



Goldthorpe Retail Scheme Doncaster Road, Goldthorpe

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Prepared For: Warrior Developments Limited

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Contents

Chapter	Title	Page
1.	INTRODUCTION	4
	Introduction	4
	Development Details	4
2.	POLICY CONTEXT	6
	National Policy Context	6
	Local Policy Context	7
3.	SITE ACCESSIBILITY	9
	Summary	13
4.	LOCAL HIGHWAY NETWORK	14
5.	TRIP GENERATION AND DISTRIBUTION	17
	Materiality	22
6.	OPERATIONAL ASSESSMENT	23
	Introduction	23
	Traffic Growth	23
	Committed Development	23
	Capacity Assessments	24
	High Street / Site Access	24
	Doncaster Road / Barnsley Road / High Street	25
	Barnsley Road / B6098	26
	Summary	27
7.	ACCESS, PARKING AND SERVICING	28
8.	SUMMARY AND CONCLUSION	30

1. INTRODUCTION

Introduction

- 1.1 TPS Transport Consultants (TPS) has been appointed by Warrior Developments Limited to prepare a Transport Assessment to accompany a planning application for the redevelopment of the former Goldthorpe Primary School site, to the immediate south of Doncaster Road, in Goldthorpe.

Development Details

- 1.2 The site is located in the centre of Goldthorpe to the immediate south east of the Doncaster Road / Barnsley Road / High Street signalised T-junction. The site is bound by Doncaster Road to the north, High Street to the west, Asda to the south and retail uses to the east. The indicative site location is shown in **Figure 1.1** below.

Figure 1.1 Site Location



(Source: Google)

- 1.3 The development proposals comprise of one 1,972m² discount food retail unit. A total of 121 car parking spaces (including 5 disabled, 8 parent and child, 6 EV charging and 4 staff car parking spaces) will be provided, taking access from High Street. The proposed site layout is provided in **Appendix A**.



- 1.4 The site will take access from the retained, but improved, Goldthorpe Primary School access with High Street on the eastern boundary of the site, whilst there will be three additional points of pedestrian access on the northern boundary of the site to link with the wider Goldthorpe town centre.

Planning History

- 1.5 The application site was previously occupied by Goldthorpe Primary School, which was relocated to a new site in 2016; the application site has since been cleared and the old school buildings have been demolished.
- 1.6 The site benefits from extant consent for a 1,394m² retail unit (2019/0518) with 152 parking spaces. TPS prepared the Transport Assessment that supported the application. This remains a material consideration in the determination of this current application.

Report Structure

- 1.7 Following this introductory section:
- **Section 2** – sets out the national and local policy context relating to the development and transport;
 - **Section 3** – details the site's accessibility via non-car modes of travel;
 - **Section 4** - provides an assessment of the local highway network surrounding the site and an accident analysis of the past 5 years;
 - **Section 5** – sets out the trip generation for the development proposals and assesses the demand for parking;
 - **Section 6** – considers the operation of junctions in the vicinity of the site; and
 - **Section 7**- provides the results of operational assessments of the nearby junctions;
 - **Section 8**- provides a summary and conclusion.



2. POLICY CONTEXT

Introduction

- 2.1 This section of the Transport Assessment outlines the relevant national and local policy in relation to the development proposals.

National Policy Context

National Planning Policy Framework (NPPF – DCLG, July 2021)

- 2.2 The revised National Planning Policy Framework was published in July 2021 and sets out the government's planning policies for England and how these are expected to be applied. It continues to encourage development through the planning system, with a presumption in favour of sustainable development.
- 2.3 The NPPF states that *"Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe"* (Paragraph 111). Paragraph 112 sets out that development proposals should seek to:
- Give priority first to pedestrian and cycle movements, both within the scheme and connecting with neighbouring areas; and second – so far as possible – to facilitate access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;
 - Address the needs of people with disabilities and reduced mobility in relation to all modes of transport;
 - Create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;
 - Allow for the efficient delivery of goods, and access by service and emergency vehicles; and
 - Be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.



- 2.4 This Transport Assessment will demonstrate that the development proposals take full advantage of existing facilities for sustainable travel, locally, and will not result in a significant traffic impact on the local road network, therefore, satisfying the requirements of NPPF.

Local Policy Context

Sheffield City Region Transport Strategy 2019-2035

- 2.5 The Sheffield City Region Transport Strategy is a long-term plan focussing on the city's economic, environmental and equality challenges. It aims to deliver faster, more reliable and cleaner journeys, reduce the negative impact of transport by making walking and cycling for shorter trips and public transport for longer trips more attractive.
- 2.6 This will reduce dependency on cars and free up space on the roads for longer, more difficult journeys where car may be the only practical option.
- 2.7 The following transport goals are also outlined, in order to achieve the transport vision above:
- A city that's easier to get around;
 - A better-connected Sheffield; and
 - A safer and more sustainable Sheffield.
- 2.8 Of specific relevance to the development proposals, Policy 8 seeks to *"Enhance our multi-modal transport system, which encourages sustainable travel options and is embedded in the assessment of transport requirements for new developments, particularly active travel"*.
- 2.9 It is considered that the proposed development supports the policy aspirations of the Sheffield City Region Transport Strategy, by providing new retail development in a sustainable town centre location; this is discussed further in **Section 3**.

Barnsley Local Plan

- 2.10 The Barnsley Local Plan was adopted in January 2019 and sets out the local planning policy for the future development of Barnsley up to 2033. The objectives of the Local Plan are:
- **Policy SD1- Presumption in favour of sustainable development:** When considering development proposals, we will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework. We will work proactively with applicants jointly to find



solutions which mean that proposals can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area.

- **Policy T3- New Development and Sustainable Travel:** New development will be expected to:
 - Be located and designed to reduce the need to travel, be accessible to public transport and meet the needs of pedestrians and cyclists;
 - Provide at least the minimum standards of parking for cycles, motorbikes, scooters, mopeds and disabled people set out in the relevant supplementary planning document;
 - Provide a Transport Assessment or Statement in line with guidance set out in the National Planning Policy Framework and guidance including where appropriate regard for cross boundary local authority impacts; and
 - Provide a Travel Plan Statement or Travel Plan in accordance with guidance set out in the National Planning Policy Framework including where appropriate regard for cross boundary local authority impacts. Travel plans will be secured through a planning obligation or a planning condition.

Policy T4- New Development and Transport Safety:

- New development will be expected to be designed and built to provide all transport users within and surrounding the development with safe, secure and convenient access and movement;

2.11 The development proposals will adhere to policy SD1 and T3, as the development site is accessible via all modes of transport, particularly non-car modes, additionally a Travel Plan which accompanies this Transport Assessment will seek to promote sustainable travel amongst residents. **Section 4** of this Transport Assessment has assessed the vehicular impact of the existing highway network in regard to accident trends to derive whether there would be an impact on road safety from the development's implementation. Furthermore, the access has been subject to a swept path analysis to ensure that the vehicular access to the development does not create conflict with footway users or other vehicles, this adheres to Policy T4.



3. SITE ACCESSIBILITY

Introduction

- 3.1 This section of the Transport Assessment considers the accessibility of the site, particularly by non-car modes, focusing on how employees and customers will be able to access the site by means other than private car.

Pedestrian Accessibility

- 3.2 Guidance is provided by the Institute for Highways and Transportation (IHT), with regards to preferred maximum walking distance by journey type; this is summarised in **Table 3.1**. Two kilometres is typically considered to be the maximum distance that staff will be willing to walk to work, whilst customers would be likely to walk up to 800m to access town centre facilities, such as those proposed.

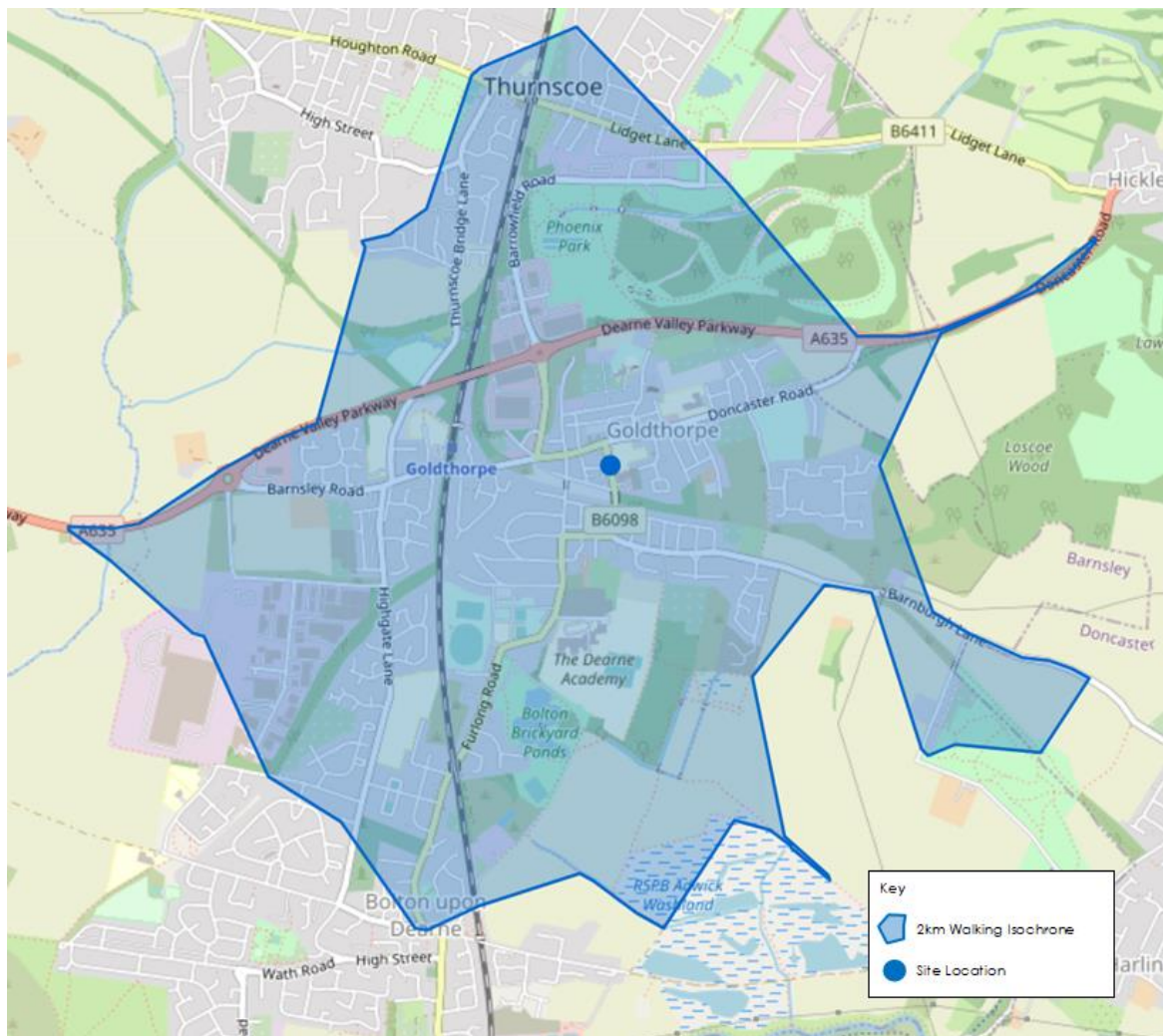
Table 3.1 - IHT Walking Guidelines

Criteria	Town Centres	Commuting/ School
Desirable	200m	500m
Acceptable	400m	1000m
Preferred Maximum	800m	2000m

(Source: IHT)

- 3.3 The site is located in Goldthorpe town centre, the preferred maximum distance for customers accessing town centres of 800m would include much of the town centre itself. A 2km catchment, the preferred maximum distance for staff commuting, would encompass: Goldthorpe, Thurnscoe and Bolton-Upon-Deane. This catchment is illustrated in **Figure 3.1** overleaf. This walking catchment covers several residential areas that would allow staff and visitors from the above areas to access the site on foot.

Figure 3.1: 2km Walking Catchment



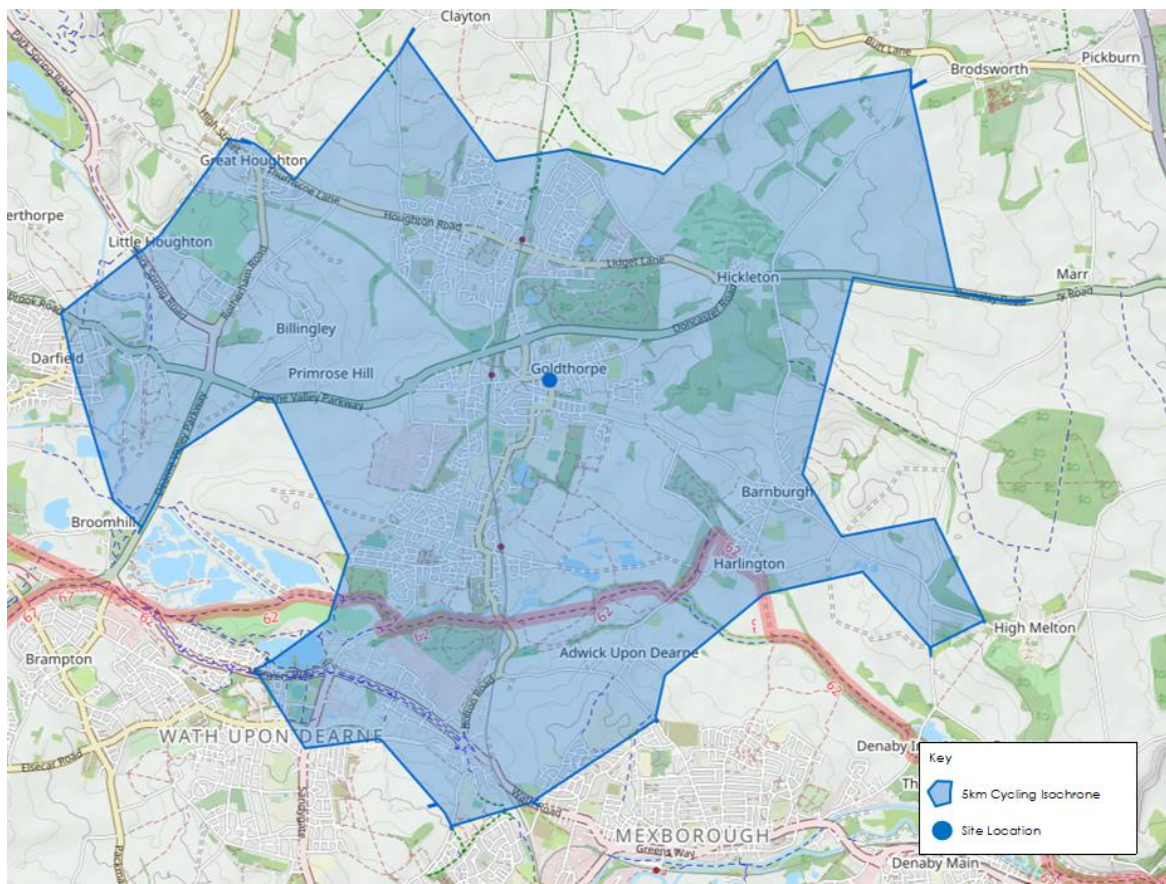
- 3.4 As can be seen from the layout, provided at Appendix A, a segregated pedestrian access is to be provided on High Street. There are footways provided on both sides of High Street, which measure approximately 2m wide. Dropped kerbs are provided across all junctions with High Street to the south of the site. To the north of the site, signalised pedestrian crossings are provided across all approaches to the Doncaster Road / Barnsley Road / High Street junction.
- 3.5 Doncaster Road runs along the northern boundary of the site; as can be seen from the proposed site layout, provided at **Appendix A**, pedestrians will be able to access the site directly from Doncaster Road.
- 3.6 Doncaster Road has wide footways on both sides of the carriageway. In addition to the signalised pedestrian crossings at the Doncaster Road / Barnsley Road / High Street

junction, there is another signalised pedestrian crossing across Doncaster Road c.45m to the east of the site, facilitating safe pedestrian movement to and from the site.

Cycling Accessibility

- 3.7 Cycling has the potential to substitute short car journeys, particularly those under 5km. The development is well located within Goldthorpe town centre with all off Goldthorpe, as well as Thurnscoe, Hickleton and Bolton-upon-Dearne falling within a reasonable cycling catchment. Thurnscoe and Bolton-upon-Dearne railway stations also fall within 5km cycling distance, allowing for potential multimodal, sustainable trips, particularly amongst staff. **Figure 3.2** overleaf illustrates a 5km cycle catchment from the site.

Figure 3.2: 5km Cycle Catchment



- 3.8 National Cycle Route 62 links Doncaster to the east and Barnsley to the west. The route passes 2.7km to the south of the development, providing a primarily off-road for cyclists, this is shown in Figure 3.3. The route follows Dearne Road northbound, then runs east along Lowfield Lane where it links into the Trans Pennine Trail and can be accessed via the local

cycle routes to the south of the site on either Straight Lane or Barnburgh View (via Kingsmark Way). NCN Route 62 provides a traffic free route to Wath upon Dearne, Mexborough, Barnsley town centre and Doncaster town centre.

Public Transport Accessibility

Bus

- 3.9 The closest bus stop is located on High Street, at the south west corner of the site. There are further bus stops on Barnsley Road, some 100m to the east of the site. These stops all benefit from a shelter, timetable information and seating. The location of the bus stops is shown in **Figure 3.2** below.

Figure 3.2 – Locations of Bus Stops



(Source: OpenStreetMap)

- 3.10 The High Street bus stops are served by the 208, 218, 218a, 219, 219a, and 226 services, with up to 7 services an hour. The Barnsley Road bus stops are served by the number X19 in addition to all the services which frequent High Street, with up to 9 services an hour. **Table 3.2**, overleaf, provides a summary of the bus routes and frequencies.



Table 3.2- Bus Services Summary Table

Service	Route	Frequency	
		Mon – Sat	Sunday
High Street and Barnsley Road			
208	Rotherham – Goldthorpe - Grimethorpe	3 per day	3 per day
218/218A	Barnsley -Goldthorpe - Rotherham	30 mins	60 mins
219/219A	Doncaster – Goldthorpe – Barnsley	30 mins	60 mins
226	Thurscoe – Goldthorpe - Wath-upon-Dearne	30 mins	60 mins
Barnsley Road			
X19	Doncaster – Marr - Goldthorpe –Barnsley	30 mins	60 mins

(Source: Bus Times.org)

- 3.11 As can be seen in **Table 3.2** above, the site is located in close proximity to a number of frequent bus services, which provide links to Barnsley and Doncaster, as well as to Rotherham, Mexborough and Wath-upon-Deane.

Rail

- 3.12 Goldthorpe Rail Station is located 650m to the west of the site location on Barnsley Road. The station is located on the Wakefield line, with hourly services in each direction between Leeds and Sheffield (every 2 hours on Sundays). The trains also call at Thurnscoe, Bolton-upon-Deane, Rotherham and Wakefield Westgate.

Summary

- 3.13 This section of the Transport Assessment has sought to identify the existing opportunities for travel by sustainable modes within the vicinity of the site. It has been identified that there are existing pedestrian and cycle routes, which can be utilised by staff members living locally to the site to commute. Furthermore, there are a wide range of destinations from which the site is accessible by public transport, with a variety of bus routes; regular services into the city centre allow for connections for onward journeys by bus, tram and train.

4. LOCAL HIGHWAY NETWORK

Introduction

- 4.1 This section of the Transport Assessment provides a summary of the existing local highway network surrounding the site. It also summarises the local road safety record over the past 5-year period, to determine whether there are any significant issues that might be exacerbated by the development proposals.

Existing Highway Network

- 4.2 A description of the local highway network in the immediate vicinity of the site is provided hereafter; for ease, it is also shown in **Figure 4.1** below.

Figure 4.1- Local Highway Network



(Source: Google)

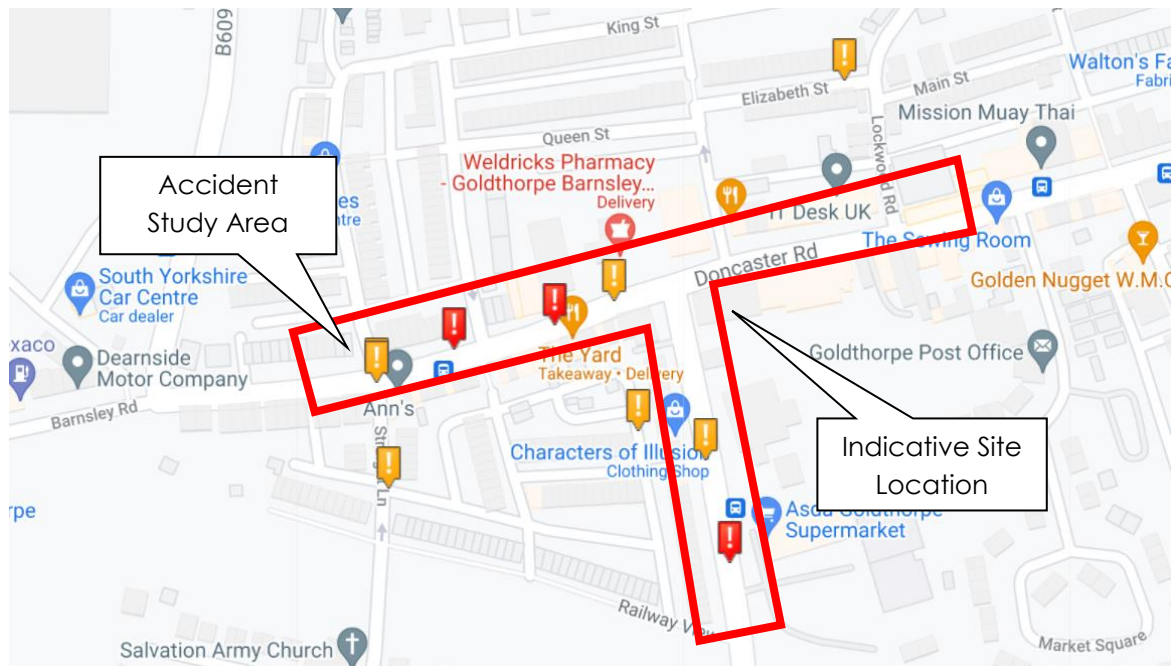
- 4.3 The site takes access from High Street, via a priority T-junction. High Street forms the western boundary of the site; it is approximately 7m wide and subject to a 30mph limit. In the vicinity of the site there are single yellow line waiting and loading restrictions on both sides of the carriageway; these restrictions are enforced between 08:00-18:00 Monday-Saturday. Double yellow lines are in place at the junction of High Street and Doncaster Road, precluding on-street parking.

- 4.4 To the south, High Street provides a route to Bolton-upon-Deerne, whilst to the north it forms an approach to the signalised T-junction with Doncaster Road and Barnsley Road.
- 4.5 Doncaster Road / Barnsley Road runs along the northern boundary of the development site; it is approximately 6.8m wide, and is subject to a 30mph speed limit. In the immediate vicinity of the site, on-street parking is permitted on the northern side of the carriageway, although this is restricted to a 1-hour limit (no return within 2 hours) between 08:00-18:00 Monday-Saturday. Along the southern side of the carriageway, there are double yellow lines, restricting all on-street parking.
- 4.6 Approximately 1km to the east of the site, Doncaster Road forms the minor approach to a priority T-junction with the A635. Some 1.4km to the west, Barnsley Road forms an approach to a three-arm roundabout with the A635. The A635 is a key route which bypasses Goldthorpe to the north, it is 8m wide and subject to the national speed limit (60mph). It links with Doncaster to the east and Barnsley to the west.

Accident Analysis

- 4.7 Accident data for the most recent 5-year period (2016-2020) has been obtained from Crash Map for the network surrounding the site. **Figure 4.2** sets out the study area considered, whilst **Table 4.1** identifies accidents by year and severity

Figure 4.2- Accident Study Area



(Source: Crashmap.co.uk)



Table 4.1 – Accidents by year and severity

Severity	2016	2017	2018	2019	2020	Total
Slight	0	1	2	0	1	4
Serious	1	1	0	0	1	3
Fatal	0	0	0	0	0	0

(Source: Crashmap)

- 4.8 As can be seen from **Table 4.1**, a total of 7 accidents occurred within the study area in the most recent five-year period. Of the five accidents recorded, 4 were slight and 3 were serious, no fatal accidents have been recorded in the most recent 5-year period. There are no discernible clusters of accidents.
- 4.9 Given the infrequent nature of accidents, there is not considered to be an existing road safety issue that would be exacerbated by the addition of trips associated with the development proposals. It should be noted, that since the preparation of the Transport Assessment which supported the 2019/0518 application, just two further accidents have been recorded, one serious and one slight.

Baseline Conditions

- 4.10 Peak period fully-classified turning counts were undertaken on Saturday 2nd March and Tuesday 5th March 2019 at the following junctions:
- Doncaster Road / Barnsley Road / High Street; and
 - Barnsley Road / B6098.
- 4.11 The peak hours for the network have been determined; the full count data is provided at **Appendix B. Table 4.2** summarises the total flows on each junction in the AM and PM peak hour respectively.

Table 4.2: Junction Peak Hours

Junction	AM		PM		Saturday	
	Peak Hour	Flow	Peak Hour	Flow	Peak Hour	Flow
Doncaster Road / Barnsley Road / High Street	07:45 – 08:45	970	16:30 – 17:30	988	11:30 – 12:30	914
Barnsley Road / B6098	08:00 – 09:00	875	16:45 – 17:45	938	11:15 – 12:15	974

(Source: Traffic Counts)



5. TRIP GENERATION AND DISTRIBUTION

Introduction

- 5.1 This section of the Transport Assessment considers the likely trip generation associated with the development proposals in the context of the approved retail scheme (2019/0518). The trips are distributed and assigned to the highway network in line with observed traffic movements.

Trip Generation

Consented Trip Generation

- 5.2 As detailed in **Section 1**, the site benefits from planning consent for a 1,394m² retail unit. The approved trip generation associated with the site, as set out in the accompanying Transport Assessment, is summarised in **Table 5.1**.

Table 5.1 – Vehicle Trip Rates

Land Use	AM			PM			Saturday		
	Arrival	Departure	Two-Way	Arrival	Departure	Two-Way	Arrival	Departure	Two-Way
Trip Rates	0.531	0.386	0.917	1.809	2.147	3.956	5.379	5.69	11.069
Trip Generation	7	5	12	25	30	55	75	79	154

(Source: 2019/0518 TPS Transport Assessment)

- 5.3 As can be seen from **Table 5.1**, the consented development proposals were anticipated to generate some 12 two-way trips in the AM peak hour, 55 two-way trips in the PM peak hour and 154 two-way trips in the Saturday peak hour without any reduction to take account of any linked trips between the site and the adjacent wider retail offering of Asda and Goldthorpe town centre.
- 5.4 It was set out in the Transport Assessment that, in accordance with research contained within the TRICS Research Report 05/1 Trip Attraction Rates of Developments with Multiple Retail and Leisure Uses, a reduction of 20% would be appropriate to take into account linked trips with other existing retail offerings in the vicinity of the site. **Table 5.2** summarises the resultant trip generation.



Table 5.2 - Linked Trip Generation

Weekday AM Peak Hour			Weekday PM Peak Hour			Saturday Peak Hour		
Arrival	Departures	Total	Arrival	Departures	Total	Arrival	Departures	Total
6	4	10	20	24	44	60	63	123

(Source: 2019/0518 TPS Transport Assessment)

Proposed Trip Generation

5.5 The current development proposals comprise a 1,972m² discount food retail unit. The TRICS database has been interrogated to derive trip rates for the development proposals. The parameters used are:

- Land Use: Retail;
- Category: Discount Food Stores;
- Size (GFA): 700 – 2800sqm;
- Date Range: 01/01/2013-28/11/2020;
- Weekday and Saturday surveys only; and
- Greater London surveys omitted.

5.6 **Table 5.3** below summarises the AM, PM and Saturday vehicle trip rates and resultant trip generation, whilst the full TRICS outputs are provided in **Appendix C**.

Table 5.3 – Vehicle Trip Rates

Land Use	AM			PM			Saturday		
	Arrival	Departure	Two-Way	Arrival	Departure	Two-Way	Arrival	Departure	Two-Way
Trip Rates	2.659	1.869	4.528	4.077	4.587	8.664	5.815	5.335	11.150
Trip Generation	52	37	89	80	90	171	115	105	220

(Source: TRICS)

5.7 As can be seen from **Table 5.3**, the development proposals are anticipated to generate some 89 two-way trips in the AM peak hour, 171 two-way trips in the PM peak hour and 220 two-way trips in the Saturday peak hour. It should be noted that these do not take account



of any linked trips between the site and the adjacent wider retail offering of Asda and Goldthorpe town centre.

Linked Trips

- 5.8 It is widely accepted that, particularly with food retail, sites largely attract existing trips rather than generating new trips. In simple terms, people always need to shop for various goods and the provision of a retail store does not, in itself, create the need to make an extra shopping trip. The presence of a retail store provides an alternative destination for an existing household's journey. Similarly, given the location within the town centre and adjacent to the ASDA supermarket, there is significant potential for customers to visit multiple retail opportunities in Goldthorpe as part of linked trip. It is, therefore, necessary to adjust the estimated traffic generation to account for this behaviour.
- 5.9 The following summarises retail trip types:
- New Trips – trips that will be new to the highway network during the assessment period (i.e. not currently undertaking a trip at this time). In most cases, these trips will be associated with new housing or another development. Primary trips would be single purpose trips for example; home – development – home.
 - Existing Trips in the Network - multi-purpose trips which call into a development en-route to another destination. Frequently this is a work-shop-home trip. Non-primary trips can be further sub-divided into:
 - Pass-by Trips - trips that visit the new development without having to make any significant diversion from their existing route;
 - Diverted Trips - trips that deviate off their normal route to visit the new development; and
 - Linked Trips - trips that will have multiple destinations within the proposed development site. Examples include trips to food and non-food retail, between both the development site and existing adjacent sites or between the development site and an established town centre.
- 5.10 The TRICS Research Report 14/1 'Pass-by and Diverted Trips', states that a significant number of trips to retail developments already exist on the network, especially during the peak hours. Key findings cited within TRICS Research Report 14/1 include:



- Harries et al. (2012) 'Trip Generation Characteristics of Large-Format Retail Development Sites in Auckland' - A high proportion of secondary (pass-by and diverted) trips exist, being in the range of 57-67%.
- Ghezawi et al. (1998) 'Convenience Store Trip Generation' - The average percentage of pass-by trips recorded was 72%, with a range between the 13 stores of 61 to 85%. The study also found a positive relationship between pass-by trip percentage and adjacent street volumes using average daily traffic flows.
- Wrigley (2006) 'The Effects of Corporate Foodstores on the High Street: Rebalancing the Debates, University of Southampton' - The level of linked (diverted) trips recorded at both locations was in the region of 60% (65% at Beverley, 58% at Warminster).
- Mouchel (2009) 'Proposed Tesco Store & Shopping Centre, West Bromwich: Working Paper 3 – Linked Trips' - The majority of cases having a level of linked trips with adjacent town and shopping centres at above 60%.

5.11 Based upon the research contained within TRICS Research report 14/1, **Table 5.4** provides a summary of trip composition, applying this to the Discount Food Retail trip generation set out in **Table 5.3**.

Table 5.4 – Trip Generation by Type

Trip Type		AM			PM			Saturday		
		Arrival	Departure	Two-Way	Arrival	Departure	Two-Way	Arrival	Departure	Two-Way
New	20%	10	7	18	16	18	34	23	21	44
Pass-by	40%	21	15	36	32	36	68	46	42	88
Diverted	40%	21	15	36	32	36	68	46	42	88
TOTAL	100%	52	37	89	80	90	171	115	105	220

(Source: Consultant Calculation)

Net Impact

5.12 As has been discussed, the site already benefits from planning consent (2019/0518) for a 1,394m² retail unit. The site considered a reduction to allow for linked trips, and that all remaining trips would be new to the network. However, given the food retail nature of the new proposals, the type of trips are slightly different. **Table 5.5** provides a summary of the



new trips associated with the consented scheme (**Table 5.2**) and new trips associated with the proposed scheme (**Table 5.4**)

Table 5.5 – Net New Trip Generation

	Weekday AM Peak Hour			Weekday PM Peak Hour			Saturday Peak Hour		
	Arrival	Departures	Total	Arrival	Departures	Total	Arrival	Departures	Total
2019/0518	6	4	10	20	24	44	60	63	123
Proposed	10	7	18	16	18	34	23	21	44
Net Impact	+4	+3	+8	-4	-6	-10	-37	-42	-79

(Source: 2019/0518 TPS Transport Assessment and Consultant Calculation)

- 5.13 As can be seen from **Table 5.5**, when considering the uplift in new trips associated with the consented scheme and proposed scheme, there would be an additional 8 two-way new vehicle trips in the AM peak hour, but 10 fewer two-way new vehicle trips in the PM peak hour and 79 fewer two-way new vehicle trips in the Saturday peak hour.

Trip Distribution

New Trip Distribution

- 5.14 As has been discussed in **Section 4** of this Transport Assessment, baseline traffic counts were undertaken on Saturday 2nd March and Tuesday 5th March 2019 at the following junctions:
- Doncaster Road / Barnsley Road / High Street; and
 - Barnsley Road / B6098.
- 5.15 In line with the methodology contained within the Transport Assessment for the consented retail scheme, the proposed 'new' development trips have been distributed on the highway network in line with observed turning movements at the junctions.
- 5.16 **Figure 5.1**, provided at **Appendix D**, illustrates the turning proportions, whilst **Figure 5.2**, also provided at **Appendix D**, shows the resultant new trips on the network.

Pass-By Trip Distribution

- 5.17 As has been discussed, pass-by trips are those trips that visit the development without having to make any significant diversion from their existing route. It is therefore assumed that these will be trips already travelling on High Street. The pass-by trip distribution at the



site access is assumed to be in line with the existing two-way north-south split of base flows on High Street.

- 5.18 **Figure 5.3**, provided at **Appendix D**, illustrates the turning proportions, whilst **Figure 5.4**, also provided at **Appendix D**, shows the resultant development flows on the network.

Diverted Trip Distribution

- 5.19 These are trips that deviate off their normal route to visit the new development. It is therefore assumed that these will be trips travelling on Doncaster Road. The diverted trip distribution at the Doncaster Road / High Street junction is assumed to be in line with the existing two-way east-west split of base flows on Doncaster Road.

- 5.20 **Figure 5.5**, provided at **Appendix D**, illustrates the turning proportions, whilst **Figure 5.6**, also provided at **Appendix D**, shows the resultant development flows on the network.

Materiality

- 5.21 In order to determine where further assessment of the impact of the development proposals is required, a materiality assessment has been undertaken (in terms of the anticipated uplift in movements as a consequence of the development). This is presented in **Table 5.6**, below.

Table 5.6: Impact at Specific Junctions

Junction	2019 Base Flows			Development Flows			% Increase		
	AM	PM	Saturday	AM	PM	Saturday	AM	PM	Saturday
Site Access	836	831	652	17	34	44	2%	4%	7%
Doncaster Road / Barnsley Road / High Street	970	988	914	9	17	26	1%	2%	3%
Barnsley Road / B6098	875	938	974	5	10	14	1%	1%	1%

(Source: Consultant Calculation)

- 5.22 The impact of the addition of trips associated with development proposals, upon junction operation, will be considered further in the following section of the Transport Assessment for all junctions identified in **Table 5.6**, reflecting the junctions that were considered as part of the approved 2019/0518 application.



6. OPERATIONAL ASSESSMENT

Introduction

- 6.1 This section of the Transport Assessment presents the results of operational assessments, undertaken to demonstrate the impact of the development proposals on highway capacity at the site access as well as the Doncaster Road / Barnsley Road / High Street and Barnsley Road / B6098 junctions.

Traffic Growth

- 6.2 Base traffic flows (2019) have been factored to a design year of 2021 and 2026, using National Traffic Model forecasts, factored with TEMPRO for MSOA Barnsley 022. The resultant growth rates that have been applied to observed traffic movements in the AM, PM and Saturday peak hours are as follows:

- 6.3 2019 - 2021

- AM – 1.0254;
- PM – 1.0245; and
- Saturday – 1.0245.

- 6.4 2019 - 2026

- AM – 1.0730;
- PM – 1.0724; and
- Saturday – 1.0748.

- 6.5 Flow diagrams are provided at **Appendix D**.

Committed Development

- 6.6 At the request of AECOM, highways consultants for Barnsley Metropolitan Borough Council, as part of the 2019/0518 application, flows associated with 125 residential dwellings taking access from Kingsmark Way, to east of Goldthorpe town centre, have been included within the operational assessments (2018/0103).

- 6.7 The flow diagrams from the Transport Assessment are provided at **Appendix E**. As the network flow diagram does not extend passed the Doncaster Road / Barnsley Road / High Street junction, the committed development flows at the Barnsley Road / B6098 junction



have been distributed based on observed traffic movements. These committed development flows are shown on Flow Diagrams provided at **Appendix D**.

Capacity Assessments

- 6.8 Junctions modelling software has been used to assess the operation of each junction; the results are summarised for each junction in turn below. The Junctions 8 software predicts the Ratio of Flow to Capacity (RFC) on each approach / turning movement and resultant traffic queue length. An RFC value of less than 0.85 is generally accepted as indicating that a junction is operating within theoretical capacity. LINSIG 3 predicts the Degree of Saturation (DoS) on each approach and resultant traffic queue length. A DoS value of less than 90% is generally accepted as indicating that a junction is operating within theoretical capacity.
- 6.9 Where RFC and DoS values exceed 1.0, the results should be treated with caution as traffic queues and delays are affected exponentially. The full model outputs are provided at **Appendix F**.
- 6.10 The following scenarios have been modelled in the 2021 and 2026 peak hours:
- Base + Committed Development AM and PM; and
 - Base + Committed Development + Development AM and PM.

High Street / Site Access

- 6.11 The High Street / Site Access priority T-junction has been modelled for the Base + Development scenarios, in the current and design year. The results are summarised in **Table 6.1**.



Table 6.1: High Street / Site Access, Base + Development

Movement	2021						2026					
	AM		PM		Saturday		AM		PM		Saturday	
	RFC	Q	RFC	Q	RFC	Q	RFC	Q	RFC	Q	RFC	Q
Site Access – High Street South	0.02	0.02	0.06	0.06	0.07	0.08	0.02	0.03	0.06	0.06	0.08	0.08
Site Access – High Street North	0.08	0.09	0.19	0.23	0.19	0.24	0.08	0.09	0.20	0.24	0.20	0.24
High Street South – High Street North / Site Access	0.04	0.06	0.07	0.13	0.07	0.13	0.04	0.06	0.07	0.13	0.08	0.14

(Source: Junctions 8)

- 6.12 As can be seen from the above results, the site access junction is anticipated to operate within capacity in all peak periods, in 2021 and in the design year of 2026.

Doncaster Road / Barnsley Road / High Street

- 6.13 The Doncaster Road / Barnsley Road / High Street signalised T-junction has been modelled for the Base and Base + Development scenarios, in the current and design year. The results are summarised in **Table 6.2** and **Table 6.3**, below.

Table 6.2: Doncaster Road / Barnsley Road / High Street, Base

	2021						2026					
	AM		PM		Saturday		AM		PM		Saturday	
	DoS	Q	DoS	Q	DoS	Q	DoS	Q	DoS	Q	DoS	Q
Doncaster Road	34.5%	9.1	33.2%	8.8	33.3%	9.3	34.0%	9.2	40.5%	10.2	34.5%	9.7
High Street	63.2%	17.7	63.1%	18.7	50.0%	11.9	67.2%	19.0	66.2%	19.9	53.3%	12.7
Barnsley Road	62.9%	15.9	62.4%	15.2	49.6%	14.1	66.8%	16.9	66.0%	16.7	52.6%	15.2

(Source: LINSIG 3)

- 6.14 As can be seen from **Table 6.2**, the Doncaster Road / Barnsley Road / High Street junction operates within capacity in all peak periods, both currently and in the design year of 2026. **Table 6.3** summarises the operation of the junction, with the addition of the development traffic.



6.15

Table 6.3: Doncaster Road / Barnsley Road / High Street, Base + Development

	2021						2026					
	AM		PM		Saturday		AM		PM		Saturday	
	DoS	Q	DoS	Q	DoS	Q	DoS	Q	DoS	Q	DoS	Q
Doncaster Road	38.4%	9.9	56.2%	11.9	45.7%	12.1	43.8%	11.1	57.5%	12.5	37.2%	10.5
High Street	68.9%	20.0	72.1%	23.4	65.9%	17.6	72.1%	21.3	75.8%	25.1	70.7%	18.9
Barnsley Road	68.9%	17.3	71.9%	17.6	65.8%	17.8	72.0%	18.9	75.4%	18.8	70.6%	18.2

(Source: LINSIG 3)

- 6.16 As can be seen from **Table 6.3**, with the addition of development trips there is an increase in the DoS and queue lengths at the junction. The highest anticipated DoS is 75.8% on the High Street approach with an associated queue of 25.1 pcu's. This is an increase in DoS of just 9.3% and an increase in queue length of just 5.2 pcu's. This level of increase cannot be considered to constitute a severe impact, particularly as the junction operates within capacity.

Barnsley Road / B6098

- 6.17 The Barnsley Road / A6098 signalised T-junction has been modelled for the Base and Base + Development scenarios, in the current and design year. The results are summarised in **Table 6.4** and **Table 6.5**, below.

Table 6.4: Barnsley Road / A6098, Base

	2021						2026					
	AM		PM		Saturday		AM		PM		Saturday	
	DoS	Q	DoS	Q	DoS	Q	DoS	Q	DoS	Q	DoS	Q
Barnsley Road (East)	51.6%	7.0	63.5%	9.8	59.2%	10.2	55.5%	7.4	66.1%	10.4	3.7	10.9
Barnsley Road (West)	57.3%	9.2	52.4%	7.7	45.5%	7.1	60.0%	9.8	53.0%	8.0	2.4	7.6
B6098	55.9%	4.7	60.6%	5.9	55.9%	3.7	58.1%	4.9	67.1%	6.6	2.1	4.0

(Source: LINSIG 3)

- 6.18 As can be seen from the above results, the junction operates satisfactorily in both peak periods, both currently and in the design year of 2024. **Table 6.4** summarises the operation of the junction, with the addition of the development traffic.



Table 6.5: Barnsley Road / A6098, Base + Development

	2021						2026					
	AM		PM		Saturday		AM		PM		Saturday	
	DoS	Q	DoS	Q	DoS	Q	DoS	Q	DoS	Q	DoS	Q
Barnsley Road (East)	51.7%	7.0	62.2%	9.7	59.9%	10.3	55.7%	7.6	66.7%	10.6	63.6%	11.3
Barnsley Road (West)	57.6%	9.3	51.2%	7.7	46.2%	7.2	57.4%	9.0	53.4%	8.1	48.5%	7.7
B6098	56.3%	4.7	64.6%	6.2	56.8%	3.8	55.0%	4.8	67.4%	6.6	59.7%	4.0

(Source: LINSIG 3)

- 6.19 As can be seen from the results, DoS values remain below 90% on all approaches in all scenarios and there are negligible changes to queuing reported.

Summary

- 6.20 Capacity assessments have been undertaken for site access as well as the Doncaster Road / Barnsley Road / High Street and Barnsley Road / B6098 junctions. The modelling results indicate that the junctions do, and will continue to, operate within theoretical capacity with the addition of vehicle trips, associated with the development proposals.
- 6.21 In accordance with NPPF it is, therefore, considered that the residual cumulative impacts of the development are not severe.



7. ACCESS, PARKING AND SERVICING

Introduction

- 7.1 This section of the Transport Assessment sets out the proposed parking and servicing arrangements for the site.

Access

- 7.2 The site will take access from the retained, but improved, Goldthorpe Primary School access with High Street on the eastern boundary of the site. As can be seen from the site layout, provided at **Appendix A**, the access will take the form of a priority T-junction, located some 55m to the south of the High Street / Doncaster Road junction and 11m to the north of the High Street / Jackson Street junction.
- 7.3 It is noted that the South Yorkshire Residential Design Guide a junction spacing of 20m between junctions on the opposite side of the carriageway “will generally apply” suggesting that in certain circumstances, a relaxation of this would be permitted. With this in mind, TPS would note that:
- Access to the former Goldthorpe Primary School was taken from the same location, a review of Crashmap suggests that there wasn't a highway safety issue at this location when the school was operational on the site;
 - Jackson Street provides access to a small quantum of residential dwellings, consequently, it is unlikely that many drivers will use the Jackson Street junction and therefore there will be minimal conflicting movements with traffic associated with the Lidl development; and
 - There is clear intervisibility between both the proposed site access, Jackson Street and High Street which will ensure that drivers are able to anticipate other vehicle movements without detriment to driver safety.
- 7.4 With this in mind, it is considered that the proposed access is suitably offset from the adjacent junction.

Parking

- 7.5 Barnsley Metropolitan Borough Council sets out parking standards in the 'Parking' Supplementary Planning Document (Adopted November 2019). For Food retail these can



be summarised as 1 car parking space per 14-20m² with 10% of spaces for EV charging. Discussions were held with BMBC on 21st October 2021, during which it was agreed that a lower level of EV charging would be acceptable if fast charging units were installed. Similarly, the parking standards identify that 5% of total parking provision to be for disabled users, plus 4% capable of enlargement.

- 7.6 Based on the parking standards, between 99 – 141 parking spaces might be permitted. As can be seen from the layout provided at **Appendix A**, in line with parking standards, a total of 121 car parking spaces will be provided, including; 5 disabled spaces, 8 parent and child, 6 EV charging and 4 staff car parking spaces.
- 7.7 Whilst the quantum of EV charging spaces falls below the 10% requirement, underground ducts will be laid within the car park to allow further electric charging units to be installed at a later date as demand dictates.
- 7.8 In line with discussions with BMBC, two hours free parking will be permitted for customers to promote linked trips to the wider district centre.
- 7.9 There are no cycle parking standards provided for food retail developments, nonetheless, cycle parking will be provided as part of the development proposals. As can be seen from the site layout provided at **Appendix A**, a total of 6 Sheffield stands, capable of accommodating 12 bicycles, will be provided in the vicinity of the store entrance.
- 7.10 Motorcycle parking standards are identified as 1 motorcycle space per 20 spaces with a minimum provision of 1 space. As can be seen from the layout, provided at **Appendix A**, a total of 6 motorcycle parking spaces will be provided.

Servicing

- 7.11 Deliveries to the unit will likely be made by articulated lorry, via High Street. The Drawing at **Appendix A** illustrates the swept path analysis of a 16.5m articulated lorry entering the access from High Street, manoeuvring through the car park to the service yard at the rear of the unit and egressing the site again in a forward gear.
- 7.12 It is anticipated that there will be just one dedicated delivery per average day per unit, increasing to two during seasonal peak periods, such as Easter and Christmas. Deliveries will typically take place outside the normal highway peak hours to minimise any disruption or conflict with customers.



8. SUMMARY AND CONCLUSION

Summary

- 8.1 TPS has prepared this Transport Assessment to accompany a planning application for the redevelopment of the former Goldthorpe Primary School, to the immediate south east of the Doncaster Road / Barnsley Road / High Street T-junction, to provide a food retail development. The following summarises the key findings:
- The proposals have been demonstrated to accord with both national and local transport policy, being in a location that is well connected with the surrounding residential catchment, offering opportunities for walking, cycling and public transport trips to the site;
 - An analysis of historic accident data suggests that there are no accident trends that might be exacerbated by the addition of development traffic;
 - Trip generation has been determined using TRICS trip rates. Taking into account pass-by and diverted trips between the retail uses, and a robust assumption that all other trips are new to the network, it is anticipated the proposals might result in 18 new two-way vehicular trips in the AM peak, 34 new two-way vehicular trips in the PM peak and 44 new two-way vehicular trips in the Saturday peak;
 - When considered in the context of the consented retail scheme on the site, the development proposals would result in 8 new two-way vehicular trips in the AM peak, but 10 fewer new two-way vehicular trips in the PM peak and 79 fewer new two-way vehicular trips in the Saturday peak;
 - The impact of development at specific off-site junctions has been assessed, these junctions being the site access along with the Doncaster Road / Barnsley Road / High Street and Barnsley Road / B6098 junctions;
 - Operational assessments of the junctions indicate that all junctions will operate satisfactorily in all peak periods with the addition of the development traffic, in both the current and design year;
 - As part of the proposals, parking is being provided in line with Barnsley Metropolitan Borough Council's parking standards; and



- Swept path analysis has been undertaken to demonstrate that the proposed site layout is suitable to accommodate the types of vehicles that are likely to access the site.

Conclusion

- 8.2 Given the above, it is considered that the proposed development will not result in a severe impact on the operation of the transport network. Consequently, in line with the National Planning Policy Framework, there are no highway grounds why the development proposals should not be granted planning consent.



Appendix A

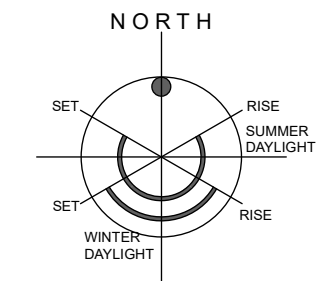
Proposed Site Layout Plan

HIGH STREET / DONCASTER - GOLDTHORPE, S63 9NG

PROPOSED SITE PLAN



Station	Easting	Northing	Level
ST01	446262.644	404327.095	52.560
ST02	446214.827	404375.443	52.351
ST03	446188.643	404315.187	51.205
ST04	446227.482	404294.019	51.823



BOUNDARY LEGEND

- A-B - Existing paladin fence on brick wall to be retained and repaired as required
- B-C - Existing brick wall retained and made good
- C-D - Retained palsade fence
- D-E - Retained paladin fence
- E-G - Existing brick wall
- G-H - Existing brick wall with railing above retained and made good where required
- H-I - Retained existing brick wall, new wall to areas of blocked up openings to match existing and made good as required
- I-A - Existing wall retained and made good
- I-A - Existing wall removed

Extent of boundary required to have 2.5m Noise barrier as Noise Assessment

NOTES
ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE BUILDING REGULATIONS AND THE REQUIREMENTS OF THE LOCAL AUTHORITY.

C	Parking layout updated to incorporate 6no. motorcycle bays.	IR	17/11/2	
B	Pedestrian access adjacent to main vehicular entrance amended to avoid clash with lamp post	RH	11/11/2	
A	Minor amendment to vehicle access	IR	05/11/2	
REV	DESCRIPTION	BY	CHKD	DATE

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PROJECT
HIGH STREET / DONCASTER ROAD
GOLDTHORPE, S63 9NG

TITLE
Planning Information
GENERAL ARRANGEMENT
PROPOSED SITE PLAN

DRAWING NO.	1526-LS-101(P)	REVISION	C
SCALE	1:500 @ A2	DATE	OCT 21
DRAWN BY		CHECKED BY	

- PURPOSE OF ISSUE
- ☐ PLANNING
 - ☐ BUILDING REGS
 - ☐ TENDER
 - ☐ COMMENT
 - ☒ INFORMATION
 - ☐ CONSTRUCTION

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Appendix B

Traffic Counts



6645 / CONTINUING
MARCH 19
MANUAL CLASSIFIED COUNT

8440 / CONTINUED
MARCH 19
MANUAL CLASSIFIED COUNT

660 / CONTINUING
MARCH 19
MANUAL CLASSIFIED COUNT

0420 / CONTINUING
MARCH 19
MANUAL CLASSIFIED COUNT

9.6.0 / CONTINUING
MARCH 19
MANUAL CLASSIFIED COUNT

6420 / CONTINUED
MARCH 19
MANUAL CLASSIFIED COUNT

SITE:	1
LOCATION:	Exterior, Street/Highway

DAY: Saturday SITE: 1
DATE: 09/03/2019 LOCATION: Riverside Blvd (66798)

DAY: Saturday SITE: 1
DATE: 09/03/2019 LOCATION: Burrows Drive 408, 2008

DAY: Saturday SITE: 1
DATE: 09/03/2019 TIME: 11:00 Reviewer: Bruce B. B. B.

DAY: Saturday SITE: 1
DATE: 09/03/2019 LOCATION: Brexley Blvd/494/79

DAY: Saturday SITE: 1
DATE: 09/03/2019 LOCATION: Breckinridge Street/US258

DATE: 09/03/2019

[illegible]

1707 ATTENDANCE: Brenda Brown/RECEIVED

ID	A										B										C										D										E										F										G										H										I										J										K										L										M										N										O										P										Q										R										S										T										U										V										W										X										Y										Z										AA										AB										AC										AD										AE										AF										AG										AH										AI										AJ										AK										AL										AM										AN										AO										AP										AQ										AR										AS										AT										AU										AV										AW										AX										AY										AZ										BA										BB										BC										BD										BE										BF										BG										BH										BI										BJ										BK										BL										BM										BN										BO										BP										BQ										BR										BS										BT										BU										BV										BW										BX										BY										BZ										CA										CB										CC										CD										CE										CF										CG										CH										CI										CJ										CK										CL										CM										CN										CO										CP										CQ										CR										CS										CT										CU										CV										CW										CX										CY										CZ										DA										DB										DC										DD										DE										DF										DG										DH										DI										DJ										DK										DL										DM										DN										DO										DP										DQ										DR										DS										DT										DU										DV										DW										DX										DY										DZ										EA										EB										EC										ED										EE										EF										EG										EH										EI										EJ										EK										EL										EM										EN										EO										EP										EQ										ER										ES										ET										EU										EV										EW										EX										EY										EZ										FA										FB										FC										FD										FE										FF										FG										FH										FI										FJ										FK										FL										FM										FN										FO										FP										FQ										FR										FS										FT										FU										FV										FW										FX										FY										FZ										GA										GB										GC										GD										GE										GF										GG										GH										GI										GJ										GK										GL										GM										GN										GO										GP										GQ										GR										GS										GT										GU										GV										GW										GX										GY										GZ										HA										HB										HC										HD										HE										HF										HG										HH										HI										HJ										HK										HL										HM										HN										HO										HP										HQ										HR										HS										HT										HU										HV										HW										HX										HY										HZ										IA										IB										IC										ID										IE										IF										IG										IH										II										IJ										IK										IL										IM										IN										IO										IP										IQ										IR										IS										IT										IU										IV										IW										IX										IY										IZ										JA										JB										JC										JD										JE										JF										JG										JH										JI										JJ										JK										JL										JM										JN										JO										JP										JQ										JR										JS										JT										JU										JV										JW										JX										JY										JZ										KA										KB										KC										KD										KE										KF										KG										KH										KI										KJ										KL										KM										KN										KO										KP										KQ										KR										KS										KT										KU										KV										KW										KX										KY										KZ										LA										LB										LC										LD										LE										LF										LG										LH										LI										LJ										LK										LM										LN										LO										LP										LQ										LR										LS										LT										LU										LV										LW										LX										LY										LZ										MA										MB										MC										MD										ME										MF										MG										MH										MI										MJ										MK										ML										MM										MN										MO										MP										MQ										MR										MS										MT										MU										MV										MW										MX										MY										MZ										NA										NB										NC										ND										NE										NF										NG										NH										NI										NJ										NK										NL										NM										NN										NO										NP										NQ										NR										NS										NT										NU										NV										NW										NX										NY										NZ										OA										OB										OC										OD										OE										OF										OG										OH										OI										OJ										OK										OL										OM										ON										OO										OP										OQ										OR										OS										OT										OU										OV										OW										OX										OY										OZ										PA										PB										PC										PD										PE					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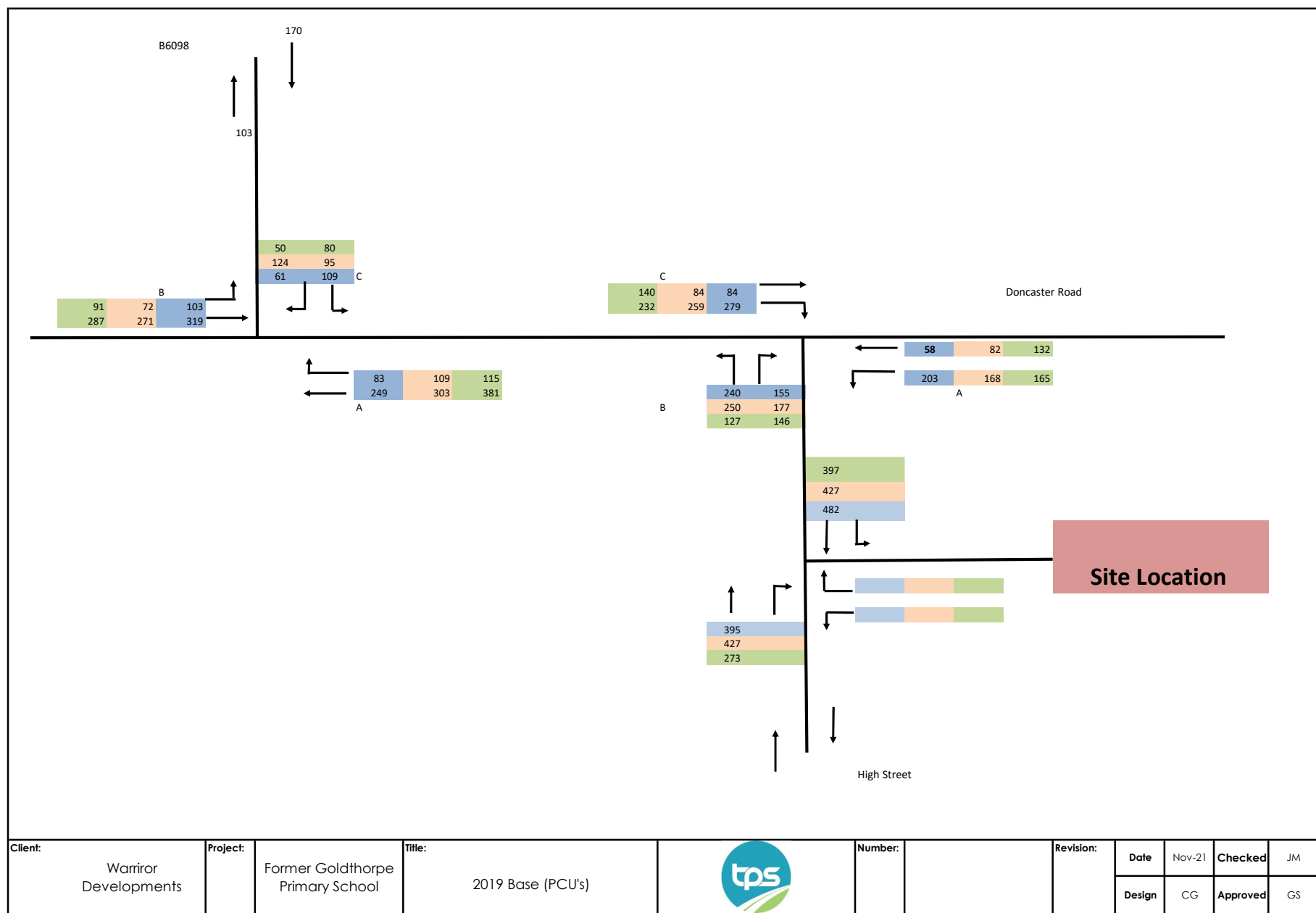
Appendix C

TRICS Outputs



Appendix D

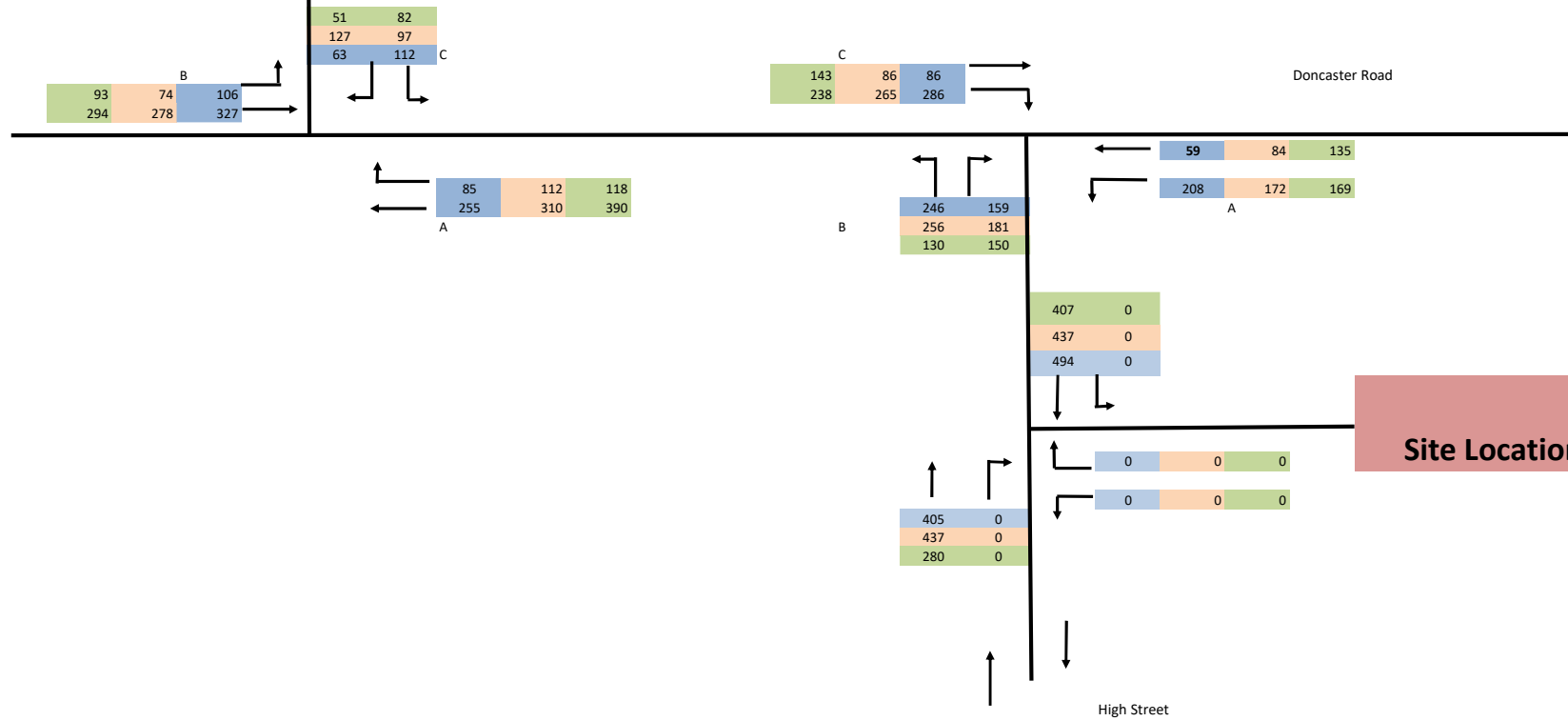
Network Flow Diagrams



Client:	Project:	Former Goldthorpe Primary School	Title:	2019 Base (PCU's)		Number:	Revision:	Date	Nov-21	Checked	JM
								Design	CG	Approved	GS

B6098

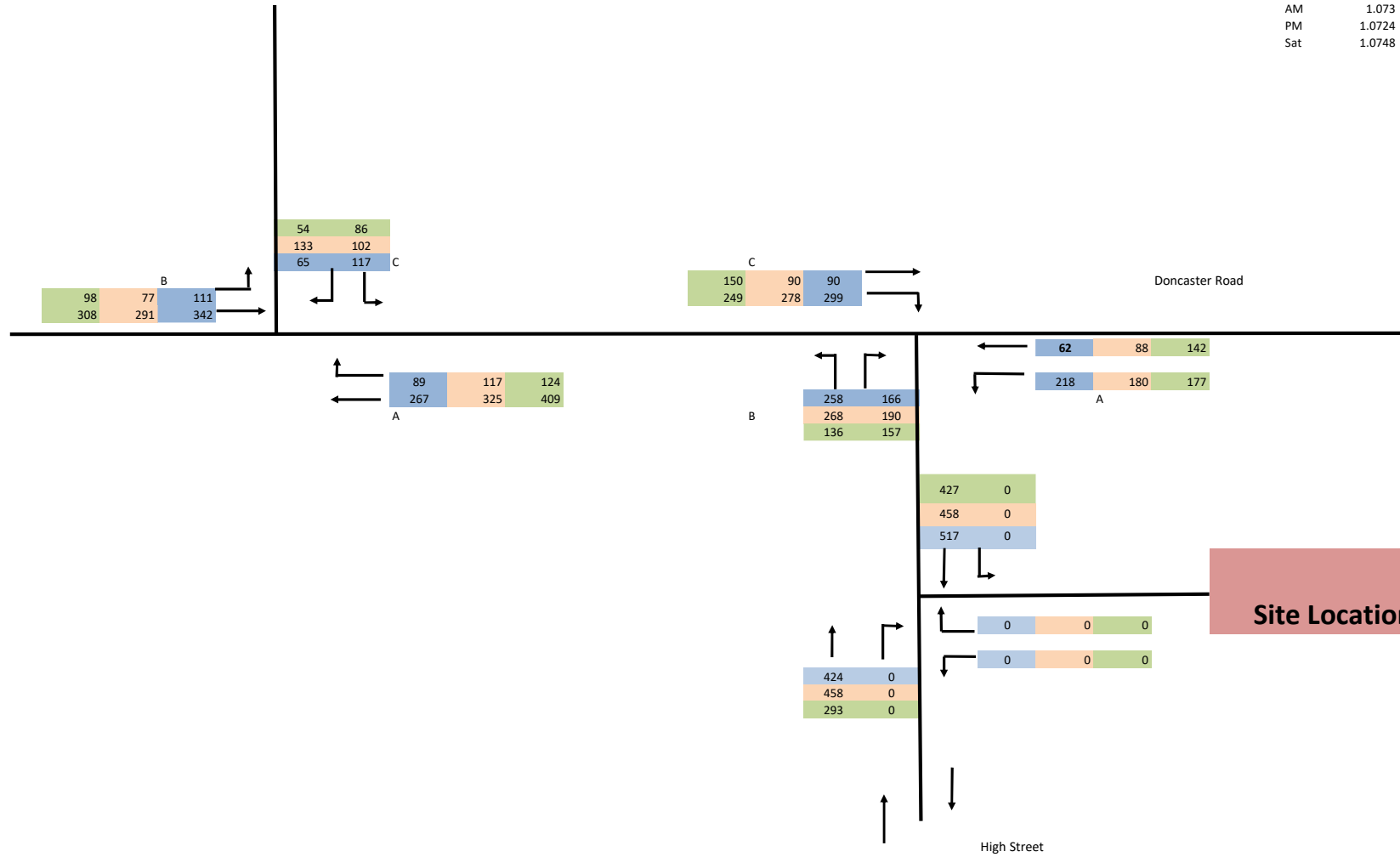
2019 - 2021
 AM 1.0254
 PM 1.0245
 Sat 1.0245



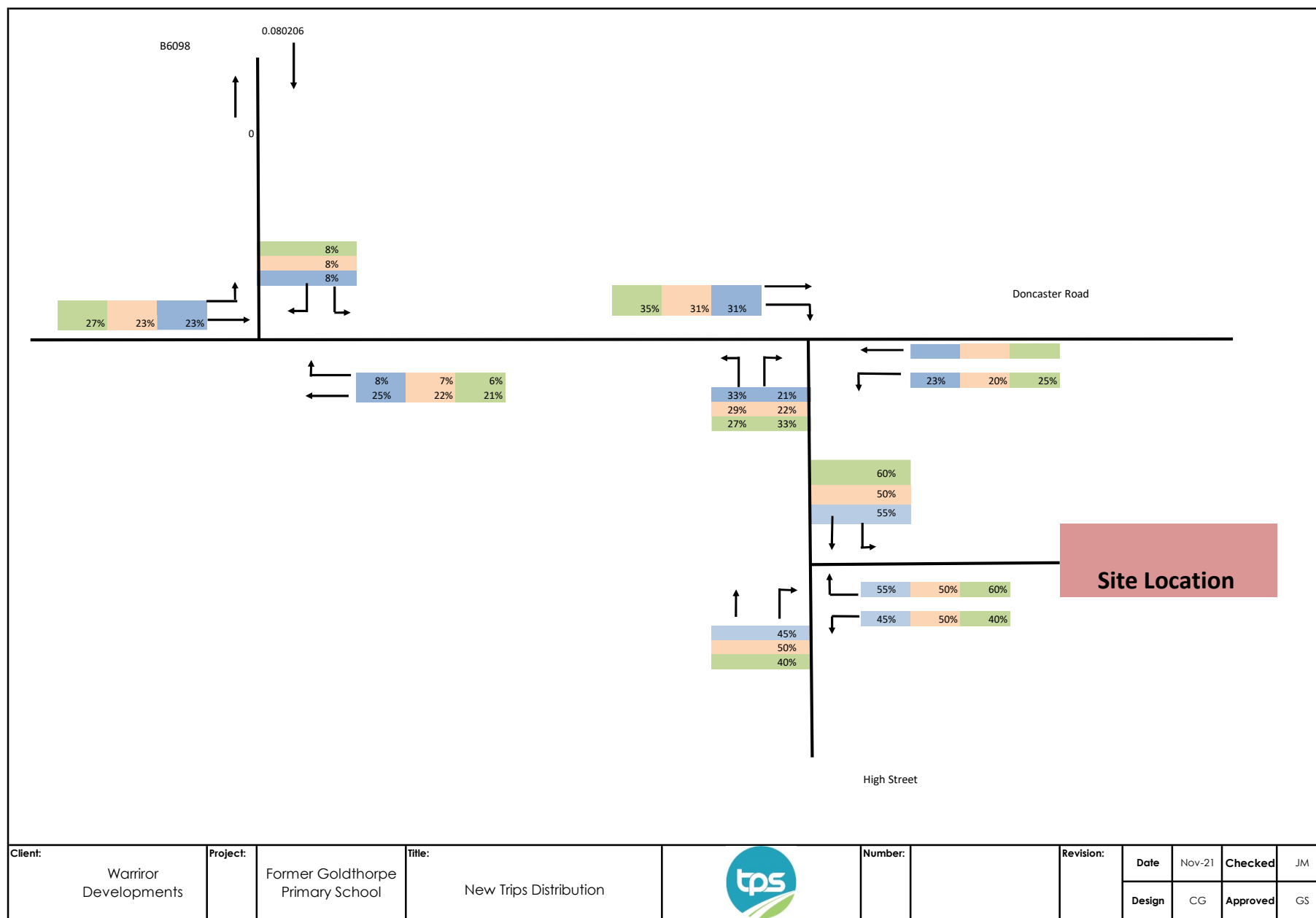
Client:	Project:	Former Goldthorpe Primary School	Title:	2021 Base		Number:		Revision:	Date	Nov-21	Checked	JM
									Design	CG	Approved	GS

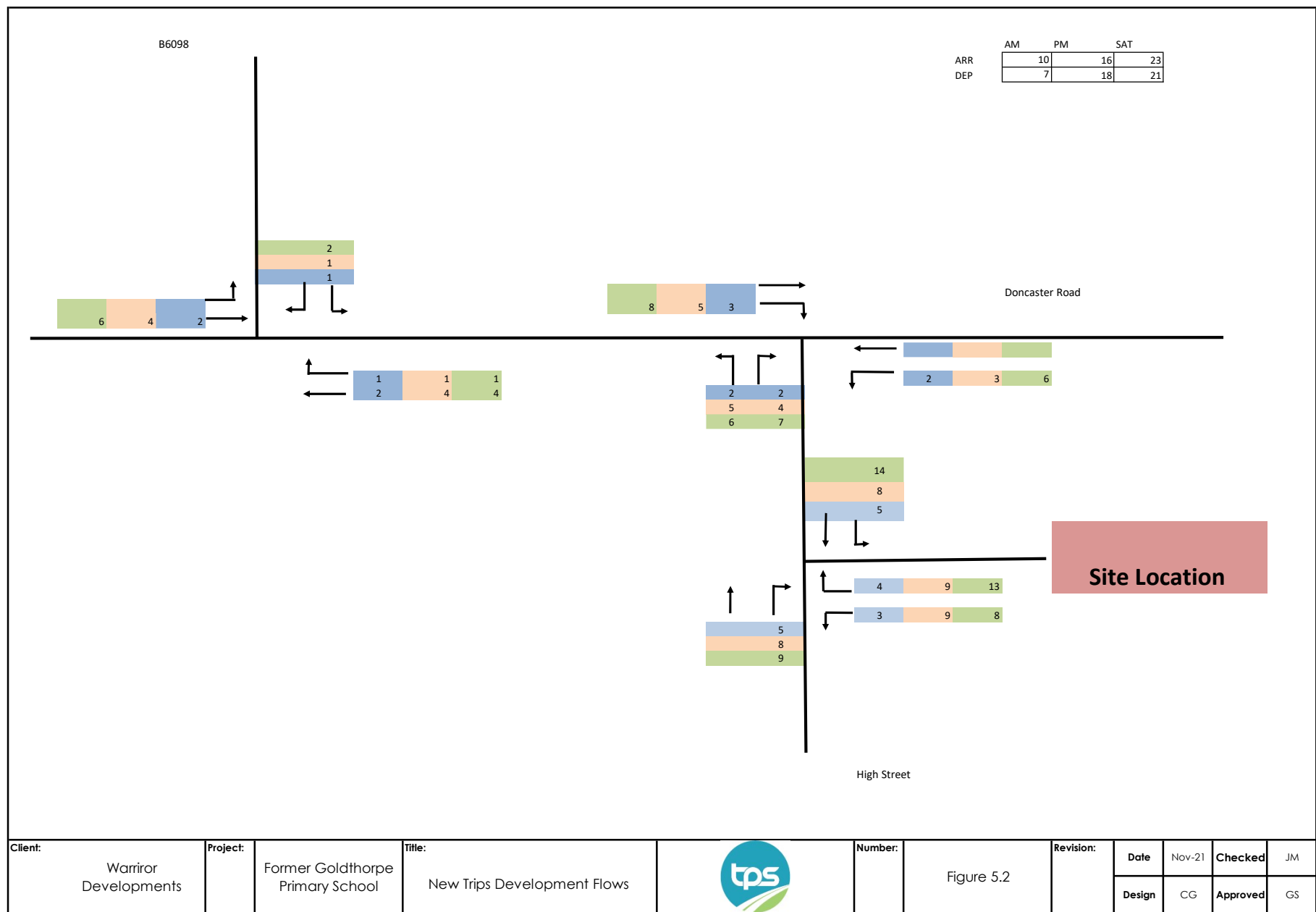
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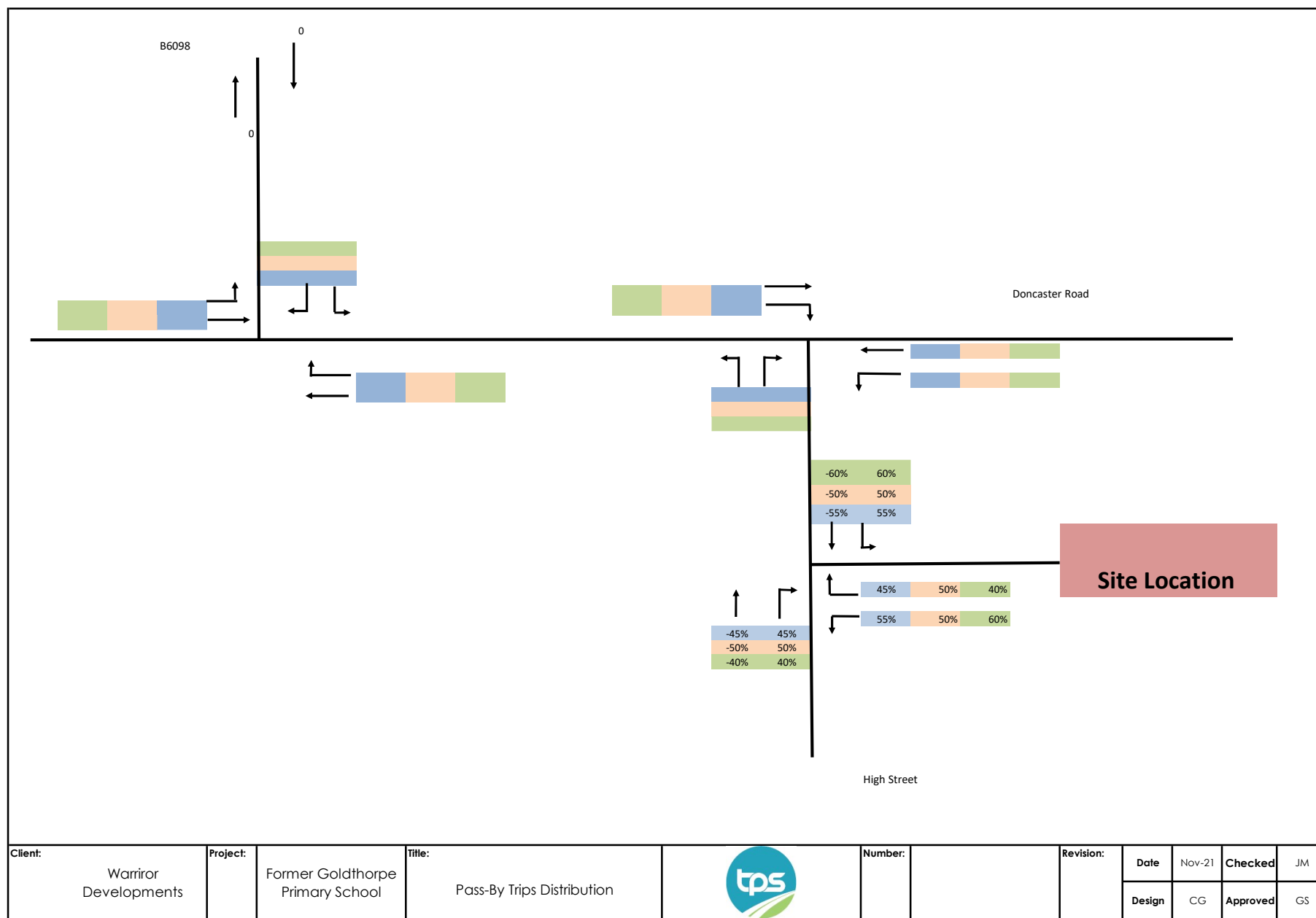
2019 - 2021
 AM 1.073
 PM 1.0724
 Sat 1.0748



Client:	Project:	Former Goldthorpe Primary School	Title:	2026 Base		Number:	Revision:	Date	Nov-21	Checked	JM
								Design	CG	Approved	GS







Client:	Project:	Former Goldthorpe Primary School	Title:	Pass-By Trips Distribution		Number:		Revision:		Date	Nov-21	Checked	JM
										Design	CG	Approved	GS

B6098

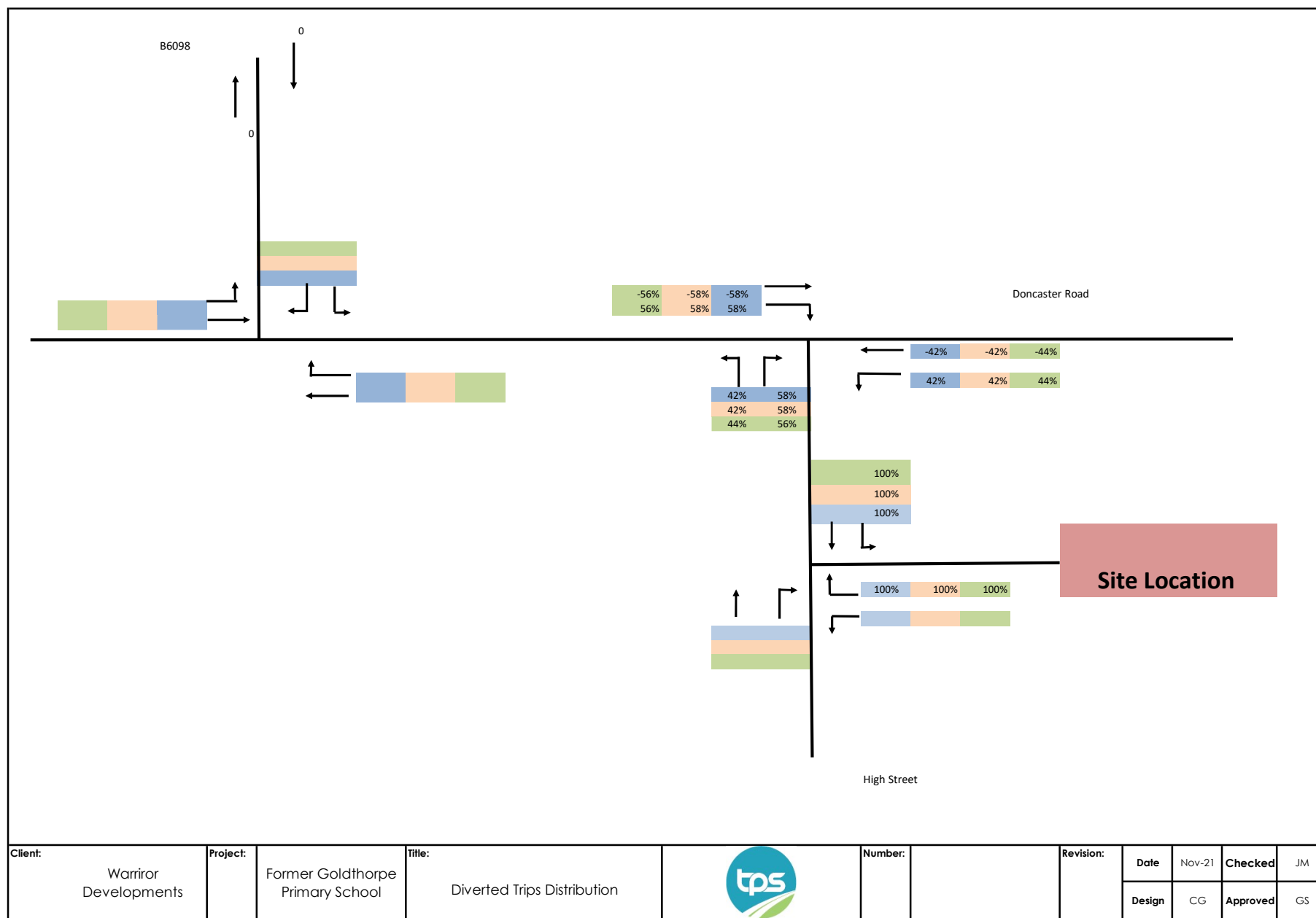
	AM	PM	SAT
ARR	21	32	46
DEP	15	36	42

Doncaster Road

Site Location

High Street

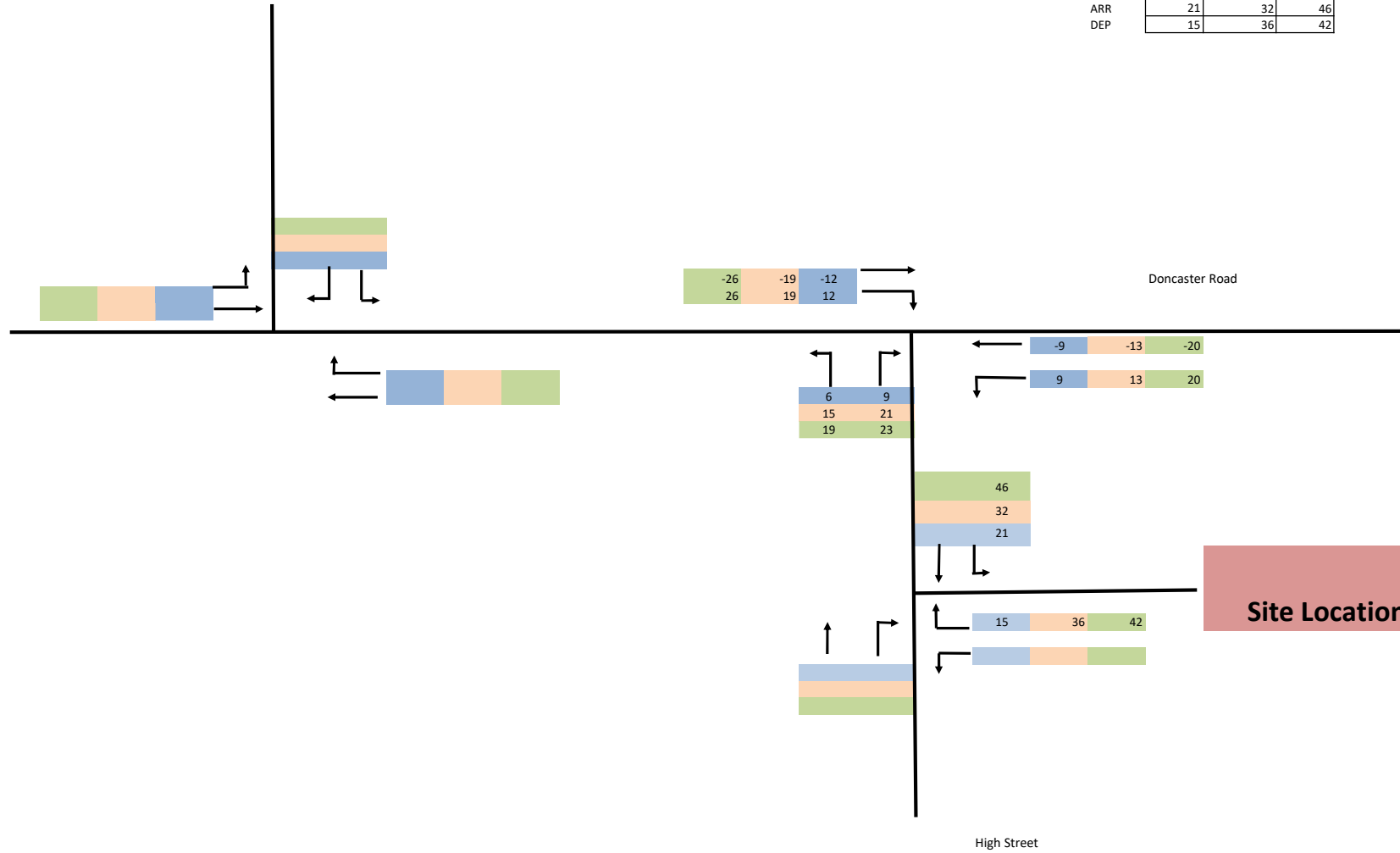
Client:	Project:	Former Goldthorpe Primary School	Title:	Pass-by Traffic Flows		Number:		Revision:	Date	Nov-21	Checked	JM
									Design	CG	Approved	GS



Client:	Project:	Former Goldthorpe Primary School	Title:	Diverted Trips Distribution		Number:		Revision:	Date	Nov-21	Checked	JM
									Design	CG	Approved	GS

B6098

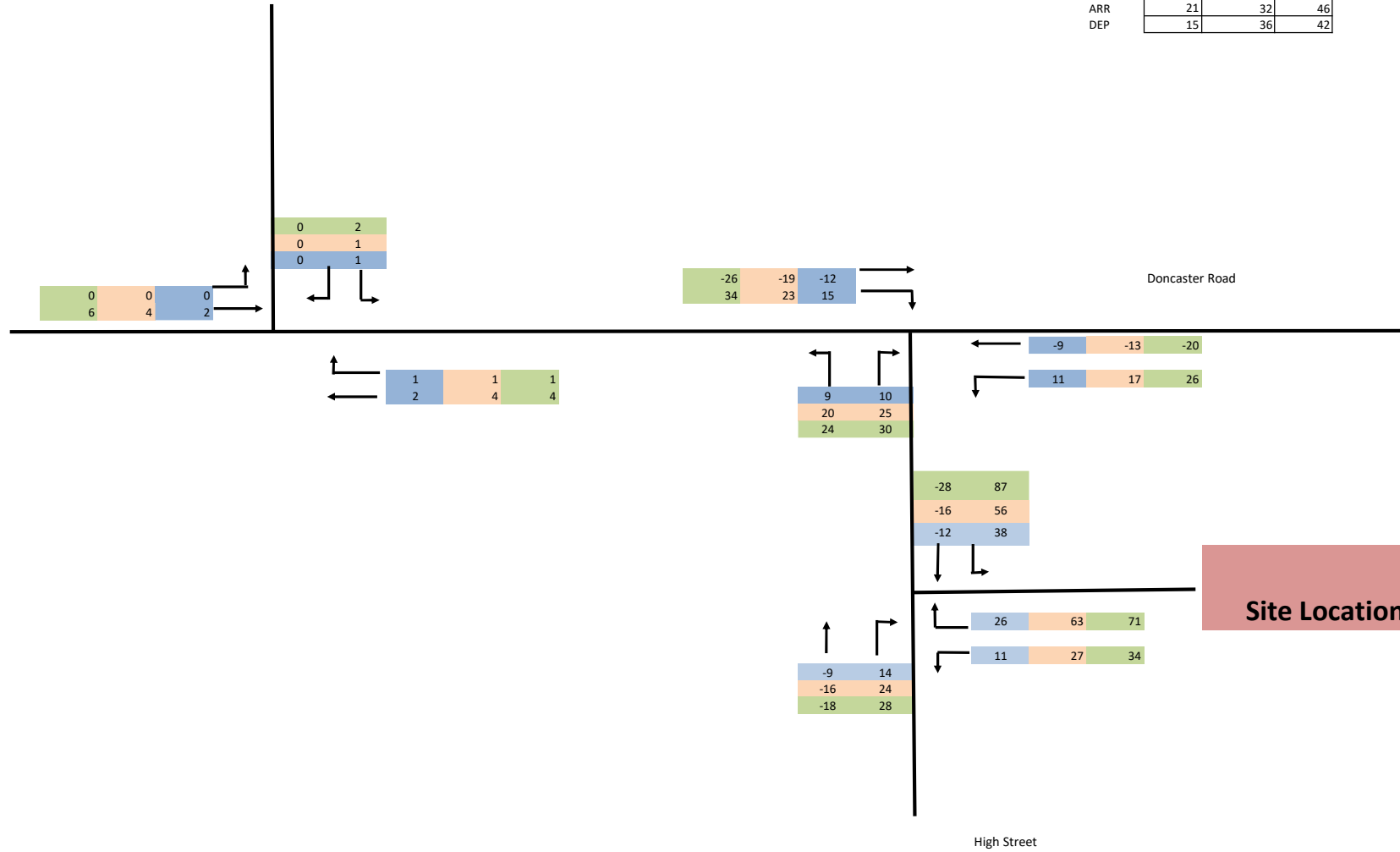
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ARR	21	32	46
DEP	15	36	42



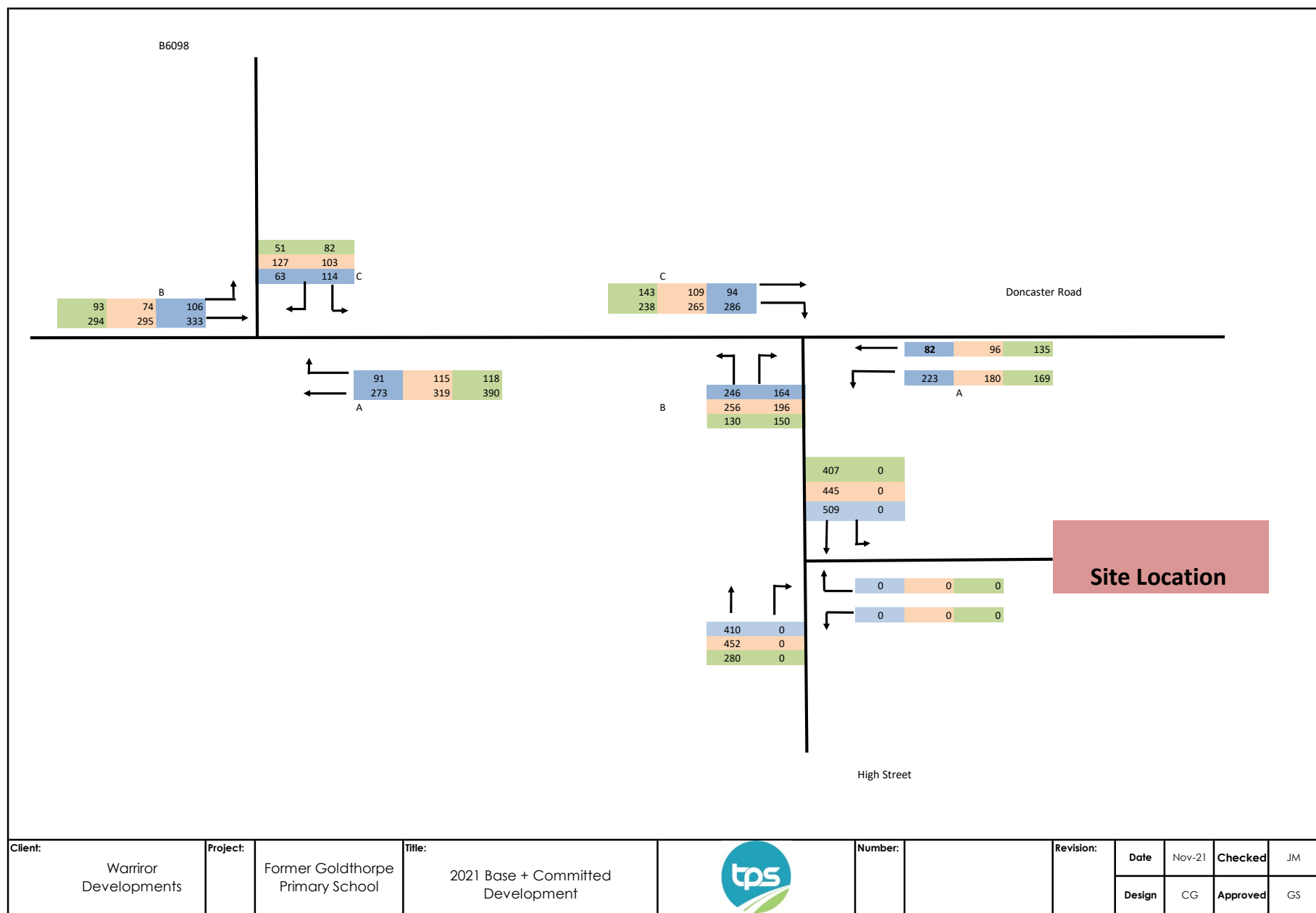
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								Design	CG	Approved	GS

B6098

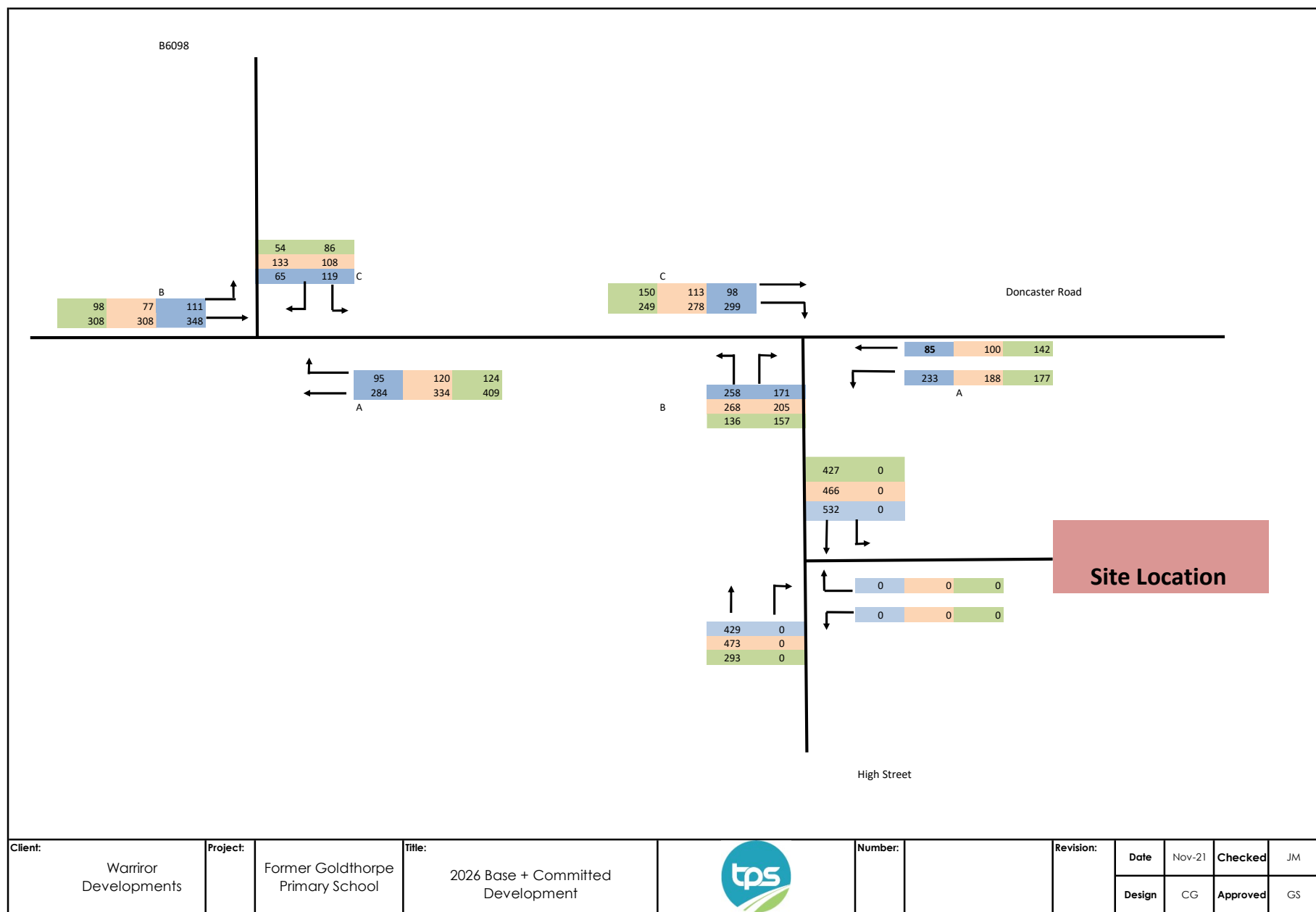
	AM	PM	SAT
ARR	21	32	46
DEP	15	36	42



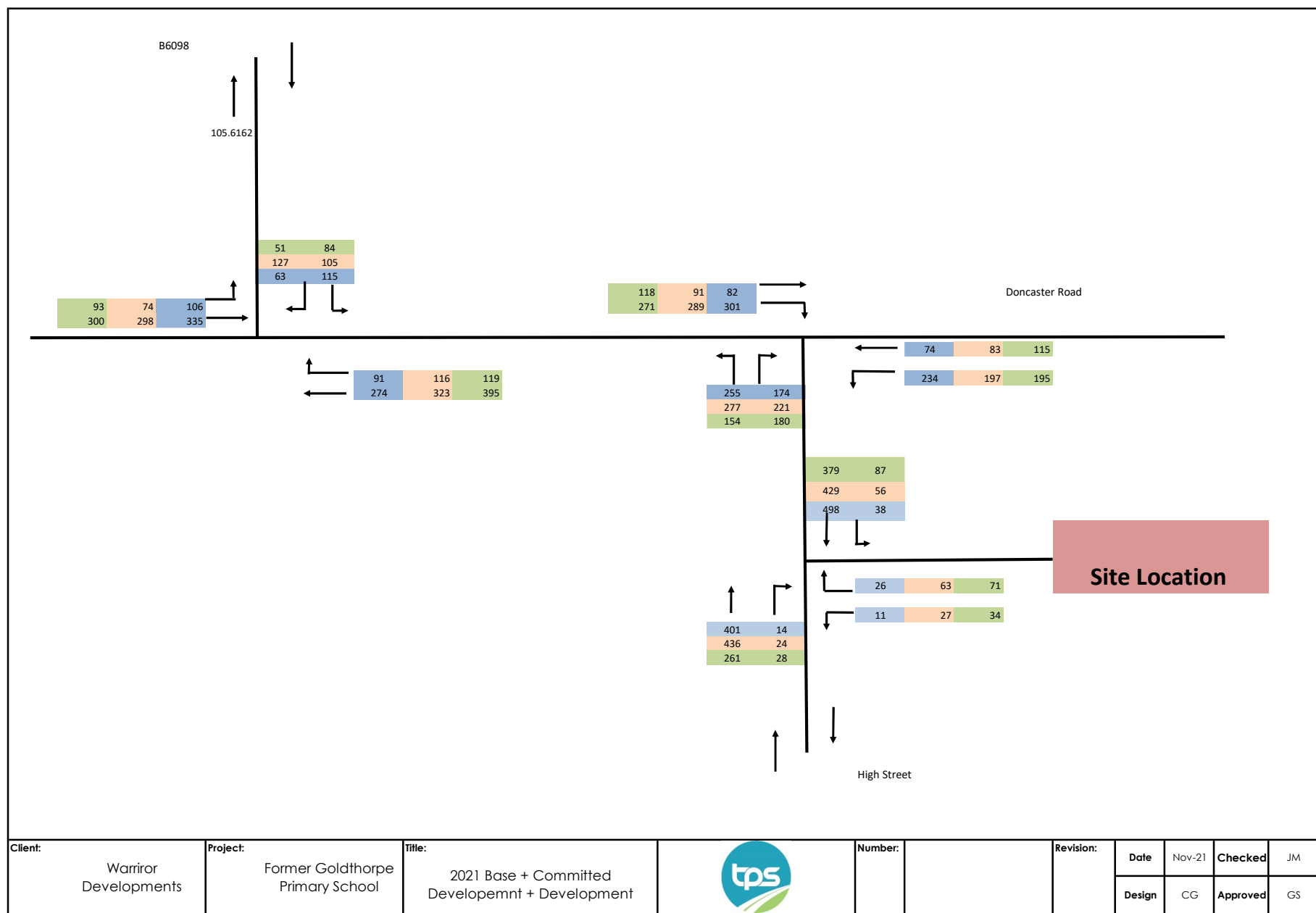
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								Design	CG	Approved	GS



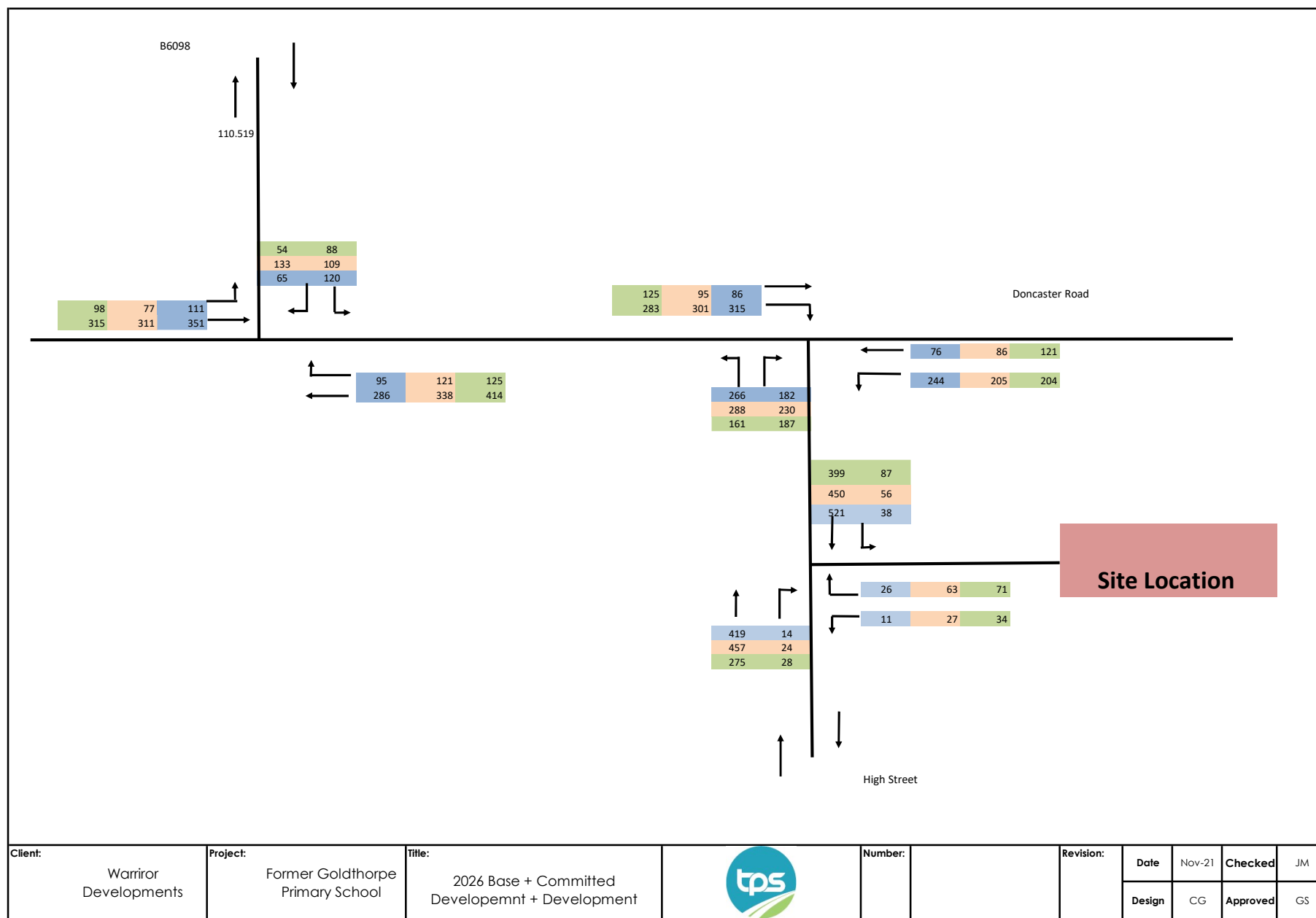
Client:	Project:	Former Goldthorpe Primary School	Title:	2021 Base + Committed Development		Number:		Revision:	Date	Nov-21	Checked	JM
									Design	CG	Approved	GS



Client:	Project:	Former Goldthorpe Primary School	Title:	2026 Base + Committed Development		Number:		Revision:		Date	Nov-21	Checked	JM
										Design	CG	Approved	GS



Client:	Project:	Title:		Number:	Revision:	Date	Nov-21	Checked	JM
						Design	CG	Approved	GS

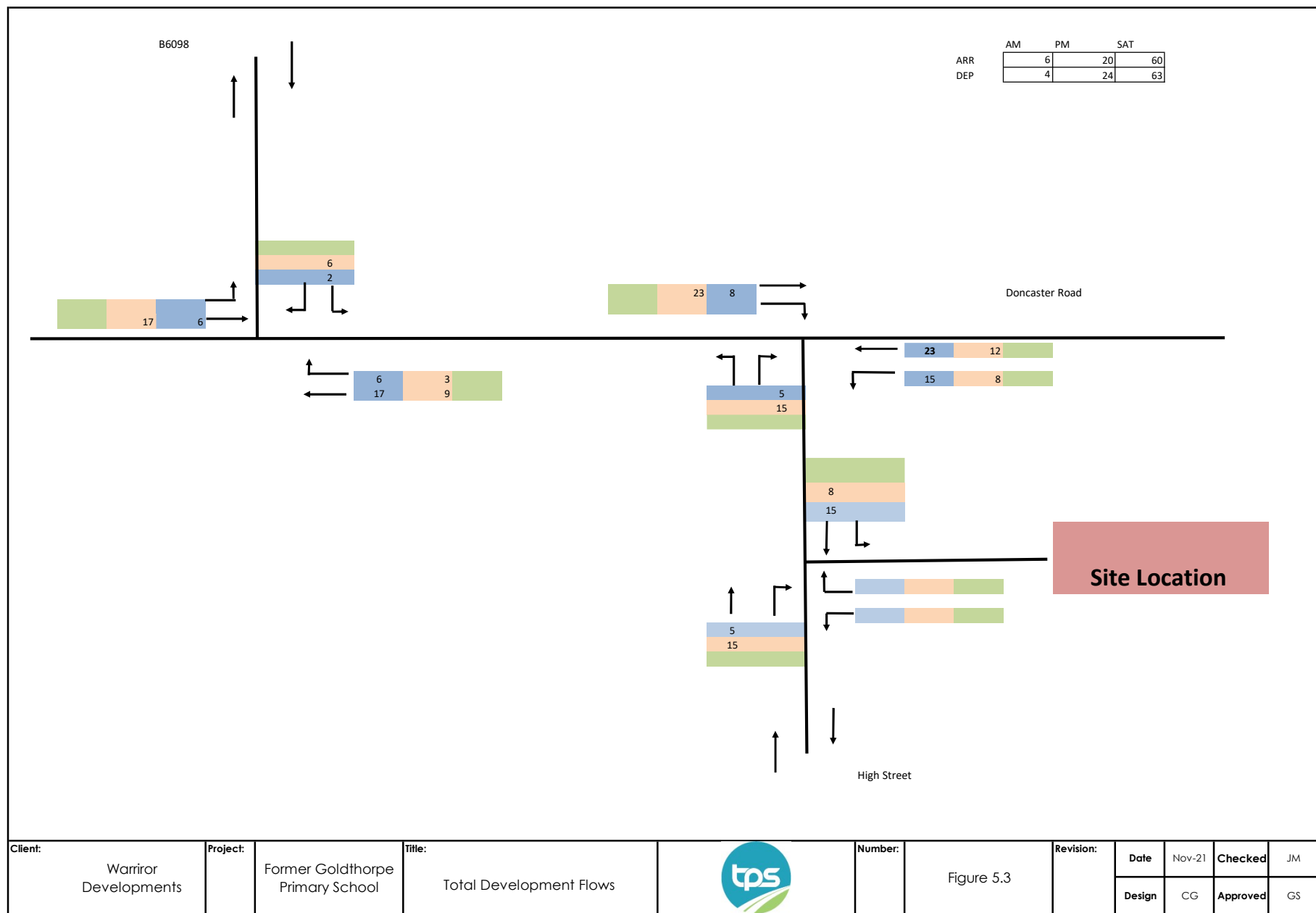


Client:	Project:	Title:		Number:	Revision:	Date	Nov-21	Checked	JM
						Design	CG	Approved	GS



Appendix E

Committed Development





Appendix F

Operational Assessments

Junctions 8				
PICADY 8 - Priority Intersection Module				
Version: 8.0.6.541 [19821,26/11/2015] © Copyright TRL Limited, 2021				
For sales and distribution information, program advice and maintenance, contact TRL: Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk				
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution				

Filename: High Street_Site Access.arc8

Path: C:\Users\micro\Dropbox\Project Files\TPS Project Files\P1827. High Street, Goldthorpe\Modelling

Report generation date: 04/11/2021 13:54:21

- » (Default Analysis Set) - 2021 Base, AM
- » (Default Analysis Set) - 2021 Base, PM
- » (Default Analysis Set) - 2021 Base, Saturday
- » (Default Analysis Set) - 2021 Base + Development, AM
- » (Default Analysis Set) - 2021 Base + Development, PM
- » (Default Analysis Set) - 2021 Base + Development, Saturday
- » (Default Analysis Set) - 2026 Base, AM
- » (Default Analysis Set) - 2026 Base, PM
- » (Default Analysis Set) - 2026 Base, Saturday
- » (Default Analysis Set) - 2026 Base + Development, AM
- » (Default Analysis Set) - 2026 Base + Development, PM
- » (Default Analysis Set) - 2026 Base + Development, Saturday

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
A1 - 2021 Base				
Stream B-C	0.00	0.00	0.00	A
Stream B-A	0.00	0.00	0.00	A
Stream C-AB	0.00	0.00	0.00	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - 2021 Base, AM" model duration: 08:00 - 09:30

"D2 - 2021 Base, PM" model duration: 17:00 - 18:30

"D3 - 2021 Base, Saturday" model duration: 11:00 - 12:30

"D4 - 2021 Base + Development, AM" model duration: 08:00 - 09:30

"D5 - 2021 Base + Development, PM" model duration: 17:00 - 18:30

"D6 - 2021 Base + Development, Saturday" model duration: 11:00 - 12:30

"D7 - 2026 Base, AM" model duration: 08:00 - 09:30

"D8 - 2026 Base, PM" model duration: 17:00 - 18:30

"D9 - 2026 Base, Saturday" model duration: 11:00 - 12:30

"D10 - 2026 Base + Development, AM" model duration: 08:00 - 09:30

"D11 - 2026 Base + Development, PM" model duration: 17:00 - 18:30

"D12 - 2026 Base + Development, Saturday" model duration: 11:00 - 12:30

Run using Junctions 8.0.6.541 at 04/11/2021 13:54:12

File summary

Title	High Street / Site Access
Location	Goldthorpe
Site Number	
Date	21/03/2019
Version	
Status	(new file)
Identifier	
Client	Warrior Developments
Jobnumber	P1160
Enumerator	TPS Workstation
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) - 2021 Base, 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base, AM	2021 Base	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		0.00	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	High Street North		Major
B	B	Site Access		Minor
C	C	High Street South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.00		0.00		2.20	60.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				8.00	4.00	3.80	3.80	3.80	✓	1.00	85	30

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	565.713	0.099	0.249	0.157	0.356
1	B-C	707.180	0.104	0.262	-	-
1	C-B	608.710	0.226	0.226	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	509.00	100.000
B	ONE HOUR	✓	0.00	100.000
C	ONE HOUR	✓	280.00	100.000

Turning Proportions

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

	To			
		A	B	C
	From A	0.000	0.000	509.000
	From B	0.000	0.000	0.000
	From C	280.000	0.000	0.000

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

	To			
		A	B	C
	From A	0.00	0.00	1.00
	From B	0.33	0.33	0.33
	From C	1.00	0.00	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
	From A	0.0	0.0	0.0
	From B	0.0	0.0	0.0
	From 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	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-A	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C-AB	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C-A	-	-	-	-	256.93	385.40	-	-	-	-	-
A-B	-	-	-	-	0.00	0.00	-	-	-	-	-
A-C	-	-	-	-	467.07	700.60	-	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	606.75	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	437.22	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	522.27	0.000	0.00	0.00	0.000	A
C-A	210.80	52.70	210.80	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	383.20	95.80	383.20	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	587.26	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	412.28	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	505.49	0.000	0.00	0.00	0.000	A
C-A	251.71	62.93	251.71	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	457.58	114.40	457.58	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	560.31	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	377.79	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	482.29	0.000	0.00	0.00	0.000	A
C-A	308.29	77.07	308.29	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	560.42	140.10	560.42	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	560.31	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	377.79	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	482.29	0.000	0.00	0.00	0.000	A
C-A	308.29	77.07	308.29	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	560.42	140.10	560.42	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	587.26	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	412.28	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	505.49	0.000	0.00	0.00	0.000	A
C-A	251.71	62.93	251.71	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	457.58	114.40	457.58	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	606.75	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	437.22	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	522.27	0.000	0.00	0.00	0.000	A
C-A	210.80	52.70	210.80	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	383.20	95.80	383.20	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:15-09:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2021 Base, 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2021 Base, PM	2021 Base	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		0.00	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	High Street North		Major
B	B	Site Access		Minor
C	C	High Street South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.00		0.00		2.20	60.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				8.00	4.00	3.80	3.80	3.80	✓	1.00	85	30

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	565.713	0.099	0.249	0.157	0.356
1	B-C	707.180	0.104	0.262	-	-
1	C-B	608.710	0.226	0.226	-	-

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 (%)
A	ONE HOUR	✓	445.00	100.000
B	ONE HOUR	✓	0.00	100.000
C	ONE HOUR	✓	452.00	100.000

Turning Proportions

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

	To			
		A	B	C
	A	0.000	0.000	445.000
	B	0.000	0.000	0.000
From	C	452.000	0.000	0.000

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

	To			
		A	B	C
	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
From	C	1.00	0.00	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
From	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	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-A	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C-AB	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C-A	-	-	-	-	414.76	622.14	-	-	-	-	-
A-B	-	-	-	-	0.00	0.00	-	-	-	-	-
A-C	-	-	-	-	408.34	612.51	-	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	619.38	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	428.93	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	533.13	0.000	0.00	0.00	0.000	A
C-A	340.29	85.07	340.29	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	335.02	83.75	335.02	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	602.34	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	402.38	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	518.47	0.000	0.00	0.00	0.000	A
C-A	406.34	101.58	406.34	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	400.05	100.01	400.05	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	578.77	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	365.67	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	498.18	0.000	0.00	0.00	0.000	A
C-A	497.66	124.42	497.66	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	489.95	122.49	489.95	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	578.77	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	365.67	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	498.18	0.000	0.00	0.00	0.000	A
C-A	497.66	124.42	497.66	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	489.95	122.49	489.95	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	602.34	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	402.38	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	518.47	0.000	0.00	0.00	0.000	A
C-A	406.34	101.58	406.34	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	400.05	100.01	400.05	0.00	-	-	-	-	-	-

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	619.38	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	428.93	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	533.13	0.000	0.00	0.00	0.000	A
C-A	340.29	85.07	340.29	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	335.02	83.75	335.02	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:15-18:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2021 Base, Saturday

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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relatio
2021 Base, Saturday	2021 Base	Saturday		ONE HOUR	11:00	12:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		0.00	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	High Street North		Major
B	B	Site Access		Minor
C	C	High Street South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.00		0.00		2.20	60.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				8.00	4.00	3.80	3.80	3.80	✓	1.00	85	30

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	565.713	0.099	0.249	0.157	0.356
1	B-C	707.180	0.104	0.262	-	-
1	C-B	608.710	0.226	0.226	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	407.00	100.000
B	ONE HOUR	✓	0.00	100.000
C	ONE HOUR	✓	280.00	100.000

Turning Proportions

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

	To			
		A	B	C
From	A	0.000	0.000	407.000
	B	0.000	0.000	0.000
	C	280.000	0.000	0.000

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

	To			
		A	B	C
From	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
	C	1.00	0.00	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	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	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-A	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C-AB	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C-A	-	-	-	-	256.93	385.40	-	-	-	-	-
A-B	-	-	-	-	0.00	0.00	-	-	-	-	-
A-C	-	-	-	-	373.47	560.21	-	-	-	-	-

Main Results for each time segment

Main results: (11:00-11:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	626.88	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	456.35	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	539.59	0.000	0.00	0.00	0.000	A
C-A	210.80	52.70	210.80	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	306.41	76.60	306.41	0.00	-	-	-	-	-	-

Main results: (11:15-11:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	611.29	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	435.12	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	526.17	0.000	0.00	0.00	0.000	A
C-A	251.71	62.93	251.71	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	365.88	91.47	365.88	0.00	-	-	-	-	-	-

Main results: (11:30-11:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	589.74	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	405.77	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	507.62	0.000	0.00	0.00	0.000	A
C-A	308.29	77.07	308.29	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	448.12	112.03	448.12	0.00	-	-	-	-	-	-

Main results: (11:45-12:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	589.74	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	405.77	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	507.62	0.000	0.00	0.00	0.000	A
C-A	308.29	77.07	308.29	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	448.12	112.03	448.12	0.00	-	-	-	-	-	-

Main results: (12:00-12:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	611.29	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	435.12	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	526.17	0.000	0.00	0.00	0.000	A
C-A	251.71	62.93	251.71	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	365.88	91.47	365.88	0.00	-	-	-	-	-	-

Main results: (12:15-12:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	626.88	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	456.35	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	539.59	0.000	0.00	0.00	0.000	A
C-A	210.80	52.70	210.80	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	306.41	76.60	306.41	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (11:00-11:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (11:15-11:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (11:30-11:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (11:45-12:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (12:00-12:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (12:15-12:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2021 Base + 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship
2021 Base + Development, AM	2021 Base + Development	AM		ONE HOUR	08:00	09:30	90	15				✓	

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		7.91	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	High Street North		Major
B	B	Site Access		Minor
C	C	High Street South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.00		0.00		2.20	60.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				8.00	4.00	3.80	3.80	3.80	✓	1.00	85	30

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	576.123	0.100	0.254	0.160	0.362
1	B-C	642.823	0.094	0.238	-	-
1	C-B	608.710	0.226	0.226	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	536.00	100.000
B	ONE HOUR	✓	37.00	100.000
C	ONE HOUR	✓	415.00	100.000

Turning Proportions

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

		To		
From		A	B	C
	A	0.000	38.000	498.000
	B	26.000	0.000	11.000
	C	401.000	14.000	0.000

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

		To		
From		A	B	C
	A	0.00	0.07	0.93
	B	0.70	0.00	0.30
	C	0.97	0.03	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
From		A	B	C
	A	0.0	0.0	0.0
	B	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	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.02	7.41	0.02	A	10.09	15.14	1.77	7.03	0.02	1.77	7.03
B-A	0.08	10.97	0.09	B	23.86	35.79	5.87	9.84	0.07	5.87	9.84
C-AB	0.04	5.07	0.06	A	23.98	35.96	3.80	6.34	0.04	3.80	6.34
C-A	-	-	-	-	356.84	535.25	-	-	-	-	-
A-B	-	-	-	-	34.87	52.30	-	-	-	-	-
A-C	-	-	-	-	456.97	685.46	-	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	8.28	2.07	8.22	0.00	544.44	0.015	0.00	0.02	6.713	A
B-A	19.57	4.89	19.38	0.00	426.13	0.046	0.00	0.05	8.847	A
C-AB	17.30	4.33	17.18	0.00	727.69	0.024	0.00	0.03	5.067	A
C-A	295.13	73.78	295.13	0.00	-	-	-	-	-	-
A-B	28.61	7.15	28.61	0.00	-	-	-	-	-	-
A-C	374.92	93.73	374.92	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	9.89	2.47	9.87	0.00	524.95	0.019	0.02	0.02	6.988	A
B-A	23.37	5.84	23.32	0.00	396.98	0.059	0.05	0.06	9.633	A
C-AB	22.78	5.69	22.73	0.00	751.97	0.030	0.03	0.04	4.936	A
C-A	350.30	87.58	350.30	0.00	-	-	-	-	-	-
A-B	34.16	8.54	34.16	0.00	-	-	-	-	-	-
A-C	447.69	111.92	447.69	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	12.11	3.03	12.09	0.00	497.74	0.024	0.02	0.02	7.412	A
B-A	28.63	7.16	28.53	0.00	356.71	0.080	0.06	0.09	10.965	B
C-AB	31.79	7.95	31.72	0.00	785.51	0.040	0.04	0.06	4.775	A
C-A	425.13	106.28	425.13	0.00	-	-	-	-	-	-
A-B	41.84	10.46	41.84	0.00	-	-	-	-	-	-
A-C	548.31	137.08	548.31	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	12.11	3.03	12.11	0.00	497.70	0.024	0.02	0.02	7.412	A
B-A	28.63	7.16	28.62	0.00	356.70	0.080	0.09	0.09	10.972	B
C-AB	31.82	7.95	31.82	0.00	785.54	0.041	0.06	0.06	4.778	A
C-A	425.10	106.28	425.10	0.00	-	-	-	-	-	-
A-B	41.84	10.46	41.84	0.00	-	-	-	-	-	-
A-C	548.31	137.08	548.31	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	9.89	2.47	9.91	0.00	524.89	0.019	0.02	0.02	6.990	A
B-A	23.37	5.84	23.47	0.00	396.96	0.059	0.09	0.06	9.642	A
C-AB	22.81	5.70	22.88	0.00	752.02	0.030	0.06	0.04	4.937	A
C-A	350.27	87.57	350.27	0.00	-	-	-	-	-	-
A-B	34.16	8.54	34.16	0.00	-	-	-	-	-	-
A-C	447.69	111.92	447.69	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	8.28	2.07	8.30	0.00	544.35	0.015	0.02	0.02	6.715	A
B-A	19.57	4.89	19.63	0.00	426.09	0.046	0.06	0.05	8.859	A
C-AB	17.36	4.34	17.40	0.00	727.74	0.024	0.04	0.03	5.070	A
C-A	295.08	73.77	295.08	0.00	-	-	-	-	-	-
A-B	28.61	7.15	28.61	0.00	-	-	-	-	-	-
A-C	374.92	93.73	374.92	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.22	0.01	6.713	A	A
B-A	0.69	0.05	8.847	A	A
C-AB	0.44	0.03	5.067	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.28	0.02	6.988	A	A
B-A	0.91	0.06	9.633	A	A
C-AB	0.59	0.04	4.936	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.36	0.02	7.412	A	A
B-A	1.25	0.08	10.965	B	B
C-AB	0.86	0.06	4.775	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.37	0.02	7.412	A	A
B-A	1.30	0.09	10.972	B	B
C-AB	0.86	0.06	4.778	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.30	0.02	6.990	A	A
B-A	0.98	0.07	9.642	A	A
C-AB	0.60	0.04	4.937	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:15-09:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.24	0.02	6.715	A	A
B-A	0.75	0.05	8.859	A	A
C-AB	0.45	0.03	5.070	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2021 Base + 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship
2021 Base + Development, PM	2021 Base + Development	PM		ONE HOUR	17:00	18:30	90	15				✓	

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		8.84	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	High Street North		Major
B	B	Site Access		Minor
C	C	High Street South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.00		0.00		2.20	60.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				8.00	4.00	3.80	3.80	3.80	✓	1.00	85	30

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	576.123	0.100	0.254	0.160	0.362
1	B-C	642.823	0.094	0.238	-	-
1	C-B	608.710	0.226	0.226	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	485.00	100.000
B	ONE HOUR	✓	90.00	100.000
C	ONE HOUR	✓	460.00	100.000

Turning Proportions

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

	To		
	A	B	C
From	A	0.000	56.000
	B	63.000	0.000
	C	436.000	24.000

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

	To		
	A	B	C
From	A	0.00	0.12
	B	0.70	0.00
	C	0.95	0.05

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.0	0.0	0.0
	B	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	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.06	7.72	0.06	A	24.78	37.16	4.49	7.25	0.05	4.49	7.25
B-A	0.19	12.24	0.23	B	57.81	86.71	15.47	10.71	0.17	15.47	10.71
C-AB	0.07	4.99	0.13	A	43.84	65.76	8.00	7.30	0.09	8.00	7.30
C-A	-	-	-	-	378.26	567.40	-	-	-	-	-
A-B	-	-	-	-	51.39	77.08	-	-	-	-	-
A-C	-	-	-	-	393.66	590.49	-	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	20.33	5.08	20.17	0.00	545.81	0.037	0.00	0.04	6.847	A
B-A	47.43	11.86	46.94	0.00	430.96	0.110	0.00	0.12	9.364	A
C-AB	30.53	7.63	30.30	0.00	752.25	0.041	0.00	0.06	4.985	A
C-A	315.78	78.94	315.78	0.00	-	-	-	-	-	-
A-B	42.16	10.54	42.16	0.00	-	-	-	-	-	-
A-C	322.97	80.74	322.97	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	24.27	6.07	24.23	0.00	525.51	0.046	0.04	0.05	7.181	A
B-A	56.64	14.16	56.48	0.00	402.68	0.141	0.12	0.16	10.394	B
C-AB	40.31	10.08	40.22	0.00	780.71	0.052	0.06	0.08	4.861	A
C-A	373.22	93.31	373.22	0.00	-	-	-	-	-	-
A-B	50.34	12.59	50.34	0.00	-	-	-	-	-	-
A-C	385.66	96.42	385.66	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	29.73	7.43	29.67	0.00	496.13	0.060	0.05	0.06	7.716	A
B-A	69.36	17.34	69.08	0.00	363.61	0.191	0.16	0.23	12.213	B
C-AB	60.55	15.14	60.35	0.00	833.29	0.073	0.08	0.13	4.658	A
C-A	445.92	111.48	445.92	0.00	-	-	-	-	-	-
A-B	61.66	15.41	61.66	0.00	-	-	-	-	-	-
A-C	472.34	118.08	472.34	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	29.73	7.43	29.73	0.00	495.99	0.060	0.06	0.06	7.720	A
B-A	69.36	17.34	69.36	0.00	363.56	0.191	0.23	0.23	12.235	B
C-AB	60.62	15.15	60.61	0.00	833.39	0.073	0.13	0.13	4.660	A
C-A	445.85	111.46	445.85	0.00	-	-	-	-	-	-
A-B	61.66	15.41	61.66	0.00	-	-	-	-	-	-
A-C	472.34	118.08	472.34	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	24.27	6.07	24.33	0.00	525.33	0.046	0.06	0.05	7.185	A
B-A	56.64	14.16	56.91	0.00	402.62	0.141	0.23	0.17	10.421	B
C-AB	40.38	10.10	40.58	0.00	780.84	0.052	0.13	0.08	4.867	A
C-A	373.15	93.29	373.15	0.00	-	-	-	-	-	-
A-B	50.34	12.59	50.34	0.00	-	-	-	-	-	-
A-C	385.66	96.42	385.66	0.00	-	-	-	-	-	-

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	20.33	5.08	20.37	0.00	545.56	0.037	0.05	0.04	6.856	A
B-A	47.43	11.86	47.59	0.00	430.87	0.110	0.17	0.13	9.398	A
C-AB	30.65	7.66	30.74	0.00	752.35	0.041	0.08	0.06	4.991	A
C-A	315.66	78.91	315.66	0.00	-	-	-	-	-	-
A-B	42.16	10.54	42.16	0.00	-	-	-	-	-	-
A-C	322.97	80.74	322.97	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.56	0.04	6.847	A	A
B-A	1.76	0.12	9.364	A	A
C-AB	0.85	0.06	4.985	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.71	0.05	7.181	A	A
B-A	2.36	0.16	10.394	B	B
C-AB	1.19	0.08	4.861	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.93	0.06	7.716	A	A
B-A	3.36	0.22	12.213	B	B
C-AB	1.93	0.13	4.658	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.95	0.06	7.720	A	A
B-A	3.50	0.23	12.235	B	B
C-AB	1.95	0.13	4.660	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.75	0.05	7.185	A	A
B-A	2.57	0.17	10.421	B	B
C-AB	1.21	0.08	4.867	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:15-18:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.60	0.04	6.856	A	A
B-A	1.93	0.13	9.398	A	A
C-AB	0.88	0.06	4.991	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2021 Base + Development, Saturday

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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship
2021 Base + Development, Saturday	2021 Base + Development	Saturday		ONE HOUR	11:00	12:30	90	15				✓	

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		8.72	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	High Street North		Major
B	B	Site Access		Minor
C	C	High Street South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.00		0.00		2.20	60.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				8.00	4.00	3.80	3.80	3.80	✓	1.00	85	30

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	576.123	0.100	0.254	0.160	0.362
1	B-C	642.823	0.094	0.238	-	-
1	C-B	608.710	0.226	0.226	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	466.00	100.000
B	ONE HOUR	✓	105.00	100.000
C	ONE HOUR	✓	289.00	100.000

Turning Proportions

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

	To			
		A	B	C
From	A	0.000	87.000	379.000
	B	71.000	0.000	34.000
	C	261.000	28.000	0.000

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

	To			
		A	B	C
From	A	0.00	0.19	0.81
	B	0.68	0.00	0.32
	C	0.90	0.10	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	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	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.07	7.70	0.08	A	31.20	46.80	5.64	7.23	0.06	5.64	7.23
B-A	0.19	11.08	0.24	B	65.15	97.73	16.13	9.90	0.18	16.13	9.90
C-AB	0.07	5.65	0.13	A	39.78	59.67	8.58	8.63	0.10	8.58	8.63
C-A	-	-	-	-	225.41	338.12	-	-	-	-	-
A-B	-	-	-	-	79.83	119.75	-	-	-	-	-
A-C	-	-	-	-	347.78	521.67	-	-	-	-	-

Main Results for each time segment

Main results: (11:00-11:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	25.60	6.40	25.40	0.00	551.31	0.046	0.00	0.05	6.844	A
B-A	53.45	13.36	52.93	0.00	458.06	0.117	0.00	0.13	8.874	A
C-AB	29.44	7.36	29.18	0.00	666.78	0.044	0.00	0.06	5.645	A
C-A	188.14	47.03	188.14	0.00	-	-	-	-	-	-
A-B	65.50	16.37	65.50	0.00	-	-	-	-	-	-
A-C	285.33	71.33	285.33	0.00	-	-	-	-	-	-

Main results: (11:15-11:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	30.57	7.64	30.52	0.00	532.27	0.057	0.05	0.06	7.174	A
B-A	63.83	15.96	63.67	0.00	435.00	0.147	0.13	0.17	9.690	A
C-AB	37.68	9.42	37.59	0.00	679.38	0.055	0.06	0.09	5.609	A
C-A	222.13	55.53	222.13	0.00	-	-	-	-	-	-
A-B	78.21	19.55	78.21	0.00	-	-	-	-	-	-
A-C	340.71	85.18	340.71	0.00	-	-	-	-	-	-

Main results: (11:30-11:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	37.43	9.36	37.36	0.00	504.93	0.074	0.06	0.08	7.698	A
B-A	78.17	19.54	77.90	0.00	403.12	0.194	0.17	0.24	11.060	B
C-AB	52.11	13.03	51.93	0.00	701.00	0.074	0.09	0.13	5.549	A
C-A	266.09	66.52	266.09	0.00	-	-	-	-	-	-
A-B	95.79	23.95	95.79	0.00	-	-	-	-	-	-
A-C	417.29	104.32	417.29	0.00	-	-	-	-	-	-

Main results: (11:45-12:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	37.43	9.36	37.43	0.00	504.80	0.074	0.08	0.08	7.702	A
B-A	78.17	19.54	78.17	0.00	403.08	0.194	0.24	0.24	11.079	B
C-AB	52.16	13.04	52.16	0.00	701.07	0.074	0.13	0.13	5.552	A
C-A	266.03	66.51	266.03	0.00	-	-	-	-	-	-
A-B	95.79	23.95	95.79	0.00	-	-	-	-	-	-
A-C	417.29	104.32	417.29	0.00	-	-	-	-	-	-

Main results: (12:00-12:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	30.57	7.64	30.64	0.00	532.09	0.057	0.08	0.06	7.182	A
B-A	63.83	15.96	64.09	0.00	434.93	0.147	0.24	0.17	9.716	A
C-AB	37.75	9.44	37.92	0.00	679.48	0.056	0.13	0.09	5.614	A
C-A	222.06	55.51	222.06	0.00	-	-	-	-	-	-
A-B	78.21	19.55	78.21	0.00	-	-	-	-	-	-
A-C	340.71	85.18	340.71	0.00	-	-	-	-	-	-

Main results: (12:15-12:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	25.60	6.40	25.65	0.00	551.06	0.046	0.06	0.05	6.851	A
B-A	53.45	13.36	53.61	0.00	457.95	0.117	0.17	0.13	8.908	A
C-AB	29.53	7.38	29.63	0.00	666.86	0.044	0.09	0.07	5.651	A
C-A	188.04	47.01	188.04	0.00	-	-	-	-	-	-
A-B	65.50	16.37	65.50	0.00	-	-	-	-	-	-
A-C	285.33	71.33	285.33	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (11:00-11:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.70	0.05	6.844	A	A
B-A	1.88	0.13	8.874	A	A
C-AB	0.95	0.06	5.645	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (11:15-11:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.89	0.06	7.174	A	A
B-A	2.48	0.17	9.690	A	A
C-AB	1.31	0.09	5.609	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (11:30-11:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.16	0.08	7.698	A	A
B-A	3.44	0.23	11.060	B	B
C-AB	1.99	0.13	5.549	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (11:45-12:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.19	0.08	7.702	A	A
B-A	3.57	0.24	11.079	B	B
C-AB	2.01	0.13	5.552	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (12:00-12:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.94	0.06	7.182	A	A
B-A	2.69	0.18	9.716	A	A
C-AB	1.34	0.09	5.614	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (12:15-12:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.75	0.05	6.851	A	A
B-A	2.06	0.14	8.908	A	A
C-AB	0.98	0.07	5.651	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2026 Base, 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2026 Base, AM	2026 Base	AM		ONE HOUR	08:00	09:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		0.00	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	High Street North		Major
B	B	Site Access		Minor
C	C	High Street South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.00		0.00		2.20	60.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				8.00	4.00	3.80	3.80	3.80	✓	1.00	85	30

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	565.713	0.099	0.249	0.157	0.356
1	B-C	707.180	0.104	0.262	-	-
1	C-B	608.710	0.226	0.226	-	-

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	Vehicle Mix Varies	Vehicle Mix Varies	Vehicle Mix Varies	Vehicle Mix	PCU Factor	Default Turning	Estimate from	Turning Proportions	Turning Proportions	Turning Proportions
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Am	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	532.00	100.000
B	ONE HOUR	✓	0.00	100.000
C	ONE HOUR	✓	429.00	100.000

Turning Proportions

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

	To			
		A	B	C
From	A	0.000	0.000	532.000
	B	0.000	0.000	0.000
	C	429.000	0.000	0.000

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

	To			
		A	B	C
From	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
	C	1.00	0.00	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.0	0.0	0.0
	B	0.0	0.0	0.0
From	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	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-A	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C-AB	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C-A	-	-	-	-	393.66	590.49	-	-	-	-	-
A-B	-	-	-	-	0.00	0.00	-	-	-	-	-
A-C	-	-	-	-	488.17	732.26	-	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	602.21	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	415.33	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	518.36	0.000	0.00	0.00	0.000	A
C-A	322.97	80.74	322.97	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	400.52	100.13	400.52	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	581.84	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	386.14	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	500.82	0.000	0.00	0.00	0.000	A
C-A	385.66	96.42	385.66	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	478.26	119.56	478.26	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	553.67	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	345.78	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	476.57	0.000	0.00	0.00	0.000	A
C-A	472.34	118.08	472.34	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	585.74	146.44	585.74	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	553.67	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	345.78	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	476.57	0.000	0.00	0.00	0.000	A
C-A	472.34	118.08	472.34	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	585.74	146.44	585.74	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	581.84	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	386.14	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	500.82	0.000	0.00	0.00	0.000	A
C-A	385.66	96.42	385.66	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	478.26	119.56	478.26	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	602.21	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	415.33	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	518.36	0.000	0.00	0.00	0.000	A
C-A	322.97	80.74	322.97	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	400.52	100.13	400.52	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:15-09:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2026 Base, 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2026 Base, PM	2026 Base	PM		ONE HOUR	17:00	18:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		0.00	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	High Street North		Major
B	B	Site Access		Minor
C	C	High Street South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.00		0.00		2.20	60.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				8.00	4.00	3.80	3.80	3.80	✓	1.00	85	30

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	565.713	0.099	0.249	0.157	0.356
1	B-C	707.180	0.104	0.262	-	-
1	C-B	608.710	0.226	0.226	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	466.00	100.000
B	ONE HOUR	✓	0.00	100.000
C	ONE HOUR	✓	473.00	100.000

Turning Proportions

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

	To			
		A	B	C
From	A	0.000	0.000	466.000
	B	0.000	0.000	0.000
	C	473.000	0.000	0.000

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

	To			
		A	B	C
From	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
	C	1.00	0.00	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	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	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-A	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C-AB	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C-A	-	-	-	-	434.03	651.05	-	-	-	-	-
A-B	-	-	-	-	0.00	0.00	-	-	-	-	-
A-C	-	-	-	-	427.61	641.41	-	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	615.24	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	422.51	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	529.57	0.000	0.00	0.00	0.000	A
C-A	356.10	89.02	356.10	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	350.83	87.71	350.83	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	597.39	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	394.72	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	514.21	0.000	0.00	0.00	0.000	A
C-A	425.22	106.30	425.22	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	418.92	104.73	418.92	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	572.71	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	356.29	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	492.97	0.000	0.00	0.00	0.000	A
C-A	520.78	130.20	520.78	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	513.08	128.27	513.08	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	572.71	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	356.29	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	492.97	0.000	0.00	0.00	0.000	A
C-A	520.78	130.20	520.78	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	513.08	128.27	513.08	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	597.39	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	394.72	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	514.21	0.000	0.00	0.00	0.000	A
C-A	425.22	106.30	425.22	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	418.92	104.73	418.92	0.00	-	-	-	-	-	-

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	615.24	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	422.51	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	529.57	0.000	0.00	0.00	0.000	A
C-A	356.10	89.02	356.10	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	350.83	87.71	350.83	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:15-18:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2026 Base, Saturday

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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relatio
2026 Base, Saturday	2026 Base	Saturday		ONE HOUR	11:00	12:30	90	15				✓		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		0.00	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	High Street North		Major
B	B	Site Access		Minor
C	C	High Street South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.00		0.00		2.20	60.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				8.00	4.00	3.80	3.80	3.80	✓	1.00	85	30

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	565.713	0.099	0.249	0.157	0.356
1	B-C	707.180	0.104	0.262	-	-
1	C-B	608.710	0.226	0.226	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	427.00	100.000
B	ONE HOUR	✓	0.00	100.000
C	ONE HOUR	✓	293.00	100.000

Turning Proportions

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

		To		
From		A	B	C
	A	0.000	0.000	427.000
	B	0.000	0.000	0.000
	C	293.000	0.000	0.000

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

		To		
From		A	B	C
	A	0.00	0.00	1.00
	B	0.33	0.33	0.33
	C	1.00	0.00	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
From		A	B	C
	A	0.0	0.0	0.0
	B	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	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B-A	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C-AB	0.00	0.00	0.00	A	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C-A	-	-	-	-	268.86	403.29	-	-	-	-	-
A-B	-	-	-	-	0.00	0.00	-	-	-	-	-
A-C	-	-	-	-	391.82	587.73	-	-	-	-	-

Main Results for each time segment

Main results: (11:00-11:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	622.93	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	451.06	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	536.19	0.000	0.00	0.00	0.000	A
C-A	220.59	55.15	220.59	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	321.47	80.37	321.47	0.00	-	-	-	-	-	-

Main results: (11:15-11:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	606.58	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	428.81	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	522.12	0.000	0.00	0.00	0.000	A
C-A	263.40	65.85	263.40	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	383.86	95.97	383.86	0.00	-	-	-	-	-	-

Main results: (11:30-11:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	583.97	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	398.04	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	502.65	0.000	0.00	0.00	0.000	A
C-A	322.60	80.65	322.60	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	470.14	117.53	470.14	0.00	-	-	-	-	-	-

Main results: (11:45-12:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	583.97	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	398.04	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	502.65	0.000	0.00	0.00	0.000	A
C-A	322.60	80.65	322.60	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	470.14	117.53	470.14	0.00	-	-	-	-	-	-

Main results: (12:00-12:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	606.58	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	428.81	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	522.12	0.000	0.00	0.00	0.000	A
C-A	263.40	65.85	263.40	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	383.86	95.97	383.86	0.00	-	-	-	-	-	-

Main results: (12:15-12:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	0.00	0.00	0.00	0.00	622.93	0.000	0.00	0.00	0.000	A
B-A	0.00	0.00	0.00	0.00	451.06	0.000	0.00	0.00	0.000	A
C-AB	0.00	0.00	0.00	0.00	536.19	0.000	0.00	0.00	0.000	A
C-A	220.59	55.15	220.59	0.00	-	-	-	-	-	-
A-B	0.00	0.00	0.00	0.00	-	-	-	-	-	-
A-C	321.47	80.37	321.47	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (11:00-11:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (11:15-11:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (11:30-11:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (11:45-12:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (12:00-12:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (12:15-12:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.00	0.00	0.000	A	A
B-A	0.00	0.00	0.000	A	A
C-AB	0.00	0.00	0.000	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2026 Base + 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship
2026 Base + Development, AM	2026 Base + Development	AM		ONE HOUR	08:00	09:30	90	15				✓	

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		8.01	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	High Street North		Major
B	B	Site Access		Minor
C	C	High Street South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.00		0.00		2.20	60.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				8.00	4.00	3.80	3.80	3.80	✓	1.00	85	30

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	576.123	0.100	0.254	0.160	0.362
1	B-C	642.823	0.094	0.238	-	-
1	C-B	608.710	0.226	0.226	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	559.00	100.000
B	ONE HOUR	✓	37.00	100.000
C	ONE HOUR	✓	433.00	100.000

Turning Proportions

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

	To			
		A	B	C
From	A	0.000	38.000	521.000
	B	26.000	0.000	11.000
	C	419.000	14.000	0.000

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

	To			
		A	B	C
From	A	0.00	0.07	0.93
	B	0.70	0.00	0.30
	C	0.97	0.03	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.0	0.0	0.0
	B	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	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.02	7.51	0.03	A	10.09	15.14	1.79	7.10	0.02	1.79	7.10
B-A	0.08	11.30	0.09	B	23.86	35.79	6.01	10.07	0.07	6.01	10.07
C-AB	0.04	5.03	0.06	A	24.64	36.97	3.89	6.31	0.04	3.89	6.31
C-A	-	-	-	-	372.68	559.03	-	-	-	-	-
A-B	-	-	-	-	34.87	52.30	-	-	-	-	-
A-C	-	-	-	-	478.08	717.12	-	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	8.28	2.07	8.22	0.00	540.26	0.015	0.00	0.02	6.766	A
B-A	19.57	4.89	19.38	0.00	419.58	0.047	0.00	0.05	8.992	A
C-AB	17.68	4.42	17.56	0.00	733.44	0.024	0.00	0.03	5.029	A
C-A	308.30	77.08	308.30	0.00	-	-	-	-	-	-
A-B	28.61	7.15	28.61	0.00	-	-	-	-	-	-
A-C	392.24	98.06	392.24	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	9.89	2.47	9.87	0.00	519.93	0.019	0.02	0.02	7.057	A
B-A	23.37	5.84	23.31	0.00	389.15	0.060	0.05	0.06	9.839	A
C-AB	23.38	5.84	23.33	0.00	758.85	0.031	0.03	0.04	4.894	A
C-A	365.88	91.47	365.88	0.00	-	-	-	-	-	-
A-B	34.16	8.54	34.16	0.00	-	-	-	-	-	-
A-C	468.37	117.09	468.37	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	12.11	3.03	12.09	0.00	491.53	0.025	0.02	0.03	7.508	A
B-A	28.63	7.16	28.52	0.00	347.12	0.082	0.06	0.09	11.295	B
C-AB	32.81	8.20	32.74	0.00	793.88	0.041	0.04	0.06	4.729	A
C-A	443.93	110.98	443.93	0.00	-	-	-	-	-	-
A-B	41.84	10.46	41.84	0.00	-	-	-	-	-	-
A-C	573.63	143.41	573.63	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	12.11	3.03	12.11	0.00	491.49	0.025	0.03	0.03	7.508	A
B-A	28.63	7.16	28.62	0.00	347.11	0.082	0.09	0.09	11.303	B
C-AB	32.84	8.21	32.84	0.00	793.91	0.041	0.06	0.06	4.732	A
C-A	443.90	110.98	443.90	0.00	-	-	-	-	-	-
A-B	41.84	10.46	41.84	0.00	-	-	-	-	-	-
A-C	573.63	143.41	573.63	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	9.89	2.47	9.91	0.00	519.87	0.019	0.03	0.02	7.061	A
B-A	23.37	5.84	23.47	0.00	389.13	0.060	0.09	0.06	9.847	A
C-AB	23.41	5.85	23.48	0.00	758.90	0.031	0.06	0.04	4.895	A
C-A	365.85	91.46	365.85	0.00	-	-	-	-	-	-
A-B	34.16	8.54	34.16	0.00	-	-	-	-	-	-
A-C	468.37	117.09	468.37	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	8.28	2.07	8.30	0.00	540.17	0.015	0.02	0.02	6.770	A
B-A	19.57	4.89	19.63	0.00	419.53	0.047	0.06	0.05	9.005	A
C-AB	17.74	4.44	17.79	0.00	733.49	0.024	0.04	0.03	5.032	A
C-A	308.24	77.06	308.24	0.00	-	-	-	-	-	-
A-B	28.61	7.15	28.61	0.00	-	-	-	-	-	-
A-C	392.24	98.06	392.24	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (08:00-08:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.22	0.01	6.766	A	A
B-A	0.70	0.05	8.992	A	A
C-AB	0.44	0.03	5.029	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:15-08:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.28	0.02	7.057	A	A
B-A	0.92	0.06	9.839	A	A
C-AB	0.61	0.04	4.894	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:30-08:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.37	0.02	7.508	A	A
B-A	1.29	0.09	11.295	B	B
C-AB	0.88	0.06	4.729	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (08:45-09:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.38	0.03	7.508	A	A
B-A	1.34	0.09	11.303	B	B
C-AB	0.89	0.06	4.732	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:00-09:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.30	0.02	7.061	A	A
B-A	1.00	0.07	9.847	A	A
C-AB	0.61	0.04	4.895	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (09:15-09:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.24	0.02	6.770	A	A
B-A	0.76	0.05	9.005	A	A
C-AB	0.46	0.03	5.032	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2026 Base + 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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship
2026 Base + Development, PM	2026 Base + Development	PM		ONE HOUR	17:00	18:30	90	15				✓	

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		8.98	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	High Street North		Major
B	B	Site Access		Minor
C	C	High Street South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.00		0.00		2.20	60.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				8.00	4.00	3.80	3.80	3.80	✓	1.00	85	30

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	576.123	0.100	0.254	0.160	0.362
1	B-C	642.823	0.094	0.238	-	-
1	C-B	608.710	0.226	0.226	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	506.00	100.000
B	ONE HOUR	✓	90.00	100.000
C	ONE HOUR	✓	481.00	100.000

Turning Proportions

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

	To			
		A	B	C
From	A	0.000	56.000	450.000
	B	63.000	0.000	27.000
	C	457.000	24.000	0.000

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

	To			
		A	B	C
From	A	0.00	0.11	0.89
	B	0.70	0.00	0.30
	C	0.95	0.05	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
From	A	0.0	0.0	0.0
	B	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	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.06	7.82	0.06	A	24.78	37.16	4.53	7.32	0.05	4.54	7.32
B-A	0.20	12.65	0.24	B	57.81	86.71	15.87	10.98	0.18	15.87	10.98
C-AB	0.07	4.94	0.13	A	45.30	67.95	8.24	7.28	0.09	8.24	7.28
C-A	-	-	-	-	396.08	594.11	-	-	-	-	-
A-B	-	-	-	-	51.39	77.08	-	-	-	-	-
A-C	-	-	-	-	412.93	619.39	-	-	-	-	-

Main Results for each time segment

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	20.33	5.08	20.17	0.00	541.88	0.038	0.00	0.04	6.898	A
B-A	47.43	11.86	46.93	0.00	424.43	0.112	0.00	0.12	9.524	A
C-AB	31.27	7.82	31.04	0.00	759.64	0.041	0.00	0.06	4.940	A
C-A	330.85	82.71	330.85	0.00	-	-	-	-	-	-
A-B	42.16	10.54	42.16	0.00	-	-	-	-	-	-
A-C	338.78	84.70	338.78	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	24.27	6.07	24.23	0.00	520.73	0.047	0.04	0.05	7.250	A
B-A	56.64	14.16	56.47	0.00	394.88	0.143	0.12	0.17	10.632	B
C-AB	41.46	10.36	41.37	0.00	789.46	0.053	0.06	0.08	4.814	A
C-A	390.95	97.74	390.95	0.00	-	-	-	-	-	-
A-B	50.34	12.59	50.34	0.00	-	-	-	-	-	-
A-C	404.54	101.14	404.54	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	29.73	7.43	29.67	0.00	489.98	0.061	0.05	0.06	7.819	A
B-A	69.36	17.34	69.07	0.00	354.05	0.196	0.17	0.24	12.620	B
C-AB	63.02	15.76	62.81	0.00	845.45	0.075	0.08	0.13	4.600	A
C-A	466.57	116.64	466.57	0.00	-	-	-	-	-	-
A-B	61.66	15.41	61.66	0.00	-	-	-	-	-	-
A-C	495.46	123.86	495.46	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	29.73	7.43	29.73	0.00	489.83	0.061	0.06	0.06	7.824	A
B-A	69.36	17.34	69.36	0.00	354.00	0.196	0.24	0.24	12.647	B
C-AB	63.10	15.77	63.09	0.00	845.56	0.075	0.13	0.13	4.602	A
C-A	466.49	116.62	466.49	0.00	-	-	-	-	-	-
A-B	61.66	15.41	61.66	0.00	-	-	-	-	-	-
A-C	495.46	123.86	495.46	0.00	-	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	24.27	6.07	24.33	0.00	520.53	0.047	0.06	0.05	7.258	A
B-A	56.64	14.16	56.92	0.00	394.81	0.143	0.24	0.17	10.665	B
C-AB	41.54	10.39	41.75	0.00	789.60	0.053	0.13	0.08	4.816	A
C-A	390.87	97.72	390.87	0.00	-	-	-	-	-	-
A-B	50.34	12.59	50.34	0.00	-	-	-	-	-	-
A-C	404.54	101.14	404.54	0.00	-	-	-	-	-	-

Main results: (18:15-18:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	20.33	5.08	20.37	0.00	541.63	0.038	0.05	0.04	6.908	A
B-A	47.43	11.86	47.60	0.00	424.34	0.112	0.17	0.13	9.559	A
C-AB	31.40	7.85	31.49	0.00	759.74	0.041	0.08	0.06	4.944	A
C-A	330.72	82.68	330.72	0.00	-	-	-	-	-	-
A-B	42.16	10.54	42.16	0.00	-	-	-	-	-	-
A-C	338.78	84.70	338.78	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (17:00-17:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.56	0.04	6.898	A	A
B-A	1.79	0.12	9.524	A	A
C-AB	0.87	0.06	4.940	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:15-17:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.71	0.05	7.250	A	A
B-A	2.41	0.16	10.632	B	B
C-AB	1.22	0.08	4.814	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:30-17:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.94	0.06	7.819	A	A
B-A	3.47	0.23	12.620	B	B
C-AB	2.00	0.13	4.600	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (17:45-18:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.96	0.06	7.824	A	A
B-A	3.61	0.24	12.647	B	B
C-AB	2.02	0.13	4.602	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:00-18:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.76	0.05	7.258	A	A
B-A	2.63	0.18	10.665	B	B
C-AB	1.24	0.08	4.816	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (18:15-18:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.60	0.04	6.908	A	A
B-A	1.96	0.13	9.559	A	A
C-AB	0.89	0.06	4.944	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

(Default Analysis Set) - 2026 Base + Development, Saturday

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	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	N/A		✓				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship
2026 Base + Development, Saturday	2026 Base + Development	Saturday		ONE HOUR	11:00	12:30	90	15				✓	

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Do Geometric Delay	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C		8.84	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	High Street North		Major
B	B	Site Access		Minor
C	C	High Street South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	7.00		0.00		2.20	60.00	✓	0.00

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

Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				8.00	4.00	3.80	3.80	3.80	✓	1.00	85	30

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	576.123	0.100	0.254	0.160	0.362
1	B-C	642.823	0.094	0.238	-	-
1	C-B	608.710	0.226	0.226	-	-

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

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

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

Traffic Flows

Demand Set Data Options

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

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	486.00	100.000
B	ONE HOUR	✓	105.00	100.000
C	ONE HOUR	✓	303.00	100.000

Turning Proportions

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

	To			
		A	B	C
	A	0.000	87.000	399.000
	B	71.000	0.000	34.000
	C	275.000	28.000	0.000

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

	To			
		A	B	C
	A	0.00	0.18	0.82
	B	0.68	0.00	0.32
	C	0.91	0.09	0.00

Vehicle Mix

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

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

Heavy Vehicle Percentages - Junction 1 (for whole period)

	To			
		A	B	C
	A	0.0	0.0	0.0
	B	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	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
B-C	0.08	7.80	0.08	A	31.20	46.80	5.70	7.31	0.06	5.70	7.31
B-A	0.20	11.36	0.24	B	65.15	97.73	16.45	10.10	0.18	16.45	10.10
C-AB	0.08	5.62	0.14	A	40.76	61.13	8.78	8.62	0.10	8.78	8.62
C-A	-	-	-	-	237.28	355.92	-	-	-	-	-
A-B	-	-	-	-	79.83	119.75	-	-	-	-	-
A-C	-	-	-	-	366.13	549.19	-	-	-	-	-

Main Results for each time segment

Main results: (11:00-11:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	25.60	6.40	25.40	0.00	547.61	0.047	0.00	0.05	6.892	A
B-A	53.45	13.36	52.92	0.00	452.56	0.118	0.00	0.13	8.996	A
C-AB	29.97	7.49	29.71	0.00	670.97	0.045	0.00	0.06	5.613	A
C-A	198.14	49.54	198.14	0.00	-	-	-	-	-	-
A-B	65.50	16.37	65.50	0.00	-	-	-	-	-	-
A-C	300.39	75.10	300.39	0.00	-	-	-	-	-	-

Main results: (11:15-11:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	30.57	7.64	30.52	0.00	527.77	0.058	0.05	0.06	7.239	A
B-A	63.83	15.96	63.67	0.00	428.43	0.149	0.13	0.17	9.865	A
C-AB	38.50	9.63	38.41	0.00	684.47	0.056	0.06	0.09	5.572	A
C-A	233.89	58.47	233.89	0.00	-	-	-	-	-	-
A-B	78.21	19.55	78.21	0.00	-	-	-	-	-	-
A-C	358.69	89.67	358.69	0.00	-	-	-	-	-	-

Main results: (11:30-11:45)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	37.43	9.36	37.36	0.00	499.24	0.075	0.06	0.08	7.793	A
B-A	78.17	19.54	77.89	0.00	395.07	0.198	0.17	0.24	11.339	B
C-AB	53.67	13.42	53.48	0.00	707.91	0.076	0.09	0.14	5.504	A
C-A	279.94	69.98	279.94	0.00	-	-	-	-	-	-
A-B	95.79	23.95	95.79	0.00	-	-	-	-	-	-
A-C	439.31	109.83	439.31	0.00	-	-	-	-	-	-

Main results: (11:45-12:00)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	37.43	9.36	37.43	0.00	499.10	0.075	0.08	0.08	7.797	A
B-A	78.17	19.54	78.17	0.00	395.02	0.198	0.24	0.24	11.361	B
C-AB	53.73	13.43	53.73	0.00	707.99	0.076	0.14	0.14	5.507	A
C-A	279.87	69.97	279.87	0.00	-	-	-	-	-	-
A-B	95.79	23.95	95.79	0.00	-	-	-	-	-	-
A-C	439.31	109.83	439.31	0.00	-	-	-	-	-	-

Main results: (12:00-12:15)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	30.57	7.64	30.64	0.00	527.59	0.058	0.08	0.06	7.244	A
B-A	63.83	15.96	64.10	0.00	428.35	0.149	0.24	0.18	9.892	A
C-AB	38.57	9.64	38.76	0.00	684.57	0.056	0.14	0.09	5.577	A
C-A	233.82	58.45	233.82	0.00	-	-	-	-	-	-
A-B	78.21	19.55	78.21	0.00	-	-	-	-	-	-
A-C	358.69	89.67	358.69	0.00	-	-	-	-	-	-

Main results: (12:15-12:30)

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
B-C	25.60	6.40	25.65	0.00	547.35	0.047	0.06	0.05	6.903	A
B-A	53.45	13.36	53.62	0.00	452.45	0.118	0.18	0.14	9.031	A
C-AB	30.07	7.52	30.17	0.00	671.05	0.045	0.09	0.07	5.621	A
C-A	198.04	49.51	198.04	0.00	-	-	-	-	-	-
A-B	65.50	16.37	65.50	0.00	-	-	-	-	-	-
A-C	300.39	75.10	300.39	0.00	-	-	-	-	-	-

Queueing Delay Results for each time segment

Queueing Delay results: (11:00-11:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.71	0.05	6.892	A	A
B-A	1.91	0.13	8.996	A	A
C-AB	0.96	0.06	5.613	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (11:15-11:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.90	0.06	7.239	A	A
B-A	2.52	0.17	9.865	A	A
C-AB	1.34	0.09	5.572	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (11:30-11:45)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.18	0.08	7.793	A	A
B-A	3.53	0.24	11.339	B	B
C-AB	2.05	0.14	5.504	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (11:45-12:00)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	1.21	0.08	7.797	A	A
B-A	3.66	0.24	11.361	B	B
C-AB	2.07	0.14	5.507	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (12:00-12:15)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.95	0.06	7.244	A	A
B-A	2.74	0.18	9.892	A	A
C-AB	1.37	0.09	5.577	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-

Queueing Delay results: (12:15-12:30)

Stream	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
B-C	0.76	0.05	6.903	A	A
B-A	2.09	0.14	9.031	A	A
C-AB	1.00	0.07	5.621	A	A
C-A	-	-	-	-	-
A-B	-	-	-	-	-
A-C	-	-	-	-	-