Proposed Residential Development

Bexhill, Fryatts Way

Transport Assessment

Revision 02

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Prepared on Behalf of Gladman Developments Ltd

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1.0 INTRODUCTION

1.1 BACKGROUND

1.1.1 Tetra Tech (TT) has been appointed by Gladman Developments Ltd. to prepare a Transport Assessment (TA) in support of an outline planning application (all matters reserved except for access) for a residential development on land off Fryatts Way, Bexhill.

1.1.2 The development site is located on land to the west of Fryatts Way adjacent to an existing residential area. The site is located to the west of Bexhill Town Centre. The location of the site is shown in **Plan 1**, whilst the local highway network is shown in **Plan 2**. An initial Development Framework of the site is attached in **Appendix A**.

1.1.3 The proposed development comprises of up to 210 residential dwellings. The development is proposed to be accessed off Fryatts Way on the eastern site boundary via a new priority access.

1.1.4 This TA provides information on the traffic and transport planning aspects of the development proposals.

1.1.5 In addition to this TA, a separate residential Travel Plan (TP) has been prepared and will be submitted as part of the planning application.

1.1.6 The local planning authority (LPA) for where the site is located is Rother District Council (RDC) and the local highway authority (LHA) is East Sussex County Council (ESCC).

1.2 SCOPING

1.2.1 Prior to the preparation of this TA, discussions and email correspondence have taken place with the LHA and Highways England over the proposals. A copy of the relevant correspondence is attached in **Appendix B.**

1.2.2 The comments received from the LHA and HE in the course of the above discussions have been taken into account in the preparation of this TA.

1.3 REPORT STRUCTURE

1.3.1 Following the introductory section, the report is structured as follows:

- **Section 2** sets out the local and national transport policy context relevant to the proposals.
- **Section 3** describes the site location, the local highway network, and presents a review of personal injury accident data in the vicinity of the site.
- **Section 4** reviews the accessibility of the site by sustainable transport modes.

- **Section 5** sets out the proposed development and access arrangements.
- **Section 6** describes the methodology used to derive future vehicular traffic flows on the local highway network.
- **Section 7** presents the methodology and results of the traffic impact assessment.
- **Section 8** summarises and concludes the report.

2.0 NATIONAL AND LOCAL POLICY CONTEXT

2.1 INTRODUCTION

2.1.1 This section of the TA reviews transportation planning policy and guidance documents in the context of the proposed development site, with reference to the following documents:

- National Planning Policy Framework (2019)
- East Sussex Local Transport Plan (2011-2026)
- Rother Local Plan Core Strategy (2014)
- Rother District Local Plan (2006)

2.2 NATIONAL PLANNING POLICY FRAMEWORK (2019)

2.2.1 The Ministry of Housing, Communities and Local Government published the revised National Planning Policy Framework (NPPF) on 24 July 2018. It was updated on 19 February 2019.

2.2.2 At the heart of the NPPF is a presumption in favour of sustainable development. In this context, it is fundamental that for new development sustainable transport is promoted. Section 5 of the NPPF sets out the ways in which to deliver a sufficient supply of homes in urban and rural areas, while Section 9 sets out polices for promoting sustainable transport.

2.2.3 Paragraph 102 of the NPPF states:

'Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:

- *the potential impacts of development on transport networks can be addressed;*
- *opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;*
- *opportunities to promote walking, cycling and public transport use are identified and pursued;*
- *the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and*
- *patterns of movement, streets, parking and other transport considerations are integral to the design of schemes and contribute to making high quality places.'*

2.2.4 At paragraph 103 the NPPF states:

'The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making.'

2.2.5 Ultimately, NPPF sets out key tests for the acceptability of planning applications in terms of transport and highways at paragraphs 108 and 109.

Paragraph 108 of the NPPF states 'it should be ensured that:

a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;

b) safe and suitable access to the site can be achieved for all users; and

c) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.'

2.2.6 At paragraph 109 NPPF states:

'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.'

2.3 EAST SUSSEX COUNTY COUNCIL LOCAL TRANSPORT PLAN (2011-2026)

2.3.1 ESCC's Local Transport Plan (LTP) covers the period between 2011 and 2026 and sets out the transport strategy for the County during this time. This update of the transport plan sets out the transport infrastructure and services needed to deliver sustainable economic growth and support additional housing in the county during this period.

2.3.2 The LTP's vision is:

'To make East Sussex a prosperous county where an effective, well managed transport infrastructure and improved travel choices help businesses to thrive and deliver better access to jobs and services, safer, healthier, sustainable and inclusive communities and a high-quality environment.'

2.3.3 The LTP sets out five objectives to help achieve its overall vision. These are:

- Improve economic competitiveness and growth
- Improve safety, health and security
- Tackle climate change
- Improve accessibility and enhance social inclusion
- Improve quality of life

2.3.4 Within the LTP, emphasis is put on encouraging sustainable travel to and from jobs and services. It also identifies Bexhill as an area for greater investment in transport infrastructure in order to deliver regeneration, development and sustainable economic growth.

2.4 ROTHER DISTRICT COUNCILS LOCAL PLAN CORE STRATEGY (2014-2028)

2.4.1 RDC's Local Plan Core Strategy was adopted in September 2014. This document sets out the Council's vision and objectives that will guide the future pattern and form of development over the period up until 2028.

2.4.2 The strategic objective for Bexhill is provided in Chapter 6: Table 1, which sets out the following:

'To strengthen the identity of Bexhill and for it to become one of the most attractive places to live on the south coast, attractive to families, the young and elderly alike, within an integrated approach to securing a more prosperous future for the Bexhill and Hastings area.'

2.4.3 The strategic objective for Transport is also provided in Chapter 6: Table 1, and is set out below:

'To provide a higher level of access to jobs and services for all ages in both urban and rural areas and improve connectivity with the rest of the region.'

2.4.4 Chapter 8 of this document provides details of the overall strategy to deliver the objectives for Bexhill. These are to:

- Conserve and enhance the town's distinct and independent character and residential function, supported by local services and jobs as much as possible;
- Develop local amenities, including support for community activities and facilities, learning opportunities, and improved sports and leisure facilities, including a new leisure/swimming centre, and a network of accessible green space around the town, as well as by implementation of the Combe Valley Countryside Park;
- Promote the economic growth of the town, and wider area, including through encouraging growth in new and established local firms, especially in high value-added sectors, prioritising development for employment purposes, increasing the supply of land and premises and promoting efficient infrastructure;

- Give priority to improving welfare and economic opportunities in more deprived areas, including by assessing the impacts of development proposals on more vulnerable groups and areas;
- Improve road, rail, bus and cycling access within Bexhill and between the town and Hastings, via an integrated sustainable local transport strategy for the Bexhill and Hastings area, key elements of which will be:
  - The Bexhill to Hastings Link Road, associated 'greenway' and new 'quality bus corridors';
  - A cycle network that focuses on 'utility' routes to the town centre, schools, colleges and workplaces, and recreational routes into the Countryside Park and along the seafront;
- Strengthen the town centre's role, both as a commercial and cultural centre, in accordance with Policy BX2;
- Provide for employment and housing growth, in accordance with Policy BX3, with particular regard to the needs of families, affordable housing for younger people and a range of supported housing options for older households.

2.5 ROTHER DISTRICT LOCAL PLAN (2006)

2.5.1 The Rother District Local Plan was adopted in July 2006, and outlines a vision for the Rother area, namely that:

"Rother will be a place where everyone can live together sustainably and residents are properly informed, consulted and involved as part of an effective local partnership that recognises and addresses the needs of everyone in our community"

2.5.2 Section 10 of the Rother District Local Plan relates to the coastal town of Bexhill.

2.5.3 Paragraph 10.11 states that proposals should:

"develop [Bexhill's] residential, employment, shopping and service centre functions."

2.5.4 Policy HG2 states that proposals for development will be considered in the context of the following:

(iv) The proposed development should be well located within or adjacent to an existing settlement and be of an appropriate scale and character in keeping with existing development in the locality and normally provide good access to local facilities, e.g. shops and schools.

2.6 COMPLIANCE WITH POLICY

2.6.1 Subsequent sections of this report describe the development proposals and surrounding existing facilities such as local services, pedestrian routes and existing public transport provision while also

assessing the impact of the proposals on the local transport network. As will be shown, the development proposals comply with the guidelines and policies detailed above.

3.0 EXISTING CONDITIONS

3.1 INTRODUCTION

3.1.1 This section of the TA describes the site and existing local highway network, including current traffic flows and the safety record of the local highway network.

3.2 SITE LOCATION

3.2.1 The location of the site is shown on **Plan 1**.

3.2.2 **Plan 1** shows that the proposed development site is located adjacent to an existing residential area approximately 2km from Bexhill Town Centre shopping area as defined in the RDC Local Plan. In the wider context it is located approximately 9km to the west of the centre of Hastings and 15km to the northeast of the centre of Eastbourne.

3.2.3 The site is currently an undeveloped green field which is bounded to the east by existing residential dwellings apart from a small section of the site (approximately 15m long) which forms a boundary onto Fryatts Way. To the south, west and north, the site is bounded by undeveloped green fields.

3.3 LOCAL HIGHWAY NETWORK

3.3.1 This section describes the local highway network, which is shown on **Plan 2.**

3.3.2 The key local roads to the site are:

- Fryatts Way from which the site will be accessed.
- Ellerslie Lane and Turkey Road which will be used by traffic accessing the site from the north, north east and north west.
- Broadoak Lane which provides access to the A259 to the south west.
- Summerhill Road / Knebworth Road which provide access to the A259 and Bexhill Town Centre to the southeast.
- The A259 trunk road which provides access to neighbouring towns such as Eastbourne and Hastings.

3.3.3 Fryatts Way is a two-way single carriageway cul-de-sac road that is subject to a 30mph speed limit. There are footways and street lighting present on both sides of the carriageway. The northern end of the street is the cul-de-sac with the eastern end of the road forming the minor arm of a priority junction with Ellerslie Lane.

3.3.4 Ellerslie Lane is a two-way single carriageway road which extends north to south. It is subject to a 30mph speed limit. Approximately 620m to the north of its junction with Fryatts Way, Ellerslie Lane forms the minor arm of a priority junction with Turkey Road. Approximately 150m to the south of Fryatts Way, Ellerslie Lane forms a crossroad junction with Broadoak Lane and Blackfields Avenue.

3.3.5 To the south of Ellerslie Lanes junction with Fryatts Way, footpaths are present on both sides of the carriageway. Where frontage access to residential dwellings are provided, Ellerslie Way features street lighting. Along its full length, Ellerslie Way is subject to a Traffic Regulation Order which restricts vehicles larger than 6ft 6ichs (198cm) in width from travelling along the road, except for access.

3.3.6 Turkey Road is a two-way single carriageway road that is subject to a 30mph speed limit. Close to its junction with Ellerslie Road, footways and street lighting are present on both sides of the carriageway. Turkey Road is also a bus route.

3.3.7 Approximately 1km to the west of its junction with Ellerslie Way, Turkey Road forms a crossroad junction with Peartree Lane and Whydown Road. Approximately 1.2km to the east of its junction with Ellerslie Way, Turkey Road forms a mini-roundabout junction with the A269 which provides access into the centre of Bexhill.

3.3.8 Broadoak Lane is a two-way single carriageway road that is subject to a 30mph speed limit. The road extends from the A259, approximately 560m to the south west of Broadoak Lane's junction with Ellerslie Way to West Down Rd approximately 700m to the east. It features intermittent footways and continuous street lighting to both sides of the carriageway. The southernmost section between Courthope Drive and the A259 is also a bus route. At its southern end, Broadoak Lane forms the minor arm of a ghost island right turn priority junction with the A259 (Little Common Road).

3.3.9 Summer Hill Road / Knebworth Drive are single carriageway roads that are subject to a 30mph speed limit. Footways and street lighting are present on both sides of the carriageway. At its western end, Summer Hill Road forms the minor arm of a priority junction with Ellerslie Lane. Summer Hill Road extends eastwards from Ellerslie Lane for approximately 190m before turning south as Knebworth Drive and heading southwards for approximately 450m until it meets with the A259 (Little Common Road) where it forms the minor arm of a ghost island right turn priority junction.

3.3.10 All the above-mentioned roads run through residential areas.

3.3.11 In the vicinity of the site, the A259 is a single carriageway road subject to a 40mph speed limit. Footways are present on both sides of the carriageway. The road extends to the south of the site and to the north of Bexhill Town Centre and connects to town to Eastbourne approximately 15km to the west and Hastings approximately 8km to the east.

3.4 LOCAL ROAD WIDTHS

3.4.1 As noted above, the review of the local highway network undertaken has identified that there is a TRO in the form of a width restriction along Ellerslie Road. The network of interest has been reviewed in detail to establish carriageway widths to determine whether the width of local roads will be able to accommodate the traffic likely to be generated by the proposed development. The carriageway widths of local roads are shown in the drawing attached in **Appendix C.**

3.4.2 Figure 7.1 in Manual for Streets 1 (MfS1), provided as **Extract 3.1**, illustrates the type of vehicles that various carriageway widths can accommodate.

Extract 3.1: Figure 7.1 in Manual for Streets 1

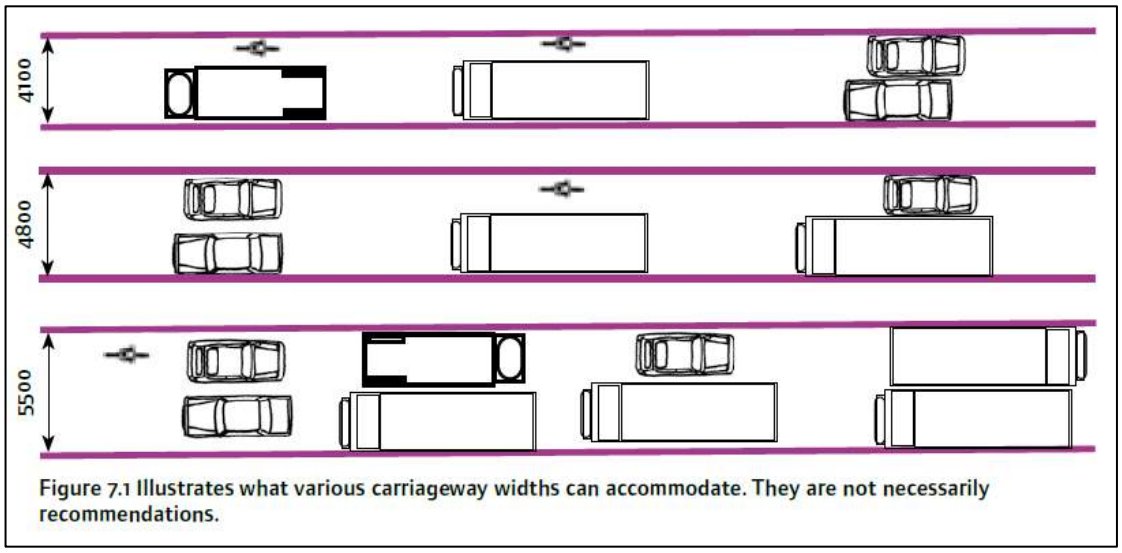


Figure 7.1 Illustrates what various carriageway widths can accommodate. They are not necessarily recommendations.

3.4.3 **Extract 3.1** is summarised below:

- A carriageway width of less than 4.1m would not allow two cars to pass each other simultaneously.
- A carriageway width of greater than 4.1m and less than 4.8m would allow two cars to pass, but would not allow a goods vehicle to pass a car simultaneously.
- A carriageway width of greater than 4.8m and less than 5.5m would allow a goods vehicle to pass a car but would not allow two goods vehicles to pass each other.
- A carriageway width of greater than 5.5m would allow two goods vehicles to pass each other.

3.4.4 The Local Highway Network – Road Widths plan attached in **Appendix C** shows that all roads in the vicinity of the site have a width greater than 4.1m and therefore confirms that all the roads near the site are wide enough to accommodate two cars travelling in the opposite direction.

3.4.5 The plan shows that most local roads are greater than 5.5m wide with just a few sections of road less than 5.5m wide. The sections of road that are less than 5.5m wide are mostly located along Ellerslie Road to the north of Fryatts Way where the road width ranges from between 4.1m to greater than 5.5m wide. There is just one section of road on Ellerslie Road to the south of Fryatts Way that is less than 5.5m wide (being between 4.8m and 5.5m wide) with a further section of Knebworth Road ranging in width between 4.8m and 5.5m. There is also a section of Broadoak Lane to the south of the site which is also between 4.1 and 4.8m wide.

3.4.6 The above shows that whilst parts of the road network in the vicinity of the site are relatively narrow, the majority of the network can accommodate two goods vehicles travelling in the opposite direction at the same time. The above also shows that there are no parts of the network where two cars cannot pass each other.

3.5 PERSONAL INJURY ACCIDENT REVIEW

3.5.1 A review of the Crashmap website has been undertaken to determine whether there are any existing highway safety issues on the local network in the vicinity of the site

3.5.2 Personal Injury Accidents (PIAs) that occurred within the study area have been reviewed for the most recent available five-year period (2016 – 2020). The study area includes Fryatts Way, Ellerslie Lane and the A259 Little Common Road. The locations of the PIAs are shown in **Extract 3.2**.

3.5.3 This shows that there were just 10 recorded PIAs within the study area over the five-year period. Of the 10 recorded PIAs, seven were classified as resulting in a ‘slight’ injury, while three were classified as resulting in a ‘serious’ injury. These are indicated by the yellow and red flags respectively in **Extract 3.2**.

3.5.4 The PIAs are summarised by year, severity, and location in **Table 3.2**.

Extract 3.2: PIA Study Area

3.5.5 The PIAs are summarised by year and severity in **Table 3.1**.

Table 3.1: Summary of PIAs by Frequency and Severity

Severity	Year					
	2016	2017	2018	2019	2020	Total
PIAs on Knebworth Road						
Serious	0	1	0	0	0	1
PIAs on Deerswood Lane						
Serious	0	0	0	1	0	1
PIAs on Little Common Road						
Slight	3	2	0	0	0	5
Serious	0	1	0	1	0	2
Fatal	0	0	0	0	0	0
Total	3	3	0	2	0	9

3.5.6 **Extract 3.2** shows that the majority of PIAs in the study area occurred along the A259 Little Common Road. No PIAs occurred at the Ellerslie Lane / Fryatts Way junction which would be used to access the development, nor have any PIAs been recorded along Ellerslie Lane or Fryatts Way.

3.5.7 In the five-year study period, the earliest 'serious' PIA occurred in the vicinity of the same junction on 26th February 2017. This PIA appears to have occurred when the first vehicle (travelling east) attempted to turn right onto White Hill Avenue and collided with the second vehicle which was travelling west. The passenger of the first vehicle sustained serious injuries while there were also four 'slight' injuries, the drivers of both vehicles and two passengers in the second vehicle.

3.5.8 The second recent serious PIA occurred on 1st October 2017 at the junction of Knebworth Road and Courthope Drive. This involved a pedal cycle and a car, with the pedal cyclist incurring the injury.

3.5.9 The most recent serious PIA occurred on 19th July 2019 at the junction of Deerswood Ln and Foxhill. This involved two vehicles with one casuality.

3.5.10 A total of 9 accidents over a five-year study period equates to less than two accidents per year. It is important to note that no PIAs occurred on Ellerslie Lane or on Fryatts Way which would be used to access the development. It should also be noted that as shown in **Table 3.1**, no PIAs occurred during 2018 and the most recent year of the five-year study period (2020).

3.5.11 It is therefore considered that there is no evidence of an existing highway safety issue that should prevent the proposed development from coming forward.

4.0 ACCESSIBILITY BY SUSTAINABLE MODES

4.1 INTRODUCTION

4.1.1 This section describes the amenities that are accessible from the development site by sustainable travel modes. It also describes the existing sustainable transport infrastructure that is in place to provide access to these amenities.

4.2 ACCESSIBILITY ON FOOT

4.2.1 It is generally accepted that walking is the most important mode of travel at a local level and offers the greatest potential to reduce short car trips, particularly those under 2km. The implication of this is that 2km is a distance that people are typically prepared to walk to access an amenity/facility. 2km is also the Institution for Highways and Transportation (IHT) guidance preferred maximum suggested walking distance to schools and for commuting.

4.2.2 In respect of this, **Plan 3** has been prepared to show a 1km and 2km walk catchment from the centre of the site. Assuming a walk speed of 1.4m/s, this equates to a 12-minute and 24-minute walk respectively.

4.2.3 **Plan 3** shows that within a 1km walk of the site, there are numerous bus stops that can be reached, including stops located on Broadoak Lane, Turkey Road, Gunters Lane and West Down Road. The services available at these bus stops are described in more detail later in this section. Residential areas in Glenleigh Park, Little Common and Old Town can also be reached within a 2km walk. Collington Railway Station is just outside of the 2km catchment, and the services operating at this station are detailed later on in this section.

4.2.4 **Plan 3** shows that the 2km walk catchment area covers a wide variety of key amenities and facilities including schools, post offices, convenience shops, restaurants, bars and pubs, a TESCO Express, medical centres, Bexhill Leisure Centre and outdoor play areas. The Little Common Shopping Area, within which there are several shops, café, restaurants, barber shops and clinics, is also located within the site's 2km walk catchment. Additionally, a Lidl supermarket is located just at the edge of the 2km walk catchment.

4.2.5 Bexhill Town Centre shopping area, as defined in the RDC's Local Development Framework, is located just outside the site's 2km walking catchment, however considering that the town centre offers a wide range of amenities and facilities, it would not be inconceivable that a future resident may choose to walk to the town centre.

4.2.6 Pedestrian infrastructure provisions on the roads near the site have been fully reviewed and are shown on **Plan 4.**

4.2.7 It can be seen from **Plan 4** that the majority of roads within the 2km walk catchment have footways on both sides of the road. The exception to this is along a short section of Ellerslie Lane (from House No. 23 to the Ellerslie Lane / Turkey Road priority junction) and along a short road section of Broadoak Lane. Along these sections of road, there are no pedestrian footways on either side of road. However, there are alternative pedestrian routes which can be used to access the same destinations, as is shown on **Plan 4**.

4.2.8 As part of the development proposals, footways will be provided along the proposed internal road which will connect with the existing pedestrian network along Fryatts Way.

4.3 ACCESSIBILITY BY CYCLE

4.3.1 It is generally accepted that cycling has the potential to substitute for short car trips, particularly those less than 5km and to form part of a longer journey which includes public transport modes.

4.3.2 To demonstrate the site's accessibility by cycle, a 5km cycle catchment has been prepared and is shown in **Plan 5**. It can be seen that the entirety of Bexhill and surrounding area are located within the 5km catchment including the additional areas of Lunsford's Cross, Watermill, Sidley, Pebsham.

4.3.3 National Cycle Route 2 which is a coastal route passes through the site's 5km cycle catchment. The route consists of a mixture of on and off-road cycle lanes/paths which pass through the residential areas of Cooden, Bexhill and Pebsham.

4.4 ACCESSIBILITY BY PUBLIC TRANSPORT

By Bus

4.4.1 As shown on **Plan 2**, the closest bus stops to the site are located on Courthope Drive approximately 600m walking distance from the site. These bus stops are served by bus route 11. **Plan 2** shows that there are additional stops on Broadoak Lane, Warwick Road and on the A259. These stops are also served by bus route 11.

4.4.2 Additional bus stops are located on Gunter's Lane, West Down Road and Turkey Lane. These bus stops are served by bus route 97. The closest of these stops is located on Turkey Lane, or on Gunter's Lane, approximately 850m walking distance from the site.

4.4.3 **Plan 4** shows the suitable walking routes to the bus stops.

4.4.4 Additionally, there are more bus stops near the Little Common roundabout and on the A269 which are within 2km walk of the centre of the site.

4.4.5 A summary of the bus services available from all the stops identified above is set out in **Table 4.1**.

Table 4.1: Bus services, Routes, and Frequencies Accessible from the Site

Service	Route	Average One-Way Frequency					
		Weekday				Sat.	Sun.
		AM Peak	Inter Peak	PM Peak	Eve.		
Services available from Broadoak Ln, Courthope Dr, Warwick Rd (approx. 600m walk)							
11	Bexhill Town Centre – Little Common	Four services daily at 09:32, 11:21, 13:36 and 15:57					-
Services available from Gunter's Ln and Turkey Rd (approx. 850m walk)							
97	Bexhill – Sidley – Hooe	Three services daily at 10:31, 12:21 and 14:01				Four services daily at 09:01, 10:31, 12:21 and 14:01	-
98/98A	Hastings - Bexhill - Sidley - Hailsham - Polegate - Eastbourne	10min	30min	30min	50min	15-30min during the daytime no service during the evening	60min during the daytime no service during the evening
Services available within 2km Walk Catchment (near Little Common Roundabout on the A259)							
95	Bexhill - Sidley - Battle - Conquest Hospital	1 service	-	1 service	-	-	-
96	Little Common - Bexhill	Four services daily at 09:57, 11:27, 13:27 and 14.57				Three services daily at 09:57, 11:27 and 14.02	-
99	Silverhill - Hastings - Bexhill - Pevensey Bay - Eastbourne	30min	30min-60min	30min	60min	the same as weekday	60min

4.4.6 **Table 4.1** demonstrates that buses can be caught to Bexhill Town Centre from bus stops located within 600m of the site. The table also shows that a wider and more frequent range of bus services can be caught from bus stops that are located within 2km of the site (circa 1.7km and 1.85km). The services combine to provide at least 9 services per hour during the main travel demand periods.

4.4.7 The bus services identified in **Table 4.1** mean that future residents of the site can travel by bus to a number of local and regional destinations such as Bexhill Town Centre, Battle, Hastings, Polegate, and Eastbourne.

4.4.8 All bus services in the vicinity of the site also connect the site to Bexhill Railway Station, which has regular railway services to Brighton, Eastbourne, Lewes, London Victoria, Gatwick Airport, East Croydon and Hastings.

4.4.9 In addition to the regular bus services set out above, there is also a 'Dial-a-Ride' community bus service that can be called by people with any type of disability regardless of age who cannot use regular public transport.

By Rail

4.4.10 Collington Railway Station is located approximately 2.3km from the site and provides railway services to a number of destinations. There are hourly railway services to Ore via Hastings, to Ashford International, London Victoria via Eastbourne, Gatwick Airport and East Croydon.

4.4.11 Bexhill and Cooden Beach Railway Stations are located approximately 3.2km from the site in a south easterly and south-westerly direction respectively.

4.4.12 Bexhill Railway Station provides additional services to various destinations. Typical off-peak services, Mondays to Saturday, are set out below:

- 2 services per hour to Brighton via Eastbourne and Lewes.
- 1 service per hour to Eastbourne.
- 1 service per hour to London Victoria via Eastbourne, Gatwick Airport and East Croydon.
- 3 services per hour to Hastings of which 1 service per hour continues to Ashford International via Rye while 2 services per hour continue to Ore.

4.4.13 Cooden Beach Railway Station has the same railway services as Collington Railway Station.

4.5 TRAVEL PLAN

4.5.1 The development will be supported by a comprehensive Travel Plan, which will positively encourage the future residents of the development to travel by sustainable modes. This TA should be read in conjunction with framework Travel Plan.

4.6 ACCESSIBILITY SUMMARY

4.6.1 The above demonstrates that there are a number of facilities located within a short walk of the site (around 1km) include educational establishments, bars/pubs and restaurants, a post office and convenience store. The 'Little Common Shopping Area' with its range of amenities and facilities is located just within a 2km walk of the site while Bexhill Town Centre shopping area with its wide range of amenities and facilities is located just outside the site's 2km walking catchment. A wide range of amenities and facilities will therefore be accessible on foot to future residents of the proposed development.

4.6.2 The entirety of Bexhill, including the town centre, and surrounding areas are located within a 5km cycle of the site.

4.6.3 Bus stops are located approximately 600m to the south east of the site from where bus services to Bexhill Town Centre can be caught. More regular services to various local and regional destinations including Battle, Hastings, Polegate, and Eastbourne can be caught from bus stops located within 850m of the site.

4.6.4 Regular train services operate from Bexhill Railway Station to Eastbourne, Lewes, London Victoria, Gatwick Airport, and Ashford International.

4.6.5 Given the above sustainable transport provision, it is considered that the site is adequately accessible by sustainable forms of transport.

5.0 PROPOSED DEVELOPMENT

5.1 INTRODUCTION

5.1.1 This section describes the development proposals including vehicular access.

5.2 DEVELOPMENT PROPOSALS

5.2.1 The proposed development site is located on land to the west of Fryatts Way, in Bexhill, adjacent to an existing residential area.

5.2.2 The proposals comprise up to 210 residential units including 30% affordable housing (up to 63 houses), planting landscaping, public open space and sustainable drainage system (SuDS). All matters are reserved except for access. It should be noted that no reduction in traffic generation as would be expected with affordable housing has been applied. This adds an extra level of robustness to the capacity assessments.

5.2.3 Vehicle and pedestrian access to the development will be via Fryatts Way with a simple priority junction being provided into the site. In accordance with local standards the site access road will be 5.5m wide with 2m footways provided on both sides of the carriageway which will connect with the existing pedestrian infrastructure on Fryatts Way. A drawing showing the layout of the proposed site access is attached in **Appendix D**. The drawing shows that visibility splays corresponding with the 30mph speed limit along Fryatts Way can be provided at the junction. i.e. 2.4 x 40m.

5.2.4 Also attached in **Appendix D** are autotracking drawings showing a large refuse vehicle, a removal van, and a fire tender safely manoeuvring in and out of the site from Fryatts Way. The drawings show that the vehicles will have to travel on the opposite side of the carriageway for a short distance when turning in and out of the site access junction but given that there are only likely to be infrequent large vehicle movements and Fryatts Way is very lightly trafficked, this is considered to be acceptable. Manual for Streets (MfS) in para 6.8.1 acknowledges that *'on streets with low traffic flows and speeds, it may be assumed that [service vehicles] will be able to use the full width of the carriageway to manoeuvre'.*

5.2.5 It is intended to develop the on-site highway infrastructure with a clear hierarchy in place and in accordance with the recommendations contained with the Manual for Streets (DfT, 2007) and its companion guide Manual for Streets 2 – Wider Application of the Principles (DfT, 2010). The internal streets will be well-lit and will provide routes for walking and cycling in compliance with Policy CS17 of the Charnwood Local Plan.

5.2.6 The on-site highway network will be considered as 'streets' and designed as such. There will be an emphasis on people and their environment, and the design will fulfil three key movement functions. These are:

- Pedestrian and Vehicle Circulation.
- Access to buildings.
- Public Space for human interaction and sociability.

5.2.7 The parking (both vehicular and cycle) will be provided in accordance with local guidance.

6.0 TRAFFIC FLOW ANALYSIS

6.1 INTRODUCTION

6.1.1 This section of the report explains the methodology that has been used to forecast traffic on the local highway network in the future.

6.1.2 In order to fully understand the impact of the proposal on the local highway network, it was agreed during scoping discussions with ESCC and HE, the following junctions were identified as requiring detailed junction capacity assessment:

- J1: Site Access / Fryatts Way Priority Junction
- J2: Ellerslie Lane / Fryatts Way Priority Junction
- J3: Ellerslie Lane / Turkey Road / St Mary's Road Staggered Junction
- J4: Turkey Road/A269 Ninfield Road Mini Roundabout
- J5: Little Common Roundabout
- J6: Broadoak Lane /A259 Little Common Road Priority Junction
- J7: A269 / A259 Signal Junction

6.1.3 This section describes the methodology that was used to derive traffic flows used in the traffic impact assessment, described in **Section 7**.

6.2 2028 BASELINE TRAFFIC DATA

6.2.1 2028 baseline traffic flows for the AM and PM peak hours have been obtained from the East Sussex Saturn Model, which are contained in **Appendix E**. 2028 Saturn baseline traffic flows also includes the committed developments in the vicinity of the site.

6.2.2 2028 baseline flows are also shown in **Figure 1** and **Figure 2** for the AM and PM peak hours respectively.

6.3 VEHICULAR TRIP GENERATION OF THE PROPOSALS

6.3.1 In order to determine the level of traffic that could potentially be generated by the development, the industry standard TRICS database has been interrogated.

6.3.2 Trip rates have been derived in line with the best practice guidelines from the TRICS Good Practice Guide 2021 (GPG). The methodology used to derive appropriate trip rates for the proposed development was as follows:

- The proposed land use category (C3 Privately Owned Houses) was selected from the main menu.

- In 'Region Selection', Greater London, Republic of Ireland and Northern Ireland were excluded.
- Number of dwellings was set to between 100 and 400.
- Survey date was set to 01/01/2005 to include more survey sites.
- Any survey which took place on a Saturday or Sunday were excluded.
- In location type – 'Edge of Town' was selected based on the site location.
- Any survey site with mixed houses and flat was deselected to avoid the low trip rates.

6.3.3 The resulting trip rates and trip generation associated with 210 dwellings are set out in **Table 6.1**. The full TRICS output is shown in **Appendix F**.

Table 6.1: Vehicular Trip Rates and Trip Generation of the Proposals (210 Dwellings)

Proposed Land Use	Unit	AM Peak Hour (0800-0900)			PM Peak Hour (1700-1800)		
		Arr.	Dep.	2-Way	Arr.	Dep.	2-Way
Trip Rates							
C3 Houses Privately Owned	Dwelling	0.146	0.426	0.572	0.392	0.181	0.573
Trip Generations							
C3 Houses Privately Owned	210 (Dwelling)	31	89	120	82	38	120

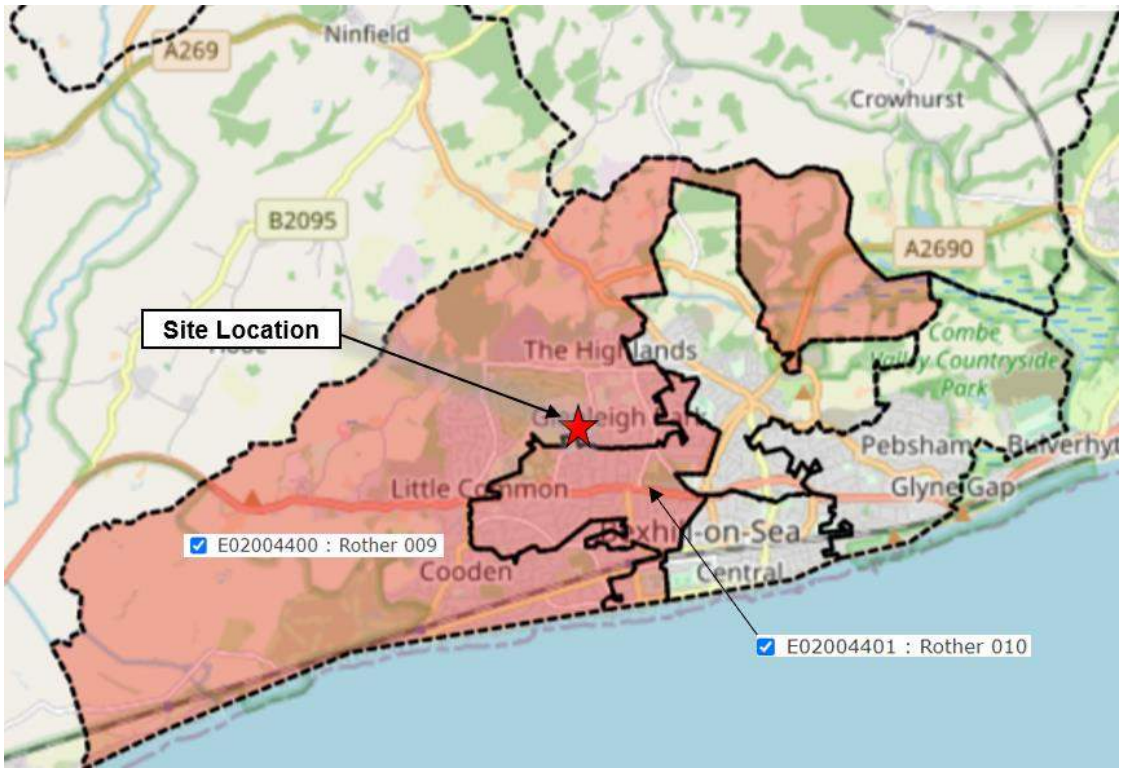
6.3.4 As shown in **Table 6.1**, the proposed residential development is estimated to generate circa 120 two-way trips during the weekday morning peak hour and 120 two-way trips in the evening peak hour.

6.4 TRIP DISTRIBUTION

6.4.1 A trip distribution has been derived based on the 2011 Census 'journey to work'. This dataset contains information on the location of employment and the method of travel. It contains origin-destination data at the Middle Super Output Area (MSOA) level.

6.4.2 The site is located within 'Rother 009' MSOA, however, just at the boundary with 'Rother 010' MSOA (as shown in **Extract 6.1**). In order to include more samples from 2011 census data, a filter was applied to include data from residents of the 'Rother 009' and 'Rother 010'.

Extract 6.1: 2011 Census Super Output Areas – Mid Layer Area (MSOA)



6.4.3 The dataset was further filtered to only include residents who commute to work by driving. The full data output from the 2011 Census is contained in **Appendix G**.

6.4.4 As Fryatts Way is a dead-end to the north, all development traffic will turn right out of the site onto Fryatts Way and progress to the junction with Ellerslie Lane.

6.4.5 The most likely route (or routes) between the development site and employment areas has been identified using Google Map routing. The full analysis is contained in **Appendix G**. The resultant trip distribution is illustrated in **Figure 3**.

6.4.6 The trip generation in **Table 6.1** were distributed onto the local highway network using the distribution shown in **Figure 3**. The resulting development traffic generation distributed onto the local highway network is shown in **Figures 4** and **5,** for the AM and PM peak hours respectively.

6.5 FUTURE YEAR ASSESSMENT FLOWS

6.5.1 To derive the future year assessment flows (i.e. 2028 with development) the development trip generation flows shown in **Figures 4** and **5** have been added to the 2028 baseline flows shown in **Figures 1** and **2**. The resultant 2028 assessment flows (i.e. with the proposed development) for the weekday AM and PM peak periods are shown in **Figures 6** and **7** respectively.

7.0 TRAFFIC IMPACT ASSESSMENT

7.1 INTRODUCTION

7.1.1 This section of the report summarises the capacity assessments undertaken for the 6 key off-site junctions listed in **Section 6.1** as agreed with the LHA along with the proposed site access.

7.1.2 The priority junctions and roundabouts have been assessed using the JUNCTIONS 9 analysis software. The key operational output parameters of JUNCTIONS 9 are:

- The ratio of flow to capacity (RFC), in which RFC values of less than 1.0 indicate the junction is operating within its ultimate capacity;
- End queues in vehicles, which indicates the forecast length of traffic queues; and,
- Average delays in seconds per vehicle.

7.1.3 The signalised junction has been assessed using the LinSig software. The key output operational parameters of LinSig are:

- Degree of saturation (DoS), where DoS values less than 100% indicate the junction is operating within its ultimate capacity;
- The maximum mean queue (MMQ) forecast on a link; and,
- Average delays in seconds per vehicle.

7.2 ASSESSMENT RESULTS

J1: Site Access / Fryatts Way Priority Junction

7.2.1 The site access junction is proposed to be via Fryatts Way in the form of a simple priority junction (layout as shown in **Appendix D)**.

7.2.2 The capacity of the proposed junction has been assessed using the derived 2028 with development traffic flows shown in **Figures 6** to **7** with the results summarised in **Table 7.1**. Full JUNCTIONS 9 are contained in **Appendix H**.

Table 7.1: J1 Capacity Assessment for 2028 Assessment Flows

Link Description	2028 With Development					
	AM Peak			PM Peak		
	Max RFC	Average Delay (s/pcu)	Max Queue (PCU)	Max RFC	Average Delay (s/pcu)	Max Queue (PCU)
Site Access	0.21	9.5	0	0.09	8.4	0
Fryatts Way (N)	0.00	0.0	0	0.00	0.0	0
Average Jun. Delay (s/pcu)	7			3		

7.2.3 **Table 7.1** confirm that the junction is forecast to operate well within capacity in both the weekday morning and evening peak hours in the 2028 assessment year with no queuing.

J2: Ellerslie Lane / Fryatts Way Priority Junction

7.2.4 This junction is a priority t-junction and has therefore been modelled using JUNCTIONS 9.

7.2.5 **Table 7.2** summarise the results for 2028 without and with the proposed development. Full JUNCTIONS 9 outputs are contained in **Appendix I**.

Table 7.2: J2 Capacity Assessment for 2028 Assessment Flows

Link Description	AM Peak							PM Peak						
	2028 w/o Dev.			2028 With Dev.			Diff.	2028 w/o Dev.			2028 With Dev.			Diff.
	Max RFC	Average Delay (s/pcu)	Max Queue (PCU)	Max RFC	Average Delay (s/pcu)	Max Queue (PCU)	Max Queue (PCU)	Max RFC	Average Delay (s/pcu)	Max Queue (PCU)	Max RFC	Average Delay (s/pcu)	Max Queue (PCU)	Max Queue (PCU)
Fryatts Way	0.04	7.9	0	0.25	10.2	0	0	0.02	8.3	0	0.12	9.5	0	0
Ellerslie Lane (N)	0.00	5.3	0	0.02	5.4	0	0	0.01	5.4	0	0.07	5.7	0	0
Average Jun. Delay (s/pcu)	0.5			3.0			-	0.3			1.3			-
Average Jun. Delay Increase Due to Dev. (s/pcu)	+ 2.5						-	+ 1.1						-

7.2.6 **Table 7.2** shows that the junction is forecast to operate well within its capacity in both the weekday AM and PM peak hours in 2028 even with the addition of the proposed development traffic. The table shows that the impact of the proposals on the operation of the junction is negligible.

J3: Ellerslie Lane / Turkey Road / St Mary's Road Staggered Junction

7.2.7 This junction is a staggered priority junction and has therefore been modelled using JUNCTIONS 9.

7.2.8 **Table 7.3** summarise the results for 2028 without and with the proposed development. Full JUNCTIONS 9 outputs are contained in **Appendix J**.

Table 7.3: J3 Capacity Assessment for 2028 Assessment Flows

Link Description	AM Peak							PM Peak						
	2028 w/o Dev.			2028 With Dev.			Diff.	2028 w/o Dev.			2028 With Dev.			Diff.
	Max RFC	Average Delay (s/pcu)	Max Queue (PCU)	Max RFC	Average Delay (s/pcu)	Max Queue (PCU)	Max Queue (PCU)	Max RFC	Average Delay (s/pcu)	Max Queue (PCU)	Max RFC	Average Delay (s/pcu)	Max Queue (PCU)	Max Queue (PCU)
Ellerslie Lane	0.19	9.9	0	0.26	10.9	0	0	0.42	12.5	1	0.45	13.4	1	0
Turkey Road (E)	0.06	6.8	0	0.06	6.8	0	0	0.03	6.6	0	0.03	6.5	0	0
St Mary's Road - Left Turn	0.02	5.8	0	0.02	5.9	0	0	0.16	8.3	0	0.17	8.6	0	0
St Mary's Road - Right Turn	0.10	9.1	0	0.11	9.3	0	0	0.38	12.6	1	0.42	13.5	1	0
Turkey Road (W)	0.06	5.5	0	0.06	5.5	0	0	0.03	5.4	0	0.04	5.4	0	0
Average Jun. Delay (s/pcu)	2.4			2.9			-	6.8			7.3			-
Average Jun. Delay Increase Due to Dev. (s/pcu)	+ 0.5						-	+ 0.5						-

7.2.9 **Table 7.3** shows that the junction is forecast to operate well within its capacity in both the weekday AM and PM peak hours in 2028 even with the addition of the proposed development traffic. The table shows that the impact of the proposals on the operation of the junction is negligible.

J4: Turkey Road/A269 Ninfield Road Mini Roundabout

7.2.10 This junction is as a priority mini-roundabout and has therefore been modelled using JUNCTIONS 9.

7.2.11 **Table 7.4** summarise the results for 2028 without and with the proposed development. Full JUNCTIONS 9 outputs are contained in **Appendix K**.

Table 7.4: J4 Capacity Assessment for 2028 Assessment Flows

Link Description	AM Peak							PM Peak						
	2028 w/o Dev.			2028 With Dev.			Diff.	2028 w/o Dev.			2028 With Dev.			Diff.
	Max RFC	Average Delay (s/pcu)	Max Queue (PCU)	Max RFC	Average Delay (s/pcu)	Max Queue (PCU)	Max Queue (PCU)	Max RFC	Average Delay (s/pcu)	Max Queue (PCU)	Max RFC	Average Delay (s/pcu)	Max Queue (PCU)	Max Queue (PCU)
A269 Ninfield Rd (E)	0.78	20.0	4	0.78	20.4	4	0	0.60	10.7	2	0.62	11.1	2	0
Turkey Rd	0.35	7.0	1	0.37	7.2	1	0	0.33	6.7	1	0.34	6.8	1	0
A269 Ninfield Rd (W)	0.57	7.5	2	0.58	7.6	2	0	0.49	6.0	1	0.49	6.1	1	0
Average Jun. Delay (s/pcu)	12.3			12.6			-	7.9			8.1			-
Average Jun. Delay Increase Due to Dev. (s/pcu)	+ 0.3						-	+ 0.2						-

7.2.12 **Table 7.4** shows that the junction is forecast to operate within its capacity in both the weekday AM and PM peak hours in 2028 even with the addition of the proposed development traffic. The table shows that the impact of the proposals on the operation of the junction is negligible.

J5: Little Common Roundabout

7.2.13 As part of an approved application for the residential development (85 dwellings) (app. ref. RR/2018/3127/P) at land at Clavering Walk, Cooden, the roundabout has been proposed to undertake highway improvement. The Highways England (HE) approved mitigation drawing (180300-003F) is contained in **Appendix L**.

7.2.14 The layout / geometry inputs used in this junction assessment have been extracted from the junction assessment which informed the agreed mitigation measures associated with the Clavering Walk proposals at this junction.

7.2.15 **Table 7.5** summarise the results for 2028 without and with the proposed development. Full JUNCTIONS 9 outputs are contained in **Appendix M**.

Table 7.5: J5 Capacity Assessment for 2028 Assessment Flows

Link Description	AM Peak							PM Peak						
	2028 w/o Dev.			2028 With Dev.			Diff.	2028 w/o Dev.			2028 With Dev.			Diff.
	Max RFC	Average Delay (s/pcu)	Max Queue (PCU)	Max RFC	Average Delay (s/pcu)	Max Queue (PCU)	Max Queue (PCU)	Max RFC	Average Delay (s/pcu)	Max Queue (PCU)	Max RFC	Average Delay (s/pcu)	Max Queue (PCU)	Max Queue (PCU)
Pear Tree Lane	0.49	11.7	1	0.49	11.8	1	0	0.28	8.6	0	0.28	8.7	0	0
Little Common Road (A259)	0.87	27.3	5	0.89	31.6	6	1	0.76	15.3	3	0.77	15.9	3	0
Cooden Sea Road	0.35	5.2	1	0.36	5.3	1	0	0.44	5.8	1	0.45	5.8	1	0
Barnhorn Road (A259)	1.00	62.5	17	1.01	67.9	19	2	1.14	216.4	68	1.16	253.5	78	10
Chestnut Walk	0.26	15.8	0	0.26	16.0	0	0	0.17	13.8	0	0.18	13.9	0	0
Average Jun. Delay (s/pcu)	36.2			39.6			-	103.0			120.0			-
Average Jun. Delay Increase Due to Dev. (s/pcu)	+ 3.5						-	+ 17						-
Flow Increase (pcu/hr)	+ 32						-	+ 33						-

7.2.16 In the AM peak hour, **Table 7.5** indicates that for the without development scenario, the junction is forecast to operate well within capacity on all junction approaches with the exception of Barnhorn Road. That approach is forecast to operate at capacity with a maximum RFC of 1.00. With the inclusion of the development trips the junction is forecast to operate with a maximum RFC of 1.01. The inclusion of the development traffic will increase average junction delay by 3.5 seconds per PCU, which would entirely unperceivable.

7.2.17 In the PM peak hour, **Table 7.5** indicates that for the without development scenario, the junction is forecast to operate well within capacity on all junction approaches with the exception of Barnhorn Road. That approach is forecasted to operate with a maximum RFC of 1.14 on Barnhorn Road arm. With the inclusion of the development trips the junction is forecast to operate with a maximum RFC of 1.16. The inclusion of the development traffic will increase average junction delay by 17 seconds per PCU, which would not be significant.

7.2.18 It is concluded that such levels of impact do not conflict with the relevant tests (Para 109 of NPPF) requiring highway mitigation or could be considered to represent impacts which could be considered severe.

J6: Broadoak Lane /A259 Little Common Road Priority Junction

7.2.19 This junction is priority roundabout junction and has therefore been modelled using JUNCTIONS 9.

7.2.20 **Table 7.6** summarise the results for 2028 without and with the proposed development. Full JUNCTIONS 9 outputs are contained in **Appendix N**.

Table 7.6: J6 Capacity Assessment for 2028 Assessment Flows

Link Description	AM Peak							PM Peak						
	2028 w/o Dev.			2028 With Dev.			Diff.	2028 w/o Dev.			2028 With Dev.			Diff.
	Max RFC	Average Delay (s/pcu)	Max Queue (PCU)	Max RFC	Average Delay (s/pcu)	Max Queue (PCU)	Max Queue (PCU)	Max RFC	Average Delay (s/pcu)	Max Queue (PCU)	Max RFC	Average Delay (s/pcu)	Max Queue (PCU)	Max Queue (PCU)
Broadoak Ln - Left Turn	0.25	20.3	0	0.56	71.3	1	1	0.28	15.2	0	0.32	18.9	1	0
Broadoak Ln - Right Turn	0.69	59.2	2	0.87	108.6	5	3	0.48	66.4	1	0.58	83.2	1	0
A259 Little Common Rd (E)	0.14	10.0	0	0.14	10.1	0	0	0.35	14.6	1	0.35	14.9	1	0
Average Jun. Delay (s/pcu)	5.2			11.6			-	3.2			4.1			-
Average Jun. Delay Increase Due to Dev. (s/pcu)	+ 6.4						-	+ 1.0						-

7.2.21 **Table 7.6** shows that the junction is forecast to operate within its capacity in both the weekday AM and PM peak hours in 2028 even with the addition of the proposed development traffic. The table shows that the impact of the proposals on the operation of the junction is negligible.

J7: A269 / A259 Signal Junction

7.2.22 This junction is a signal-controlled junction and has therefore been modelled using LinSig. The LinSig model used for the assessment in this report is a replica of the approved LinSig model for the proposed Bexhill Leisure Centre development (app. ref. RR/2019/430/P).

7.2.23 **Table 7.7** summarises the results for 2028 without and with the development for the junction. Full LinSig outputs are contained in **Appendix O.**

Table 7.7: J7 Capacity Assessment for 2028 Assessment Flows

Approach	AM Peak							PM Peak						
	2028 w/o Dev.			2028 With Dev.			Diff.	2028 w/o Dev.			2028 With Dev.			Diff.
	DoS (%)	Average Delay (s/pcu)	MMQ (pcu)	DoS (%)	Average Delay (s/pcu)	MMQ (pcu)	MMQ (pcu)	DoS (%)	Average Delay (s/pcu)	MMQ (pcu)	DoS (%)	Average Delay (s/pcu)	MMQ (pcu)	MMQ (pcu)
A259 Little Common Road (W) Left	57.3%	34.8	17	57.7%	34.8	17	0	64.6%	41.1	19	63.3%	39.6	19	0
A259 Little Common Road (W) Ahead Right	92.4%	76.5	33	93.5%	78.3	35	2	91.7%	85.1	26	93.5%	90.8	28	2
A259 Belle Hill (E) Ahead Left	36.3%	48.8	7	35.6%	47.4	7	0	50.1%	60.6	9	52.2%	61.1	9	0
A259 Belle Hill (E) Ahead Right	39.4%	49.2	8	38.6%	47.9	8	0	53.6%	60.9	10	55.5%	61.4	11	0
A269 Combe Valley Way Left Ahead	88.8%	53.7	39	88.8%	53.6	38	-1	64.1%	32.7	22	65.4%	34.2	23	1
A269 Combe Valley Way Right	91.7%	120.0	25	93.6%	135.3	28	3	92.0%	108.8	19	92.9%	112.0	19	0
A269 London Road Left Right Ahead	91.8%	81.4	30	93.9%	89.5	33	2	92.5%	69.4	36	93.5%	72.1	36	0
Average Jun. Delay (s/pcu)	67			71			-	64			66			-
Average Jun. Delay Increase Due to Dev. (s/pcu)	+ 4						-	+ 2						-

7.2.24 **Table 7.7** demonstrates that in both peaks, the junction is forecast to operate within capacity, for the with and without development scenarios. The development has a negligible impact in terms of increases in delays, queues and DoS. The average overall junction delay is forecast to increase by a maximum of 4 seconds.

7.3 JUNCTION CAPACITY SUMMARY

7.3.1 The results of the junction capacity assessments demonstrate that all the junctions assessed on the local highway network will continue to operate within their operational capacity or only marginally over capacity. The increases in queues, delays and degree of saturation due to the inclusion of the development traffic are low, which would generally be not noticeable to existing users.

7.3.2 It is the case that the development will not give rise to any significant impacts or have a ‘severe’ residual cumulative impact on traffic flows or congestion. Accordingly, the proposals pass the National Planning Policy Framework (NPPF), paragraph 109 test on severity of impact.

7.3.3 With respect to the Little Common roundabout (J5), the junction is forecast to exceed capacity in both the base and with development scenarios. It is concluded that such levels of impact associated with the development do not conflict with the relevant tests (Para 109 of NPPF) requiring highway mitigation or could be considered to represent impacts which could be considered severe.

7.3.4 It should be noted that Covid-19 will have short and possible long-term implications on travel habits and associated traffic levels. This could include for example increased home working and permanently altered travel behaviors. The traffic flows used in the assessments in this report do not reflect this (e.g. are ‘pre Covid-19’) and therefore can be considered robust.

8.0 SUMMARY AND CONCLUSIONS

8.1 SUMMARY

8.1.1 Tetra Tech (TT) has been appointed by Gladman Developments Ltd. to prepare a Transport Assessment in support of an outline planning application (all matters reserved except for access) for a residential development on land off Fryatts Way, Bexhill

8.1.2 The development site is located on land to the west of Fryatts Way adjacent to an existing residential area. The site is located to the west of Bexhill Town Centre.

8.1.3 The proposed development comprises up to 210 residential dwellings. The development is proposed to be accessed off Fryatts Way on the eastern site boundary via a new priority access.

8.1.4 Personal Injury Accident (PIA) data for the local highway network has been reviewed for a 5-year period. This showed that that there is not an existing highway safety issue in the vicinity of site which should prevent the proposed development from coming forward.

8.1.5 The proposed site is located next to an established residential area. The site is very accessible by foot with good pedestrian infrastructure in place in the vicinity of the site. It has been established that there are a number of facilities located within a short walk of the site (around 1km) include educational establishments, bars/pubs and restaurants, a post office and convenience store. The 'Little Common Shopping Area' with its range of amenities and facilities is located just within a 2km walk of the site while Bexhill Town Centre shopping area with its wide range of amenities and facilities is located just outside the site's 2km walking catchment. A wide range of amenities and facilities will therefore be accessible on foot to future residents of the proposed development.

8.1.6 Bus stops are located approximately 600m to the south east of the site from where bus services to Bexhill Town Centre can be caught. More regular services to various local and regional destinations including Battle, Hastings, Polegate, and Eastbourne can be caught from bus stops located within 850m of the site.

8.1.7 In addition to the regular bus services set out above, there is also a 'Dial-a-Ride' community bus service that can be called by people with any type of disability regardless of age who cannot use regular public transport.

8.1.8 Regular train services operate from Bexhill Railway Station to Eastbourne, Lewes, London Victoria, Gatwick Airport, and Ashford International.

8.1.9 The results of the junction capacity assessments demonstrate that all the junctions assessed on the local highway network will continue to operate within their operational capacity or only marginally over capacity. The increases in queues, delays and degree of saturation due to the inclusion of the development traffic are low, which would generally be not noticeable to existing users.

8.1.10 It is the case that the development will not give rise to any significant impacts or have a 'severe' residual cumulative impact on traffic flows or congestion. Accordingly, the proposals pass the National Planning Policy Framework (NPPF), paragraph 109 test on severity of impact.

8.1.11 With respect to the Little Common roundabout (J5), the junction is forecast to exceed capacity in both the base and with development scenarios. It is concluded that such levels of impact associated with the development do not conflict with the relevant tests (Para 109 of NPPF) requiring highway mitigation or could be considered to represent impacts which could be considered severe.

8.1.12 It should be noted that Covid-19 will have short and possible long-term implications on travel habits and associated traffic levels. This could include for example increased home working and permanently altered travel behaviors. The traffic flows used in the assessments in this report do not reflect this (e.g. are 'pre Covid-19') and therefore can be considered robust.

8.2 CONCLUSION

8.2.1 It has been demonstrated that the proposed development is accessible by sustainable modes of transport in accordance with national and local policy.

8.2.2 It has been demonstrated that the residual cumulative impact of the development is not significant, and certainly not severe in NPPF terms.

8.2.3 It is therefore concluded that there are no transport or highway reasons why the proposed development should not be granted planning permission.

PLANS

Proposed Residential Development

Bexhill, Fryatts Way

Gladman Developments Ltd

Legend

Site Location

Site Boundary

09 June 2021

Scale: 1:20,000 @A3

NGR: 573,874 E / 108,664 N

Plan 1: Site Location

Drawn by: Y Liu

Checked by: M Thompson

Office: Manchester

Drawing No. Plan 1

Revision No.

TETRA TECH

Quay West at MediaCityUK,
Trafford Wharf Road,
Trafford Park,
Manchester,
M17 1HH

Proposed Residential Development

Bexhill, Fryatts Way

Gladman Developments Ltd

Legend

- Site Location
- Site Boundary
- Bus Stop
- Rail Station
- Public Rights of Way
- Bexhill Town Centre Shopping Area

09 June 2021

Scale: 1:7,500 @A3

NGR: 573,386 E / 108,284 N

Plan 2: Local Highway Network

Drawn by: Y Liu

Checked by: M Thompson

Office: Manchester

Drawing No. Plan 2

Revision No.

TETRA TECH

Quay West at MediaCityUK, Trafford Wharf Road, Trafford Park, Manchester, M17 1HH

Proposed Residential Development

Bexhill, Fryatts Way

Gladman Developments Ltd

Legend

- Site Location
- Site Boundary
- Bus Stop
- Lidl
- Convenience Store
- Tesco Express
- ALDI
- Educational Facility
- Nursery
- Hazelmere Nursing Home
- Restaurant
- Bars and Pubs
- Medical Surgery / Hospital / Pharmacy
- Dentist
- Vets
- Bexhill Leisure Centre
- Post Office
- Kwik Fit
- Outdoor Area / Park
- 1km Catchment
- 2km Catchment
- Town Centre Shopping Area - as defined in RDC's Local Development Framework (2011)
- Little Common Shopping Area

09 June 2021

Scale: 1:11,000 @A3

NGR: 572,877 E / 108,576 N

Plan 3: Walk Catchments

Drawn by: Y Liu

Checked by: M Thompson

Office: Manchester

Drawing No. Plan 3

Revision No.

TETRA TECH

Quay West at MediaCityUK, Trafford Wharf Road, Trafford Park, Manchester, M17 1HH

Legend

- Site Location
- Site Boundary
- Suitable Walking Routes for Future Residents
- Footway
- Public Rights of Way
- Town Centre Shopping Area - as defined in RDC Local Development Framework (2011)
- Bus Stop
- Bus Route 11
- Bus Route 95
- Bus Service 96
- Bus Service 97
- Bus Service 98/98A
- Bus Service 99
- Supermarket
- Convenience Shop
- Educational Facility
- Medical Surgery / Hospital
- Post Office
- Rail Station
- Outdoor Area / Park
- Bexhill Leisure Centre
- Little Common Shopping_Area
- Uncontrolled Pedestrian Crossing
- Signal Controlled Pedestrian Crossing
- Zebra Crossing

Quay West at MediaCityUK
Trafford Wharf Road
Trafford Park
Manchester
M17 1HH

TEL: +44 (0)161 835 2400
FAX: +44 (0)161 835 3400

TETRA TECH

Fryatts Way, Bexhill

Plan 4: Pedestrian Infrastructure

Scale @ A3 1:8,000 | Project No.: A115791

Proposed Residential Development

Bexhill, Fryatts Way

Gladman Developments Ltd

Legend

- Site Location
- Rail Station
- National Cycle Routes
- Town Centre Shopping Area
- 5km Catchment

Watermill

Lunsford's Cross

Sidley

Glenleigh Park

Little Common

Pebsham

Old Town

Bexhill Rail Station

Collington Rail Station

BEXHILL

Cooden Beach Rail Station

National Cycle Route 2

10 June 2021

Scale: 1:27,000 @A3

NGR: 572,746 E / 109,504 N

Plan 5: Cycle Catchment

Drawn by: Y Liu

Checked by: M Thompson

Office: Manchester

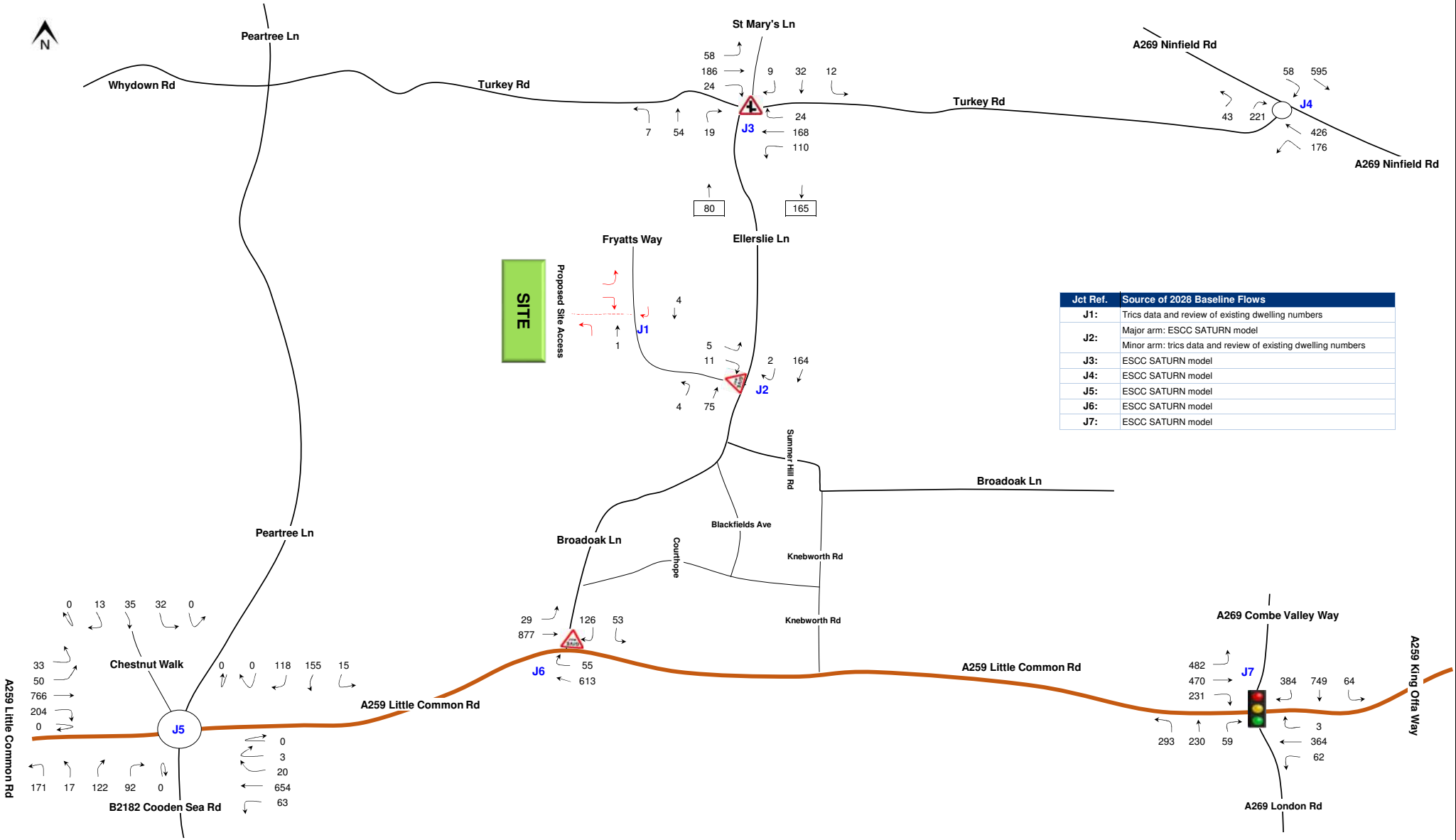
Drawing No. Plan 5

Revision No.

TETRA TECH

Quay West at MediaCityUK,
Trafford Wharf Road,
Trafford Park,
Manchester,
M17 1HH

FIGURES

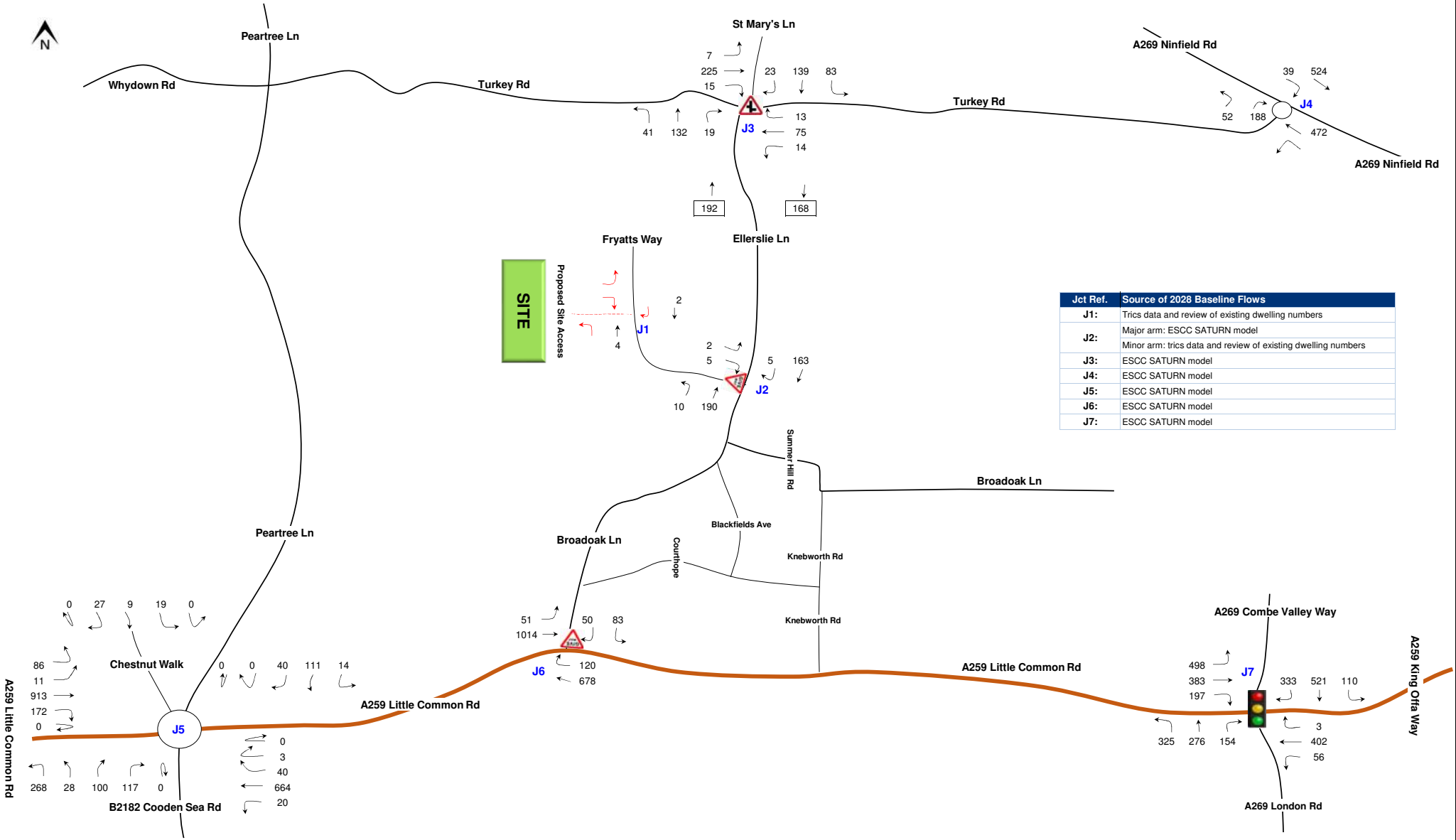


Jct Ref.	Source of 2028 Baseline Flows
J1:	Trics data and review of existing dwelling numbers
J2:	Major arm: ESCC SATURN model
	Minor arm: trics data and review of existing dwelling numbers
J3:	ESCC SATURN model
J4:	ESCC SATURN model
J5:	ESCC SATURN model
J6:	ESCC SATURN model
J7:	ESCC SATURN model

Fig 1: AM Peak Hour 2028 Baseline Flows (Extracted from the East Sussex County Council SATURN model for Bexhill and Hastings)

Job no. A115791 Bexhill, Fryatts Way

TETRA TECH



Jct Ref.	Source of 2028 Baseline Flows
J1:	Trics data and review of existing dwelling numbers
J2:	Major arm: ESCC SATURN model
	Minor arm: trics data and review of existing dwelling numbers
J3:	ESCC SATURN model
J4:	ESCC SATURN model
J5:	ESCC SATURN model
J6:	ESCC SATURN model
J7:	ESCC SATURN model

Fig 2: PM Peak Hour 2028 Baseline Flows (Extracted from the East Sussex County Council SATURN model for Bexhill and Hastings)

Job no. A115791 Bexhill, Fryatts Way

TETRA TECH

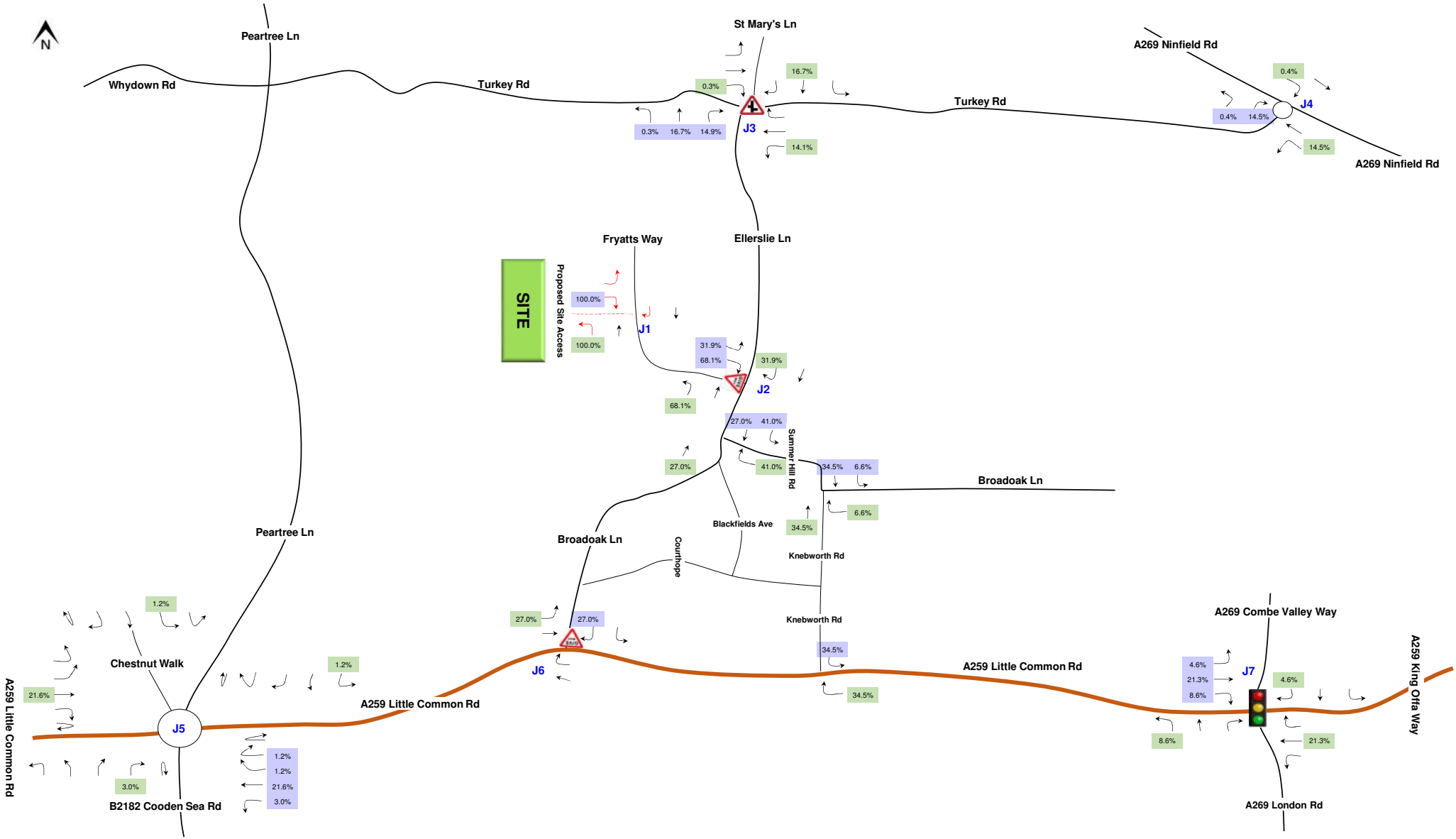


Fig 3: Trip Distribution based on 2011 Census- Proposed Residential Development

Job no. A115791 Bexhill, Fryatts Way

TETRA TECH

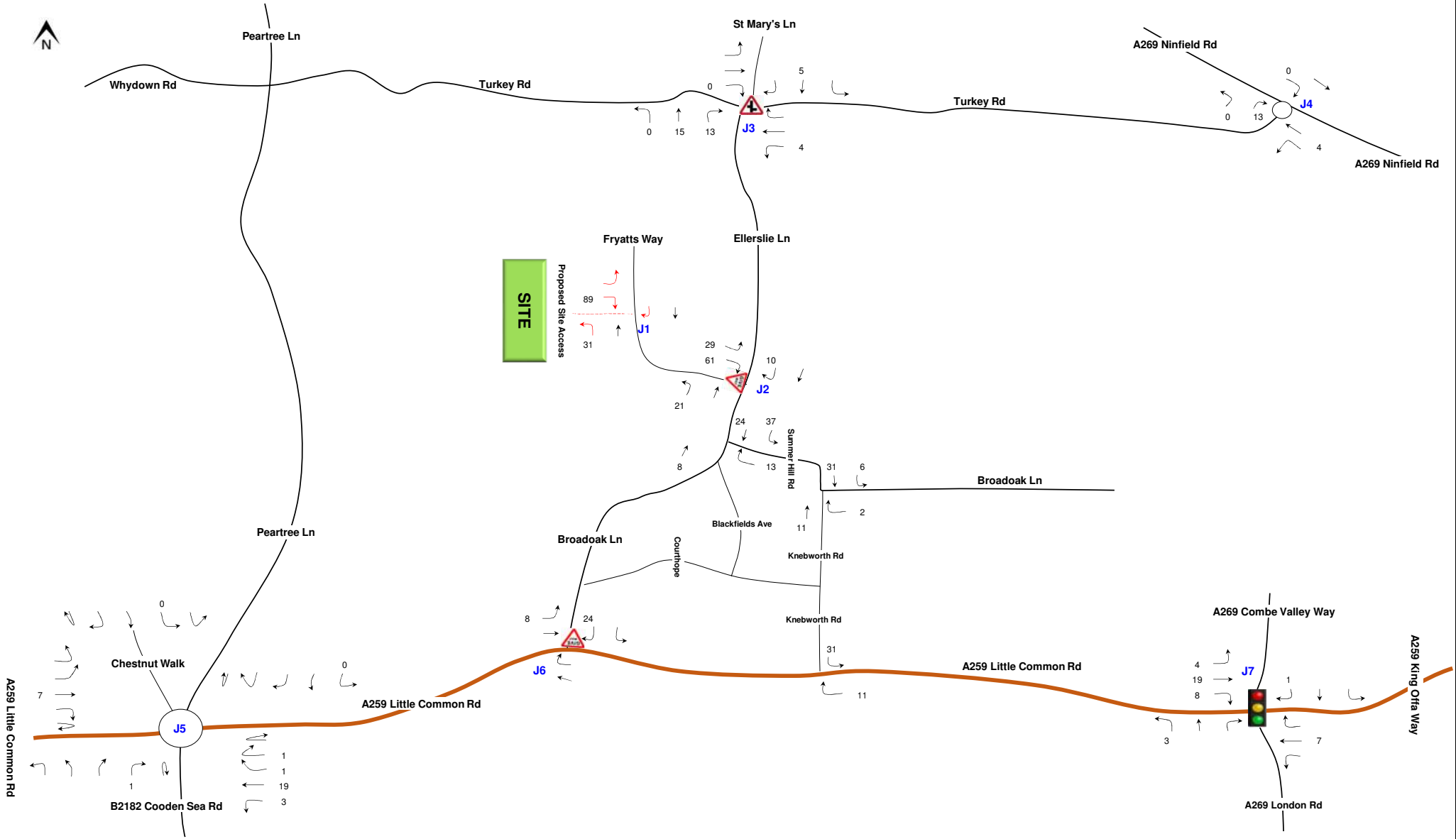


Fig 4: AM Peak Trip Generation - Proposed Residential Development

Job no. A115791 Bexhill, Fryatts Way

TETRA TECH

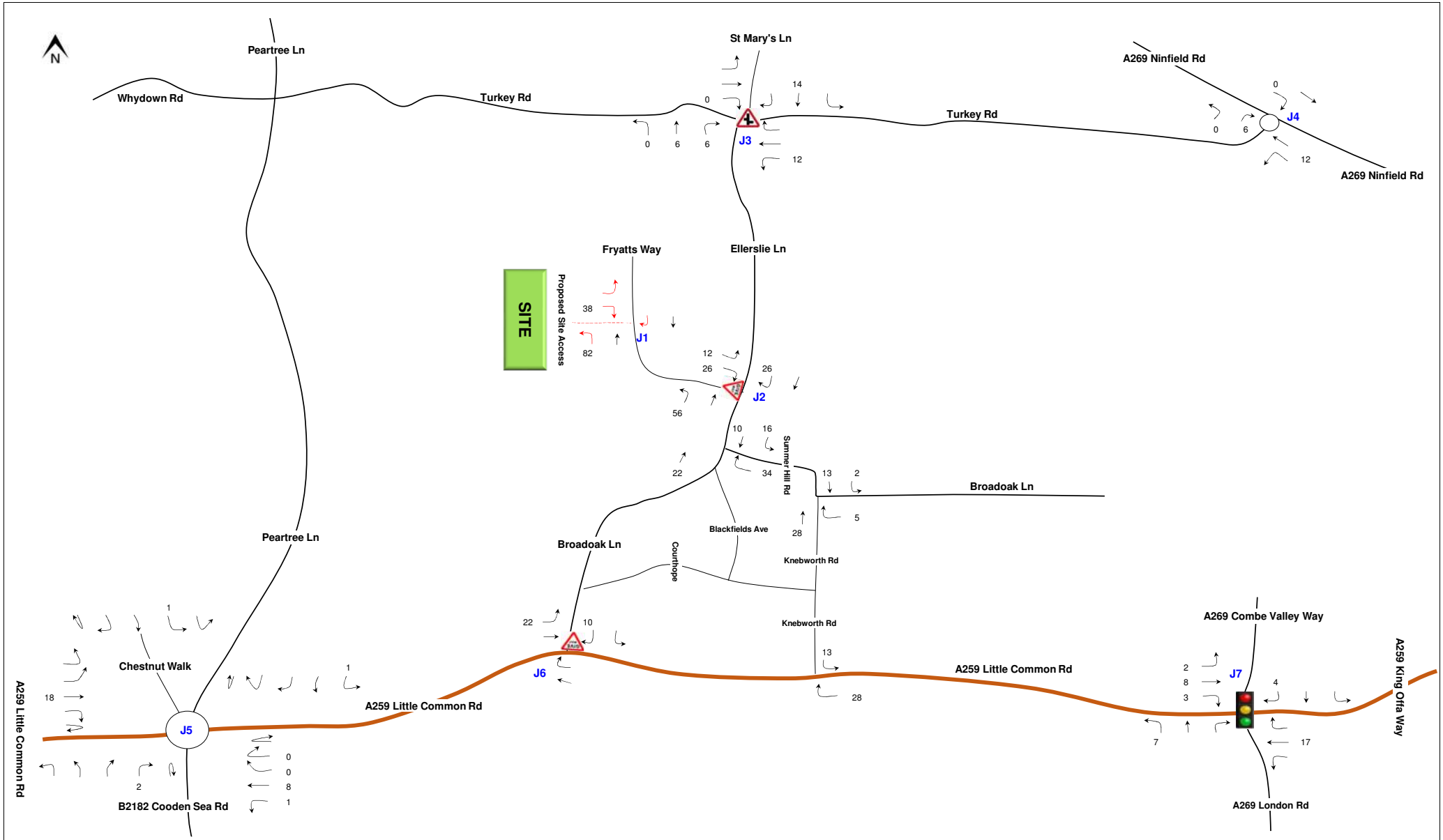


Fig 5: PM Peak Trip Generation - Proposed Residential Development

Job no. A115791 Bexhill, Fryatts Way

TETRA TECH

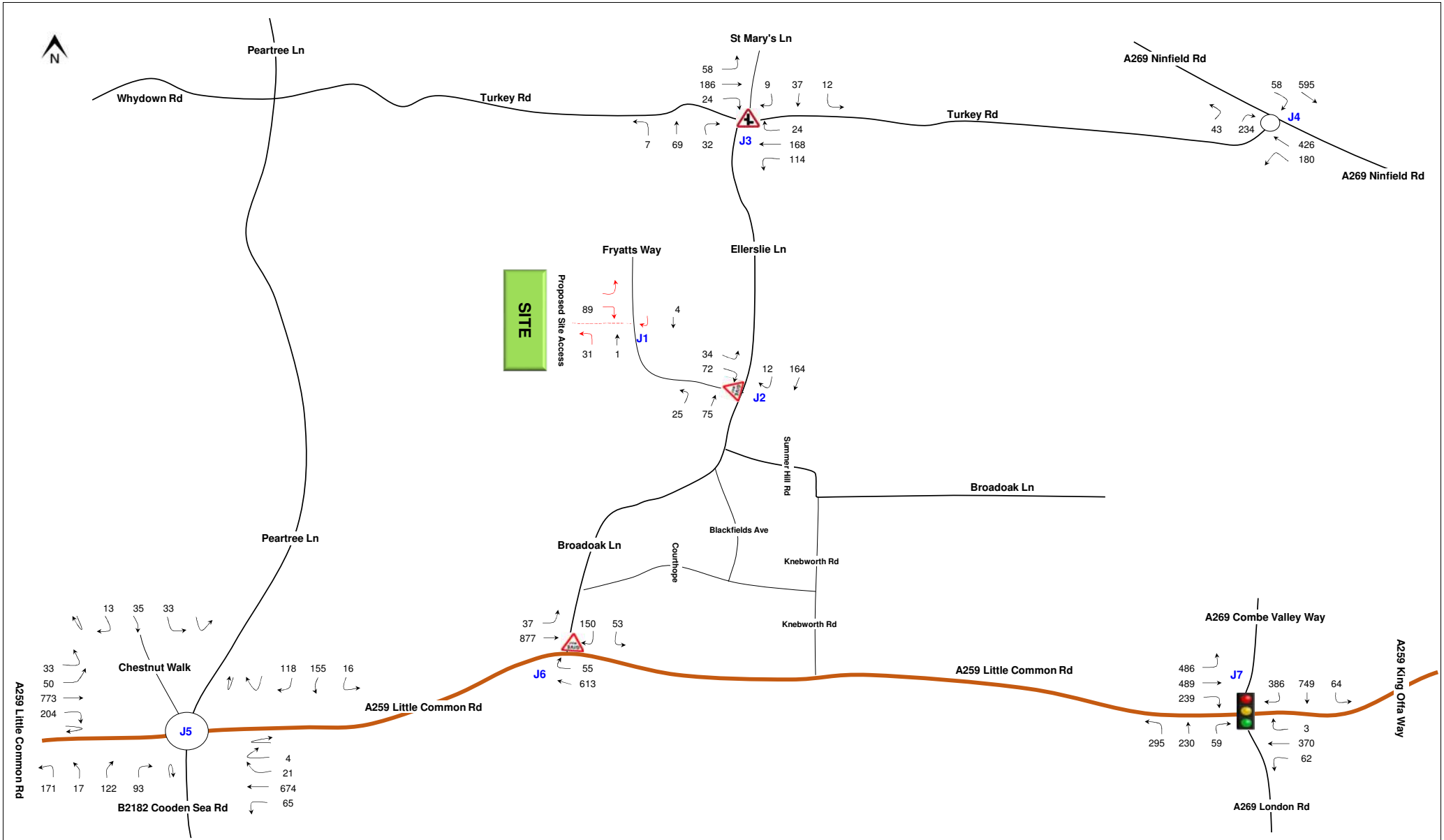


Fig 6: AM Peak Hour 2028 With Development Flows

Job no. A115791 Bexhill, Fryatts Way

TETRA TECH

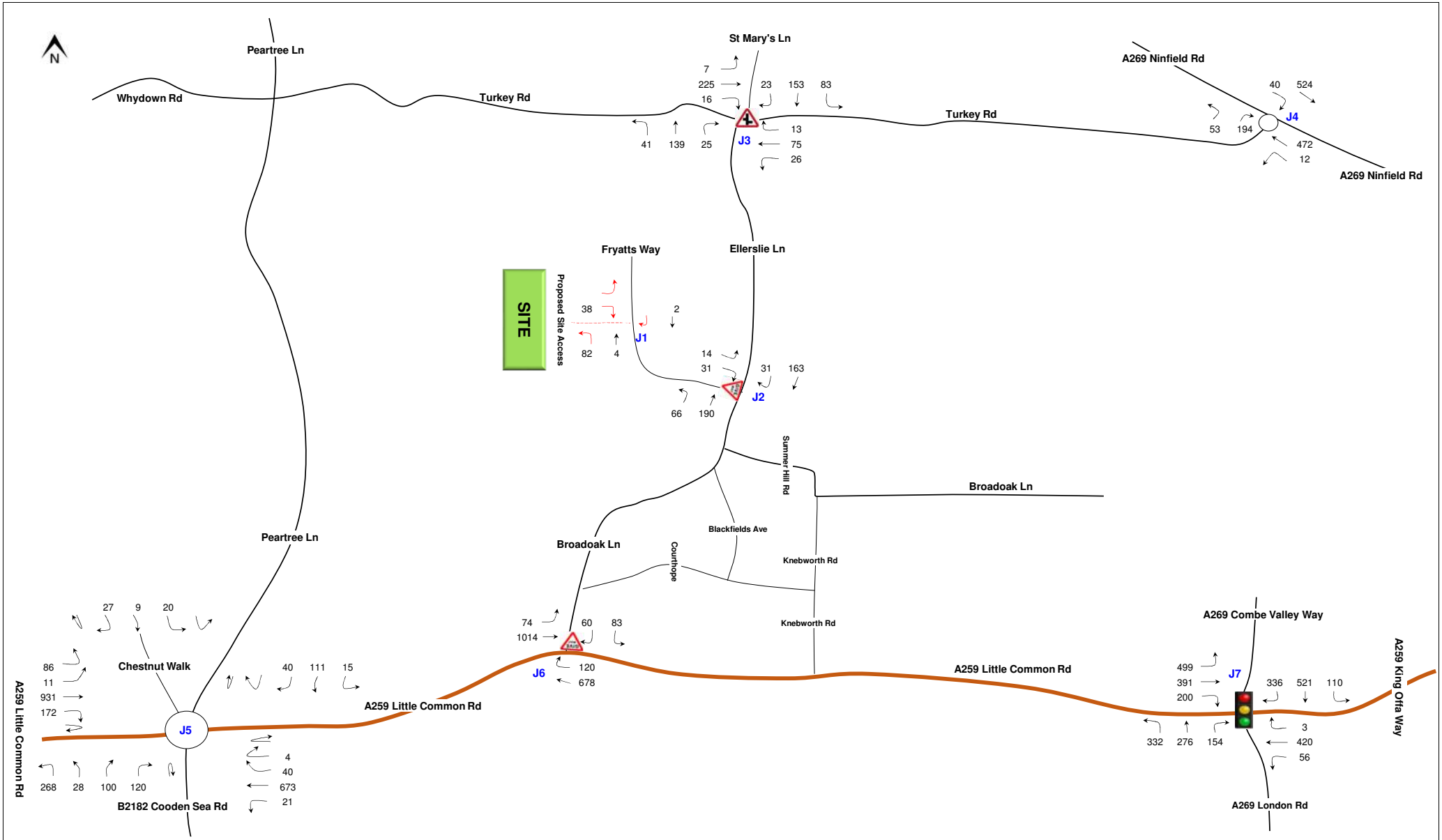


Fig 7: PM Peak Hour 2028 With Development Flows

Job no. A115791 Bexhill, Fryatts Way

TETRA TECH

APPENDICES

APPENDIX A: DEVELOPMENT FRAMEWORK

Open Space Type	Policy (if applicable)	Required (ha)	Provision (ha)
Areas for play	0.1ha per 50 dwellings*	0.42ha	0.42ha (0.04ha equipped)
Amenity	-	-	1.78ha
Semi-natural	-	-	1.43ha
SuDS	-	-	0.63ha
Total	2.43ha per 1000 people**	1.22ha	4.39ha
**Policy CF4 Rother Local Plan 2006*			
***Policy CF3 Rother Local Plan 2006*			

NOTES

N

0 50 100m

KEY

Application Site Boundary		11.29ha
Land under applicant's control		0.27ha
Residential	Circa 210 dwellings at 30 dph	6.90ha
Potential vehicular access location		
Potential access from adjacent land		
Total Green Infrastructure (See Table 1)		4.39ha
Existing trees and hedgerows		
Root protection areas for existing trees and hedgerows		
Proposed structural planting		
Potential location for SuDS basins		
Potential location for swales		
Public Right of Way		
Existing roads		
Potential pedestrian connection		
L	Potential location for equipped play area (LEAP)	
Flood zone		
Potential location for pumping station		

Gladman Developments Ltd
Land off Fryatts Way
Bexhill-on-Sea

DEVELOPMENT FRAMEWORK

1:2000 @ A3
22nd February 2021 CEP / CEP
9309-L-02 rev **F**

masterplanning
environmental assessment
landscape design
urban design
ecology
architecture
arboriculture

FPCR Environment and Design Ltd
Lockington Hall
Lockington
Derby DE74 2RH

t: 01509 672772
f: 01509 674565
e: mail@fpcr.co.uk
w: www.fpcr.co.uk

File: C:\Users\CEP\Desktop\9309-L-02 Development Framework.vwx

APPENDIX B: SCOPING CORRESPONDENCE

mike.smith

Subject: FW: !EXT! RE: !EXT! Fryatts Way, Bexhill - Proposed Residential Development
Attachments: transport-model-access-guidance-jan-2018.pdf

-------- Original message --------
From: Ben Lenton <Ben.Lenton@eastsussex.gov.uk>
Date: 26/01/2020 10:34 (GMT+00:00)
To: "luke.regan" <luke.regan@wyg.com>
Subject: !EXT! RE: !EXT! Fryatts Way, Bexhill - Proposed Residential Development

⚠ **CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments. ⚠

Hi Luke

I have attached our model access guide which may answer some of your queries, some of the others I've addressed below but the rest will be for the holders of the model to answer as you suggest and I can contact them for a quote etc.

However, before proceeding I would strongly suggest speaking to Highway's England first as for the most part the model will be used to assess the impact on their roads. Therefore the extent and the specifics of the work will need to be agreed with them.

I hope that this is helpful.

Regards

Ben

Ben Lenton
Principal Officer
Transport Development Control
01273 336114 or 07701 394528
eastsussex.gov.uk

East Sussex County Council

From: luke.regan [mailto:luke.regan@wyg.com]
Sent: 23 January 2020 10:35 AM
To: Ben Lenton
Cc: matt.thompson
Subject: [Sender Unverified]RE: !EXT! Fryatts Way, Bexhill - Proposed Residential Development

Ben,

Thanks again. With respect to the SATURN model, please may I ask a few questions? I appreciate that these might be best answered by the holders of the model.

General Questions

1. Model Access Fee – how much is the model access fee? Please can you provide us with the relevant protocol form? The Access Guide provides some indication of the fee required; however, this may differ once the extent of the work is known.

2. Is the SATURN modelling undertaken by yourselves or do you have a transport consultant holding the model? If it is the case that a highway consultant holds the model, please provide us with a contact? ESCC commission a consultant to carry out the modelling work; however, the work and all correspondence will generally be carried out through us.

3. Model Years / Baseline / Assessment Year– I note that the ESCC SATURN model has a future year of 2028. Do you think that this is a suitable year for assessment? Yes

Baseline Scenario

If we were to use the existing model and then manually assign / add development traffic then I believe that the data below would be needed from the model.

1. SATURN link flow data – how would we be provided the SATURN link flow data? Our preference would be a .csv file including A Node, B Node, AX, AY, BX, BY, V/C, Queues, Delays, Speeds and HGV%.

2. Extraction of Turning Counts – We would require turning count data extracted from SATURN for the following junctions
    a. Little Common Roundabout
    b. A259 / Broadoak Lane
    c. Ellerslie Lane / Summer Hill Road
    d. Turkey Road / Ellerslie Lane
    e. Turkey Road / Ninfield Road
    f. A259 / Knebworth Road
    g. A259 / A269

3. Timescale – please can you let me know what the timescales would be for turnaround of Baseline Link Data and Baseline Turning Counts?

SATURN Assessment

Alternatively, if we were to proceed with a formal SATURN model run, would be the additional cost and what would be the timescales for us to receive the Assessment Link Data and Assessment Turning Counts (for the same 7 junctions as the baseline assessment)? We would obviously provide development traffic generations and distributions to inform this approach.

Thanks,

Luke Regan MSc MCIHT CMILT
Associate Director

WYG
Quay West at MediaCityUK, Trafford Wharf Road, Trafford Park, Manchester, M17 1HH
Tel: +44 161 874 4665
Mob: +44 792 025 8248

www.wyg.com

From: Ben Lenton <Ben.Lenton@eastsussex.gov.uk>
Sent: 22 January 2020 13:03
To: luke.regan <luke.regan@wyg.com>
Subject: !EXT! Fryatts Way, Bexhill - Proposed Residential Development [Filed 22 Jan 2020 13:33]

Hi Luke

Thank you for your email and the additional information.

As previously discussed ESCC charge for detailed pre-app guidance; however, I can provide a relatively brief response free of charge. The following comments, some of which cover our standard requirements for a development of this type/scale whilst some comments are specific to the site and the information you have provided:

For your proposed development of 200 residential units, the main issues to consider and requirements that would need to be met are:

1. Suitable vehicle, pedestrian and cycle access, to include sufficient width, gradient and visibility splays. In this instance access into the site would be via an extension of the existing cul-de-sac. The access road is likely to require a minimum carriageway width of 5.0 - 5.5m; however, tracking drawings would be required to confirm that larger vehicles (refuse/emergency)are able to negotiate the route into the site in a safe and convenient manner. 2m wide footways either side of the access would also be required.

2. Appropriate on site vehicle and cycle parking- the number of spaces should be in accordance with the ESCC Parking Demand Calculator. Parking spaces would need to meet the required minimum dimensions to be counted towards the overall provision. The minimum sizes are as follows:

Parking Space – 5m x 2.5m (A minimum additional 0.5m will need to be added to either or both dimensions where the space is adjacent to a wall(s) or fence(s). Spaces in front of garages must be a minimum of 6m long to maintain access to the garage)
Disabled Parking Space - 5m x 3.6m
Car Ports – 5m x 2.8m
Garages: 3m x 6m or 3m x 7m if cycle storage is included.
Regardless of size garages remain less likely to be used for parking and therefore a garage only counts as 1/3 of a parking space.

3. ESCC supports the approach to development set out in Manual for Streets and Manual for Streets 2, which has been adopted guidance for residential street design since their introduction in 2007 and 2010. Within these documents there are references to visibility splays, turning circles and car parking layouts.

Also our Local Design Guide can be found at the web link below. It provides further advice on how MfS is to be interpreted and applied within East Sussex. Other

ESCC guidance documents relating to highway construction can also be found here.

https://new.eastsussex.gov.uk/environment/planning/applications/developmentcontrol/adoptionandimprovements

Appropriate on site vehicle turning for vehicles likely to visit the site. This would relate to service and emergency vehicles. The requirements of emergency and other
service vehicles (section 6.7 and 6.8 Manual for Streets) should be met.

4. The likely trip generation of the proposed development and local travel demands. This would be expected within a Transport Assessment, guidance found using this link.

https://eastsussexgovuk.blob.core.windows.net/media/1763/transport_assess_statements_reports.pdf.

My understanding is that this site is not in the local plan; however, I have previously commented on a planning application to develop the much smaller site nearby which is in the LP. Although we did not raise a highway objection to the proposal there were concerns regarding the accessibility of the site (infrequent bus service with nearest stops a considerable walk away). Also, the roads leading to the site are narrow in places with no footways available on some stretches. These issues are likely to be a greater concern for a larger development of this type.

As mentioned, use of the Bexhill/Hastings SATURN model is likely to be required to assess the impact further afield. As this site is not a Local Plan allocated site it would not be included in the model (albeit there may be an element for windfall sites in the model) and therefore a model run including the development traffic would be required, especially as HE are likely to have concerns regarding the impact on Little Common Roundabout (see below). Using the model will be subject to a model access fee plus the cost of the model run. This was the approach used by the Spindlewood site (RR/2017/1705/P); however, Clavering Walk (RR/2018/3127/P) took a different approach as they argued that the impact beyond the junctions nearest the site would be minimal, although their development was much smaller. It may be useful to look at the TA's for both sites.

I would also recommend contacting Highways England as they will undoubtedly wish to comment on a planning application of this type. Richard Franklin was the officer that dealt with the Clavering Walk site but if you contact them at PlanningSE@highwaysengland.co.uk they will make sure it goes through to the right person.

For the planning applications mentioned above, HE raised concerns that the A259 Little Common roundabout already suffers from severe delays during peak periods and as a result their requirement was for the applicant to achieve a nil detriment at the junction. HE are therefore unlikely to accept an argument that the development impacts are only a small percentage difference to those flows already present at the junction.

My view at this stage is that a model run would be required to assess the impact further afield and as you suggest this could be done by extracting background flows from SATURN and manually assigning the development traffic to create a "with development" opening year and future year scenario. However, our main concerns would be regarding the impact on the approach road (as mentioned above) and so the scope of the study further afield would be best discussed and agreed with HE.

5. Appropriate improvements to the local network to ensure safe access, and accessibility by all modes of transport. The site is not well located from an accessibility perspective with this in mind there would be a need to provide improvements to pedestrian links, bus stop facilities etc as part of the proposal. This would require further investigation.

The above link will direct you much of the basic information needed to assist in the highway and transport consideration of many proposals.

ESCC will also expect the following to be submitted as part of any future application:

- A site location plan scale (1:1250) with site boundary indicated
- Schedule of existing uses including planning history

- Description, including site layout plans, of the proposed development/uses
- Reference to supporting national, regional, and local planning documents and polices
- Summary to support the site access/highways works proposals, including plan (scale 1:250 or similar) with achievable visibility splays, access widths and gradients indicated
- Stage 1 Road Safety Audit of proposed highway works and designers response, including amended plans
- A 'Transport Assessment', including location of key services, availability of sustainable modes of transport and existing/future vehicular traffic generation
- Proposed Travel Plan measures
- Parking strategy, including provision of parking for all modes of transport
- Relevant data collected to date
- Proposed trip rates supported with TRICS outputs and site selection methodology

The above comments are for guidance only and shall not prejudice any further comments East Sussex County Council wishes to make at any next stage, recognising that policy and material considerations can change. They should however be regarded as highway requirements that would need to be satisfactorily met as part of any formal proposal. The final decision to grant planning permission is made by elected members of the local planning authority.

I appreciate that I have not been able to answer all of your queries in depth or definitively; however, I hope that it is helpful.

Regards

Ben

Ben Lenton
Principal Officer
Transport Development Control
01273 336114 or 07701 394528
eastsussex.gov.uk

East Sussex County Council

From: luke.regan [mailto:luke.regan@wyg.com]
Sent: 17 January 2020 2:41 PM
To: Ben Lenton
Subject: [Sender Unverified]Fryatts Way, Bexhill - Proposed Residential Development

Ben,

Many thanks for your time yesterday. It was helpful to understand some of the area specific traffic matters.

As agreed, I provide an initial forecast of total peak hour traffic generation and the resultant distribution of that on the local highway network. In the first instance, I have based this on a development unit yield of 200 dwellings. This may change as the proposals are developed further.

You will note that on the basis of this, traffic increases at local junctions are modest once development traffic routes beyond Ellerslie Lane. We spoke in particular about the Little Common roundabout and impacts there (also in the context of the two residential proposals located to the south west of that, Spindlewood Drive and Clavering Walk). The forecast peak hour increases in vehicles associated with the Fryatts Way proposals are 31 in both the AM and PM peak hours. This equates to peak hour increases of 1 vehicle every two minutes and I assume, would be imperceivable.

I welcome your views on traffic increases of this level and consequently what you will need to see in terms of junction assessments to enable you to fully appraise development impacts. You mentioned that there is a SATURN model which includes Bexhill that could be used to assign development traffic, indicate impacts and provide assessment flows for discrete junction assessments. Please can you let me know if you think this is necessary given the level of increases on the local road network?

I suspect that there are a number of different ways that we could use the SATURN model ranging from extracting background flows from SATURN and manually assigning the development traffic to create a "with development" scenario (using information akin to that attached), through to commissioning a "with development" SATURN model run (we would provide traffic generation and OD data, the SATURN model would distribute the traffic through highway assignment). Perhaps the first method may be sensible given the nature of the local road network and levels of traffic that the development could add to particular junctions? I welcome your views.

On a final point, please could you let me know who the local officer is at Highways England so that I can discuss possible impacts on the A259 trunk road at the appropriate time.

Please can we catch up early next week?

Thanks again,

L

Luke Regan **MSc MCIHT CMILT**
Associate Director

WYG
Quay West at MediaCityUK, Trafford Wharf Road, Trafford Park, Manchester, M17 1HH
Tel: +44 161 874 4665
Mob: +44 792 025 8248

www.wyg.com

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Thompson, Matt

From: Bowie, David <David.Bowie@highwaysengland.co.uk>

Sent: 14 February 2020 12:54
To: matt.thompson
Cc: Planning SE; Franklin, Richard; Cleaver, Elizabeth; Bown, Kevin; Morgan, Samantha
Subject: RE: #9675 FW: Proposed Residential Scheme, Bexhill [Filed 20 Feb 2020 10:59]

For Attention of: Mathew Thompson

Site Address: Land west of Fryatts Way, Bexhill
Proposal: circa 200 dwellings

Highways England Reference: #9675

Dear Matthew,

Thank you for consulting Highways England regarding the pre-app proposal at land west of Fryatts Way. The proposals have been passed to me for consideration and response.

Highways England has been appointed by the Secretary of State for Transport as strategic highway company under the provisions of the Infrastructure Act 2015 and is the highway authority, traffic authority and street authority for the strategic road network (SRN). The SRN is a critical national asset and as such Highways England works to ensure that it operates and is managed in the public interest, both in respect of current activities and needs as well as in providing effective stewardship of its long-term operation and integrity. Highways England will be concerned with proposals that have the potential to impact on the safe and efficient operation of the SRN, in this case, particularly the A259.

Firstly I note that the proposal site does not form an allocated site within Rother District Councils DaSA (Development and Site Allocations) Local Plan which was adopted on the 16 December 2019. Highways England have worked closely with the Rother District Council, East Sussex County Council and their consultants to reach an agreed position relating to the individual and cumulative impacts of the DaSA allocations. Mitigations have been agreed and will be funded via the site allocations at several junctions on the A259 which have been designed to achieve a nil detriment. Most notably in relation to this proposals potential impacts there are agreed mitigations for the A259 Little Common roundabout and the A259 / A269 /A2690 King Offa Way signalised cross roads. You should note that these junctions are already considered to be severely congested and therefore even though this proposal will add approximately 30 trips at each we do not consider this de minimis and there will be a requirement to model both and provide appropriate mitigation to achieve nil detriment. I would recommend getting in touch with the District Council to obtain both modelling and agreed mitigation designs as this will save you and your client time and money developing models from scratch.

Having reviewed the Trip Generation and distribution submitted in support of the development, I have the following comments:

- The TRICS selections for this site should include ‘suburban’ sites and sites dated no older than 10 years. However having examined the trip generation figures, we are content that

these are suitable and can be used. Due to strong organised local opposition to sites we have requested that applicants undertake a sensitivity test on their residential developments using a trip rate of 0.7 per dwelling AM and PM. This is to ensure that the assessment is robust and stands up to scrutiny.

- I am content that Census 2011 travel to work data is used for the distribution.
- I would like some justification on how the routes have been selected and the proportions applied. I have done a sense check on the route choices and have the following discrepancies:
    - Lewes 60% route F onto the A259 and 40% go north on route B – having examined google maps journey planner for a Monday in AM peak 100% use route F.
    - Similarly for Crawley 50% use route B and 50% use route F – google maps journey planner suggests three route choices for a Monday in AM peak which all use route F.
    -

I recommend that all the route choices are checked and if a journey planner tool has been used to select a time in peak hours. I have initial concerns that the number of trips distributed onto the A259 has been underestimated.

I trust that my initial comments are of assistance and look forward to receiving the proposals in full in due course should your client decide to proceed.

If you have any queries regarding this response, please contact us at PlanningSE@highwaysengland.co.uk.

Kind regards,

David
David Bowie
Area 4 Spatial Planning Manager (Acting)
Tel: +44 (0) 7900 056130
Highways England | Bridge House | 1 Walnut Tree Close | Guildford | Surrey | GU1 4LZ
Web: http://www.highwaysengland.co.uk

From: matt.thompson [mailto:matt.thompson@wyg.com]
Sent: 11 February 2020 11:21
To: Planning SE <planningse@highwaysengland.co.uk>
Subject: #9675 FW: Proposed Residential Scheme, Bexhill

Good morning,

We made contact over two weeks ago to initiate scoping consultation with yourselves with regards to a proposed residential scheme in Bexhill.

Please can someone get in contact with us ASAP. We require traffic modelling be undertaken by the local highway authority however we cannot commission this until we have reached an agreement with yourselves with regards to our modelling approach.

Many thanks

Matt Thompson
Transport Planner

WYG
Quay West at MediaCityUK, Trafford Wharf Road, Trafford Park, Manchester, M17 1HH
Tel: +44 161 874 8743

www.wyg.com

From: matt.thompson
Sent: 29 January 2020 13:41
To: PlanningSE@highwaysengland.co.uk
Cc: luke.regan
Subject: FW: Proposed Residential Scheme, Bexhill

Good afternoon,

Further to my email below and my call with Kevin Bown yesterday afternoon, I attach the scoping information that we have presented to ESCC. Please can this be provided to the case officer, once assigned.

At current we are weighing up two modelling methodologies;

1) Using the ESCC SATURN model for Bexhill simply extract background flows and manually assigning the development traffic to that using information akin to that attached
2) Full testing of the development and a SATURN model run.

I welcome your views both on the two modelling approaches and on our review of the A259 considering the de minimis impact of the development traffic on the trunk road, namely an additional 1 vehicle every 2 minutes.

Kind regards

Matt Thompson
Transport Planner

WYG
Quay West at MediaCityUK, Trafford Wharf Road, Trafford Park, Manchester, M17 1HH
Tel: +44 161 874 8743

www.wyg.com

From: matt.thompson
Sent: 27 January 2020 17:34
To: PlanningSE@highwaysengland.co.uk
Cc: luke.regan <luke.regan@wyg.com>
Subject: Proposed Residential Scheme, Bexhill

Good afternoon,

We are providing transport and highways advice regarding a residential scheme in Bexhill.

The development comprises circa 200-dwellings. The site is located on land west of Fryatts Way, as marked with a red cross in the attached screenshot.

As part of the pre-application process we have been in contact with East Sussex County Council. They have advised us to contact yourselves to discuss to impact of the proposals on the trunk road network, namely the A259.

Please could you provide me with the contact details for the HE development control officer for this area, so that I can call to discuss this proposed residential scheme.

Many thanks

Matt Thompson
Transport Planner

WYG
Quay West at MediaCityUK, Trafford Wharf Road, Trafford Park, Manchester, M17 1HH
Tel: +44 161 874 8743

www.wyg.com

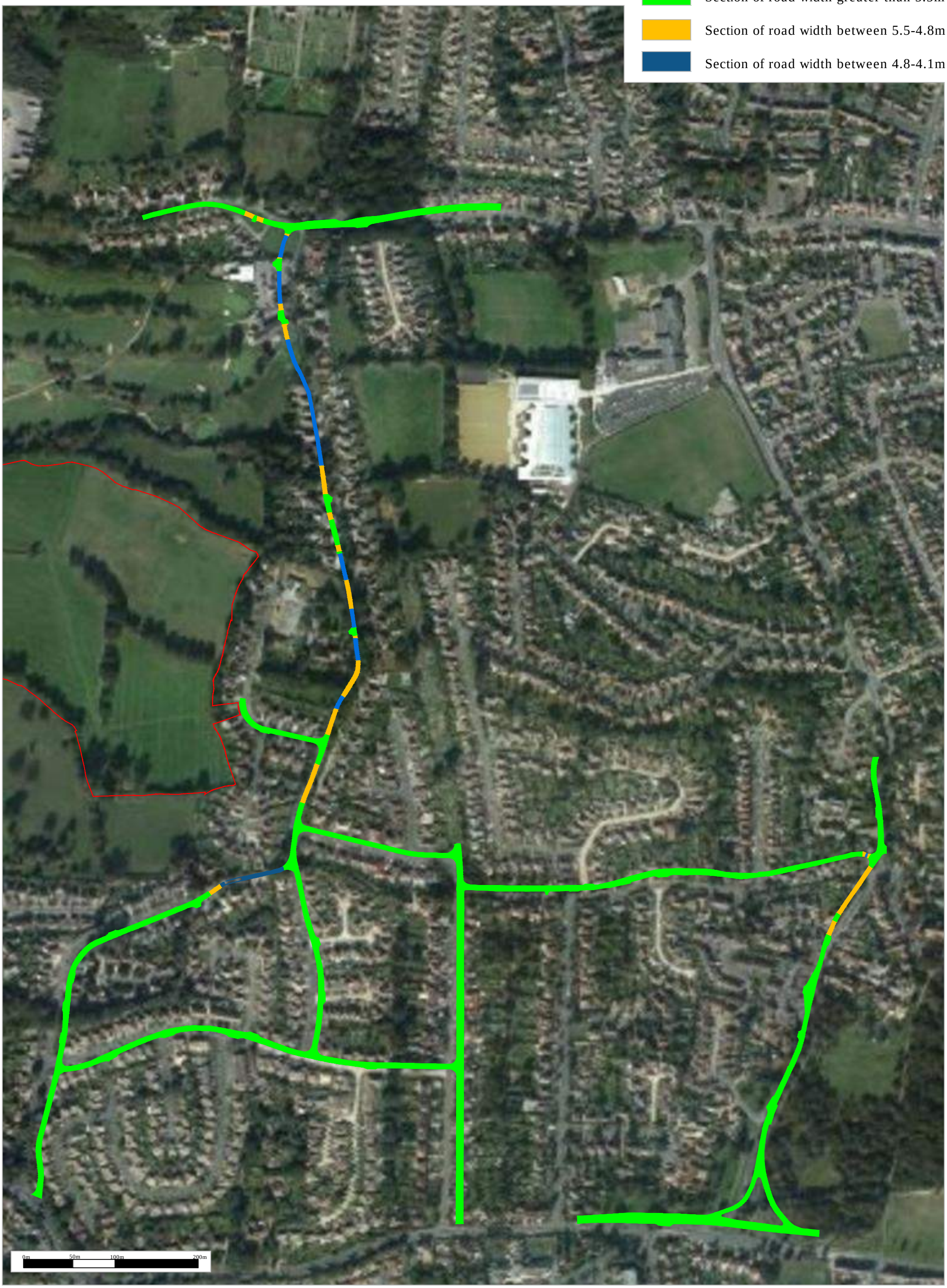
WYG Environment Planning Transport Limited. Registered in England number: 03050297.
Registered Office: 3 Sovereign Square, Sovereign Street, Leeds LS1 4ER. VAT No: 431-0326-08.

Highways England Company Limited | General enquiries: 0300 123 5000 |National Traffic Operations Centre, 3 Ridgeway, Quinton Business Park, Birmingham B32 1AF | *https://www.gov.uk/government/organisations/highways-england* | *info@highwaysengland.co.uk*

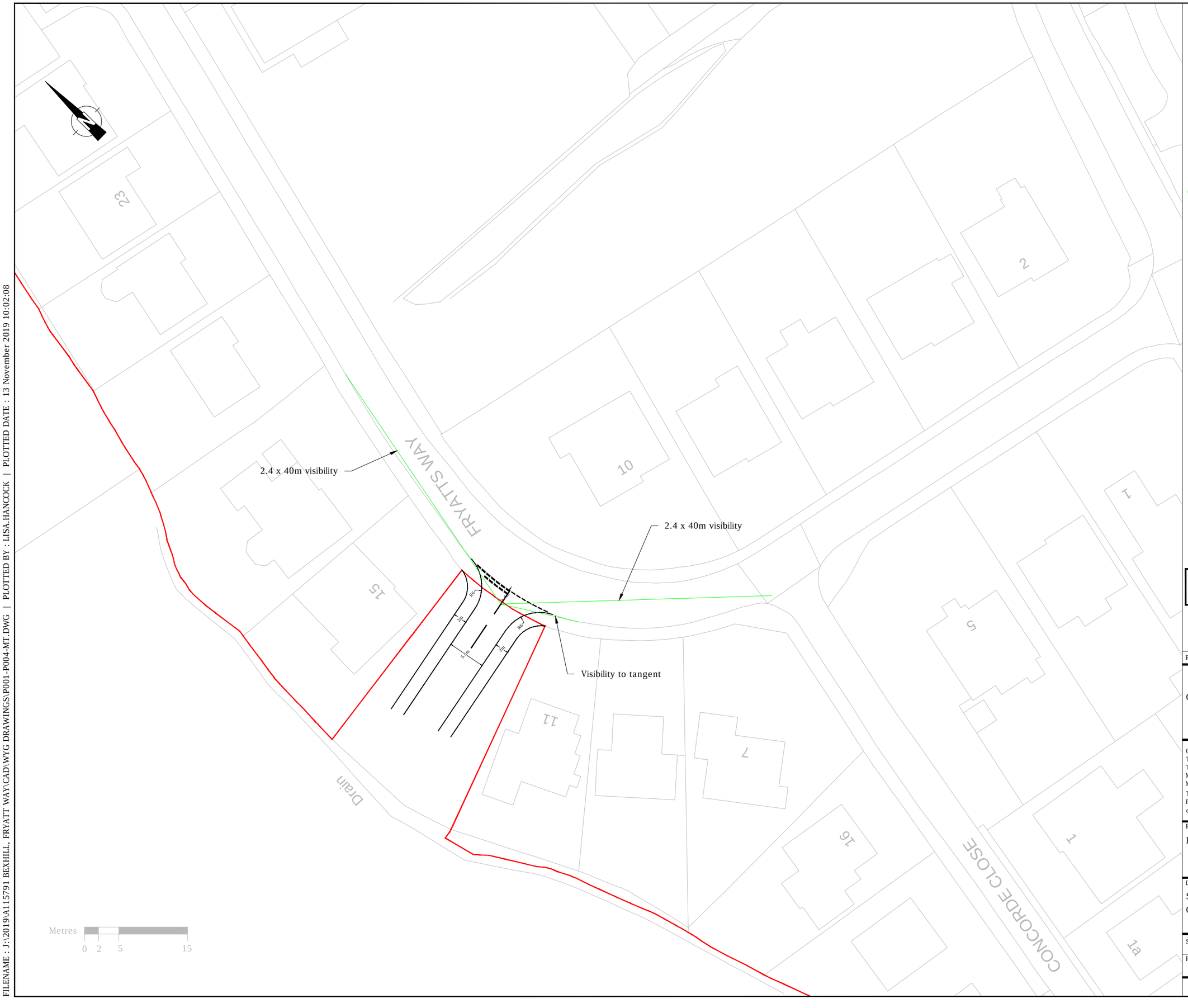
Registered in England and Wales no 9346363 | Registered Office: Bridge House, 1 Walnut Tree Close, Guildford, Surrey GU1 4LZ

APPENDIX C: REVIEW OF ROAD WIDTHS

Fryatts Way, Bexhill
Local Highway Network - Road Widths



APPENDIX D: PROPOSED SITE ACCESS JUNCTION



DO NOT SCALE: CONTRACTOR TO CHECK ALL DIMENSIONS AND REPORT ANY OMISSIONS OR ERRORS

1. THIS DRAWING SHOULD BE READ IN RELATION TO THE SUBJECT OF THE TITLE ONLY. OTHER INFORMATION SHOWN ON THE DRAWING IS TO BE CONSIDERED INDICATIVE ONLY. REFERENCE SHOULD BE MADE TO APPROPRIATE DRAWING SERIES/SPECIFICATIONS FOR OTHER INFORMATION.
2. ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED OTHERWISE.
3. THIS DRAWING IS BASED ON OS MAPPING PROVIDED BY GLADMAN DEVELOPMENTS LTD. WYG DOES NOT TAKE RESPONSIBILITY FOR ANY DISCREPANCIES.
4. EXTENT OF ADOPTED HIGHWAY TO BE CONFIRMED

SITE BOUNDARY

VISIBILITY SPLAY

PRELIMINARY ISSUE

REV	DESCRIPTION	BY	CHK	APP	DATE

Gladman Developments Ltd.

QUAY WEST at MediaCity UK
TRAFFORD WHARF ROAD
TRAFFORD PARK
MANCHESTER
M17 1HH
TEL: +44 (0)161 872 3223
FAX: +44 (0)161 872 3193
e-mail: manchester@wyg.com

Project:

Bexhill, Fryatt Way

Drawing Title:

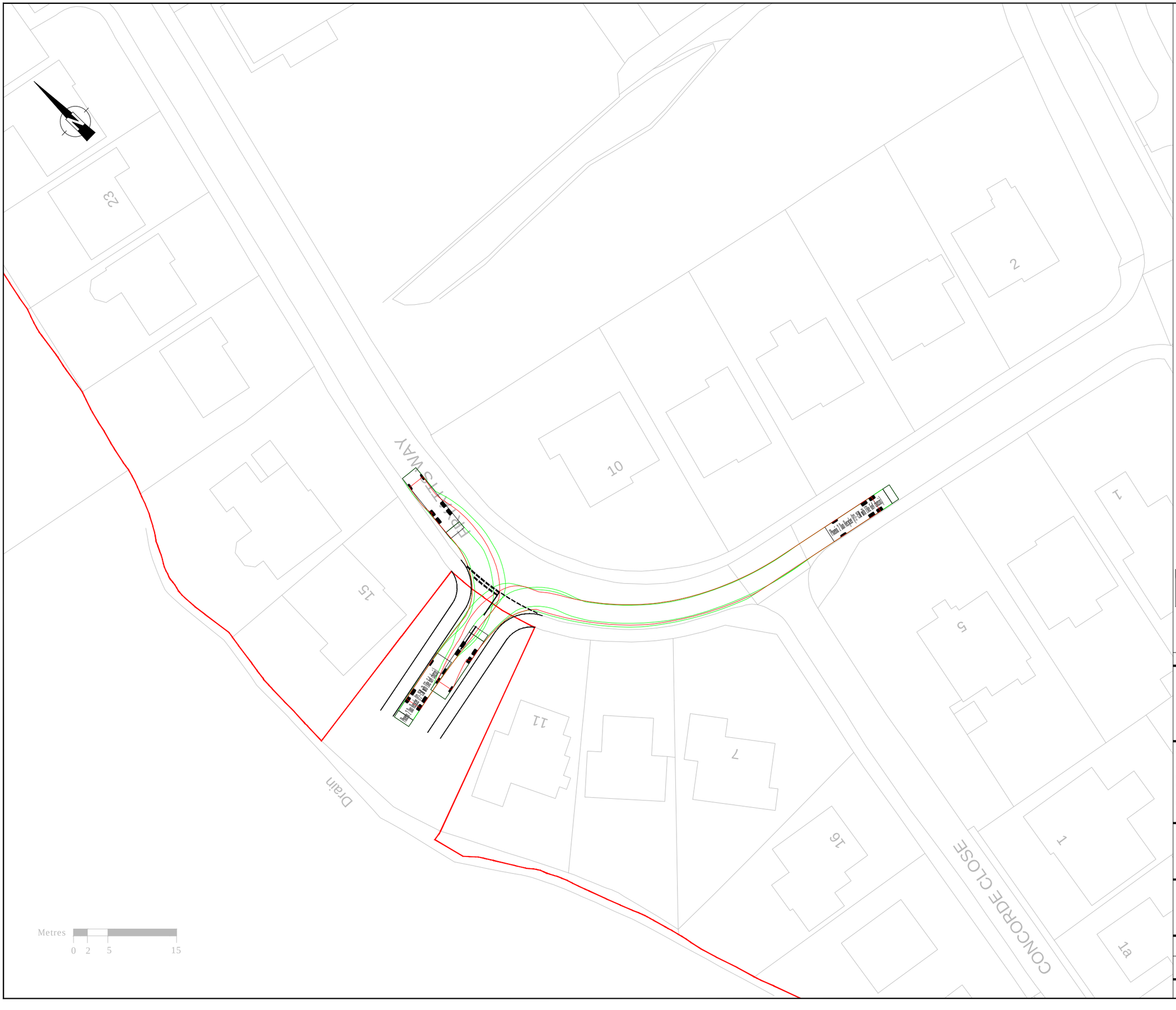
Site Access Design

General Arrangement & Visibility Splays (30 MPH)

Scale @ A3	Drawn Date	Checked Date	Approved Date
1:500	LH 11 19	MT 11 19	LR 11 19

Project No.	Office	Type	Drawing No.	Revision
A115791	27	C	P001-01	-

FILENAME : J:\2019\A115791 BEXHILL, FRYATT WAY\CAD\WYG DRAWINGS\P001-P004-MT.DWG | PLOTTED BY : LISA.HANCOCK | PLOTTED DATE : 13 November 2019 10:02:08



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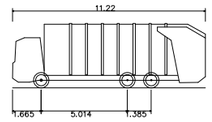
4. EXTENT OF ADOPTED HIGHWAY TO BE CONFIRMED

SITE BOUNDARY



Phoenix 2 Duo Recycler (P2-15W with Elite 6x4 chassis)

Overall Length	11.220m
Overall Width	2.530m
Overall Body Height	3.756m
Min Body Ground Clearance	0.309m
Track Width	2.530m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	11.550m

PRELIMINARY ISSUE

REV	DESCRIPTION	BY	CHK	APP	DATE

Gladman Developments Ltd.

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TEL: +44 (0)161 872 3223
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e-mail: manchester@wyg.com

Project:
Bexhill, Fryatt Way

Drawing Title:
Site Access Design
Swept Path Analysis
Large Refuse Vehicle

Scale @ A3	Drawn	Date	Checked	Date	Approved	Date
1:500	LH	11 19	MT	11 19	LR	11 19

Project No.	Office	Type	Drawing No.	Revision
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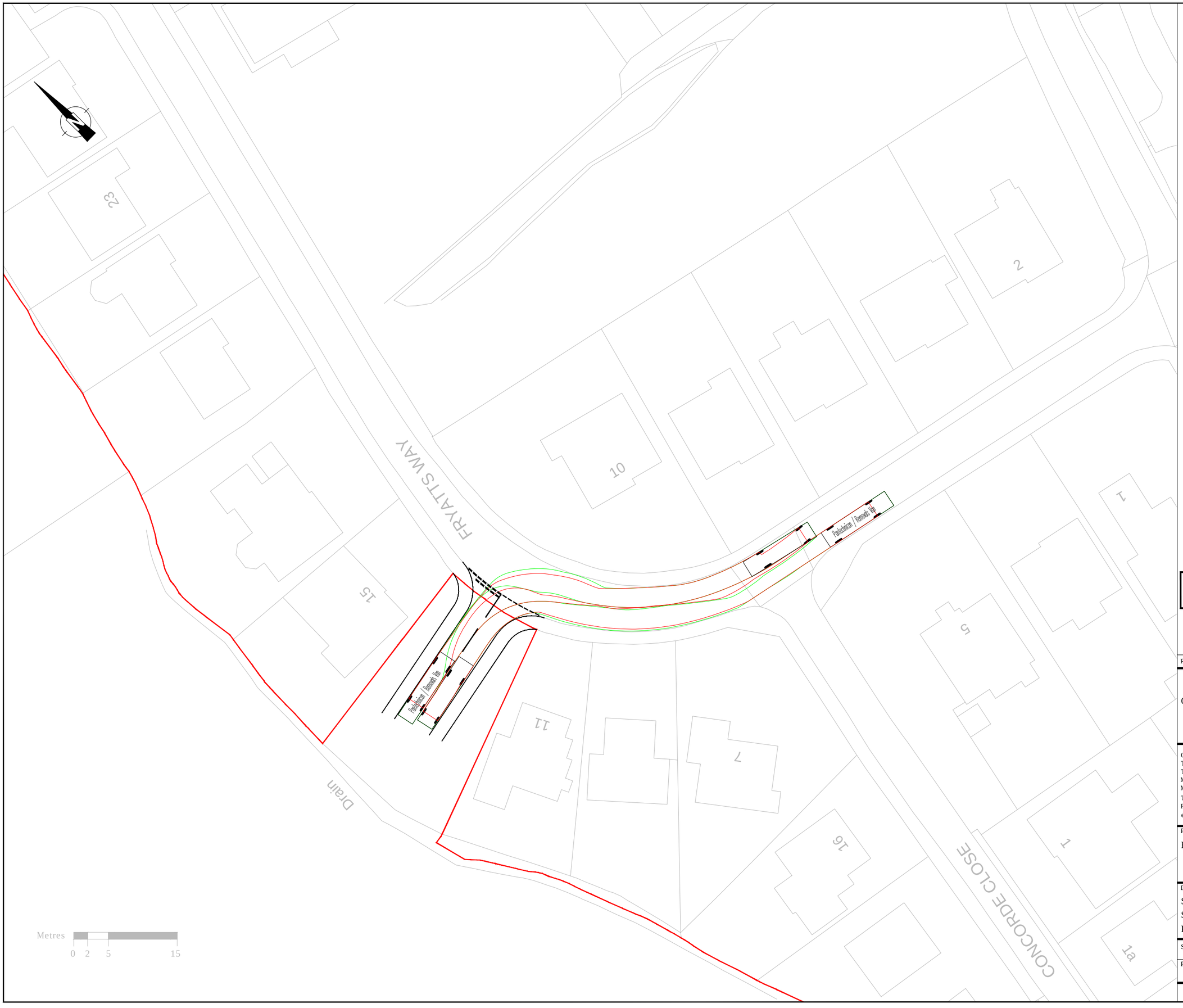

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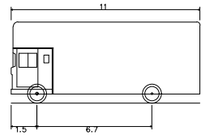
4. EXTENT OF ADOPTED HIGHWAY TBC

SITE BOUNDARY



Pantechnicon / Removals Van	
Overall Length	11.000m
Overall Width	2.500m
Overall Body Height	4.730m
Min Body Ground Clearance	0.541m
Track Width	2.500m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	12.200m

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Gladman Developments Ltd.

QUAY WEST at MediaCity UK
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MANCHESTER
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FAX: +44 (0)161 872 3193
e-mail: manchester@wyg.com

Project:

Bexhill, Fryatt Way

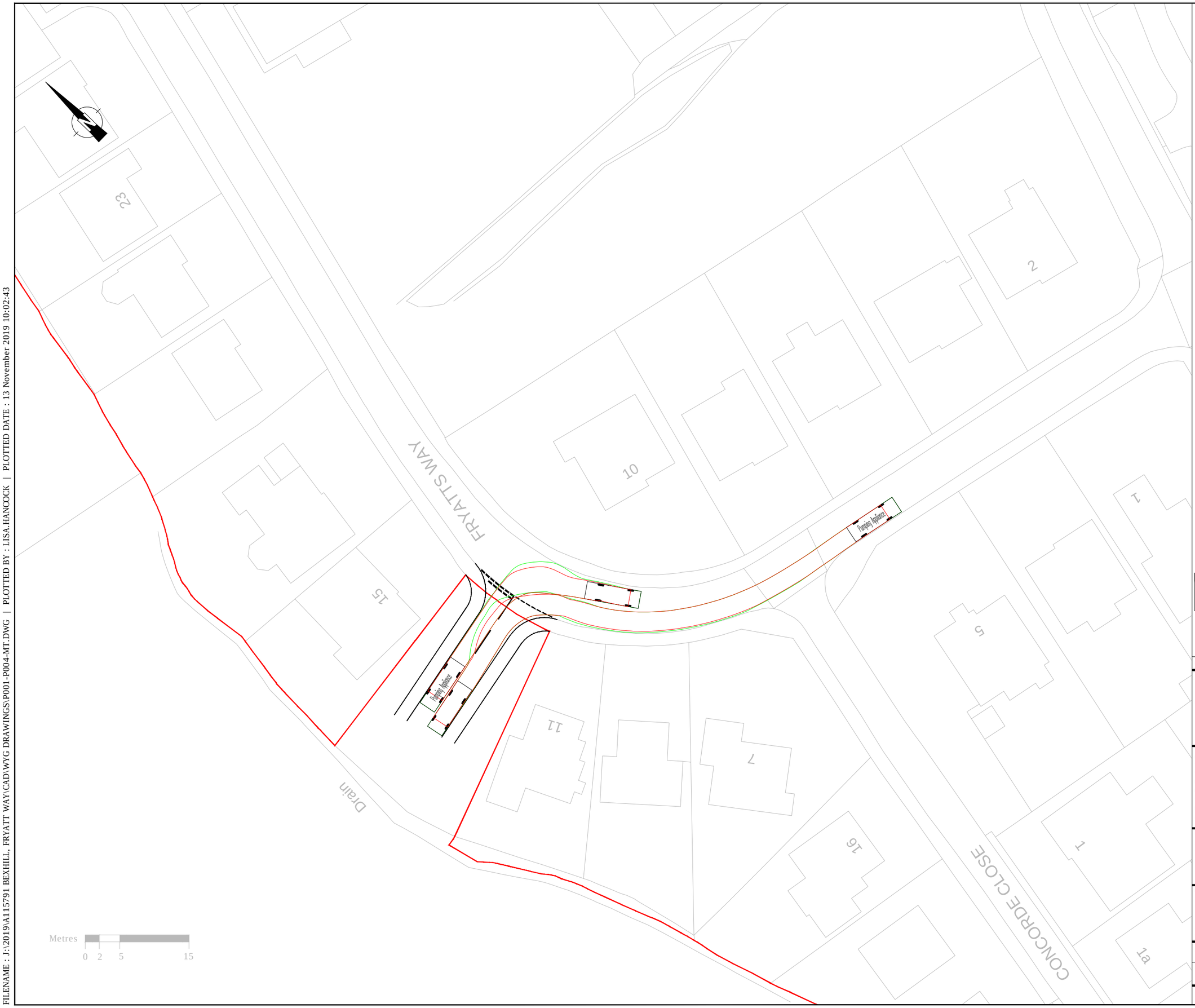
Drawing Title:

Site Access Design
Swept Path Analysis
Pantechnicon

Scale @ A3	Drawn	Date	Checked	Date	Approved	Date
1:500	LH	11 19	MT	11 19	LR	11 19

Project No.	Office	Type	Drawing No.	Revision
A115791	27	C	P003	-

FILENAME : J:\2019\A115791 BEXHILL, FRYATT WAY\CAD\WYG DRAWINGS\P001-P004-MT.DWG | PLOTTED BY : LISA.HANCOCK | PLOTTED DATE : 13 November 2019 10:02:34



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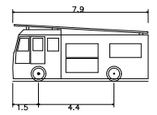
4. EXTENT OF ADOPTED HIGHWAY TO BE CONFIRMED

SITE BOUNDARY



Pumping Appliance	
Overall Length	7.900m
Overall Width	2.500m
Overall Body Height	3.300m
Min Body Ground Clearance	0.140m
Track Width	2.500m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	7.750m

PRELIMINARY ISSUE

REV	DESCRIPTION	BY	CHK	APP	DATE

Gladman Developments Ltd.

QUAY WEST at MediaCity UK
TRAFFORD WHARF ROAD
TRAFFORD PARK
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TEL: +44 (0)161 872 3223
FAX: +44 (0)161 872 3193
e-mail: manchester@wyg.com

Project:
Bexhill, Fryatt Way

Drawing Title:
Site Access Design
Swept Path Analysis
Fire Tender

Scale @ A3	Drawn	Date	Checked	Date	Approved	Date
1:500	LH	11 19	MT	11 19	LR	11 19

Project No.	Office	Type	Drawing No.	Revision
A115791	27	C	P004	-

APPENDIX E: 2028 EAST SUSSEX SATURN MODEL BASELINE FLOWS

Open Space Type	Policy (if applicable)	Required (ha)	Provision (ha)
Areas for play	0.1ha per 50 dwellings*	0.42ha	0.42ha (0.04ha equipped)
Amenity	-	-	1.78ha
Semi-natural	-	-	1.43ha
SuDS	-	-	0.63ha
Total	2.43ha per 1000 people**	1.22ha	4.39ha
**Policy CF4 Rother Local Plan 2006*			
***Policy CF3 Rother Local Plan 2006*			

NOTES

N

0 50 100m

KEY

Application Site Boundary		11.29ha
Land under applicant's control		0.27ha
Residential	Circa 210 dwellings at 30 dph	6.90ha
Potential vehicular access location		
Potential access from adjacent land		
Total Green Infrastructure (See Table 1)		4.39ha
Existing trees and hedgerows		
Root protection areas for existing trees and hedgerows		
Proposed structural planting		
Potential location for SuDS basins		
Potential location for swales		
Public Right of Way		
Existing roads		
Potential pedestrian connection		
L	Potential location for equipped play area (LEAP)	
Flood zone		
Potential location for pumping station		

Gladman Developments Ltd
Land off Fryatts Way
Bexhill-on-Sea

DEVELOPMENT FRAMEWORK

1:2000 @ A3
22nd February 2021 CEP / CEP
9309-L-02 rev **F**

masterplanning
environmental assessment
landscape design
urban design
ecology
architecture
arboriculture

FPCR Environment and Design Ltd
Lockington Hall
Lockington
Derby DE74 2RH

t: 01509 672772
f: 01509 674565
e: mail@fpcr.co.uk
w: www.fpcr.co.uk

File: C:\Users\CEP\Desktop\9309-L-02 Development Framework.vwx

APPENDIX F: TRICS OUTPUTS

Calculation Reference: AUDIT-705118-200116-0105

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST		
	EX	ESSEX	1 days
	HF	HERTFORDSHIRE	1 days
	KC	KENT	2 days
	SC	SURREY	1 days
	WS	WEST SUSSEX	2 days
04	EAST ANGLIA		
	NF	NORFOLK	1 days
	SF	SUFFOLK	2 days
05	EAST MIDLANDS		
	DS	DERBYSHIRE	1 days
	LN	LINCOLNSHIRE	1 days
	NT	NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS		
	ST	STAFFORDSHIRE	1 days
	WO	WORCESTERSHIRE	1 days
10	WALES		
	CF	CARDIFF	1 days
11	SCOTLAND		
	FI	FIFE	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Secondary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of dwellings
Actual Range: 101 to 371 (units:)
Range Selected by User: 100 to 400 (units:)

Parking Spaces Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/05 to 23/09/19

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	5 days
Tuesday	3 days
Wednesday	3 days
Thursday	4 days
Friday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	17 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Edge of Town	17

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	15
Out of Town	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:

Use Class:

C3	17 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

5,001 to 10,000	5 days
10,001 to 15,000	5 days
15,001 to 20,000	6 days
20,001 to 25,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	1 days
50,001 to 75,000	2 days
75,001 to 100,000	5 days
100,001 to 125,000	1 days
125,001 to 250,000	8 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	8 days
1.1 to 1.5	7 days
1.6 to 2.0	2 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	5 days
No	12 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present	17 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 CF-03-A-02 MIXED HOUSES CARDIFF
DROPE ROAD
CARDIFF

Edge of Town
Residential Zone
Total Number of dwellings: 196
Survey date: FRIDAY *05/10/07* *Survey Type: MANUAL*

2 DS-03-A-02 MIXED HOUSES DERBYSHIRE
RADBOURNE LANE
DERBY

Edge of Town
Residential Zone
Total Number of dwellings: 371
Survey date: TUESDAY *10/07/18* *Survey Type: MANUAL*

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

4 FI-03-A-03 MIXED HOUSES FIFE
WOODMILL ROAD
DUNFERMLINE

Edge of Town
Residential Zone
Total Number of dwellings: 155
Survey date: MONDAY *30/04/07* *Survey Type: MANUAL*

5 HF-03-A-03 MIXED HOUSES HERTFORDSHIRE
HARE STREET ROAD
BUNTINGFORD

Edge of Town
Residential Zone
Total Number of dwellings: 160
Survey date: MONDAY *08/07/19* *Survey Type: MANUAL*

6 KC-03-A-04 SEMI-DETACHED & TERRACED KENT
KILN BARN ROAD
AYLESFORD
DITTON
Edge of Town
Residential Zone
Total Number of dwellings: 110
Survey date: FRIDAY *22/09/17* *Survey Type: MANUAL*

7 KC-03-A-07 MIXED HOUSES KENT
RECULVER ROAD
HERNE BAY

Edge of Town
Residential Zone
Total Number of dwellings: 288
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

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

LIST OF SITES relevant to selection parameters (Cont.)

9 NF-03-A-06 MIXED HOUSES NORFOLK
BEAUFORT WAY
GREAT YARMOUTH
BRADWELL
Edge of Town
Residential Zone
Total Number of dwellings: 275
Survey date: MONDAY *23/09/19* *Survey Type: MANUAL*

10 NT-03-A-03 SEMI DETACHED NOTTINGHAMSHIRE
B6018 SUTTON ROAD
KIRKBY-IN-ASHFIELD

Edge of Town
Residential Zone
Total Number of dwellings: 166
Survey date: WEDNESDAY *28/06/06* *Survey Type: MANUAL*

11 SC-03-A-05 MIXED HOUSES SURREY
REIGATE ROAD
HORLEY

Edge of Town
Residential Zone
Total Number of dwellings: 207
Survey date: MONDAY *01/04/19* *Survey Type: MANUAL*

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

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

14 ST-03-A-07 DETACHED & SEMI-DETACHED STAFFORDSHIRE
BEACONSIDE
STAFFORD
MARSTON GATE
Edge of Town
Residential Zone
Total Number of dwellings: 248
Survey date: WEDNESDAY *22/11/17* *Survey Type: MANUAL*

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

16 WS-03-A-04 MIXED HOUSES WEST SUSSEX
HILLS FARM LANE
HORSHAM
BROADBRIDGE HEATH
Edge of Town
Residential Zone
Total Number of dwellings: 151
Survey date: THURSDAY *11/12/14* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

17 WS-03-A-08 MIXED HOUSES WEST SUSSEX
ROUNDSTONE LANE
ANGMERING

Edge of Town
Residential Zone
Total Number of dwellings: 180
Survey date: THURSDAY *19/04/18* *Survey Type: MANUAL*

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
ES-03-A-03	mixed houses and flat
ES-03-A-04	mixed houses and flat
WS-03-A-09	mixed houses and flat

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	17	203	0.089	17	203	0.345	17	203	0.434
08:00 - 09:00	17	203	0.146	17	203	0.426	17	203	0.572
09:00 - 10:00	17	203	0.150	17	203	0.198	17	203	0.348
10:00 - 11:00	17	203	0.131	17	203	0.172	17	203	0.303
11:00 - 12:00	17	203	0.148	17	203	0.149	17	203	0.297
12:00 - 13:00	17	203	0.168	17	203	0.160	17	203	0.328
13:00 - 14:00	17	203	0.171	17	203	0.156	17	203	0.327
14:00 - 15:00	17	203	0.179	17	203	0.176	17	203	0.355
15:00 - 16:00	17	203	0.299	17	203	0.190	17	203	0.489
16:00 - 17:00	17	203	0.310	17	203	0.184	17	203	0.494
17:00 - 18:00	17	203	0.392	17	203	0.181	17	203	0.573
18:00 - 19:00	17	203	0.299	17	203	0.186	17	203	0.485
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.482			2.523			5.005

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

*To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.*

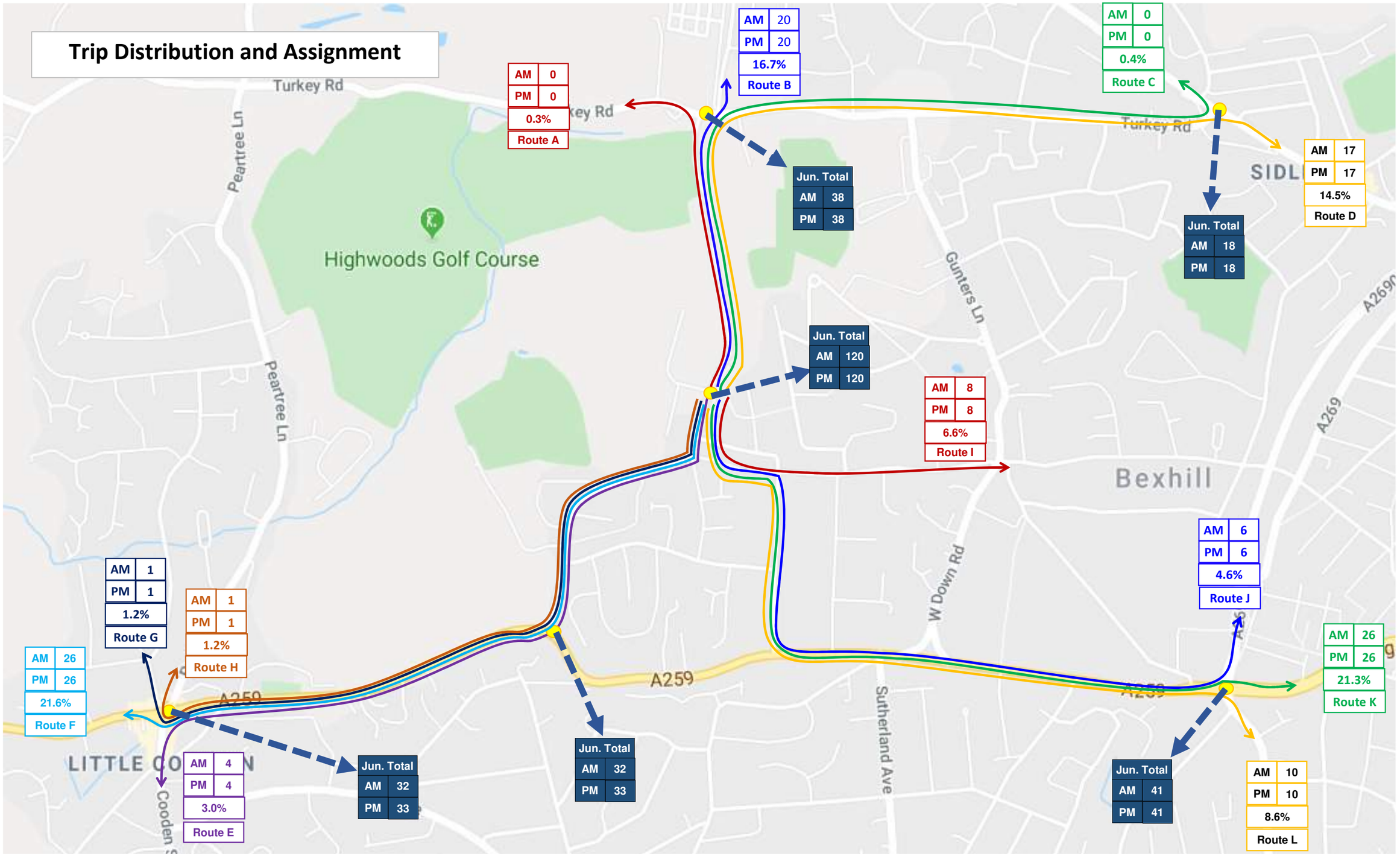
Parameter summary

Trip rate parameter range selected:	101 - 371 (units:)
Survey date date range:	01/01/05 - 23/09/19
Number of weekdays (Monday-Friday):	17
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	3

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

APPENDIX G: 2011 CENSUS DATA AND TRIP DISTRIBUTION

Trip Distribution and Assignment



WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level)

population	All usual residents aged 16 and over in employment the week before the census
units	Persons
date	2011
method of travel to work	Driving a car or van

place of work : 2011 census merged local authority district	usual residence: E02004400 : Rother 009	E02004401 : Rother 010	Total	ROUTE	%	TRIPS
E02004392 : Rother 001	18	16	34	B	100.0%	34
E02004393 : Rother 002	3	4	7	B	50.0%	4
				J	50.0%	4
E02004394 : Rother 003	25	14	39	B	50.0%	20
				J	50.0%	20
E02004395 : Rother 004	13	8	21	J	50.0%	11
				K	50.0%	11
E02004396 : Rother 005	16	16	32	J	40.0%	13
				K	40.0%	13
				D	20.0%	6
E02004397 : Rother 006	77	57	134	B	80.0%	107
				J	20.0%	27
E02004398 : Rother 007	65	66	131	D	40.0%	52
				C	10.0%	13
				I	40.0%	52
				B	10.0%	13
E02004399 : Rother 008	143	130	273	D	25.0%	68
				I	30.0%	82
				K	30.0%	82
				L	15.0%	41
E02004400 : Rother 009	127	81	208	B	5.0%	10
				A	5.0%	10
				E	20.0%	42
				F	20.0%	42
				G	20.0%	42
				H	20.0%	42
				I	10.0%	21
E02004401 : Rother 010	98	77	175	I	33.3%	58
				E	33.3%	58
				J	33.3%	58
E02004402 : Rother 011	296	199	495	K	50.0%	248
				L	50.0%	248
Hastings	406	313	719	D	50.0%	360
				K	50.0%	360
Eastbourne	240	146	386	F	100.0%	386
Wealden	187	103	290	F	40.0%	116
				B	60.0%	174
Lewes	51	43	94	F	60.0%	56
				B	40.0%	38
Tunbridge Wells	42	27	69	B	100.0%	69
Brighton and Hove	28	10	38	F	100.0%	38
Mid Sussex	22	7	29	F	100.0%	29
Crawley	12	9	21	F	50.0%	11
				B	50.0%	11
Ashford	8	11	19	F	100.0%	19
Tonbridge and Malling	10	4	14	B	60.0%	8
				J	40.0%	6
Maidstone	10	2	12	B	50.0%	6
				J	50.0%	6
Shepway	7	4	11	J	100.0%	11
Croydon	7	3	10	B	100.0%	10
Reigate and Banstead	4	6	10	B	50.0%	5
				F	50.0%	5
Horsham	4	5	9	F	100.0%	9
Camden	7	1	8	B	100.0%	8
Sutton	4	4	8	B	50.0%	4
				F	50.0%	4
Westminster,City of London	5	3	8	B	100.0%	8
Worthing	6	2	8	F	100.0%	8
Hillingdon	4	3	7	B	100.0%	7
Southwark	6	1	7	B	100.0%	7
Swale	5	2	7	I	100.0%	7
Thurrock	4	2	6	B	100.0%	6
Bromley	2	4	6	B	100.0%	6
Sevenoaks	5	1	6	B	100.0%	6

Route	TRIPS	Distribution
A	10	0.3%
B	560	16.7%
C	13	0.4%
D	487	14.5%
E	100	3.0%
F	723	21.6%
G	42	1.2%
H	42	1.2%
I	220	6.6%
J	154	4.6%
K	712	21.3%
L	288	8.6%
Total	**3351**	**100.0%**

In order to protect against disclosure of personal information, records have been swapped between different geographic areas. Some counts will be affected, particularly small counts at the lowest geographies.

APPENDIX H: JUNCTIONS 9 OUTPUT (J1)

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462

Filename: J1 Site Access_Fryatts Way.j9
Path: \\manchester32\jobs\2019\A115791 Bexhill, Fryatt Way\Jun. Ass\J1 Site Access_Fryatts Way
Report generation date: 09/06/2021 19:03:50

Summary of junction performance

	AM				PM			
	Q (PCU)	Delay (s)	RFC	Junction Delay (s)	Q (PCU)	Delay (s)	RFC	Junction Delay (s)
	Proposed Site Access - 2028 Ass. Flows							
Stream B-AC	0.3	9.48	0.21	6.97	0.1	8.36	0.09	2.56
Stream C-AB	0.0	0.00	0.00		0.0	0.00	0.00	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of Av. delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted Av.s.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	03/06/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	WYG\yujing.liu
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Av. delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2028 Ass. Flows	AM	ONE HOUR	07:45	09:15	15	✓
D2	2028 Ass. Flows	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Proposed Site Access	✓	100.000	100.000

Proposed Site Access - 2028 Ass. Flows, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J1 Site Access/Fryatts Way	T-Junction	Two-way		6.97	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Fryatts Way (S)		Major
B	Site Access		Minor
C	Fryatts Way (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Fryatts Way (N)	6.95			14.9	✓	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)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	2.75	22	17

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	481	0.084	0.212	0.134	0.303
B-C	619	0.091	0.230	-	-
C-B	583	0.216	0.216	-	-

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 Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2028 Ass. Flows	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A - Fryatts Way (S)		ONE HOUR	✓	32	100.000
B - Site Access		ONE HOUR	✓	89	100.000
C - Fryatts Way (N)		ONE HOUR	✓	4	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Fryatts Way (S)	B - Site Access	C - Fryatts Way (N)
From	A - Fryatts Way (S)	0	31	1
	B - Site Access	89	0	0
	C - Fryatts Way (N)	4	0	0

Vehicle Mix

HV %s

		To		
		A - Fryatts Way (S)	B - Site Access	C - Fryatts Way (N)
From	A - Fryatts Way (S)	0	0	1
	B - Site Access	0	0	0
	C - Fryatts Way (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.21	9.48	0.3	A	82	123
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					28	43
A-C					0.92	1

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	67	17	479	0.140	66	0.0	0.2	8.717	A
C-AB	0	0	577	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	23	6			23				
A-C	0.75	0.19			0.75				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	80	20	478	0.167	80	0.2	0.2	9.027	A
C-AB	0	0	576	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	28	7			28				
A-C	0.90	0.22			0.90				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	98	24	478	0.205	98	0.2	0.3	9.467	A
C-AB	0	0	575	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	34	9			34				
A-C	1	0.28			1				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	98	24	478	0.205	98	0.3	0.3	9.478	A
C-AB	0	0	575	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	34	9			34				
A-C	1	0.28			1				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	80	20	478	0.167	80	0.3	0.2	9.049	A
C-AB	0	0	576	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	28	7			28				
A-C	0.90	0.22			0.90				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	67	17	479	0.140	67	0.2	0.2	8.751	A
C-AB	0	0	577	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	23	6			23				
A-C	0.75	0.19			0.75				

Proposed Site Access - 2028 Ass. Flows, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J1 Site Access/Fryatts Way	T-Junction	Two-way		2.56	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2028 Ass. Flows	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A - Fryatts Way (S)		ONE HOUR	✓	86	100.000
B - Site Access		ONE HOUR	✓	38	100.000
C - Fryatts Way (N)		ONE HOUR	✓	2	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Fryatts Way (S)	B - Site Access	C - Fryatts Way (N)
From	A - Fryatts Way (S)	0	82	4
	B - Site Access	38	0	0
	C - Fryatts Way (N)	2	0	0

Vehicle Mix

HV %s

		To		
		A - Fryatts Way (S)	B - Site Access	C - Fryatts Way (N)
From	A - Fryatts Way (S)	0	0	1
	B - Site Access	0	0	0
	C - Fryatts Way (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.09	8.36	0.1	A	35	52
C-AB	0.00	0.00	0.0	A	0	0
C-A					0	0
A-B					75	113
A-C					4	6

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	29	7	475	0.060	28	0.0	0.1	8.055	A
C-AB	0	0	569	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	62	15			62				
A-C	3	0.75			3				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	34	9	474	0.072	34	0.1	0.1	8.184	A
C-AB	0	0	566	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	74	18			74				
A-C	4	0.90			4				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	42	10	472	0.089	42	0.1	0.1	8.360	A
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	90	23			90				
A-C	4	1			4				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	42	10	472	0.089	42	0.1	0.1	8.361	A
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	90	23			90				
A-C	4	1			4				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	34	9	474	0.072	34	0.1	0.1	8.188	A
C-AB	0	0	566	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	74	18			74				
A-C	4	0.90			4				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	29	7	475	0.060	29	0.1	0.1	8.067	A
C-AB	0	0	569	0.000	0	0.0	0.0	0.000	A
C-A	0	0			0				
A-B	62	15			62				
A-C	3	0.75			3				

APPENDIX I: JUNCTIONS 9 OUTPUT (J2)

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462

Filename: J2 Ellerslie Lane_Fryatts Way.j9
Path: \\manchester32\jobs\2019\A115791 Bexhill, Fryatt Way\Jun. Ass\J2 Ellerslie Lane _Fryatts Way
Report generation date: 09/06/2021 19:04:57

Summary of junction performance

	AM				PM			
	Q (PCU)	Delay (s)	RFC	Junction Delay (s)	Q (PCU)	Delay (s)	RFC	Junction Delay (s)
Existing Layout - 2028 Baseline Flows								
Stream B-AC	0.0	7.88	0.04	0.53	0.0	8.33	0.02	0.25
Stream C-AB	0.0	5.25	0.00		0.0	5.43	0.01	
Existing Layout - 2028 Ass. Flows								
Stream B-AC	0.3	10.18	0.25	3.04	0.1	9.47	0.12	1.33
Stream C-AB	0.0	5.35	0.02		0.1	5.72	0.07	

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of Av. delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted Av.s.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	03/06/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	WYG\yujing.liu
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Av. delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2028 Baseline Flows	AM	ONE HOUR	07:45	09:15	15	✓
D2	2028 Baseline Flows	PM	ONE HOUR	16:45	18:15	15	✓
D3	2028 Ass. Flows	AM	ONE HOUR	07:45	09:15	15	✓
D4	2028 Ass. Flows	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Existing Layout	✓	100.000	100.000

Existing Layout - 2028 Baseline Flows, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Ellerslie Lane (N) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Ellerslie Lane / Fryatts Way Priority Jun.	T-Junction	Two-way		0.53	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Ellerslie Lane (S)		Major
B	Fryatts Way		Minor
C	Ellerslie Lane (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Ellerslie Lane (N)	5.50			86.0	✓	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)	Visibility to left (m)	Visibility to right (m)
B - Fryatts Way	One lane	2.70	21	20

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	479	0.089	0.225	0.142	0.322
B-C	617	0.097	0.244	-	-
C-B	624	0.247	0.247	-	-

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 Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2028 Baseline Flows	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A - Ellerslie Lane (S)		ONE HOUR	✓	79	100.000
B - Fryatts Way		ONE HOUR	✓	16	100.000
C - Ellerslie Lane (N)		ONE HOUR	✓	166	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Ellerslie Lane (S)	B - Fryatts Way	C - Ellerslie Lane (N)
From	A - Ellerslie Lane (S)	0	4	75
	B - Fryatts Way	11	0	5
	C - Ellerslie Lane (N)	164	2	0

Vehicle Mix

HV %s

		To		
		A - Ellerslie Lane (S)	B - Fryatts Way	C - Ellerslie Lane (N)
From	A - Ellerslie Lane (S)	0	0	2
	B - Fryatts Way	0	0	0
	C - Ellerslie Lane (N)	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.04	7.88	0.0	A	15	22
C-AB	0.00	5.25	0.0	A	2	4
C-A					150	225
A-B					4	6
A-C					69	103

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	12	3	487	0.025	12	0.0	0.0	7.569	A
C-AB	2	0.46	691	0.003	2	0.0	0.0	5.252	A
C-A	123	31			123				
A-B	3	0.75			3				
A-C	56	14			56				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	4	482	0.030	14	0.0	0.0	7.699	A
C-AB	2	0.57	704	0.003	2	0.0	0.0	5.159	A
C-A	147	37			147				
A-B	4	0.90			4				
A-C	67	17			67				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	18	4	474	0.037	18	0.0	0.0	7.881	A
C-AB	3	0.73	722	0.004	3	0.0	0.0	5.037	A
C-A	180	45			180				
A-B	4	1			4				
A-C	83	21			83				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	18	4	474	0.037	18	0.0	0.0	7.881	A
C-AB	3	0.74	722	0.004	3	0.0	0.0	5.039	A
C-A	180	45			180				
A-B	4	1			4				
A-C	83	21			83				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	4	482	0.030	14	0.0	0.0	7.700	A
C-AB	2	0.57	704	0.003	2	0.0	0.0	5.164	A
C-A	147	37			147				
A-B	4	0.90			4				
A-C	67	17			67				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	12	3	487	0.025	12	0.0	0.0	7.573	A
C-AB	2	0.46	691	0.003	2	0.0	0.0	5.255	A
C-A	123	31			123				
A-B	3	0.75			3				
A-C	56	14			56				

Existing Layout - 2028 Baseline Flows, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Ellerslie Lane (N) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Ellerslie Lane / Fryatts Way Priority Jun.	T-Junction	Two-way		0.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2028 Baseline Flows	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A - Ellerslie Lane (S)		ONE HOUR	✓	200	100.000
B - Fryatts Way		ONE HOUR	✓	7	100.000
C - Ellerslie Lane (N)		ONE HOUR	✓	168	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Ellerslie Lane (S)	B - Fryatts Way	C - Ellerslie Lane (N)
From	A - Ellerslie Lane (S)	0	10	190
	B - Fryatts Way	5	0	2
	C - Ellerslie Lane (N)	163	5	0

Vehicle Mix

HV %s

		To		
		A - Ellerslie Lane (S)	B - Fryatts Way	C - Ellerslie Lane (N)
From	A - Ellerslie Lane (S)	0	0	2
	B - Fryatts Way	0	0	0
	C - Ellerslie Lane (N)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.02	8.33	0.0	A	6	10
C-AB	0.01	5.43	0.0	A	6	9
C-A					148	222
A-B					9	14
A-C					174	262

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	1	463	0.011	5	0.0	0.0	7.868	A
C-AB	5	1	669	0.007	5	0.0	0.0	5.425	A
C-A	122	30			122				
A-B	8	2			8				
A-C	143	36			143				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	2	453	0.014	6	0.0	0.0	8.057	A
C-AB	6	1	679	0.008	6	0.0	0.0	5.359	A
C-A	145	36			145				
A-B	9	2			9				
A-C	171	43			171				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	2	440	0.018	8	0.0	0.0	8.332	A
C-AB	7	2	692	0.011	7	0.0	0.0	5.270	A
C-A	178	44			178				
A-B	11	3			11				
A-C	209	52			209				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	2	440	0.018	8	0.0	0.0	8.332	A
C-AB	7	2	692	0.011	7	0.0	0.0	5.273	A
C-A	178	44			178				
A-B	11	3			11				
A-C	209	52			209				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	2	453	0.014	6	0.0	0.0	8.057	A
C-AB	6	1	679	0.008	6	0.0	0.0	5.361	A
C-A	145	36			145				
A-B	9	2			9				
A-C	171	43			171				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	1	463	0.011	5	0.0	0.0	7.871	A
C-AB	5	1	669	0.007	5	0.0	0.0	5.428	A
C-A	122	30			122				
A-B	8	2			8				
A-C	143	36			143				

Existing Layout - 2028 Ass. Flows, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Ellerslie Lane (N) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Ellerslie Lane / Fryatts Way Priority Jun.	T-Junction	Two-way		3.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2028 Ass. Flows	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A - Ellerslie Lane (S)		ONE HOUR	✓	100	100.000
B - Fryatts Way		ONE HOUR	✓	106	100.000
C - Ellerslie Lane (N)		ONE HOUR	✓	176	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Ellerslie Lane (S)	B - Fryatts Way	C - Ellerslie Lane (N)
From	A - Ellerslie Lane (S)	0	25	75
	B - Fryatts Way	72	0	34
	C - Ellerslie Lane (N)	164	12	0

Vehicle Mix

HV %s

		To		
		A - Ellerslie Lane (S)	B - Fryatts Way	C - Ellerslie Lane (N)
From	A - Ellerslie Lane (S)	0	0	2
	B - Fryatts Way	0	0	0
	C - Ellerslie Lane (N)	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.25	10.18	0.3	B	97	146
C-AB	0.02	5.35	0.0	A	14	21
C-A					147	221
A-B					23	34
A-C					69	103

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	80	20	485	0.165	79	0.0	0.2	8.849	A
C-AB	11	3	687	0.016	11	0.0	0.0	5.351	A
C-A	121	30			121				
A-B	19	5			19				
A-C	56	14			56				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	95	24	479	0.199	95	0.2	0.2	9.373	A
C-AB	14	3	700	0.020	14	0.0	0.0	5.277	A
C-A	145	36			145				
A-B	22	6			22				
A-C	67	17			67				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	117	29	470	0.248	116	0.2	0.3	10.157	B
C-AB	18	4	717	0.025	18	0.0	0.0	5.180	A
C-A	176	44			176				
A-B	28	7			28				
A-C	83	21			83				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	117	29	470	0.248	117	0.3	0.3	10.175	B
C-AB	18	4	717	0.025	18	0.0	0.0	5.183	A
C-A	176	44			176				
A-B	28	7			28				
A-C	83	21			83				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	95	24	479	0.199	96	0.3	0.3	9.397	A
C-AB	14	3	700	0.020	14	0.0	0.0	5.283	A
C-A	145	36			145				
A-B	22	6			22				
A-C	67	17			67				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	80	20	485	0.165	80	0.3	0.2	8.893	A
C-AB	11	3	687	0.016	11	0.0	0.0	5.355	A
C-A	121	30			121				
A-B	19	5			19				
A-C	56	14			56				

Existing Layout - 2028 Ass. Flows, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	C - Ellerslie Lane (N) - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Ellerslie Lane / Fryatts Way Priority Jun.	T-Junction	Two-way		1.33	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2028 Ass. Flows	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A - Ellerslie Lane (S)		ONE HOUR	✓	256	100.000
B - Fryatts Way		ONE HOUR	✓	45	100.000
C - Ellerslie Lane (N)		ONE HOUR	✓	194	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Ellerslie Lane (S)	B - Fryatts Way	C - Ellerslie Lane (N)
From	A - Ellerslie Lane (S)	0	66	190
	B - Fryatts Way	31	0	14
	C - Ellerslie Lane (N)	163	31	0

Vehicle Mix

HV %s

		To		
		A - Ellerslie Lane (S)	B - Fryatts Way	C - Ellerslie Lane (N)
From	A - Ellerslie Lane (S)	0	0	2
	B - Fryatts Way	0	0	0
	C - Ellerslie Lane (N)	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.12	9.47	0.1	A	41	62
C-AB	0.07	5.72	0.1	A	37	55
C-A					141	212
A-B					61	91
A-C					174	262

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	34	8	457	0.074	34	0.0	0.1	8.495	A
C-AB	29	7	660	0.043	28	0.0	0.1	5.713	A
C-A	117	29			117				
A-B	50	12			50				
A-C	143	36			143				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	40	10	446	0.091	40	0.1	0.1	8.881	A
C-AB	36	9	667	0.054	36	0.1	0.1	5.711	A
C-A	139	35			139				
A-B	59	15			59				
A-C	171	43			171				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	50	12	430	0.115	49	0.1	0.1	9.462	A
C-AB	46	12	678	0.069	46	0.1	0.1	5.710	A
C-A	167	42			167				
A-B	73	18			73				
A-C	209	52			209				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	50	12	430	0.115	50	0.1	0.1	9.468	A
C-AB	47	12	678	0.069	47	0.1	0.1	5.715	A
C-A	167	42			167				
A-B	73	18			73				
A-C	209	52			209				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	40	10	446	0.091	41	0.1	0.1	8.893	A
C-AB	36	9	667	0.054	36	0.1	0.1	5.719	A
C-A	139	35			139				
A-B	59	15			59				
A-C	171	43			171				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	34	8	457	0.074	34	0.1	0.1	8.512	A
C-AB	29	7	660	0.044	29	0.1	0.1	5.719	A
C-A	117	29			117				
A-B	50	12			50				
A-C	143	36			143				

APPENDIX J: JUNCTIONS 9 OUTPUT (J3)

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462

Filename: J3 Ellerslie Ln_Turkey Rd_St Mary's Rd (staggered).j9
Path: \\manchester32\jobs\2019\A115791 Bexhill, Fryatt Way\Jun. Ass\J3 Ellerslie Ln_Turkey Rd_St Mary's Rd (staggered)
Report generation date: 09/06/2021 19:05:56

Summary of junction performance

	AM				PM			
	Q (PCU)	Delay (s)	RFC	Junction Delay (s)	Q (PCU)	Delay (s)	RFC	Junction Delay (s)
Existing Layout - 2028 Baseline Flows								
Stream B-ACD	0.2	9.92	0.19	2.40	0.7	12.49	0.42	6.80
Stream A-BCD	0.1	6.78	0.06		0.0	6.57	0.03	
Stream D-A	0.0	5.84	0.02		0.2	8.33	0.16	
Stream D-BC	0.1	9.06	0.10		0.6	12.59	0.38	
Stream C-ABD	0.1	5.51	0.06		0.0	5.37	0.03	
Existing Layout - 2028 Ass. Flows								
Stream B-ACD	0.4	10.93	0.26	2.89	0.8	13.38	0.45	7.33
Stream A-BCD	0.1	6.79	0.06		0.0	6.50	0.03	
Stream D-A	0.0	5.91	0.02		0.2	8.59	0.17	
Stream D-BC	0.1	9.32	0.11		0.7	13.47	0.42	
Stream C-ABD	0.1	5.53	0.06		0.1	5.41	0.04	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of Av. delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted Av.s.

File summary

File Description

Title	
Location	
Site number	
Date	03/06/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	WYG\yujing.liu
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Av. delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2028 Baseline Flows	AM	ONE HOUR	07:45	09:15	15	✓
D2	2028 Baseline Flows	PM	ONE HOUR	16:45	18:15	15	✓
D3	2028 Ass. Flows	AM	ONE HOUR	07:45	09:15	15	✓
D4	2028 Ass. Flows	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Existing Layout	✓	100.000	100.000

Existing Layout - 2028 Baseline Flows, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Ellerslie Lane/Turkey Road/St Mary's Road Staggered Jun	Right-Left Stagger	Two-way		2.40	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Turkey Road (E)		Major
B	Ellerslie Lane		Minor
C	Turkey Road (W)		Major
D	St Mary's Road		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A - Turkey Road (E)	7.75			58.0	✓	0.00
C - Turkey Road (W)	6.75			100.0	✓	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)	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 - Ellerslie Lane	One lane	2.85								124	112
D - St Mary's Road	One lane plus flare		10.00	10.00	7.45	3.10	2.35	✓	2.00	48	40

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
A-D	608	-	-	-	0.217	0.217	0.217	-	0.217	-	-
B-AD	567	0.100	0.252	-	-	-	0.159	0.361	0.159	0.100	0.252
B-C	684	0.101	0.256	-	-	-	-	-	-	0.101	0.256
C-B	632	0.237	0.237	-	-	-	-	-	-	0.237	0.237
D-A	724	-	-	-	0.259	0.103	0.259	-	0.103	-	-
D-BC	569	0.152	0.152	0.346	0.242	0.096	0.242	-	0.096	-	-

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 Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2028 Baseline Flows	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A - Turkey Road (E)		ONE HOUR	✓	302	100.000
B - Ellerslie Lane		ONE HOUR	✓	80	100.000
C - Turkey Road (W)		ONE HOUR	✓	268	100.000
D - St Mary's Road		ONE HOUR	✓	53	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Turkey Road (E)	B - Ellerslie Lane	C - Turkey Road (W)	D - St Mary's Road
From	A - Turkey Road (E)	0	110	168	24
	B - Ellerslie Lane	19	0	7	54
	C - Turkey Road (W)	186	24	0	58
	D - St Mary's Road	12	32	9	0

Vehicle Mix

HV %s

		To			
		A - Turkey Road (E)	B - Ellerslie Lane	C - Turkey Road (W)	D - St Mary's Road
From	A - Turkey Road (E)	0	4	1	42
	B - Ellerslie Lane	2	0	1	3
	C - Turkey Road (W)	6	3	0	0
	D - St Mary's Road	1	1	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.19	9.92	0.2	A	73	110
A-BCD	0.06	6.78	0.1	A	35	52
A-B					96	144
A-C					147	220
D-A	0.02	5.84	0.0	A	11	17
D-BC	0.10	9.06	0.1	A	38	56
C-ABD	0.06	5.51	0.1	A	33	49
C-D					51	76
C-A					163	244

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	60	15	497	0.121	60	0.0	0.1	8.433	A
A-BCD	26	6	700	0.037	26	0.0	0.1	6.783	A
A-B	80	20			80				
A-C	122	30			122				
D-A	9	2	664	0.014	9	0.0	0.0	5.546	A
D-BC	31	8	485	0.064	31	0.0	0.1	7.990	A
C-ABD	24	6	700	0.035	24	0.0	0.0	5.507	A
C-D	42	11			42				
C-A	135	34			135				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	72	18	482	0.149	72	0.1	0.2	9.008	A
A-BCD	33	8	720	0.046	33	0.1	0.1	6.608	A
A-B	94	24			94				
A-C	144	36			144				
D-A	11	3	652	0.017	11	0.0	0.0	5.665	A
D-BC	37	9	469	0.079	37	0.1	0.1	8.412	A
C-ABD	31	8	715	0.044	31	0.0	0.1	5.450	A
C-D	50	12			50				
C-A	160	40			160				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	88	22	461	0.191	88	0.2	0.2	9.902	A
A-BCD	45	11	747	0.060	45	0.1	0.1	6.333	A
A-B	114	28			114				
A-C	174	43			174				
D-A	13	3	636	0.021	13	0.0	0.0	5.838	A
D-BC	45	11	447	0.101	45	0.1	0.1	9.055	A
C-ABD	42	10	735	0.057	42	0.1	0.1	5.373	A
C-D	60	15			60				
C-A	193	48			193				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	88	22	461	0.191	88	0.2	0.2	9.915	A
A-BCD	45	11	747	0.060	45	0.1	0.1	6.273	A
A-B	114	28			114				
A-C	174	43			174				
D-A	13	3	636	0.021	13	0.0	0.0	5.838	A
D-BC	45	11	446	0.101	45	0.1	0.1	9.060	A
C-ABD	42	10	735	0.057	42	0.1	0.1	5.377	A
C-D	60	15			60				
C-A	193	48			193				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	72	18	482	0.149	72	0.2	0.2	9.023	A
A-BCD	33	8	720	0.046	33	0.1	0.1	6.475	A
A-B	94	24			94				
A-C	144	36			144				
D-A	11	3	652	0.017	11	0.0	0.0	5.667	A
D-BC	37	9	469	0.079	37	0.1	0.1	8.422	A
C-ABD	31	8	715	0.044	31	0.1	0.1	5.458	A
C-D	50	12			50				
C-A	160	40			160				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	60	15	497	0.121	60	0.2	0.1	8.462	A
A-BCD	26	6	700	0.037	26	0.1	0.1	6.720	A
A-B	80	20			80				
A-C	122	30			122				
D-A	9	2	664	0.014	9	0.0	0.0	5.551	A
D-BC	31	8	485	0.064	31	0.1	0.1	8.006	A
C-ABD	25	6	700	0.035	25	0.1	0.1	5.514	A
C-D	42	11			42				
C-A	135	34			135				

Existing Layout - 2028 Baseline Flows, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Ellerslie Lane/Turkey Road/St Mary's Road Staggered Jun	Right-Left Stagger	Two-way		6.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2028 Baseline Flows	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A - Turkey Road (E)		ONE HOUR	✓	102	100.000
B - Ellerslie Lane		ONE HOUR	✓	192	100.000
C - Turkey Road (W)		ONE HOUR	✓	247	100.000
D - St Mary's Road		ONE HOUR	✓	245	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Turkey Road (E)	B - Ellerslie Lane	C - Turkey Road (W)	D - St Mary's Road
From	A - Turkey Road (E)	0	14	75	13
	B - Ellerslie Lane	19	0	41	132
	C - Turkey Road (W)	225	15	0	7
	D - St Mary's Road	83	139	23	0

Vehicle Mix

HV %s

		To			
		A - Turkey Road (E)	B - Ellerslie Lane	C - Turkey Road (W)	D - St Mary's Road
From	A - Turkey Road (E)	0	3	8	3
	B - Ellerslie Lane	3	0	5	0
	C - Turkey Road (W)	2	3	0	2
	D - St Mary's Road	10	0	9	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.42	12.49	0.7	B	176	264
A-BCD	0.03	6.57	0.0	A	14	21
A-B					13	19
A-C					67	101
D-A	0.16	8.33	0.2	A	76	114
D-BC	0.38	12.59	0.6	B	149	223
C-ABD	0.03	5.37	0.0	A	20	30
C-D					6	9
C-A					201	301

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	145	36	531	0.272	143	0.0	0.4	9.379	A
A-BCD	11	3	592	0.019	11	0.0	0.0	6.414	A
A-B	10	3			10				
A-C	55	14			55				
D-A	62	16	624	0.100	62	0.0	0.1	7.037	A
D-BC	122	30	500	0.244	121	0.0	0.3	9.571	A
C-ABD	15	4	705	0.021	15	0.0	0.0	5.361	A
C-D	5	1			5				
C-A	166	41			166				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	173	43	519	0.333	172	0.4	0.5	10.499	B
A-BCD	14	3	589	0.023	14	0.0	0.0	6.477	A
A-B	12	3			12				
A-C	66	16			66				
D-A	75	19	601	0.124	74	0.1	0.2	7.514	A
D-BC	146	36	487	0.299	145	0.3	0.4	10.660	B
C-ABD	19	5	720	0.026	19	0.0	0.0	5.277	A
C-D	6	2			6				
C-A	197	49			197				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	211	53	503	0.420	211	0.5	0.7	12.418	B
A-BCD	17	4	585	0.029	17	0.0	0.0	6.564	A
A-B	15	4			15				
A-C	80	20			80				
D-A	91	23	567	0.161	91	0.2	0.2	8.317	A
D-BC	178	45	468	0.381	178	0.4	0.6	12.522	B
C-ABD	25	6	741	0.034	25	0.0	0.0	5.162	A
C-D	7	2			7				
C-A	239	60			239				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	211	53	503	0.420	211	0.7	0.7	12.493	B
A-BCD	17	4	585	0.029	17	0.0	0.0	6.572	A
A-B	15	4			15				
A-C	80	20			80				
D-A	91	23	567	0.161	91	0.2	0.2	8.333	A
D-BC	178	45	468	0.381	178	0.6	0.6	12.587	B
C-ABD	25	6	741	0.034	25	0.0	0.0	5.163	A
C-D	7	2			7				
C-A	239	60			239				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	173	43	519	0.333	173	0.7	0.5	10.585	B
A-BCD	14	3	589	0.023	14	0.0	0.0	6.488	A
A-B	12	3			12				
A-C	66	16			66				
D-A	75	19	601	0.124	75	0.2	0.2	7.537	A
D-BC	146	36	486	0.299	146	0.6	0.4	10.734	B
C-ABD	19	5	719	0.026	19	0.0	0.0	5.279	A
C-D	6	2			6				
C-A	197	49			197				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	145	36	530	0.273	145	0.5	0.4	9.481	A
A-BCD	11	3	591	0.019	11	0.0	0.0	6.423	A
A-B	10	3			10				
A-C	55	14			55				
D-A	62	16	623	0.100	63	0.2	0.1	7.065	A
D-BC	122	30	500	0.244	122	0.4	0.3	9.664	A
C-ABD	15	4	704	0.021	15	0.0	0.0	5.366	A
C-D	5	1			5				
C-A	166	41			166				

Existing Layout - 2028 Ass. Flows, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Ellerslie Lane/Turkey Road/St Mary's Road Staggered Jun	Right-Left Stagger	Two-way		2.89	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2028 Ass. Flows	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A - Turkey Road (E)		ONE HOUR	✓	306	100.000
B - Ellerslie Lane		ONE HOUR	✓	108	100.000
C - Turkey Road (W)		ONE HOUR	✓	268	100.000
D - St Mary's Road		ONE HOUR	✓	58	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Turkey Road (E)	B - Ellerslie Lane	C - Turkey Road (W)	D - St Mary's Road
From	A - Turkey Road (E)	0	114	168	24
	B - Ellerslie Lane	32	0	7	69
	C - Turkey Road (W)	186	24	0	58
	D - St Mary's Road	12	37	9	0

Vehicle Mix

HV %s

		To			
		A - Turkey Road (E)	B - Ellerslie Lane	C - Turkey Road (W)	D - St Mary's Road
From	A - Turkey Road (E)	0	4	1	42
	B - Ellerslie Lane	2	0	1	3
	C - Turkey Road (W)	6	3	0	0
	D - St Mary's Road	1	1	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.26	10.93	0.4	B	99	149
A-BCD	0.06	6.79	0.1	A	35	53
A-B					99	149
A-C					146	220
D-A	0.02	5.91	0.0	A	11	17
D-BC	0.11	9.32	0.1	A	42	63
C-ABD	0.06	5.53	0.1	A	33	49
C-D					51	76
C-A					163	244

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	81	20	494	0.165	81	0.0	0.2	8.921	A
A-BCD	26	6	698	0.037	26	0.0	0.1	6.794	A
A-B	83	21			83				
A-C	122	30			122				
D-A	9	2	659	0.014	9	0.0	0.0	5.589	A
D-BC	35	9	481	0.072	34	0.0	0.1	8.126	A
C-ABD	25	6	699	0.035	24	0.0	0.0	5.519	A
C-D	42	11			42				
C-A	135	34			135				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	97	24	478	0.203	97	0.2	0.3	9.679	A
A-BCD	33	8	717	0.047	33	0.1	0.1	6.617	A
A-B	98	24			98				
A-C	144	36			144				
D-A	11	3	646	0.017	11	0.0	0.0	5.720	A
D-BC	41	10	464	0.089	41	0.1	0.1	8.593	A
C-ABD	31	8	713	0.044	31	0.0	0.1	5.464	A
C-D	50	12			50				
C-A	160	40			160				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	119	30	457	0.260	119	0.3	0.4	10.903	B
A-BCD	45	11	745	0.061	45	0.1	0.1	6.347	A
A-B	118	29			118				
A-C	174	43			174				
D-A	13	3	628	0.021	13	0.0	0.0	5.910	A
D-BC	51	13	441	0.115	51	0.1	0.1	9.314	A
C-ABD	42	10	733	0.057	42	0.1	0.1	5.389	A
C-D	60	15			60				
C-A	193	48			193				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	119	30	457	0.260	119	0.4	0.4	10.934	B
A-BCD	46	11	745	0.061	46	0.1	0.1	6.289	A
A-B	118	29			118				
A-C	174	43			174				
D-A	13	3	628	0.021	13	0.0	0.0	5.911	A
D-BC	51	13	441	0.115	51	0.1	0.1	9.322	A
C-ABD	42	10	733	0.057	42	0.1	0.1	5.391	A
C-D	60	15			60				
C-A	193	48			193				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	97	24	478	0.203	97	0.4	0.3	9.712	A
A-BCD	34	8	717	0.047	34	0.1	0.1	6.482	A
A-B	98	24			98				
A-C	144	36			144				
D-A	11	3	646	0.017	11	0.0	0.0	5.722	A
D-BC	41	10	464	0.089	41	0.1	0.1	8.607	A
C-ABD	31	8	713	0.044	31	0.1	0.1	5.470	A
C-D	50	12			50				
C-A	160	40			160				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	81	20	494	0.165	82	0.3	0.2	8.969	A
A-BCD	26	7	698	0.037	26	0.1	0.1	6.730	A
A-B	83	21			83				
A-C	122	30			122				
D-A	9	2	659	0.014	9	0.0	0.0	5.592	A
D-BC	35	9	481	0.072	35	0.1	0.1	8.145	A
C-ABD	25	6	699	0.035	25	0.1	0.1	5.528	A
C-D	42	11			42				
C-A	135	34			135				

Existing Layout - 2028 Ass. Flows, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Ellerslie Lane/Turkey Road/St Mary's Road Staggered Jun	Right-Left Stagger	Two-way		7.33	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2028 Ass. Flows	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A - Turkey Road (E)		ONE HOUR	✓	114	100.000
B - Ellerslie Lane		ONE HOUR	✓	205	100.000
C - Turkey Road (W)		ONE HOUR	✓	248	100.000
D - St Mary's Road		ONE HOUR	✓	259	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A - Turkey Road (E)	B - Ellerslie Lane	C - Turkey Road (W)	D - St Mary's Road
From	A - Turkey Road (E)	0	26	75	13
	B - Ellerslie Lane	25	0	41	139
	C - Turkey Road (W)	225	16	0	7
	D - St Mary's Road	83	153	23	0

Vehicle Mix

HV %s

		To			
		A - Turkey Road (E)	B - Ellerslie Lane	C - Turkey Road (W)	D - St Mary's Road
From	A - Turkey Road (E)	0	3	8	3
	B - Ellerslie Lane	3	0	5	0
	C - Turkey Road (W)	2	3	0	2
	D - St Mary's Road	10	0	9	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.45	13.38	0.8	B	188	282
A-BCD	0.03	6.50	0.0	A	14	21
A-B					23	35
A-C					67	101
D-A	0.17	8.59	0.2	A	76	114
D-BC	0.42	13.47	0.7	B	162	242
C-ABD	0.04	5.41	0.1	A	21	32
C-D					6	9
C-A					200	300

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	154	39	527	0.293	153	0.0	0.4	9.713	A
A-BCD	11	3	596	0.019	11	0.0	0.0	6.369	A
A-B	19	5			19				
A-C	55	14			55				
D-A	62	16	617	0.101	62	0.0	0.1	7.133	A
D-BC	133	33	498	0.266	131	0.0	0.4	9.889	A
C-ABD	16	4	701	0.023	16	0.0	0.0	5.402	A
C-D	5	1			5				
C-A	166	41			166				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	184	46	515	0.358	184	0.4	0.6	11.001	B
A-BCD	14	3	594	0.023	14	0.0	0.0	6.422	A
A-B	23	6			23				
A-C	66	16			66				
D-A	75	19	592	0.126	74	0.1	0.2	7.654	A
D-BC	158	40	484	0.327	158	0.4	0.5	11.154	B
C-ABD	20	5	715	0.028	20	0.0	0.0	5.324	A
C-D	6	2			6				
C-A	196	49			196				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	226	56	498	0.453	225	0.6	0.8	13.280	B
A-BCD	18	4	592	0.030	18	0.0	0.0	6.494	A
A-B	28	7			28				
A-C	80	20			80				
D-A	91	23	553	0.165	91	0.2	0.2	8.565	A
D-BC	194	48	464	0.418	193	0.5	0.7	13.384	B
C-ABD	27	7	735	0.037	27	0.0	0.1	5.218	A
C-D	7	2			7				
C-A	239	60			239				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	226	56	498	0.453	226	0.8	0.8	13.383	B
A-BCD	18	4	592	0.030	18	0.0	0.0	6.501	A
A-B	28	7			28				
A-C	80	20			80				
D-A	91	23	553	0.165	91	0.2	0.2	8.586	A
D-BC	194	48	464	0.418	194	0.7	0.7	13.474	B
C-ABD	27	7	735	0.037	27	0.1	0.1	5.221	A
C-D	7	2			7				
C-A	239	60			239				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	184	46	514	0.358	185	0.8	0.6	11.118	B
A-BCD	14	3	594	0.023	14	0.0	0.0	6.434	A
A-B	23	6			23				
A-C	66	16			66				
D-A	75	19	591	0.126	75	0.2	0.2	7.677	A
D-BC	158	40	483	0.327	159	0.7	0.5	11.256	B
C-ABD	20	5	715	0.029	20	0.1	0.0	5.325	A
C-D	6	2			6				
C-A	196	49			196				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	154	39	526	0.293	155	0.6	0.4	9.839	A
A-BCD	11	3	595	0.019	11	0.0	0.0	6.381	A
A-B	19	5			19				
A-C	55	14			55				
D-A	62	16	616	0.102	63	0.2	0.1	7.162	A
D-BC	133	33	497	0.266	133	0.5	0.4	10.003	B
C-ABD	16	4	700	0.023	16	0.0	0.0	5.405	A
C-D	5	1			5				
C-A	165	41			165				

APPENDIX K: JUNCTIONS 9 OUTPUT (J4)

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

Filename: J4 Turkey Rd_A269 Ninfield Rd (mini rbt).j9
Path: \\manchester32\jobs\2019\A115791 Bexhill, Fryatt Way\Jun. Ass\J4 Turkey Rd_A269 Ninfield Rd (mini rbt)
Report generation date: 09/06/2021 19:08:37

Summary of junction performance

	AM				PM			
	Q (PCU)	Delay (s)	RFC	Junction Delay (s)	Q (PCU)	Delay (s)	RFC	Junction Delay (s)
Existing Layout - 2028 Baseline Flows								
1 - A269 Ninfield Rd (E)	3.5	19.95	0.78	12.33	1.5	10.69	0.60	7.88
2 - Turkey Rd	0.6	6.98	0.35		0.5	6.67	0.33	
3 - A269 Ninfield Rd (W)	1.5	7.46	0.57		1.0	6.03	0.49	
Existing Layout - 2028 Ass. Flows								
1 - A269 Ninfield Rd (E)	3.6	20.40	0.78	12.58	1.6	11.13	0.62	8.10
2 - Turkey Rd	0.6	7.17	0.37		0.5	6.76	0.34	
3 - A269 Ninfield Rd (W)	1.5	7.61	0.58		1.0	6.09	0.49	

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of Av. delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted Av.s.

File summary

File Description

Title	
Location	
Site number	
Date	16/12/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	WYG\yujing.liu
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Av. delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)
JUNCTIONS 9	5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2028 Baseline Flows	AM	ONE HOUR	07:45	09:15	15	✓
D2	2028 Baseline Flows	PM	ONE HOUR	16:45	18:15	15	✓
D3	2028 Ass. Flows	AM	ONE HOUR	07:45	09:15	15	✓
D4	2028 Ass. Flows	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Existing Layout	✓	100.000	100.000

Existing Layout - 2028 Baseline Flows, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 82% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Turkey Road/A269 Ninfield Road (mini rbt)	Mini-roundabout		1, 2, 3	12.33	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Name	Description
1	A269 Ninfield Rd (E)	
2	Turkey Rd	
3	A269 Ninfield Rd (W)	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1 - A269 Ninfield Rd (E)	3.10	3.10	4.90	2.4	12.69	9.45	0.0	✓
2 - Turkey Rd	4.00	4.00	6.30	19.7	14.59	9.55	0.0	✓
3 - A269 Ninfield Rd (W)	3.20	3.20	4.70	10.9	19.64	19.47	0.0	✓

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A269 Ninfield Rd (E)	0.504	885
2 - Turkey Rd	0.582	1108
3 - A269 Ninfield Rd (W)	0.759	1435

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2028 Baseline Flows	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - A269 Ninfield Rd (E)		ONE HOUR	✓	602	100.000
2 - Turkey Rd		ONE HOUR	✓	264	100.000
3 - A269 Ninfield Rd (W)		ONE HOUR	✓	653	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A269 Ninfield Rd (E)	2 - Turkey Rd	3 - A269 Ninfield Rd (W)
From	1 - A269 Ninfield Rd (E)	0	176	426
	2 - Turkey Rd	221	0	43
	3 - A269 Ninfield Rd (W)	595	58	0

Vehicle Mix

HV %s

		To		
		1 - A269 Ninfield Rd (E)	2 - Turkey Rd	3 - A269 Ninfield Rd (W)
From	1 - A269 Ninfield Rd (E)	0	2	8
	2 - Turkey Rd	6	0	3
	3 - A269 Ninfield Rd (W)	11	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A269 Ninfield Rd (E)	0.78	19.95	3.5	C	552	829
2 - Turkey Rd	0.35	6.98	0.6	A	242	363
3 - A269 Ninfield Rd (W)	0.57	7.46	1.5	A	599	899

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A269 Ninfield Rd (E)	453	113	43	863	0.525	449	611	0.0	1.2	9.135	A
2 - Turkey Rd	199	50	317	923	0.215	198	175	0.0	0.3	5.219	A
3 - A269 Ninfield Rd (W)	492	123	165	1310	0.375	489	350	0.0	0.7	4.816	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A269 Ninfield Rd (E)	541	135	52	858	0.631	539	732	1.2	1.8	11.870	B
2 - Turkey Rd	237	59	381	886	0.268	237	210	0.3	0.4	5.848	A
3 - A269 Ninfield Rd (W)	587	147	198	1285	0.457	586	420	0.7	0.9	5.667	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A269 Ninfield Rd (E)	663	166	64	852	0.778	656	896	1.8	3.4	18.851	C
2 - Turkey Rd	291	73	464	837	0.347	290	256	0.4	0.6	6.928	A
3 - A269 Ninfield Rd (W)	719	180	243	1251	0.575	717	512	0.9	1.5	7.391	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A269 Ninfield Rd (E)	663	166	64	852	0.778	662	898	3.4	3.5	19.955	C
2 - Turkey Rd	291	73	469	835	0.348	291	257	0.6	0.6	6.976	A
3 - A269 Ninfield Rd (W)	719	180	243	1250	0.575	719	516	1.5	1.5	7.455	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A269 Ninfield Rd (E)	541	135	52	858	0.631	548	736	3.5	1.9	12.570	B
2 - Turkey Rd	237	59	388	882	0.269	238	213	0.6	0.4	5.901	A
3 - A269 Ninfield Rd (W)	587	147	199	1284	0.457	589	426	1.5	0.9	5.723	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A269 Ninfield Rd (E)	453	113	44	862	0.526	456	616	1.9	1.2	9.463	A
2 - Turkey Rd	199	50	323	920	0.216	199	177	0.4	0.3	5.271	A
3 - A269 Ninfield Rd (W)	492	123	167	1309	0.376	493	355	0.9	0.7	4.865	A

Existing Layout - 2028 Baseline Flows, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Turkey Road/A269 Ninfield Road (mini rbt)	Mini-roundabout		1, 2, 3	7.88	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2028 Baseline Flows	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - A269 Ninfield Rd (E)		ONE HOUR	✓	472	100.000
2 - Turkey Rd		ONE HOUR	✓	240	100.000
3 - A269 Ninfield Rd (W)		ONE HOUR	✓	563	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A269 Ninfield Rd (E)	2 - Turkey Rd	3 - A269 Ninfield Rd (W)
From	1 - A269 Ninfield Rd (E)	0	0	472
	2 - Turkey Rd	188	0	52
	3 - A269 Ninfield Rd (W)	524	39	0

Vehicle Mix

HV %s

		To		
		1 - A269 Ninfield Rd (E)	2 - Turkey Rd	3 - A269 Ninfield Rd (W)
From	1 - A269 Ninfield Rd (E)	0	0	2
	2 - Turkey Rd	0	0	1
	3 - A269 Ninfield Rd (W)	11	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A269 Ninfield Rd (E)	0.60	10.69	1.5	B	433	650
2 - Turkey Rd	0.33	6.67	0.5	A	220	330
3 - A269 Ninfield Rd (W)	0.49	6.03	1.0	A	517	775

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A269 Ninfield Rd (E)	355	89	29	870	0.409	353	533	0.0	0.7	7.061	A
2 - Turkey Rd	181	45	353	903	0.200	180	29	0.0	0.2	4.985	A
3 - A269 Ninfield Rd (W)	424	106	141	1328	0.319	422	391	0.0	0.5	4.371	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A269 Ninfield Rd (E)	424	106	35	867	0.489	423	639	0.7	1.0	8.256	A
2 - Turkey Rd	216	54	423	861	0.250	215	35	0.2	0.3	5.582	A
3 - A269 Ninfield Rd (W)	506	127	169	1307	0.387	505	470	0.5	0.7	4.950	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A269 Ninfield Rd (E)	520	130	43	863	0.602	518	782	1.0	1.5	10.564	B
2 - Turkey Rd	264	66	518	807	0.328	264	43	0.3	0.5	6.639	A
3 - A269 Ninfield Rd (W)	620	155	207	1278	0.485	619	575	0.7	1.0	6.006	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A269 Ninfield Rd (E)	520	130	43	863	0.602	520	784	1.5	1.5	10.690	B
2 - Turkey Rd	264	66	520	805	0.328	264	43	0.5	0.5	6.666	A
3 - A269 Ninfield Rd (W)	620	155	207	1278	0.485	620	577	1.0	1.0	6.033	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A269 Ninfield Rd (E)	424	106	35	867	0.490	426	642	1.5	1.0	8.379	A
2 - Turkey Rd	216	54	426	860	0.251	216	35	0.5	0.3	5.615	A
3 - A269 Ninfield Rd (W)	506	127	169	1307	0.387	507	473	1.0	0.7	4.977	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A269 Ninfield Rd (E)	355	89	29	870	0.409	356	537	1.0	0.7	7.169	A
2 - Turkey Rd	181	45	356	900	0.201	181	29	0.3	0.3	5.019	A
3 - A269 Ninfield Rd (W)	424	106	142	1328	0.319	425	396	0.7	0.5	4.403	A

Existing Layout - 2028 Ass. Flows, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 81% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Turkey Road/A269 Ninfield Road (mini rbt)	Mini-roundabout		1, 2, 3	12.58	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2028 Ass. Flows	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - A269 Ninfield Rd (E)		ONE HOUR	✓	606	100.000
2 - Turkey Rd		ONE HOUR	✓	277	100.000
3 - A269 Ninfield Rd (W)		ONE HOUR	✓	653	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A269 Ninfield Rd (E)	2 - Turkey Rd	3 - A269 Ninfield Rd (W)
From	1 - A269 Ninfield Rd (E)	0	180	426
	2 - Turkey Rd	234	0	43
	3 - A269 Ninfield Rd (W)	595	58	0

Vehicle Mix

HV %s

		To		
		1 - A269 Ninfield Rd (E)	2 - Turkey Rd	3 - A269 Ninfield Rd (W)
From	1 - A269 Ninfield Rd (E)	0	2	8
	2 - Turkey Rd	6	0	3
	3 - A269 Ninfield Rd (W)	11	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A269 Ninfield Rd (E)	0.78	20.40	3.6	C	556	834
2 - Turkey Rd	0.37	7.17	0.6	A	254	381
3 - A269 Ninfield Rd (W)	0.58	7.61	1.5	A	599	899

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A269 Ninfield Rd (E)	456	114	43	863	0.529	452	621	0.0	1.2	9.196	A
2 - Turkey Rd	209	52	317	923	0.226	207	178	0.0	0.3	5.299	A
3 - A269 Ninfield Rd (W)	492	123	175	1302	0.378	489	350	0.0	0.7	4.860	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A269 Ninfield Rd (E)	545	136	52	858	0.635	542	744	1.2	1.8	11.995	B
2 - Turkey Rd	249	62	381	886	0.281	249	213	0.3	0.4	5.957	A
3 - A269 Ninfield Rd (W)	587	147	210	1276	0.460	586	420	0.7	0.9	5.730	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A269 Ninfield Rd (E)	667	167	64	852	0.783	660	910	1.8	3.5	19.218	C
2 - Turkey Rd	305	76	464	838	0.364	304	260	0.4	0.6	7.112	A
3 - A269 Ninfield Rd (W)	719	180	257	1240	0.580	717	511	0.9	1.5	7.542	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A269 Ninfield Rd (E)	667	167	64	852	0.783	667	913	3.5	3.6	20.404	C
2 - Turkey Rd	305	76	469	835	0.365	305	262	0.6	0.6	7.166	A
3 - A269 Ninfield Rd (W)	719	180	258	1240	0.580	719	516	1.5	1.5	7.611	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A269 Ninfield Rd (E)	545	136	52	858	0.635	552	748	3.6	1.9	12.740	B
2 - Turkey Rd	249	62	388	882	0.282	250	216	0.6	0.4	6.014	A
3 - A269 Ninfield Rd (W)	587	147	211	1275	0.460	589	427	1.5	1.0	5.799	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A269 Ninfield Rd (E)	456	114	44	862	0.529	459	625	1.9	1.2	9.537	A
2 - Turkey Rd	209	52	323	920	0.227	209	180	0.4	0.3	5.345	A
3 - A269 Ninfield Rd (W)	492	123	177	1301	0.378	493	355	1.0	0.7	4.910	A

Existing Layout - 2028 Ass. Flows, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Turkey Road/A269 Ninfield Road (mini rbt)	Mini-roundabout		1, 2, 3	8.10	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2028 Ass. Flows	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - A269 Ninfield Rd (E)		ONE HOUR	✓	484	100.000
2 - Turkey Rd		ONE HOUR	✓	247	100.000
3 - A269 Ninfield Rd (W)		ONE HOUR	✓	564	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1 - A269 Ninfield Rd (E)	2 - Turkey Rd	3 - A269 Ninfield Rd (W)
From	1 - A269 Ninfield Rd (E)	0	12	472
	2 - Turkey Rd	194	0	53
	3 - A269 Ninfield Rd (W)	524	40	0

Vehicle Mix

HV %s

		To		
		1 - A269 Ninfield Rd (E)	2 - Turkey Rd	3 - A269 Ninfield Rd (W)
From	1 - A269 Ninfield Rd (E)	0	0	2
	2 - Turkey Rd	0	0	1
	3 - A269 Ninfield Rd (W)	11	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A269 Ninfield Rd (E)	0.62	11.13	1.6	B	444	666
2 - Turkey Rd	0.34	6.76	0.5	A	227	340
3 - A269 Ninfield Rd (W)	0.49	6.09	1.0	A	518	776

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A269 Ninfield Rd (E)	364	91	30	869	0.419	361	538	0.0	0.7	7.186	A
2 - Turkey Rd	186	46	353	903	0.206	185	39	0.0	0.3	5.019	A
3 - A269 Ninfield Rd (W)	425	106	145	1325	0.320	423	392	0.0	0.5	4.391	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A269 Ninfield Rd (E)	435	109	36	866	0.502	434	645	0.7	1.0	8.464	A
2 - Turkey Rd	222	56	423	861	0.258	222	47	0.3	0.3	5.637	A
3 - A269 Ninfield Rd (W)	507	127	174	1303	0.389	506	471	0.5	0.7	4.980	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A269 Ninfield Rd (E)	533	133	44	862	0.618	531	789	1.0	1.6	10.980	B
2 - Turkey Rd	272	68	517	807	0.337	271	57	0.3	0.5	6.730	A
3 - A269 Ninfield Rd (W)	621	155	213	1273	0.488	620	576	0.7	1.0	6.062	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A269 Ninfield Rd (E)	533	133	44	862	0.618	533	790	1.6	1.6	11.130	B
2 - Turkey Rd	272	68	520	805	0.338	272	57	0.5	0.5	6.763	A
3 - A269 Ninfield Rd (W)	621	155	214	1273	0.488	621	578	1.0	1.0	6.089	A

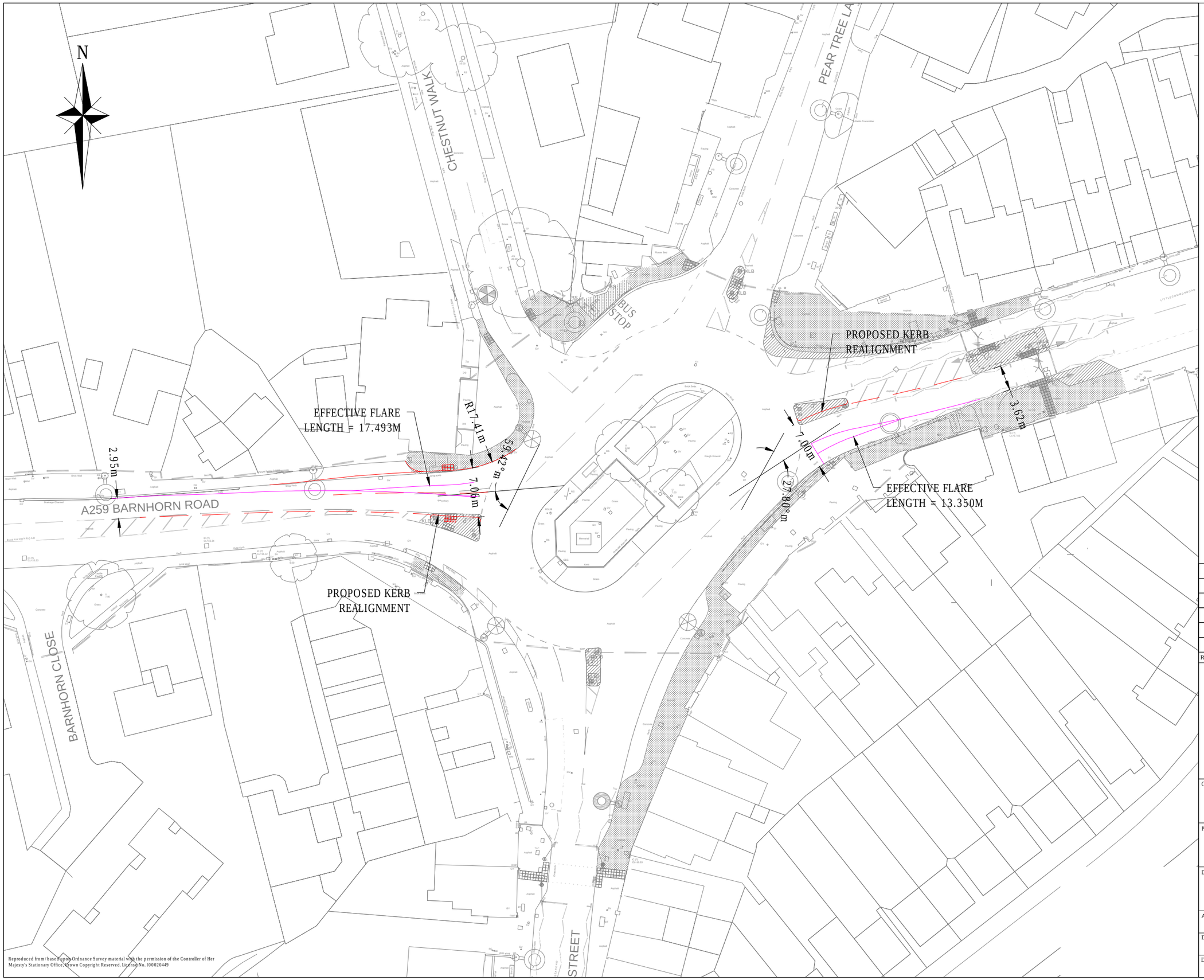
17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A269 Ninfield Rd (E)	435	109	36	866	0.502	437	647	1.6	1.0	8.602	A
2 - Turkey Rd	222	56	427	859	0.258	223	47	0.5	0.4	5.670	A
3 - A269 Ninfield Rd (W)	507	127	175	1302	0.389	508	474	1.0	0.7	5.010	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A269 Ninfield Rd (E)	364	91	30	869	0.419	366	542	1.0	0.7	7.302	A
2 - Turkey Rd	186	46	357	900	0.207	186	39	0.4	0.3	5.057	A
3 - A269 Ninfield Rd (W)	425	106	146	1324	0.321	425	397	0.7	0.5	4.423	A

APPENDIX L: COMMITTED HIGHWAY IMPROVEMENT (J5)



NOTES

1) DO NOT SCALE FROM THIS DRAWING. WORK FROM FIGURED DIMENSIONS ONLY.
2) ALL DIMENSIONS SHOWN ON THIS DRAWING ARE IN METRES UNLESS OTHERWISE STATED.
3) CONSENTED ROUNDABOUT LAYOUT INDICATIVELY RECREATED USING PBA'S DRAWING NUMBER 33228/2002/03/001 REVISION P.
4) ICD DIMENSIONS PROVIDED BY HIGHWAYS ENGLAND.

KEY

PROPOSED IMPROVEMENTS

PRELIMINARY

Rev	Description	Drn	Chk	App	Date
F	MAPPING AND HE MEASUREMENTS INCLUDED	AG	PR	ATB	04.06.19
E	REVISED IMRPOVEMENT SCHEME	AG	PR	ATB	09.05.19
D	REVISED BASE ROUNDABOUT LAYOUT INCLUDED	AG	PR	ATB	12.04.19
C	REVISED FURTHER TO HIGHWAYS ENGLAND COMMENTS	AG	PR	ATB	15.03.19
B	REVISED FURTHER TO HIGHWAYS ENGLAND COMMENTS	AG	ATB	SJH	06.02.19
A	CLIENT DETAILS REVISED	AG	ATB	SJH	08.11.18

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Client

BELLWAY HOMES LIMITED

Project Title:

CLAVERING WALK, BEXHILL-ON-SEA

Drawing Title:

PROPOSED IMPROVEMENT SCHEME AT LITTLE COMMON ROUNDABOUT

A3 Scale	Date	Designed by
1:500	30.10.18	AG
Drawn by	**Checked by**	**Approved by**
AG	ATB	SJH

Drawing Number	Rev
180300-003	F

APPENDIX M: JUNCTIONS 9 OUTPUT (J5)

Junctions 9

ARCADY 9 - Roundabout Module

Filename: Little Common Roundabout -180300-003 F.j9
Path: \\manchester32\jobs\2019\A115791 Bexhill, Fryatt Way\Jun. Ass\J5 Little Common Rdt
Report generation date: 09/06/2021 19:09:34

»Drawing No. 180300-003F - 2028 Baseline Flows, AM
»Drawing No. 180300-003F - 2028 Baseline Flows, PM
»Drawing No. 180300-003F - 2028 Assessment Flows, AM
»Drawing No. 180300-003F - 2028 Assessment Flows, PM

Summary of junction performance

	AM				PM			
	Q (PCU)	Delay (s)	RFC	Junction Delay (s)	Q (PCU)	Delay (s)	RFC	Junction Delay (s)
Drawing No. 180300-003F - 2028 Baseline Flows								
1 - Pear Tree Lane	0.9	11.69	0.49	36.16	0.4	8.62	0.28	102.96
2 - Little Common Road (A259)	5.4	27.33	0.87		3.0	15.34	0.76	
3 - Cooden Sea Road	0.6	5.17	0.35		0.8	5.75	0.44	
4 - Barnhorn Road (A259)	17.1	62.45	1.00		68.3	216.35	1.14	
5 - Chestnut Walk	0.3	15.76	0.26		0.2	13.79	0.17	
Drawing No. 180300-003F - 2028 Assessment Flows								
1 - Pear Tree Lane	0.9	11.81	0.49	39.63	0.4	8.68	0.28	120.04
2 - Little Common Road (A259)	6.4	31.64	0.89		3.2	15.94	0.77	
3 - Cooden Sea Road	0.6	5.26	0.36		0.8	5.83	0.45	
4 - Barnhorn Road (A259)	18.6	67.85	1.01		78.2	253.54	1.16	
5 - Chestnut Walk	0.4	15.97	0.26		0.2	13.93	0.18	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of Av. delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted Av.s.

File summary

File Description

Title	
Location	
Site number	
Date	12/02/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	WYG\patrick.tallents
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Av. delay units	Total delay units	Rate of delay units
m	mph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2028 Baseline Flows	AM	ONE HOUR	07:45	09:15	10	✓
D2	2028 Baseline Flows	PM	ONE HOUR	16:45	18:15	10	✓
D3	2028 Assessment Flows	AM	ONE HOUR	07:45	09:15	10	✓
D4	2028 Assessment Flows	PM	ONE HOUR	16:45	18:15	10	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Drawing No. 180300-003F	✓	100.000	100.000

Drawing No. 180300-003F - 2028 Baseline Flows, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Little Common Roundabout	Standard Roundabout		1, 2, 3, 4, 5	36.16	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Pear Tree Lane	
2	Little Common Road (A259)	
3	Cooden Sea Road	
4	Barnhorn Road (A259)	
5	Chestnut Walk	

Roundabout Geometry

Arm	V (m)	E (m)	I' (m)	R (m)	D (m)	PHI (deg)	Exit only
1 - Pear Tree Lane	3.16	5.66	17.0	4.9	49.4	68.0	
2 - Little Common Road (A259)	3.62	7.00	13.4	24.5	48.0	38.3	
3 - Cooden Sea Road	3.42	7.84	12.3	28.1	49.4	34.2	
4 - Barnhorn Road (A259)	2.95	7.06	17.5	17.4	48.0	59.4	
5 - Chestnut Walk	2.95	5.21	1.4	8.0	34.4	60.4	

Pelican/Puffin Crossings

Arm	Space between crossing and junc. entry (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
2 - Little Common Road (A259)	3.00	3.00	2.90	1.00	5.00	6.00	7.00
3 - Cooden Sea Road	5.00	3.00	2.90	1.00	5.00	6.00	7.00

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
1 - Pear Tree Lane	None		
2 - Little Common Road (A259)	Direct		-450
3 - Cooden Sea Road	None		
4 - Barnhorn Road (A259)	Direct		-225
5 - Chestnut Walk	None		

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Pear Tree Lane	0.407	1056
2 - Little Common Road (A259)	0.598	1180
3 - Cooden Sea Road	0.603	1658
4 - Barnhorn Road (A259)	0.533	1204
5 - Chestnut Walk	0.420	825

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2028 Baseline Flows	AM	ONE HOUR	07:45	09:15	10	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Pear Tree Lane		ONE HOUR	✓	288	100.000
2 - Little Common Road (A259)		ONE HOUR	✓	740	100.000
3 - Cooden Sea Road		ONE HOUR	✓	402	100.000
4 - Barnhorn Road (A259)		ONE HOUR	✓	1053	100.000
5 - Chestnut Walk		ONE HOUR	✓	80	100.000

Demand overview (Pedestrians)

Arm	Profile type	Av. Ped flow (Ped/hr)
1 - Pear Tree Lane		
2 - Little Common Road (A259)	[ONEHOUR]	17.00
3 - Cooden Sea Road	[ONEHOUR]	9.00
4 - Barnhorn Road (A259)		
5 - Chestnut Walk		

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk
From	1 - Pear Tree Lane	0	15	155	118	0
	2 - Little Common Road (A259)	3	0	63	654	20
	3 - Cooden Sea Road	122	92	0	171	17
	4 - Barnhorn Road (A259)	50	766	204	0	33
	5 - Chestnut Walk	0	32	35	13	0

Vehicle Mix

HV %s

		To				
		1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk
From	1 - Pear Tree Lane	0	2	1	0	0
	2 - Little Common Road (A259)	6	0	5	3	3
	3 - Cooden Sea Road	9	2	0	10	7
	4 - Barnhorn Road (A259)	2	6	7	0	3
	5 - Chestnut Walk	0	2	3	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Pear Tree Lane	0.49	11.69	0.9	B	235	353
2 - Little Common Road (A259)	0.87	27.33	5.4	D	605	907
3 - Cooden Sea Road	0.35	5.17	0.6	A	328	493
4 - Barnhorn Road (A259)	1.00	62.45	17.1	F	860	1290
5 - Chestnut Walk	0.26	15.76	0.3	C	65	98

Main Results for each time segment

07:45 - 07:55

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	195	32	761		746	0.261	193	117	0.0	0.4	6.518	A
2 - Little Common Road (A259)	500	83	350	11.50	958	0.522	494	603	0.0	1.1	7.898	A
3 - Cooden Sea Road	272	45	539	6.09	1320	0.206	270	305	0.0	0.3	3.678	A
4 - Barnhorn Road (A259)	712	119	171		1113	0.640	701	639	0.0	1.8	9.033	A
5 - Chestnut Walk	54	9	825		479	0.113	53	47	0.0	0.1	8.681	A

07:55 - 08:05

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	195	32	772		742	0.262	195	118	0.4	0.4	6.619	A
2 - Little Common Road (A259)	500	83	355	11.50	961	0.520	500	612	1.1	1.1	8.052	A
3 - Cooden Sea Road	272	45	546	6.09	1317	0.206	272	309	0.3	0.3	3.706	A
4 - Barnhorn Road (A259)	712	119	172		1113	0.640	712	646	1.8	1.8	9.495	A
5 - Chestnut Walk	54	9	836		474	0.114	54	47	0.1	0.1	8.808	A

08:05 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	244	41	954		668	0.365	243	147	0.4	0.6	8.496	A
2 - Little Common Road (A259)	627	104	441	14.40	916	0.684	621	756	1.1	2.1	12.316	B
3 - Cooden Sea Road	341	57	678	7.62	1236	0.276	340	383	0.3	0.4	4.320	A
4 - Barnhorn Road (A259)	892	149	215		1090	0.818	878	804	1.8	4.2	16.965	C
5 - Chestnut Walk	68	11	1034		391	0.173	67	59	0.1	0.2	11.410	B

08:15 - 08:25

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	279	47	1075		619	0.451	278	168	0.6	0.8	10.582	B
2 - Little Common Road (A259)	718	120	501	16.48	880	0.815	707	852	2.1	3.9	20.143	C
3 - Cooden Sea Road	390	65	773	8.73	1179	0.331	389	435	0.4	0.5	4.902	A
4 - Barnhorn Road (A259)	1021	170	246		1073	0.951	987	916	4.2	9.9	34.101	D
5 - Chestnut Walk	78	13	1166		336	0.231	77	66	0.2	0.3	14.274	B

08:25 - 08:35

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	292	49	1120		600	0.487	291	175	0.8	0.9	11.694	B
2 - Little Common Road (A259)	751	125	524	17.24	867	0.866	742	888	3.9	5.4	27.326	D
3 - Cooden Sea Road	408	68	811	9.13	1156	0.353	407	454	0.5	0.6	5.171	A
4 - Barnhorn Road (A259)	1068	178	257		1067	1.001	1027	961	9.9	16.8	56.220	F
5 - Chestnut Walk	81	14	1214		315	0.257	81	69	0.3	0.3	15.759	C

08:35 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	279	47	1106		606	0.461	280	170	0.9	0.9	11.115	B
2 - Little Common Road (A259)	718	120	509	16.48	875	0.820	719	876	5.4	5.1	24.380	C
3 - Cooden Sea Road	390	65	785	8.73	1172	0.332	390	443	0.6	0.5	4.955	A
4 - Barnhorn Road (A259)	1021	170	246		1073	0.952	1019	929	16.8	17.1	62.446	F
5 - Chestnut Walk	78	13	1198		322	0.241	78	68	0.3	0.3	15.136	C

08:45 - 08:55

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	244	41	1031		636	0.383	245	152	0.9	0.6	9.302	A
2 - Little Common Road (A259)	627	104	460	14.40	905	0.693	642	817	5.1	2.5	14.881	B
3 - Cooden Sea Road	341	57	699	7.62	1224	0.278	341	403	0.5	0.4	4.390	A
4 - Barnhorn Road (A259)	892	149	216		1089	0.819	960	825	17.1	5.7	35.392	E
5 - Chestnut Walk	68	11	1115		357	0.190	68	62	0.3	0.2	12.832	B

08:55 - 09:05

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	195	32	794		733	0.266	196	120	0.6	0.4	6.771	A
2 - Little Common Road (A259)	500	83	361	11.50	964	0.519	508	629	2.5	1.1	8.294	A
3 - Cooden Sea Road	272	45	554	6.09	1313	0.207	273	315	0.4	0.3	3.730	A
4 - Barnhorn Road (A259)	712	119	172		1112	0.640	734	655	5.7	2.0	10.626	B
5 - Chestnut Walk	54	9	859		465	0.116	55	48	0.2	0.1	9.039	A

09:05 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	195	32	772		742	0.263	195	118	0.4	0.4	6.626	A
2 - Little Common Road (A259)	500	83	355	11.50	962	0.520	500	612	1.1	1.1	8.057	A
3 - Cooden Sea Road	272	45	546	6.09	1317	0.206	272	309	0.3	0.3	3.706	A
4 - Barnhorn Road (A259)	712	119	172		1113	0.640	712	647	2.0	1.9	9.539	A
5 - Chestnut Walk	54	9	837		474	0.114	54	47	0.1	0.1	8.816	A

Drawing No. 180300-003F - 2028 Baseline Flows, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Little Common Roundabout	Standard Roundabout		1, 2, 3, 4, 5	102.96	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2028 Baseline Flows	PM	ONE HOUR	16:45	18:15	10	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Pear Tree Lane		ONE HOUR	✓	165	100.000
2 - Little Common Road (A259)		ONE HOUR	✓	727	100.000
3 - Cooden Sea Road		ONE HOUR	✓	513	100.000
4 - Barnhorn Road (A259)		ONE HOUR	✓	1182	100.000
5 - Chestnut Walk		ONE HOUR	✓	55	100.000

Demand overview (Pedestrians)

Arm	Profile type	Av. Ped flow (Ped/hr)
1 - Pear Tree Lane		
2 - Little Common Road (A259)	[ONEHOUR]	17.00
3 - Cooden Sea Road	[ONEHOUR]	9.00
4 - Barnhorn Road (A259)		
5 - Chestnut Walk		

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk
From	1 - Pear Tree Lane	0	14	111	40	0
	2 - Little Common Road (A259)	3	0	20	664	40
	3 - Cooden Sea Road	100	117	0	268	28
	4 - Barnhorn Road (A259)	11	913	172	0	86
	5 - Chestnut Walk	0	19	9	27	0

Vehicle Mix

HV %s

		To				
		1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk
From	1 - Pear Tree Lane	0	2	1	7	0
	2 - Little Common Road (A259)	17	0	1	5	1
	3 - Cooden Sea Road	2	2	0	8	0
	4 - Barnhorn Road (A259)	4	5	7	0	8
	5 - Chestnut Walk	0	1	0	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Pear Tree Lane	0.28	8.62	0.4	A	135	202
2 - Little Common Road (A259)	0.76	15.34	3.0	C	594	891
3 - Cooden Sea Road	0.44	5.75	0.8	A	419	629
4 - Barnhorn Road (A259)	1.14	216.35	68.3	F	966	1448
5 - Chestnut Walk	0.17	13.79	0.2	B	45	67

Main Results for each time segment

16:45 - 16:55

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	112	19	835		716	0.156	110	76	0.0	0.2	6.076	A
2 - Little Common Road (A259)	492	82	239	11.50	1022	0.481	486	706	0.0	0.9	6.956	A
3 - Cooden Sea Road	347	58	517	6.09	1334	0.260	345	208	0.0	0.4	3.811	A
4 - Barnhorn Road (A259)	799	133	193		1101	0.726	784	669	0.0	2.6	11.464	B
5 - Chestnut Walk	37	6	874		458	0.081	37	103	0.0	0.1	8.809	A

16:55 - 17:05

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	112	19	849		710	0.157	112	77	0.2	0.2	6.160	A
2 - Little Common Road (A259)	492	82	243	11.50	1026	0.479	492	718	0.9	1.0	7.057	A
3 - Cooden Sea Road	347	58	523	6.09	1331	0.261	347	211	0.4	0.4	3.836	A
4 - Barnhorn Road (A259)	799	133	195		1100	0.726	799	675	2.6	2.7	12.526	B
5 - Chestnut Walk	37	6	889		452	0.082	37	104	0.1	0.1	8.964	A

17:05 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	140	23	1033		636	0.220	139	96	0.2	0.3	7.425	A
2 - Little Common Road (A259)	616	103	298	14.40	996	0.619	612	874	1.0	1.6	9.715	A
3 - Cooden Sea Road	435	72	651	7.62	1253	0.347	433	259	0.4	0.6	4.604	A
4 - Barnhorn Road (A259)	1001	167	243		1075	0.932	967	842	2.7	8.4	28.844	D
5 - Chestnut Walk	47	8	1083		371	0.126	46	128	0.1	0.1	11.447	B

17:15 - 17:25

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	160	27	1116		602	0.266	160	109	0.3	0.4	8.333	A
2 - Little Common Road (A259)	705	117	331	16.48	982	0.718	700	944	1.6	2.5	13.109	B
3 - Cooden Sea Road	497	83	745	8.73	1197	0.416	496	286	0.6	0.7	5.383	A
4 - Barnhorn Road (A259)	1146	191	278		1056	1.086	1035	963	8.4	26.9	72.700	F
5 - Chestnut Walk	53	9	1172		333	0.160	53	141	0.1	0.2	13.266	B

17:25 - 17:35

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	167	28	1133		595	0.281	167	114	0.4	0.4	8.619	A
2 - Little Common Road (A259)	737	123	341	17.24	976	0.756	734	959	2.5	3.0	15.343	C
3 - Cooden Sea Road	520	87	782	9.13	1176	0.443	520	294	0.7	0.8	5.754	A
4 - Barnhorn Road (A259)	1199	200	292		1049	1.143	1044	1010	26.9	52.7	146.226	F
5 - Chestnut Walk	56	9	1191		325	0.172	56	145	0.2	0.2	13.794	B

17:35 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	160	27	1133		595	0.269	160	110	0.4	0.4	8.486	A
2 - Little Common Road (A259)	705	117	335	16.48	980	0.719	706	958	3.0	2.8	13.882	B
3 - Cooden Sea Road	497	83	752	8.73	1194	0.416	498	289	0.8	0.8	5.426	A
4 - Barnhorn Road (A259)	1146	191	279		1055	1.086	1052	970	52.7	68.3	213.448	F
5 - Chestnut Walk	53	9	1189		326	0.164	53	143	0.2	0.2	13.646	B

17:45 - 17:55

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	140	23	1117		601	0.232	140	97	0.4	0.3	8.004	A
2 - Little Common Road (A259)	616	103	313	14.40	993	0.620	622	944	2.8	1.8	10.333	B
3 - Cooden Sea Road	435	72	662	7.62	1248	0.348	436	273	0.8	0.6	4.657	A
4 - Barnhorn Road (A259)	1001	167	245		1074	0.933	1057	853	68.3	58.9	216.346	F
5 - Chestnut Walk	47	8	1167		335	0.139	47	135	0.2	0.2	12.905	B

17:55 - 18:05

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	112	19	1109		605	0.184	112	80	0.3	0.2	7.494	A
2 - Little Common Road (A259)	492	82	284	11.50	1006	0.489	496	937	1.8	1.0	7.453	A
3 - Cooden Sea Road	347	58	528	6.09	1329	0.261	348	252	0.6	0.4	3.854	A
4 - Barnhorn Road (A259)	799	133	196		1100	0.727	1081	681	58.9	12.1	122.790	F
5 - Chestnut Walk	37	6	1151		342	0.109	37	125	0.2	0.1	12.224	B

18:05 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	112	19	900		690	0.162	112	78	0.2	0.2	6.383	A
2 - Little Common Road (A259)	492	82	251	11.50	1021	0.481	492	761	1.0	1.0	7.125	A
3 - Cooden Sea Road	347	58	524	6.09	1331	0.261	347	219	0.4	0.4	3.837	A
4 - Barnhorn Road (A259)	799	133	195		1100	0.726	853	676	12.1	3.0	18.072	C
5 - Chestnut Walk	37	6	940		430	0.086	37	108	0.1	0.1	9.460	A

Drawing No. 180300-003F - 2028 Assessment Flows, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Little Common Roundabout	Standard Roundabout		1, 2, 3, 4, 5	39.63	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2028 Assessment Flows	AM	ONE HOUR	07:45	09:15	10	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Pear Tree Lane		ONE HOUR	✓	289	100.000
2 - Little Common Road (A259)		ONE HOUR	✓	764	100.000
3 - Cooden Sea Road		ONE HOUR	✓	403	100.000
4 - Barnhorn Road (A259)		ONE HOUR	✓	1060	100.000
5 - Chestnut Walk		ONE HOUR	✓	81	100.000

Demand overview (Pedestrians)

Arm	Profile type	Av. Ped flow (Ped/hr)
1 - Pear Tree Lane		
2 - Little Common Road (A259)	[ONEHOUR]	17.00
3 - Cooden Sea Road	[ONEHOUR]	9.00
4 - Barnhorn Road (A259)		
5 - Chestnut Walk		

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk
From	1 - Pear Tree Lane	0	16	155	118	0
	2 - Little Common Road (A259)	4	0	65	674	21
	3 - Cooden Sea Road	122	93	0	171	17
	4 - Barnhorn Road (A259)	50	773	204	0	33
	5 - Chestnut Walk	0	33	35	13	0

Vehicle Mix

HV %s

		To				
		1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk
From	1 - Pear Tree Lane	0	2	1	0	0
	2 - Little Common Road (A259)	6	0	5	3	3
	3 - Cooden Sea Road	9	2	0	10	7
	4 - Barnhorn Road (A259)	2	6	7	0	3
	5 - Chestnut Walk	0	2	3	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Pear Tree Lane	0.49	11.81	0.9	B	236	354
2 - Little Common Road (A259)	0.89	31.64	6.4	D	624	936
3 - Cooden Sea Road	0.36	5.26	0.6	A	329	494
4 - Barnhorn Road (A259)	1.01	67.85	18.6	F	866	1299
5 - Chestnut Walk	0.26	15.97	0.4	C	66	99

Main Results for each time segment

07:45 - 07:55

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	195	33	767		744	0.263	193	118	0.0	0.4	6.554	A
2 - Little Common Road (A259)	517	86	350	11.50	958	0.539	510	610	0.0	1.2	8.157	A
3 - Cooden Sea Road	273	45	554	6.09	1312	0.208	271	306	0.0	0.3	3.715	A
4 - Barnhorn Road (A259)	717	119	173		1112	0.644	706	652	0.0	1.8	9.150	A
5 - Chestnut Walk	55	9	831		476	0.115	54	47	0.0	0.1	8.744	A

07:55 - 08:05

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	195	33	778		739	0.264	195	119	0.4	0.4	6.658	A
2 - Little Common Road (A259)	517	86	355	11.50	962	0.537	517	619	1.2	1.2	8.329	A
3 - Cooden Sea Road	273	45	561	6.09	1308	0.208	272	310	0.3	0.3	3.740	A
4 - Barnhorn Road (A259)	717	119	174		1112	0.645	717	660	1.8	1.9	9.637	A
5 - Chestnut Walk	55	9	842		471	0.116	55	48	0.1	0.1	8.876	A

08:05 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	245	41	961		665	0.368	244	148	0.4	0.6	8.569	A
2 - Little Common Road (A259)	647	108	440	14.40	916	0.706	640	764	1.2	2.3	13.130	B
3 - Cooden Sea Road	341	57	696	7.62	1225	0.279	341	385	0.3	0.4	4.375	A
4 - Barnhorn Road (A259)	898	150	217		1089	0.825	883	820	1.9	4.3	17.434	C
5 - Chestnut Walk	69	11	1041		388	0.177	68	59	0.1	0.2	11.560	B

08:15 - 08:25

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	280	47	1081		616	0.455	279	169	0.6	0.8	10.695	B
2 - Little Common Road (A259)	741	123	500	16.48	881	0.841	728	860	2.3	4.5	22.427	C
3 - Cooden Sea Road	391	65	792	8.73	1168	0.335	390	436	0.4	0.5	4.977	A
4 - Barnhorn Road (A259)	1028	171	248		1072	0.959	991	934	4.3	10.5	35.626	E
5 - Chestnut Walk	79	13	1172		333	0.236	78	67	0.2	0.3	14.467	B

08:25 - 08:35

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	293	49	1125		598	0.490	292	176	0.8	0.9	11.812	B
2 - Little Common Road (A259)	775	129	523	17.24	867	0.894	763	894	4.5	6.4	31.642	D
3 - Cooden Sea Road	409	68	831	9.13	1145	0.357	408	455	0.5	0.6	5.260	A
4 - Barnhorn Road (A259)	1075	179	260		1066	1.009	1029	979	10.5	18.1	59.622	F
5 - Chestnut Walk	82	14	1219		313	0.262	82	70	0.3	0.4	15.967	C

08:35 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	280	47	1113		603	0.465	280	171	0.9	0.9	11.251	B
2 - Little Common Road (A259)	741	123	509	16.48	876	0.846	742	885	6.4	6.2	28.735	D
3 - Cooden Sea Road	391	65	806	8.73	1160	0.337	391	445	0.6	0.6	5.039	A
4 - Barnhorn Road (A259)	1028	171	249		1071	0.959	1025	948	18.1	18.6	67.854	F
5 - Chestnut Walk	79	13	1205		319	0.246	79	69	0.4	0.3	15.392	C

08:45 - 08:55

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	245	41	1045		631	0.388	246	153	0.9	0.7	9.462	A
2 - Little Common Road (A259)	647	108	461	14.40	904	0.716	667	831	6.2	2.8	16.801	C
3 - Cooden Sea Road	341	57	722	7.62	1211	0.282	342	406	0.6	0.4	4.463	A
4 - Barnhorn Road (A259)	898	150	219		1088	0.826	973	846	18.6	6.1	39.463	E
5 - Chestnut Walk	69	11	1129		351	0.195	69	63	0.3	0.3	13.143	B

08:55 - 09:05

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	195	33	802		730	0.268	197	120	0.7	0.4	6.822	A
2 - Little Common Road (A259)	517	86	362	11.50	964	0.536	526	637	2.8	1.2	8.664	A
3 - Cooden Sea Road	273	45	571	6.09	1303	0.209	273	317	0.4	0.3	3.765	A
4 - Barnhorn Road (A259)	717	119	175		1111	0.645	741	669	6.1	2.0	10.909	B
5 - Chestnut Walk	55	9	867		461	0.119	55	49	0.3	0.1	9.129	A

09:05 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	195	33	779		739	0.264	195	119	0.4	0.4	6.665	A
2 - Little Common Road (A259)	517	86	355	11.50	963	0.537	517	619	1.2	1.2	8.334	A
3 - Cooden Sea Road	273	45	561	6.09	1308	0.208	273	310	0.3	0.3	3.740	A
4 - Barnhorn Road (A259)	717	119	174		1112	0.645	717	660	2.0	2.0	9.679	A
5 - Chestnut Walk	55	9	843		471	0.116	55	48	0.1	0.1	8.882	A

Drawing No. 180300-003F - 2028 Assessment Flows, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Little Common Roundabout	Standard Roundabout		1, 2, 3, 4, 5	120.04	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2028 Assessment Flows	PM	ONE HOUR	16:45	18:15	10	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Pear Tree Lane		ONE HOUR	✓	166	100.000
2 - Little Common Road (A259)		ONE HOUR	✓	738	100.000
3 - Cooden Sea Road		ONE HOUR	✓	516	100.000
4 - Barnhorn Road (A259)		ONE HOUR	✓	1200	100.000
5 - Chestnut Walk		ONE HOUR	✓	56	100.000

Demand overview (Pedestrians)

Arm	Profile type	Av. Ped flow (Ped/hr)
1 - Pear Tree Lane		
2 - Little Common Road (A259)	[ONEHOUR]	17.00
3 - Cooden Sea Road	[ONEHOUR]	9.00
4 - Barnhorn Road (A259)		
5 - Chestnut Walk		

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk
From	1 - Pear Tree Lane	0	15	111	40	0
	2 - Little Common Road (A259)	4	0	21	673	40
	3 - Cooden Sea Road	100	120	0	268	28
	4 - Barnhorn Road (A259)	11	931	172	0	86
	5 - Chestnut Walk	0	20	9	27	0

Vehicle Mix

HV %s

		To				
		1 - Pear Tree Lane	2 - Little Common Road (A259)	3 - Cooden Sea Road	4 - Barnhorn Road (A259)	5 - Chestnut Walk
From	1 - Pear Tree Lane	0	2	1	7	0
	2 - Little Common Road (A259)	17	0	1	5	1
	3 - Cooden Sea Road	2	2	0	8	0
	4 - Barnhorn Road (A259)	4	5	7	0	8
	5 - Chestnut Walk	0	1	0	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Pear Tree Lane	0.28	8.68	0.4	A	136	203
2 - Little Common Road (A259)	0.77	15.94	3.2	C	603	904
3 - Cooden Sea Road	0.45	5.83	0.8	A	422	632
4 - Barnhorn Road (A259)	1.16	253.54	78.2	F	980	1470
5 - Chestnut Walk	0.18	13.93	0.2	B	46	69

Main Results for each time segment

16:45 - 16:55

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	112	19	849		711	0.158	111	77	0.0	0.2	6.141	A
2 - Little Common Road (A259)	499	83	239	11.50	1023	0.488	493	721	0.0	1.0	7.048	A
3 - Cooden Sea Road	349	58	524	6.09	1330	0.262	347	208	0.0	0.4	3.833	A
4 - Barnhorn Road (A259)	811	135	196		1100	0.738	795	675	0.0	2.8	11.896	B
5 - Chestnut Walk	38	6	888		452	0.084	37	103	0.0	0.1	8.944	A

16:55 - 17:05

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	112	19	864		704	0.159	112	78	0.2	0.2	6.229	A
2 - Little Common Road (A259)	499	83	243	11.50	1026	0.486	499	734	1.0	1.0	7.154	A
3 - Cooden Sea Road	349	58	530	6.09	1327	0.263	349	212	0.4	0.4	3.860	A
4 - Barnhorn Road (A259)	811	135	197		1099	0.738	811	682	2.8	2.9	13.103	B
5 - Chestnut Walk	38	6	904		445	0.085	38	104	0.1	0.1	9.112	A

17:05 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	141	23	1047		630	0.223	140	97	0.2	0.3	7.520	A
2 - Little Common Road (A259)	625	104	298	14.40	997	0.627	621	889	1.0	1.7	9.921	A
3 - Cooden Sea Road	437	73	660	7.62	1248	0.350	436	259	0.4	0.6	4.644	A
4 - Barnhorn Road (A259)	1016	169	247		1073	0.947	977	849	2.9	9.4	31.303	D
5 - Chestnut Walk	47	8	1097		365	0.130	47	127	0.1	0.2	11.683	B

17:15 - 17:25

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	161	27	1123		599	0.269	160	110	0.3	0.4	8.406	A
2 - Little Common Road (A259)	716	119	329	16.48	983	0.728	710	954	1.7	2.6	13.524	B
3 - Cooden Sea Road	500	83	755	8.73	1191	0.420	499	285	0.6	0.7	5.447	A
4 - Barnhorn Road (A259)	1164	194	282		1054	1.104	1037	972	9.4	30.5	80.371	F
5 - Chestnut Walk	54	9	1179		330	0.165	54	140	0.2	0.2	13.446	B

17:25 - 17:35

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	168	28	1137		593	0.284	168	115	0.4	0.4	8.675	A
2 - Little Common Road (A259)	749	125	339	17.24	977	0.766	745	966	2.6	3.2	15.938	C
3 - Cooden Sea Road	523	87	792	9.13	1170	0.447	523	292	0.7	0.8	5.831	A
4 - Barnhorn Road (A259)	1217	203	296		1047	1.163	1043	1019	30.5	59.4	163.716	F
5 - Chestnut Walk	57	9	1195		323	0.176	57	144	0.2	0.2	13.932	B

17:35 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	161	27	1137		593	0.271	161	111	0.4	0.4	8.537	A
2 - Little Common Road (A259)	716	119	332	16.48	981	0.729	717	966	3.2	3.0	14.381	B
3 - Cooden Sea Road	500	83	761	8.73	1189	0.421	501	287	0.8	0.8	5.493	A
4 - Barnhorn Road (A259)	1164	194	283		1053	1.105	1051	979	59.4	78.2	241.704	F
5 - Chestnut Walk	54	9	1193		324	0.168	54	141	0.2	0.2	13.769	B

17:45 - 17:55

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	141	23	1122		599	0.235	141	98	0.4	0.3	8.053	A
2 - Little Common Road (A259)	625	104	310	14.40	994	0.629	632	952	3.0	1.8	10.591	B
3 - Cooden Sea Road	437	73	671	7.62	1243	0.352	438	272	0.8	0.6	4.700	A
4 - Barnhorn Road (A259)	1016	169	248		1072	0.948	1058	861	78.2	71.3	253.538	F
5 - Chestnut Walk	47	8	1172		333	0.142	48	134	0.2	0.2	13.030	B

17:55 - 18:05

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	112	19	1115		602	0.186	113	81	0.3	0.2	7.540	A
2 - Little Common Road (A259)	499	83	282	11.50	1008	0.495	504	945	1.8	1.1	7.545	A
3 - Cooden Sea Road	349	58	535	6.09	1325	0.263	350	251	0.6	0.4	3.880	A
4 - Barnhorn Road (A259)	811	135	198		1098	0.739	1082	687	71.3	26.1	165.059	F
5 - Chestnut Walk	38	6	1157		339	0.112	38	124	0.2	0.1	12.343	B

18:05 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Pear Tree Lane	112	19	991		653	0.172	112	79	0.2	0.2	6.829	A
2 - Little Common Road (A259)	499	83	263	11.50	1015	0.492	499	840	1.1	1.0	7.312	A
3 - Cooden Sea Road	349	58	530	6.09	1327	0.263	349	231	0.4	0.4	3.862	A
4 - Barnhorn Road (A259)	811	135	197		1099	0.738	948	682	26.1	3.4	37.930	E
5 - Chestnut Walk	38	6	1032		392	0.097	38	114	0.1	0.1	10.499	B

APPENDIX N: JUNCTIONS 9 OUTPUT (J6)

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462

Filename: J6 Broadoak Ln_A259 Little Common Rd.j9
Path: \\manchester32\jobs\2019\A115791 Bexhill, Fryatt Way\Jun. Ass\J6 Broadoak Ln_ A259 Little Common Rd
Report generation date: 09/06/2021 19:10:16

Summary of junction performance

	AM					PM				
	Set ID	Q (PCU)	Delay (s)	RFC	Junction Delay (s)	Set ID	Q (PCU)	Delay (s)	RFC	Junction Delay (s)
	Existing Layout - 2028 Baseline Flows									
Stream B-C	D1	0.3	20.33	0.25	5.19	D2	0.4	15.22	0.28	3.17
Stream B-A		2.1	59.24	0.69			1.0	66.43	0.48	
Stream C-AB		0.2	10.00	0.14			0.5	14.56	0.35	
	Existing Layout - 2028 Ass. Flows									
Stream B-C	D3	1.1	71.29	0.56	11.55	D4	0.5	18.93	0.32	4.12
Stream B-A		4.6	108.62	0.87			1.4	83.21	0.58	
Stream C-AB		0.2	10.06	0.14			0.5	14.92	0.35	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of Av. delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted Av.s.

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	03/06/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	WYG\yujing.liu
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Av. delay units	Total delay units	Rate of delay units
m	kph	PCU	PCU	perHour	s	-Min	perMin

Analysis Options

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)
5.75				0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2028 Baseline Flows	AM	ONE HOUR	07:45	09:15	15	✓
D2	2028 Baseline Flows	PM	ONE HOUR	16:45	18:15	15	✓
D3	2028 Ass. Flows	AM	ONE HOUR	07:45	09:15	15	✓
D4	2028 Ass. Flows	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Existing Layout	✓	100.000	100.000

Existing Layout - 2028 Baseline Flows, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Broadoak Ln/A259 Little Common Rd Priority Jun	T-Junction	Two-way		5.19	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A259 Little Common Rd (W)		Major
B	Broadoak Ln		Minor
C	A259 Little Common Rd (E)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - A259 Little Common Rd (E)	7.45		✓	3.00	65.0	✓	10.00

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	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 - Broadoak Ln	One lane plus flare	10.00	5.30	3.95	3.30	3.20	✓	1.00	39	31

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	574	0.098	0.248	0.156	0.354
B-C	662	0.095	0.240	-	-
C-B	665	0.241	0.241	-	-

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 Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2028 Baseline Flows	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A - A259 Little Common Rd (W)		ONE HOUR	✓	906	100.000
B - Broadoak Ln		ONE HOUR	✓	179	100.000
C - A259 Little Common Rd (E)		ONE HOUR	✓	668	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A259 Little Common Rd (W)	B - Broadoak Ln	C - A259 Little Common Rd (E)
From	A - A259 Little Common Rd (W)	0	29	877
	B - Broadoak Ln	126	0	53
	C - A259 Little Common Rd (E)	613	55	0

Vehicle Mix

HV %s

		To		
		A - A259 Little Common Rd (W)	B - Broadoak Ln	C - A259 Little Common Rd (E)
From	A - A259 Little Common Rd (W)	0	4	5
	B - Broadoak Ln	7	0	1
	C - A259 Little Common Rd (E)	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.25	20.33	0.3	C	49	73
B-A	0.69	59.24	2.1	F	116	173
C-AB	0.14	10.00	0.2	B	50	76
C-A					562	844
A-B					27	40
A-C					805	1207

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	40	10	454	0.088	40	0.0	0.1	8.774	A
B-A	95	24	321	0.295	93	0.0	0.4	16.750	C
C-AB	41	10	500	0.083	41	0.0	0.1	7.918	A
C-A	461	115			461				
A-B	22	5			22				
A-C	660	165			660				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	48	12	392	0.121	47	0.1	0.1	10.540	B
B-A	113	28	272	0.417	112	0.4	0.7	23.949	C
C-AB	49	12	468	0.106	49	0.1	0.1	8.677	A
C-A	551	138			551				
A-B	26	7			26				
A-C	788	197			788				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	15	250	0.233	58	0.1	0.3	18.844	C
B-A	139	35	202	0.688	134	0.7	2.0	53.154	F
C-AB	61	15	424	0.143	60	0.1	0.2	9.991	A
C-A	675	169			675				
A-B	32	8			32				
A-C	966	241			966				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	15	237	0.246	58	0.3	0.3	20.334	C
B-A	139	35	202	0.688	138	2.0	2.1	59.235	F
C-AB	61	15	424	0.143	61	0.2	0.2	10.000	B
C-A	675	169			675				
A-B	32	8			32				
A-C	966	241			966				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	48	12	384	0.124	48	0.3	0.1	10.865	B
B-A	113	28	272	0.417	119	2.1	0.8	25.919	D
C-AB	49	12	468	0.106	50	0.2	0.1	8.690	A
C-A	551	138			551				
A-B	26	7			26				
A-C	788	197			788				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	40	10	451	0.089	40	0.1	0.1	8.858	A
B-A	95	24	321	0.295	96	0.8	0.5	17.199	C
C-AB	41	10	500	0.083	42	0.1	0.1	7.929	A
C-A	461	115			461				
A-B	22	5			22				
A-C	660	165			660				

Existing Layout - 2028 Baseline Flows, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Broadoak Ln/A259 Little Common Rd Priority Jun	T-Junction	Two-way		3.17	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2028 Baseline Flows	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A - A259 Little Common Rd (W)		ONE HOUR	✓	1065	100.000
B - Broadoak Ln		ONE HOUR	✓	133	100.000
C - A259 Little Common Rd (E)		ONE HOUR	✓	798	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A259 Little Common Rd (W)	B - Broadoak Ln	C - A259 Little Common Rd (E)
From	A - A259 Little Common Rd (W)	0	51	1014
	B - Broadoak Ln	50	0	83
	C - A259 Little Common Rd (E)	678	120	0

Vehicle Mix

HV %s

		To		
		A - A259 Little Common Rd (W)	B - Broadoak Ln	C - A259 Little Common Rd (E)
From	A - A259 Little Common Rd (W)	0	6	5
	B - Broadoak Ln	13	0	0
	C - A259 Little Common Rd (E)	5	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.28	15.22	0.4	C	76	114
B-A	0.48	66.43	1.0	F	46	69
C-AB	0.35	14.56	0.5	B	110	165
C-A					622	933
A-B					47	70
A-C					930	1396

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	62	16	494	0.127	62	0.0	0.1	8.328	A
B-A	38	9	249	0.151	37	0.0	0.2	19.141	C
C-AB	90	23	471	0.192	89	0.0	0.2	9.498	A
C-A	510	128			510				
A-B	38	10			38				
A-C	763	191			763				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	75	19	442	0.169	74	0.1	0.2	9.799	A
B-A	45	11	193	0.233	44	0.2	0.3	27.232	D
C-AB	108	27	434	0.249	108	0.2	0.3	11.131	B
C-A	610	152			610				
A-B	46	11			46				
A-C	912	228			912				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	91	23	335	0.273	91	0.2	0.4	14.718	B
B-A	55	14	116	0.476	53	0.3	0.9	62.484	F
C-AB	132	33	382	0.346	131	0.3	0.5	14.469	B
C-A	746	187			746				
A-B	56	14			56				
A-C	1116	279			1116				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	91	23	328	0.279	91	0.4	0.4	15.215	C
B-A	55	14	116	0.477	55	0.9	1.0	66.435	F
C-AB	132	33	382	0.346	132	0.5	0.5	14.556	B
C-A	746	187			746				
A-B	56	14			56				
A-C	1116	279			1116				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	75	19	437	0.171	75	0.4	0.2	9.962	A
B-A	45	11	193	0.232	47	1.0	0.4	28.285	D
C-AB	108	27	434	0.249	109	0.5	0.3	11.207	B
C-A	610	152			610				
A-B	46	11			46				
A-C	912	228			912				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	62	16	492	0.127	63	0.2	0.1	8.390	A
B-A	38	9	249	0.151	38	0.4	0.2	19.399	C
C-AB	90	23	471	0.192	91	0.3	0.2	9.564	A
C-A	510	128			510				
A-B	38	10			38				
A-C	763	191			763				

Existing Layout - 2028 Ass. Flows, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Broadoak Ln/A259 Little Common Rd Priority Jun	T-Junction	Two-way		11.55	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2028 Ass. Flows	AM	ONE HOUR	07:45	09:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A - A259 Little Common Rd (W)		ONE HOUR	✓	914	100.000
B - Broadoak Ln		ONE HOUR	✓	203	100.000
C - A259 Little Common Rd (E)		ONE HOUR	✓	668	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A259 Little Common Rd (W)	B - Broadoak Ln	C - A259 Little Common Rd (E)
From	A - A259 Little Common Rd (W)	0	37	877
	B - Broadoak Ln	150	0	53
	C - A259 Little Common Rd (E)	613	55	0

Vehicle Mix

HV %s

		To		
		A - A259 Little Common Rd (W)	B - Broadoak Ln	C - A259 Little Common Rd (E)
From	A - A259 Little Common Rd (W)	0	4	5
	B - Broadoak Ln	7	0	1
	C - A259 Little Common Rd (E)	3	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.56	71.29	1.1	F	49	73
B-A	0.87	108.62	4.6	F	138	206
C-AB	0.14	10.06	0.2	B	50	76
C-A					562	844
A-B					34	51
A-C					805	1207

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	40	10	436	0.092	39	0.0	0.1	9.170	A
B-A	113	28	323	0.349	111	0.0	0.6	17.941	C
C-AB	41	10	499	0.083	41	0.0	0.1	7.931	A
C-A	461	115			461				
A-B	28	7			28				
A-C	660	165			660				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	48	12	362	0.132	47	0.1	0.2	11.566	B
B-A	135	34	273	0.494	133	0.6	1.0	27.225	D
C-AB	49	12	467	0.106	49	0.1	0.1	8.713	A
C-A	551	138			551				
A-B	33	8			33				
A-C	788	197			788				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	15	171	0.342	57	0.2	0.5	31.657	D
B-A	165	41	201	0.820	156	1.0	3.3	73.261	F
C-AB	61	15	422	0.144	60	0.1	0.2	10.049	B
C-A	675	169			675				
A-B	41	10			41				
A-C	966	241			966				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	58	15	105	0.557	56	0.5	1.1	71.287	F
B-A	165	41	190	0.869	160	3.3	4.6	108.619	F
C-AB	61	15	422	0.144	61	0.2	0.2	10.059	B
C-A	675	169			675				
A-B	41	10			41				
A-C	966	241			966				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	48	12	324	0.147	51	1.1	0.2	13.491	B
B-A	135	34	258	0.522	148	4.6	1.3	38.418	E
C-AB	49	12	467	0.106	50	0.2	0.1	8.726	A
C-A	551	138			551				
A-B	33	8			33				
A-C	788	197			788				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	40	10	431	0.093	40	0.2	0.1	9.312	A
B-A	113	28	323	0.349	116	1.3	0.6	18.758	C
C-AB	41	10	499	0.083	42	0.1	0.1	7.953	A
C-A	461	115			461				
A-B	28	7			28				
A-C	660	165			660				

Existing Layout - 2028 Ass. Flows, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Broadoak Ln/A259 Little Common Rd Priority Jun	T-Junction	Two-way		4.12	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2028 Ass. Flows	PM	ONE HOUR	16:45	18:15	15	✓

Vehicle mix varies over turn	Vehicle mix varies over entry	Vehicle mix source	PCU Factor for a HV (PCU)
✓	✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A - A259 Little Common Rd (W)		ONE HOUR	✓	1088	100.000
B - Broadoak Ln		ONE HOUR	✓	143	100.000
C - A259 Little Common Rd (E)		ONE HOUR	✓	798	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - A259 Little Common Rd (W)	B - Broadoak Ln	C - A259 Little Common Rd (E)
From	A - A259 Little Common Rd (W)	0	74	1014
	B - Broadoak Ln	60	0	83
	C - A259 Little Common Rd (E)	678	120	0

Vehicle Mix

HV %s

		To		
		A - A259 Little Common Rd (W)	B - Broadoak Ln	C - A259 Little Common Rd (E)
From	A - A259 Little Common Rd (W)	0	6	5
	B - Broadoak Ln	13	0	0
	C - A259 Little Common Rd (E)	5	1	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.32	18.93	0.5	C	76	114
B-A	0.58	83.21	1.4	F	55	83
C-AB	0.35	14.92	0.5	B	110	165
C-A					622	933
A-B					68	102
A-C					930	1396

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	62	16	482	0.130	62	0.0	0.1	8.557	A
B-A	45	11	250	0.181	44	0.0	0.2	19.705	C
C-AB	90	23	467	0.193	89	0.0	0.2	9.601	A
C-A	510	128			510				
A-B	56	14			56				
A-C	763	191			763				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	75	19	426	0.175	74	0.1	0.2	10.232	B
B-A	54	13	193	0.279	53	0.2	0.4	28.898	D
C-AB	108	27	429	0.252	107	0.2	0.3	11.302	B
C-A	610	152			610				
A-B	67	17			67				
A-C	912	228			912				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	91	23	294	0.311	90	0.2	0.4	17.600	C
B-A	66	17	114	0.580	63	0.4	1.3	74.892	F
C-AB	132	33	376	0.352	131	0.3	0.5	14.828	B
C-A	746	187			746				
A-B	81	20			81				
A-C	1116	279			1116				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	91	23	281	0.325	91	0.4	0.5	18.930	C
B-A	66	17	113	0.582	66	1.3	1.4	83.205	F
C-AB	132	33	376	0.352	132	0.5	0.5	14.917	B
C-A	746	187			746				
A-B	81	20			81				
A-C	1116	279			1116				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	75	19	419	0.178	76	0.5	0.2	10.507	B
B-A	54	13	193	0.279	58	1.4	0.5	30.757	D
C-AB	108	27	429	0.252	109	0.5	0.3	11.384	B
C-A	610	152			610				
A-B	67	17			67				
A-C	912	228			912				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	62	16	480	0.130	63	0.2	0.2	8.632	A
B-A	45	11	250	0.181	46	0.5	0.3	20.056	C
C-AB	90	23	467	0.193	91	0.3	0.2	9.669	A
C-A	510	128			510				
A-B	56	14			56				
A-C	763	191			763				

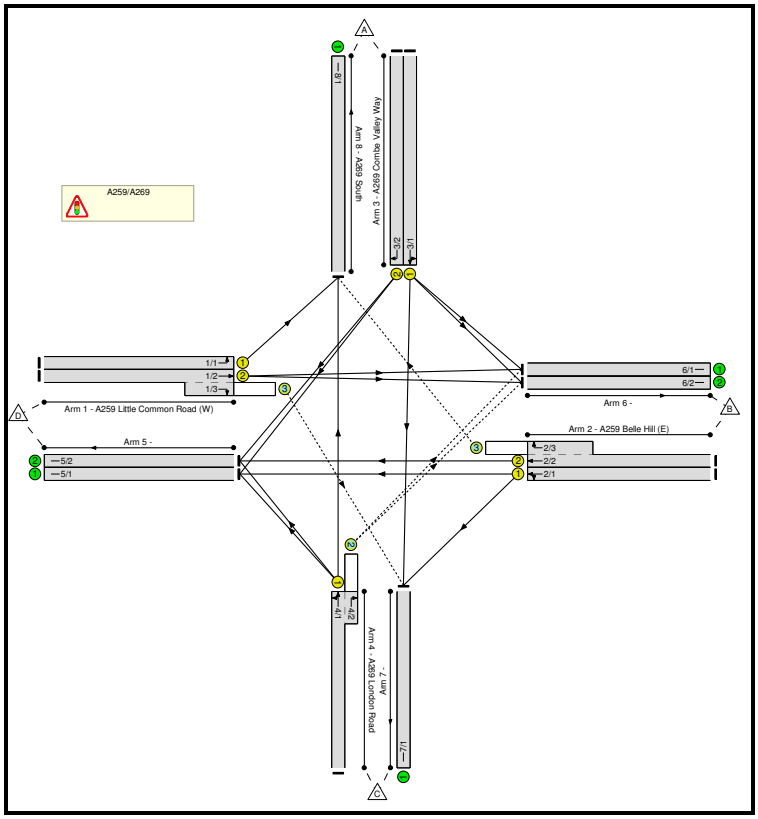
APPENDIX O: LINSIG OUTPUT (J7)

Full Input Data And Results

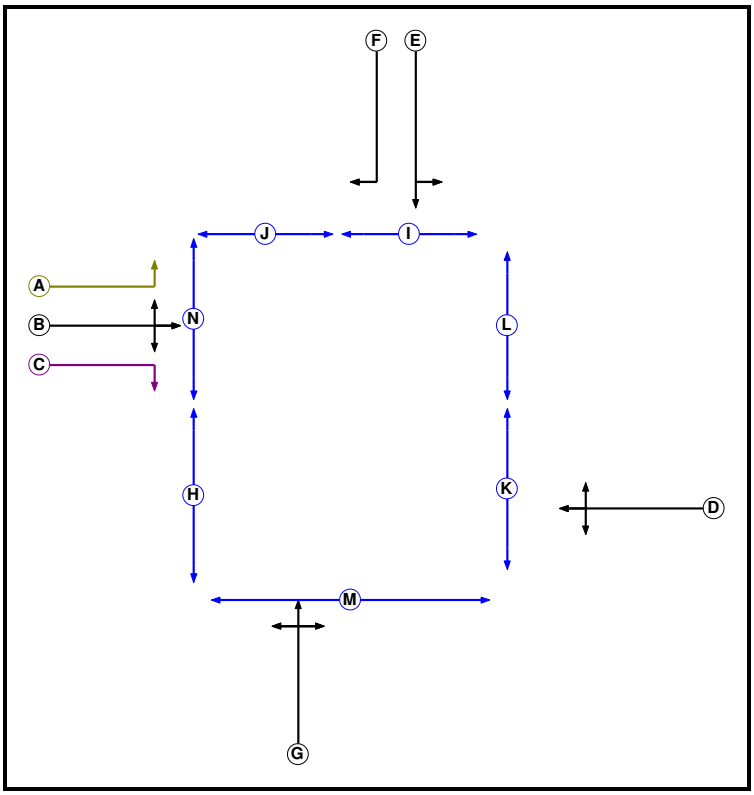
User and Project Details

Project:	**A115791 Bexhill, Fryatt Way**
Title:	**A259/A269 Existing Layout**
Location:	
Additional detail:	Approved LinSig Model of the Existing Layout - Bexhill Leisure Destination
File name:	Approved LinSig Model-Existing Layout (Bexhill Leisure Destination) V2.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Filter	B	3	0
B	Traffic		7	7
C	Ind. Arrow	B	4	4
D	Traffic		7	7
E	Traffic		7	7
F	Traffic		7	7
G	Traffic		7	7
H	Pedestrian		4	4
I	Pedestrian		4	4
J	Pedestrian		4	4
K	Pedestrian		4	4
L	Pedestrian		4	4
M	Pedestrian		4	4
N	Pedestrian		4	4

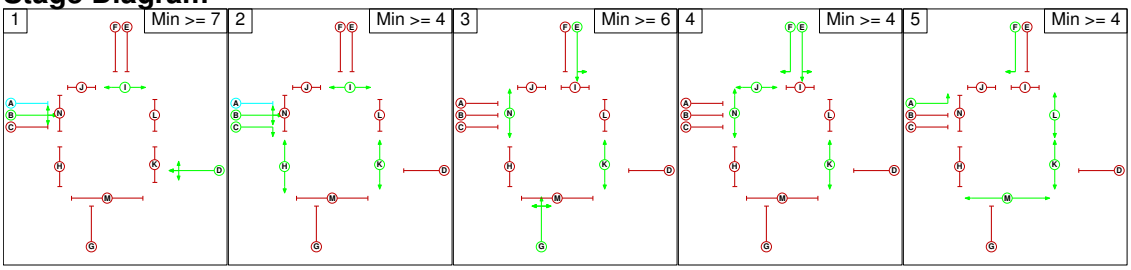
Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N
A		-	-	-	-	-	7	-	-	8	-	-	-	5
B	-		-	-	8	6	7	-	-	8	-	9	10	5
C	-	-		6	5	5	7	-	-	-	-	-	9	5
D	-	-	5		5	5	8	9	-	9	5	-	7	-
E	-	5	5	7		-	-	-	5	-	-	7	9	-
F	-	5	5	5	-		6	9	5	-	-	-	-	-
G	7	7	6	5	-	8		8	-	10	-	12	5	-
H	-	-	-	4	-	4	4		-	-	-	-	-	-
I	-	-	-	-	0	0	-	-		-	-	-	-	-
J	0	0	-	0	-	-	0	-	-		-	-	-	-
K	-	-	-	0	-	-	-	-	-	-		-	-	-
L	-	0	-	-	0	-	0	-	-	-	-		-	-
M	-	0	0	0	0	-	0	-	-	-	-	-		-
N	0	0	0	-	-	-	-	-	-	-	-	-	-	

Phases in Stage

Stage No.	Phases in Stage
1	B D I
2	B C H I K
3	E G K N
4	E F J K N
5	A F K L M

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	3	G	Gaining absolute	6	6
2	3	G	Gaining absolute	6	6
2	4	F	Gaining absolute	6	6

Prohibited Stage Change

From Stage \ To Stage	1	2	3	4	5
1		9	8	9	10
2	X		8	8	10
3	7	X		10	12
4	7	9	6		9
5	5	9	X	X	

Give-Way Lane Input Data

Junction: A259/A269

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/3 (A259 Little Common Road (W))	7/1 (Right)	1439	0	2/1	1.09	All	4.80	-	0.50	5	3.00
				2/2	1.09	All					
2/3 (A259 Belle Hill (E))	8/1 (Right)	1439	0	1/1	1.09	All	4.80	-	0.50	5	3.00
				1/2	1.09	All					
4/2 (A269 London Road)	6/1 (Right)	1439	0	3/1	1.09	All	4.30	-	0.50	4	4.30
	6/2 (Right)	1439	0	3/1	1.09	All					

Lane Input Data

Junction: A259/A269

Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A259 Little Common Road (W))	U	B A	2	3	7.0	Geom	-	3.60	0.00	Y	Arm 8 Left	15.00
1/2 (A259 Little Common Road (W))	U	B	2	3	7.0	Geom	-	3.75	0.00	N	Arm 6 Ahead	Inf
1/3 (A259 Little Common Road (W))	O	B C	2	3	5.6	Geom	-	3.75	0.00	N	Arm 7 Right	15.00
2/1 (A259 Belle Hill (E))	U	D	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 5 Ahead	Inf
											Arm 7 Left	10.00
2/2 (A259 Belle Hill (E))	U	D	2	3	60.0	Geom	-	3.30	0.00	N	Arm 5 Ahead	Inf
2/3 (A259 Belle Hill (E))	O	D	2	3	7.5	Geom	-	3.30	0.00	N	Arm 8 Right	15.00
3/1 (A269 Combe Valley Way)	U	E	2	3	5.9	Geom	-	3.50	0.00	Y	Arm 6 Left	18.00
											Arm 7 Ahead	Inf
3/2 (A269 Combe Valley Way)	U	F	2	3	5.0	Geom	-	3.75	0.00	N	Arm 5 Right	15.00
4/1 (A269 London Road)	U	G	2	3	3.7	Geom	-	2.75	0.00	Y	Arm 5 Left	17.00
											Arm 8 Ahead	Inf
4/2 (A269 London Road)	O	G	2	3	3.7	Geom	-	2.75	0.00	N	Arm 6 Right	16.00
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/2	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (A269 South)	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'AM Peak 2028 Baseline Flows'	08:00	09:00	01:00	
2: 'PM Peak 2028 Baseline Flows'	17:00	18:00	01:00	
3: 'AM Peak 2028 Assessment Flows'	08:00	09:00	01:00	
4: 'PM Peak 2028 Assessment Flows'	17:00	18:00	01:00	

Scenario 1: 'AM Peak 2028 Baseline Flows' (FG1: 'AM Peak 2028 Baseline Flows', Plan 1: 'Capture Double')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	64	749	384	1197
	B	3	0	62	364	429
	C	230	59	0	293	582
	D	482	470	231	0	1183
	Tot.	715	593	1042	1041	3391

Traffic Lane Flows

Lane	Scenario 1: AM Peak 2028 Baseline Flows
Junction: A259/A269	
1/1	482
1/2 (with short)	701(In) 470(Out)
1/3 (short)	231
2/1	192
2/2 (with short)	237(In) 234(Out)
2/3 (short)	3
3/1	813
3/2	384
4/1 (with short)	582(In) 523(Out)
4/2 (short)	59
5/1	469
5/2	572
6/1	297
6/2	296
7/1	1042
8/1	715

Lane Saturation Flows

Junction: A259/A269								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A259 Little Common Road (W))	3.60	0.00	Y	Arm 8 Left	15.00	100.0 %	1795	1795
1/2 (A259 Little Common Road (W))	3.75	0.00	N	Arm 6 Ahead	Inf	100.0 %	2130	2130
1/3 (A259 Little Common Road (W))	3.75	0.00	N	Arm 7 Right	15.00	100.0 %	1936	1936
2/1 (A259 Belle Hill (E))	3.30	0.00	Y	Arm 5 Ahead	Inf	67.7 %	1855	1855
				Arm 7 Left	10.00	32.3 %		
2/2 (A259 Belle Hill (E))	3.30	0.00	N	Arm 5 Ahead	Inf	100.0 %	2085	2085
2/3 (A259 Belle Hill (E))	3.30	0.00	N	Arm 8 Right	15.00	100.0 %	1895	1895
3/1 (A269 Combe Valley Way)	3.50	0.00	Y	Arm 6 Left	18.00	7.9 %	1952	1952
				Arm 7 Ahead	Inf	92.1 %		
3/2 (A269 Combe Valley Way)	3.75	0.00	N	Arm 5 Right	15.00	100.0 %	1936	1936
4/1 (A269 London Road)	2.75	0.00	Y	Arm 5 Left	17.00	56.0 %	1801	1801
				Arm 8 Ahead	Inf	44.0 %		
4/2 (A269 London Road)	2.75	0.00	N	Arm 6 Right	16.00	100.0 %	1856	1856
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1 (A269 South Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 2: 'PM Peak 2028 Baseline Flows' (FG2: 'PM Peak 2028 Baseline Flows', Plan 1: 'Capture Double')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	110	521	333	964
	B	3	0	56	402	461
	C	276	154	0	325	755
	D	498	383	197	0	1078
	Tot.	777	647	774	1060	3258

Traffic Lane Flows

Lane	Scenario 2: PM Peak 2028 Baseline Flows
Junction: A259/A269	
1/1	498
1/2 (with short)	580(In) 383(Out)
1/3 (short)	197
2/1	209
2/2 (with short)	252(In) 249(Out)
2/3 (short)	3
3/1	631
3/2	333
4/1 (with short)	755(In) 601(Out)
4/2 (short)	154
5/1	483
5/2	577
6/1	324
6/2	323
7/1	774
8/1	777

Lane Saturation Flows

Junction: A259/A269								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A259 Little Common Road (W))	3.60	0.00	Y	Arm 8 Left	15.00	100.0 %	1795	1795
1/2 (A259 Little Common Road (W))	3.75	0.00	N	Arm 6 Ahead	Inf	100.0 %	2130	2130
1/3 (A259 Little Common Road (W))	3.75	0.00	N	Arm 7 Right	15.00	100.0 %	1936	1936
2/1 (A259 Belle Hill (E))	3.30	0.00	Y	Arm 5 Ahead	Inf	73.2 %	1870	1870
				Arm 7 Left	10.00	26.8 %		
2/2 (A259 Belle Hill (E))	3.30	0.00	N	Arm 5 Ahead	Inf	100.0 %	2085	2085
2/3 (A259 Belle Hill (E))	3.30	0.00	N	Arm 8 Right	15.00	100.0 %	1895	1895
3/1 (A269 Combe Valley Way)	3.50	0.00	Y	Arm 6 Left	18.00	17.4 %	1937	1937
				Arm 7 Ahead	Inf	82.6 %		
3/2 (A269 Combe Valley Way)	3.75	0.00	N	Arm 5 Right	15.00	100.0 %	1936	1936
4/1 (A269 London Road)	2.75	0.00	Y	Arm 5 Left	17.00	54.1 %	1804	1804
				Arm 8 Ahead	Inf	45.9 %		
4/2 (A269 London Road)	2.75	0.00	N	Arm 6 Right	16.00	100.0 %	1856	1856
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1 (A269 South Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 3: 'AM Peak 2028 Assessment Flows' (FG3: 'AM Peak 2028 Assessment Flows', Plan 1: 'Capture Double')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	64	749	386	1199
	B	3	0	62	370	435
	C	230	59	0	295	584
	D	486	489	239	0	1214
	Tot.	719	612	1050	1051	3432

Traffic Lane Flows

Lane	Scenario 3: AM Peak 2028 Assessment Flows
Junction: A259/A269	
1/1	486
1/2 (with short)	728(In) 489(Out)
1/3 (short)	239
2/1	195
2/2 (with short)	240(In) 237(Out)
2/3 (short)	3
3/1	813
3/2	386
4/1 (with short)	584(In) 525(Out)
4/2 (short)	59
5/1	474
5/2	577
6/1	307
6/2	305
7/1	1050
8/1	719

Lane Saturation Flows

Junction: A259/A269								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A259 Little Common Road (W))	3.60	0.00	Y	Arm 8 Left	15.00	100.0 %	1795	1795
1/2 (A259 Little Common Road (W))	3.75	0.00	N	Arm 6 Ahead	Inf	100.0 %	2130	2130
1/3 (A259 Little Common Road (W))	3.75	0.00	N	Arm 7 Right	15.00	100.0 %	1936	1936
2/1 (A259 Belle Hill (E))	3.30	0.00	Y	Arm 5 Ahead	Inf	68.2 %	1856	1856
				Arm 7 Left	10.00	31.8 %		
2/2 (A259 Belle Hill (E))	3.30	0.00	N	Arm 5 Ahead	Inf	100.0 %	2085	2085
2/3 (A259 Belle Hill (E))	3.30	0.00	N	Arm 8 Right	15.00	100.0 %	1895	1895
3/1 (A269 Combe Valley Way)	3.50	0.00	Y	Arm 6 Left	18.00	7.9 %	1952	1952
				Arm 7 Ahead	Inf	92.1 %		
3/2 (A269 Combe Valley Way)	3.75	0.00	N	Arm 5 Right	15.00	100.0 %	1936	1936
4/1 (A269 London Road)	2.75	0.00	Y	Arm 5 Left	17.00	56.2 %	1801	1801
				Arm 8 Ahead	Inf	43.8 %		
4/2 (A269 London Road)	2.75	0.00	N	Arm 6 Right	16.00	100.0 %	1856	1856
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1 (A269 South Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 4: 'PM Peak 2028 Assessment Flows' (FG4: 'PM Peak 2028 Assessment Flows', Plan 1: 'Capture Double')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	110	521	336	967
	B	3	0	56	420	479
	C	276	154	0	332	762
	D	499	391	200	0	1090
	Tot.	778	655	777	1088	3298

Traffic Lane Flows

Lane	Scenario 4: PM Peak 2028 Assessment Flows
Junction: A259/A269	
1/1	499
1/2 (with short)	591(In) 391(Out)
1/3 (short)	200
2/1	218
2/2 (with short)	261(In) 258(Out)
2/3 (short)	3
3/1	631
3/2	336
4/1 (with short)	762(In) 608(Out)
4/2 (short)	154
5/1	496
5/2	592
6/1	328
6/2	327
7/1	777
8/1	778

Lane Saturation Flows

Junction: A259/A269								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A259 Little Common Road (W))	3.60	0.00	Y	Arm 8 Left	15.00	100.0 %	1795	1795
1/2 (A259 Little Common Road (W))	3.75	0.00	N	Arm 6 Ahead	Inf	100.0 %	2130	2130
1/3 (A259 Little Common Road (W))	3.75	0.00	N	Arm 7 Right	15.00	100.0 %	1936	1936
2/1 (A259 Belle Hill (E))	3.30	0.00	Y	Arm 5 Ahead	Inf	74.3 %	1873	1873
				Arm 7 Left	10.00	25.7 %		
2/2 (A259 Belle Hill (E))	3.30	0.00	N	Arm 5 Ahead	Inf	100.0 %	2085	2085
2/3 (A259 Belle Hill (E))	3.30	0.00	N	Arm 8 Right	15.00	100.0 %	1895	1895
3/1 (A269 Combe Valley Way)	3.50	0.00	Y	Arm 6 Left	18.00	17.4 %	1937	1937
				Arm 7 Ahead	Inf	82.6 %		
3/2 (A269 Combe Valley Way)	3.75	0.00	N	Arm 5 Right	15.00	100.0 %	1936	1936
4/1 (A269 London Road)	2.75	0.00	Y	Arm 5 Left	17.00	54.6 %	1803	1803
				Arm 8 Ahead	Inf	45.4 %		
4/2 (A269 London Road)	2.75	0.00	N	Arm 6 Right	16.00	100.0 %	1856	1856
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1 (A269 South Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 5: 'AM Peak 2028 Baseline Flows' (FG1: 'AM Peak 2028 Baseline Flows', Plan 2: 'One Cycle')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	64	749	384	1197
	B	3	0	62	364	429
	C	230	59	0	293	582
	D	482	470	231	0	1183
	Tot.	715	593	1042	1041	3391

Traffic Lane Flows

Lane	Scenario 5: AM Peak 2028 Baseline Flows
Junction: A259/A269	
1/1	482
1/2 (with short)	701(In) 470(Out)
1/3 (short)	231
2/1	192
2/2 (with short)	237(In) 234(Out)
2/3 (short)	3
3/1	813
3/2	384
4/1 (with short)	582(In) 523(Out)
4/2 (short)	59
5/1	469
5/2	572
6/1	297
6/2	296
7/1	1042
8/1	715

Lane Saturation Flows

Junction: A259/A269								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A259 Little Common Road (W))	3.60	0.00	Y	Arm 8 Left	15.00	100.0 %	1795	1795
1/2 (A259 Little Common Road (W))	3.75	0.00	N	Arm 6 Ahead	Inf	100.0 %	2130	2130
1/3 (A259 Little Common Road (W))	3.75	0.00	N	Arm 7 Right	15.00	100.0 %	1936	1936
2/1 (A259 Belle Hill (E))	3.30	0.00	Y	Arm 5 Ahead	Inf	67.7 %	1855	1855
				Arm 7 Left	10.00	32.3 %		
2/2 (A259 Belle Hill (E))	3.30	0.00	N	Arm 5 Ahead	Inf	100.0 %	2085	2085
2/3 (A259 Belle Hill (E))	3.30	0.00	N	Arm 8 Right	15.00	100.0 %	1895	1895
3/1 (A269 Combe Valley Way)	3.50	0.00	Y	Arm 6 Left	18.00	7.9 %	1952	1952
				Arm 7 Ahead	Inf	92.1 %		
3/2 (A269 Combe Valley Way)	3.75	0.00	N	Arm 5 Right	15.00	100.0 %	1936	1936
4/1 (A269 London Road)	2.75	0.00	Y	Arm 5 Left	17.00	56.0 %	1801	1801
				Arm 8 Ahead	Inf	44.0 %		
4/2 (A269 London Road)	2.75	0.00	N	Arm 6 Right	16.00	100.0 %	1856	1856
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1 (A269 South Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 6: 'PM Peak 2028 Baseline Flows' (FG2: 'PM Peak 2028 Baseline Flows', Plan 2: 'One Cycle')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	110	521	333	964
	B	3	0	56	402	461
	C	276	154	0	325	755
	D	498	383	197	0	1078
	Tot.	777	647	774	1060	3258

Traffic Lane Flows

Lane	Scenario 6: PM Peak 2028 Baseline Flows
Junction: A259/A269	
1/1	498
1/2 (with short)	580(In) 383(Out)
1/3 (short)	197
2/1	213
2/2 (with short)	248(In) 245(Out)
2/3 (short)	3
3/1	631
3/2	333
4/1 (with short)	755(In) 601(Out)
4/2 (short)	154
5/1	487
5/2	573
6/1	324
6/2	323
7/1	774
8/1	777

Lane Saturation Flows

Junction: A259/A269								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A259 Little Common Road (W))	3.60	0.00	Y	Arm 8 Left	15.00	100.0 %	1795	1795
1/2 (A259 Little Common Road (W))	3.75	0.00	N	Arm 6 Ahead	Inf	100.0 %	2130	2130
1/3 (A259 Little Common Road (W))	3.75	0.00	N	Arm 7 Right	15.00	100.0 %	1936	1936
2/1 (A259 Belle Hill (E))	3.30	0.00	Y	Arm 5 Ahead	Inf	73.7 %	1871	1871
				Arm 7 Left	10.00	26.3 %		
2/2 (A259 Belle Hill (E))	3.30	0.00	N	Arm 5 Ahead	Inf	100.0 %	2085	2085
2/3 (A259 Belle Hill (E))	3.30	0.00	N	Arm 8 Right	15.00	100.0 %	1895	1895
3/1 (A269 Combe Valley Way)	3.50	0.00	Y	Arm 6 Left	18.00	17.4 %	1937	1937
				Arm 7 Ahead	Inf	82.6 %		
3/2 (A269 Combe Valley Way)	3.75	0.00	N	Arm 5 Right	15.00	100.0 %	1936	1936
4/1 (A269 London Road)	2.75	0.00	Y	Arm 5 Left	17.00	54.1 %	1804	1804
				Arm 8 Ahead	Inf	45.9 %		
4/2 (A269 London Road)	2.75	0.00	N	Arm 6 Right	16.00	100.0 %	1856	1856
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1 (A269 South Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 7: 'AM Peak 2028 Assessment Flows' (FG3: 'AM Peak 2028 Assessment Flows', Plan 2: 'One Cycle')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	64	749	386	1199
	B	3	0	62	370	435
	C	230	59	0	295	584
	D	486	489	239	0	1214
	Tot.	719	612	1050	1051	3432

Traffic Lane Flows

Lane	Scenario 7: AM Peak 2028 Assessment Flows
Junction: A259/A269	
1/1	486
1/2 (with short)	728(In) 489(Out)
1/3 (short)	239
2/1	195
2/2 (with short)	240(In) 237(Out)
2/3 (short)	3
3/1	813
3/2	386
4/1 (with short)	584(In) 525(Out)
4/2 (short)	59
5/1	474
5/2	577
6/1	307
6/2	305
7/1	1050
8/1	719

Lane Saturation Flows

Junction: A259/A269								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A259 Little Common Road (W))	3.60	0.00	Y	Arm 8 Left	15.00	100.0 %	1795	1795
1/2 (A259 Little Common Road (W))	3.75	0.00	N	Arm 6 Ahead	Inf	100.0 %	2130	2130
1/3 (A259 Little Common Road (W))	3.75	0.00	N	Arm 7 Right	15.00	100.0 %	1936	1936
2/1 (A259 Belle Hill (E))	3.30	0.00	Y	Arm 5 Ahead	Inf	68.2 %	1856	1856
				Arm 7 Left	10.00	31.8 %		
2/2 (A259 Belle Hill (E))	3.30	0.00	N	Arm 5 Ahead	Inf	100.0 %	2085	2085
2/3 (A259 Belle Hill (E))	3.30	0.00	N	Arm 8 Right	15.00	100.0 %	1895	1895
3/1 (A269 Combe Valley Way)	3.50	0.00	Y	Arm 6 Left	18.00	7.9 %	1952	1952
				Arm 7 Ahead	Inf	92.1 %		
3/2 (A269 Combe Valley Way)	3.75	0.00	N	Arm 5 Right	15.00	100.0 %	1936	1936
4/1 (A269 London Road)	2.75	0.00	Y	Arm 5 Left	17.00	56.2 %	1801	1801
				Arm 8 Ahead	Inf	43.8 %		
4/2 (A269 London Road)	2.75	0.00	N	Arm 6 Right	16.00	100.0 %	1856	1856
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1 (A269 South Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 8: 'PM Peak 2028 Assessment Flows' (FG4: 'PM Peak 2028 Assessment Flows', Plan 2: 'One Cycle')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	110	521	336	967
	B	3	0	56	420	479
	C	276	154	0	332	762
	D	499	391	200	0	1090
	Tot.	778	655	777	1088	3298

Traffic Lane Flows

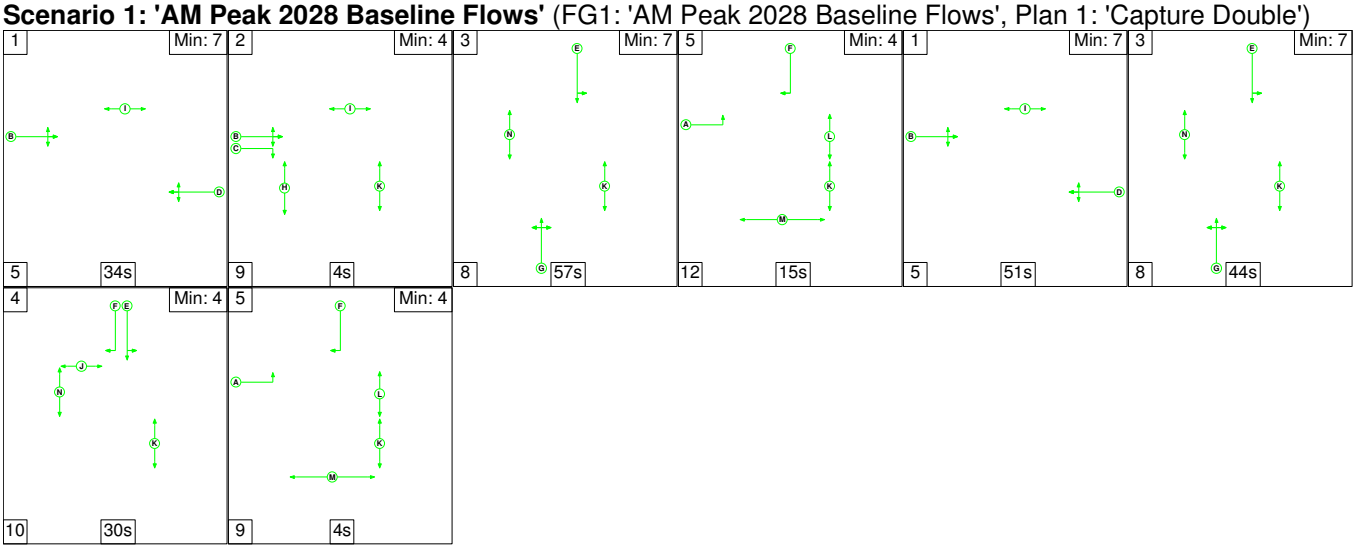
Lane	Scenario 8: PM Peak 2028 Assessment Flows
Junction: A259/A269	
1/1	499
1/2 (with short)	591(In) 391(Out)
1/3 (short)	200
2/1	223
2/2 (with short)	256(In) 253(Out)
2/3 (short)	3
3/1	631
3/2	336
4/1 (with short)	762(In) 608(Out)
4/2 (short)	154
5/1	501
5/2	587
6/1	328
6/2	327
7/1	777
8/1	778

Lane Saturation Flows

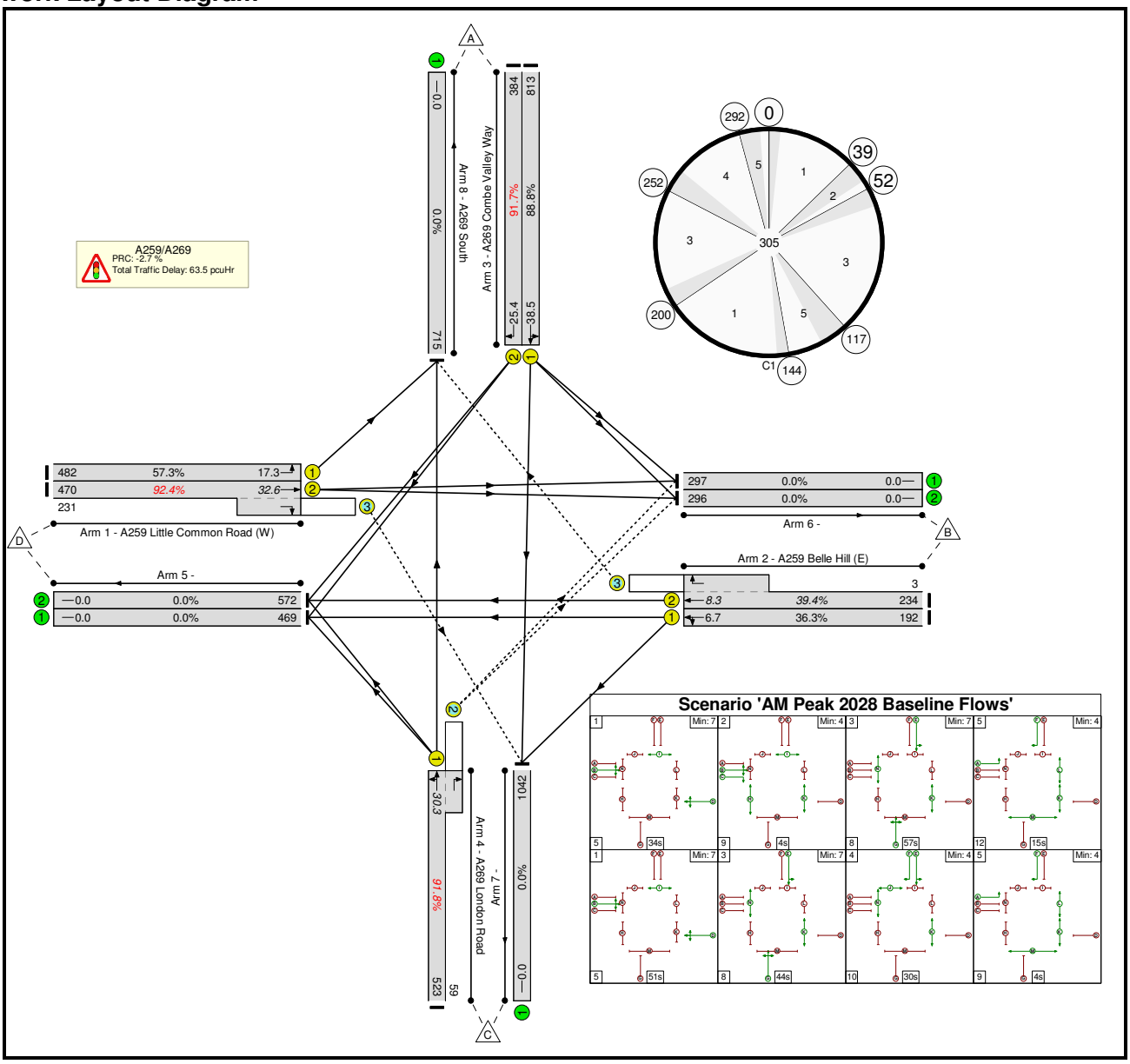
Junction: A259/A269								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A259 Little Common Road (W))	3.60	0.00	Y	Arm 8 Left	15.00	100.0 %	1795	1795
1/2 (A259 Little Common Road (W))	3.75	0.00	N	Arm 6 Ahead	Inf	100.0 %	2130	2130
1/3 (A259 Little Common Road (W))	3.75	0.00	N	Arm 7 Right	15.00	100.0 %	1936	1936
2/1 (A259 Belle Hill (E))	3.30	0.00	Y	Arm 5 Ahead	Inf	74.9 %	1874	1874
				Arm 7 Left	10.00	25.1 %		
2/2 (A259 Belle Hill (E))	3.30	0.00	N	Arm 5 Ahead	Inf	100.0 %	2085	2085
2/3 (A259 Belle Hill (E))	3.30	0.00	N	Arm 8 Right	15.00	100.0 %	1895	1895
3/1 (A269 Combe Valley Way)	3.50	0.00	Y	Arm 6 Left	18.00	17.4 %	1937	1937
				Arm 7 Ahead	Inf	82.6 %		
3/2 (A269 Combe Valley Way)	3.75	0.00	N	Arm 5 Right	15.00	100.0 %	1936	1936
4/1 (A269 London Road)	2.75	0.00	Y	Arm 5 Left	17.00	54.6 %	1803	1803
				Arm 8 Ahead	Inf	45.4 %		
4/2 (A269 London Road)	2.75	0.00	N	Arm 6 Right	16.00	100.0 %	1856	1856
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1 (A269 South Lane 1)	Infinite Saturation Flow						Inf	Inf

Stage Sequence Diagram

Scenario 1: 'AM Peak 2028 Baseline Flows' (FG1: 'AM Peak 2028 Baseline Flows', Plan 1: 'Capture Double')



Network Layout Diagram



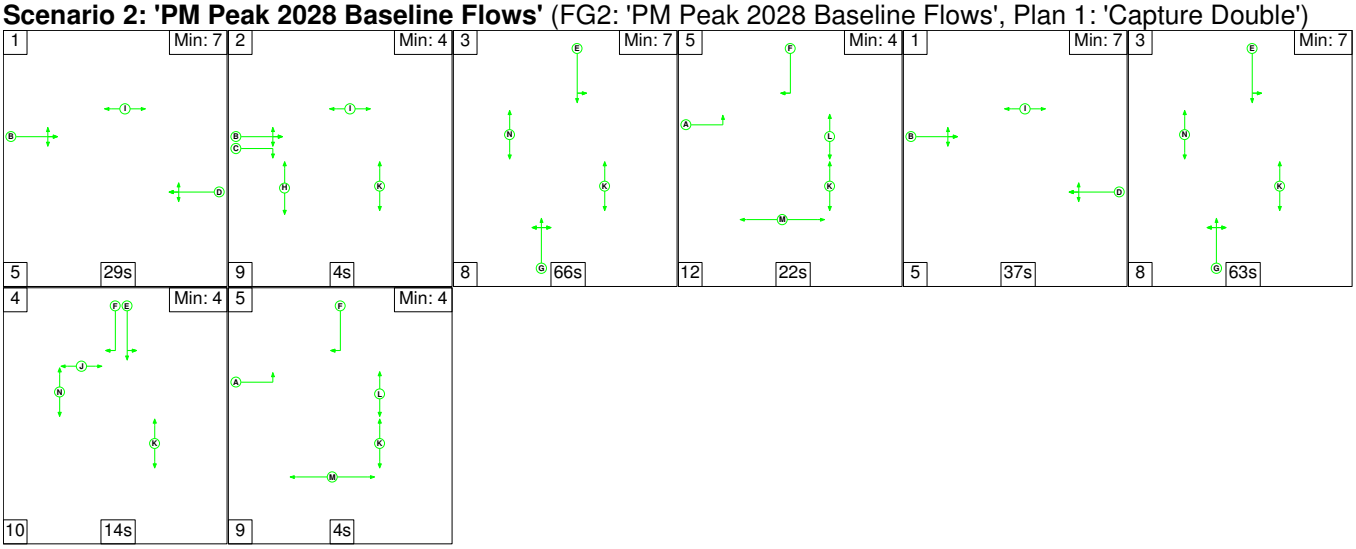
Network Results

Item	Lane Description	Full Phase	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A259/A269 Existing Layout	-	-	-	-	-	**92.4%**	**43.0**	**19.3**	**63.5**	-	-	-	-
A259/A269	-	-	-	-	-	**92.4%**	**43.0**	**19.3**	**63.5**	-	-	-	-
1/1	A259 Little Common Road (W) Left	B	482	1795	842	57.3%	4.0	0.7	4.7	34.8	16.6	0.7	17.3
1/2+1/3	A259 Little Common Road (W) Ahead Right	B	701	2130:1936	758	92.4%	9.2	5.2	14.9	76.5	27.4	5.2	32.6
2/1	A259 Belle Hill (E) Ahead Left	D	192	1855	529	36.3%	2.3	0.3	2.6	48.8	6.5	0.3	6.7
2/2+2/3	A259 Belle Hill (E) Ahead Right	D	237	2085:1895	602	39.4%	2.9	0.3	3.2	49.2	8.0	0.3	8.3
3/1	A269 Combe Valley Way Left Ahead	E	813	1952	915	88.8%	8.4	3.7	12.1	53.7	34.8	3.7	38.5
3/2	A269 Combe Valley Way Right	F	384	1936	419	91.7%	8.4	4.4	12.8	120.0	21.0	4.4	25.4
4/1+4/2	A269 London Road Left Right Ahead	G	582	1801:1856	634	91.8%	7.8	4.7	13.2	81.4	25.6	4.7	30.3

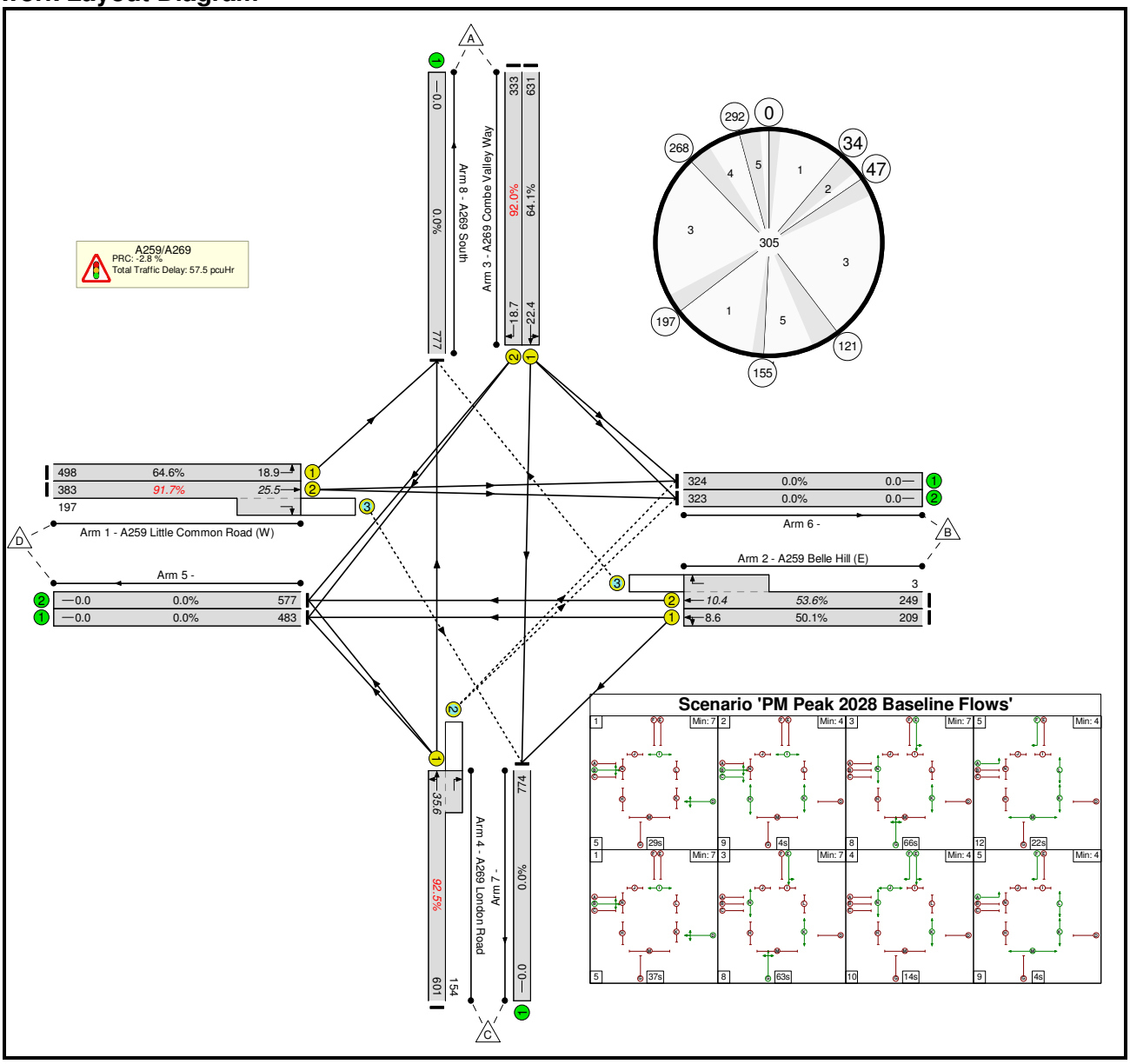
C1 PRC for Signalled Lanes (%): -2.7 Total Delay for Signalled Lanes (pcuHr): 63.49 Cycle Time (s): 305
PRC Over All Lanes (%): -2.7 Total Delay Over All Lanes(pcuHr): 63.49

Stage Sequence Diagram

Scenario 2: 'PM Peak 2028 Baseline Flows' (FG2: 'PM Peak 2028 Baseline Flows', Plan 1: 'Capture Double')



Network Layout Diagram



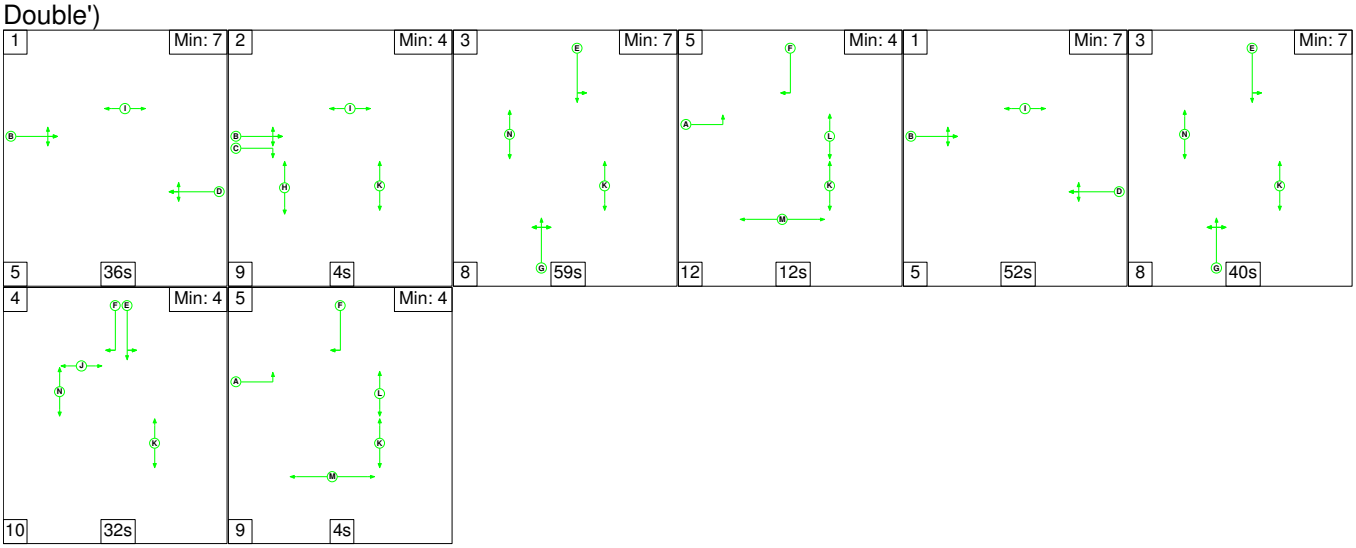
Network Results

Item	Lane Description	Full Phase	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A259/A269 Existing Layout	-	-	-	-	-	**92.5%**	**38.7**	**17.3**	**57.5**	-	-	-	-
A259/A269	-	-	-	-	-	**92.5%**	**38.7**	**17.3**	**57.5**	-	-	-	-
1/1	A259 Little Common Road (W) Left	B	498	1795	771	64.6%	4.8	0.9	5.7	41.1	18.0	0.9	18.9
1/2+1/3	A259 Little Common Road (W) Ahead Right	B	580	2130:1936	633	91.7%	8.4	4.7	13.7	85.1	20.8	4.7	25.5
2/1	A259 Belle Hill (E) Ahead Left	D	209	1870	417	50.1%	3.0	0.5	3.5	60.6	8.1	0.5	8.6
2/2+2/3	A259 Belle Hill (E) Ahead Right	D	252	2085:1895	470	53.6%	3.7	0.6	4.3	60.9	9.8	0.6	10.4
3/1	A269 Combe Valley Way Left Ahead	E	631	1937	984	64.1%	4.8	0.9	5.7	32.7	21.6	0.9	22.4
3/2	A269 Combe Valley Way Right	F	333	1936	362	92.0%	5.6	4.4	10.1	108.8	14.2	4.4	18.7
4/1+4/2	A269 London Road Left Right Ahead	G	755	1804:1856	816	92.5%	8.4	5.3	14.5	69.4	30.3	5.3	35.6

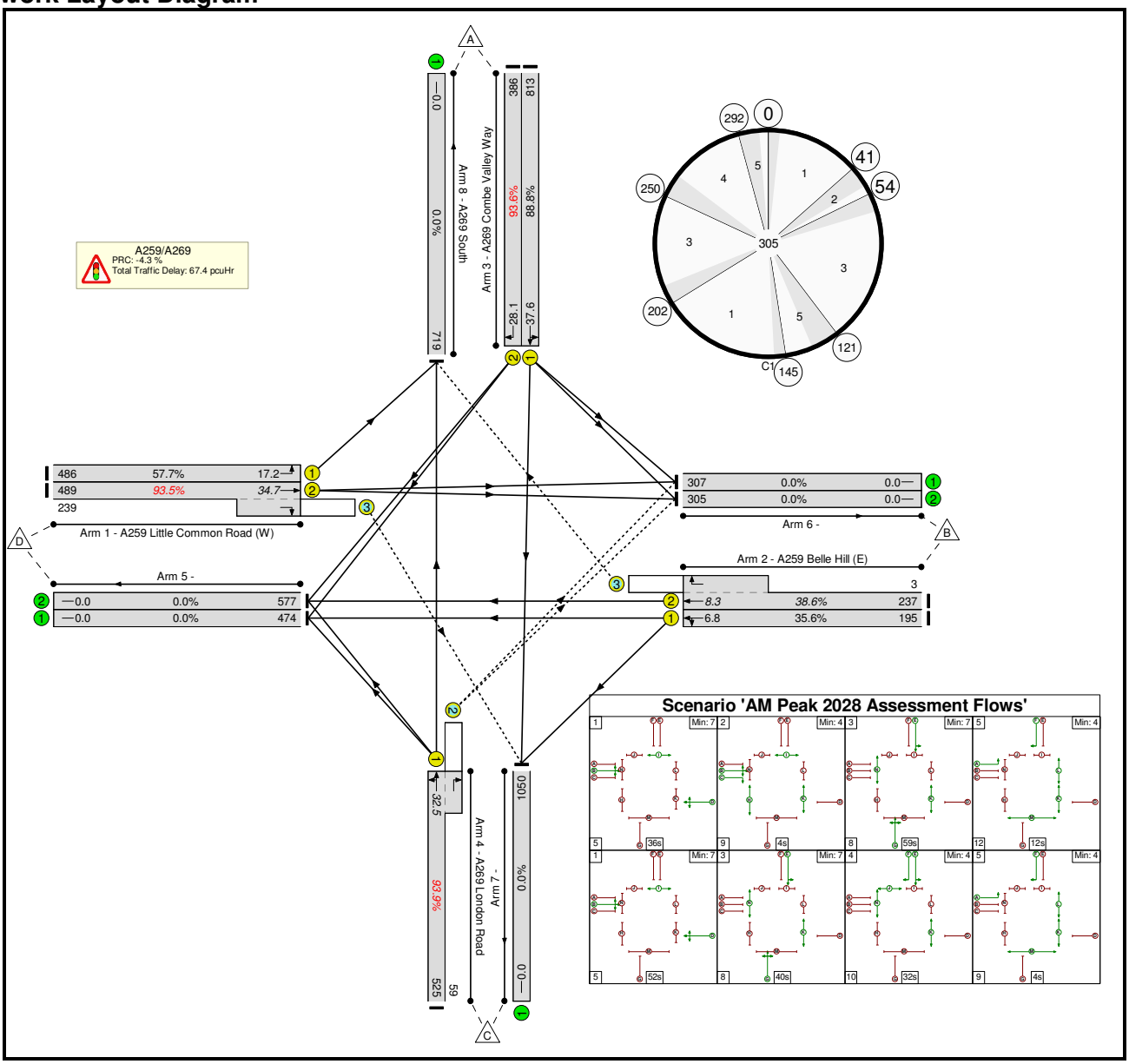
C1 PRC for Signalled Lanes (%): -2.8 Total Delay for Signalled Lanes (pcuHr): 57.52 Cycle Time (s): 305
PRC Over All Lanes (%): -2.8 Total Delay Over All Lanes(pcuHr): 57.52

Stage Sequence Diagram

Scenario 3: 'AM Peak 2028 Assessment Flows' (FG3: 'AM Peak 2028 Assessment Flows', Plan 1: 'Capture Double')



Network Layout Diagram



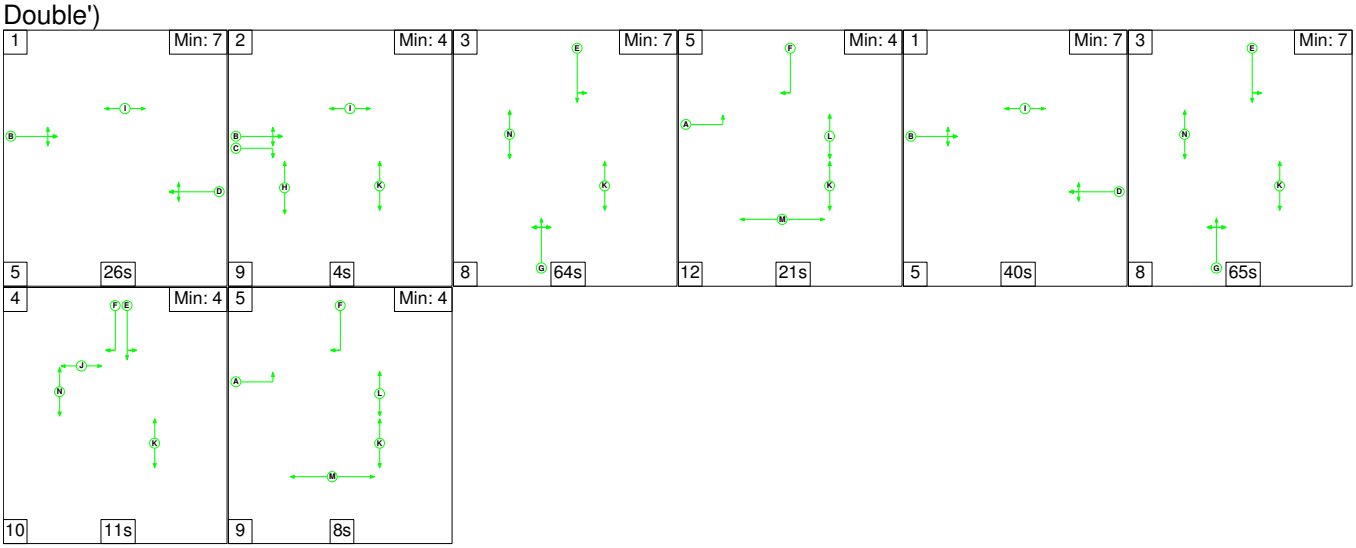
Network Results

Item	Lane Description	Full Phase	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A259/A269 Existing Layout	-	-	-	-	-	**93.9%**	**44.3**	**21.9**	**67.4**	-	-	-	-
A259/A269	-	-	-	-	-	**93.9%**	**44.3**	**21.9**	**67.4**	-	-	-	-
1/1	A259 Little Common Road (W) Left	B	486	1795	842	57.7%	4.0	0.7	4.7	34.8	16.5	0.7	17.2
1/2+1/3	A259 Little Common Road (W) Ahead Right	B	728	2130:1936	778	93.5%	9.5	5.9	15.8	78.3	28.8	5.9	34.7
2/1	A259 Belle Hill (E) Ahead Left	D	195	1856	548	35.6%	2.3	0.3	2.6	47.4	6.5	0.3	6.8
2/2+2/3	A259 Belle Hill (E) Ahead Right	D	240	2085:1895	622	38.6%	2.8	0.3	3.2	47.9	8.0	0.3	8.3
3/1	A269 Combe Valley Way Left Ahead	E	813	1952	915	88.8%	8.4	3.7	12.1	53.6	33.9	3.7	37.6
3/2	A269 Combe Valley Way Right	F	386	1936	413	93.6%	9.3	5.2	14.5	135.3	22.9	5.2	28.1
4/1+4/2	A269 London Road Left Right Ahead	G	584	1801:1856	622	93.9%	8.0	5.9	14.5	89.5	26.7	5.9	32.5

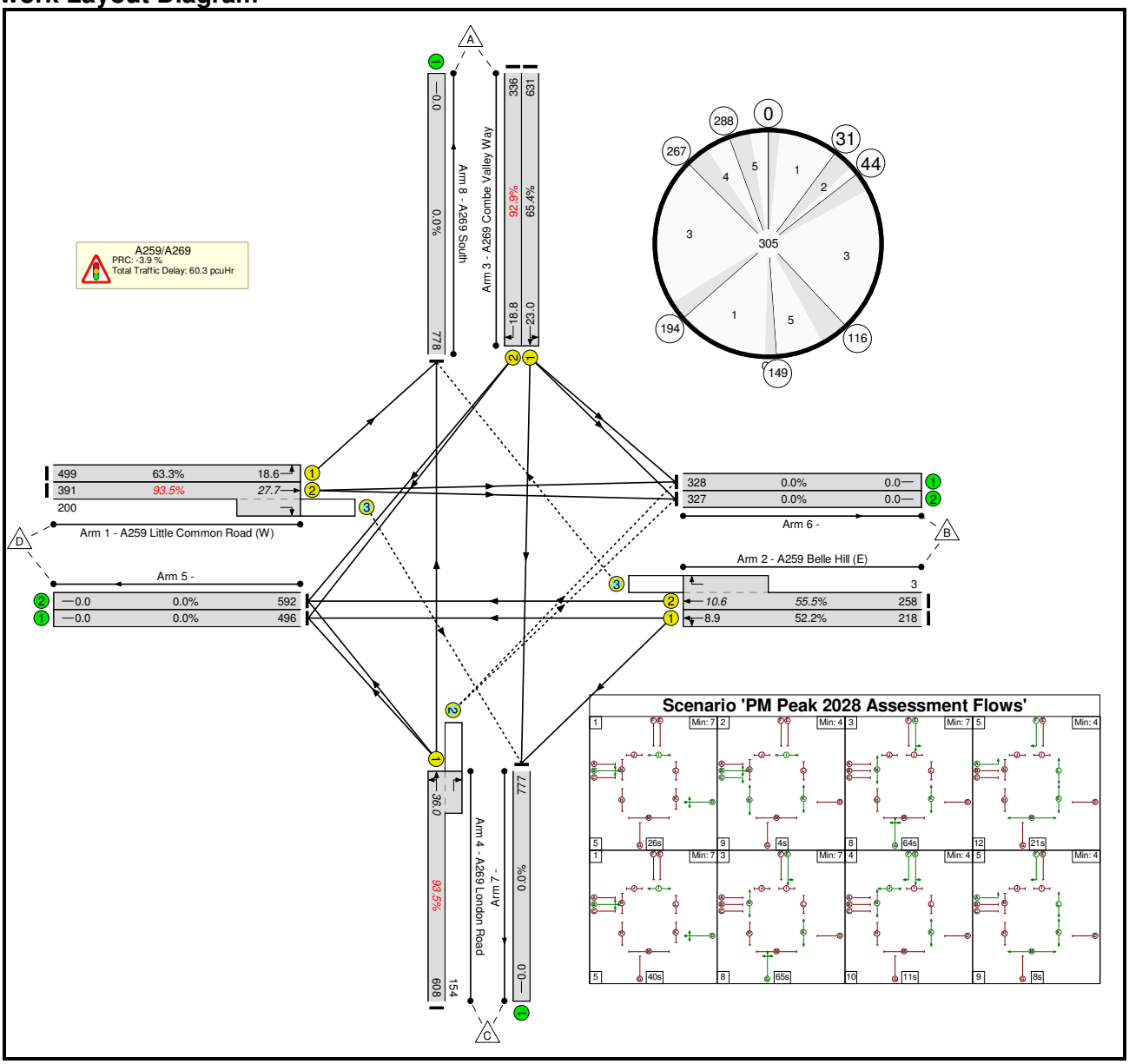
C1 PRC for Signalled Lanes (%): -4.3 Total Delay for Signalled Lanes (pcuHr): 67.43 Cycle Time (s): 305
PRC Over All Lanes (%): -4.3 Total Delay Over All Lanes(pcuHr): 67.43

Stage Sequence Diagram

Scenario 4: 'PM Peak 2028 Assessment Flows' (FG4: 'PM Peak 2028 Assessment Flows', Plan 1: 'Capture Double')



Network Layout Diagram



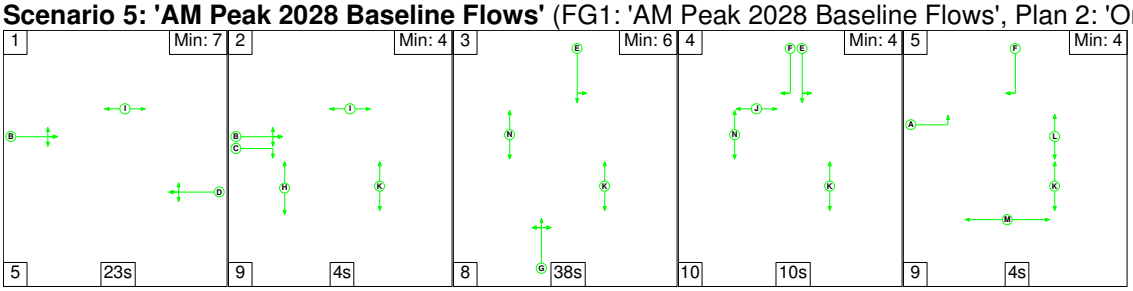
Network Results

Item	Lane Description	Full Phase	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A259/A269 Existing Layout	-	-	-	-	-	**93.5%**	**39.5**	**19.2**	**60.3**	-	-	-	-
A259/A269	-	-	-	-	-	**93.5%**	**39.5**	**19.2**	**60.3**	-	-	-	-
1/1	A259 Little Common Road (W) Left	B	499	1795	789	63.3%	4.6	0.9	5.5	39.6	17.7	0.9	18.6
1/2+1/3	A259 Little Common Road (W) Ahead Right	B	591	2130:1936	632	93.5%	8.6	5.6	14.9	90.8	22.1	5.6	27.7
2/1	A259 Belle Hill (E) Ahead Left	D	218	1873	418	52.2%	3.2	0.5	3.7	61.1	8.4	0.5	8.9
2/2+2/3	A259 Belle Hill (E) Ahead Right	D	261	2085:1895	470	55.5%	3.8	0.6	4.5	61.4	10.0	0.6	10.6
3/1	A269 Combe Valley Way Left Ahead	E	631	1937	965	65.4%	5.0	0.9	6.0	34.2	22.1	0.9	23.0
3/2	A269 Combe Valley Way Right	F	336	1936	362	92.9%	5.7	4.8	10.5	112.0	14.1	4.8	18.8
4/1+4/2	A269 London Road Left Right Ahead	G	762	1803:1856	815	93.5%	8.5	5.9	15.3	72.1	30.2	5.9	36.0

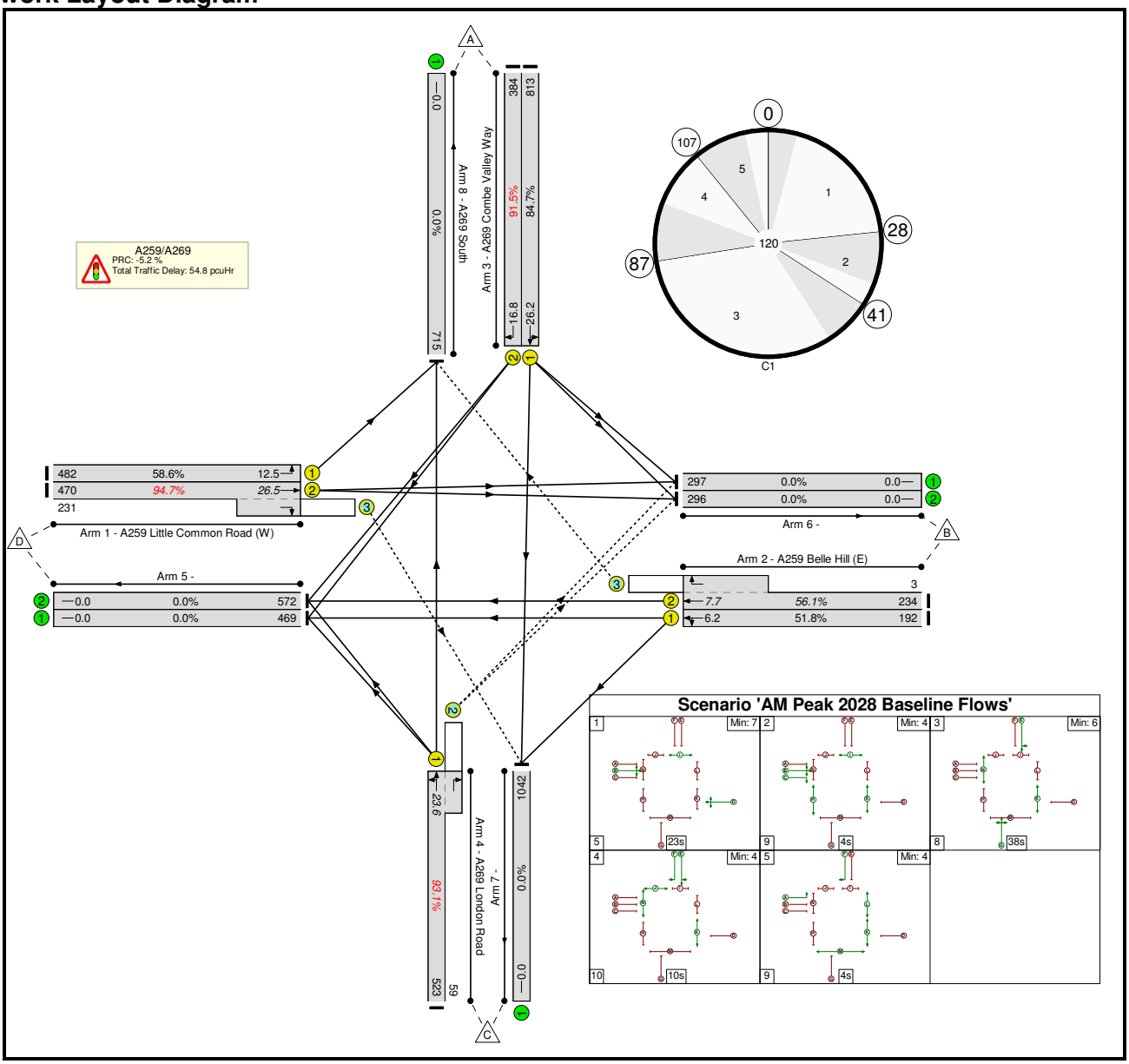
C1 PRC for Signalled Lanes (%): -3.9 Total Delay for Signalled Lanes (pcuHr): 60.26 Cycle Time (s): 305
PRC Over All Lanes (%): -3.9 Total Delay Over All Lanes(pcuHr): 60.26

Stage Sequence Diagram

Scenario 5: 'AM Peak 2028 Baseline Flows' (FG1: 'AM Peak 2028 Baseline Flows', Plan 2: 'One Cycle')



Network Layout Diagram



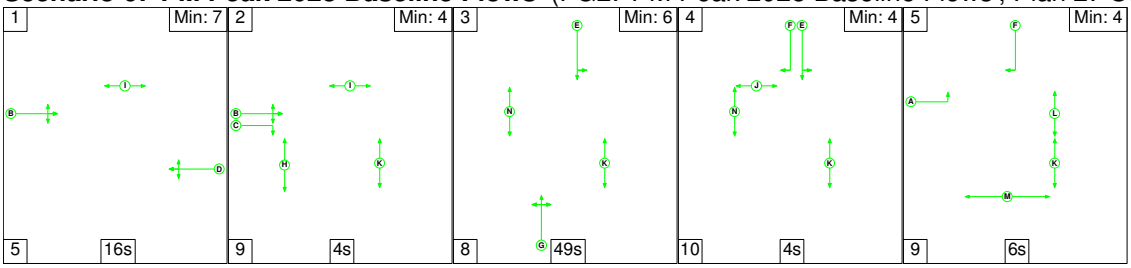
Network Results

Item	Lane Description	Full Phase	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A259/A269 Existing Layout	-	-	-	-	-	**94.7%**	**32.9**	**20.9**	**54.8**	-	-	-	-
A259/A269	-	-	-	-	-	**94.7%**	**32.9**	**20.9**	**54.8**	-	-	-	-
1/1	A259 Little Common Road (W) Left	B	482	1795	823	58.6%	3.2	0.7	3.9	29.3	11.8	0.7	12.5
1/2+1/3	A259 Little Common Road (W) Ahead Right	B	701	2130:1936	740	94.7%	7.5	6.7	14.6	74.8	19.8	6.7	26.5
2/1	A259 Belle Hill (E) Ahead Left	D	192	1855	371	51.8%	2.3	0.5	2.8	52.8	5.7	0.5	6.2
2/2+2/3	A259 Belle Hill (E) Ahead Right	D	237	2085:1895	422	56.1%	2.8	0.6	3.5	53.2	7.0	0.6	7.7
3/1	A269 Combe Valley Way Left Ahead	E	813	1952	960	84.7%	6.0	2.7	8.7	38.4	23.5	2.7	26.2
3/2	A269 Combe Valley Way Right	F	384	1936	419	91.5%	4.9	4.3	9.2	86.7	12.5	4.3	16.8
4/1+4/2	A269 London Road Left Right Ahead	G	582	1801:1856	625	93.1%	6.2	5.4	12.1	74.7	18.2	5.4	23.6

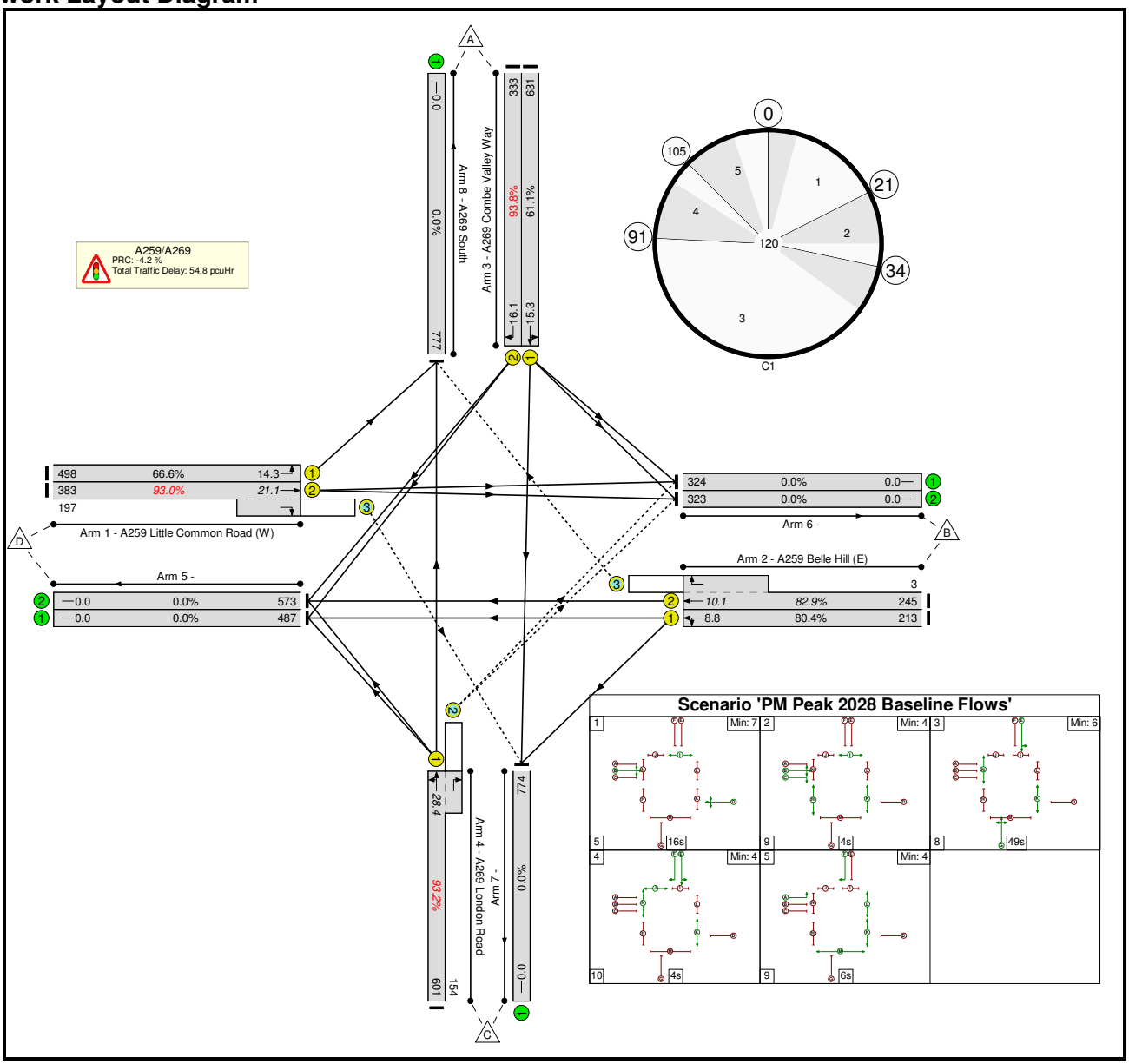
C1 PRC for Signalled Lanes (%): -5.2 Total Delay for Signalled Lanes (pcuHr): 54.81 Cycle Time (s): 120
PRC Over All Lanes (%): -5.2 Total Delay Over All Lanes(pcuHr): 54.81

Stage Sequence Diagram

Scenario 6: 'PM Peak 2028 Baseline Flows' (FG2: 'PM Peak 2028 Baseline Flows', Plan 2: 'One Cycle')



Network Layout Diagram



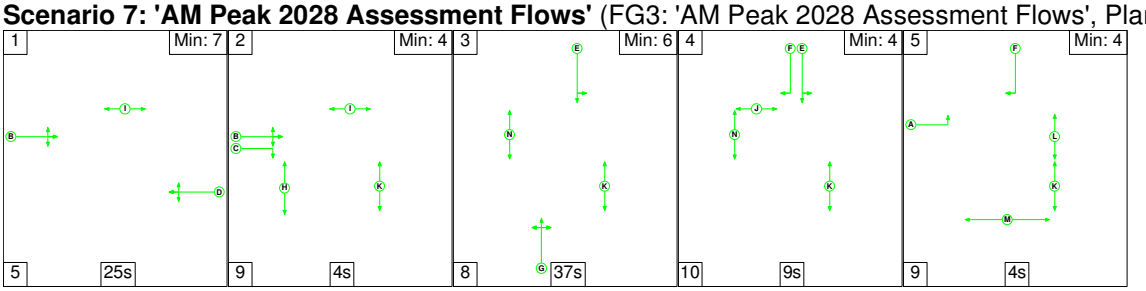
Network Results

Item	Lane Description	Full Phase	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A259/A269 Existing Layout	-	-	-	-	-	**93.8%**	**31.6**	**22.1**	**54.8**	-	-	-	-
A259/A269	-	-	-	-	-	**93.8%**	**31.6**	**22.1**	**54.8**	-	-	-	-
1/1	A259 Little Common Road (W) Left	B	498	1795	748	66.6%	3.9	1.0	4.9	35.4	13.3	1.0	14.3
1/2+1/3	A259 Little Common Road (W) Ahead Right	B	580	2130:1936	624	93.0%	6.8	5.3	12.5	77.6	15.8	5.3	21.1
2/1	A259 Belle Hill (E) Ahead Left	D	213	1871	265	80.4%	3.0	1.9	4.9	82.1	6.9	1.9	8.8
2/2+2/3	A259 Belle Hill (E) Ahead Right	D	248	2085:1895	299	82.9%	3.4	2.2	5.7	82.8	7.9	2.2	10.1
3/1	A269 Combe Valley Way Left Ahead	E	631	1937	1033	61.1%	3.4	0.8	4.2	23.8	14.5	0.8	15.3
3/2	A269 Combe Valley Way Right	F	333	1936	355	93.8%	4.5	5.2	9.6	104.1	10.9	5.2	16.1
4/1+4/2	A269 London Road Left Right Ahead	G	755	1804:1856	810	93.2%	6.7	5.7	13.0	62.1	22.8	5.7	28.4

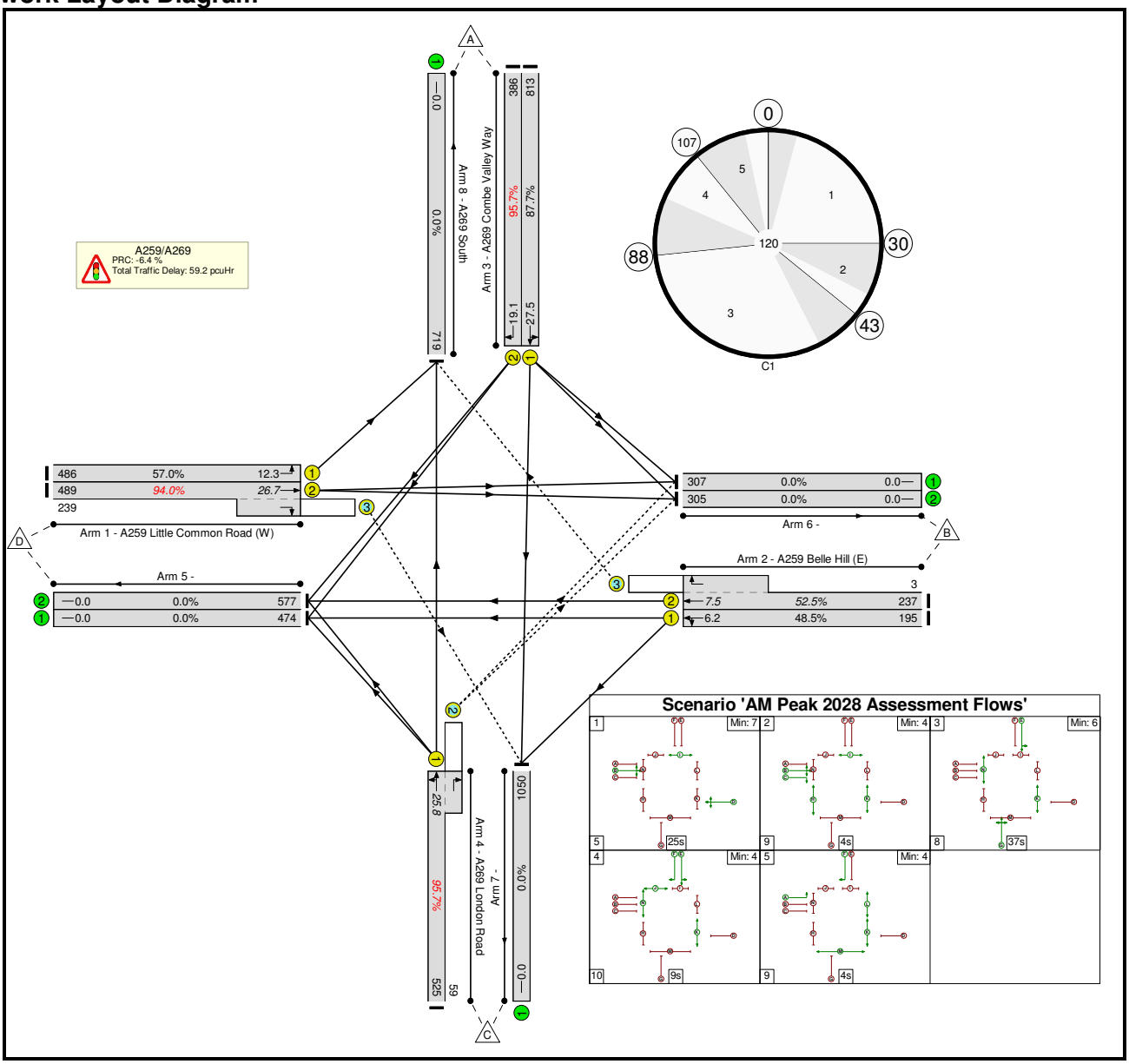
C1 PRC for Signalled Lanes (%): -4.2 Total Delay for Signalled Lanes (pcuHr): 54.80 Cycle Time (s): 120
PRC Over All Lanes (%): -4.2 Total Delay Over All Lanes(pcuHr): 54.80

Stage Sequence Diagram

Scenario 7: 'AM Peak 2028 Assessment Flows' (FG3: 'AM Peak 2028 Assessment Flows', Plan 2: 'One Cycle')



Network Layout Diagram



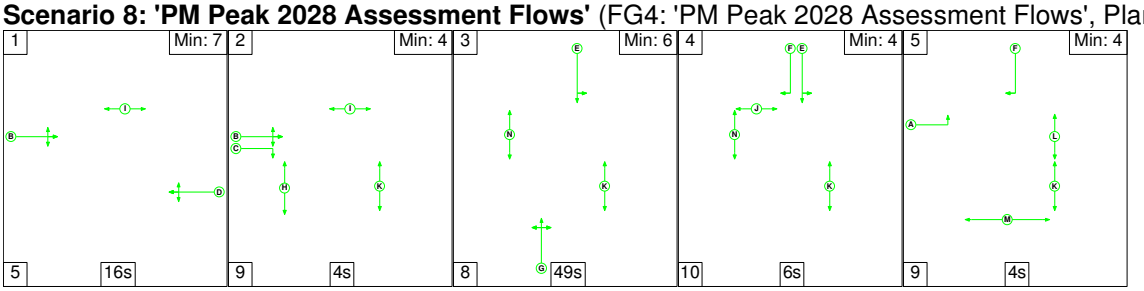
Network Results

Item	Lane Description	Full Phase	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A259/A269 Existing Layout	-	-	-	-	-	**95.7%**	**33.4**	**24.9**	**59.2**	-	-	-	-
A259/A269	-	-	-	-	-	**95.7%**	**33.4**	**24.9**	**59.2**	-	-	-	-
1/1	A259 Little Common Road (W) Left	B	486	1795	853	57.0%	3.1	0.7	3.7	27.6	11.6	0.7	12.3
1/2+1/3	A259 Little Common Road (W) Ahead Right	B	728	2130:1936	774	94.0%	7.5	6.2	14.2	70.1	20.5	6.2	26.7
2/1	A259 Belle Hill (E) Ahead Left	D	195	1856	402	48.5%	2.2	0.5	2.7	49.8	5.7	0.5	6.2
2/2+2/3	A259 Belle Hill (E) Ahead Right	D	240	2085:1895	457	52.5%	2.8	0.5	3.3	50.1	7.0	0.5	7.5
3/1	A269 Combe Valley Way Left Ahead	E	813	1952	927	87.7%	6.4	3.4	9.8	43.2	24.2	3.4	27.5
3/2	A269 Combe Valley Way Right	F	386	1936	403	95.7%	5.0	6.4	11.4	106.7	12.7	6.4	19.1
4/1+4/2	A269 London Road Left Right Ahead	G	584	1801:1856	610	95.7%	6.3	7.2	14.1	86.9	18.6	7.2	25.8

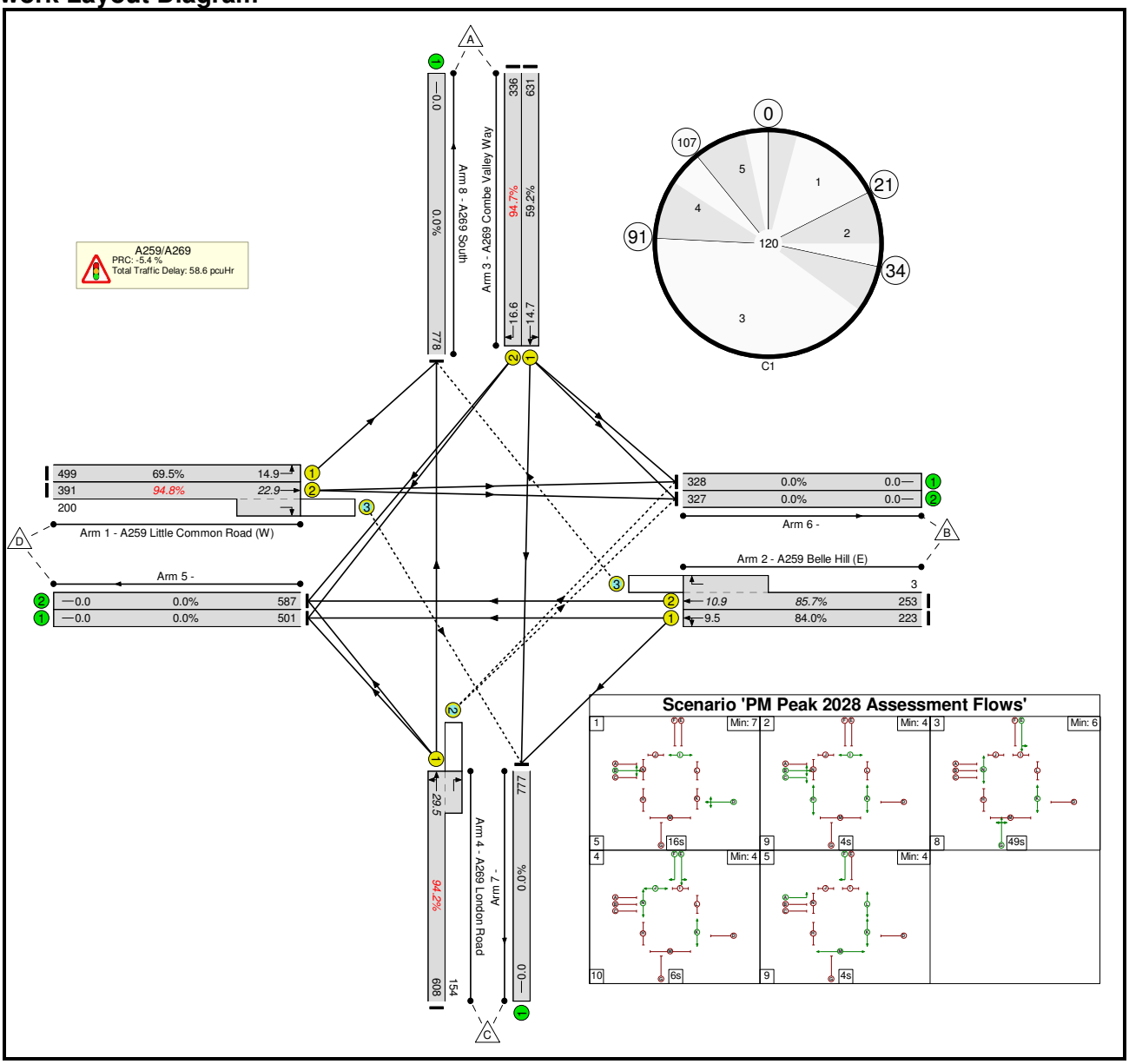
C1 PRC for Signalled Lanes (%): -6.4 Total Delay for Signalled Lanes (pcuHr): 59.23 Cycle Time (s): 120
PRC Over All Lanes (%): -6.4 Total Delay Over All Lanes(pcuHr): 59.23

Stage Sequence Diagram

Scenario 8: 'PM Peak 2028 Assessment Flows' (FG4: 'PM Peak 2028 Assessment Flows', Plan 2: 'One Cycle')



Network Layout Diagram



Network Results

Item	Lane Description	Full Phase	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A259/A269 Existing Layout	-	-	-	-	-	**94.8%**	**32.2**	**25.3**	**58.6**	-	-	-	-
A259/A269	-	-	-	-	-	**94.8%**	**32.2**	**25.3**	**58.6**	-	-	-	-
1/1	A259 Little Common Road (W) Left	B	499	1795	718	69.5%	4.1	1.1	5.3	38.1	13.7	1.1	14.9
1/2+1/3	A259 Little Common Road (W) Ahead Right	B	591	2130:1936	623	94.8%	7.0	6.5	13.9	84.6	16.3	6.5	22.9
2/1	A259 Belle Hill (E) Ahead Left	D	223	1874	265	84.0%	3.1	2.4	5.5	88.3	7.2	2.4	9.5
2/2+2/3	A259 Belle Hill (E) Ahead Right	D	256	2085:1895	299	85.7%	3.6	2.7	6.2	87.9	8.2	2.7	10.9
3/1	A269 Combe Valley Way Left Ahead	E	631	1937	1065	59.2%	3.2	0.7	3.9	22.2	14.0	0.7	14.7
3/2	A269 Combe Valley Way Right	F	336	1936	355	94.7%	4.5	5.6	10.1	108.2	11.0	5.6	16.6
4/1+4/2	A269 London Road Left Right Ahead	G	762	1803:1856	809	94.2%	6.8	6.3	13.8	65.0	23.2	6.3	29.5

C1 PRC for Signalled Lanes (%): -5.4 Total Delay for Signalled Lanes (pcuHr): 58.61 Cycle Time (s): 120
PRC Over All Lanes (%): -5.4 Total Delay Over All Lanes(pcuHr): 58.61