0.0	0.0				
From	В	0.0	0.0	0.0				
	С	0.0	0.0	0.0				



Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.02	8.35	0.02	Α
B-A	0.07	16.52	0.08	С
C-AB	0.00	4.56	0.00	Α
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	5.27	5.23	0.00	508.97	0.010	0.01	7.146	Α
B-A	12.05	11.90	0.00	330.18	0.036	0.04	11.306	В
C-AB	1.54	1.53	0.00	791.18	0.002	0.00	4.558	Α
C-A	442.64	442.64	0.00	-	-	-	-	-
A-B	6.02	6.02	0.00	-	-	-	-	-
A-C	578.94	578.94	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	6.29	6.28	0.00	479.76	0.013	0.01	7.602	Α
B-A	14.38	14.33	0.00	290.45	0.050	0.05	13.034	В
C-AB	2.12	2.11	0.00	826.05	0.003	0.00	4.368	Α
C-A	528.28	528.28	0.00	-	-	-	-	-
A-B	7.19	7.19	0.00	-	-	-	-	-
A-C	691.32	691.32	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	7.71	7.69	0.00	438.94	0.018	0.02	8.347	Α
B-A	17.62	17.50	0.00	235.51	0.075	0.08	16.505	С
C-AB	3.13	3.12	0.00	873.27	0.004	0.00	4.136	А
C-A	646.47	646.47	0.00	-	-	-	-	-
A-B	8.81	8.81	0.00	-	-	-	-	-
A-C	846.68	846.68	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	7.71	7.71	0.00	438.80	0.018	0.02	8.350	Α
B-A	17.62	17.61	0.00	235.52	0.075	0.08	16.520	С
C-AB	3.13	3.13	0.00	873.27	0.004	0.00	4.136	Α
C-A	646.47	646.47	0.00	-	-	-	-	-
A-B	8.81	8.81	0.00	-	-	-	-	-
A-C	846.68	846.68	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	6.29	6.31	0.00	479.52	0.013	0.01	7.606	Α
B-A	14.38	14.49	0.00	290.49	0.050	0.05	13.047	В
C-AB	2.12	2.12	0.00	826.05	0.003	0.00	4.368	Α
C-A	528.28	528.28	0.00	-	-	-	-	-
A-B	7.19	7.19	0.00	-	-	-	-	-
A-C	691.32	691.32	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	5.27	5.28	0.00	508.70	0.010	0.01	7.153	Α
B-A	12.05	12.10	0.00	330.22	0.036	0.04	11.320	В
C-AB	1.55	1.55	0.00	791.18	0.002	0.00	4.558	Α
C-A	442.64	442.64	0.00	-	-	-	-	-
A-B	6.02	6.02	0.00	-	-	-	-	-
A-C	578.94	578.94	0.00	-	-	-	-	-

(Default Analysis Set) - 2023 No Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 No Development, FM	2023 No Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junction	Name	Junction Type	unction Type Major Road Direction		Arm Order Junction Delay (s)	
1	B4267 South Rd / Highbridge Close	T-Junction	Two-way	A,B,C	6.45	Α



Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (West)		Major
В	В	Highbridge Close		Minor
С	С	B4267 South Rd (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central Has right reserve (m) turn bay		Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	6.80		0.00		2.20	73.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane plus flare				10.00	4.80	3.30	3.30	3.30	✓	1.00	34	28

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	534.753	0.094	0.238	0.149	0.339
1	B-C	656.880	0.097	0.246	-	-
1	C-B	616.238	0.230	0.230	-	-

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

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

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

Traffic Flows

Vel	fault nicle lix	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				✓	✓



General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	599.00	100.000
В	ONE HOUR	✓	13.00	100.000
С	ONE HOUR	✓	720.00	100.000

Turning Proportions

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

		То					
		Α	В	С			
F	Α	0.000	15.000	584.000			
From	В	9.000	0.000	4.000			
	C	708.000	12.000	0.000			

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

		То					
		Α	В	С			
From	Α	0.00	0.03	0.97			
FIOIII	В	0.69	0.00	0.31			
	C	0.98	0.02	0.00			

Vehicle Mix

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

		То					
_		Α	В	С			
From	Α	1.000	1.000	1.000			
FIOIII	В	1.000	1.000	1.000			
	С	1.000	1.000	1.000			

Heavy Vehicle Percentages - Junction 1 (for whole period)

		То							
		Α	В	С					
From	Α	0.0	0.0	0.0					
FIOIII	В	0.0	0.0	0.0					
	С	0.0	0.0	0.0					



Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.01	7.38	0.01	Α
B-A	0.04	14.43	0.04	В
C-AB	0.05	4.24	0.07	Α
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	3.01	2.99	0.00	545.10	0.006	0.01	6.640	Α
B-A	6.78	6.70	0.00	346.47	0.020	0.02	10.593	В
C-AB	19.87	19.76	0.00	869.46	0.023	0.03	4.237	Α
C-A	522.18	522.18	0.00	-	-	-	-	-
A-B	11.29	11.29	0.00	-	-	-	-	-
A-C	439.67	439.67	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	3.60	3.59	0.00	523.03	0.007	0.01	6.929	Α
B-A	8.09	8.06	0.00	309.92	0.026	0.03	11.926	В
C-AB	27.24	27.20	0.00	915.53	0.030	0.04	4.052	Α
C-A	620.02	620.02	0.00	-	-	-	-	-
A-B	13.48	13.48	0.00	-	-	-	-	-
A-C	525.00	525.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	4.40	4.40	0.00	492.39	0.009	0.01	7.376	Α
B-A	9.91	9.86	0.00	259.39	0.038	0.04	14.423	В
C-AB	46.98	46.86	0.00	1015.17	0.046	0.07	3.717	А
C-A	745.76	745.76	0.00	-	-	-	-	-
A-B	16.52	16.52	0.00	-	-	-	-	-
A-C	643.00	643.00	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	4.40	4.40	0.00	492.29	0.009	0.01	7.377	Α
B-A	9.91	9.91	0.00	259.38	0.038	0.04	14.429	В
C-AB	47.02	47.02	0.00	1015.24	0.046	0.07	3.717	Α
C-A	745.72	745.72	0.00	-	-	-	-	-
A-B	16.52	16.52	0.00	-	-	-	-	-
A-C	643.00	643.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	3.60	3.60	0.00	522.85	0.007	0.01	6.932	Α
B-A	8.09	8.14	0.00	309.93	0.026	0.03	11.930	В
C-AB	27.28	27.40	0.00	915.61	0.030	0.04	4.053	Α
C-A	619.98	619.98	0.00	-	-	-	-	-
A-B	13.48	13.48	0.00	-	-	-	-	-
A-C	525.00	525.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	3.01	3.02	0.00	544.87	0.006	0.01	6.645	Α
B-A	6.78	6.80	0.00	346.48	0.020	0.02	10.600	В
C-AB	19.95	19.99	0.00	869.52	0.023	0.03	4.239	Α
C-A	522.11	522.11	0.00	-	-	-	-	-
A-B	11.29	11.29	0.00	-	-	-	-	-
A-C	439.67	439.67	0.00	-	-	-	-	-

(Default Analysis Set) - 2028 No Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 No Development, AM	2028 No Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Highbridge Close	T-Junction	Two-way	A,B,C	14.42	В



Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (West)		Major
В	В	Highbridge Close		Minor
С	С	B4267 South Rd (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	6.80		0.00		2.20	73.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane plus flare				10.00	4.80	3.30	3.30	3.30	✓	1.00	34	28

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	40"	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	535.527	0.094	0.238	0.150	0.340
1	B-C	654.410	0.097	0.245	-	-
1	C-B	616.238	0.230	0.230	-	-

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

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

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

Traffic Flows

Defai Vehic Mix	 	Vehicle Mix Varies Over Entry	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				✓	✓



General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	830.00	100.000
В	ONE HOUR	✓	24.00	100.000
С	ONE HOUR	✓	630.00	100.000

Turning Proportions

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

	То							
		Α	В	С				
F	Α	0.000	8.000	822.000				
From	В	17.000	0.000	7.000				
	C	629.000	1.000	0.000				

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

		7	Го		
		Α	В	С	
From	Α	0.00	0.01	0.99	
From	В	0.71	0.00	0.29	
	С	1.00	0.00	0.00	

Vehicle Mix

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

			То	
		Α	В	С
F	Α	1.000	1.000	1.000
From	В	1.000	1.000	1.000
	С	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		То							
		Α	В	С					
From	Α	0.0	0.0	0.0					
	В	0.0	0.0	0.0					
	С	0.0	0.0	0.0					



Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.02	8.69	0.02	Α
B-A	0.09	18.31	0.09	С
C-AB	0.00	4.49	0.00	Α
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	5.27	5.23	0.00	497.27	0.011	0.01	7.316	Α
B-A	12.80	12.63	0.00	316.55	0.040	0.04	11.839	В
C-AB	1.62	1.61	0.00	803.40	0.002	0.00	4.489	Α
C-A	472.68	472.68	0.00	-	-	-	-	-
A-B	6.02	6.02	0.00	-	-	-	-	-
A-C	618.84	618.84	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	6.29	6.28	0.00	466.04	0.014	0.01	7.830	Α
B-A	15.28	15.22	0.00	274.07	0.056	0.06	13.904	В
C-AB	2.24	2.24	0.00	840.43	0.003	0.00	4.294	Α
C-A	564.12	564.12	0.00	-	-	-	-	-
A-B	7.19	7.19	0.00	-	-	-	-	-
A-C	738.96	738.96	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	7.71	7.69	0.00	422.20	0.018	0.02	8.685	Α
B-A	18.72	18.58	0.00	215.30	0.087	0.09	18.287	С
C-AB	3.36	3.35	0.00	890.31	0.004	0.00	4.058	Α
C-A	690.29	690.29	0.00	-	-	-	-	-
A-B	8.81	8.81	0.00	-	-	-	-	-
A-C	905.04	905.04	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	7.71	7.71	0.00	422.02	0.018	0.02	8.688	Α
B-A	18.72	18.71	0.00	215.32	0.087	0.09	18.311	С
C-AB	3.36	3.36	0.00	890.31	0.004	0.00	4.060	Α
C-A	690.29	690.29	0.00	-	-	-	-	-
A-B	8.81	8.81	0.00	-	-	-	-	-
A-C	905.04	905.04	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	6.29	6.31	0.00	465.75	0.014	0.01	7.837	Α
B-A	15.28	15.42	0.00	274.11	0.056	0.06	13.922	В
C-AB	2.24	2.25	0.00	840.43	0.003	0.00	4.294	Α
C-A	564.11	564.11	0.00	-	-	-	-	-
A-B	7.19	7.19	0.00	-	-	-	-	-
A-C	738.96	738.96	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	5.27	5.28	0.00	496.98	0.011	0.01	7.323	Α
B-A	12.80	12.87	0.00	316.60	0.040	0.04	11.854	В
C-AB	1.62	1.63	0.00	803.40	0.002	0.00	4.491	Α
C-A	472.67	472.67	0.00	-	-	-	-	-
A-B	6.02	6.02	0.00	-	-	-	-	-
A-C	618.84	618.84	0.00	-	-	-	-	-

(Default Analysis Set) - 2028 No Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 No Development, FM	2028 No Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junction	Name	Junction Type	Major Road Direction	Arm Order	Arm Order Junction Delay (s)	
1	B4267 South Rd / Highbridge Close	T-Junction	Two-way	A,B,C	6.46	А



Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (West)		Major
В	В	Highbridge Close		Minor
С	С	B4267 South Rd (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	6.80		0.00		2.20	73.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane plus flare				10.00	4.80	3.30	3.30	3.30	✓	1.00	34	28

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	40"	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	557.656	0.098	0.248	0.156	0.354
1	B-C	660.833	0.098	0.247	-	-
1	C-B	616.238	0.230	0.230	-	-

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

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

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

Traffic Flows

Default 'ehicle 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				✓	✓



General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	640.00	100.000
В	ONE HOUR	✓	15.00	100.000
С	ONE HOUR	✓	770.00	100.000

Turning Proportions

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

	То						
		Α	В	С			
F	Α	0.000	16.000	624.000			
From	В	10.000	0.000	5.000			
	C	757.000	13.000	0.000			

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

	То				
		Α	В	С	
Erom	Α	0.00	0.03	0.98	
From	В	0.67	0.00	0.33	
	С	0.98	0.02	0.00	

Vehicle Mix

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

	То				
_		Α	В	С	
From	Α	1.000	1.000	1.000	
	В	1.000	1.000	1.000	
	С	1.000	1.000	1.000	

Heavy Vehicle Percentages - Junction 1 (for whole period)

	То				
		Α	В	С	
Erom	Α	0.0	0.0	0.0	
From	В	0.0	0.0	0.0	
	C	0.0	0.0	0.0	



Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.01	7.53	0.01	Α
B-A	0.04	15.02	0.05	С
C-AB	0.05	4.17	0.08	Α
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	3.76	3.74	0.00	540.61	0.007	0.01	6.705	Α
B-A	7.53	7.44	0.00	347.76	0.022	0.02	10.576	В
C-AB	22.60	22.47	0.00	886.15	0.026	0.03	4.168	Α
C-A	557.09	557.09	0.00	-	-	-	-	-
A-B	12.05	12.05	0.00	-	-	-	-	-
A-C	469.78	469.78	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	4.49	4.49	0.00	516.84	0.009	0.01	7.025	Α
B-A	8.99	8.96	0.00	307.04	0.029	0.03	12.075	В
C-AB	31.21	31.16	0.00	934.59	0.033	0.04	3.984	Α
C-A	661.00	661.00	0.00	-	1	-	1	-
A-B	14.38	14.38	0.00	-	-	-	-	-
A-C	560.96	560.96	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	5.51	5.49	0.00	483.74	0.011	0.01	7.526	Α
B-A	11.01	10.95	0.00	250.70	0.044	0.05	15.012	С
C-AB	55.34	55.18	0.00	1042.41	0.053	0.08	3.646	Α
C-A	792.45	792.45	0.00	-	-	-	-	-
A-B	17.62	17.62	0.00	-	-	-	-	-
A-C	687.04	687.04	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	5.51	5.50	0.00	483.62	0.011	0.01	7.528	Α
B-A	11.01	11.01	0.00	250.72	0.044	0.05	15.017	С
C-AB	55.39	55.39	0.00	1042.49	0.053	0.08	3.646	Α
C-A	792.40	792.40	0.00	-	-	-	-	-
A-B	17.62	17.62	0.00	-	-	-	-	-
A-C	687.04	687.04	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	4.49	4.51	0.00	516.63	0.009	0.01	7.031	Α
B-A	8.99	9.05	0.00	307.09	0.029	0.03	12.082	В
C-AB	31.26	31.41	0.00	934.69	0.033	0.05	3.986	Α
C-A	660.95	660.95	0.00	-	-	-	-	-
A-B	14.38	14.38	0.00	-	-	-	-	-
A-C	560.96	560.96	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	3.76	3.77	0.00	540.38	0.007	0.01	6.708	Α
B-A	7.53	7.56	0.00	347.83	0.022	0.02	10.582	В
C-AB	22.69	22.74	0.00	886.22	0.026	0.03	4.169	Α
C-A	557.00	557.00	0.00	-	-	-	-	-
A-B	12.05	12.05	0.00	-	-	-	-	-
A-C	469.78	469.78	0.00	-	-	-	-	-



Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.4.487 [15039,24/03/2014] © Copyright TRL Limited, 2015

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Filename: Jn5 - South Road - Existing Site Access.arc8

Path: P:\GBCFA\TP\HB\Projects\5133321 - Sully Sport & Social Club - TAYL3270\04 - Analysis\Junction Modelling

Report generation date: 25/06/2015 11:46:37

- » (Default Analysis Set) 2023 With Development, AM
- » (Default Analysis Set) 2023 With Development, PM
- » (Default Analysis Set) 2028 With Development, AM
- » (Default Analysis Set) 2028 With Development, PM
- » (Default Analysis Set) 2023 No Development, AM
- » (Default Analysis Set) 2023 No Development, PM
- » (Default Analysis Set) 2028 No Development, AM
- » (Default Analysis Set) 2028 No Development, PM

Summary of junction performance

		AM		
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2023 \	Nith Devel	opme	ent
Stream B-C	0.10	8.05	0.09	Α
Stream B-A	0.25	19.07	0.20	С
Stream C-AB	0.20	4.14	0.10	Α
Stream C-A	-	-	-	-
Stream A-B	-	1	-	-
Stream A-C	-	-	-	-

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

"D5 - 2023 With Development, AM " model duration: 07:45 - 09:15

"D6 - 2023 With Development, PM" model duration: 16:45 - 18:15

"D7 - 2028 With Development, AM" model duration: 07:45 - 09:15

"D8 - 2028 With Development, PM" model duration: 16:45 - 18:15

"D9 - 2023 No Development, AM" model duration: 07:45 - 09:15

"D10 - 2023 No Development, PM" model duration: 16:45 - 18:15

"D11 - 2028 No Development, AM" model duration: 07:45 - 09:15

"D12 - 2028 No Development, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.4.487 at 25/06/2015 11:46:34



File summary

Title	(untitled)
Location	
Site Number	
Date	09/10/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	TAYL3270
Description	

Analysis Options

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

Units

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

(Default Analysis Set) - 2023 With Development, AM

Data Errors and Warnings

Severity	y Area Item		Description			
Marning	Minor arm flare	Arm B - Minor Arm	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero			
Warning	Williof affit flare	Geometry	flare length is not allowed.			

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 With Development, AM	2023 With Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Existing Site Access	T-Junction	Two-way	A,B,C	9.18	Α



Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	A	B4267 South Rd (East)		Major
В	В	Existing Access		Minor
С	С	B4267 South Rd (West)		Major

Major Arm Geometry

Am	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	6.65		0.00		2.20	35.80	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane plus flare				8.60	4.10	4.10	4.10	4.10	✓	1.00	9	11

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	543.006	0.096	0.243	0.153	0.347
1	B-C	703.153	0.105	0.265	-	-
1	C-B	594.695	0.224	0.224	-	-

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

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

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

Traffic Flows

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				✓	✓



General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	625.00	100.000
В	ONE HOUR	✓	83.00	100.000
С	ONE HOUR	✓	810.00	100.000

Turning Proportions

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

		То						
		Α	В	С				
	Α	0.000	9.000	616.000				
From	В	43.000	0.000	40.000				
	C	789.000	21.000	0.000				

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

		7	Го		
		Α	В	С	
From	Α	0.00	0.01	0.99	
FIOIII	В	0.52	0.00	0.48	
	С	0.97	0.03	0.00	

Vehicle Mix

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

	То						
From		Α	В	С			
	Α	1.000	1.000	1.000			
	В	1.000	1.000	1.000			
	С	1.000	1.000	1.000			

Heavy Vehicle Percentages - Junction 1 (for whole period)

		То							
From		Α	В	С					
	Α	0.0	0.0	0.0					
	В	0.0	0.0	0.0					
	С	0.0	0.0	0.0					



Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.09	8.05	0.10	Α
B-A	0.20	19.07	0.25	С
C-AB	0.10	4.14	0.20	А
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	30.11	29.89	0.00	565.12	0.053	0.06	6.722	Α
B-A	32.37	31.95	0.00	333.35	0.097	0.11	11.927	В
C-AB	42.37	42.09	0.00	911.32	0.046	0.07	4.140	Α
C-A	567.44	567.44	0.00	-	-	-	-	-
A-B	6.78	6.78	0.00	-	-	-	-	-
A-C	463.76	463.76	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	35.96	35.90	0.00	535.51	0.067	0.07	7.205	Α
B-A	38.66	38.48	0.00	292.59	0.132	0.15	14.156	В
C-AB	60.96	60.82	0.00	973.60	0.063	0.10	3.944	Α
C-A	667.22	667.22	0.00	-	-	-	-	-
A-B	8.09	8.09	0.00	-	-	-	-	-
A-C	553.77	553.77	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	44.04	43.94	0.00	491.81	0.090	0.10	8.036	Α
B-A	47.34	46.96	0.00	236.15	0.200	0.24	18.990	С
C-AB	103.84	103.47	0.00	1077.96	0.096	0.20	3.694	А
C-A	787.99	787.99	0.00	-	-	-	-	-
A-B	9.91	9.91	0.00	-	-	-	-	-
A-C	678.23	678.23	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	44.04	44.04	0.00	490.98	0.090	0.10	8.054	Α
B-A	47.34	47.33	0.00	236.12	0.201	0.25	19.065	С
C-AB	104.02	104.02	0.00	1078.17	0.096	0.20	3.697	Α
C-A	787.80	787.80	0.00	-	-	-	-	-
A-B	9.91	9.91	0.00	-	-	-	-	-
A-C	678.23	678.23	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	35.96	36.06	0.00	534.19	0.067	0.07	7.230	Α
B-A	38.66	39.03	0.00	292.60	0.132	0.15	14.219	В
C-AB	61.13	61.50	0.00	973.89	0.063	0.11	3.949	Α
C-A	667.04	667.04	0.00	-	-	-	-	-
A-B	8.09	8.09	0.00	-	-	-	-	-
A-C	553.77	553.77	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	30.11	30.18	0.00	563.81	0.053	0.06	6.748	Α
B-A	32.37	32.56	0.00	333.38	0.097	0.11	11.973	В
C-AB	42.59	42.73	0.00	911.52	0.047	0.07	4.144	Α
C-A	567.22	567.22	0.00	-	-	-	-	-
A-B	6.78	6.78	0.00	-	-	-	-	-
A-C	463.76	463.76	0.00	-	-	-	-	-

(Default Analysis Set) - 2023 With Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor Arm Geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 With Development, PM	2023 With Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junction	Name	Junction Type Major Road Direction		Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Existing Site Access	T-Junction	Two-way	A,B,C	7.46	А



Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (East)		Major
В	В	Existing Access		Minor
С	С	B4267 South Rd (West)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	6.65		0.00		2.20	35.80	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane plus flare				8.60	4.10	4.10	4.10	4.10	✓	1.00	9	11

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	542.384	0.096	0.243	0.153	0.347
1	B-C	707.191	0.105	0.266	-	-
1	C-B	594.695	0.224	0.224	-	-

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

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

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

Traffic Flows

Default Vehicle Mix	Vehicle Mix Varies Over Time		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				✓	✓



General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	780.00	100.000
В	ONE HOUR	✓	47.00	100.000
С	ONE HOUR	✓	664.00	100.000

Turning Proportions

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

	То					
		Α	В	С		
F	Α	0.000	50.000	730.000		
From	В	24.000	0.000	23.000		
	C	630.000	34.000	0.000		

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

	То				
		Α	В	С	
From	Α	0.00	0.06	0.94	
FIOIII	В	0.51	0.00	0.49	
	C	0.95	0.05	0.00	

Vehicle Mix

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

	То					
		Α	В	С		
From	Α	1.000	1.000	1.000		
FIOIII	В	1.000	1.000	1.000		
	С	1.000	1.000	1.000		

Heavy Vehicle Percentages - Junction 1 (for whole period)

	То				
		Α	В	С	
Erom	Α	0.0	0.0	0.0	
From	В	0.0	0.0	0.0	
	C	0.0	0.0	0.0	



Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.05	8.08	0.06	Α
B-A	0.12	18.32	0.13	С
C-AB	0.15	4.80	0.41	А
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	17.32	17.19	0.00	549.05	0.032	0.03	6.766	Α
B-A	18.07	17.84	0.00	324.13	0.056	0.06	11.745	В
C-AB	59.71	59.19	0.00	810.69	0.074	0.13	4.789	Α
C-A	440.18	440.18	0.00	-	-	-	-	-
A-B	37.64	37.64	0.00	-	-	-	-	-
A-C	549.58	549.58	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	20.68	20.64	0.00	516.85	0.040	0.04	7.254	Α
B-A	21.58	21.48	0.00	281.68	0.077	0.08	13.831	В
C-AB	85.01	84.72	0.00	857.30	0.099	0.21	4.663	Α
C-A	511.91	511.91	0.00	-	-	-	-	-
A-B	44.95	44.95	0.00	-	-	-	-	-
A-C	656.26	656.26	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	25.32	25.26	0.00	471.53	0.054	0.06	8.066	Α
B-A	26.42	26.23	0.00	223.02	0.118	0.13	18.275	С
C-AB	139.02	138.24	0.00	934.00	0.149	0.40	4.531	Α
C-A	592.06	592.06	0.00	-	-	-	-	-
A-B	55.05	55.05	0.00	-	-	-	-	-
A-C	803.74	803.74	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	25.32	25.32	0.00	470.93	0.054	0.06	8.078	Α
B-A	26.42	26.42	0.00	222.92	0.119	0.13	18.319	С
C-AB	139.43	139.41	0.00	934.47	0.149	0.41	4.537	Α
C-A	591.65	591.65	0.00	-	-	-	-	-
A-B	55.05	55.05	0.00	-	-	-	-	-
A-C	803.74	803.74	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	20.68	20.73	0.00	515.80	0.040	0.04	7.271	Α
B-A	21.58	21.77	0.00	281.57	0.077	0.08	13.866	В
C-AB	85.42	86.19	0.00	857.92	0.100	0.21	4.673	Α
C-A	511.51	511.51	0.00	-	-	-	-	-
A-B	44.95	44.95	0.00	-	-	-	-	-
A-C	656.26	656.26	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	17.32	17.35	0.00	547.97	0.032	0.03	6.784	Α
B-A	18.07	18.17	0.00	324.05	0.056	0.06	11.772	В
C-AB	60.13	60.44	0.00	811.07	0.074	0.14	4.802	Α
C-A	439.77	439.77	0.00	-	-	-	-	-
A-B	37.64	37.64	0.00	-	-	-	-	-
A-C	549.58	549.58	0.00	-	-	-	-	-

(Default Analysis Set) - 2028 With Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor Arm Geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 With Development, AM	2028 With Development	АМ		ONE HOUR	07:45	09:15	90	15		



Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Existing Site Access	T-Junction	Two-way	A,B,C	9.48	Α

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (East)		Major
В	В	Existing Access		Minor
С	С	B4267 South Rd (West)		Major

Major Arm Geometry

Arm	Arm Width of Has kerber carriageway (m) reser		entral Width of kerbed central Harreserve (m) tu		Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	6.65		0.00		2.20	35.80	✓	0.00

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

Minor Arm Geometry

А	ırm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
	В	One lane plus flare				8.60	4.10	4.10	4.10	4.10	√	1.00	9	11

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	543.006	0.096	0.243	0.153	0.347
1	B-C	703.153	0.105	0.265	-	-
1	C-B	594.695	0.224	0.224	-	-

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

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

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



Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	666.00	100.000
В	ONE HOUR	✓	83.00	100.000
С	ONE HOUR	√	864.00	100.000

Turning Proportions

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

		То						
		Α	В	С				
From	Α	0.000	9.000	657.000				
FIOIII	В	43.000	0.000	40.000				
	C	842.000	22.000	0.000				

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

	То					
		Α	В	С		
F	Α	0.00	0.01	0.99		
From	В	0.52	0.00	0.48		
	С	0.97	0.03	0.00		

Vehicle Mix

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

		То						
		Α	В	С				
From	Α	1.000	1.000	1.000				
FIOIII	В	1.000	1.000	1.000				
	С	1.000	1.000	1.000				



Heavy Vehicle Percentages - Junction 1 (for whole period)

		То						
		Α	В	С				
From	Α	0.0	0.0	0.0				
FIOIII	В	0.0	0.0	0.0				
	С	0.0	0.0	0.0				

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.09	8.33	0.10	Α
B-A	0.22	21.36	0.28	С
C-AB	0.11	4.07	0.24	Α
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	30.11	29.89	0.00	556.50	0.054	0.06	6.832	Α
B-A	32.37	31.93	0.00	319.49	0.101	0.11	12.500	В
C-AB	47.29	46.98	0.00	933.10	0.051	0.08	4.062	Α
C-A	603.17	603.17	0.00	-	-	-	-	-
A-B	6.78	6.78	0.00	-	-	-	-	-
A-C	494.62	494.62	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	35.96	35.89	0.00	524.75	0.069	0.07	7.364	Α
B-A	38.66	38.46	0.00	276.03	0.140	0.16	15.140	С
C-AB	68.77	68.61	0.00	998.94	0.069	0.12	3.871	Α
C-A	707.95	707.95	0.00	-	-	-	-	-
A-B	8.09	8.09	0.00	-	-	-	-	-
A-C	590.63	590.63	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	44.04	43.93	0.00	476.97	0.092	0.10	8.311	Α
B-A	47.34	46.89	0.00	215.85	0.219	0.27	21.248	С
C-AB	120.37	119.90	0.00	1111.09	0.108	0.24	3.632	Α
C-A	830.91	830.91	0.00	-	-	-	-	-
A-B	9.91	9.91	0.00	-	-	-	-	-
A-C	723.37	723.37	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	44.04	44.04	0.00	475.94	0.093	0.10	8.335	Α
B-A	47.34	47.33	0.00	215.82	0.219	0.28	21.361	С
C-AB	120.61	120.61	0.00	1111.36	0.109	0.24	3.638	Α
C-A	830.67	830.67	0.00	-	-	-	-	-
A-B	9.91	9.91	0.00	-	-	-	-	-
A-C	723.37	723.37	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	35.96	36.07	0.00	523.16	0.069	0.07	7.391	Α
B-A	38.66	39.10	0.00	276.04	0.140	0.17	15.223	С
C-AB	68.99	69.46	0.00	999.30	0.069	0.12	3.876	Α
C-A	707.73	707.73	0.00	-	-	-	-	-
A-B	8.09	8.09	0.00	-	-	-	-	-
A-C	590.63	590.63	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	30.11	30.18	0.00	555.05	0.054	0.06	6.858	Α
B-A	32.37	32.58	0.00	319.52	0.101	0.11	12.556	В
C-AB	47.55	47.72	0.00	933.33	0.051	0.08	4.067	Α
C-A	602.91	602.91	0.00	-	-	-	-	-
A-B	6.78	6.78	0.00	-	-	-	-	-
A-C	494.62	494.62	0.00	-	-	-	-	-

(Default Analysis Set) - 2028 With Development, PM

Data Errors and Warnings

Severity	/ Area Item		Description
Warning	Minor arm flare	Arm B - Minor Arm Geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 With Development, PM	2028 With Development	PM		ONE HOUR	16:45	18:15	90	15		



Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Existing Site Access	T-Junction	Two-way	A,B,C	7.59	Α

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (East)		Major
В	В	Existing Access		Minor
С	С	B4267 South Rd (West)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	6.65		0.00		2.20	35.80	✓	0.00

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

Minor Arm Geometry

A	mı	linor m Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
	3 p	ne lane olus lare				8.60	4.10	4.10	4.10	4.10	√	1.00	9	11

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	541.494	0.096	0.242	0.152	0.346
1	B-C	712.970	0.106	0.268	-	-
1	C-B	594.695	0.224	0.224	-	-

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

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

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



Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	830.00	100.000
В	ONE HOUR	✓	48.00	100.000
С	ONE HOUR	√	706.00	100.000

Turning Proportions

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

		То					
		Α	В	С			
From	Α	0.000	50.000	780.000			
FIOIII	В	24.000	0.000	24.000			
	C	671.000	35.000	0.000			

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

	То					
		Α	В	С		
F	Α	0.00	0.06	0.94		
From	В	0.50	0.00	0.50		
	С	0.95	0.05	0.00		

Vehicle Mix

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

	То					
		Α	В	С		
From	Α	1.000	1.000	1.000		
FIOIII	В	1.000	1.000	1.000		
	С	1.000	1.000	1.000		



Heavy Vehicle Percentages - Junction 1 (for whole period)

	То					
		Α	В	С		
	Α	0.0	0.0	0.0		
From	В	0.0	0.0	0.0		
	С	0.0	0.0	0.0		

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.06	8.33	0.06	Α
B-A	0.13	20.51	0.15	С
C-AB	0.16	4.74	0.48	Α
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	18.07	17.93	0.00	543.20	0.033	0.03	6.851	Α
B-A	18.07	17.82	0.00	309.52	0.058	0.06	12.332	В
C-AB	65.08	64.50	0.00	826.28	0.079	0.14	4.725	Α
C-A	466.43	466.43	0.00	-	-	-	-	-
A-B	37.64	37.64	0.00	-	-	-	-	-
A-C	587.22	587.22	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	21.58	21.54	0.00	508.50	0.042	0.04	7.392	Α
B-A	21.58	21.47	0.00	264.39	0.082	0.09	14.813	В
C-AB	93.75	93.40	0.00	876.12	0.107	0.23	4.603	Α
C-A	540.93	540.93	0.00	-	-	-	-	-
A-B	44.95	44.95	0.00	-	-	-	-	-
A-C	701.20	701.20	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	26.42	26.36	0.00	459.29	0.058	0.06	8.314	Α
B-A	26.42	26.19	0.00	202.03	0.131	0.15	20.448	С
C-AB	157.13	156.15	0.00	959.42	0.164	0.47	4.490	Α
C-A	620.20	620.20	0.00	-	-	-	-	-
A-B	55.05	55.05	0.00	-	-	-	-	-
A-C	858.80	858.80	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	26.42	26.42	0.00	458.55	0.058	0.06	8.330	Α
B-A	26.42	26.42	0.00	201.90	0.131	0.15	20.513	С
C-AB	157.66	157.64	0.00	960.01	0.164	0.48	4.498	Α
C-A	619.66	619.66	0.00	-	-	-	-	-
A-B	55.05	55.05	0.00	-	-	-	-	-
A-C	858.80	858.80	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	21.58	21.64	0.00	507.25	0.043	0.04	7.416	Α
B-A	21.58	21.81	0.00	264.25	0.082	0.09	14.861	В
C-AB	94.25	95.21	0.00	876.89	0.107	0.24	4.616	Α
C-A	540.43	540.43	0.00	-	-	-	-	-
A-B	44.95	44.95	0.00	-	-	-	-	-
A-C	701.20	701.20	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	18.07	18.11	0.00	542.00	0.033	0.03	6.874	Α
B-A	18.07	18.18	0.00	309.43	0.058	0.06	12.364	В
C-AB	65.57	65.93	0.00	826.73	0.079	0.15	4.738	Α
C-A	465.95	465.95	0.00	-	-	-	-	-
A-B	37.64	37.64	0.00	-	-	-	-	-
A-C	587.22	587.22	0.00	-	-	-	-	-

(Default Analysis Set) - 2023 No Development, AM

Data Errors and Warnings

Severity	Area	ltem	Description
Warning	Minor arm flare	Arm B - Minor Arm Geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 No Development, AM	2023 No Development	AM		ONE HOUR	07:45	09:15	90	15		



Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Existing Site Access	T-Junction	Two-way	A,B,C	5.49	Α

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (East)		Major
В	В	Existing Access		Minor
С	С	B4267 South Rd (West)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	6.65		0.00		2.20	35.80	✓	0.00

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

Minor Arm Geometry

A	ırm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
	В	One lane plus flare				8.60	4.10	4.10	4.10	4.10	√	1.00	9	11

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	515.218	0.091	0.230	0.145	0.329
1	B-C	711.706	0.106	0.268	-	-
1	C-B	594.695	0.224	0.224	-	-

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

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

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



Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)		
Α	ONE HOUR	✓	605.00	100.000		
В	ONE HOUR	✓	5.00	100.000		
С	ONE HOUR	√	780.00	100.000		

Turning Proportions

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

		То							
F		Α	В	С					
	Α	0.000	7.000	598.000					
From	В	2.000	0.000	3.000					
	C	774.000	6.000	0.000					

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

		То							
		Α	В	С					
F	Α	0.00	0.01	0.99					
From	В	0.40	0.00	0.60					
	С	0.99	0.01	0.00					

Vehicle Mix

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

			То	
From		Α	С	
	Α	1.000	1.000	1.000
	В	1.000	1.000	1.000
	С	1.000	1.000	1.000



Heavy Vehicle Percentages - Junction 1 (for whole period)

		Т	o	
From		Α	В	С
	Α	0.0	0.0	0.0
	В	0.0	0.0	0.0
	С	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.01	6.79	0.01	Α
B-A	0.01	15.33	0.01	С
C-AB	0.02	4.12	0.03	Α
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	2.26	2.24	0.00	589.83	0.004	0.00	6.126	Α
B-A	1.51	1.49	0.00	324.99	0.005	0.00	11.128	В
C-AB	10.74	10.68	0.00	884.87	0.012	0.01	4.118	Α
C-A	576.49	576.49	0.00	-	-	-	-	-
A-B	5.27	5.27	0.00	-	-	-	-	-
A-C	450.21	450.21	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	2.70	2.69	0.00	566.10	0.005	0.00	6.389	Α
B-A	1.80	1.79	0.00	288.06	0.006	0.01	12.575	В
C-AB	14.84	14.82	0.00	936.03	0.016	0.02	3.907	Α
C-A	686.36	686.36	0.00	-	-	-	-	-
A-B	6.29	6.29	0.00	-	-	-	-	-
A-C	537.59	537.59	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	3.30	3.30	0.00	533.21	0.006	0.01	6.792	Α
B-A	2.20	2.19	0.00	237.00	0.009	0.01	15.331	С
C-AB	21.95	21.92	0.00	1002.15	0.022	0.03	3.671	Α
C-A	836.84	836.84	0.00	-	-	-	-	-
A-B	7.71	7.71	0.00	-	-	-	-	-
A-C	658.41	658.41	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	3.30	3.30	0.00	533.20	0.006	0.01	6.792	Α
B-A	2.20	2.20	0.00	237.00	0.009	0.01	15.331	С
C-AB	21.97	21.97	0.00	1002.17	0.022	0.03	3.671	Α
C-A	836.83	836.83	0.00	-	-	-	-	-
A-B	7.71	7.71	0.00	-	-	-	-	-
A-C	658.41	658.41	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	2.70	2.70	0.00	566.09	0.005	0.00	6.389	Α
B-A	1.80	1.81	0.00	288.05	0.006	0.01	12.576	В
C-AB	14.86	14.89	0.00	936.05	0.016	0.02	3.909	Α
C-A	686.35	686.35	0.00	-	-	-	-	-
A-B	6.29	6.29	0.00	-	-	-	-	-
A-C	537.59	537.59	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	2.26	2.26	0.00	589.82	0.004	0.00	6.128	Α
B-A	1.51	1.51	0.00	324.98	0.005	0.00	11.131	В
C-AB	10.78	10.79	0.00	884.90	0.012	0.01	4.119	Α
C-A	576.45	576.45	0.00	-	-	-	-	-
A-B	5.27	5.27	0.00	-	-	-	-	-
A-C	450.21	450.21	0.00	-	-	-	-	-

(Default Analysis Set) - 2023 No Development, PM

Data Errors and Warnings

Severity	Area	ltem	Description
Warning	Minor arm flare		Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 No Development, PM	2023 No Development	PM		ONE HOUR	16:45	18:15	90	15		



Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Existing Site Access	T-Junction	Two-way	A,B,C	5.79	Α

Junction Network Options

Driving Side	Lighting				
Left	Normal/unknown				

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (East)		Major
В	В	Existing Access		Minor
С	С	B4267 South Rd (West)		Major

Major Arm Geometry

Am	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	6.65		0.00		2.20	35.80	✓	0.00

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

Minor Arm Geometry

4	Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
	В	One lane plus flare				8.60	4.10	4.10	4.10	4.10	✓	1.00	9	11

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	515.218	0.091	0.230	0.145	0.329
1	B-C	711.706	0.106	0.268	-	-
1	C-B	594.695	0.224	0.224	-	-

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

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

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



Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	716.00	100.000
В	ONE HOUR	✓	11.00	100.000
С	ONE HOUR	√	609.00	100.000

Turning Proportions

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

	То								
		Α	В	С					
From	Α	0.000	7.000	709.000					
FIOIII	В	2.000	0.000	9.000					
	С	598.000	11.000	0.000					

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

	То							
		Α	В	С				
F	Α	0.00	0.01	0.99				
From	В	0.18	0.00	0.82				
	С	0.98	0.02	0.00				

Vehicle Mix

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

		То								
		Α	В	С						
From	Α	1.000	1.000	1.000						
FIOIII	В	1.000	1.000	1.000						
	С	1.000	1.000	1.000						



Heavy Vehicle Percentages - Junction 1 (for whole period)

	То					
		Α	В	С		
Erom	Α	0.0	0.0	0.0		
From	В	0.0	0.0	0.0		
	С	0.0	0.0	0.0		

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.02	7.34	0.02	Α
B-A	0.01	15.46	0.01	С
C-AB	0.04	4.66	0.06	Α
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	6.78	6.73	0.00	567.46	0.012	0.01	6.419	Α
B-A	1.51	1.49	0.00	323.70	0.005	0.00	11.172	В
C-AB	17.25	17.14	0.00	789.85	0.022	0.03	4.659	Α
C-A	441.24	441.24	0.00	-	-	-	-	-
A-B	5.27	5.27	0.00	-	-	-	-	-
A-C	533.77	533.77	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	8.09	8.08	0.00	539.39	0.015	0.02	6.774	Α
B-A	1.80	1.79	0.00	286.51	0.006	0.01	12.643	В
C-AB	23.66	23.62	0.00	827.73	0.029	0.04	4.476	Α
C-A	523.82	523.82	0.00	-	-	-	-	-
A-B	6.29	6.29	0.00	-	-	-	-	-
A-C	637.38	637.38	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	9.91	9.89	0.00	500.53	0.020	0.02	7.336	Α
B-A	2.20	2.19	0.00	235.10	0.009	0.01	15.455	С
C-AB	39.56	39.45	0.00	907.72	0.044	0.06	4.146	Α
C-A	630.96	630.96	0.00	-	-	-	-	-
A-B	7.71	7.71	0.00	-	-	-	-	-
A-C	780.62	780.62	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	9.91	9.91	0.00	500.52	0.020	0.02	7.336	Α
B-A	2.20	2.20	0.00	235.08	0.009	0.01	15.458	С
C-AB	39.60	39.59	0.00	907.78	0.044	0.06	4.148	Α
C-A	630.93	630.93	0.00	-	-	-	-	-
A-B	7.71	7.71	0.00	-	-	-	-	-
A-C	780.62	780.62	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	8.09	8.11	0.00	539.39	0.015	0.02	6.778	Α
B-A	1.80	1.81	0.00	286.48	0.006	0.01	12.648	В
C-AB	23.70	23.80	0.00	827.80	0.029	0.04	4.479	Α
C-A	523.78	523.78	0.00	-	-	-	-	-
A-B	6.29	6.29	0.00	-	-	-	-	-
A-C	637.38	637.38	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	6.78	6.79	0.00	567.45	0.012	0.01	6.422	Α
B-A	1.51	1.51	0.00	323.67	0.005	0.00	11.176	В
C-AB	17.32	17.36	0.00	789.90	0.022	0.03	4.659	Α
C-A	441.17	441.17	0.00	-	-	-	-	-
A-B	5.27	5.27	0.00	-	-	-	-	-
A-C	533.77	533.77	0.00	-	-	-	-	-

(Default Analysis Set) - 2028 No Development, AM

Data Errors and Warnings

Severity	Area	ltem	Description
Warning	Minor arm flare		Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 No Development, AM	2028 No Development	AM		ONE HOUR	07:45	09:15	90	15		



Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Existing Site Access	T-Junction	Two-way	A,B,C	5.55	Α

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (East)		Major
В	В	Existing Access		Minor
С	С	B4267 South Rd (West)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central Has right reserve (m) turn bay		Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)	
С	6.65		0.00		2.20	35.80	✓	0.00	

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

Minor Arm Geometry

А	rm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
	В	One lane plus flare				8.60	4.10	4.10	4.10	4.10	✓	1.00	9	11

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	515.218	0.091	0.230	0.145	0.329
1	B-C	711.706	0.106	0.268	-	-
1	C-B	594.695	0.224	0.224	-	-

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

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

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



Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	646.00	100.000
В	ONE HOUR	✓	6.00	100.000
С	ONE HOUR	√	834.00	100.000

Turning Proportions

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

	То						
From		Α	В	С			
	Α	0.000	7.000	639.000			
	В	2.000	0.000	4.000			
	С	828.000	6.000	0.000			

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

	То						
From		Α	В	С			
	Α	0.00	0.01	0.99			
	В	0.33	0.00	0.67			
	С	0.99	0.01	0.00			

Vehicle Mix

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

		То					
From		Α	В	С			
	Α	1.000	1.000	1.000			
	В	1.000	1.000	1.000			
	С	1.000	1.000	1.000			



Heavy Vehicle Percentages - Junction 1 (for whole period)

	То					
		Α	В	С		
Erom	Α	0.0	0.0	0.0		
From	В	0.0	0.0	0.0		
	С	0.0	0.0	0.0		

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.01	6.97	0.01	Α
B-A	0.01	16.68	0.01	С
C-AB	0.02	4.04	0.03	Α
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	3.01	2.99	0.00	581.54	0.005	0.01	6.221	Α
B-A	1.51	1.49	0.00	311.98	0.005	0.00	11.594	В
C-AB	11.31	11.26	0.00	903.70	0.013	0.01	4.033	Α
C-A	616.57	616.57	0.00	-	-	-	-	-
A-B	5.27	5.27	0.00	-	-	-	-	-
A-C	481.07	481.07	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	3.60	3.59	0.00	556.18	0.006	0.01	6.514	Α
B-A	1.80	1.79	0.00	272.52	0.007	0.01	13.296	В
C-AB	15.75	15.73	0.00	957.29	0.016	0.02	3.822	Α
C-A	734.00	734.00	0.00	-	-	-	-	-
A-B	6.29	6.29	0.00	-	-	-	-	-
A-C	574.45	574.45	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	4.40	4.40	0.00	521.03	0.008	0.01	6.967	Α
B-A	2.20	2.19	0.00	217.98	0.010	0.01	16.682	С
C-AB	23.52	23.48	0.00	1026.02	0.023	0.03	3.590	Α
C-A	894.74	894.74	0.00	-	-	-	-	-
A-B	7.71	7.71	0.00	-	-	-	-	-
A-C	703.55	703.55	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	4.40	4.40	0.00	521.03	0.008	0.01	6.967	Α
B-A	2.20	2.20	0.00	217.97	0.010	0.01	16.684	С
C-AB	23.53	23.53	0.00	1026.03	0.023	0.03	3.593	Α
C-A	894.72	894.72	0.00	-	-	-	-	-
A-B	7.71	7.71	0.00	-	-	-	-	-
A-C	703.55	703.55	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	3.60	3.60	0.00	556.17	0.006	0.01	6.514	Α
B-A	1.80	1.81	0.00	272.51	0.007	0.01	13.301	В
C-AB	15.77	15.80	0.00	957.32	0.016	0.02	3.825	Α
C-A	733.98	733.98	0.00	-	-	-	-	-
A-B	6.29	6.29	0.00	-	-	-	-	-
A-C	574.45	574.45	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	3.01	3.02	0.00	581.53	0.005	0.01	6.224	Α
B-A	1.51	1.51	0.00	311.97	0.005	0.00	11.595	В
C-AB	11.35	11.37	0.00	903.73	0.013	0.01	4.035	Α
C-A	616.53	616.53	0.00	-	-	-	-	-
A-B	5.27	5.27	0.00	-	-	-	-	-
A-C	481.07	481.07	0.00	-	-	-	-	-

(Default Analysis Set) - 2028 No Development, PM

Data Errors and Warnings

Severity	Area	ltem	Description
Warning	Minor arm flare	Arm B - Minor Arm Geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 No Development, PM	2028 No Development	PM		ONE HOUR	16:45	18:15	90	15		



Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Existing Site Access	T-Junction	Two-way	A,B,C	5.78	Α

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (East)		Major
В	В	Existing Access		Minor
С	С	B4267 South Rd (West)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	6.65		0.00		2.20	35.80	✓	0.00

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

Minor Arm Geometry

,	۸rm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
	В	One lane plus flare				8.60	4.10	4.10	4.10	4.10	✓	1.00	9	11

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	515.218	0.091	0.230	0.145	0.329
1	B-C	711.706	0.106	0.268	-	-
1	C-B	594.695	0.224	0.224	-	-

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

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

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



Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	766.00	100.000
В	ONE HOUR	✓	12.00	100.000
С	ONE HOUR	√	651.00	100.000

Turning Proportions

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

		То						
		Α	В	С				
From	Α	0.000	7.000	759.000				
FIOIII	В	2.000	0.000	10.000				
	C	639.000	12.000	0.000				

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

		То						
		Α	В	С				
F	Α	0.00	0.01	0.99				
From	В	0.17	0.00	0.83				
	С	0.98	0.02	0.00				

Vehicle Mix

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

		То						
		Α	В	С				
From	Α	1.000	1.000	1.000				
FIOIII	В	1.000	1.000	1.000				
	С	1.000	1.000	1.000				



Heavy Vehicle Percentages - Junction 1 (for whole period)

		Т	o	
		Α	В	С
From	Α	0.0	0.0	0.0
FIOIII	В	0.0	0.0	0.0
	С	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C 0.02		7.58	0.02	Α
B-A	0.01	16.88	0.01	С
C-AB	0.05	4.60	0.08	Α
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	7.53	7.47	0.00	557.36	0.014	0.01	6.546	Α
B-A	1.51	1.49	0.00	310.30	0.005	0.00	11.657	В
C-AB	19.75	19.63	0.00	803.19	0.025	0.03	4.594	Α
C-A	470.36	470.36	0.00	-	-	-	-	-
A-B	5.27	5.27	0.00	-	-	-	-	-
A-C	571.41	571.41	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	8.99	8.98	0.00	527.32	0.017	0.02	6.944	Α
B-A	1.80	1.79	0.00	270.50	0.007	0.01	13.396	В
C-AB	27.33	27.28	0.00	843.32	0.032	0.04	4.411	Α
C-A	557.91	557.91	0.00	-	-	-	-	-
A-B	6.29	6.29	0.00	-	-	-	-	-
A-C	682.33	682.33	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	11.01	10.99	0.00	485.71	0.023	0.02	7.582	Α
B-A	2.20	2.19	0.00	215.50	0.010	0.01	16.875	С
C-AB	46.93	46.80	0.00	930.55	0.050	0.08	4.073	Α
C-A	669.83	669.83	0.00	-	-	-	-	-
A-B	7.71	7.71	0.00	-	-	-	-	-
A-C	835.67	835.67	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	11.01	11.01	0.00	485.70	0.023	0.02	7.582	Α
B-A	2.20	2.20	0.00	215.48	0.010	0.01	16.879	С
C-AB	46.98	46.98	0.00	930.63	0.050	0.08	4.074	Α
C-A	669.78	669.78	0.00	-	-	-	-	-
A-B	7.71	7.71	0.00	-	-	-	-	-
A-C	835.67	835.67	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	8.99	9.01	0.00	527.31	0.017	0.02	6.947	Α
B-A	1.80	1.81	0.00	270.47	0.007	0.01	13.402	В
C-AB	27.37	27.51	0.00	843.42	0.032	0.04	4.414	Α
C-A	557.86	557.86	0.00	-	-	-	-	-
A-B	6.29	6.29	0.00	-	-	-	-	-
A-C	682.33	682.33	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	7.53	7.54	0.00	557.35	0.014	0.01	6.547	Α
B-A	1.51	1.51	0.00	310.27	0.005	0.00	11.661	В
C-AB	19.83	19.88	0.00	803.25	0.025	0.03	4.597	Α
C-A	470.27	470.27	0.00	-	-	-	-	-
A-B	5.27	5.27	0.00	-	-	-	-	-
A-C	571.41	571.41	0.00	-	-	-	-	-



Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.4.487 [15039,24/03/2014] © Copyright TRL Limited, 2015

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Filename: Jn4 - B4267 (South Rd) - Cleveland Avenue.arc8

Path: P:\GBCFA\TP\HB\Projects\5133321 - Sully Sport & Social Club - TAYL3270\04 - Analysis\Junction Modelling

Report generation date: 25/06/2015 11:30:44

- » (Default Analysis Set) 2023 With Development, AM
- » (Default Analysis Set) 2023 With Development, PM
- » (Default Analysis Set) 2028 With Development, AM
- » (Default Analysis Set) 2028 With Development, PM
- » (Default Analysis Set) 2023 No Development, AM
- » (Default Analysis Set) 2023 No Development, PM
- » (Default Analysis Set) 2028 No Development, AM
- » (Default Analysis Set) 2028 No Development, PM

Summary of junction performance

		AM			
	Queue (PCU)	Delay (s)	RFC	LOS	
	A1 - 2023 With Developmen				
Stream B-AC	0.14	13.89	0.12	В	
Stream C-AB	0.10	4.12	0.06	Α	
Stream C-A	-	1	-	-	
Stream A-B	-	-	-	-	
Stream A-C	-	-	-	-	

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

"D5 - 2023 With Development, AM " model duration: 07:45 - 09:15

"D6 - 2023 With Development, PM" model duration: 16:45 - 18:15

"D7 - 2028 With Development, AM" model duration: 07:45 - 09:15

"D8 - 2028 With Development, PM" model duration: 16:45 - 18:15 "D9 - 2023 No Development, AM" model duration: 07:45 - 09:15

"D10 - 2023 No Development, PM" model duration: 16:45 - 18:15

"D10 - 2023 No Development, PM" model duration: 16:45 - 18:15 "D11 - 2028 No Development, AM" model duration: 07:45 - 09:15

"D12 - 2028 No Development, PM" model duration: 07:45 - 09:15

Run using Junctions 8.0.4.487 at 25/06/2015 11:30:41



File summary

Title	(untitled)
Location	
Site Number	
Date	09/10/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	TAYL3270
Description	

Analysis Options

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

Units

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

(Default Analysis Set) - 2023 With Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 With Development, AM	2023 With Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Cleveland Avenue	T-Junction	Two-way	A,B,C	8.05	Α

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown



Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (East)		Major
В	В	Clevedon Ave		Minor
С	С	B4267 South Rd (West)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	6.65		0.00		2.20	87.20	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane	4.45								✓		7	9

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	554.684	0.098	0.248	0.156	0.354
1	B-C	720.930	0.107	0.271	-	-
1	C-B	624.462	0.235	0.235	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	654.00	100.000
В	ONE HOUR	✓	33.00	100.000
С	ONE HOUR	✓	800.00	100.000



Turning Proportions

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

		То						
		Α	В	С				
From	Α	0.000	7.000	647.000				
FIOM	В	21.000	0.000	12.000				
	С	785.000	15.000	0.000				

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

		То						
		Α	В	С				
Eram	Α	0.00	0.01	0.99				
From	В	0.64	0.00	0.36				
	С	0.98	0.02	0.00				

Vehicle Mix

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

		То					
		Α	В	С			
From	Α	1.000	1.000	1.000			
FIOIII	В	1.000	1.000	1.000			
	C	1.000	1.000	1.000			

Heavy Vehicle Percentages - Junction 1 (for whole period)

	То						
		Α	В	С			
F	Α	0.0	0.0	0.0			
From	В	0.0	0.0	0.0			
	С	0.0	0.0	0.0			

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.12	13.89	0.14	В
C-AB	0.06	4.12	0.10	Α
C-A	-	-	-	-
A-B -		-	-	-
A-C	-	-	-	-



Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	24.84	24.58	0.00	398.98	0.062	0.07	9.608	Α
C-AB	26.56	26.41	0.00	900.85	0.029	0.04	4.117	Α
C-A	575.72	575.72	0.00	-	-	-	-	-
A-B	5.27	5.27	0.00	-	-	-	-	-
A-C	487.10	487.10	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	29.67	29.57	0.00	356.44	0.083	0.09	11.009	В
C-AB	42.23	42.14	0.00	982.03	0.043	0.06	3.829	Α
C-A	676.95	676.95	0.00	-	-	-	-	-
A-B	6.29	6.29	0.00	-	-	-	-	-
A-C	581.64	581.64	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	AC 36.33 36.14		0.00	295.59	0.123	0.14	13.865	В
C-AB	66.14	65.98	0.00	1061.76	0.062	0.10	3.614	Α
C-A	814.68	814.68	0.00	-	-	-	-	-
A-B	7.71	7.71	0.00	-	-	-	-	-
A-C	712.36	712.36	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	AC 36.33 36.33		0.00	0.00 295.56		0.14	13.886	В
C-AB	66.21	66.21	0.00	1061.85	0.062	0.10	3.615	Α
C-A	814.60	814.60	0.00	-	-	-	-	-
A-B	7.71	7.71	0.00	-	-	-	-	-
A-C	712.36	712.36	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	-AC 29.67 29.85		0.00	356.39	0.083	0.09	11.030	В
C-AB	42.32	42.48	0.00	982.17	0.043	0.06	3.834	Α
C-A	676.86	676.86	0.00	-	-	-	-	-
A-B	6.29	6.29	0.00	-	-	-	-	-
A-C	581.64	581.64	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	24.84 24.94		0.00 398.93		0.062	0.07	9.629	Α
C-AB	26.67	26.77	0.00	900.95	0.030	0.04	4.120	Α
C-A	575.61	575.61	0.00	-	-	-	-	-
A-B	5.27	5.27	0.00	-	-	-	-	-
A-C	487.10	487.10	0.00	-	-	-	-	-



(Default Analysis Set) - 2023 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 With Development, PM	2023 With Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Cleveland Avenue	T-Junction	Two-way	A,B,C	9.60	А

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (East)		Major
В	В	Clevedon Ave		Minor
С	С	B4267 South Rd (West)		Major

Major Arm Geometry

Arr	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	6.65		0.00		2.20	87.20	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane	4.45								✓		7	9



Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	554.684	0.098	0.248	0.156	0.354
1	B-C	720.930	0.107	0.271	-	-
1	C-B	624.462	0.235	0.235	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	761.00	100.000
В	ONE HOUR	✓	22.00	100.000
С	ONE HOUR	✓	652.00	100.000

Turning Proportions

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

		То					
		Α	В	С			
From	Α	0.000	21.000	740.000			
FIOIII	В	15.000	0.000	7.000			
	C	645.000	7.000	0.000			

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

	_							
		То						
		Α	В	С				
From	Α	0.00	0.03	0.97				
FIOIII	В	0.68	0.00	0.32				
	С	0.99	0.01	0.00				



Vehicle Mix

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

		То					
		Α	В	С			
From	Α	1.000	1.000	1.000			
FIOIII	В	1.000	1.000	1.000			
	С	1.000	1.000	1.000			

Heavy Vehicle Percentages - Junction 1 (for whole period)

		То						
		Α	В	С				
From	Α	0.0	0.0	0.0				
FIOIII	В	0.0	0.0	0.0				
	С	0.0	0.0	0.0				

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.09	13.86	0.09	В
C-AB	0.03	4.43	0.03	Α
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	16.56	16.39	0.00	387.29	0.043	0.04	9.702	А
C-AB	11.26	11.20	0.00	824.07	0.014	0.02	4.428	А
C-A	479.60	479.60	0.00	-	-	-	-	-
A-B	15.81	15.81	0.00	-	-	-	-	-
A-C	557.11	557.11	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	19.78	19.71	0.00	344.55	0.057	0.06	11.078	В
C-AB	15.53	15.50	0.00	862.80	0.018	0.02	4.248	Α
C-A	570.61	570.61	0.00	-	-	-	-	-
A-B	18.88	18.88	0.00	-	-	-	-	-
A-C	665.24	665.24	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	24.22	24.10	0.00	283.99	0.085	0.09	13.844	В
C-AB	23.06	23.02	0.00	914.63	0.025	0.03	4.037	А
C-A	694.80	694.80	0.00	-	-	-	-	-
A-B	23.12	23.12	0.00	-	-	-	-	-
A-C	814.76	814.76	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	24.22	24.22	0.00	283.98	0.085	0.09	13.857	В
C-AB	23.08	23.08	0.00	914.65	0.025	0.03	4.039	Α
C-A	694.79	694.79	0.00	-	-	-	-	-
A-B	23.12	23.12	0.00	-	-	-	-	-
A-C	814.76	814.76	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	19.78	19.90	0.00	344.54	0.057	0.06	11.095	В
C-AB	15.55	15.59	0.00	862.83	0.018	0.02	4.250	Α
C-A	570.59	570.59	0.00	-	-	-	-	-
A-B	18.88	18.88	0.00	-	-	-	-	-
A-C	665.24	665.24	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	16.56	16.63	0.00	387.27	0.043	0.05	9.716	Α
C-AB	11.30	11.32	0.00	824.10	0.014	0.02	4.429	Α
C-A	479.56	479.56	0.00	-	-	-	-	-
A-B	15.81	15.81	0.00	-	-	-	-	-
A-C	557.11	557.11	0.00	-	-	-	-	-

(Default Analysis Set) - 2028 With Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 With Development, AM	2028 With Development	AM		ONE HOUR	07:45	09:15	90	15		



Junction Network

Junctions

Junction	Name	Junction Type	nction Type Major Road Direction		Junction Delay (s)	Junction LOS
1	B4267 South Rd / Cleveland Avenue	T-Junction	Two-way	A,B,C	8.35	Α

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (East)		Major
В	В	Clevedon Ave		Minor
С	С	B4267 South Rd (West)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	6.65		0.00		2.20	87.20	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane	4.45								✓		7	9

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	554.684	0.098	0.248	0.156	0.354
1	B-C	720.930	0.107	0.271	-	-
1	C-B	624.462	0.235	0.235	-	-

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

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

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



Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	695.00	100.000
В	ONE HOUR	✓	36.00	100.000
С	ONE HOUR	√	853.00	100.000

Turning Proportions

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

			То	
		Α	В	С
F	Α	0.000	7.000	688.000
From	В	23.000	0.000	13.000
	C	837.000	16.000	0.000

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

	То				
From		Α	В	С	
	Α	0.00	0.01	0.99	
	В	0.64	0.00	0.36	
	С	0.98	0.02	0.00	

Vehicle Mix

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

	То				
From		Α	В	С	
	Α	1.000	1.000	1.000	
	В	1.000	1.000	1.000	
	С	1.000	1.000	1.000	



Heavy Vehicle Percentages - Junction 1 (for whole period)

		То				
		Α	В	С		
From	Α	0.0	0.0	0.0		
FIOIII	В	0.0	0.0	0.0		
	С	0.0	0.0	0.0		

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.15	15.43	0.17	С
C-AB	0.08	4.05	0.14	Α
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	27.10	26.80	0.00	384.49	0.070	0.07	10.056	В
C-AB	29.78	29.61	0.00	918.21	0.032	0.04	4.051	Α
C-A	612.40	612.40	0.00	-	-	-	-	-
A-B	5.27	5.27	0.00	-	-	-	-	-
A-C	517.96	517.96	0.00	-	-	-	-	-

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

	•	*						
Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	32.36	32.25	0.00	338.75	0.096	0.10	11.745	В
C-AB	48.43	48.32	0.00	1006.20	0.048	0.07	3.757	Α
C-A	718.40	718.40	0.00	-	-	-	-	-
A-B	6.29	6.29	0.00	-	-	-	-	-
A-C	618.50	618.50	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	39.64	39.39	0.00	273.03	0.145	0.17	15.390	С
C-AB	84.60	84.34	0.00	1114.52	0.076	0.14	3.494	Α
C-A	854.57	854.57	0.00	-	-	-	-	-
A-B	7.71	7.71	0.00	-	-	-	-	-
A-C	757.50	757.50	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	39.64	39.63	0.00	272.99	0.145	0.17	15.425	С
C-AB	84.72	84.72	0.00	1114.67	0.076	0.14	3.495	Α
C-A	854.45	854.45	0.00	-	-	-	-	-
A-B	7.71	7.71	0.00	-	-	-	-	-
A-C	757.50	757.50	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	32.36	32.61	0.00	338.69	0.096	0.11	11.770	В
C-AB	48.54	48.80	0.00	1006.41	0.048	0.07	3.763	Α
C-A	718.29	718.29	0.00	-	-	-	-	-
A-B	6.29	6.29	0.00	-	-	-	-	-
A-C	618.50	618.50	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	27.10	27.22	0.00	384.44	0.071	0.08	10.083	В
C-AB	29.91	30.02	0.00	918.32	0.033	0.04	4.054	А
C-A	612.28	612.28	0.00	-	-	-	-	-
A-B	5.27	5.27	0.00	-	-	-	-	-
A-C	517.96	517.96	0.00	-	-	-	-	-

(Default Analysis Set) - 2028 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 With Development, PM	2028 With Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junctio	n Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Cleveland Avenue	T-Junction	Two-way	A,B,C	10.35	В

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown



Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (East)		Major
В	В	Clevedon Ave		Minor
С	С	B4267 South Rd (West)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	6.65		0.00		2.20	87.20	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane	4.45								✓		7	9

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	554.684	0.098	0.248	0.156	0.354
1	B-C	720.930	0.107	0.271	-	-
1	C-B	624.462	0.235	0.235	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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



Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	812.00	100.000
В	ONE HOUR	✓	23.00	100.000
С	ONE HOUR	✓	692.00	100.000

Turning Proportions

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

		То						
From		Α	В	С				
	Α	0.000	23.000	789.000				
	В	16.000	0.000	7.000				
	O	685.000	7.000	0.000				

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

		То					
From		Α	В	С			
	Α	0.00	0.03	0.97			
	В	0.70	0.00	0.30			
	С	0.99	0.01	0.00			

Vehicle Mix

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

		То					
From		Α	В	С			
	Α	1.000	1.000	1.000			
	В	1.000	1.000	1.000			
	С	1.000	1.000	1.000			

Heavy Vehicle Percentages - Junction 1 (for whole period)

	То						
From		Α	В	С			
	Α	0.0	0.0	0.0			
	В	0.0	0.0	0.0			
	C	0.0	0.0	0.0			



Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.10 15.35		0.11	С
C-AB 0.03		4.37	0.03	Α
C-A	-	-	-	-
A-B	3		-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	17.32	17.12	0.00	370.66	0.047	0.05	10.177	В
C-AB	11.79	11.73	0.00	836.04	0.014	0.02	4.367	Α
C-A	509.18	509.18	0.00	-	-	-	-	-
A-B	17.32	17.32	0.00	-	-	-	-	-
A-C	594.00	594.00	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	20.68	20.60	0.00	324.85	0.064	0.07	11.829	В
C-AB	16.40	16.37	0.00	876.77	0.019	0.02	4.183	А
C-A	605.70	605.70	0.00	-	-	-	-	-
A-B	20.68	20.68	0.00	-	-	-	-	-
A-C	709.29	709.29	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	25.32	25.17	0.00	259.79	0.097	0.11	15.335	С
C-AB	24.65	24.61	0.00	930.99	0.026	0.03	3.971	Α
C-A	737.25	737.25	0.00	-	-	-	-	-
A-B	25.32	25.32	0.00	-	-	-	-	-
A-C	868.71	868.71	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	25.32	25.32	0.00	259.78	0.097	0.11	15.353	С
C-AB	24.67	24.67	0.00	931.01	0.027	0.03	3.971	А
C-A	737.24	737.24	0.00	-	-	-	-	-
A-B	25.32	25.32	0.00	-	-	-	-	-
A-C	868.71	868.71	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	20.68	20.83	0.00	324.84	0.064	0.07	11.849	В
C-AB	16.42	16.46	0.00	876.81	0.019	0.02	4.186	Α
C-A	605.67	605.67	0.00	-	-	-	-	-
A-B	20.68	20.68	0.00	-	-	-	-	-
A-C	709.29	709.29	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	17.32	17.39	0.00	370.64	0.047	0.05	10.192	В
C-AB	11.83	11.86	0.00	836.07	0.014	0.02	4.369	Α
C-A	509.14	509.14	0.00	-	-	-	-	-
A-B	17.32	17.32	0.00	-	-	-	-	-
A-C	594.00	594.00	0.00	-	-	-	-	-

(Default Analysis Set) - 2023 No Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 No Development, AM	2023 No Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Cleveland Avenue	T-Junction	Two-way	A,B,C	7.74	Α

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown



Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (East)		Major
В	В	Clevedon Ave		Minor
С	С	B4267 South Rd (West)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	6.65		0.00		2.20	87.20	✓	0.00

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

Minor Arm Geometry

Arı	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane	4.45								✓		7	9

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	554.684	0.098	0.248	0.156	0.354
1	B-C	720.930	0.107	0.271	-	-
1	С-В	624.462	0.235	0.235	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	599.00	100.000
В	ONE HOUR	✓	33.00	100.000
С	ONE HOUR	✓	769.00	100.000



Turning Proportions

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

		То					
		Α	В	С			
	Α	0.000	7.000	592.000			
From	В	21.000	0.000	12.000			
	С	754.000	15.000	0.000			

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

		То					
From		Α	В	С			
	Α	0.00	0.01	0.99			
	В	0.64	0.00	0.36			
	С	0.98	0.02	0.00			

Vehicle Mix

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

		То				
From		Α	В	O		
	Α	1.000	1.000	1.000		
	В	1.000	1.000	1.000		
	O	1.000	1.000	1.000		

Heavy Vehicle Percentages - Junction 1 (for whole period)

	То					
		Α	В	С		
	Α	0.0	0.0	0.0		
From	В	0.0	0.0	0.0		
	С	0.0	0.0	0.0		

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC 0.11		12.80	0.13	В
C-AB	0.06	4.15	0.10	Α
C-A -		-	-	-
A-B	-	-	-	-
A-C	-	-	-	-



Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	24.84	24.59	0.00	413.24	0.060	0.06	9.257	Α
C-AB	25.62	25.47	0.00	894.18	0.029	0.04	4.144	Α
C-A	553.32	553.32	0.00	-	-	-	-	-
A-B	5.27	5.27	0.00	-	-	-	-	-
A-C	445.69	445.69	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	29.67	29.58	0.00	373.80	0.079	0.09	10.456	В
C-AB	40.08	40.00	0.00	971.60	0.041	0.06	3.864	Α
C-A	651.23	651.23	0.00	-	-	-	-	-
A-B	6.29	6.29	0.00	-	-	-	-	-
A-C	532.20	532.20	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	36.33	36.17	0.00	317.60	0.114	0.13	12.783	В
C-AB	62.01	61.86	0.00	1049.20	0.059	0.10	3.645	Α
C-A	784.68	784.68	0.00	-	-	-	-	-
A-B	7.71	7.71	0.00	-	-	-	-	-
A-C	651.80	651.80	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	36.33	36.33	0.00	317.57	0.114	0.13	12.799	В
C-AB	62.07	62.07	0.00	1049.28	0.059	0.10	3.646	Α
C-A	784.61	784.61	0.00	-	-	-	-	-
A-B	7.71	7.71	0.00	-	-	-	-	-
A-C	651.80	651.80	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	29.67	29.83	0.00	373.76	0.079	0.09	10.471	В
C-AB	40.16	40.31	0.00	971.73	0.041	0.06	3.867	Α
C-A	651.16	651.16	0.00	-	-	-	-	-
A-B	6.29	6.29	0.00	-	-	-	-	-
A-C	532.20	532.20	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	AC 24.84 24.93		0.00	413.19	0.060	0.06	9.275	Α
C-AB	25.72	25.81	0.00	894.28	0.029	0.04	4.147	Α
C-A	553.22	553.22	0.00	-	-	-	-	-
A-B	5.27	5.27	0.00	-	-	-	-	-
A-C	445.69	445.69	0.00	-	-	-	-	-



(Default Analysis Set) - 2023 No Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 No Development, FM	2023 No Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Cleveland Avenue	T-Junction	Two-way	A,B,C	9.26	А

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (East)		Major
В	В	Clevedon Ave		Minor
С	С	B4267 South Rd (West)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	6.65		0.00		2.20	87.20	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane	4.45								✓		7	9



Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	554.684	0.098	0.248	0.156	0.354
1	B-C	720.930	0.107	0.271	-	-
1	С-В	624.462	0.235	0.235	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	726.00	100.000
В	ONE HOUR	✓	22.00	100.000
С	ONE HOUR	✓	597.00	100.000

Turning Proportions

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

	То				
		Α	В	С	
From	Α	0.000	21.000	705.000	
FIOIII	В	15.000	0.000	7.000	
	C	590.000	7.000	0.000	

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

	То						
		Α	В	С			
	Α	0.00	0.03	0.97			
From	В	0.68	0.00	0.32			
	С	0.99	0.01	0.00			



Vehicle Mix

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

	То					
	Α		В	С		
Erom	Α	1.000	1.000	1.000		
From	В	1.000	1.000	1.000		
	С	1.000	1.000	1.000		

Heavy Vehicle Percentages - Junction 1 (for whole period)

	То						
-		Α	В	С			
	Α	0.0	0.0	0.0			
From	В	0.0	0.0	0.0			
	С	0.0	0.0	0.0			

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.08	12.88	0.09	В
C-AB	0.02	4.54	0.03	Α
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	16.56	16.39	0.00	400.00	0.041	0.04	9.381	А
C-AB	10.64	10.58	0.00	802.77	0.013	0.01	4.544	А
C-A	438.82	438.82	0.00	-	-	-	-	-
A-B	15.81	15.81	0.00	-	-	-	-	-
A-C	530.76	530.76	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	19.78	19.72	0.00	360.03	0.055	0.06	10.577	В
C-AB	14.53	14.51	0.00	838.03	0.017	0.02	4.371	Α
C-A	522.16	522.16	0.00	-	-	-	-	-
A-B	18.88	18.88	0.00	-	-	-	-	-
A-C	633.78	633.78	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	24.22	24.11	0.00	303.61	0.080	0.09	12.874	В
C-AB	21.34	21.30	0.00	885.64	0.024	0.03	4.164	Α
C-A	635.97	635.97	0.00	-	-	-	-	-
A-B	23.12	23.12	0.00	-	-	-	-	-
A-C	776.22	776.22	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	24.22	24.22	0.00	303.60	0.080	0.09	12.884	В
C-AB	21.35	21.35	0.00	885.66	0.024	0.03	4.166	Α
C-A	635.95	635.95	0.00	-	-	-	-	-
A-B	23.12	23.12	0.00	-	-	-	-	-
A-C	776.22	776.22	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	19.78	19.89	0.00	360.02	0.055	0.06	10.586	В
C-AB	14.55	14.59	0.00	838.06	0.017	0.02	4.373	Α
C-A	522.14	522.14	0.00	-	-	-	-	-
A-B	18.88	18.88	0.00	-	-	-	-	-
A-C	633.78	633.78	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	16.56	16.62	0.00	399.98	0.041	0.04	9.391	Α
C-AB	10.67	10.69	0.00	802.80	0.013	0.02	4.544	Α
C-A	438.78	438.78	0.00	-	-	-	-	-
A-B	15.81	15.81	0.00	-	-	-	-	-
A-C	530.76	530.76	0.00	-	-	-	-	-

(Default Analysis Set) - 2028 No Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 No Development, AM	2028 No Development	AM		ONE HOUR	07:45	09:15	90	15		



Junction Network

Junctions

ı	Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
	1	B4267 South Rd / Cleveland Avenue	T-Junction	Two-way	A,B,C	8.11	Α

Junction Network Options

Driving Side	Lighting			
Left	Normal/unknown			

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	A A B4267 South Rd (Major
В	В	Clevedon Ave		Minor
С	С	B4267 South Rd (West)		Major

Major Arm Geometry

Am	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	6.65		0.00		2.20	87.20	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane	4.45								✓		7	9

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Junction Stream		Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	554.684	0.098	0.248	0.156	0.354
1	B-C	720.930	0.107	0.271	-	-
1	C-B	624.462	0.235	0.235	-	-

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

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

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



Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	640.00	100.000
В	ONE HOUR	✓	36.00	100.000
С	ONE HOUR	√	822.00	100.000

Turning Proportions

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

	То								
		Α	В	С					
From	Α	0.000	7.000	633.000					
FIOIII	В	23.000	0.000	13.000					
	C	806.000	16.000	0.000					

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

	То						
		Α	В	С			
F	Α	0.00	0.01	0.99			
From	В	0.64	0.00	0.36			
	С	0.98	0.02	0.00			

Vehicle Mix

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

		То							
		Α	В	С					
Eram	Α	1.000	1.000	1.000					
From	В	1.000	1.000	1.000					
	С	1.000	1.000	1.000					



Heavy Vehicle Percentages - Junction 1 (for whole period)

	То				
		Α	В	С	
	Α	0.0	0.0	0.0	
From	В	0.0	0.0	0.0	
	С	0.0	0.0	0.0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.13	14.08	0.15	В
C-AB	0.07	4.08	0.11	Α
C-A	-A		-	-
A-B	-	-	-	-
A-C	-c		-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	27.10	26.81	0.00	398.84	0.068	0.07	9.670	Α
C-AB	28.72	28.56	0.00	911.62	0.032	0.04	4.077	Α
C-A	590.12	590.12	0.00	-	-	-	-	-
A-B	5.27	5.27	0.00	-	-	-	-	-
A-C	476.56	476.56	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	32.36	32.26	0.00	356.27	0.091	0.10	11.107	В
C-AB	45.96	45.85	0.00	995.79	0.046	0.07	3.789	А
C-A	693.00	693.00	0.00	-	-	-	-	-
A-B	6.29	6.29	0.00	-	-	-	-	-
A-C	569.05	569.05	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	39.64	39.42	0.00	295.37	0.134	0.15	14.054	В
C-AB	72.08	71.90	0.00	1077.44	0.067	0.11	3.579	Α
C-A	832.96	832.96	0.00	-	-	-	-	-
A-B	7.71	7.71	0.00	-	-	-	-	-
A-C	696.95	696.95	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	39.64	39.63	0.00	295.34	0.134	0.15	14.078	В
C-AB	72.17	72.16	0.00	1077.53	0.067	0.11	3.581	Α
C-A	832.87	832.87	0.00	-	-	-	-	-
A-B	7.71	7.71	0.00	-	-	-	-	-
A-C	696.95	696.95	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	32.36	32.57	0.00	356.22	0.091	0.10	11.129	В
C-AB	46.06	46.24	0.00	995.95	0.046	0.07	3.793	Α
C-A	692.90	692.90	0.00	-	-	-	-	-
A-B	6.29	6.29	0.00	-	-	-	-	-
A-C	569.05	569.05	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	27.10	27.21	0.00	398.78	0.068	0.07	9.692	Α
C-AB	28.84	28.95	0.00	911.73	0.032	0.04	4.078	Α
C-A	590.00	590.00	0.00	-	-	-	-	-
A-B	5.27	5.27	0.00	-	-	-	-	-
A-C	476.56	476.56	0.00	-	-	-	-	-

(Default Analysis Set) - 2028 No Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 No Development, PM	2028 No Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type Major Road Direction		Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Cleveland Avenue	T-Junction	Two-way	A,B,C	9.92	А

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown



Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (East)		Major
В	В	Clevedon Ave		Minor
С	С	B4267 South Rd (West)		Major

Major Arm Geometry

Arm			Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	6.65		0.00		2.20	87.20	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane	4.45								✓		7	9

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	554.684	0.098	0.248	0.156	0.354
1	B-C	720.930	0.107	0.271	-	-
1	C-B	624.462	0.235	0.235	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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



Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	777.00	100.000
В	ONE HOUR	✓	23.00	100.000
С	ONE HOUR	✓	637.00	100.000

Turning Proportions

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

		То					
From		Α	В	С			
	Α	0.000	23.000	754.000			
	В	16.000	0.000	7.000			
	C	630.000	7.000	0.000			

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

	То					
From		Α	В	С		
	Α	0.00	0.03	0.97		
	В	0.70	0.00	0.30		
	С	0.99	0.01	0.00		

Vehicle Mix

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

		То					
		Α	В	С			
Erom	Α	1.000	1.000	1.000			
From	В	1.000	1.000	1.000			
	С	1.000	1.000	1.000			

Heavy Vehicle Percentages - Junction 1 (for whole period)

	То					
		Α	В	С		
From	Α	0.0	0.0	0.0		
FIOIII	В	0.0	0.0	0.0		
	C	0.0	0.0	0.0		



Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.09	14.15	0.10	В
C-AB	C-AB 0.03 4.48		0.03	Α
C-A	-	-	-	-
A-B	-	-	-	-
A-C	A-C		-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	17.32	17.13	0.00	383.48	0.045	0.05	9.821	Α
C-AB	11.14	11.08	0.00	814.90	0.014	0.02	4.478	Α
C-A	468.42	468.42	0.00	-	-	-	-	-
A-B	17.32	17.32	0.00	-	-	-	-	-
A-C	567.65	567.65	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	20.68	20.61	0.00	340.49	0.061	0.06	11.251	В
C-AB	15.36	15.34	0.00	852.28	0.018	0.02	4.301	Α
C-A	557.29	557.29	0.00	-	-	-	-	-
A-B	20.68	20.68	0.00	-	-	-	-	-
A-C	677.83	677.83	0.00	-	-	-	-	_

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	25.32	25.19	0.00	279.67	0.091	0.10	14.139	В
C-AB	22.83	22.79	0.00	902.51	0.025	0.03	4.092	А
C-A	678.52	678.52	0.00	-	-	-	-	-
A-B	25.32	25.32	0.00	-	-	-	-	-
A-C	830.17	830.17	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	25.32	25.32	0.00	279.66	0.091	0.10	14.153	В
C-AB	22.85	22.85	0.00	902.53	0.025	0.03	4.092	Α
C-A	678.50	678.50	0.00	-	-	-	-	-
A-B	25.32	25.32	0.00	-	-	-	-	-
A-C	830.17	830.17	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	20.68	20.81	0.00	340.48	0.061	0.07	11.265	В
C-AB	15.38	15.42	0.00	852.31	0.018	0.02	4.301	Α
C-A	557.27	557.27	0.00	-	-	-	-	-
A-B	20.68	20.68	0.00	-	-	-	-	-
A-C	677.83	677.83	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	17.32	17.39	0.00	383.46	0.045	0.05	9.837	Α
C-AB	11.18	11.21	0.00	814.93	0.014	0.02	4.480	Α
C-A	468.38	468.38	0.00	-	-	-	-	-
A-B	17.32	17.32	0.00	-	-	-	-	-
A-C	567.65	567.65	0.00	-	-	-	-	-



Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.4.487 [15039,24/03/2014] © Copyright TRL Limited, 2015

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Filename: Jn3 - B4267 - Cog Road.arc8

Path: P:\GBCFA\TP\HB\Projects\5133321 - Sully Sport & Social Club - TAYL3270\04 - Analysis\Junction Modelling

Report generation date: 25/06/2015 09:18:29

- » (Default Analysis Set) 2023 No Development, AM
- » (Default Analysis Set) 2023 No Development, PM
- » (Default Analysis Set) 2028 No Development, AM
- » (Default Analysis Set) 2028 No Development, PM
- » (Default Analysis Set) 2023 With Development, AM
- » (Default Analysis Set) 2023 With Development, PM
- » (Default Analysis Set) 2028 With Development, AM
- » (Default Analysis Set) 2028 With Development, PM
- » (Default Analysis Set) 2023 With Development (No Growth), AM
- » (Default Analysis Set) 2023 With Development (No Growth), PM
- » (Default Analysis Set) 2023 No Development (No Growth), AM
- » (Default Analysis Set) 2023 No Development (No Growth), PM

Summary of junction performance

		AM				
	Queue (PCU)	Delay (s)	RFC	LOS		
	A1 - 2023 No Development					
Stream B-C	4.65	226.77	0.99	F		
Stream B-A	8.94	159.03	0.98	F		
Stream C-AB	0.40	4.74	0.15	Α		
Stream C-A	-	-	-	-		
Stream A-B	-	-	-	-		
Stream A-C	-	-	-	-		

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

"D1 - 2023 No Development, AM " model duration: 07:45 - 09:15

"D2 - 2023 No Development, PM" model duration: 16:45 - 18:15

"D3 - 2028 No Development, AM" model duration: 07:45 - 09:15

"D4 - 2028 No Development, PM" model duration: 16:45 - 18:15

"D5 - 2023 With Development, AM" model duration: 07:45 - 09:15

"D6 - 2023 With Development, PM" model duration: 16:45 - 18:15 "D7 - 2028 With Development, AM" model duration: 07:45 - 09:15

"D8 - 2028 With Development, PM" model duration: 16:45 - 18:15

"D9 - 2023 With Development (No Growth), AM" model duration: 07:45 - 09:15

"D10 - 2023 With Development (No Growth), PM" model duration: 16:45 - 18:15

"D11 - 2023 No Development (No Growth), AM" model duration: 07:45 - 09:15

"D12 - 2023 No Development (No Growth), PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.4.487 at 25/06/2015 09:18:25



File summary

Title	(untitled)
Location	
Site Number	
Date	09/10/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	TAYL3270
Description	

Analysis Options

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

Units

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

(Default Analysis Set) - 2023 No Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 No Development, AM	2023 No Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Hayes Rd	T-Junction	Two-way	A,B,C	128.34	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown



Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (West)		Major
В	В	Cog Rd		Minor
С	С	B4267 South Rd (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	7.80		0.00		2.20	85.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane plus flare				10.00	10.00	6.50	4.20	3.10	✓	2.00	34	37

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	for	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	578.975	0.097	0.246	0.155	0.351
1	B-C	705.289	0.100	0.252	-	-
1	C-B	623.188	0.223	0.223	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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



Entry Flows

General Flows Data

Am	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	1002.00	100.000
В	ONE HOUR	✓	258.00	100.000
С	ONE HOUR	✓	685.00	100.000

Turning Proportions

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

		То					
		Α	В	C			
F	Α	0.000	198.000	804.000			
From	В	191.000	0.000	67.000			
	C	654.000	31.000	0.000			

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

	То				
		Α	В	С	
F	Α	0.00	0.20	0.80	
From	В	0.74	0.00	0.26	
	С	0.95	0.05	0.00	

Vehicle Mix

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

	То				
		Α	В	С	
Erom	Α	1.000	1.000	1.000	
From	В	1.000	1.000	1.000	
	С	1.000	1.000	1.000	

Heavy Vehicle Percentages - Junction 1 (for whole period)

	То				
		Α	В	С	
Fram	Α	0.0	0.0	0.0	
From	В	0.0	0.0	0.0	
	U	0.0	0.0	0.0	



Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.99	226.77	4.65	F
B-A	0.98	159.03	8.94	F
C-AB	0.15	4.74	0.40	А
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	50.44	49.96	0.00	466.16	0.108	0.12	8.640	Α
B-A	143.79	140.84	0.00	331.36	0.434	0.74	18.626	С
C-AB	56.51	56.03	0.00	817.63	0.069	0.12	4.728	Α
C-A	459.19	459.19	0.00	-	-	-	-	-
A-B	149.06	149.06	0.00	-	-	-	-	-
A-C	605.29	605.29	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	60.23	59.96	0.00	378.04	0.159	0.19	11.309	В
B-A	171.71	168.96	0.00	283.01	0.607	1.43	30.778	D
C-AB	81.83	81.54	0.00	862.10	0.095	0.19	4.614	Α
C-A	533.97	533.97	0.00	-	-	-	-	-
A-B	178.00	178.00	0.00	-	-	-	-	-
A-C	722.78	722.78	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	73.77	59.33	0.00	74.25	0.994	3.80	175.658	F
B-A	210.29	190.30	0.00	215.23	0.977	6.42	103.230	F
C-AB	138.48	137.66	0.00	938.19	0.148	0.40	4.502	Α
C-A	615.72	615.72	0.00	-	-	-	-	-
A-B	218.00	218.00	0.00	-	-	-	-	-
A-C	885.22	885.22	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	73.77	70.36	0.00	80.74	0.914	4.65	226.769	F
B-A	210.29	200.21	0.00	214.21	0.982	8.94	159.033	F
C-AB	138.92	138.90	0.00	938.70	0.148	0.40	4.512	Α
C-A	615.28	615.28	0.00	-	-	-	-	-
A-B	218.00	218.00	0.00	-	-	-	-	-
A-C	885.22	885.22	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	60.23	77.88	0.00	319.75	0.188	0.24	15.952	С
B-A	171.71	200.55	0.00	281.51	0.610	1.73	55.445	F
C-AB	82.23	83.04	0.00	862.75	0.095	0.20	4.627	Α
C-A	533.57	533.57	0.00	-	-	-	-	-
A-B	178.00	178.00	0.00	-	-	-	-	-
A-C	722.78	722.78	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	50.44	50.89	0.00	460.09	0.110	0.12	8.806	Α
B-A	143.79	147.55	0.00	331.38	0.434	0.79	19.954	С
C-AB	56.90	57.20	0.00	818.00	0.070	0.12	4.737	Α
C-A	458.80	458.80	0.00	-	-	-	-	-
A-B	149.06	149.06	0.00	-	-	-	-	-
A-C	605.29	605.29	0.00	-	-	-	-	-

(Default Analysis Set) - 2023 No Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 No Development, PM	2023 No Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Hayes Rd	T-Junction	Two-way	A,B,C	10.93	В



Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (West)		Major
В	В	Cog Rd		Minor
С	С	B4267 South Rd (East)		Major

Major Arm Geometry

Am	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	7.80		0.00		2.20	85.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane plus flare				10.00	10.00	6.50	4.20	3.10	✓	2.00	34	37

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	579.502	0.097	0.246	0.155	0.351
1	B-C	704.167	0.099	0.251	-	-
1	C-B	623.188	0.223	0.223	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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



Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	683.00	100.000
В	ONE HOUR	✓	147.00	100.000
С	ONE HOUR	✓	622.00	100.000

Turning Proportions

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

		То						
		Α	В	C				
F	Α	0.000	158.000	525.000				
From	В	110.000	0.000	37.000				
	C	562.000	60.000	0.000				

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

		То					
		Α	В	С			
From	Α	0.00	0.23	0.77			
FIOIII	В	0.75	0.00	0.25			
	C	0.90	0.10	0.00			

Vehicle Mix

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

		То						
		Α	В	С				
From	Α	1.000	1.000	1.000				
FIOIII	В	1.000	1.000	1.000				
	С	1.000	1.000	1.000				

Heavy Vehicle Percentages - Junction 1 (for whole period)

	То						
		Α	В	С			
Fram	Α	0.0	0.0	0.0			
From	В	0.0	0.0	0.0			
	U	0.0	0.0	0.0			



Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.09	8.30	0.09	Α
B-A	0.40	20.00	0.66	С
C-AB	0.22	5.06	0.66	Α
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	27.86	27.65	0.00	560.50	0.050	0.05	6.756	Α
B-A	82.81	81.75	0.00	389.41	0.213	0.27	11.663	В
C-AB	92.71	91.68	0.00	809.25	0.115	0.26	5.017	Α
C-A	375.56	375.56	0.00	-	-	-	-	-
A-B	118.95	118.95	0.00	-	-	-	-	-
A-C	395.25	395.25	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	33.26	33.20	0.00	527.97	0.063	0.07	7.276	Α
B-A	98.89	98.42	0.00	352.28	0.281	0.38	14.153	В
C-AB	128.71	128.20	0.00	849.67	0.151	0.39	4.999	Α
C-A	430.45	430.45	0.00	-	-	-	-	-
A-B	142.04	142.04	0.00	-	-	-	-	-
A-C	471.96	471.96	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	40.74	40.63	0.00	475.35	0.086	0.09	8.279	Α
B-A	121.11	120.04	0.00	301.13	0.402	0.65	19.761	С
C-AB	200.34	199.27	0.00	914.30	0.219	0.66	5.049	Α
C-A	484.49	484.49	0.00	-	-	-	-	-
A-B	173.96	173.96	0.00	-	-	-	-	-
A-C	578.04	578.04	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	40.74	40.74	0.00	474.31	0.086	0.09	8.302	Α
B-A	121.11	121.07	0.00	300.96	0.402	0.66	20.000	С
C-AB	200.86	200.82	0.00	914.91	0.220	0.66	5.062	Α
C-A	483.98	483.98	0.00	-	-	-	-	-
A-B	173.96	173.96	0.00	-	-	-	-	-
A-C	578.04	578.04	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	33.26	33.36	0.00	526.90	0.063	0.07	7.294	Α
B-A	98.89	99.94	0.00	352.04	0.281	0.40	14.337	В
C-AB	129.27	130.31	0.00	850.53	0.152	0.40	5.017	Α
C-A	429.90	429.90	0.00	-	-	-	-	-
A-B	142.04	142.04	0.00	-	-	-	-	-
A-C	471.96	471.96	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	27.86	27.92	0.00	559.60	0.050	0.05	6.770	Α
B-A	82.81	83.31	0.00	389.11	0.213	0.27	11.790	В
C-AB	93.44	93.97	0.00	809.90	0.115	0.27	5.041	Α
C-A	374.83	374.83	0.00	-	-	-	-	-
A-B	118.95	118.95	0.00	-	-	-	-	-
A-C	395.25	395.25	0.00	-	-	-	-	-

(Default Analysis Set) - 2028 No Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 No Development, AM	2028 No Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Hayes Rd	T-Junction	Two-way	A,B,C	229.65	F



Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (West)		Major
В	В	Cog Rd		Minor
С	С	B4267 South Rd (East)		Major

Major Arm Geometry

Am	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	7.80		0.00		2.20	85.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane plus flare				10.00	10.00	6.50	4.20	3.10	✓	2.00	34	37

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	578.515	0.097	0.245	0.154	0.351
1	B-C	706.268	0.100	0.252	-	-
1	C-B	623.188	0.223	0.223	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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



Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	1070.00	100.000
В	ONE HOUR	✓	270.00	100.000
С	ONE HOUR	✓	733.00	100.000

Turning Proportions

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

		То					
		Α	В	С			
F	Α	0.000	210.000	860.000			
From	В	198.000	0.000	72.000			
	C	699.000	34.000	0.000			

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

		То					
		Α	В	С			
From	Α	0.00	0.20	0.80			
FIOIII	В	0.73	0.00	0.27			
	С	0.95	0.05	0.00			

Vehicle Mix

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

		То					
		Α	В	С			
Erom	Α	1.000	1.000	1.000			
From	В	1.000	1.000	1.000			
	С	1.000	1.000	1.000			

Heavy Vehicle Percentages - Junction 1 (for whole period)

		Т	o	
		Α	В	С
From	Α	0.0	0.0	0.0
FIOIII	В	0.0	0.0	0.0
	С	0.0	0.0	0.0



Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	1.17	382.94	8.18	F
B-A	1.15	311.91	19.50	F
C-AB	0.18	4.70	0.55	Α
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	54.21	53.66	0.00	445.93	0.122	0.14	9.164	Α
B-A	149.06	145.60	0.00	313.80	0.475	0.87	21.006	С
C-AB	66.21	65.62	0.00	833.31	0.079	0.15	4.688	Α
C-A	485.64	485.64	0.00	-	-	-	-	-
A-B	158.10	158.10	0.00	-	-	-	-	-
A-C	647.45	647.45	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	64.73	64.33	0.00	332.82	0.194	0.24	13.388	В
B-A	178.00	173.95	0.00	261.97	0.679	1.88	39.191	Е
C-AB	97.32	96.93	0.00	881.28	0.110	0.24	4.592	Α
C-A	561.63	561.63	0.00	-	-	-	-	-
A-B	188.79	188.79	0.00	-	-	-	-	-
A-C	773.12	773.12	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	79.27	57.99	0.00	67.67	1.172	5.56	238.468	F
B-A	218.00	179.18	0.00	190.22	1.146	11.58	170.330	F
C-AB	169.98	168.80	0.00	964.82	0.176	0.54	4.531	Α
C-A	637.07	637.07	0.00	-	-	-	-	-
A-B	231.21	231.21	0.00	-	-	-	-	-
A-C	946.88	946.88	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	79.27	68.80	0.00	72.73	1.090	8.18	382.942	F
B-A	218.00	186.33	0.00	189.40	1.151	19.50	311.914	F
C-AB	170.67	170.64	0.00	965.56	0.177	0.55	4.545	Α
C-A	636.37	636.37	0.00	-	-	-	-	-
A-B	231.21	231.21	0.00	-	-	-	-	-
A-C	946.88	946.88	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	64.73	89.30	0.00	107.73	0.601	2.03	201.645	F
B-A	178.00	242.80	0.00	258.37	0.689	3.30	179.800	F
C-AB	97.92	99.11	0.00	882.22	0.111	0.25	4.611	Α
C-A	561.03	561.03	0.00	-	-	-	-	-
A-B	188.79	188.79	0.00	-	-	-	-	-
A-C	773.12	773.12	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	54.21	61.77	0.00	434.08	0.125	0.14	9.861	Α
B-A	149.06	158.46	0.00	313.06	0.476	0.95	24.543	С
C-AB	66.72	67.13	0.00	833.81	0.080	0.15	4.700	Α
C-A	485.12	485.12	0.00	-	-	-	-	-
A-B	158.10	158.10	0.00	-	-	-	-	-
A-C	647.45	647.45	0.00	-	-	-	-	-

(Default Analysis Set) - 2028 No Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 No Development, FM	2028 No Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Hayes Rd	T-Junction	Two-way	A,B,C	11.87	В



Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (West)		Major
В	В	Cog Rd		Minor
С	С	B4267 South Rd (East)		Major

Major Arm Geometry

Am	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	7.80		0.00		2.20	85.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane plus flare				10.00	10.00	6.50	4.20	3.10	✓	2.00	34	37

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	579.192	0.097	0.246	0.155	0.351
1	B-C	704.828	0.100	0.252	-	-
1	C-B	623.188	0.223	0.223	-	-

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

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

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



Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	726.00	100.000
В	ONE HOUR	✓	156.00	100.000
С	ONE HOUR	✓	666.00	100.000

Turning Proportions

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

		То					
		Α	В	C			
F	Α	0.000	166.000	560.000			
From	В	116.000	0.000	40.000			
	C	601.000	65.000	0.000			

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

		То					
		Α	В	С			
From	Α	0.00	0.23	0.77			
FIOIII	В	0.74	0.00	0.26			
	С	0.90	0.10	0.00			

Vehicle Mix

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

		То					
		Α	В	С			
From	Α	1.000	1.000	1.000			
FIOIII	В	1.000	1.000	1.000			
	С	1.000	1.000	1.000			

Heavy Vehicle Percentages - Junction 1 (for whole period)

		Т	o	
		Α	В	С
Erom	Α	0.0	0.0	0.0
From	В	0.0	0.0	0.0
	С	0.0	0.0	0.0



Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.10	8.83	0.11	Α
B-A	0.45	23.33	0.81	С
C-AB	0.25	5.15	0.81	А
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	30.11	29.88	0.00	550.97	0.055	0.06	6.905	Α
B-A	87.33	86.14	0.00	376.28	0.232	0.30	12.358	В
C-AB	105.69	104.47	0.00	824.04	0.128	0.31	5.003	Α
C-A	395.71	395.71	0.00	-	-	-	-	-
A-B	124.97	124.97	0.00	-	-	-	-	-
A-C	421.60	421.60	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	35.96	35.89	0.00	515.01	0.070	0.07	7.513	Α
B-A	104.28	103.72	0.00	336.62	0.310	0.44	15.419	С
C-AB	152.13	151.49	0.00	872.98	0.174	0.47	5.000	Α
C-A	446.59	446.59	0.00	-	-	-	-	-
A-B	149.23	149.23	0.00	-	-	-	-	-
A-C	503.43	503.43	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	44.04	43.91	0.00	453.24	0.097	0.11	8.792	Α
B-A	127.72	126.30	0.00	281.98	0.453	0.79	22.914	С
C-AB	235.66	234.32	0.00	938.34	0.251	0.80	5.132	Α
C-A	497.61	497.61	0.00	-	-	-	-	-
A-B	182.77	182.77	0.00	-	-	-	-	-
A-C	616.57	616.57	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	44.04	44.04	0.00	451.59	0.098	0.11	8.832	Α
B-A	127.72	127.65	0.00	281.77	0.453	0.81	23.329	С
C-AB	236.38	236.33	0.00	939.11	0.252	0.81	5.149	Α
C-A	496.90	496.90	0.00	-	-	-	-	-
A-B	182.77	182.77	0.00	-	-	-	-	-
A-C	616.57	616.57	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	35.96	36.08	0.00	513.50	0.070	0.08	7.541	Α
B-A	104.28	105.68	0.00	336.32	0.310	0.46	15.701	С
C-AB	152.90	154.20	0.00	874.13	0.175	0.49	5.025	Α
C-A	445.82	445.82	0.00	-	-	-	-	-
A-B	149.23	149.23	0.00	-	-	-	-	-
A-C	503.43	503.43	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	30.11	30.18	0.00	549.88	0.055	0.06	6.929	Α
B-A	87.33	87.94	0.00	375.92	0.232	0.31	12.529	В
C-AB	106.59	107.26	0.00	824.87	0.129	0.32	5.032	Α
C-A	394.81	394.81	0.00	-	-	-	-	-
A-B	124.97	124.97	0.00	-	-	-	-	-
A-C	421.60	421.60	0.00	-	-	-	-	-

(Default Analysis Set) - 2023 With Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 With Development, AM	2023 With Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Hayes Rd	T-Junction	Two-way	A,B,C	163.04	F



Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (West)		Major
В	В	Cog Rd		Minor
С	С	B4267 South Rd (East)		Major

Major Arm Geometry

Arr	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	7.80		0.00		2.20	85.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane plus flare				10.00	10.00	6.50	4.20	3.10	✓	2.00	34	37

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	578.600	0.097	0.246	0.154	0.351
1	B-C	706.088	0.100	0.252	-	-
1	С-В	623.188	0.223	0.223	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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



Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	1024.00	100.000
В	ONE HOUR	✓	260.00	100.000
С	ONE HOUR	✓	734.00	100.000

Turning Proportions

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

			То		
_		Α	В	С	
	Α	0.000	198.000	826.000	
From	В	191.000	0.000	69.000	
	C	701.000	33.000	0.000	

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

		7	Го		
		Α	В	С	
From	Α	0.00	0.19	0.81	
FIOIII	В	0.73	0.00	0.27	
	C	0.96	0.04	0.00	

Vehicle Mix

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

		То							
		Α	В	С					
From	Α	1.000	1.000	1.000					
	В	1.000	1.000	1.000					
	С	1.000	1.000	1.000					

Heavy Vehicle Percentages - Junction 1 (for whole period)

		То							
From		Α	В	С					
	Α	0.0	0.0	0.0					
	В	0.0	0.0	0.0					
	С	0.0	0.0	0.0					



Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	1.07	274.62	5.98	F
B-A	1.05	218.93	12.81	F
C-AB	0.17	4.65	0.49	А
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	51.95	51.44	0.00	459.50	0.113	0.13	8.812	Α
B-A	143.79	140.68	0.00	321.07	0.448	0.78	19.657	С
C-AB	63.72	63.17	0.00	839.86	0.076	0.14	4.634	Α
C-A	488.87	488.87	0.00	-	-	-	-	-
A-B	149.06	149.06	0.00	-	-	-	-	-
A-C	621.86	621.86	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	62.03	61.72	0.00	362.04	0.171	0.20	11.975	В
B-A	171.71	168.51	0.00	270.74	0.634	1.58	34.171	D
C-AB	93.24	92.89	0.00	888.58	0.105	0.22	4.528	Α
C-A	566.61	566.61	0.00	-	-	-	-	-
A-B	178.00	178.00	0.00	-	-	-	-	-
A-C	742.56	742.56	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	75.97	58.77	0.00	71.11	1.068	4.50	201.068	F
B-A	210.29	183.21	0.00	200.60	1.048	8.35	130.163	F
C-AB	161.57	160.52	0.00	972.92	0.166	0.49	4.437	Α
C-A	646.58	646.58	0.00	-	-	-	-	-
A-B	218.00	218.00	0.00	-	-	-	-	-
A-C	909.44	909.44	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	75.97	70.08	0.00	77.01	0.987	5.98	274.623	F
B-A	210.29	192.44	0.00	199.68	1.053	12.81	218.929	F
C-AB	162.17	162.14	0.00	973.57	0.167	0.49	4.450	Α
C-A	645.98	645.98	0.00	-	-	-	-	-
A-B	218.00	218.00	0.00	-	-	-	-	-
A-C	909.44	909.44	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	62.03	84.61	0.00	254.69	0.244	0.33	23.937	С
B-A	171.71	214.72	0.00	268.73	0.639	2.06	89.751	F
C-AB	93.77	94.81	0.00	889.41	0.105	0.23	4.541	Α
C-A	566.08	566.08	0.00	-	-	-	-	-
A-B	178.00	178.00	0.00	-	-	-	-	-
A-C	742.56	742.56	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	51.95	52.75	0.00	451.84	0.115	0.13	9.039	Α
B-A	143.79	148.66	0.00	321.06	0.448	0.84	21.421	С
C-AB	64.19	64.56	0.00	840.31	0.076	0.14	4.647	Α
C-A	488.40	488.40	0.00	-	-	-	-	-
A-B	149.06	149.06	0.00	-	-	-	-	-
A-C	621.86	621.86	0.00	-	-	-	-	-

(Default Analysis Set) - 2023 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 With Development, PM	2023 With Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Hayes Rd	T-Junction	Two-way	A,B,C	11.40	В



Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (West)		Major
В	В	Cog Rd		Minor
С	С	B4267 South Rd (East)		Major

Major Arm Geometry

Arr	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	7.80		0.00		2.20	85.00	✓	0.00

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

Minor Arm Geometry

Arr	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane plus flare				10.00	10.00	6.50	4.20	3.10	✓	2.00	34	37

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	578.515	0.097	0.245	0.154	0.351
1	B-C	706.268	0.100	0.252	-	-
1	C-B	623.188	0.223	0.223	-	-

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn		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				✓	✓

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

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



Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	725.00	100.000
В	ONE HOUR	✓	150.00	100.000
С	ONE HOUR	✓	648.00	100.000

Turning Proportions

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

		То					
		Α	В	O			
	Α	0.000	158.000	567.000			
From	В	110.000	0.000	40.000			
	C	585.000	63.000	0.000			

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

	То				
		Α	В	С	
From	Α	0.00	0.22	0.78	
	В	0.73	0.00	0.27	
	С	0.90	0.10	0.00	

Vehicle Mix

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

	То				
		Α	В	С	
	Α	1.000	1.000	1.000	
From	В	1.000	1.000	1.000	
	С	1.000	1.000	1.000	

Heavy Vehicle Percentages - Junction 1 (for whole period)

	То				
		Α	В	С	
Fram	Α	0.0	0.0	0.0	
From	В	0.0	0.0	0.0	
	С	0.0	0.0	0.0	



Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C 0.10		8.67	0.11	Α
B-A	0.43	22.08	0.73	С
C-AB	0.24	5.14	0.76	А
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	30.11	29.89	0.00	553.55	0.054	0.06	6.871	Α
B-A	82.81	81.71	0.00	377.52	0.219	0.28	12.126	В
C-AB	100.61	99.45	0.00	815.85	0.123	0.29	5.029	Α
C-A	387.23	387.23	0.00	-	-	-	-	-
A-B	118.95	118.95	0.00	-	-	-	-	-
A-C	426.87	426.87	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	35.96	35.89	0.00	518.61	0.069	0.07	7.457	Α
B-A	98.89	98.38	0.00	338.24	0.292	0.40	14.974	В
C-AB	144.13	143.53	0.00	862.79	0.167	0.44	5.013	Α
C-A	438.41	438.41	0.00	-	-	-	-	-
A-B	142.04	142.04	0.00	-	-	-	-	-
A-C	509.72	509.72	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	44.04	43.92	0.00	460.61	0.096	0.10	8.636	Α
B-A	121.11	119.87	0.00	284.14	0.426	0.71	21.750	С
C-AB	222.21	220.97	0.00	925.84	0.240	0.75	5.124	Α
C-A	491.25	491.25	0.00	-	-	-	-	-
A-B	173.96	173.96	0.00	-	-	-	-	-
A-C	624.28	624.28	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	44.04	44.04	0.00	459.27	0.096	0.11	8.669	Α
B-A	121.11	121.05	0.00	283.94	0.427	0.73	22.080	С
C-AB	222.86	222.82	0.00	926.56	0.241	0.76	5.142	Α
C-A	490.61	490.61	0.00	-	-	-	-	-
A-B	173.96	173.96	0.00	-	-	-	-	-
A-C	624.28	624.28	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	35.96	36.08	0.00	517.32	0.070	0.08	7.481	Α
B-A	98.89	100.11	0.00	337.97	0.293	0.42	15.209	С
C-AB	144.83	146.03	0.00	863.85	0.168	0.46	5.037	Α
C-A	437.71	437.71	0.00	-	-	-	-	-
A-B	142.04	142.04	0.00	-	-	-	-	-
A-C	509.72	509.72	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	30.11	30.18	0.00	552.55	0.055	0.06	6.894	Α
B-A	82.81	83.36	0.00	377.18	0.220	0.29	12.276	В
C-AB	101.45	102.08	0.00	816.62	0.124	0.30	5.052	Α
C-A	386.40	386.40	0.00	-	-	-	-	-
A-B	118.95	118.95	0.00	-	-	-	-	-
A-C	426.87	426.87	0.00	-	-	-	-	-

(Default Analysis Set) - 2028 With Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 With Development, AM	2028 With Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Hayes Rd	T-Junction	Two-way	A,B,C	284.34	F



Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (West)		Major
В	В	Cog Rd		Minor
С	С	B4267 South Rd (East)		Major

Major Arm Geometry

Arr	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	7.80		0.00		2.20	85.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane plus flare				10.00	10.00	6.50	4.20	3.10	✓	2.00	34	37

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	578.159	0.097	0.245	0.154	0.350
1	B-C	707.025	0.100	0.252	-	-
1	C-B	623.188	0.223	0.223	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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



Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	1092.00	100.000
В	ONE HOUR	✓	272.00	100.000
С	ONE HOUR	✓	781.00	100.000

Turning Proportions

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

		То						
		Α	В	C				
F	Α	0.000	210.000	882.000				
From	В	198.000	0.000	74.000				
	C	746.000	35.000	0.000				

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

		То					
		Α	В	С			
F	Α	0.00	0.19	0.81			
From	В	0.73	0.00	0.27			
	С	0.96	0.04	0.00			

Vehicle Mix

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

		То					
		Α	В	С			
From	Α	1.000	1.000	1.000			
FIOIII	В	1.000	1.000	1.000			
	С	1.000	1.000	1.000			

Heavy Vehicle Percentages - Junction 1 (for whole period)

		То						
		Α	В	С				
Fram	Α	0.0	0.0	0.0				
From	В	0.0	0.0	0.0				
	C	0.0	0.0	0.0				



Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	1.27	479.44	10.42	F
B-A	1.24	408.42	25.57	F
C-AB	0.20	4.61	0.67	Α
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	55.71	55.14	0.00	438.39	0.127	0.14	9.379	Α
B-A	149.06	145.39	0.00	303.79	0.491	0.92	22.257	С
C-AB	72.17	71.53	0.00	855.55	0.084	0.16	4.591	Α
C-A	515.81	515.81	0.00	-	-	-	-	-
A-B	158.10	158.10	0.00	-	-	-	-	-
A-C	664.02	664.02	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	66.52	66.03	0.00	311.22	0.214	0.27	14.653	В
B-A	178.00	173.17	0.00	250.02	0.712	2.12	44.289	Е
C-AB	112.20	111.69	0.00	918.53	0.122	0.29	4.465	Α
C-A	589.90	589.90	0.00	-	-	-	-	-
A-B	188.79	188.79	0.00	-	-	-	-	-
A-C	792.90	792.90	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	81.48	56.31	0.00	64.14	1.270	6.56	277.863	F
B-A	218.00	168.52	0.00	175.99	1.239	14.49	214.473	F
C-AB	198.28	196.78	0.00	1008.18	0.197	0.66	4.446	Α
C-A	661.62	661.62	0.00	-	-	-	-	-
A-B	231.21	231.21	0.00	-	-	-	-	-
A-C	971.10	971.10	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	81.48	66.03	0.00	68.40	1.191	10.42	479.437	F
B-A	218.00	173.71	0.00	175.25	1.244	25.57	408.418	F
C-AB	199.24	199.19	0.00	1009.16	0.197	0.67	4.462	Α
C-A	660.66	660.66	0.00	-	-	-	-	-
A-B	231.21	231.21	0.00	-	-	-	-	-
A-C	971.10	971.10	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	66.52	86.90	0.00	95.24	0.698	5.32	313.270	F
B-A	178.00	237.41	0.00	246.70	0.722	10.71	281.241	F
C-AB	113.04	114.53	0.00	919.83	0.123	0.30	4.486	Α
C-A	589.07	589.07	0.00	-	-	-	-	-
A-B	188.79	188.79	0.00	-	-	-	-	-
A-C	792.90	792.90	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	55.71	76.33	0.00	387.05	0.144	0.17	12.357	В
B-A	149.06	187.78	0.00	302.47	0.493	1.03	41.194	Е
C-AB	72.77	73.31	0.00	856.15	0.085	0.17	4.606	Α
C-A	515.20	515.20	0.00	-	-	-	-	-
A-B	158.10	158.10	0.00	-	-	-	-	-
A-C	664.02	664.02	0.00	-	-	-	-	-

(Default Analysis Set) - 2028 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 With Development, PM	2028 With Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Jun	nction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
	1	B4267 South Rd / Hayes Rd	T-Junction	Two-way	A,B,C	12.60	В



Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (West)		Major
В	В	Cog Rd		Minor
С	С	B4267 South Rd (East)		Major

Major Arm Geometry

Arr	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central Has right reserve (m) turn bay		Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	7.80		0.00		2.20	85.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane plus flare				10.00	10.00	6.50	4.20	3.10	✓	2.00	34	37

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	578.266	0.097	0.245	0.154	0.351
1	B-C	706.798	0.100	0.252	-	-
1	C-B	623.188	0.223	0.223	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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



Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	769.00	100.000
В	ONE HOUR	✓	159.00	100.000
С	ONE HOUR	✓	691.00	100.000

Turning Proportions

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

		То					
		Α	В	C			
F	Α	0.000	166.000	603.000			
From	В	116.000	0.000	43.000			
	C	624.000	67.000	0.000			

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

		То					
		Α		С			
From	Α	0.00	0.22	0.78			
FIOIII	В	0.73	0.00	0.27			
	С	0.90	0.10	0.00			

Vehicle Mix

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

		То				
		Α	В	С		
Erom	Α	1.000	1.000	1.000		
From	В	1.000	1.000	1.000		
	С	1.000	1.000	1.000		

Heavy Vehicle Percentages - Junction 1 (for whole period)

		Т	o	
		Α	В	С
From	Α	0.0	0.0	0.0
FIOIII	В	0.0	0.0	0.0
	С	0.0	0.0	0.0



Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.11	9.31	0.12	Α
B-A	0.48	26.17	0.91	D
C-AB	0.27	5.23	0.92	Α
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	32.37	32.12	0.00	543.59	0.060	0.06	7.035	Α
B-A	87.33	86.09	0.00	364.53	0.240	0.31	12.874	В
C-AB	112.64	111.32	0.00	830.61	0.136	0.33	5.005	Α
C-A	407.58	407.58	0.00	-	-	-	-	-
A-B	124.97	124.97	0.00	-	-	-	-	-
A-C	453.97	453.97	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	38.66	38.58	0.00	504.95	0.077	0.08	7.718	Α
B-A	104.28	103.66	0.00	322.74	0.323	0.47	16.383	С
C-AB	163.82	163.10	0.00	881.86	0.186	0.51	5.020	Α
C-A	457.37	457.37	0.00	-	-	-	-	-
A-B	149.23	149.23	0.00	-	-	-	-	-
A-C	542.08	542.08	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	47.34	47.19	0.00	436.07	0.109	0.12	9.250	Α
B-A	127.72	126.05	0.00	265.17	0.482	0.88	25.569	D
C-AB	256.90	255.33	0.00	949.89	0.270	0.90	5.202	Α
C-A	503.91	503.91	0.00	-	-	-	-	-
A-B	182.77	182.77	0.00	-	-	-	-	-
A-C	663.92	663.92	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	47.34	47.34	0.00	433.84	0.109	0.12	9.313	Α
B-A	127.72	127.63	0.00	264.92	0.482	0.91	26.173	D
C-AB	257.76	257.71	0.00	950.80	0.271	0.92	5.227	Α
C-A	503.04	503.04	0.00	-	-	-	-	-
A-B	182.77	182.77	0.00	-	-	-	-	-
A-C	663.92	663.92	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	38.66	38.81	0.00	503.09	0.077	0.08	7.757	Α
B-A	104.28	105.94	0.00	322.41	0.323	0.49	16.754	С
C-AB	164.74	166.26	0.00	883.21	0.187	0.54	5.048	Α
C-A	456.46	456.46	0.00	-	-	-	-	-
A-B	149.23	149.23	0.00	-	-	-	-	-
A-C	542.08	542.08	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	32.37	32.45	0.00	542.39	0.060	0.06	7.062	Α
B-A	87.33	88.01	0.00	364.14	0.240	0.32	13.070	В
C-AB	113.66	114.42	0.00	831.55	0.137	0.35	5.037	Α
C-A	406.56	406.56	0.00	-	-	-	-	-
A-B	124.97	124.97	0.00	-	-	-	-	-
A-C	453.97	453.97	0.00	-	-	-	-	-

(Default Analysis Set) - 2023 With Development (No Growth), AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 With Development (No Growth), AM	2023 With Development (No Growth)	AM		ONE HOUR	07:45	09:15	90	15		



Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Hayes Rd	T-Junction	Two-way	A,B,C	50.24	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (West)		Major
В	В	Cog Rd		Minor
С	С	B4267 South Rd (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	7.80		0.00		2.20	85.00	✓	0.00

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

Minor Arm Geometry

,	Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
	В	One lane plus flare				10.00	10.00	6.50	4.20	3.10	✓	2.00	34	37

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	579.206	0.097	0.246	0.155	0.351
1	B-C	704.798	0.100	0.252	-	-
1	C-B	623.188	0.223	0.223	-	-

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

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

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



Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	927.00	100.000
В	ONE HOUR	✓	242.00	100.000
С	ONE HOUR	✓	665.00	100.000

Turning Proportions

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

			То	
F		Α	В	C
	Α	0.000	182.000	745.000
From	В	180.000	0.000	62.000
	C	635.000	30.000	0.000

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

		То							
		Α	В	С					
F	Α	0.00	0.20	0.80					
From	В	0.74	0.00	0.26					
	С	0.95	0.05	0.00					

Vehicle Mix

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

			То	
		A B		С
F	Α	1.000	1.000	1.000
From	В	1.000	1.000	1.000
	С	1.000	1.000	1.000



Heavy Vehicle Percentages - Junction 1 (for whole period)

		То						
		Α	В	С				
Erom	Α	0.0	0.0	0.0				
From	В	0.0	0.0	0.0				
	С	0.0	0.0	0.0				

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.38	31.54	0.58	D
B-A	0.84	79.99	4.05	F
C-AB	0.13	4.72	0.34	Α
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	46.68	46.26	0.00	486.90	0.096	0.10	8.162	Α
B-A	135.51	133.02	0.00	346.10	0.392	0.62	16.710	С
C-AB	52.68	52.25	0.00	816.78	0.065	0.11	4.709	Α
C-A	447.97	447.97	0.00	-	-	-	-	-
A-B	137.02	137.02	0.00	-	-	-	-	-
A-C	560.88	560.88	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	55.74	55.55	0.00	416.81	0.134	0.15	9.960	Α
B-A	161.82	159.90	0.00	300.65	0.538	1.10	25.227	D
C-AB	75.48	75.23	0.00	860.42	0.088	0.17	4.588	Α
C-A	522.34	522.34	0.00	-	-	-	-	-
A-B	163.61	163.61	0.00	-	-	-	-	-
A-C	669.74	669.74	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	68.26	67.11	0.00	217.02	0.315	0.44	23.836	С
B-A	198.18	188.50	0.00	237.34	0.835	3.52	64.111	F
C-AB	125.13	124.47	0.00	934.02	0.134	0.34	4.450	Α
C-A	607.05	607.05	0.00	-	-	-	-	-
A-B	200.39	200.39	0.00	-	-	-	-	-
A-C	820.26	820.26	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	68.26	67.73	0.00	181.22	0.377	0.58	31.544	D
B-A	198.18	196.06	0.00	237.22	0.835	4.05	79.991	F
C-AB	125.47	125.46	0.00	934.43	0.134	0.34	4.459	Α
C-A	606.71	606.71	0.00	-	-	-	-	-
A-B	200.39	200.39	0.00	-	-	-	-	-
A-C	820.26	820.26	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	55.74	57.38	0.00	398.50	0.140	0.16	10.601	В
B-A	161.82	173.08	0.00	300.71	0.538	1.24	30.323	D
C-AB	75.80	76.46	0.00	860.95	0.088	0.18	4.597	Α
C-A	522.02	522.02	0.00	-	-	-	-	-
A-B	163.61	163.61	0.00	-	-	-	-	-
A-C	669.74	669.74	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	46.68	46.90	0.00	483.12	0.097	0.11	8.256	Α
B-A	135.51	137.81	0.00	346.10	0.392	0.66	17.466	С
C-AB	53.02	53.28	0.00	817.10	0.065	0.11	4.716	Α
C-A	447.63	447.63	0.00	-	-	-	-	-
A-B	137.02	137.02	0.00	-	-	-	-	-
A-C	560.88	560.88	0.00	-	-	-	-	-

(Default Analysis Set) - 2023 With Development (No Growth), PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 With Development (No Growth), PM	2023 With Development (No Growth)	PM		ONE HOUR	16:45	18:15	90	15		



Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Hayes Rd	T-Junction	Two-way	A,B,C	10.23	В

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (West)		Major
В	В	Cog Rd		Minor
С	С	B4267 South Rd (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	7.80		0.00		2.20	85.00	✓	0.00

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

Minor Arm Geometry

4	Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
	В	One lane plus flare				10.00	10.00	6.50	4.20	3.10	√	2.00	34	37

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	578.772	0.097	0.246	0.155	0.351
1	B-C	705.722	0.100	0.252	-	-
1	C-B	623.188	0.223	0.223	-	-

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

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

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



Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	663.00	100.000
В	ONE HOUR	✓	137.00	100.000
С	ONE HOUR	✓	585.00	100.000

Turning Proportions

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

		То					
		Α	В	С			
From	Α	0.000	147.000	516.000			
FIOIII	В	101.000	0.000	36.000			
	C	529.000	56.000	0.000			

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

	То					
		Α	В	С		
F	Α	0.00	0.22	0.78		
From	В	0.74	0.00	0.26		
	С	0.90	0.10	0.00		

Vehicle Mix

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

	То					
		Α	В	С		
From	Α	1.000	1.000	1.000		
FIOIII	В	1.000	1.000	1.000		
	С	1.000	1.000	1.000		



Heavy Vehicle Percentages - Junction 1 (for whole period)

	То				
		Α	В	С	
From	Α	0.0	0.0	0.0	
From	В	0.0	0.0	0.0	
	С	0.0	0.0	0.0	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.08	8.00	0.09	Α
B-A	0.36	17.97	0.55	С
C-AB	0.20	5.07	0.57	Α
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	27.10	26.90	0.00	567.55	0.048	0.05	6.657	Α
B-A	76.04	75.10	0.00	396.29	0.192	0.23	11.176	В
C-AB	83.10	82.21	0.00	794.65	0.105	0.22	5.052	Α
C-A	357.32	357.32	0.00	-	-	-	-	-
A-B	110.67	110.67	0.00	-	-	-	-	-
A-C	388.47	388.47	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	32.36	32.31	0.00	537.16	0.060	0.06	7.130	Α
B-A	90.80	90.41	0.00	360.67	0.252	0.33	13.302	В
C-AB	114.46	113.99	0.00	832.09	0.138	0.34	5.021	Α
C-A	411.44	411.44	0.00	-	-	-	-	-
A-B	132.15	132.15	0.00	-	-	-	-	-
A-C	463.87	463.87	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	39.64	39.54	0.00	490.16	0.081	0.09	7.987	Α
B-A	111.20	110.37	0.00	311.57	0.357	0.54	17.817	С
C-AB	175.47	174.58	0.00	891.41	0.197	0.56	5.033	Α
C-A	468.63	468.63	0.00	-	-	-	-	-
A-B	161.85	161.85	0.00	-	-	-	-	-
A-C	568.13	568.13	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	39.64	39.63	0.00	489.46	0.081	0.09	8.002	Α
B-A	111.20	111.17	0.00	311.43	0.357	0.55	17.968	С
C-AB	175.87	175.85	0.00	891.91	0.197	0.57	5.044	Α
C-A	468.22	468.22	0.00	-	-	-	-	-
A-B	161.85	161.85	0.00	-	-	-	-	-
A-C	568.13	568.13	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	32.36	32.45	0.00	536.35	0.060	0.06	7.144	Α
B-A	90.80	91.61	0.00	360.46	0.252	0.34	13.430	В
C-AB	114.93	115.79	0.00	832.81	0.138	0.35	5.036	Α
C-A	410.97	410.97	0.00	-	-	-	-	-
A-B	132.15	132.15	0.00	-	-	-	-	-
A-C	463.87	463.87	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	27.10	27.16	0.00	566.78	0.048	0.05	6.671	Α
B-A	76.04	76.45	0.00	396.02	0.192	0.24	11.278	В
C-AB	83.72	84.20	0.00	795.20	0.105	0.23	5.074	Α
C-A	356.70	356.70	0.00	-	-	-	-	-
A-B	110.67	110.67	0.00	-	-	-	-	-
A-C	388.47	388.47	0.00	-	-	-	-	-

(Default Analysis Set) - 2023 No Development (No Growth), AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 No Development (No Growth), AM	2023 No Development (No Growth)	AM		ONE HOUR	07:45	09:15	90	15		



Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Hayes Rd	T-Junction	Two-way	A,B,C	39.94	Е

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (West)		Major
В	В	Cog Rd		Minor
С	С	B4267 South Rd (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	7.80		0.00		2.20	85.00	✓	0.00

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

Minor Arm Geometry

4	Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
	В	One lane plus flare				10.00	10.00	6.50	4.20	3.10	√	2.00	34	37

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	579.614	0.097	0.246	0.155	0.351
1	B-C	703.928	0.099	0.251	-	-
1	C-B	623.188	0.223	0.223	-	-

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

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

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



Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	904.00	100.000
В	ONE HOUR	✓	240.00	100.000
С	ONE HOUR	✓	616.00	100.000

Turning Proportions

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

		То						
		Α	В	C				
From	Α	0.000	182.000	722.000				
FIOIII	В	180.000	0.000	60.000				
	C	588.000	28.000	0.000				

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

		То						
		Α	В	С				
F	Α	0.00	0.20	0.80				
From	В	0.75	0.00	0.25				
	С	0.95	0.05	0.00				

Vehicle Mix

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

		То						
		Α	В	С				
From	Α	1.000	1.000	1.000				
FIOIII	В	1.000	1.000	1.000				
	С	1.000	1.000	1.000				



Heavy Vehicle Percentages - Junction 1 (for whole period)

		То					
		Α	В	С			
From	Α	0.0	0.0	0.0			
FIOIII	В	0.0	0.0	0.0			
	С	0.0	0.0	0.0			

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.28	20.92	0.37	С
B-A	0.78	61.81	3.17	F
C-AB	0.12	4.81	0.28	Α
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	45.17	44.77	0.00	492.75	0.092	0.10	8.028	Α
B-A	135.51	133.13	0.00	356.62	0.380	0.60	15.947	С
C-AB	46.39	46.02	0.00	794.71	0.058	0.09	4.808	Α
C-A	417.36	417.36	0.00	-	-	-	-	-
A-B	137.02	137.02	0.00	-	-	-	-	-
A-C	543.56	543.56	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	53.94	53.77	0.00	428.08	0.126	0.14	9.614	Α
B-A	161.82	160.13	0.00	313.17	0.517	1.02	23.260	С
C-AB	65.75	65.55	0.00	833.99	0.079	0.14	4.686	Α
C-A	488.02	488.02	0.00	-	-	-	-	-
A-B	163.61	163.61	0.00	-	-	-	-	-
A-C	649.06	649.06	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	66.06	65.31	0.00	260.14	0.254	0.33	18.407	С
B-A	198.18	190.79	0.00	252.70	0.784	2.87	52.879	F
C-AB	106.53	106.01	0.00	899.45	0.118	0.27	4.540	Α
C-A	571.70	571.70	0.00	-	-	-	-	-
A-B	200.39	200.39	0.00	-	-	-	-	-
A-C	794.94	794.94	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	66.06	65.89	0.00	237.78	0.278	0.37	20.917	С
B-A	198.18	196.98	0.00	252.65	0.784	3.17	61.815	F
C-AB	106.78	106.77	0.00	899.76	0.119	0.28	4.545	Α
C-A	571.45	571.45	0.00	-	-	-	-	-
A-B	200.39	200.39	0.00	-	-	-	-	-
A-C	794.94	794.94	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	53.94	54.83	0.00	415.79	0.130	0.15	9.998	Α
B-A	161.82	169.98	0.00	313.25	0.517	1.13	26.379	D
C-AB	66.01	66.51	0.00	834.40	0.079	0.15	4.695	Α
C-A	487.77	487.77	0.00	-	-	-	-	-
A-B	163.61	163.61	0.00	-	-	-	-	-
A-C	649.06	649.06	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	45.17	45.36	0.00	489.50	0.092	0.10	8.108	Α
B-A	135.51	137.49	0.00	356.62	0.380	0.63	16.571	С
C-AB	46.67	46.88	0.00	794.97	0.059	0.10	4.814	Α
C-A	417.08	417.08	0.00	-	-	-	-	-
A-B	137.02	137.02	0.00	-	-	-	-	-
A-C	543.56	543.56	0.00	-	-	-	-	-

(Default Analysis Set) - 2023 No Development (No Growth), PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 No Development (No Growth), PM	2023 No Development (No Growth)	PM		ONE HOUR	16:45	18:15	90	15		



Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Hayes Rd	T-Junction	Two-way	A,B,C	9.89	Α

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
Α	Α	B4267 South Rd (West)		Major
В	В	Cog Rd		Minor
С	С	B4267 South Rd (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central		Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
С	7.80		0.00		2.20	85.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
В	One lane plus flare				10.00	10.00	6.50	4.20	3.10	√	2.00	34	37

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	579.861	0.097	0.246	0.155	0.351
1	B-C	703.404	0.099	0.251	-	-
1	C-B	623.188	0.223	0.223	-	-

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

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

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



Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	620.00	100.000
В	ONE HOUR	✓	134.00	100.000
С	ONE HOUR	√	560.00	100.000

Turning Proportions

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

		То					
		Α	В	C			
From	Α	0.000	147.000	473.000			
FIOIII	В	101.000	0.000	33.000			
	C	506.000	54.000	0.000			

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

		То					
		Α	В	С			
F	Α	0.00	0.24	0.76			
From	В	0.75	0.00	0.25			
	С	0.90	0.10	0.00			

Vehicle Mix

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

		То					
		Α		С			
	Α	1.000	1.000	1.000			
From	В	1.000	1.000	1.000			
	С	1.000	1.000	1.000			



Heavy Vehicle Percentages - Junction 1 (for whole period)

		То						
		Α	В	С				
From	Α	0.0	0.0	0.0				
FIOIII	В	0.0	0.0	0.0				
	С	0.0	0.0	0.0				

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.07	7.72	0.08	Α
B-A	0.34	16.57	0.51	С
C-AB	0.18	5.08	0.50	Α
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

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

	•	*						
Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	24.84	24.66	0.00	574.32	0.043	0.04	6.548	Α
B-A	76.04	75.14	0.00	408.21	0.186	0.23	10.780	В
C-AB	77.54	76.73	0.00	788.32	0.098	0.20	5.058	Α
C-A	344.06	344.06	0.00	-	-	-	-	-
A-B	110.67	110.67	0.00	-	-	-	-	-
A-C	356.10	356.10	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	29.67	29.62	0.00	546.10	0.054	0.06	6.969	Α
B-A	90.80	90.44	0.00	374.71	0.242	0.31	12.647	В
C-AB	106.01	105.59	0.00	824.17	0.129	0.31	5.015	Α
C-A	397.42	397.42	0.00	-	-	-	-	-
A-B	132.15	132.15	0.00	-	-	-	-	-
A-C	425.22	425.22	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	36.33	36.25	0.00	503.10	0.072	0.08	7.710	Α
B-A	111.20	110.47	0.00	328.53	0.338	0.50	16.450	С
C-AB	160.28	159.52	0.00	880.39	0.182	0.50	5.005	А
C-A	456.29	456.29	0.00	-	-	-	-	-
A-B	161.85	161.85	0.00	-	-	-	-	-
A-C	520.78	520.78	0.00	-	-	-	-	-



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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	36.33	36.33	0.00	502.53	0.072	0.08	7.721	Α
B-A	111.20	111.18	0.00	328.41	0.339	0.51	16.567	С
C-AB	160.62	160.60	0.00	880.81	0.182	0.50	5.015	Α
C-A	455.95	455.95	0.00	-	-	-	-	-
A-B	161.85	161.85	0.00	-	-	-	-	-
A-C	520.78	520.78	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	29.67	29.74	0.00	545.41	0.054	0.06	6.981	Α
B-A	90.80	91.51	0.00	374.52	0.242	0.33	12.751	В
C-AB	106.41	107.15	0.00	824.79	0.129	0.32	5.030	Α
C-A	397.02	397.02	0.00	-	-	-	-	-
A-B	132.15	132.15	0.00	-	-	-	-	-
A-C	425.22	425.22	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	24.84	24.89	0.00	573.62	0.043	0.05	6.560	Α
B-A	76.04	76.41	0.00	407.96	0.186	0.23	10.869	В
C-AB	78.08	78.52	0.00	788.80	0.099	0.21	5.076	Α
C-A	343.52	343.52	0.00	-	-	-	-	-
A-B	110.67	110.67	0.00	-	-	-	-	-
A-C	356.10	356.10	0.00	-	-	-	-	-



Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014] © Copyright TRL Limited, 2015

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Filename: Jn2 - B4267 - Hayes Rd - Sully Rd Rbt.arc8

Path: P:\GBCFA\TP\HB\Projects\5133321 - Sully Sport & Social Club - TAYL3270\04 - Analysis\Junction Modelling

Report generation date: 25/06/2015 08:36:55

- » (Default Analysis Set) 2023 With Development, AM
- » (Default Analysis Set) 2023 With Development, PM
- » (Default Analysis Set) 2028 With Development, AM
- » (Default Analysis Set) 2028 With Development, PM
- » (Default Analysis Set) 2023 No Development, AM
- » (Default Analysis Set) 2023 No Development, PM
- » (Default Analysis Set) 2028 No Development, AM
- » (Default Analysis Set) 2028 No Development, PM

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2023 With Development			
Arm A	0.90	3.29	0.47	Α
Arm B	0.36	2.59	0.26	Α
Arm C	1.12	4.39	0.53	Α

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

"D5 - 2023 With Development, AM " model duration: 07:45 - 09:15 "D6 - 2023 With Development, PM" model duration: 16:45 - 18:15 "D7 - 2028 With Development, AM" model duration: 07:45 - 09:15 "D8 - 2028 With Development, PM" model duration: 16:45 - 18:15 "D9 - 2023 No Development, AM" model duration: 07:45 - 09:15 "D10 - 2023 No Development, PM" model duration: 16:45 - 18:15 "D11 - 2028 No Development, PM" model duration: 07:45 - 09:15 "D12 - 2028 No Development, PM" model duration: 16:45 - 18:15 "D12 - 2028 No Development, PM" model duration: 16:45 - 18:15

Run using Junctions 8.0.4.487 at 25/06/2015 08:36:53



File summary

Title	(untitled)
Location	
Site Number	
Date	09/10/2014
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	TAYL3270
Description	

Analysis Options

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

Units

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

(Default Analysis Set) - 2023 With Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 With Development, AM	2023 With Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junc	tion	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	l	B4267 South Rd / Hayes Rd	Roundabout	A,B,C			3.57	Α

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown



Arms

Arms

Arm	Arm	Name	Description
Α	Α	B4267 South Rd	
В	В	Hayes Rd	
С	С	B4267 Sully Moors Rd	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Α	0.00	99999.00
В	0.00	99999.00
С	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half- width (m) E - Entry wi		l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Α	4.10	9.30	26.70	29.30	35.20	34.00	
В	6.00	9.50	27.00	23.50	35.20	29.00	
С	3.60	10.20	22.70	33.00	35.20	55.00	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Enter slope and intercept directly Entered slope Entered intercept (P		Final Slope	Final Intercept (PCU/hr)
Α		(calculated)	(calculated)	0.756	2216.594
В		(calculated)	(calculated)	0.836	2595.177
С		(calculated)	(calculated)	0.688	1983.226

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 (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	896.00	100.000
В	ONE HOUR	✓	453.00	100.000
С	ONE HOUR	✓	837.00	100.000



Turning Proportions

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

		То						
From		Α	В	С				
	Α	0.000	130.000	766.000				
	В	319.000	0.000	134.000				
	С	673.000	164.000	0.000				

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

		То					
		Α	В	С			
Erom	Α	0.00	0.15	0.85			
From	В	0.70	0.00	0.30			
	С	0.80	0.20	0.00			

Vehicle Mix

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

		То					
		Α	В	С			
F	Α	1.000	1.000	1.000			
From	В	1.000	1.000	1.000			
	С	1.000	1.000	1.000			

Heavy Vehicle Percentages - Junction 1 (for whole period)

		То						
		Α	В	С				
Erom	Α	0.0	0.0	0.0				
From	В	0.0	0.0	0.0				
	С	0.0	0.0	0.0				

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
Α	0.47	3.29	0.90	Α
В	0.26	2.59	0.36	А
С	0.53	4.39	1.12	Α



Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Α	674.56	672.70	123.05	0.00	2123.52	0.318	0.46	2.478	Α
В	341.04	340.27	575.10	0.00	2114.46	0.161	0.19	2.028	Α
С	630.14	628.03	239.62	0.00	1818.39	0.347	0.53	3.019	Α

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	Los
Α	805.49	804.87	147.28	0.00	2105.19	0.383	0.62	2.767	Α
В	407.24	407.00	688.09	0.00	2020.01	0.202	0.25	2.231	Α
С	752.45	751.66	286.61	0.00	1786.07	0.421	0.72	3.479	Α

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Α	986.51	985.40	180.26	0.00	2080.24	0.474	0.90	3.285	Α
В	498.76	498.34	842.43	0.00	1891.01	0.264	0.36	2.585	Α
С	921.55	920.00	350.93	0.00	1741.82	0.529	1.11	4.373	A

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Α	986.51	986.50	180.56	0.00	2080.02	0.474	0.90	3.291	Α
В	498.76	498.76	843.37	0.00	1890.22	0.264	0.36	2.586	Α
С	921.55	921.53	351.22	0.00	1741.62	0.529	1.12	4.389	Α

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	Los
Α	805.49	806.59	147.73	0.00	2104.85	0.383	0.62	2.774	Α
В	407.24	407.65	689.56	0.00	2018.79	0.202	0.25	2.234	Α
С	752.45	753.99	287.07	0.00	1785.75	0.421	0.73	3.493	Α

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Α	674.56	675.18	123.62	0.00	2123.09	0.318	0.47	2.488	Α
В	341.04	341.28	577.22	0.00	2112.69	0.161	0.19	2.032	Α
С	630.14	630.94	240.33	0.00	1817.90	0.347	0.53	3.036	А

(Default Analysis Set) - 2023 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

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Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 With Development, PM	2023 With Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Hayes Rd	Roundabout	A,B,C			2.81	Α

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
Α	Α	B4267 South Rd	
В	В	Hayes Rd	
С	С	B4267 Sully Moors Rd	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Α	0.00	99999.00
В	0.00	99999.00
С	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half- width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Α	4.10	9.30	26.70	29.30	35.20	34.00	
В	6.00	9.50	27.00	23.50	35.20	29.00	
С	3.60	10.20	22.70	33.00	35.20	55.00	

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)
Α		(calculated)	(calculated)	0.756	2216.594
В		(calculated)	(calculated)	0.836	2595.177
С		(calculated)	(calculated)	0.688	1983.226

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



Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	693.00	100.000
В	ONE HOUR	✓	377.00	100.000
С	ONE HOUR	√	693.00	100.000

Turning Proportions

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

			То		
		Α	В	С	
From	Α	0.000	150.000	543.000	
FIOIII	В	180.000	0.000	197.000	
	С	577.000	116.000	0.000	

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

	То						
		Α	В	С			
F	Α	0.00	0.22	0.78			
From	В	0.48	0.00	0.52			
	С	0.83	0.17	0.00			

Vehicle Mix

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

			То	
		Α	В	С
From	Α	1.000	1.000	1.000
FIOIII	В	1.000	1.000	1.000
	С	1.000	1.000	1.000



Heavy Vehicle Percentages - Junction 1 (for whole period)

		Т	o	
		Α	В	С
From	Α	0.0	0.0	0.0
FIOIII	В	0.0	0.0	0.0
	С	0.0	0.0	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
Α	0.36	2.65	0.56	Α
В	0.20	2.14	0.25	А
С	0.41	3.32	0.70	А

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Α	521.73	520.45	87.08	0.00	2150.73	0.243	0.32	2.208	A
В	283.83	283.25	407.80	0.00	2254.31	0.126	0.14	1.826	Α
С	521.73	520.21	135.24	0.00	1890.19	0.276	0.38	2.626	Α

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	Los
Α	622.99	622.63	104.20	0.00	2137.78	0.291	0.41	2.376	Α
В	338.92	338.76	487.86	0.00	2187.38	0.155	0.18	1.947	Α
С	622.99	622.53	161.74	0.00	1871.96	0.333	0.50	2.881	Α

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	Los
Α	763.01	762.41	127.58	0.00	2120.09	0.360	0.56	2.650	Α
В	415.08	414.83	597.38	0.00	2095.84	0.198	0.25	2.141	Α
С	763.01	762.19	198.06	0.00	1846.98	0.413	0.70	3.317	А

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Α	763.01	763.00	127.72	0.00	2119.99	0.360	0.56	2.652	Α
В	415.08	415.08	597.85	0.00	2095.45	0.198	0.25	2.142	Α
С	763.01	763.00	198.18	0.00	1846.89	0.413	0.70	3.320	Α

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Α	622.99	623.59	104.42	0.00	2137.61	0.291	0.41	2.380	Α
В	338.92	339.17	488.61	0.00	2186.76	0.155	0.18	1.950	Α
С	622.99	623.79	161.94	0.00	1871.83	0.333	0.50	2.888	Α

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	Los
Α	521.73	522.09	87.41	0.00	2150.48	0.243	0.32	2.210	Α
В	283.83	283.98	409.09	0.00	2253.23	0.126	0.14	1.830	Α
С	521.73	522.20	135.59	0.00	1889.95	0.276	0.38	2.632	Α

(Default Analysis Set) - 2028 With Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 With Development, AM	2028 With Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Hayes Rd	Roundabout	A,B,C			3.86	Α

Junction Network Options

Driving Side	Lighting		
Left	Normal/unknown		

Arms

Arms

Arm	Arm Name		Description	
Α	Α	B4267 South Rd		
B B		B B Hayes Rd		
С	С	B4267 Sully Moors Rd		



Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Α	0.00	99999.00
В	0.00	99999.00
С	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half- width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Α	4.10	9.30	26.70	29.30	35.20	34.00	
В	6.00	9.50	27.00	23.50	35.20	29.00	
С	3.60	10.20	22.70	33.00	35.20	55.00	

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)
Α		(calculated)	(calculated)	0.756	2216.594
В		(calculated)	(calculated)	0.836	2595.177
С		(calculated)	(calculated)	0.688	1983.226

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 (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	950.00	100.000
В	ONE HOUR	✓	485.00	100.000
С	ONE HOUR	√	892.00	100.000

Turning Proportions

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

	То				
		Α	В	С	
From	Α	0.000	139.000	811.000	
	В	341.000	0.000	144.000	
	С	716.000	176.000	0.000	



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

	То				
		Α	В	С	
From	Α	0.00	0.15	0.85	
From	В	0.70	0.00	0.30	
	С	0.80	0.20	0.00	

Vehicle Mix

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

	То				
		Α	В	С	
From	Α	1.000	1.000	1.000	
	В	1.000	1.000	1.000	
	С	1.000	1.000	1.000	

Heavy Vehicle Percentages - Junction 1 (for whole period)

	То				
		Α	В	С	
Erom	Α	0.0	0.0	0.0	
From	В	0.0	0.0	0.0	
	C	0.0	0.0	0.0	

Results

Results Summary for whole modelled period

	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
	Α	0.51	3.51	1.02	Α
ľ	В	0.29	2.74	0.41	А
Γ	С	0.57	4.85	1.31	А

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Α	715.21	713.18	132.04	0.00	2116.72	0.338	0.51	2.562	Α
В	365.13	364.29	608.83	0.00	2086.27	0.175	0.21	2.089	Α
С	671.54	669.19	256.13	0.00	1807.03	0.372	0.59	3.157	Α

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Α	854.03	853.33	158.04	0.00	2097.06	0.407	0.68	2.893	Α
В	436.01	435.73	728.47	0.00	1986.26	0.220	0.28	2.321	Α
С	801.89	800.96	306.36	0.00	1772.48	0.452	0.82	3.702	Α

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	Los
Α	1045.97	1044.65	193.40	0.00	2070.31	0.505	1.01	3.505	Α
В	533.99	533.50	891.80	0.00	1849.74	0.289	0.40	2.735	Α
С	982.11	980.17	375.10	0.00	1725.19	0.569	1.31	4.819	Α

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	Los
Α	1045.97	1045.95	193.77	0.00	2070.02	0.505	1.02	3.514	Α
В	533.99	533.99	892.91	0.00	1848.81	0.289	0.41	2.737	Α
С	982.11	982.08	375.44	0.00	1724.95	0.569	1.31	4.845	Α

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	Los
Α	854.03	855.34	158.60	0.00	2096.63	0.407	0.69	2.904	Α
В	436.01	436.50	730.19	0.00	1984.83	0.220	0.28	2.325	Α
С	801.89	803.81	306.90	0.00	1772.11	0.453	0.83	3.724	Α

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

An	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Α	715.21	715.92	132.69	0.00	2116.23	0.338	0.51	2.573	Α
В	365.13	365.41	611.17	0.00	2084.31	0.175	0.21	2.096	Α
С	671.54	672.50	256.92	0.00	1806.49	0.372	0.59	3.179	Α

(Default Analysis Set) - 2028 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 With Development,		FM		ONE HOUR	16:45	18:15	90	15		



Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Hayes Rd	Roundabout	A,B,C			2.94	Α

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
Α	Α	B4267 South Rd	
В	В	Hayes Rd	
С	С	B4267 Sully Moors Rd	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Α	0.00	99999.00
В	0.00	99999.00
С	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half- width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Α	4.10	9.30	26.70	29.30	35.20	34.00	
В	6.00	9.50	27.00	23.50	35.20	29.00	
С	3.60	10.20	22.70	33.00	35.20	55.00	

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)
Α		(calculated)	(calculated)	0.756	2216.594
В		(calculated)	(calculated)	0.836	2595.177
С		(calculated)	(calculated)	0.688	1983.226

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



Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	737.00	100.000
В	ONE HOUR	✓	403.00	100.000
С	ONE HOUR	✓	735.00	100.000

Turning Proportions

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

		То						
		Α	В	С				
F	Α	0.000	160.000	577.000				
From	В	192.000	0.000	211.000				
	C	611.000	124.000	0.000				

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

		То					
		Α	В	С			
Eram	Α	0.00	0.22	0.78			
From	В	0.48	0.00	0.52			
	C	0.83	0.17	0.00			

Vehicle Mix

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

		То					
		Α	В	С			
From	Α	1.000	1.000	1.000			
FIOIII	В	1.000	1.000	1.000			
	С	1.000	1.000	1.000			

Heavy Vehicle Percentages - Junction 1 (for whole period)

	То					
		Α	В	С		
From	Α	0.0	0.0	0.0		
FIOIII	В	0.0	0.0	0.0		
	С	0.0	0.0	0.0		



Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
Α	0.38	2.76	0.62	Α
В	0.21	2.22	0.27	А
С	0.44	3.50	0.78	А

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Α	554.85	553.46	93.07	0.00	2146.19	0.259	0.35	2.258	Α
В	303.40	302.77	433.31	0.00	2232.98	0.136	0.16	1.864	Α
С	553.35	551.69	144.25	0.00	1884.00	0.294	0.41	2.698	Α

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Α	662.55	662.14	111.38	0.00	2132.34	0.311	0.45	2.448	Α
В	362.29	362.11	518.39	0.00	2161.86	0.168	0.20	2.000	Α
С	660.75	660.22	172.52	0.00	1864.55	0.354	0.55	2.987	Α

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	Los
Α	811.45	810.77	136.37	0.00	2113.45	0.384	0.62	2.762	Α
В	443.71	443.42	634.75	0.00	2064.60	0.215	0.27	2.220	Α
С	809.25	808.31	211.26	0.00	1837.90	0.440	0.78	3.493	Α

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr) RFC		End Queue (PCU)	Delay (s)	Los
Α	811.45	811.45	136.52	0.00	2113.33	0.384	0.62	2.764	Α
В	443.71	443.71	635.28	0.00	2064.16	0.215	0.27	2.221	Α
С	809.25	809.24	211.40	0.00	1837.81	0.440	0.78	3.499	Α

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

Arm	rm Total Demand Entry Flow (PCU/hr) (PCU/hr)		, , , , , , , , , , , , , , , , , , , ,		Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Α	662.55 663.22 111.63		0.00	2132.16	0.311	0.45	2.453	Α	
В	362.29	362.29 362.57 519.24		0.00	2161.15	0.168	0.20	2.001	Α
С			172.74	0.00	1864.40	0.354	0.55	2.994	Α

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

Arm	Total Demand (PCU/hr)			Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS	
Α	554.85	555.26	93.44	0.00	2145.91	0.259	0.35	2.265	Α
В	303.40	303.58	434.72	0.00	2231.81	0.136	0.16	1.869	Α
С	553.35	553.88	144.63	0.00	1883.73	0.294	0.42	2.709	Α

(Default Analysis Set) - 2023 No Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Name Roundabout Capacity Model		Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 No Development, AM	2023 No Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Hayes Rd	Roundabout	A,B,C			3.45	А

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
Α	Α	B4267 South Rd	
В	В	Hayes Rd	
С	С	B4267 Sully Moors Rd	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)				
Α	0.00	99999.00				
В	0.00	99999.00				
С	0.00	99999.00				



Roundabout Geometry

Arm	V - Approach road half- width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Α	4.10	9.30	26.70	29.30	35.20	34.00	
В	6.00	9.50	9.50 27.00		35.20	29.00	
С	3.60	10.20	22.70	33.00	35.20	55.00	

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)
Α		(calculated)	(calculated)	0.756	2216.594
В		(calculated)	(calculated)	0.836	2595.177
С		(calculated)	(calculated)	0.688	1983.226

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 (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	850.00	100.000
В	ONE HOUR	✓	445.00	100.000
С	ONE HOUR	✓	822.00	100.000

Turning Proportions

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

		То						
		Α	В	С				
From	Α	0.000	123.000	727.000				
From	В	311.000	0.000	134.000				
	С	658.000	164.000	0.000				

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

		То					
		Α	В	С			
Fram	Α	0.00	0.14	0.86			
From	В	0.70	0.00	0.30			
	С	0.80	0.20	0.00			



Vehicle Mix

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

			То	
		Α	В	С
From	Α	1.000	1.000	1.000
FIOIII	В	1.000	1.000	1.000
	С	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		То					
		Α	В	С			
F	Α	0.0	0.0	0.0			
From	В	0.0	0.0	0.0			
	С	0.0	0.0	0.0			

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
Α	0.45	3.15	0.82	Α
В	0.25	2.51	0.34	А
С	0.52	4.27	1.07	Α

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Α	639.92	638.21	123.06	0.00	2123.51	0.301	0.43	2.422	Α
В	335.02	334.28	545.85	0.00	2138.91	0.157	0.19	1.993	Α
С	618.84	616.80	233.62	0.00	1822.52	0.340	0.51	2.980	Α

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

A	١rm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
	Α	764.13	763.58	147.28	0.00	2105.19	0.363	0.57	2.681	Α
	В	400.05	399.82	653.09	0.00	2049.27	0.195	0.24	2.182	Α
	С	738.96	738.22	279.42	0.00	1791.01	0.413	0.70	3.418	Α



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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Α	935.87	934.89	180.28	0.00	2080.23	0.450	0.81	3.140	Α
В	489.95	489.56	799.60	0.00	1926.81	0.254	0.34	2.505	Α
С	905.04	903.58	342.14	0.00	1747.86	0.518	1.06	4.257	Α

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	Los
Α	935.87	935.86	180.56	0.00	2080.02	0.450	0.82	3.145	Α
В	489.95	489.95	800.43	0.00	1926.11	0.254	0.34	2.506	Α
С	905.04	905.02	342.42	0.00	1747.68	0.518	1.07	4.271	Α

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	Los
Α	764.13	765.10	147.72	0.00	2104.86	0.363	0.57	2.690	Α
В	400.05	400.43	654.39	0.00	2048.19	0.195	0.24	2.186	Α
С	738.96	740.41	279.85	0.00	1790.71	0.413	0.71	3.431	Α

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	Los
Α	639.92	640.48	123.62	0.00	2123.09	0.301	0.43	2.430	Α
В	335.02	335.25	547.80	0.00	2137.28	0.157	0.19	1.999	Α
С	618.84	619.61	234.30	0.00	1822.05	0.340	0.52	2.995	Α

(Default Analysis Set) - 2023 No Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2023 No Development, FM	2023 No Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Hayes Rd	Roundabout	A,B,C			2.73	Α



Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
Α	Α	B4267 South Rd	
В	В	Hayes Rd	
С	С	B4267 Sully Moors Rd	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Α	0.00	99999.00
В	0.00	99999.00
С	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half- width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Α	4.10	9.30	26.70	29.30	35.20	34.00	
В	6.00	9.50	27.00	23.50	35.20	29.00	
С	3.60	10.20	22.70	33.00	35.20	55.00	

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)
Α		(calculated)	(calculated)	0.756	2216.594
В		(calculated)	(calculated)	0.836	2595.177
С		(calculated)	(calculated)	0.688	1983.226

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 (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	670.00	100.000
В	ONE HOUR	✓	367.00	100.000
С	ONE HOUR	✓	662.00	100.000

Turning Proportions

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

		То							
		Α	В	O					
F	Α	0.000	145.000	525.000					
From	В	170.000	0.000	197.000					
	C	546.000	116.000	0.000					

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

	То						
		Α	В	С			
From	Α	0.00	0.22	0.78			
FIOIII	В	0.46	0.00	0.54			
	С	0.82	0.18	0.00			

Vehicle Mix

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

			То	
		Α	В	С
From	Α	1.000	1.000	1.000
	В	1.000	1.000	1.000
	С	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		Т	o	
		Α	В	С
From	Α	0.0	0.0	0.0
FIOIII	В	0.0	0.0	0.0
	С	0.0	0.0	0.0



Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
Α	0.35	2.60	0.53	Α
В	0.19	2.11	0.24	А
С	0.39	3.20	0.65	А

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Α	504.41	503.19	87.08	0.00	2150.73	0.235	0.31	2.184	Α
В	276.30	275.74	394.29	0.00	2265.60	0.122	0.14	1.808	Α
С	498.39	496.97	127.73	0.00	1895.36	0.263	0.36	2.572	Α

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand Capacity (Ped/hr) (PCU/hr)		RFC	End Queue (PCU)	Delay (s)	Los
Α	602.32	601.97	104.21	0.00	2137.77	0.282	0.39	2.344	Α
В	329.93	329.78	471.70	0.00	2200.90	0.150	0.18	1.923	Α
С	595.12	594.70	152.76	0.00	1878.14	0.317	0.46	2.805	Α

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	Los
Α	737.68	737.12	127.59	0.00	2120.08	0.348	0.53	2.601	Α
В	404.07	403.83	577.60	0.00	2112.38	0.191	0.24	2.107	Α
С	728.88	728.15	187.06	0.00	1854.54	0.393	0.64	3.194	Α

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Α	737.68	737.68	127.72	0.00	2119.99	0.348	0.53	2.603	Α
В	404.07	404.07	578.03	0.00	2112.01	0.191	0.24	2.107	Α
С	728.88	728.87	187.17	0.00	1854.47	0.393	0.65	3.197	Α

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Α	602.32	602.87	104.41	0.00	2137.62	0.282	0.39	2.346	Α
В	329.93	330.16	472.40	0.00	2200.31	0.150	0.18	1.926	Α
С	595.12	595.84	152.94	0.00	1878.02	0.317	0.47	2.808	Α



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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	Los
Α	504.41	504.76	87.41	0.00	2150.48	0.235	0.31	2.189	Α
В	276.30	276.45	395.52	0.00	2264.57	0.122	0.14	1.812	Α
С	498.39	498.82	128.05	0.00	1895.14	0.263	0.36	2.580	Α

(Default Analysis Set) - 2028 No Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 No Development, AM	2028 No Development	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
1	B4267 South Rd / Hayes Rd	Roundabout	A,B,C			3.73	А

Junction Network Options

Driving Side	Lighting	
Left	Normal/unknown	

Arms

Arms

Arm	Arm	Name	Description
Α	Α	B4267 South Rd	
В	B B Hayes Rd		
С	С	B4267 Sully Moors Rd	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Α	0.00	99999.00
В	0.00	99999.00
С	0.00	99999.00



Roundabout Geometry

Arm	V - Approach road half- width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Α	4.10	9.30	26.70	29.30	35.20	34.00	
В	6.00	9.50	27.00	23.50	35.20	29.00	
С	3.60	10.20	22.70	33.00	35.20	55.00	

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)
Α		(calculated)	(calculated)	0.756	2216.594
В		(calculated)	(calculated)	0.836	2595.177
С		(calculated)	(calculated)	0.688	1983.226

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	903.00	100.000
В	ONE HOUR	✓	478.00	100.000
С	ONE HOUR	✓	877.00	100.000

Turning Proportions

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

		То					
		Α	В	C			
From	Α	0.000	131.000	772.000			
	В	334.000	0.000	144.000			
	C	701.000	176.000	0.000			

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

	То				
From		Α	В	С	
	Α	0.00	0.15	0.85	
	В	0.70	0.00	0.30	
	С	0.80	0.20	0.00	



Vehicle Mix

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

	То				
		Α	В	С	
From	Α	1.000	1.000	1.000	
	В	1.000	1.000	1.000	
	С	1.000	1.000	1.000	

Heavy Vehicle Percentages - Junction 1 (for whole period)

	То				
From		Α	В	С	
	Α	0.0	0.0	0.0	
	В	0.0	0.0	0.0	
	C	0.0	0.0	0.0	

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
Α	0.48	3.35	0.92	Α
В	0.28	2.65	0.39	А
С	0.56	4.71	1.26	А

Main Results for each time segment

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Α	679.83	677.94	132.04	0.00	2116.72	0.321	0.47	2.499	Α
В	359.86	359.04	579.59	0.00	2110.71	0.170	0.20	2.054	Α
С	660.25	657.97	250.88	0.00	1810.64	0.365	0.57	3.116	Α

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Α	811.78	811.15	158.04	0.00	2097.05	0.387	0.63	2.798	Α
В	429.71	429.45	693.47	0.00	2015.52	0.213	0.27	2.269	Α
С	788.41	787.52	300.08	0.00	1776.80	0.444	0.79	3.635	Α



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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	Los
Α	994.22	993.07	193.41	0.00	2070.30	0.480	0.92	3.339	Α
В	526.29	525.83	849.00	0.00	1885.52	0.279	0.39	2.648	Α
С	965.59	963.77	367.42	0.00	1730.48	0.558	1.25	4.684	Α

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Α	994.22	994.21	193.77	0.00	2070.02	0.480	0.92	3.345	Α
В	526.29	526.28	849.98	0.00	1884.70	0.279	0.39	2.649	Α
С	965.59	965.57	367.74	0.00	1730.26	0.558	1.26	4.707	Α

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	Los
Α	811.78	812.92	158.58	0.00	2096.64	0.387	0.63	2.808	Α
В	429.71	430.17	694.99	0.00	2014.25	0.213	0.27	2.274	Α
С	788.41	790.21	300.58	0.00	1776.45	0.444	0.80	3.655	Α

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

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	Los
Α	679.83	680.46	132.68	0.00	2116.23	0.321	0.48	2.508	Α
В	359.86	360.13	581.75	0.00	2108.91	0.171	0.21	2.058	Α
С	660.25	661.16	251.64	0.00	1810.12	0.365	0.58	3.137	A

(Default Analysis Set) - 2028 No Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

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

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 No Development, FM	2028 No Development	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

	Junction	Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Junction Delay (s)	Junction LOS
ľ	1	B4267 South Rd / Hayes Rd	Roundabout	A,B,C			2.85	Α



Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description
Α	Α	B4267 South Rd	
В	В	Hayes Rd	
С	С	B4267 Sully Moors Rd	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
Α	0.00	99999.00
В	0.00	99999.00
С	0.00	99999.00

Roundabout Geometry

Arm	V - Approach road half- width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Α	4.10	9.30	26.70	29.30	35.20	34.00	
В	6.00	9.50	27.00	23.50	35.20	29.00	
С	3.60	10.20	22.70	33.00	35.20	55.00	

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)
Α		(calculated)	(calculated)	0.756	2216.594
В		(calculated)	(calculated)	0.836	2595.177
С		(calculated)	(calculated)	0.688	1983.226

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 (PCU/hr)	Flow Scaling Factor (%)
Α	ONE HOUR	✓	714.00	100.000
В	ONE HOUR	✓	392.00	100.000
С	ONE HOUR	✓	704.00	100.000

Turning Proportions

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

		То							
		Α	В	С					
F	Α	0.000	155.000	559.000					
From	В	181.000	0.000	211.000					
	C	580.000	124.000	0.000					

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

		То					
		Α	В	С			
Erom	Α	0.00	0.22	0.78			
From	В	0.46	0.00	0.54			
	С	0.82	0.18	0.00			

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		То						
		Α	В	С				
Erom	Α	1.000	1.000	1.000				
From	В	1.000	1.000	1.000				
	С	1.000	1.000	1.000				

Heavy Vehicle Percentages - Junction 1 (for whole period)

		То						
		Α	В	С				
From	Α	0.0	0.0	0.0				
FIOIII	В	0.0	0.0	0.0				
	С	0.0	0.0	0.0				



Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
Α	0.37	2.71	0.59	Α
В	0.21	2.18	0.26	А
С	0.42	3.36	0.72	А

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Α	537.54	536.20	93.08	0.00	2146.19	0.250	0.33	2.234	Α
В	295.12	294.51	419.80	0.00	2244.27	0.132	0.15	1.846	Α
С	530.01	528.46	135.99	0.00	1889.68	0.280	0.39	2.643	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	Los
Α	641.87	641.49	111.39	0.00	2132.34	0.301	0.43	2.414	Α
В	352.40	352.23	502.23	0.00	2175.37	0.162	0.19	1.974	Α
С	632.88	632.40	162.64	0.00	1871.35	0.338	0.51	2.903	Α

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	Los
Α	786.13	785.49	136.38	0.00	2113.44	0.372	0.59	2.709	Α
В	431.60	431.33	614.97	0.00	2081.14	0.207	0.26	2.182	Α
С	775.12	774.28	199.16	0.00	1846.22	0.420	0.72	3.354	Α

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Α	786.13	786.12	136.52	0.00	2113.33	0.372	0.59	2.711	Α
В	431.60	431.60	615.47	0.00	2080.72	0.207	0.26	2.182	Α
С	775.12	775.11	199.28	0.00	1846.14	0.420	0.72	3.360	А

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
Α	641.87	642.51	111.62	0.00	2132.17	0.301	0.43	2.417	Α
В	352.40	352.67	503.03	0.00	2174.71	0.162	0.19	1.975	Α
С	632.88	633.71	162.84	0.00	1871.21	0.338	0.51	2.912	Α



Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	Los
Α	537.54	537.92	93.44	0.00	2145.92	0.250	0.34	2.240	Α
В	295.12	295.29	421.15	0.00	2243.15	0.132	0.15	1.850	Α
С	530.01	530.50	136.34	0.00	1889.43	0.281	0.39	2.651	A

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