Land South of Allington Lane
Eastleigh

Transport Opportunity Report

Hallam Land Management, The Davies Family

& Bovis Homes Ltd

Brookbanks

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Executive Summary

Brookbanks Consulting (BCL) is appointed by Hallam Land Management to review the opportunities deliver a residential development on land of Allington Lane, Eastleigh.

The proposed development could include delivery of up to 2,500 dwellings of mixed type and tenure, supported by additional employment and education land uses.

It is considered that the site benefits from a "unique" location, being surrounded by transport infrastructure, some of which is currently underutilised, from which the transport strategy can capitalise upon these strengths through offering significant benefits:

Unique location – Only strategic option in Eastleigh that can offer multiple links to several surrounding settlements, whilst facilitating opportunities for these existing settlements to take maximum advantage of new community facilities that come forward with this option

Improved access to rail – (main London to Southampton line and Eastleigh to Fareham line) - Via both new links to existing rail services and being the only strategic option which can facilitate / enable a new railway station

Proximity and good access to the city of Southampton - Closest meaningful Strategic Option to provide significant housing with rapid and easy access into Eastleigh, Hedge End, West End and Southampton

Proximity and good access to Eastleigh - Closest Strategic Option to connect to Eastleigh Town, via proposed public links (walking, cycling, rail)

Net transport benefits to surrounding settlements – No other strategic options has an opportunity to link into several existing settlements; Allington lane will bring quick links and benefits to Hedge End, West End, Eastleigh, Horton Heath, Fair Oak and Bishopstoke

Closest site to areas of major employment, leisure and housing need – Opportunity for employees and employers to benefit from living and having a new work force in this location, with regards to accessibility to multiple settlements via multiple sustainable travel opportunities.

In considering the land at Allington Lane, it is evident that the Allington new village is the closest available and realistic site to Southampton and Eastleigh, the hubs and drivers of the economy, offering major employment, transport links, leisure and being the origins of the principal housing need. In addition, existing employment, community facilities and public transport services are all within walking distance of the new community.

In this regard, no other site / strategic option for growth being considered by Eastleigh Borough Council can offer these benefits and opportunities. Currently, the site is the missing jigsaw piece to fully link the settlements in the northern part of Eastleigh.

To deliver a sustainable development, the strategy is to deliver:

High levels of self-containment - through the delivery of a range of facilities/amenities to cater for everyday needs for the existing and proposed community

Promoting greater use of non-car based travel and capturing improved public transport, cycle and pedestrian accessibility / provision – New and improved walking / cycling linkages; introduction of new bus services; availability to deliver a new railway station

Improvements to the highway network to improve the operation – Facilitate existing road and network improvements of identified congestion points

The strategy to deliver the development has been carefully considered. A comprehensive mitigation package measures has been considered to ensure that the development does not have a negative impact in the surrounding hinterland. The development opportunities are highlighted below:

Local Road Network Opportunities
The road network has been reviewed and a comprehensive package of highway interventions have been identified to mitigate the impact of development. These are identified below:

- Bishopstoke Rd / A335: This junction will be improved through minor localised widening on the Bishopstoke Road and Twyford Road approaches.
- Wide Lane / A335: This junction will be improved through minor localised widening on all approaches.
- Wide Lane / Mansbridge Road A27: This junction will be improved through minor localised widening on all approaches.

- Thornhill Park Rd / A27 / Charles Watts Way: This junction will be improved through minor localised widening on the Moorhill Road and Thornhill Park Road approaches.
- Tollbar Way / Turnpike Way / Charles Watts Way: This will be improved through minor localised widening on the Charles Watts Way approaches.
- Charles Watts Way / Botley Rd / Grange Rd: This junction will be improved through minor localised widening on the Botley Road approach.
- Tollbar Way / Botley Rd: This junction will be improved through minor localised widening on the approach.
- Botley Rd / Moorgreen Rd: This will be improved through minor localised widening on the Botley Road east approach.
- A27 Swaything Road / Allington Ln: This junction will be improved through signalisation.
- Allington Ln / Oak Vale / Upmil Cl: This junction will be improved through minor localised widening on the Oak Vale and Upmill Close approaches.
- Allington Ln / Fair Oak Rd (B3037): This junction is identified by the Highway Authority that the junction will be converted into a signal controlled junction. The junction can be further enhanced through improved phasing / staging.
- Fair Oak Rd / Alan Drayton Way: This junction will be improved through widening on the minor arm.
- Bishopstoke Rd / Riverside: This junction will be improved through widening on the minor arm.

The development will be supported by walking, cycling, public transport and travel plan strategies that will provide alternatives to the private motorcar. This will encourage a mode shift away from the private motorcar towards more sustainable modes of travel. In terms of the modelling protocol used to assess the development impacts, no specific allowance for mode shift has been assumed. Therefore, the resultant trip generation and subsequent impacts presents a worse case.

Internal Development Layout Opportunities
The development is adjacent to numerous public highway points to facilitate a phased delivery
The onsite network can be delivered to ensure a cohesive approach to on site accessibility.

Walking and Cycling Opportunities
Footway provision to be provided Allington Lane, Quob Lane and Burnett's Lane.
On site provision to provide a comprehensive network of walking and cycling routes.
The onsite PRoW network to be incorporated into the site masterplan.

Public Transport Opportunities
The development can be served by a bespoke public transport route.
The service will be self-funded to ensure the long-term viability.

Sustainable Travel Opportunities
The delivery of a mixed used development will respond to daily demands and reduce the need to travel.
The delivery of the Travel Plan will maximise opportunities for mode shift. A development of this site has the potential to achieve a significant mode shift.

Overall, the development provides mitigation in relation to the transport networks and aims to minimise travel through the implementation of the Travel Plan to sufficiently minimise the impact of the development on the highway network. Good connectivity is afforded to the surrounding urban area and accessibility to a range of key services, facilities and opportunities has been provided.

In summary, the proposals demonstrate that a well-considered approach to developing transport and highways proposals for the development is able to ensure the proposals are able to meet national, regional and local policy and guidance.

1 Introduction

1.1 Brookbanks Consulting Ltd is appointed by Hallam Land Management, The Davies Family and Bovis Homes Ltd to complete a review of the opportunities for a potential development on land south of Allington Lane, Eastleigh.

1.2 The purpose of this note is to review the transport networks supporting the development and to identify the available opportunities to deliver a sustainable development.

1.3 Hallam Land Management consider the development of this site to represent an appropriate and deliverable location for development.

2 Background Information

Location & Details

2.1 The development site is located to the north of Southampton. The broad layout is presented below.

Figure 2a: Broad site location

2.2 The wider strategic site that is being promoted, as shown below, lies between the existing urban areas of Eastleigh and Hedge End, and is bound on two sides by existing transport infrastructure. The southern boundary of the site has the M27, with the site extending up to the Portsmouth Harbour to Eastleigh railway line to the north. The western boundary of the site comprises Allington Lane, with the eastern boundary of the site being existing field boundaries or the rear of properties along Burnett's Lane. The wider strategic site location is shown illustratively on Figure 2b below:

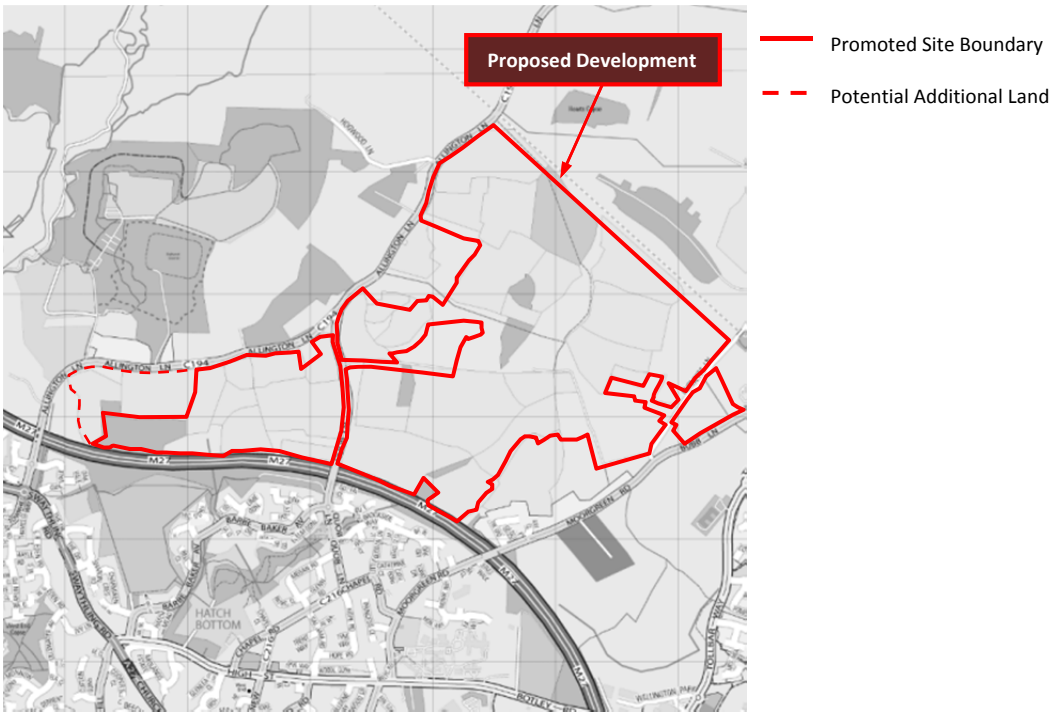


Figure 2b: Overall Strategic Site Location

Development Criteria

2.3 The final development quantum will be guided by the various technical studies being undertaken and through discussions with the Local Planning Authority, Eastleigh Borough Council.

2.4 For the purposes of this study, the development has been assumed to be:

- 2,500 homes of mixed type and tenure
- Employment land consisting of 10,000 m^2 GFA
- Two primary schools, each delivering two form entries
- Local centre in support of the future residents

3 Local Road Network Opportunities

Existing Road Network

3.1 The local road network is indicated in Figure 3a.

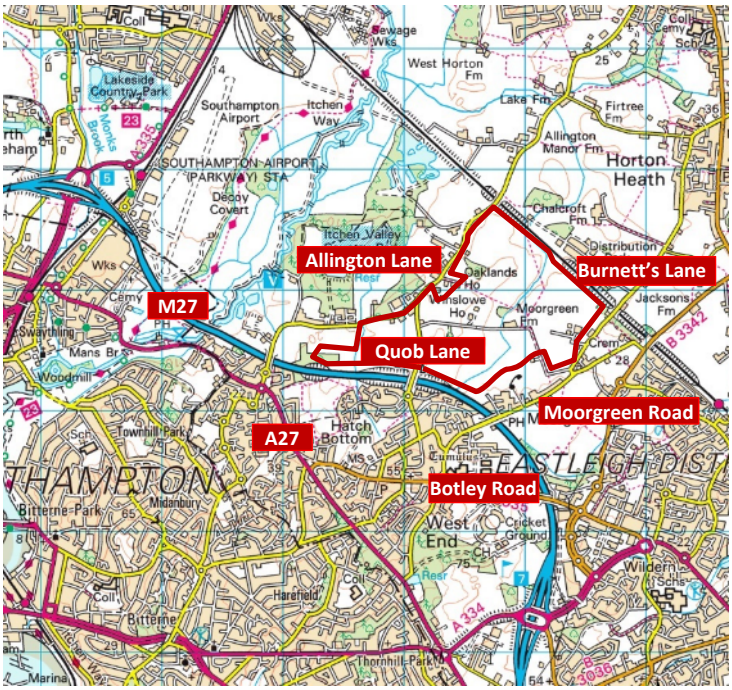


Figure 3a: Local Road Network

3.2 Allington Lane: This road caters for north – south trips from the A27 in the south to rural hinterland of northeast Southampton. The road is single carriageway and is rural in character. There are a limited number of priority junctions along Allington Lane. There are several residential properties that are served direct and the footway provision is discussed later in this report. Allington Lane passes over a rail line and the M27.

3.3 Quob Lane: Allington Lane forms a priority junction with Quob Lane. Quob Lane is a single carriageway road linking into a residential area after passing over the M27.

3.4 Burnett's Lane: This is located to the east of the site and is similar in characteristics with other roads in the area but currently accommodates significant HGV movement associated with Chalcroft Distribution Park. Burnetts Lane forms a priority junction with Moorgreen Road and Bubb Lane. Bubb Lane is a potential alternative route to the A27 to connect with the wider strategic network.

3.5 Moorgreen Road: Continues in a southerly direction from Burnetts Lane over the M27 to connect with West End. Moorgreen Road continues to connect with Botley Road in West End. This route provides an alternative connection to the strategic road network.

3.6 A27: The A27 is located to the south of the site and is connected via Allington Lane and Moorgreen Road. The A27 is a single carriageway road and provides access to residential properties and other local facilities / amenities as well as delivering a locally significant distributor link.

Highway Impact

3.7 To assess the potential impact of the development, the highway network has been assessed. Through discussions with HCC, the modelling protocol that has been agreed is broadly highlighted below. This assessment has been carried out to highlight those locations that could require enhancing. This assessment work will need to be reviewed during any subsequent planning application.

Potential Trip Generation

3.8 **Trip Rates:** To predict the likely levels of trips generated by the proposed development, TRICS was used to estimate the likely trip rates. The TRICS database is updated on a bi-annual basis and as such the latest version has been used for the assessment. The high level trip rates are presented below.

Trips	Private Housing		Affordable Housing		Primary School		Employment	
	In	Out	In	Out	In	Out	In	Out
08:00 to 09:00	0.149	0.394	0.127	0.235	0.265	0.183	1.481	0.264
17:00 to 18:00	0.35	0.201	0.258	0.185	0.029	0.045	0.182	1.178

Figure 3b: Trip rates

3.9 **Housing Trip Rate:** A development of this size will deliver a substantial housing stock of mixed type and tenure. The Local Plans highlight that housing developments will deliver elements of social housing. The percentage of affordable housing could potentially vary through site viability assessments. Therefore, to ensure a robust assessment and to take account of variation in trip rates, only a 20% assumption for affordable housing is to be included with the remaining 80% identified as private housing. This provides a robust assessment and will take into account any fluctuation in affordable housing trip rates. The resultant housing trip rates are presented below.

Trips	Private Housing	
	In	Out
08:00 to 09:00	0.145	0.362
17:00 to 18:00	0.332	0.198

Figure 3c: Housing Trip rates

3.10 **Total Trip Generation:** Based on the identified trip rates, total trip generation is presented below.

Trips	Housing		Primary School		Employment	
	In	Out	In	Out	In	Out
08:00 to 09:00	362	906	223	154	148	26
17:00 to 18:00	829	495	24	38	18	118

Figure 3d: Trip generation

3.11 **Employment internalisation:** Due to the complimentary land uses on site, it is expected that there will be an interaction between land uses. It has been agreed that 5% of the employment trips will be internal to the development. The split between internal and external trips are presented below.

Trips	Employment - Internal		Employment - External	
	In	Out	In	Out
08:00 to 09:00	7	1	141	25
17:00 to 18:00	1	6	17	112

Figure 3e: Employment trip generation

3.12 **Education Internalisation:** The development will deliver primary school places to cater for the demands of the development. To determine the demand, Census statistics has been reviewed. This included that every house would generate a 0.161 demand. This would equate to a demand of 404 places. The resultant internal trips are presented below.

Trips	Education - Internal		Education - External	
	In	Out	In	Out
08:00 to 09:00	107	74	115	80
17:00 to 18:00	12	18	13	20

Figure 3f: Education trip generation

3.13 **Total Trips:** The internal employment / education trips have been removed from the housing trips to generate the total external trips, as presented below.

Trips	Housing		Primary School		Employment	
	In	Out	In	Out	In	Out
08:00 to 09:00	247	830	115	80	141	25
17:00 to 18:00	816	470	13	20	11	43

Figure 3g: External trip generation

3.14 The development will be supported by walking, cycling, public transport and travel plan strategies that will provide alternatives to the private motorcar. This will encourage a mode shift away from the private motorcar towards more sustainable modes of travel. In terms of the modelling protocol used to assess the development impacts, no specific allowance for mode shift has been assumed. Therefore, the resultant trip generation and subsequent impacts presents a worse case.

Modelling Protocol

3.15 **Assessment Scenario:** Through discussions with HCC, it has been agreed to model the potential impacts of the development based on the output of the Hampshire Sub-Reginal Traffic Model (SRTM). The available model runs include runs for the Interim Strategic Transport Strategy work undertaken for Eastleigh Borough Council Issues and Options review-this data could be available at a cost and those runs which could be relevant are as follows:

- 2014 Reference Case
- 2036 Do Minimum 1 (Forecast baseline). This includes all the development sites that were included in the previous draft Eastleigh Local Plan to 2029, as well as North Whiteley and Welborne and associated infrastructure
- 2036 Do Something 1, which includes all the above plus various transport schemes that have either been delivered or are due to be delivered as part of development sites with planning permission or resolution to grant.

3.16 **Trip Distribution:** The development generated trips were included within the SRTM outputs, with the trips distributed using 2011 Census travel to work statistics.

3.17 The resultant traffic flows are presented in Appendix C.

Potential impact

3.18 Through discussions with HCC, as number of locations has been identified that could be sensitive to traffic increase. These are broadly located below.

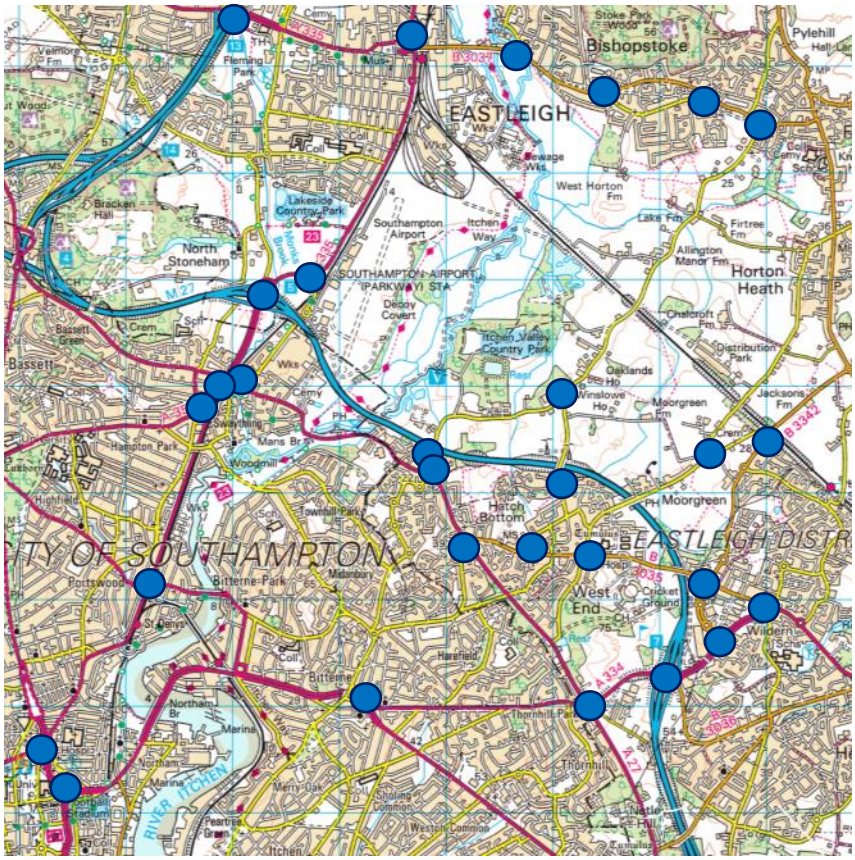


Figure 3h: Potential traffic sensitive locations

3.19 The delivery of the development will invariably increase vehicles trips in the hinterland to the site. In order to identify the junctions that are likely to be effected, a review of the increases in trips has been carried out. This has been based on the following criteria:

- No significant increase in traffic less than 5% on any arm in either peak period
- Minor increase in traffic of between 5% and 10% on any arm in either peak period
- Moderate increase in traffic of between 10% and 20% on any arm in either peak period
- Major increase in traffic greater than 20% on multiple arms in either peak period

3.20 The identified locations are indicated below.

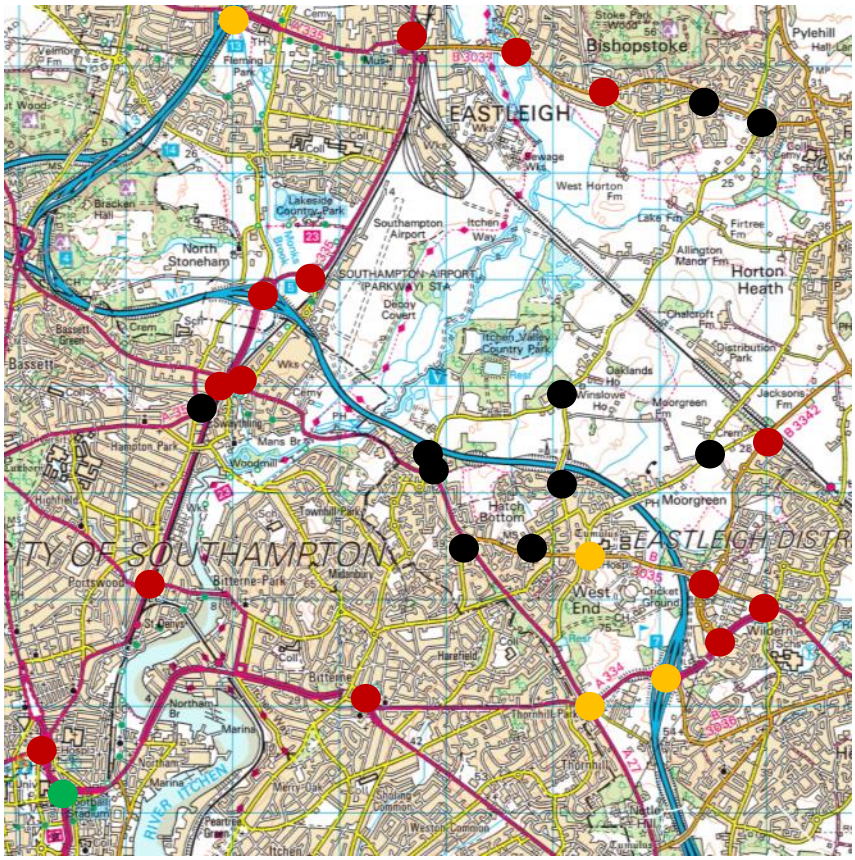


Figure 3i: Initial junction assessment

3.21 This demonstrates that the development will increase the number of trips at several locations. However, this does not necessarily result in excessive queuing. In order to assess the implications, specific junction assessments are required.

3.22 Industry accepted capacity assessment methods have been used to appraise the highway network capacity. The junction capacity output for priority junctions refers to the maximum ratio of flow to capacity (RFC), which measures the predicted flow of vehicles against the junction capacity based on the junction geometry, similarly within signal controlled junctions, overall junction capacity is measured as PRC (Practical Reserve Capacity). A PRC of 0.0% or greater indicates the junction can be expected to perform satisfactorily

3.23 It is normally accepted that an RFC of 1.000, or a degree of saturation of 100%, indicates that the junction is typically operating at maximum capacity. Due to the inherent day-to-day variability of traffic flows a RFC value of 0.85 or a Degree of Saturation of 90% are seen as acceptable in operational terms for development impact assessments.

3.24 The junctions have been assessed in the future year scenarios. Worst case results in the peak periods are summarised below, showing the junctions that operate above the normally accepted thresholds of capacity.

3.25 Through the technical support provided by the Highway Authority to the LPA to support the Local Plan production, numerous junctions have been identified for improving. The junction assessment assumes these will be delivered. The results of the junction assessment are presented below, together with the RFC / PRC for those junctions that exceed the capacity thresholds.

Junction	*Without Development*	*With Development*
Bishopstoke Rd / A335	**RFC = 1.860**	**RFC = 1.913**
Junction 13 M3 Motorway	✓	✓
Wide Lane / A335	**RFC = 2.022**	**RFC = 2.144**
Junction 5 M27 Motorway	✓	✓

Junction	*Without Development*	*With Development*
Wide Lane / Mansbridge Road A27	RFC = 1.020	RFC =1.535
Bassett Green Rd / Stoneham Way / Wide Ln	✓	✓
Stoneham Way / Stoneham Ln / Thomas Lewis Way	✓	✓
A3055 / A355	✓	✓
A3024 / Dorset St / St Andrews Rd	✓	✓
St Andrews Rd / Kingway	✓	✓
Maybray King Way / Bitterne Rd East	✓	✓
Thornhill Park Rd / A27 / Charles Watts Way	RFC = 1.837	RFC = 1.952
Junction 7 M27 motorway	✓	✓
Tollbar Way / Turnpike Way / Charles Watts Way	RFC = 1.705	RFC = 1.769
Charles Watts Way / Botley Rd / Grange Rd	RFC = 0.863	RFC = 0.894
Tollbar Way / Botley Rd	RFC =1.584	RFC =1.589
Botley Rd / Moorgreen Rd	RFC = 2.624	RFC = 2.721
High St (B3035) / Chapel Rd	✓	✓
High St (B3035) / A27 Church Hill	✓	✓
A27 Swaything Road / Allington Ln	RFC = 1.236	RFC = 1.913
Allington Ln / Oak Vale / Upmil Cl	RFC = 0.630	RFC = 1.230
Allington Ln / Quob Ln	✓	✓
Quob Ln / Quob Farm Cl / Barbe Baker Ave	✓	✓
Moorgreen Rd / Burnetts Ln / Bubb Ln	✓	✓
Bubb Ln / Tollbar Way	✓	✓
Allington Ln / Fair Oak Rd (B3037)	RFC = 2.158	RFC = 2.762
Fair Oak Rd / Alan Drayton Way - west	✓	✓
Fair Oak Rd / Alan Drayton Way - east	RFC = 1.136	RFC = 1.339
Bishopstoke Rd / Riverside	RFC = 1.351	RFC = 1.588

Figure 3j: Maximum RFC / PRC predicted

3.26 The results of the junction assessments indicate that several junctions are predicted to exceed the capacity thresholds in the future year, without the development. The inclusion of the development traffic will further extend the assessment results.

3.27 To facilitate development, it will be necessary to mitigate the impact of the development at the following locations:

3.28 **Bishopstoke Rd / A335:** This junction is predicted to exceed theoretical junction capacity in the future year without the development, with the results exacerbated following delivery of the development. The junction is currently a roundabout and it is proposed that the junction will be improved through minor localised widening on the Bishopstoke Road and Twyford Road approaches.

3.29 **Junction 13 M3 Motorway:** This junction is currently operates as a signal controlled junction. The control of the phasing / staging is controlled by MOVA that optimises the junction operation which will minimise the impact of the development. Should the delivery of the Local Plan allocations result in a cumulative impact, then this development would provide a contribution based on the development's level of impact.

3.30 **Wide Lane / A335:** This junction is predicted to exceed theoretical junction capacity in the future year without the development, with the results exacerbated following delivery of the development. The junction is currently a roundabout and it is proposed that the junction will be improved through minor localised widening on all approaches.

3.31 **Junction 5 M27 Motorway:** This junction is currently operates as a signal controlled junction. The control of the phasing / staging is controlled by MOVA that optimises the junction operation which will minimise the impact of the development. Should the delivery of the Local Plan allocations result in a cumulative impact, then this development would provide a contribution based on the development's level of impact.

3.32 **Wide Lane / Mansbridge Road A27:** This junction is predicted to exceed theoretical junction capacity in the future year without the development, with the results exacerbated following delivery of the development. The junction is currently a roundabout and it is proposed that the junction will be improved through minor localised widening on all approaches.

3.33 **Thornhill Park Rd / A27 / Charles Watts Way:** This junction is predicted to exceed theoretical junction capacity in the future year without the development, with the results exacerbated following delivery of the development. The junction is currently a roundabout and it is proposed that the junction will be improved through minor localised widening on the Moorhill Road and Thornhill Park Road approaches.

3.34 **Junction 7 M27 motorway:** This junction is currently operates as a signal controlled junction. The control of the phasing / staging is controlled by MOVA that optimises the junction operation which will minimise the impact of the development. Should the delivery of the Local Plan allocations result in a cumulative impact, then this development would provide a contribution based on the development's level of impact.

3.35 **Tollbar Way / Turnpike Way / Charles Watts Way:** This junction is predicted to exceed theoretical junction capacity in the future year without the development, with the results exacerbated following delivery of the development. The junction is currently a roundabout and it is proposed that the junction will be improved through minor localised widening on the Charles Watts Way approaches.

3.36 **Charles Watts Way / Botley Rd / Grange Rd:** This junction is predicted to exceed theoretical junction capacity in the future year without the development, with the results exacerbated following delivery of the development. The junction is currently a roundabout and it is proposed that the junction will be improved through minor localised widening on the Botley Road approach.

3.37 **Tollbar Way / Botley Rd:** This junction is predicted to exceed theoretical junction capacity in the future year without the development, with the results exacerbated following delivery of the development. The junction is currently a roundabout and it is proposed that the junction will be improved through minor localised widening on the approach.

3.38 **Botley Rd / Moorgreen Rd:** This junction is predicted to exceed theoretical junction capacity in the future year without the development, with the results exacerbated following delivery of the development. The junction is currently a roundabout and it is proposed that the junction will be improved through minor localised widening on the Botley Road east approach.

3.39 **A27 Swaything Road / Allington Ln:** This junction is predicted to exceed theoretical junction capacity in the future year without the development, with the results exacerbated following delivery of the development. The junction is currently a roundabout and it is proposed that the junction will be improved through signalisation.

3.40 **Allington Ln / Oak Vale / Upmil Cl:** This junction is predicted to exceed theoretical junction capacity in the future year without the development, with the results exacerbated following delivery of the development. The junction is currently a roundabout and it is proposed that the junction will be improved through minor localised widening on the Oak Vale and Upmill Close approaches.

3.41 **Allington Ln / Fair Oak Rd (B3037):** This junction is predicted to exceed theoretical junction capacity in the future year without the development, with the results exacerbated following delivery of the development. The junction is currently a T-junction and it is identified by the Highway Authority that the junction will be converted into a signal controlled junction. The junction can be further enhanced through improved phasing / staging.

3.42 **Fair Oak Rd / Alan Drayton Way – east:** This junction is predicted to exceed theoretical junction capacity in the future year without the development, with the results exacerbated following delivery of the development. The junction is currently a T junction and it is proposed that the junction will be improved through widening on the minor arm.

3.43 **Bishopstoke Rd / Riverside:** This junction is predicted to exceed theoretical junction capacity in the future year without the development, with the results exacerbated following delivery of the development. The junction is currently a T junction and it is proposed that the junction will be improved through widening on the minor arm.

3.44 The preliminary off site junction designs are presented in Appendix A.

Local Road Network Opportunities

Through the delivery of the above interventions that present a comprehensive package, the impact of the development will be mitigated.

4 Internal Development Layout Opportunities

4.1 To ensure that an acceptable development can be delivered, it is important to ensure that the site is fully accessible. The following paragraphs demonstrate how the development can be accessed.

4.2 The master plan for the site should be based on a clear hierarchy that encourages the safe movement of all the future residents and employees and visitors, irrespective of the manner in which they travel. A broad hierarchy is described below:

Primary route: A spine road through the site connecting to the possible external access points designed to cater for public transport vehicles and includes a segregated walking and cycling path.

Secondary Routes: Secondary routes are designed to penetrate the individual development blocks individual housing clusters and will be designed to encourage lower vehicle speeds and could incorporate shared spaces between motor vehicles, pedestrians and cyclists. and cater for vehicles at reduced speeds, which will be reflected in the design and appearance of these roads.

The primary and secondary route can be designed to cater for public transport vehicles and will include bus stop facilities, such that the majority of the site will be within 400m of a bus stop.

Tertiary route: These will be designed to penetrate individual housing clusters and will be designed to encourage lower vehicle speeds and could incorporate shared spaces between motor vehicles, pedestrians and cyclists.

4.3 The delivery of the development is likely to be phased over several years. The broad access proposals are indicated below.

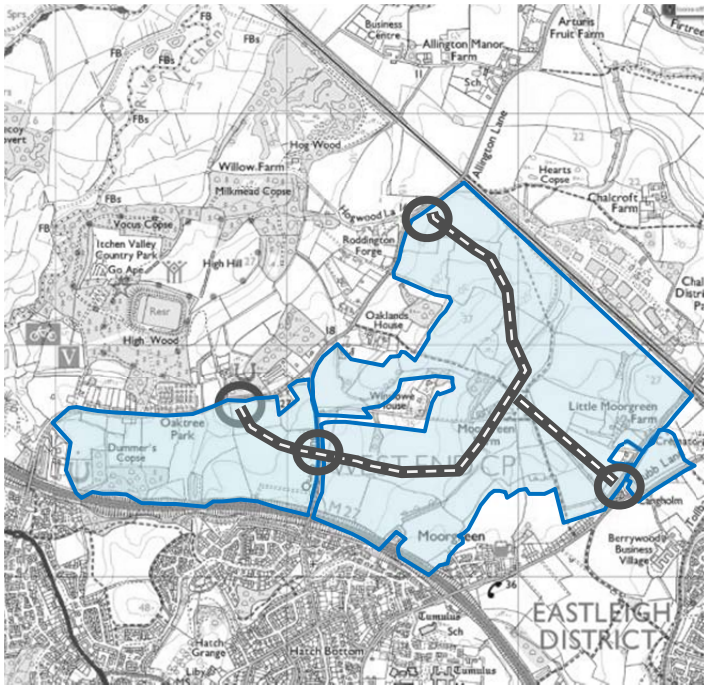


Figure 4a: Potential access strategy

4.4 Access to the first phase development initially could be taken from Allington Lane to the south. Typically, only 150 dwellings can be delivered from a single point. This threshold can often be increased if there is certainty if additional access points are to be delivered later. Therefore, it is considered that up to 300 houses could be delivered from Allington Lane to the south.

4.5 Following on from the first phase, additional points of access can be delivered from Allington Lane to the north and from Burnett's Lane to the east. 3.42

4.6 The preliminary off site junction designs are presented in Appendix B.

4.7 This demonstrates that an appropriate access strategy can be delivered. To support the continual promotion, the access strategy will be reviewed in greater detail, to ensure appropriate points of access can be delivered and will follow necessary design standards.

Internal Development Layout Opportunities

The development is adjacent to numerous public highway points to facilitate a phased delivery

The onsite network can be delivered to ensure a cohesive approach to on site accessibility.

5 Walking and Cycling Opportunities

5.1 The local footway provision adjacent to the site has been reviewed, with the following facilities identified.

5.2 Allington Lane: This bounds the site to the west and caters for north – south trips. To the north, Allington Lane does not provide any footways. Allington Lane crosses a rail line via an overbridge which has a limited width which restricts the potential to provide a footway. Moving south and west from the site, footway provision is provided to the west for a

short section before provision being provided on both sides. Further to the south, Allington Lane crosses the M27 via an overbridge which provides footways to both sides.

5.3 Quob Lane: This bisects the site and does not include any footway facilities adjacent to the site. To the south, Quob Lane crosses the M27 via an overbridge, this has a limited width which restricts the footway potential.

5.4 Burnetts Lane: This is located to the east of the site and does not include footway facilities. Burnetts Lane crosses a rail line via an overbridge which has a limited width which restricts the footway potential.

5.5 Moorgreen Road: This is located to the south-east of the site and provides for a footway heading west bound into West End. Further to the west Moorgreen Road crosses the M27 via an overbridge which provides footways to both sides onwards into West End itself.

5.6 A public right of way connects the site from Moorgreen Farm to an existing footway on Moorgreen Road. There are other existing PROWs which link site to north-west and further south-east towards Hedge End.

5.7 Existing local cycle routes within Southampton and the surrounding area are extensive. Local on-road routes run along lengths of Allington Lane (connecting West End to Itchen Valley Country Park) and Barbe Baker Avenue (accessed via Quob Lane).

5.8 The existing facilities are indicated below:

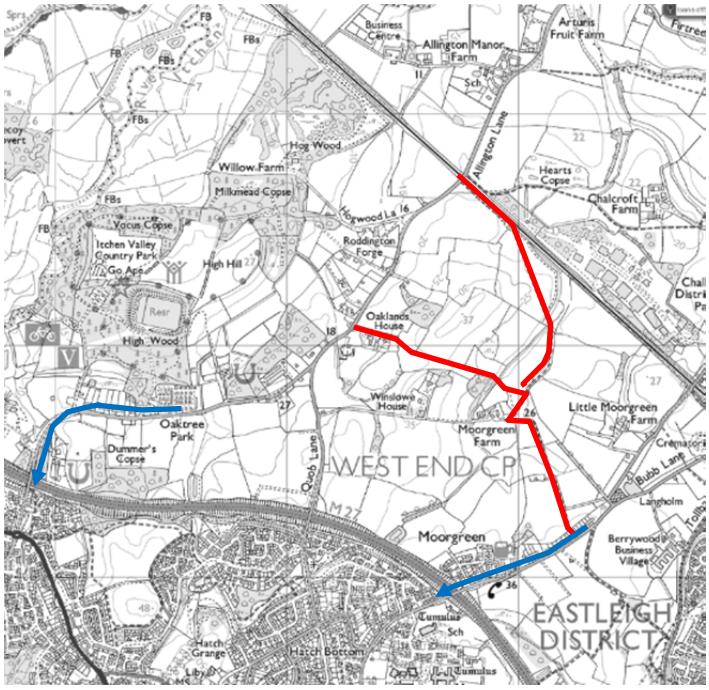


Figure 5a: Existing facilities

5.9 The master plan for the site should include a comprehensive network of walking and cycling routes that will connect the housing estates and employment area in a comprehensive manner. The on-site walking and cycling network should include strong links into the existing off-site networks such that walking and cycling is a viable alternative to the motorcar to access the off-site facilities. Overall consideration should be given towards the former Commission for Architecture and the Built Environment (CABE) principles of inclusive design, as highlighted below:

- Inclusive: so everyone can use it safely, easily and with dignity.
- Responsive: taking account of what people say they need and want.
- Flexible: so different people can use them in different ways.

- Convenient: so everyone can use them without too much effort or separation.
- Accommodating: for all people, regardless of their age, gender, mobility, ethnicity or circumstances.
- Welcoming: with no disabling barriers that night exclude some people.
- Realistic: offering more than one solution to help balance everyone's needs and recognising that one solution may not work for all.

5.10 The most likely desire line for pedestrians and cyclists will be towards the south, with Allington Lane, Quob Lane and Burnett's Lane providing the routes. There are limited footways within these corridors, however it is expected that continuous routes can be provided.

5.11 The M27 potentially creates a barrier to sustainable movement, however both the Allington Lane Burnett's Lane crossing provides acceptable footways. The footway width across the Quob Lane is currently limited, however there is scope to rationalize the carriageway to improve the widths.

Walking and Cycling Opportunities

Footway provision to be provided Allington Lane, Quob Lane and Burnett's Lane.

On site provision to provide a comprehensive network of walking and cycling routes.

The onsite PRoW network to be incorporated into the site masterplan.

6 Public Transport Opportunities

Existing Road Based Facilities

6.1 The existing bus services that operate to the northeast of Southampton are identified in Figure 6a. Those that operate close to the site are shown in Figure 6b. In addition to these services, further enhancements are likely as a result of other consented developments.

Service	Destination	Frequency
X15	**Eastleigh Bus Station– Fair Oak – Horton Heath – Boorley Green – Botley – Hedge End – Tesco – Hamble and Netley** **Operator – Xelabus**	Monday to Friday Every 2 hrs (between 10:33 and 14:43)
X4	**Eastleigh Bus Station- Parkway – West End – Moorgreen - Hedge End store and Hedge End Village** **Operator – Xelabus**	Monday to Friday Every 75 mins Saturday Every 2 hours
X9	**Eastleigh – Colden Common – Fair Oak – Horton Heath – Hedge End – Botley – Bishops Waltham** **Operator – Xelabus**	Monday to Friday Every 2 hrs Saturday Every 2 hours
X10	**Bishops Waltham – Durley – Horton Heath – Chalcroft - Moorgreen – West End – Bitterne-Southampton** **Operator – Xelabus**	Monday to Friday Every 2 hrs Saturdays Only 1 bus service during AM Only 1 bus service during PM

Service	Destination	Frequency
8	**Southampton City Centre – Bitterne – West End – Hedge End Rail Station** **Operator - First in Hampshire & Dorset**	Monday to Friday Every 30 mins Saturday Every 40 mins Sunday & Public holidays Every 60 mins
2	**Southampton – Eastleigh – Fair Oak** **Operator – Bluestar**	Monday to Friday Every 20 mins during AM Every 60mins during PM Sunday Every 60 mins
M1	**Eastleigh – Fair Oak – Marwell zoo** **Operator – First bus**	Only in Summers Monday to Sunday Every 60mins

Figure 6a: Bus Routes closest to the site

Existing Rail Based Facilities

6.2 The closest train station, Eastleigh and Hedge End Rail Station is located close proximity of the site. These cater for the following direct routes which are highlighted below:

Station	To Southampton Airport	To London Waterloo
Hedge End	Two per hour Journey time 36 minutes	Two per hour Journey time 1 hour 27 minutes
Eastleigh	Two per hour Journey Time 6 minutes	Two per hour Journey time 1 hour 20 minutes

Figure 6b: Bus routes map

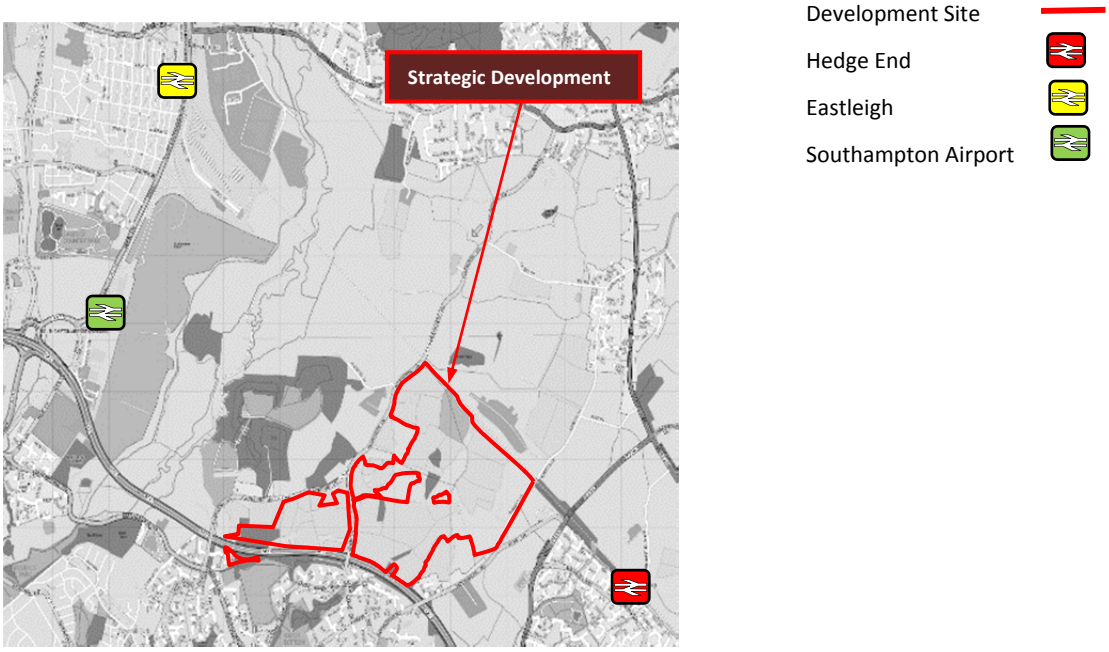


Figure 6c: Location of nearest train stations

6.3 The level of facilities provided at the train stations are highlighted below:

Station	Hedge End	Eastleigh
Car parking places	96 spaces	133 spaces
Cycle parking	Stands for 26 spaces	Stands for 58 spaces
Ticket office	✓	✓
Self-service ticket machines	✓	✓
Manned help desk	✓	✓
Pay phones	✗	✓
Waiting rooms	✓	✓
CCTV coverage	✓	✓
Post box	✗	✓
Telephone	✓	✓
Shops	✗	✓
Toilets	✗	✓
ATM machine	✓	✓

Figure 6d: Location of nearest train stations

Public Transport Opportunities

6.4 A fast reliable road based public transport system is able to provide a viable alternative to the motorcar and a shift toward this mode of travel is essential for the development to be considered sustainable. The proposed development due its scale and mixed uses has the capability to provide substantially improvements to the existing public transport networks. The current services do not operate close to the site and as such will increase the difficulty to divert. Therefore, it is expected that a new bespoke service will be required.

6.5 The public transport improvements would be phased with development to ensure the long term viability. During the initial phase, it would be expected that the development would deliver a 30-minute peak time service between the site and Southampton, with reduced frequency during all off peak periods.

6.6 The routing of the bespoke service would be subject to discussions with local operators and the Council. The provision of a connection between rail and road based public transport is important to provide route choices for the future residents. Hedge End is circa five minutes away to the east of the site and is an important destination. Through initial discussions with the local operators it would be expected that at the very least the initial phase would support a route between the site, Eastleigh, Hedge End and then Southampton. Given the scale of development and proximity of the new community to existing transport networks, we would however anticipate a more bespoke service provision that is implemented during the construction process that provides more direct links to Southampton, Eastleigh, Southampton Airport Parkway and the surrounding communities. In the short to medium term, the proposed development will ensure good links to Hedge End station, which is within easy access of the new community.

6.7 Subject to viability, as the development/revenue increases, the services would be further enhanced to improve peak and off peak frequency. In the event that a reduced quantum is delivered, this could affect viability of public transport services and a reduced/alternative public transport service may need to be considered. This could include reducing off peak frequency.

6.8 The location of the train line on provides a real opportunity to affect how people travel and to encourage more sustainable travel habits. The rail line provides an opportunity to locate a new train station / halt that has a potential to significantly alter how people travel. Whilst we do not require a train station to serve / access the new community, the land is ideally placed to make provision / enable a future railway station at (or near to) Allington Lane. The improved patronage and attractiveness of the Eastleigh to Fareham line, linking to both Southampton and Portsmouth is currently being considered by the transport authority. Therefore, looking forward, this railway line will inevitably be a focus for

future investment and improvement. Unlike other growth options, this location can assist in enabling such improvements to the benefit of the wider area.

6.9 Through discussions with the several local operators, it is considered that the development can be served by a road based public transport strategy. A summary of the discussions with two of the operators is summarised below.

6.10 **Xelabus Limited:** The existing services do not lend themselves to diversion through the site, based on the existing routes and the nature of their procurement. A new bespoke service is recommended. This could serve Southampton, Bitterne, West End, Barbe Baker Avenue, New development, Burnetts lane, Bubb Lane, Maunsell Way to Hedge End Station. It is considered that two vehicles would be required to deliver hourly frequency, increasing to three vehicles for half hourly.

6.11 **First:** Current routes do not lend themselves to serve the site. For the size of the development, a new tailor made service would be considered the best option. This would serve the development, exit onto Allington Lane, and then run via Townhill Way into the Bitterne shopping centre, it could then run direct via Northam Road into the City Centre and then onto Southampton Central Station. It is considered that two vehicles would be required initially, potentially increasing to three.

6.12 As demonstrated above, local operators consider that the development can be served by public transport. The benefit of delivering a bespoke service ensures that the demands of the development will be met throughout the build out period of the scheme.

6.13 In order to understand the long term viability, an assessment of the likely revenue against costs has been carried out. This has been based on the route being provided from first occupation, operating at an hourly frequency. The frequency will be increased following the third year. The cost estimate demonstrates that the route will be financially viable in year seven, requiring a contribution totalling £980,000.

6.14 Furthermore, the additional strategic public transport initiatives currently being considered by the transport authority, this could include rail improvements / rapid transit, will only enhance the travel options available for the future occupiers.

Public Transport Opportunities

The development can be served by a bespoke public transport route.

The service will be self-funded to ensure the long-term viability.

7 Sustainable Travel Opportunities

Sustainable Land Use Mix

7.1 The master plan should aim to deliver a mixed used sustainable development that will deliver a comprehensive range of local facilities and amenities to attract future residents and to minimise the need to travel.

7.2 This growth area has the potential to deliver significant housing quantum, potentially up to 2,500 dwellings. This will increase the critical mass which will enable the delivery of more varied supporting land uses and sustainable transport improvements that will benefit the wider area. The advantage of delivering a more comprehensive development in relation to the wider community is highlighted below:

	500 units	1,000 units	1,500 units	2,000 units	2,500 units
Site Access Arrangements	✓	✓	✓	✓	✓
Local road network improvements	✓	✓	✓	✓	✓
Walking and cycling connections into the site	✓	✓	✓	✓	✓
Wider off-site walking and cycling improvements	✓	✓	✓	✓	✓
Improvement to existing public transport routes	✓	✓	✓	✓	✓
Delivery of local centre with food retail	✓	✓	✓	✓	✓
Delivery of neighbourhood centre	✗	✗	✓	✓	✓
Delivery of primary education facilities	✓	✓	✓	✓	✓
Delivery of all through education facilities	✗	✗	✗	✗	✓
Delivery of employment opportunities	✗	✗	✗	✗	✓
Delivery of health care facilities	✗	✗	✓	✓	✓
Delivery of restaurants / public house	✗	✗	✓	✓	✓

Figure 7a: Advantages of delivering development with significant critical mass

7.3 Multi-purpose or linked trips will promote more sustainable patterns of travel. As well as employment based trips, there are a range of non-employment trips that need to be considered, these include education, shopping and leisure. The master plan should carefully consider the land use mix proposed and provide a mixed range which seeks to deliver a wide choice of services and facilities, commensurate with the site's scale and location.

7.4 By delivering a comprehensive mix of local facilities and amenities this will reduce the need to travel outside the site boundary, increasing trip internalisation which will reduce the impact on the wider road network.

7.5 The development should aim to deliver a self-sufficient community supported by a range of housing type and tenure to attract the established family units together with the future next generation.

Accessibility

7.6 The accessibility of the development is achieved through successfully forming transport links from the development to the external transport routes, so a permeable layout is delivered. This allows future site occupiers to access local facilities and amenities by different modes of travel. A qualitative review of the accessibility implications of the proposed development has been conducted.

7.7 A review of current facilities close to the site is presented below.

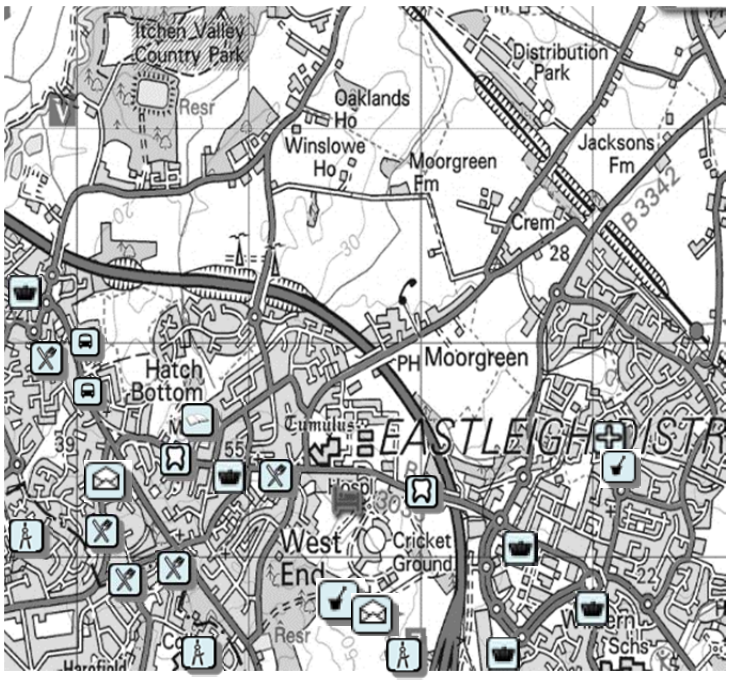


Figure 7b: Location of facilities

7.8 Journeys of less than 2km should be targeted for the promotion of walking as a suitable and sustainable mode of travel. The equivalent distance quoted for cycling is 5km. Distance contours are indicated below.

Figure 7c: Approximate walking and cycling distance contours

Sustainable modes of travel

7.9 To promote the use of modes other than the private motor car, a comprehensive **Travel Plan** should be implemented.

7.10 The purpose of a Travel Plan for a new settlement is to minimise the adverse environmental effects of development related travel from the outset. A holistic approach to the development proposals will result in a successful travel plan, where the need to travel is reduced inherently by design.

7.11 Any targets set within a Travel Plan should encourage the use of alternative and sustainable modes of travel, and in so doing, reduce the number of vehicle journeys to, from and within the development.

7.12 This can be achieved by:

- Reducing the need to travel
- Providing realistic alternatives to the car
- Making alternatives to driving alone more attractive
- Managing car parking provision

7.13 Benefits of Travel Plans include:

- Improving health, fitness and wellbeing
- Improving access
- Reducing congestion in the local area

7.14 Travel plans can be prepared to inform the master plan process and to assist with the development of a new settlement that makes the best use of sustainable modes.

7.15 The Travel Plan endeavours to promote environmentally sustainable travel choices for residents and visitors to the area. This will seek to encourage visitors and employees to use alternative modes to the single occupancy car and to emphasise the health benefits of more sustainable modes of travel.

7.16 The travel plan will include specific measures to maximise sustainable forms of travel, including car share databases, car clubs and offer discounted vouchers for public transport trips. It is essential the travel plan links with the provisions of that proposed by the developer.

7.17 As indicated, the site will be supported by a comprehensive travel plan that will include an inclusive list of measures to encourage modal shift, supported by the appointment of a travel plan coordinator for a period of ten years from first occupation.

Sustainable Travel Opportunities

The delivery of a mixed used development will respond to daily demands and reduce the need to travel.

The delivery of the Travel Plan will maximise opportunities for mode shift. A development of this site has the potential to achieve a significant mode shift.

8 Limitations

8.1 The conclusions and recommendations highlighted above are limited to the general availability of background information and the planned usage of the site.

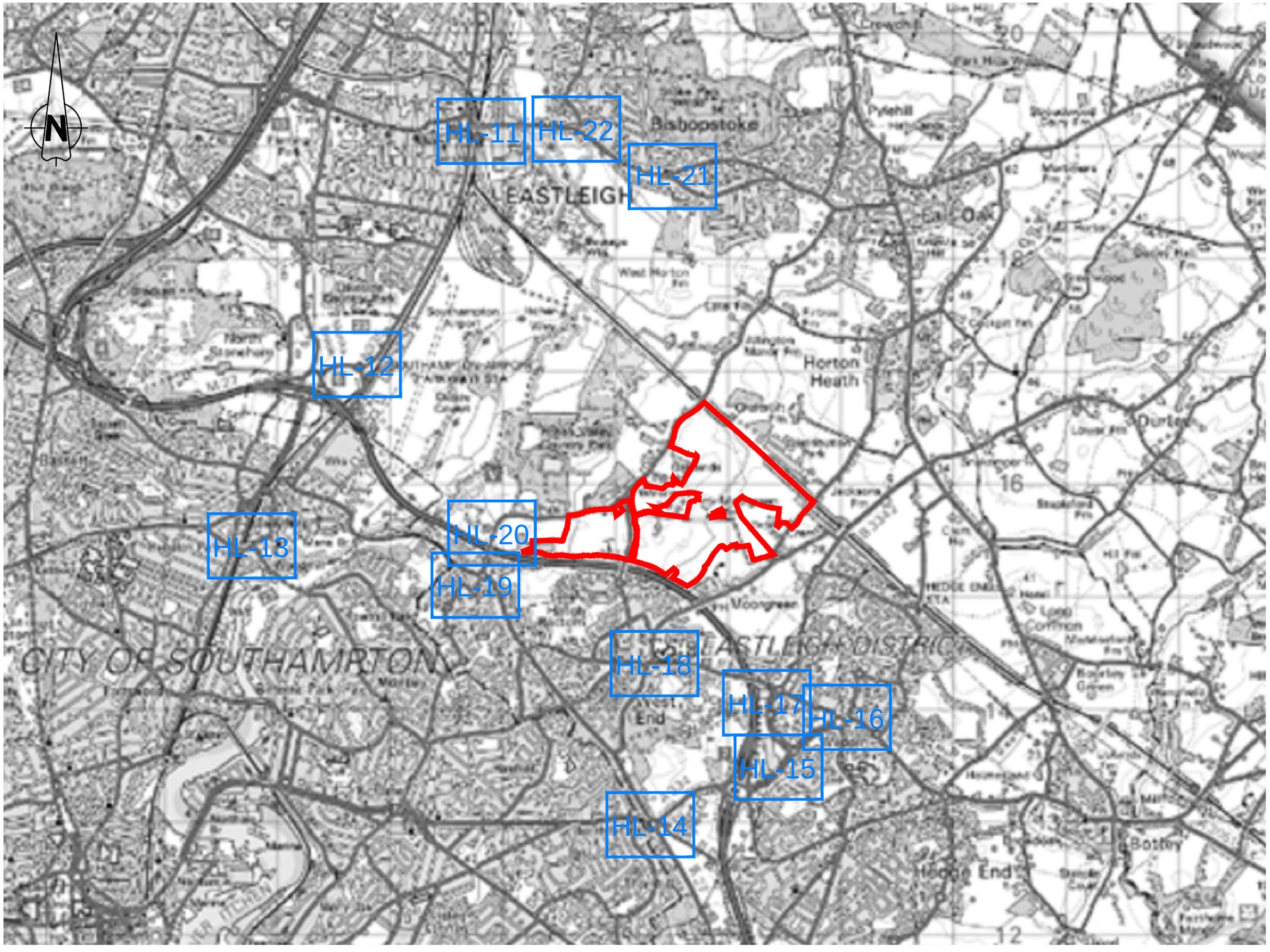
8.2 Third party information has been used in the preparation of this report, which Brookbanks Consulting Ltd, by necessity assumes is correct at the time of writing. While all reasonable checks have been made on data sources and the accuracy of data, Brookbanks Consulting Ltd accepts no liability for same.

8.3 4The benefits of this report are provided to Hallam Land Management for the proposed development land at Allington Lane.

8.4 Brookbanks Consulting Ltd excludes third party rights for the information contained in the report.

Appendix A – Off Site Junction Layout Drawings

Original Drawing Size A3



Construction Design and Management (CDM)
Key Residual Risks

Contractors entering the site should gain permission from the relevant land owners and/or principle contractor working on site at the time of entry. Contractors shall be responsible for carrying out their own risk assessments and for liaising with the relevant services companies and authorities. Listed below are Site Specific key risks associated with the project.

1) Overhead and underground services
2) Street Lighting Cables
3) Working adjacent to water courses and flood plain
4) Soft ground conditions
5) Working adjacent to live highways and railway line
6) Unchartered services
7) Existing buildings with potential asbestos hazards

NOTES:

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HLM, Bovis Homes and
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Land at Allington Lane
Eastleigh

Off-site Mitigation Drawings
Highway Junction Locations

Brookbanks
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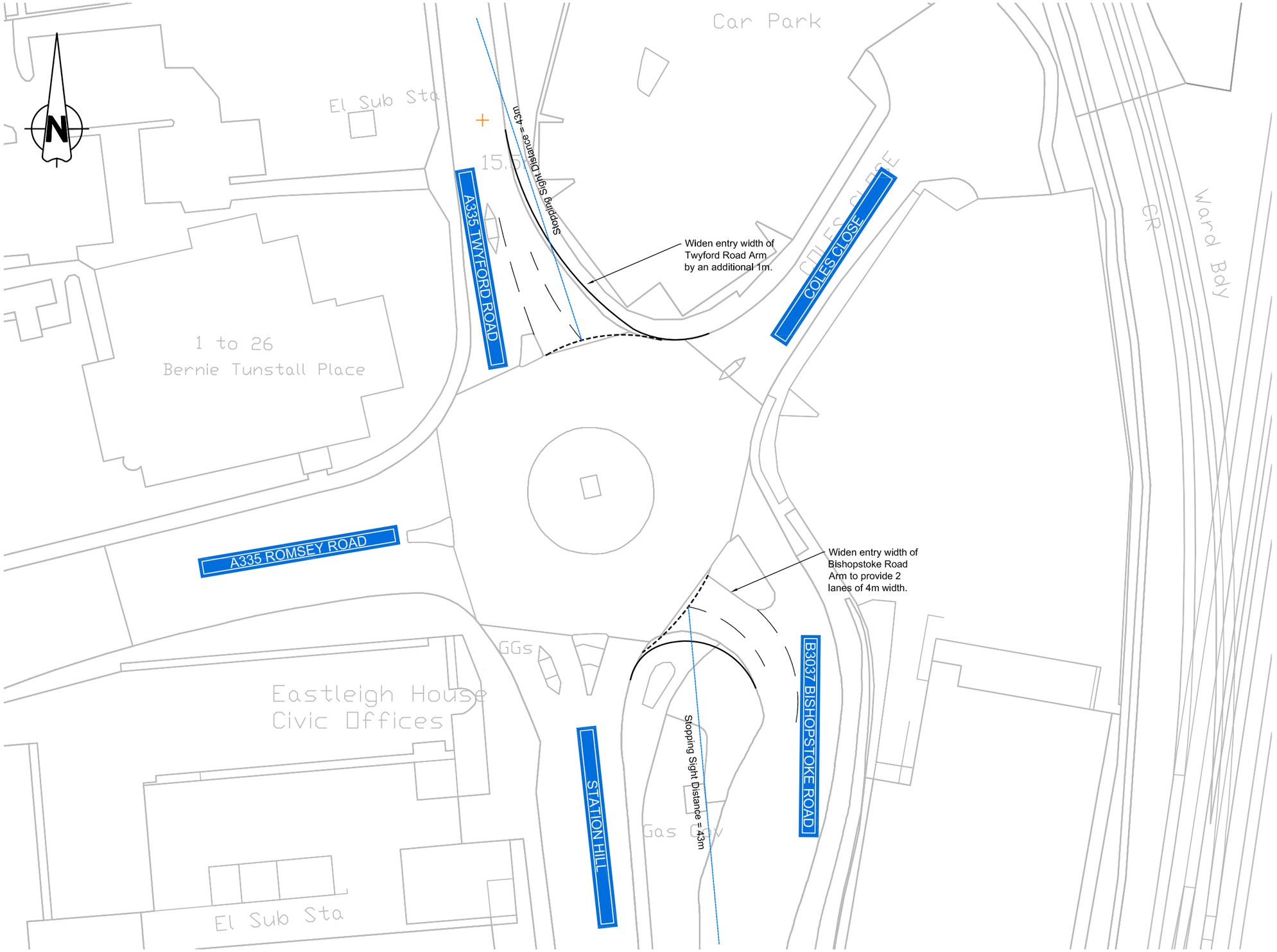

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Land at Allington Lane Eastleigh

Off-site Mitigation Drawing A335/Bishopstoke Road Roundabout

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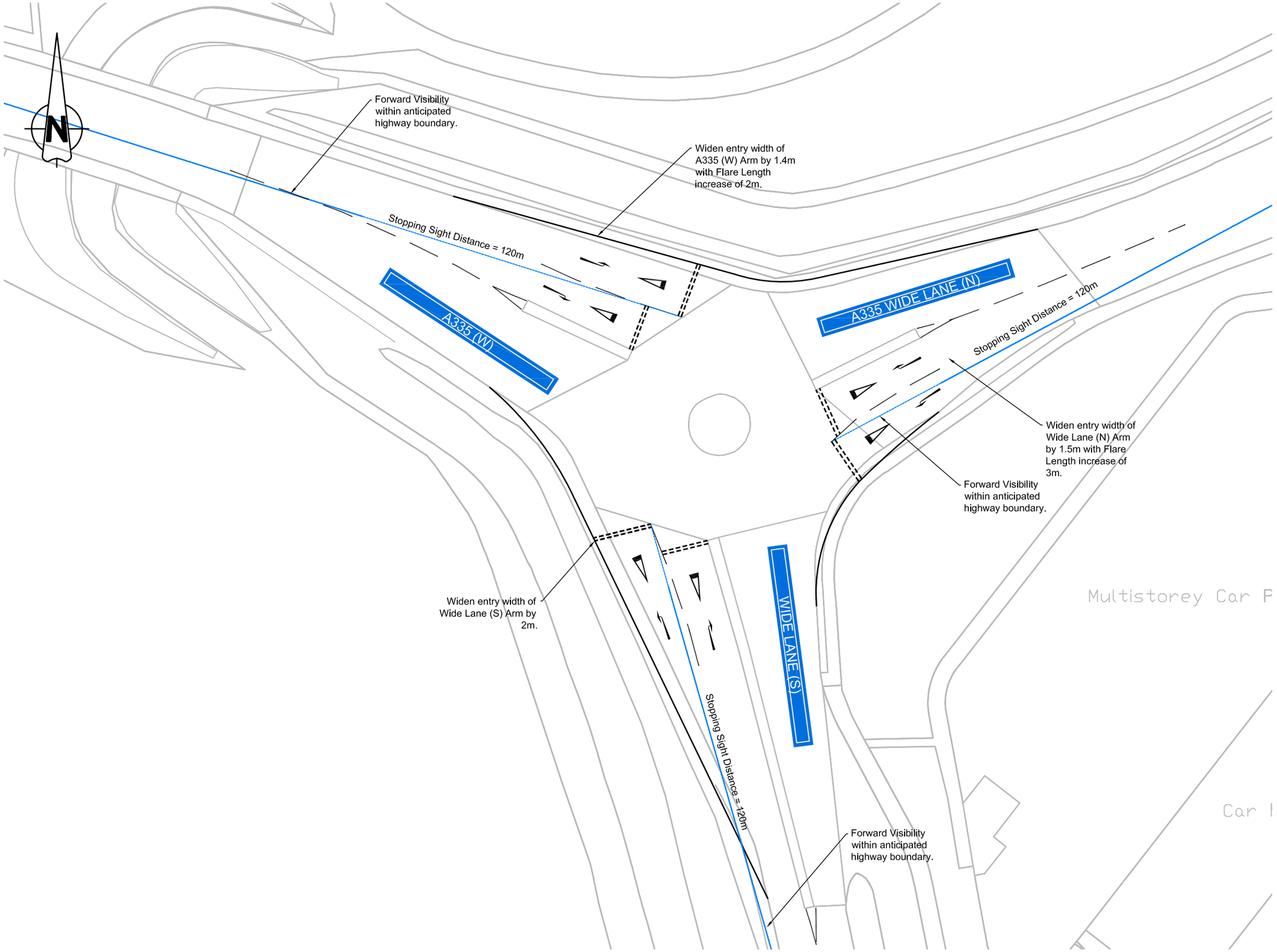

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Land at Allington Lane Eastleigh

Off-site Mitigation Drawing A335/Wide Lane Roundabout

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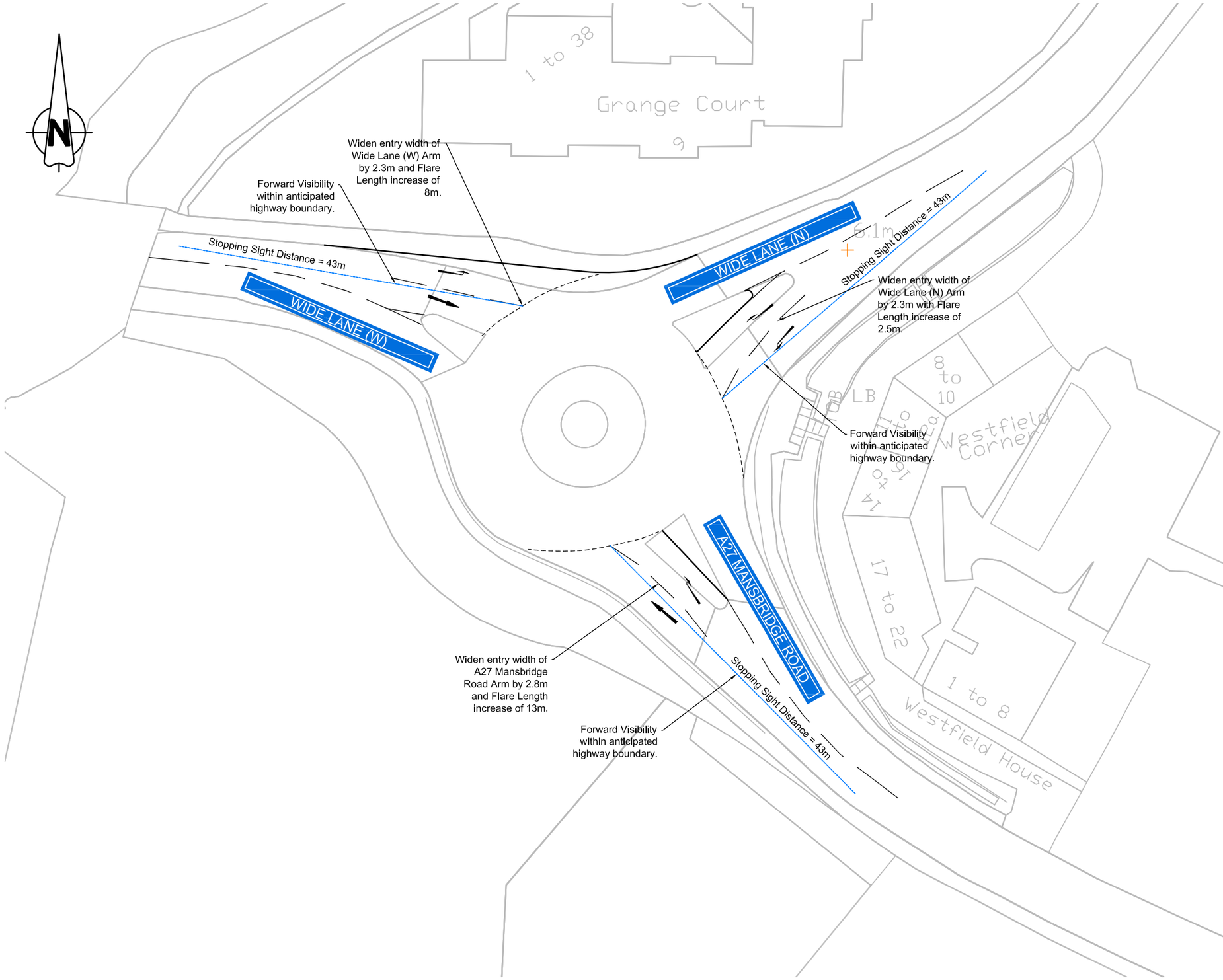

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Land at Allington Lane Eastleigh

Off-site Mitigation Drawing

Wide Lane/Mansbridge Road Roundabout

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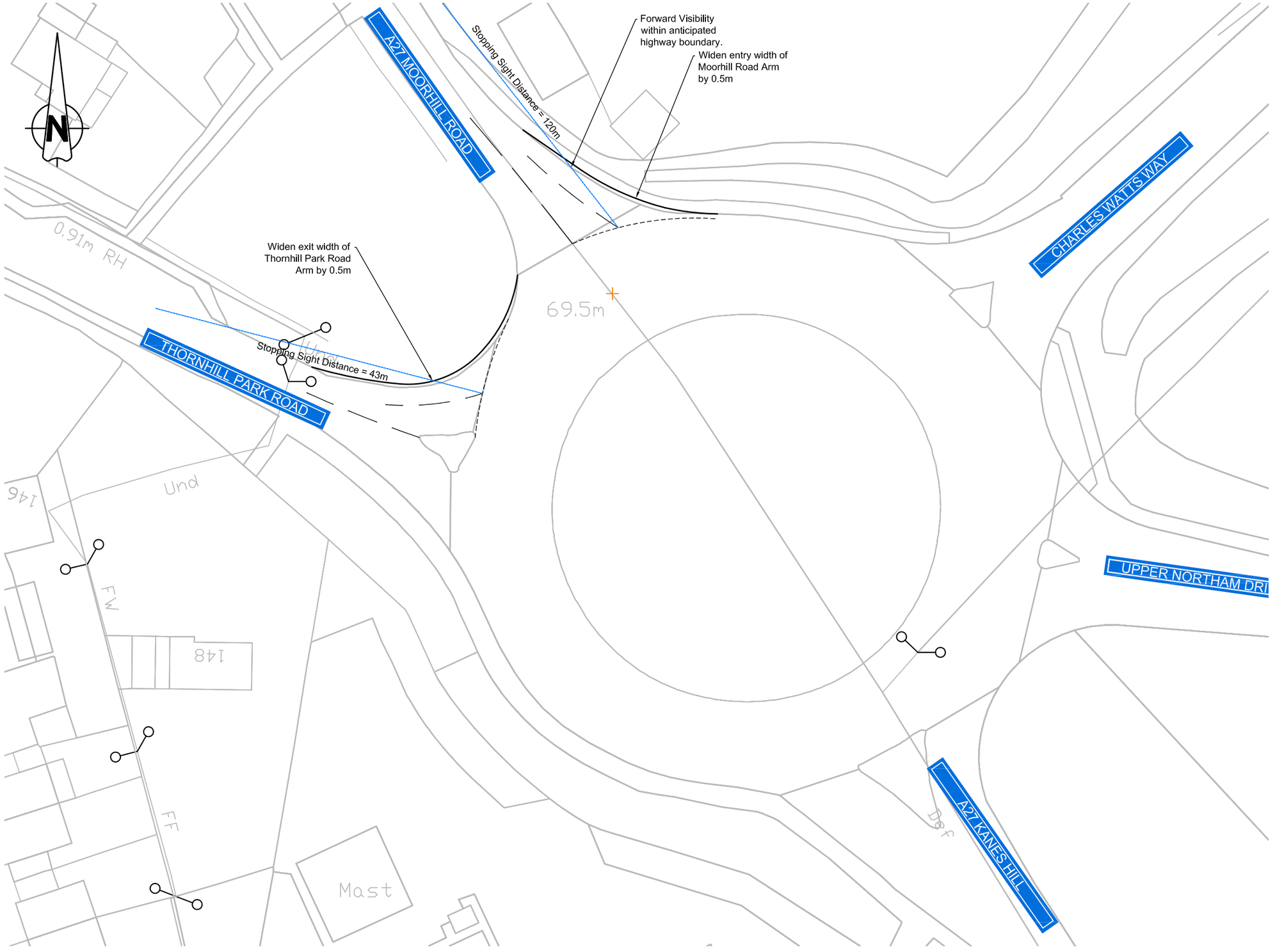

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Land at Allington Lane Eastleigh

Off-site Mitigation Drawing Thornhill Park Road/A27 Roundabout

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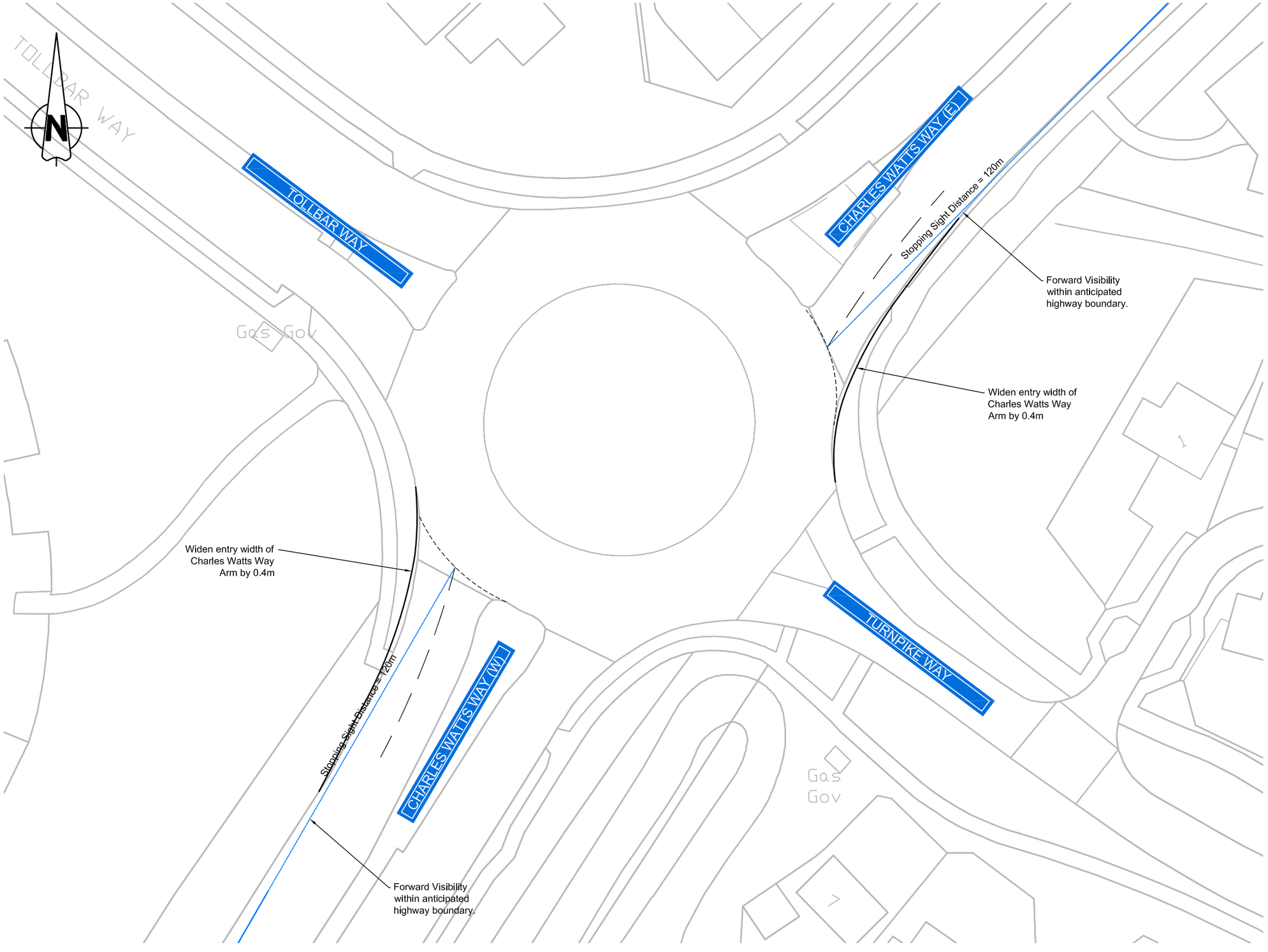

Construction Design and Management (CDM) Key Residual Risks

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Land at Allington Lane Eastleigh

Off-site Mitigation Drawing

Tollbar Way/Charles Watts Way Roundabout

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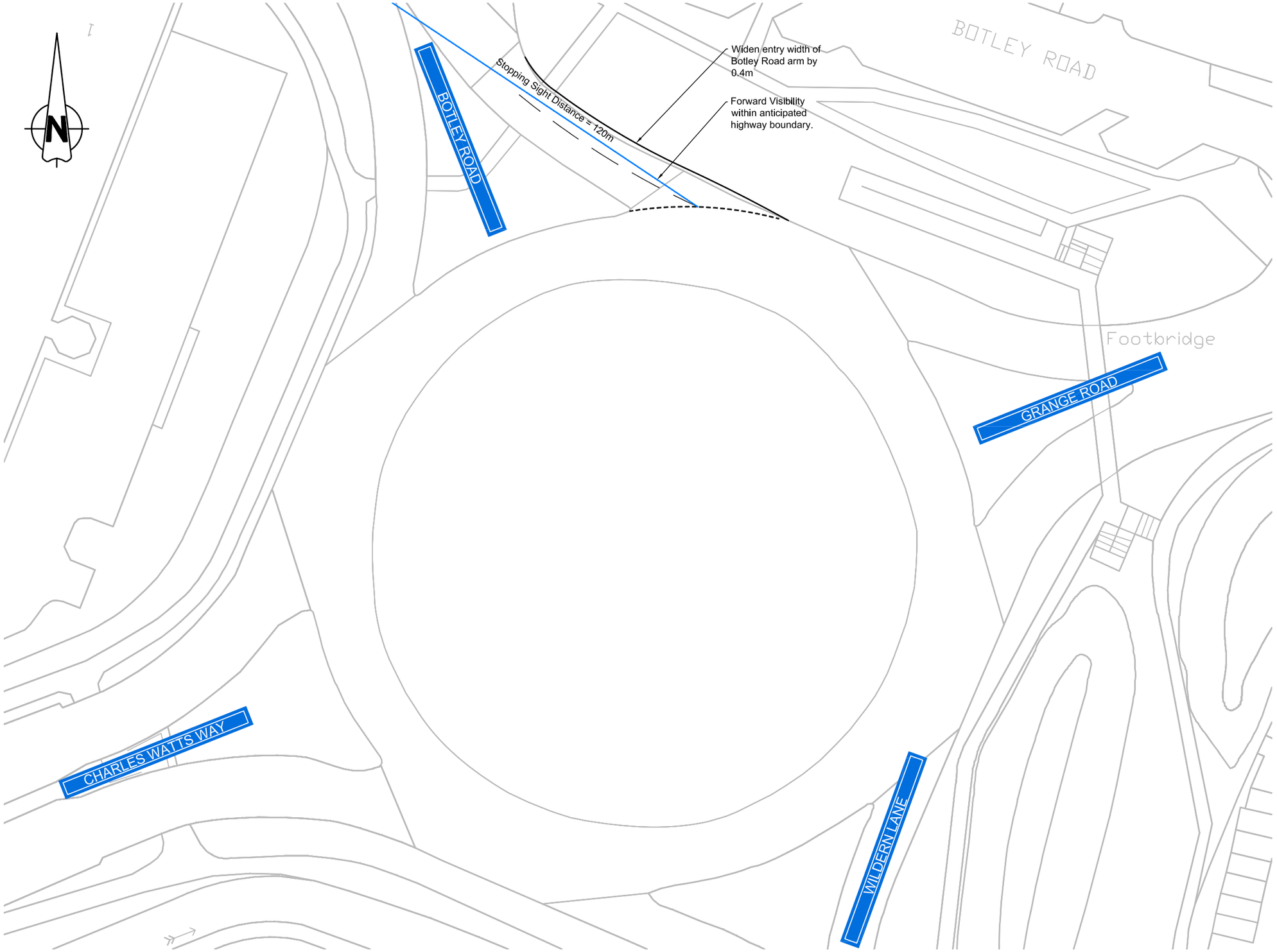

Construction Design and Management (CDM) Key Residual Risks

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KEY:

Forward Visibility

- First Issue	- - -	29.11.16
Status: Preliminary		Status Date: Nov 2016
Drawn: MDM	Checked: LW	Date: Nov 2016
Scale: 1:500	Number: 10440-HL-16	Rev: -

HLM, Bovis Homes and The Davies Family

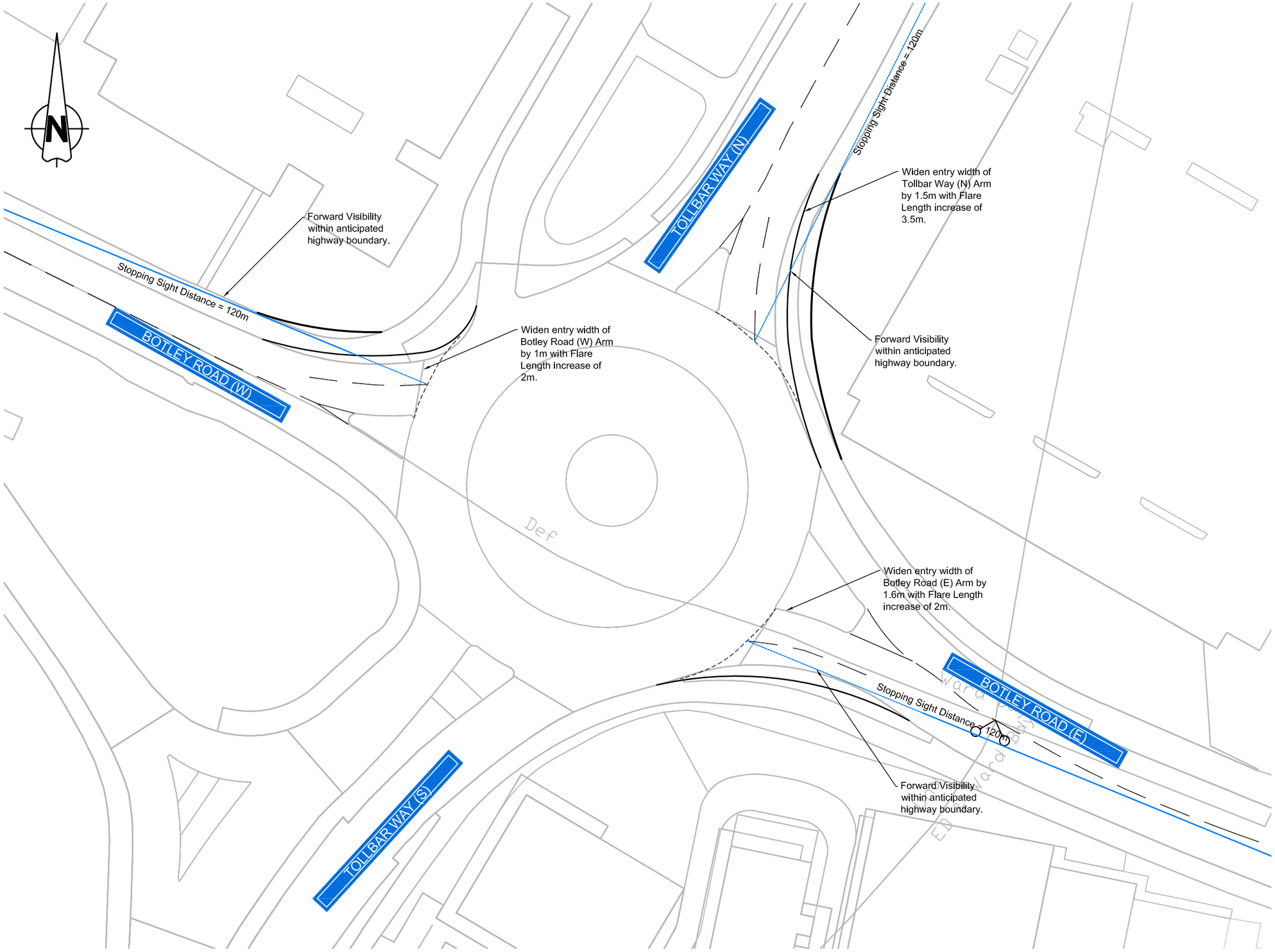
Land at Allington Lane Eastleigh

Off-site Mitigation Drawing

Charles Watts Way/Botley Road Roundabout

Brookbanks
6150 Knights Court Solihull Parkway Birmingham B37 7WY
Tel (0121) 329 4330 Fax (0121) 329 4331
www.brookbanks.com

Original Drawing Size A3



Construction Design and Management (CDM) Key Residual Risks

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1) Overhead and underground services
2) Street Lighting Cables
3) Working adjacent to water courses and flood plain
4) Soft ground conditions
5) Working adjacent to live highways and railway line
6) Unchartered services
7) Existing buildings with potential asbestos hazards

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Forward Visibility

- First Issue	- - -	29.11.16

Status		Status Date
Preliminary		Nov 2016
Drawn	**Checked**	**Date**
MDM	LW	Nov 2016
Scale	**Number**	**Rev**
1:500	10440-HL-17	-

HLM, Bovis Homes and The Davies Family

Land at Allington Lane Eastleigh

Off-site Mitigation Drawing

Tollbar Way/Botley Road Roundabout

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Tel (0121) 329 4330 Fax (0121) 329 4331
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Original Drawing Size A3

Construction Design and Management (CDM)
Key Residual Risks

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KEY:

Forward Visibility

- First Issue	- - -	29.11.16

Status		Status Date
Preliminary		Nov 2016
Drawn	**Checked**	**Date**
MDM	LW	Nov 2016
Scale	**Number**	**Rev**
1:500	10440-HL-18	-

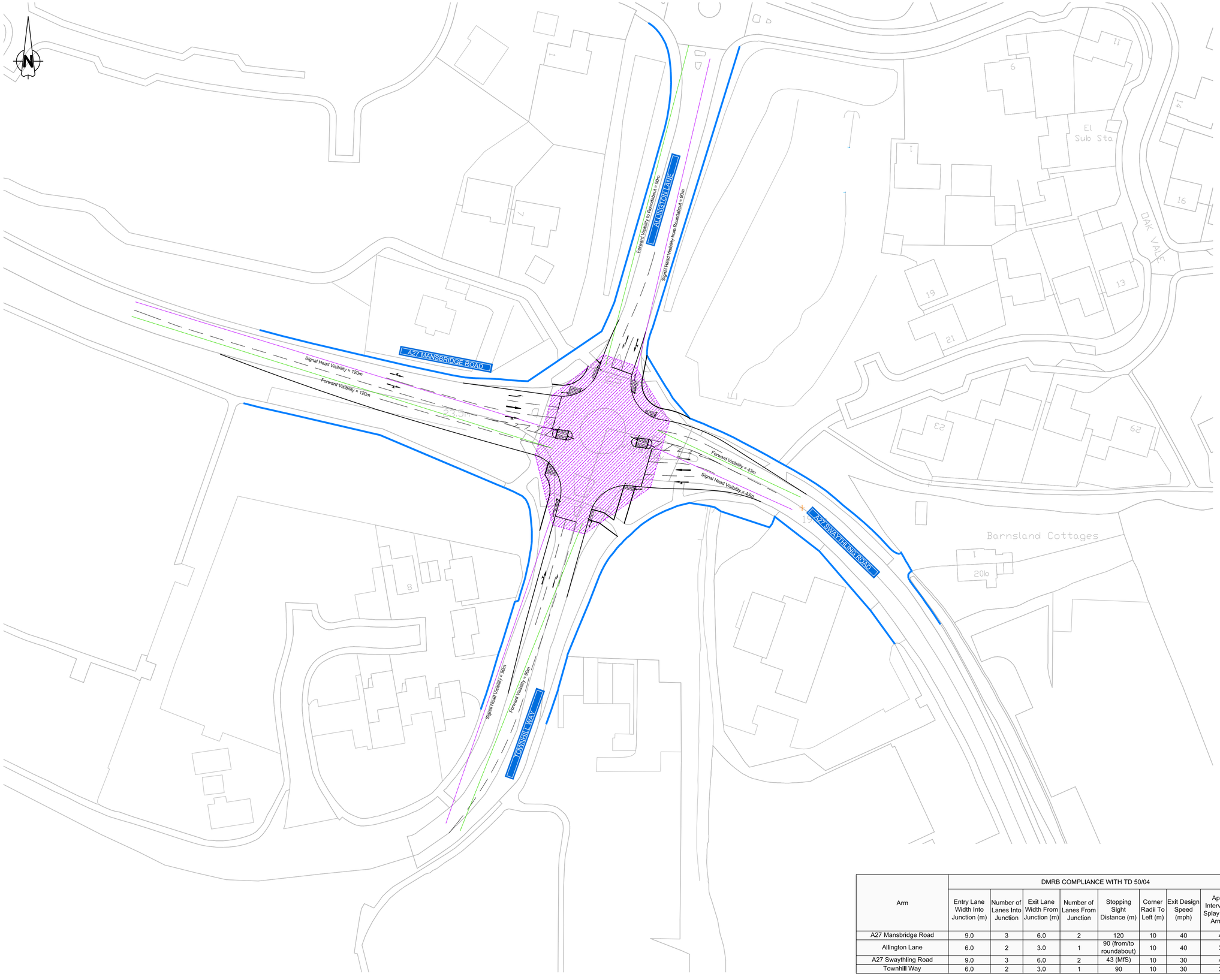
HLM, Bovis Homes and
The Davies Family

Land at Allington Lane
Eastleigh

Off-site Mitigation Drawing
Botley Road/Moorgreen Road Mini Roundabout

Brookbanks
6150 Knights Court Solihull Parkway Birmingham B37 7WY
Tel (0121) 329 4330 Fax (0121) 329 4331
www.brookbanks.com

Original Drawing Size A1



Arm	DMRB COMPLIANCE WITH TD 50/04							
	Entry Lane Width Into Junction (m)	Number of Lanes Into Junction	Exit Lane Width From Junction (m)	Number of Lanes From Junction	Stopping Sight Distance (m)	Corner Radii To Left (m)	Exit Design Speed (mph)	Approx Intervisibility Splay Across Arm (m)
A27 Mansbridge Road	9.0	3	6.0	2	120	10	40	49
Allington Lane	6.0	2	3.0	1	90 (from/to roundabout)	10	40	33
A27 Swaythling Road	9.0	3	6.0	2	43 (MfS)	10	30	49
Townhill Way	6.0	2	3.0	1	90	10	30	33

UNTIL TECHNICAL APPROVAL HAS BEEN OBTAINED FROM THE RELEVANT LOCAL AUTHORITIES, IT SHOULD BE UNDERSTOOD THAT ALL DRAWINGS ARE ISSUED AS PRELIMINARY AND NOT FOR CONSTRUCTION. SHOULD THE CONTRACTOR COMMENCE SITE WORK PRIOR TO APPROVAL BEING GIVEN, IT IS ENTIRELY AT HIS OWN RISK.

Construction Design and Management (CDM)
Key Residual Risks
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6) Unchartered services
7) Existing buildings with potential asbestos hazards

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   - TA 23/81: Junctions and Accesses - Determination of Size of Roundabouts and Major-Minor Junctions
   - TA 90/05: The Geometric Design of Pedestrian, Cycle and Equestrian Routes;
   - TA 91/05: Provision for Non-Motorised Users;
   - TD 9/93: Highway Link Design;
   - TD 50/04: The Geometric Layout of Signal-controlled Junctions and Signalized Roundabouts;

KEY:

- Assumed Highway Boundary
- Signal Head Visibility
- Traffic Signal Head
- Pedestrian Signal Head with Push Button
- Intersignal Visibility
- Forward Visibility on Exit
- Tactile Paving

- First Issue - - - 29.11.16

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HLM, Bovis Homes and
The Davies Family

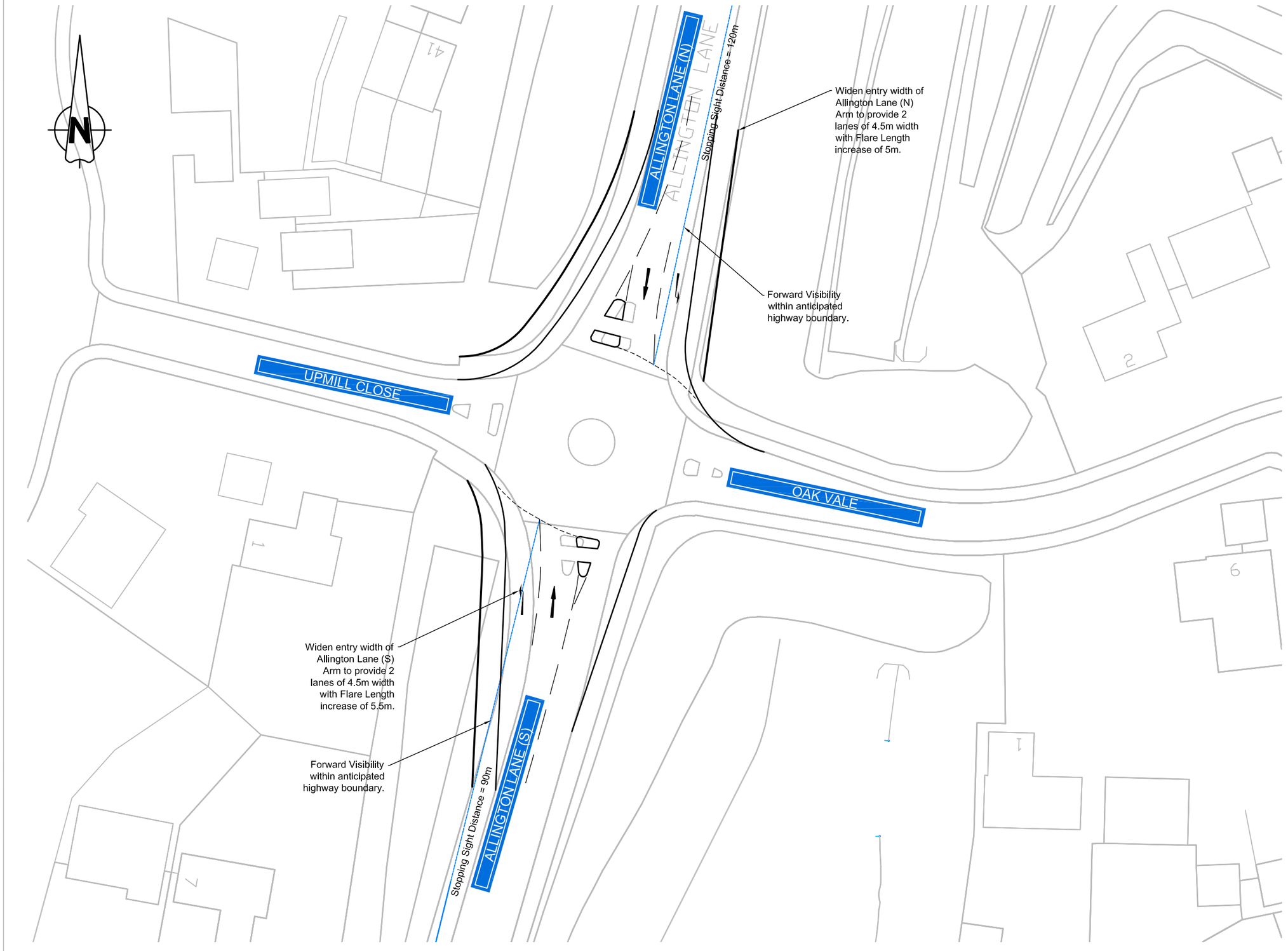
Land South of Allington Lane
Eastleigh, Hampshire

Off-site Mitigation Drawing
Signalisation of Swaythling Road /Allington Lane Roundabout

Status		Status Date
Approval		Oct 2016
Drawn	Checked	Date
MDM	LW	20.10.2016
Scale	Number	Rev
1:500	10440-HL-19	-

0 10 20 30 40 50
METRES

Original Drawing Size A3



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KEY:

---------- Forward Visibility

- First Issue	- - -	29.11.16

Status		Status Date
Preliminary		Nov 2016
Drawn	**Checked**	**Date**
MDM	LW	Nov 2016
Scale	**Number**	**Rev**
1:500	10440-HL-20	-

HLM, Bovis Homes and
The Davies Family

Land at Allington Lane
Eastleigh

Off-site Mitigation Drawing
Allington Lane/Oakvale Roundabout

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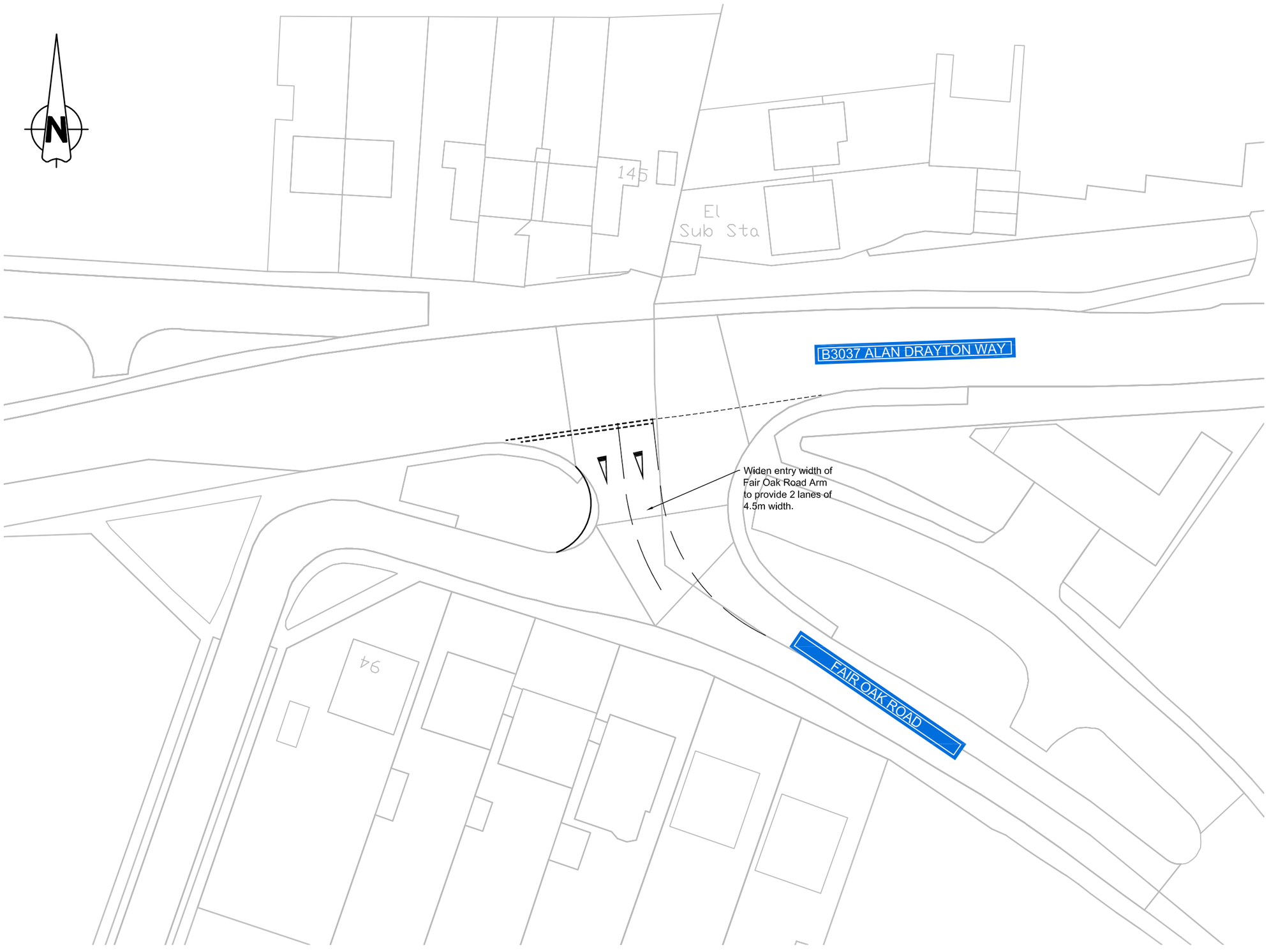
Original Drawing Size A3



Construction Design and Management (CDM)
Key Residual Risks

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Status		Status Date
Preliminary		Nov 2016
Drawn	**Checked**	**Date**
MDM	LW	Nov 2016
Scale	**Number**	**Rev**
1:500	10440-HL-21	-

HLM, Bovis Homes and
The Davies Family

Land at Allington Lane
Eastleigh

Off-site Mitigation Drawing
Alan Drayton Way/Fair Oak Road Junction

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Tel (0121) 329 4330 Fax (0121) 329 4331
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Original Drawing Size A3

Construction Design and Management (CDM) Key Residual Risks

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- First Issue	- - -	29.11.16

Status		Status Date
Preliminary		Nov 2016
Drawn	**Checked**	**Date**
MDM	LW	Nov 2016
Scale	**Number**	**Rev**
1:500	10440-HL-22	-

HLM, Bovis Homes and The Davies Family

Land at Allington Lane Eastleigh

Off-site Mitigation Drawing Bishopstoke Road/Riverside Junction

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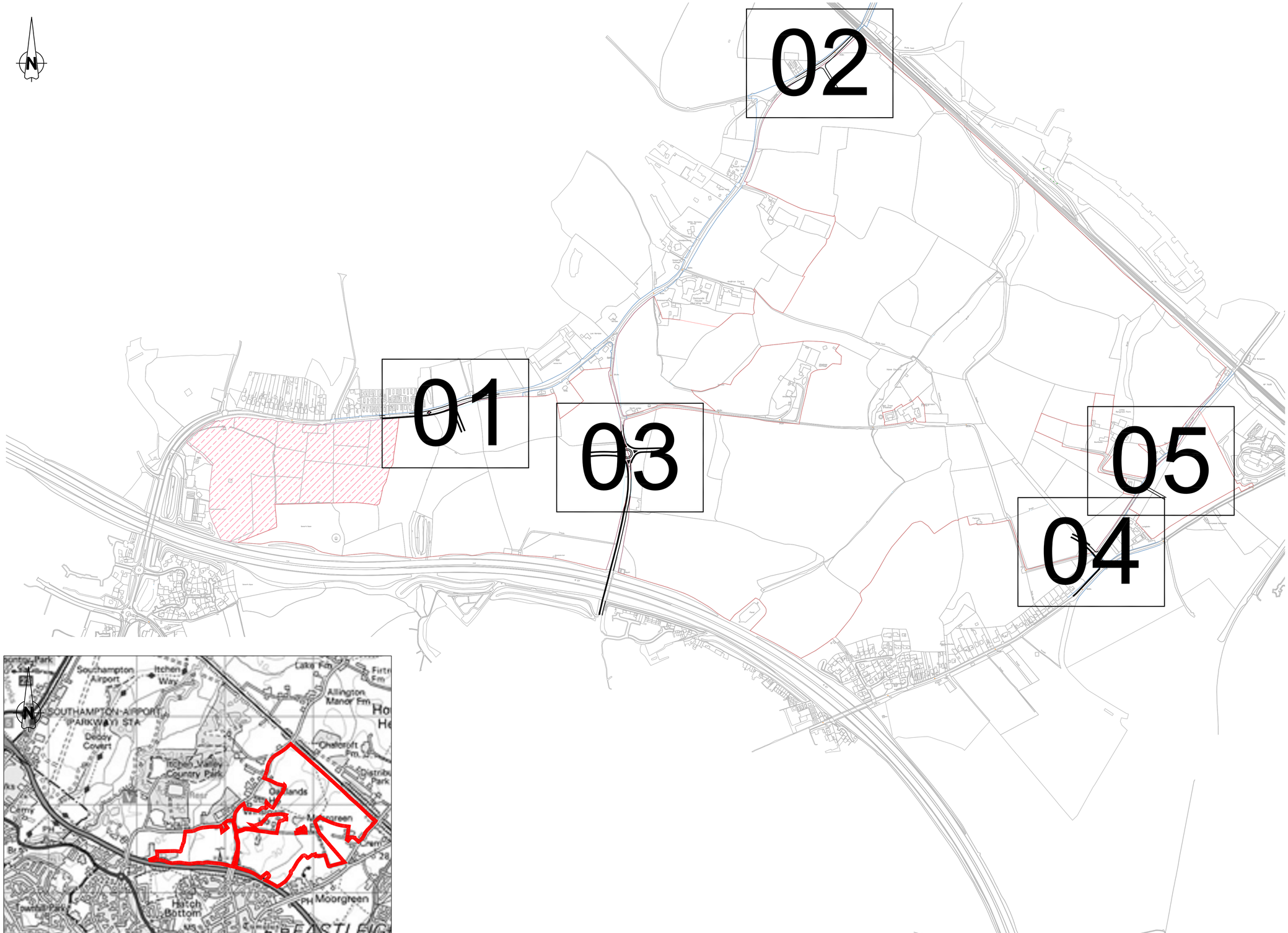
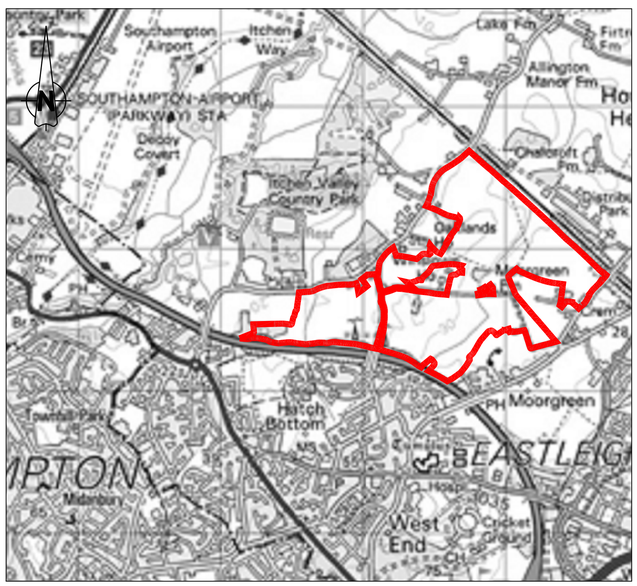
Appendix B – Site Access Junctions

Original Drawing Size A1





Context Plan
Not to Scale

Construction Design and Management (CDM)
Key Residual Risks

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   - TA 23/81: Junctions and Accesses - Determination of Size of Roundabouts and Major-Minor Junctions
   - TD 9/93: Highway Link Design
   - TD 16/07: The Geometric Design of Roundabouts

KEY:

- Highway Boundary
- Site Boundary
- Proposed Highway Boundary
- Potential Additional Site Boundary

A	Update of site boundaries.	MDM LW PAB	02.11.16
-	First Issue	- - -	20.10.16

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HLM, Bovis Homes and
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Land South of Allington Lane
Eastleigh, Hampshire

Proposed Access Strategy
Location of Junctions

Status	Status Date
Approval	Oct 2016
Drawn	**Checked**	**Date**
MDM	LW	20.10.2016
Scale	**Number**	**Rev**
1:5000	10440-HL-00	A

0 10 20 30 40 50
METRES

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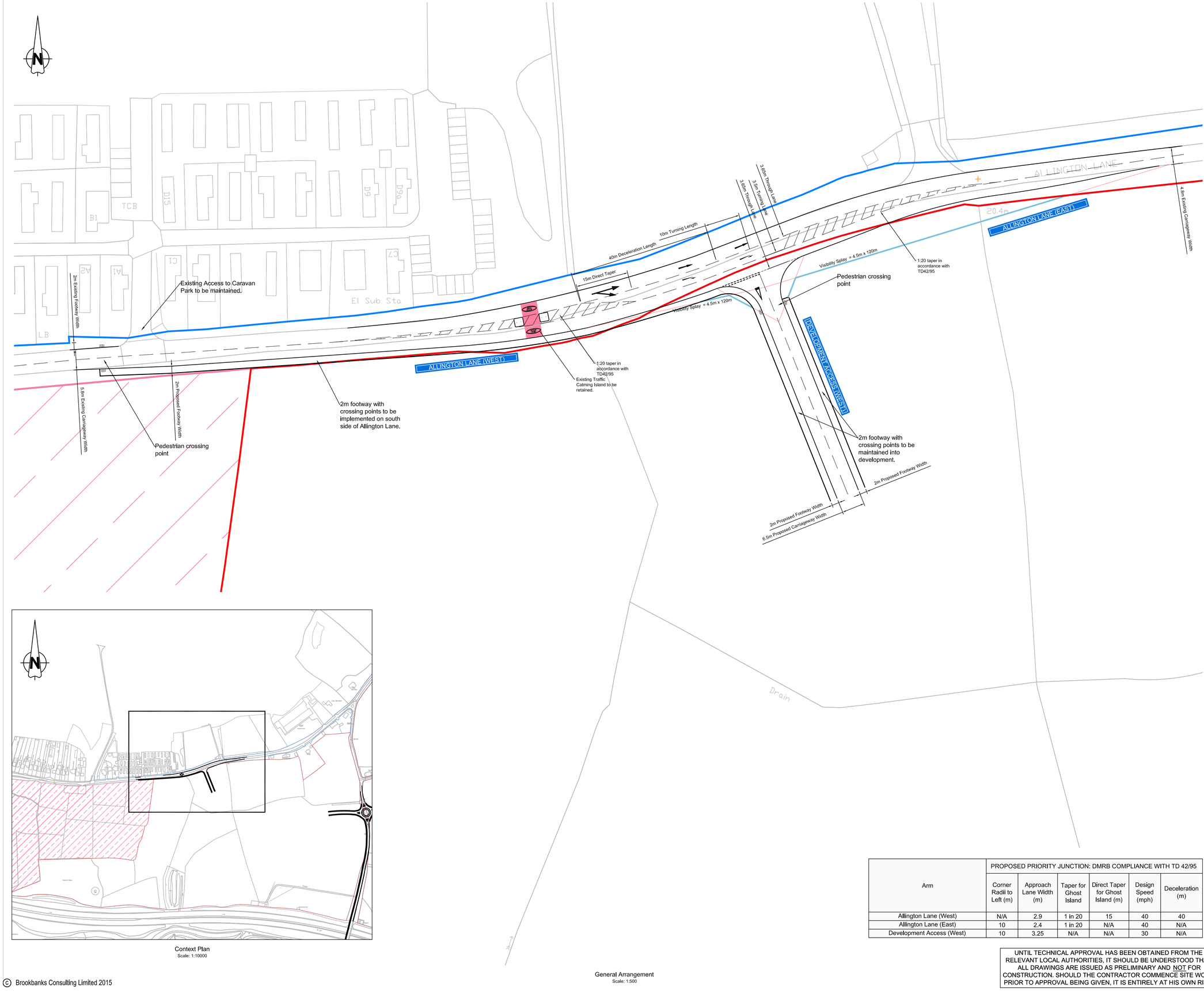
Original Drawing Size A1



General Arrangement
Scale: 1:500

Context Plan
Scale: 1:10000

Arm	PROPOSED PRIORITY JUNCTION: DMRB COMPLIANCE WITH TD 42/95					
	Corner Radii to Left (m)	Approach Lane Width (m)	Taper for Ghost Island	Direct Taper for Ghost Island (m)	Design Speed (mph)	Deceleration (m)
Allington Lane (West)	N/A	2.9	1 in 20	15	40	40
Allington Lane (East)	10	2.4	1 in 20	N/A	40	N/A
Development Access (West)	10	3.25	N/A	N/A	30	N/A

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Construction Design and Management (CDM)
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   - TD 9/93: Highway Link Design
   - TD 16/07: The Geometric Design of Roundabouts

KEY:

- Highway Boundary
- Site Boundary
- Potential Additional Site Boundary
- Proposed Highway Boundary
- Visibility Splay across Junction
- Tactile Paving

A	Update of site boundaries.	MDM LW PAB	02.11.16
-	First Issue	- - -	20.10.16

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HLM, Bovis Homes and
The Davies Family

Land South of Allington Lane
Eastleigh, Hampshire

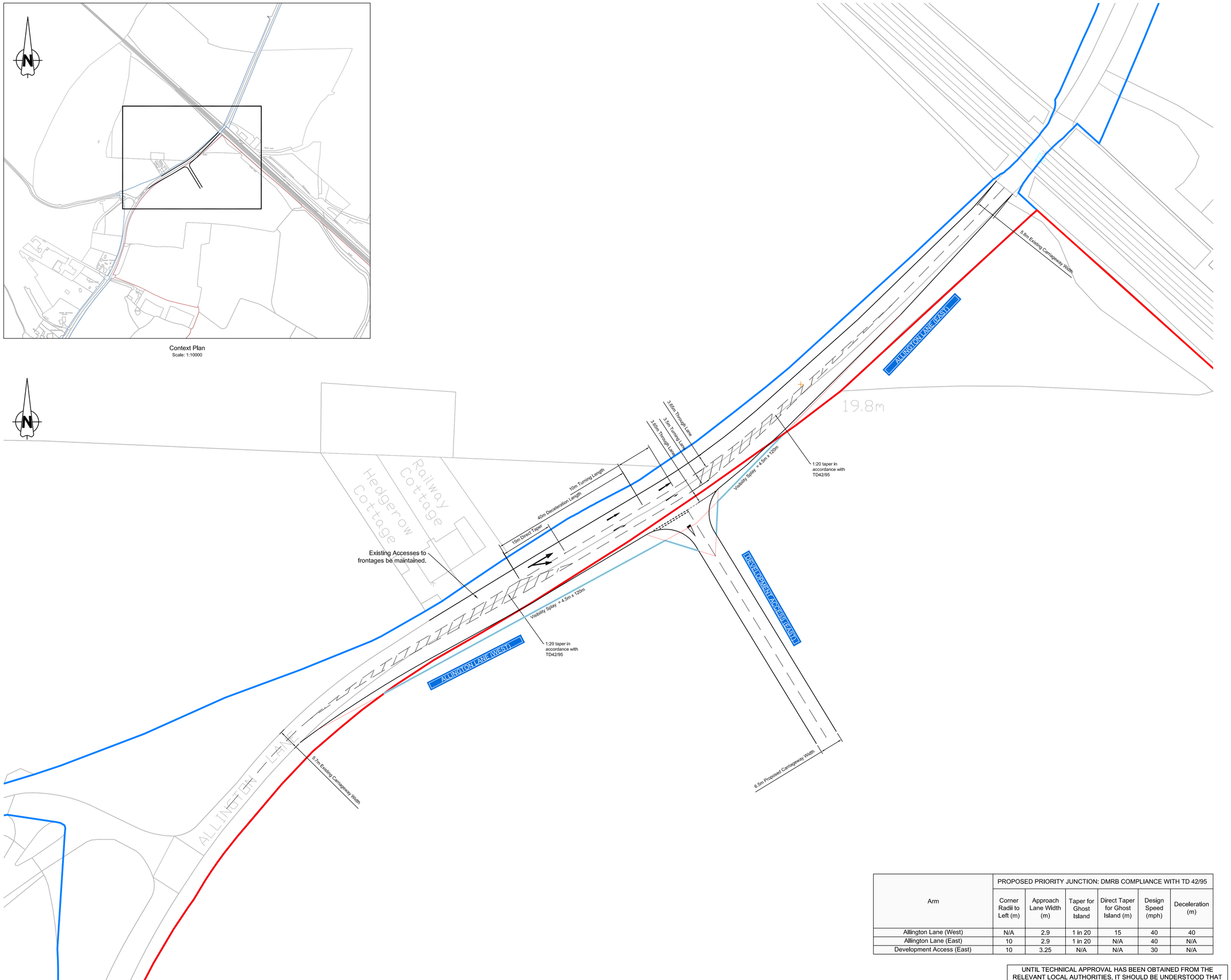
Proposed Access Strategy
Western Access off Allington Lane

Status		Status Date
Approval		Oct 2016
Drawn	Checked	Date
MDM	LW	20.10.2016
Scale	Number	Rev
As Shown	10440-HL-01	-

0 10 20 30 40 50
METRES

Original Drawing Size A1

Context Plan
Scale: 1:10000



General Arrangement
Scale: 1:500

Construction Design and Management (CDM)
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   - TD 16/07: The Geometric Design of Roundabouts

KEY:

- Highway Boundary
- Site Boundary
- Proposed Highway Boundary
- Visibility Splay across Junction

Arm	PROPOSED PRIORITY JUNCTION: DMRB COMPLIANCE WITH TD 42/95					
	Corner Radii to Left (m)	Approach Lane Width (m)	Taper for Ghost Island	Direct Taper for Ghost Island (m)	Design Speed (mph)	Deceleration (m)
Allington Lane (West)	N/A	2.9	1 in 20	15	40	40
Allington Lane (East)	10	2.9	1 in 20	N/A	40	N/A
Development Access (East)	10	3.25	N/A	N/A	30	N/A

UNTIL TECHNICAL APPROVAL HAS BEEN OBTAINED FROM THE RELEVANT LOCAL AUTHORITIES, IT SHOULD BE UNDERSTOOD THAT ALL DRAWINGS ARE ISSUED AS PRELIMINARY AND NOT FOR CONSTRUCTION. SHOULD THE CONTRACTOR COMMENCE SITE WORK PRIOR TO APPROVAL BEING GIVEN, IT IS ENTIRELY AT HIS OWN RISK.

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www.brookbanks.com

HLM, Bovis Homes and
The Davies Family

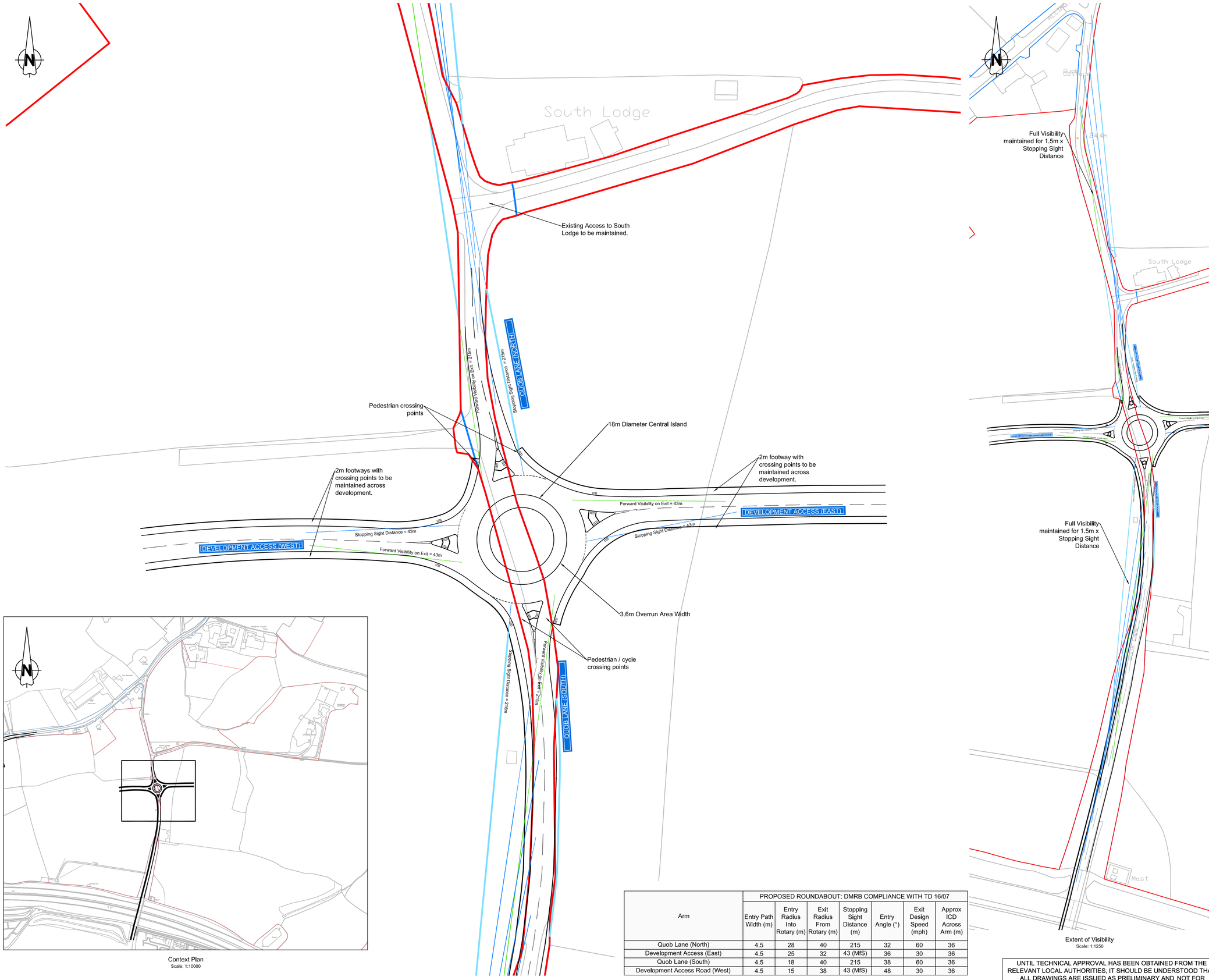
Land South of Allington Lane
Eastleigh, Hampshire

Proposed Access Strategy
Eastern Access off Allington Lane

Status		Status Date
Approval		Oct 2016
Drawn	Checked	Date
MDM	LW	20.10.2016
Scale	Number	Rev
As Shown	10440-HL-02	-

0 10 20 30 40 50
METRES

Original Drawing Size A1



General Arrangement
Scale: 1:500

Context Plan
Scale: 1:10000

Arm	PROPOSED ROUNDABOUT: DMRB COMPLIANCE WITH TD 16/07						
	Entry Path Width (m)	Entry Radius Into Rotary (m)	Exit Radius From Rotary (m)	Stopping Sight Distance (m)	Entry Angle (°)	Exit Design Speed (mph)	Approx ICD Across Arm (m)
Quob Lane (North)	4.5	28	40	215	32	60	36
Development Access (East)	4.5	25	32	43 (MfS)	36	30	36
Quob Lane (South)	4.5	18	40	215	38	60	36
Development Access Road (West)	4.5	15	38	43 (MfS)	48	30	36

Extent of Visibility
Scale: 1:1250

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   - TD 9/93: Highway Link Design
   - TD 16/07: The Geometric Design of Roundabouts

KEY:

- Highway Boundary
- Site Boundary
- Proposed Highway Boundary
- Visibility on approach to Junction
- Visibility on departure from Junction
- Tactile Paving

- First Issue - - - 19.10.16

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Tel (0121) 329 4330 Fax (0121) 329 4331
www.brookbanks.com

HLM, Bovis Homes and
The Davies Family

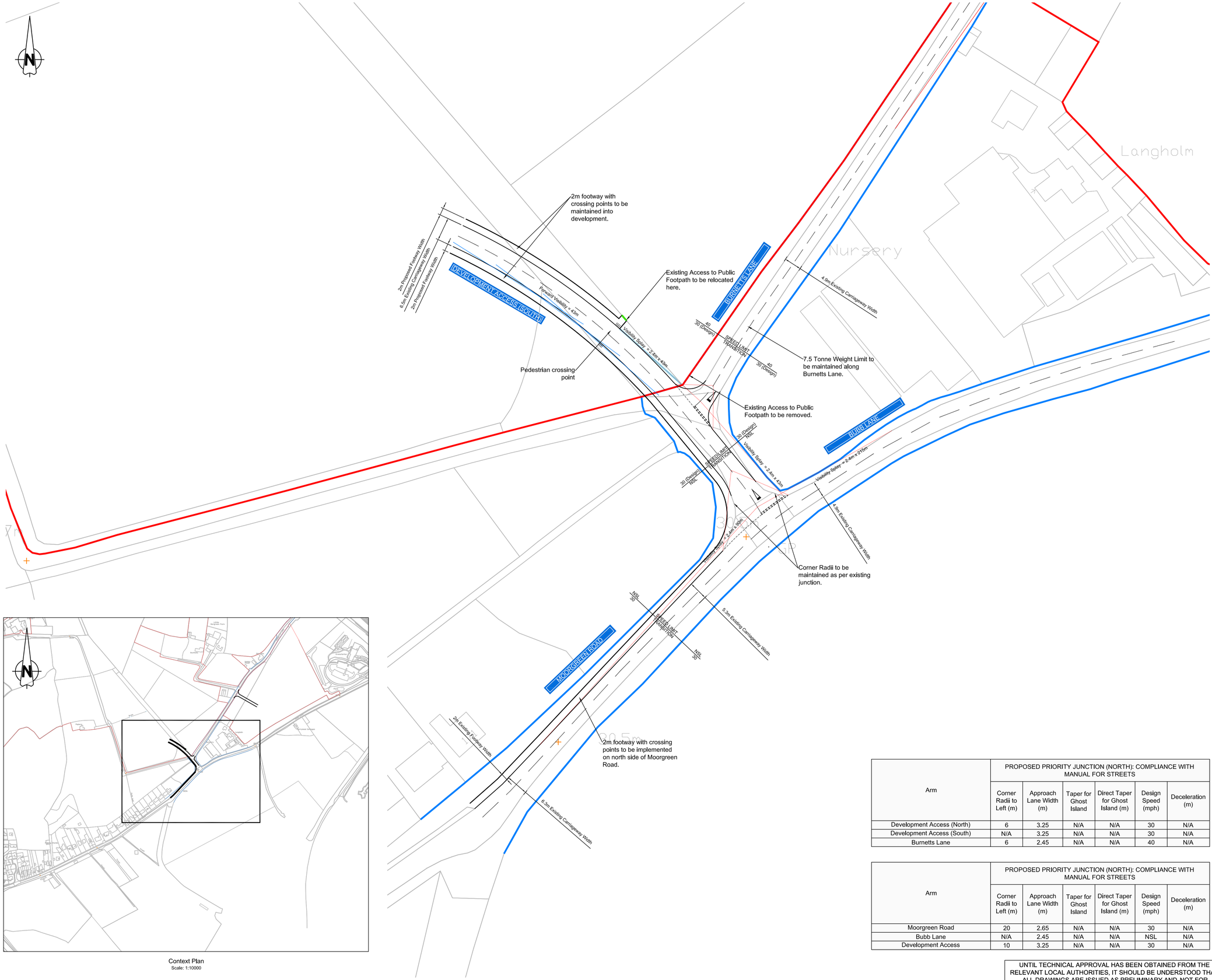
Land South of Allington Lane
Eastleigh, Hampshire

Proposed Access Strategy
Roundabout off Quobb Lane

Status		Status Date
Approval		Oct 2016
Drawn	Checked	Date
MDM	LW	19.10.2016
Scale	Number	Rev
As Shown	10440-HL-03	-

0 10 20 30 40 50
METRES

Original Drawing Size A1



Context Plan
Scale: 1:10000

General Arrangement
Scale: 1:500

Construction Design and Management (CDM)
Key Residual Risks

Contractors entering the site should gain permission from the relevant land owners and/or principle contractor working on site at the time of entry. Contractors shall be responsible for carrying out their own risk assessments and for liaising with the relevant services companies and authorities. Listed below are Site Specific key risks associated with the project.

1) Overhead and underground services
2) Street Lighting Cables
3) Working adjacent to water courses and flood plain
4) Soft ground conditions
5) Working adjacent to live highways and railway line
6) Unchartered services
7) Existing buildings with potential asbestos hazards

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KEY:

- Highway Boundary
- Site Boundary
- Proposed Highway Boundary
- Visibility Splay across Junction
- Forward Visibility
- Tactile Paving

Arm	PROPOSED PRIORITY JUNCTION (NORTH): COMPLIANCE WITH MANUAL FOR STREETS					
	Corner Radii to Left (m)	Approach Lane Width (m)	Taper for Ghost Island	Direct Taper for Ghost Island (m)	Design Speed (mph)	Deceleration (m)
Development Access (North)	6	3.25	N/A	N/A	30	N/A
Development Access (South)	N/A	3.25	N/A	N/A	30	N/A
Burnetts Lane	6	2.45	N/A	N/A	40	N/A

Arm	PROPOSED PRIORITY JUNCTION (NORTH): COMPLIANCE WITH MANUAL FOR STREETS					
	Corner Radii to Left (m)	Approach Lane Width (m)	Taper for Ghost Island	Direct Taper for Ghost Island (m)	Design Speed (mph)	Deceleration (m)
Moorgreen Road	20	2.65	N/A	N/A	30	N/A
Bubb Lane	N/A	2.45	N/A	N/A	NSL	N/A
Development Access	10	3.25	N/A	N/A	30	N/A

UNTIL TECHNICAL APPROVAL HAS BEEN OBTAINED FROM THE RELEVANT LOCAL AUTHORITIES, IT SHOULD BE UNDERSTOOD THAT ALL DRAWINGS ARE ISSUED AS PRELIMINARY AND NOT FOR CONSTRUCTION. SHOULD THE CONTRACTOR COMMENCE SITE WORK PRIOR TO APPROVAL BEING GIVEN, IT IS ENTIRELY AT HIS OWN RISK.

A	Update of site boundaries.	MDM LW PAB	02.11.16
-	First Issue	- - -	20.10.16

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The Davies Family

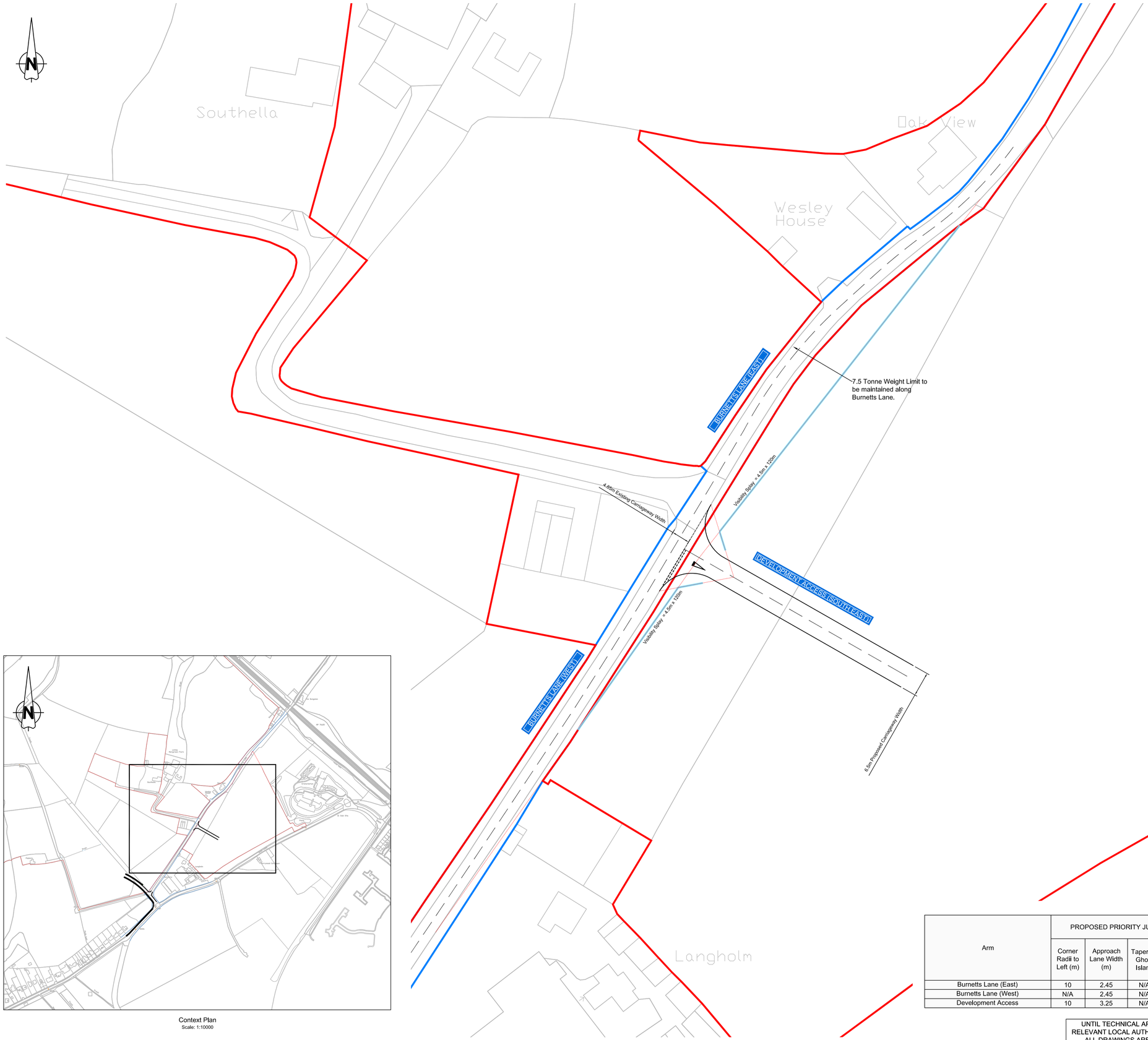
Land South of Allington Lane
Eastleigh, Hampshire

Proposed Access Strategy
Priority Junction off Bubb Lane

Status			Status Date
Approval			Oct 2016
Drawn	Checked		Date
MDM	LW		20.10.2016
Scale	Number		Rev
As Shown	10440-HL-04		A

0 10 20 30 40 50
METRES

Original Drawing Size A1



Context Plan
Scale: 1:10000

General Arrangement
Scale: 1:500

Arm	PROPOSED PRIORITY JUNCTION: COMPLIANCE WITH DMRB					
	Corner Radii to Left (m)	Approach Lane Width (m)	Taper for Ghost Island	Direct Taper for Ghost Island (m)	Design Speed (mph)	Deceleration (m)
Burnetts Lane (East)	10	2.45	N/A	N/A	40	N/A
Burnetts Lane (West)	N/A	2.45	N/A	N/A	40	N/A
Development Access	10	3.25	N/A	N/A	30	N/A

UNTIL TECHNICAL APPROVAL HAS BEEN OBTAINED FROM THE RELEVANT LOCAL AUTHORITIES, IT SHOULD BE UNDERSTOOD THAT ALL DRAWINGS ARE ISSUED AS PRELIMINARY AND NOT FOR CONSTRUCTION. SHOULD THE CONTRACTOR COMMENCE SITE WORK PRIOR TO APPROVAL BEING GIVEN, IT IS ENTIRELY AT HIS OWN RISK.

Construction Design and Management (CDM)
Key Residual Risks

Contractors entering the site should gain permission from the relevant land owners and/or principle contractor working on site at the time of entry. Contractors shall be responsible for carrying out their own risk assessments and for liaising with the relevant services companies and authorities. Listed below are Site Specific key risks associated with the project.

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2) Street Lighting Cables
3) Working adjacent to water courses and flood plain
4) Soft ground conditions
5) Working adjacent to live highways and railway line
6) Unchartered services
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   - TD 16/07: The Geometric Design of Roundabouts

KEY:

- Highway Boundary
- Site Boundary
- Proposed Highway Boundary
- Visibility Splay across Junction
- Forward Visibility
- Tactile Paving

- First Issue - - - 02.11.16

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HLM, Bovis Homes and
The Davies Family

Land South of Allington Lane
Eastleigh, Hampshire

Proposed Access Strategy
Priority Junction off Burnetts Lane

Status		Status Date
Approval		Nov 2016
Drawn	Checked	Date
MDM	LW	02.11.2016
Scale	Number	Rev
As Shown	10440-HL-05	-

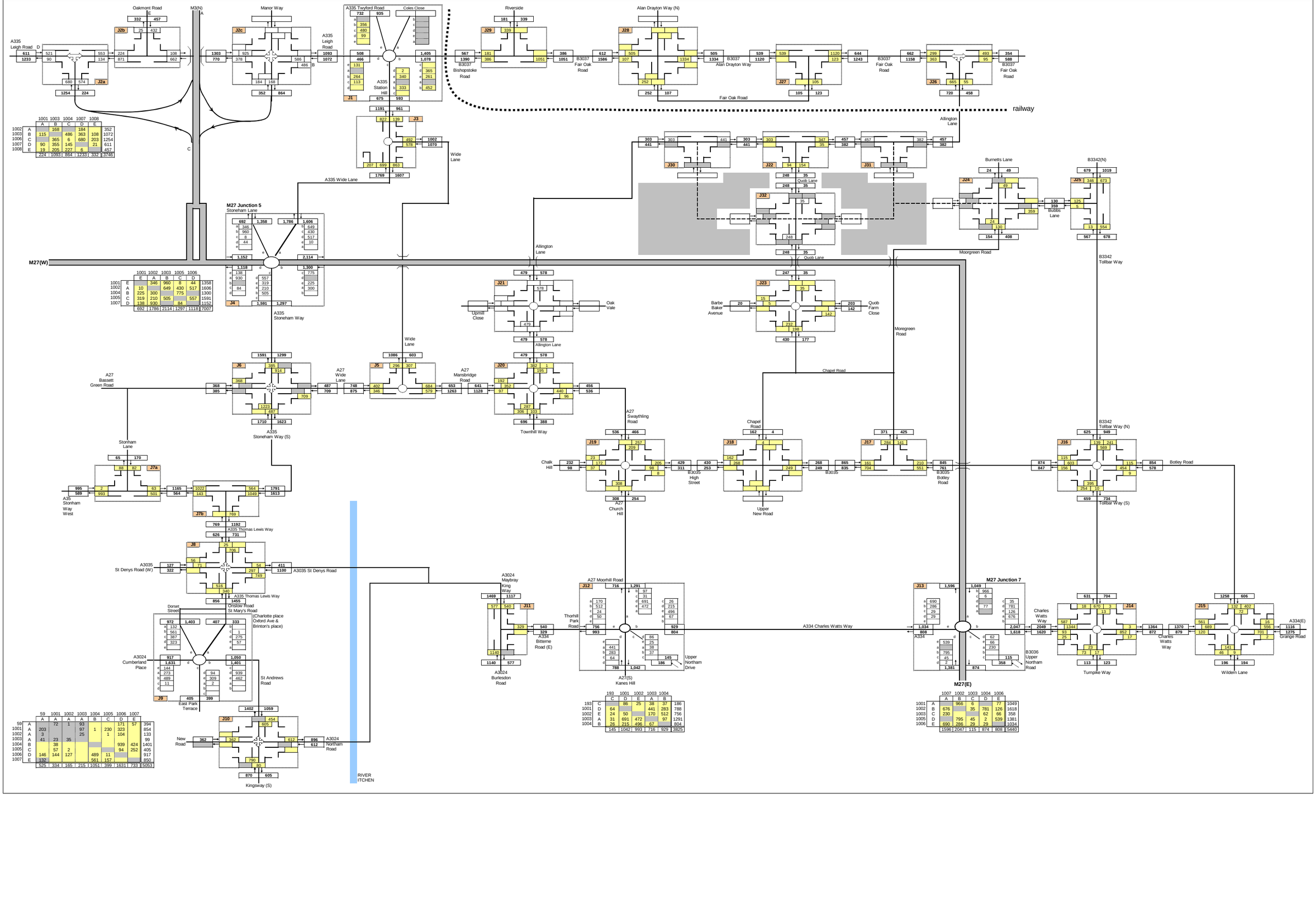
0 10 20 30 40 50
METRES

Appendix C – Traffic Flows

Client:	**HALLAM LAND MANAGEMENT**
Job:	**10440 Land South of Allington Lane, Eastleigh**
Title:	**2036 Do-Something Model Base Traffic Flows - AM Peak [PCUs]**

Prepared by: S.M.T.
30/11/2016
Figure 5

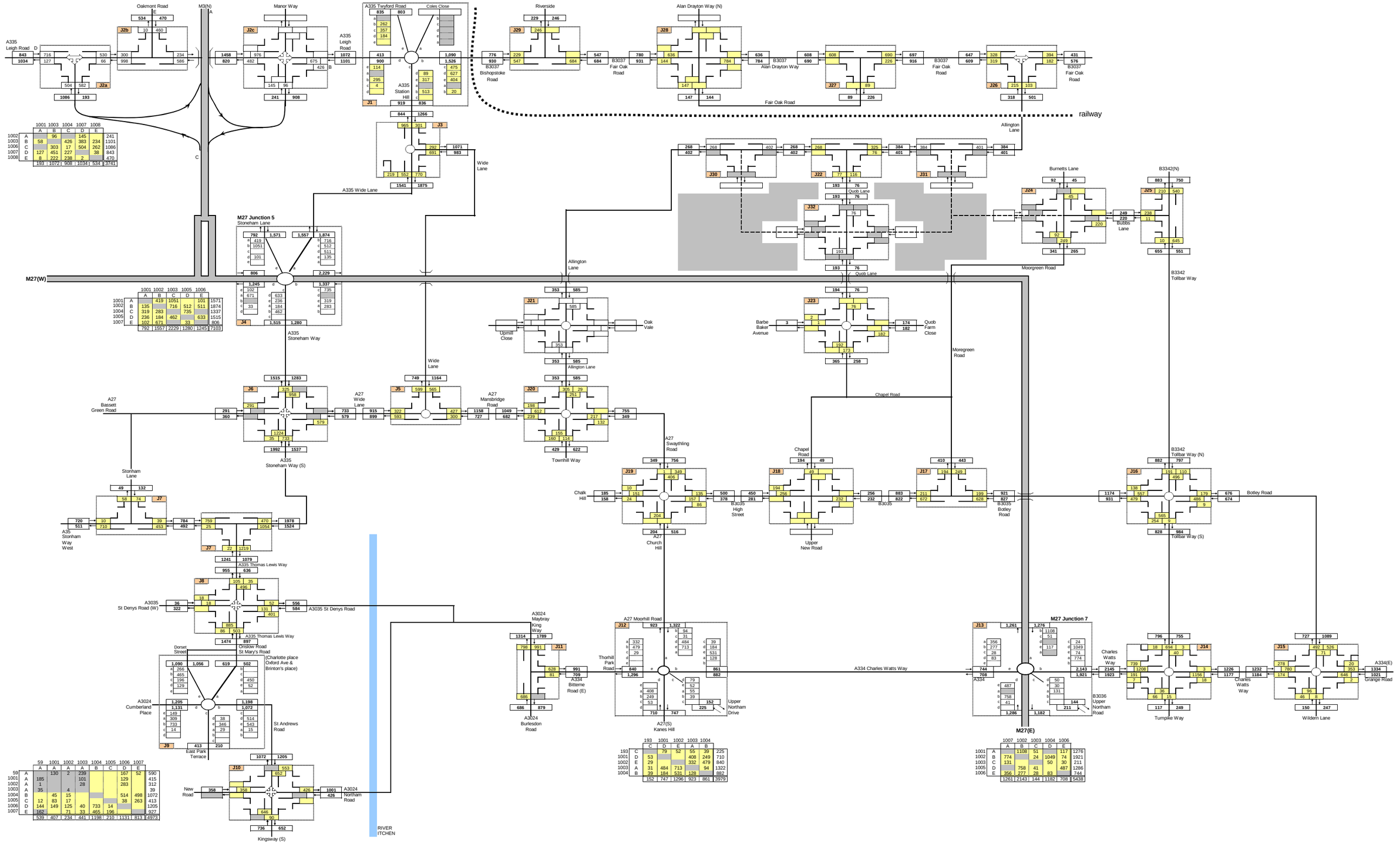
Brookbanks Consulting



Client:	**HALLAM LAND MANAGEMENT**
Job:	**10440 Land South of Allington Lane, Eastleigh**
Title:	**2036 Do-Something Model Base Traffic Flows - PM Peak [PCUs]**

Prepared by: S.M.T.
30/11/2016
Figure 6

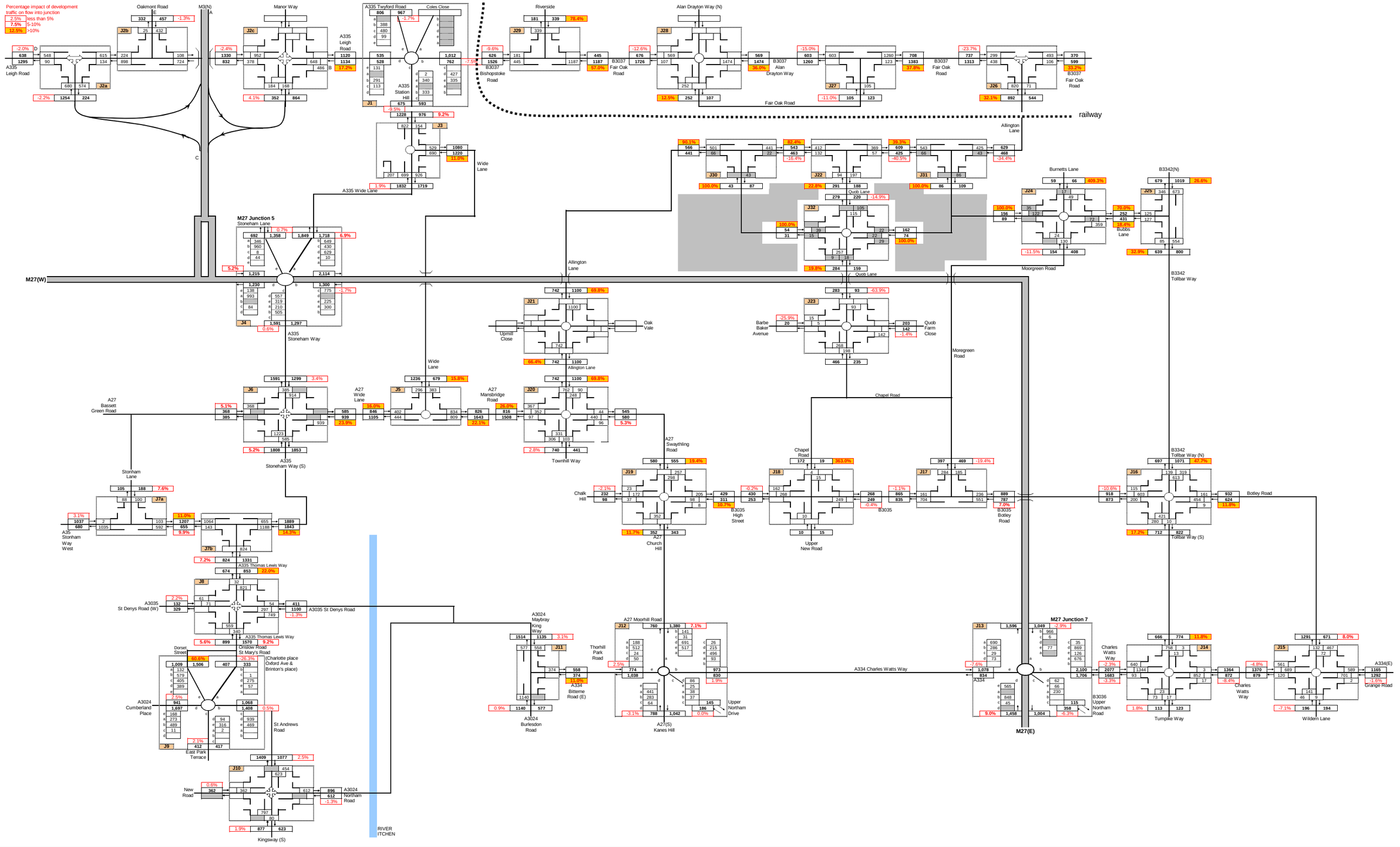
Brookbanks Consulting



Client:	**HALLAM LAND MANAGEMENT**
Job:	**10440 Land South of Allington Lane, Eastleigh**
Title:	**2036 Do-Something Model Base Traffic Flows +Development - AM Peak [PCUs]**

Prepared by: S.M.T.
30/11/2016
Figure 10

Brookbanks Consulting



Client:	**HALLAM LAND MANAGEMENT**
Job:	**10440 Land South of Allington Lane, Eastleigh**
Title:	**2036 Do-Something Model Base Traffic Flows +Development - PM Peak [PCUs]**

Prepared by: S.M.T.
30/11/2016
Figure 11

Brookbanks Consulting

Percentage impact of development traffic on flow into junction
2.5% less than 5%
7.5% 5-10%
12.5% >10%

railway

Appendix D – Junction Outputs

```
_____________________ A R C A D Y  6 _____________________

    ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY


    Analysis Program: Release 7.0 (FEBRUARY 2010)
                      Patch 15 Apr 2011
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_____________________________________________

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Nine Mile Ride          Email: software@trl.co.uk
Wokingham, Berks.       Web:   www.trlsoftware.co.uk
RG40 3GA,UK

-------------------------------------------------------------------------------
 THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
 IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS  OF THE SOLUTION
-------------------------------------------------------------------------------

 Run with file:-
 "p:\10440\Traffic\Junctions\j1a A335-Station Hill Rbt\10440 j1a A335-Station Hill Rbt DS1AM.vai"
(drive-on-the-left ) at 16:01:16 on Friday, 25 November 2016


.FILE PROPERTIES
 ***************

    RUN TITLE: j1a A335-Station Road Rbt DS1AM
     LOCATION: Eastleigh
         DATE: 24/11/16
       CLIENT: Hallam Land Management
  ENUMERATOR: Matt.Moss [BCL25]
  JOB NUMBER: 10440
       STATUS: Preliminary
 DESCRIPTION: Existing Layout

.INPUT DATA
 **********
 ARM A - Coles Close
 ARM B - Bishopstoke Road
 ARM C - Station Hill
 ARM D - A335 Romsey Road
 ARM E - Twyford Road

.GEOMETRIC DATA
 --------------


 ------------------------------------------------------------------------------------------------------------------------ T5
 I ARM    I   V (M)   I    E (M)   I    L (M)   I    R (M)   I    D (M) I   PHI (DEG)  I  SLOPE  I INTERCEPT (PCU/MIN) I
 ------------------------------------------------------------------------------------------------------------------------
 I ARM  A I    3.30   I     6.90   I     2.20   I    10.00   I   33.00   I     60.0     I  0.464  I       16.584        I
 I ARM  B I    4.20   I     4.90   I    10.10   I    10.00   I   33.00   I     45.0     I  0.542  I       21.670        I
 I ARM  C I    4.00   I     4.90   I    16.20   I     6.00   I   33.00   I     60.0     I  0.471  I       18.809        I
 I ARM  D I    7.30   I     7.60   I     8.40   I    22.00   I   31.00   I     45.0     I  0.741  I       36.405        I
 I ARM  E I    3.10   I     5.90   I     8.10   I    11.00   I   33.00   I     40.0     I  0.538  I       20.697        I
 ------------------------------------------------------------------------------------------------------------------------

 V = approach half-width       L = effective flare length            D = inscribed circle diameter
 E = entry width               R = entry radius                      PHI = entry angle


.TRAFFIC DEMAND DATA
 -------------------

 Only sets included in the current run are shown
.SCALING FACTORS
 ----------------------- T13
 IARM  I FLOW SCALE(%) I
 -----------------------
 I A   I      100      I
 I B   I      100      I
 I C   I      100      I
 I D   I      100      I
 I E   I      100      I
 -----------------------

 TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(  60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j1a A335-Station Road Rbt DS1AM


 DEMAND SET TITLE:  j1a A335-Station Road Rbt DS1AM
-------------------------------------------------------------------------------- T33
I                    I         TURNING PROPORTIONS        I
I                    I         TURNING COUNTS             I
I                    I       (PERCENTAGE OF H.V.S)        I
I                    ---------------------------------------------------------
I       TIME         I FROM/T  I  ARM A I  ARM B I  ARM C I  ARM D I  ARM E I
-------------------------------------------------------------------------------
I   08.00 - 09.00    I         I        I        I        I        I        I
I                    I  ARM  A I  0.229 I  0.000 I  0.440 I  0.186 I  0.146 I
I                    I         I  732.0 I    0.0 I 1405.0 I  593.0 I  466.0 I
I                    I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
I                    I         I        I        I        I        I        I
I                    I  ARM  B I  0.146 I  0.229 I  0.000 I  0.440 I  0.186 I
I                    I         I  466.0 I  732.0 I    0.0 I 1405.0 I  593.0 I
I                    I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
I                    I         I        I        I        I        I        I
I                    I  ARM  C I  0.186 I  0.146 I  0.229 I  0.000 I  0.440 I
I                    I         I  593.0 I  466.0 I  732.0 I    0.0 I 1405.0 I
I                    I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
```



```
I                    I         I        I        I        I        I        I
I                    I  ARM  D I  0.440 I  0.186 I  0.146 I  0.229 I  0.000 I
I                    I         I 1405.0 I  593.0 I  466.0 I  732.0 I    0.0 I
I                    I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
I                    I         I        I        I        I        I        I
I                    I  ARM  E I  0.000 I  0.440 I  0.186 I  0.146 I  0.229 I
I                    I         I    0.0 I 1405.0 I  593.0 I  466.0 I  732.0 I
I                    I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
I                    I         I        I        I        I        I        I
 ----------------------------------------------------------------------------


.       QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT
        ------------------------------------------------------------

.------------------------------------------------------------------------------------------------------------------------ T70
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END      DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE   (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
-                                                                                                                 -
I 08.00-08.15                                                                                                     I
I ARM A       0.00      6.45   0.000   - -       -    0.0    0.0       0.0             -              0.000     I
I ARM B      17.97     14.28   1.258   - -       -    0.0   58.9     461.8             -              2.240     I
I ARM C      11.25      7.99   1.408   - -       -    0.0   51.2     397.3             -              3.470     I
I ARM D       8.47     19.92   0.425   - -       -    0.0    0.7      10.6             -              0.087     I
I ARM E      15.58      9.09   1.714   - -       -    0.0   98.8     749.6             -              5.633     I
I                                                                                                             I
 ------------------------------------------------------------------------------------------------------------------------
.------------------------------------------------------------------------------------------------------------------------
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END      DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE   (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
-                                                                                                                 -
I 08.15-08.30                                                                                                     I
I ARM A       0.00      6.40   0.000   - -       -    0.0    0.0       0.0             -              0.000     I
I ARM B      17.97     14.27   1.260   - -       -   58.9  114.6    1301.1             -              6.232     I
I ARM C      11.25      7.88   1.427   - -       -   51.2  101.8    1147.2             -              9.923     I
I ARM D       8.47     19.81   0.427   - -       -    0.7    0.7      11.1             -              0.088     I
I ARM E      15.58      9.01   1.730   - -       -   98.8  197.4    2220.8             -             16.602     I
I                                                                                                             I
 ------------------------------------------------------------------------------------------------------------------------
.------------------------------------------------------------------------------------------------------------------------
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END      DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE   (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
-                                                                                                                 -
I 08.30-08.45                                                                                                     I
I ARM A       0.00      6.40   0.000   - -       -    0.0    0.0       0.0             -              0.000     I
I ARM B      17.97     14.27   1.260   - -       -  114.6  170.2    2135.5             -             10.103     I
I ARM C      11.25      7.88   1.427   - -       -  101.8  152.3    1905.5             -             16.307     I
I ARM D       8.47     19.80   0.428   - -       -    0.7    0.7      11.1             -              0.088     I
I ARM E      15.58      9.01   1.730   - -       -  197.4  296.0    3699.9             -             27.525     I
I                                                                                                             I
 ------------------------------------------------------------------------------------------------------------------------
.------------------------------------------------------------------------------------------------------------------------
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END      DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE   (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
-                                                                                                                 -
I 08.45-09.00                                                                                                     I
I ARM A       0.00      6.40   0.000   - -       -    0.0    0.0       0.0             -              0.000     I
I ARM B      17.97     14.27   1.260   - -       -  170.2  225.7    2969.2             -             13.985     I
I ARM C      11.25      7.88   1.428   - -       -  152.3  202.9    2663.8             -             22.706     I
I ARM D       8.47     19.80   0.428   - -       -    0.7    0.7      11.2             -              0.088     I
I ARM E      15.58      9.01   1.730   - -       -  296.0  394.6    5179.2             -             38.460     I
I                                                                                                             I
 ------------------------------------------------------------------------------------------------------------------------

.QUEUE AT ARM A
 --------------

  TIME SEGMENT NO. OF
    ENDING     VEHICLES
               IN QUEUE

    08.15          0.0
    08.30          0.0
    08.45          0.0
    09.00          0.0


.QUEUE AT ARM B
 --------------

  TIME SEGMENT NO. OF
    ENDING     VEHICLES
               IN QUEUE

    08.15         58.9  ************************************************************
    08.30        114.6  ************************************************************************************************************
    08.45        170.2  ************************************************************************************************************
    09.00        225.7  ************************************************************************************************************


.QUEUE AT ARM C
 --------------

  TIME SEGMENT NO. OF
    ENDING     VEHICLES
               IN QUEUE

    08.15         51.2  **************************************************
    08.30        101.8  ************************************************************************************************
    08.45        152.3  ************************************************************************************************************
    09.00        202.9  ************************************************************************************************************


.QUEUE AT ARM D
 --------------

  TIME SEGMENT NO. OF
    ENDING     VEHICLES
               IN QUEUE
```

08.15	0.7	*
08.30	0.7	*
08.45	0.7	*
09.00	0.7	*

.QUEUE AT ARM E

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	98.8	**
08.30	197.4	**
08.45	296.0	**
09.00	394.6	**

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * * DELAY *		* INCLUSIVE QUEUEING * * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	0.0	0.0	0.0	0.00	0.0	0.00
B	1078.2	1078.2	6867.5	6.37	8653.2	8.03
C	675.0	675.0	6113.9	9.06	8725.1	12.93
D	508.0	508.0	44.0	0.09	44.0	0.09
E	934.8	934.8	11849.5	12.68	20493.9	21.92
ALL	3196.0	3196.0	24874.9	7.78	37916.1	11.86

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

END OF JOB

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

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Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

Run with file:-
"p:\10440\Traffic\Junctions\j1a A335-Station Hill Rbt\10440 j1a A335-Station Hill Rbt DS1PM.vai"
(drive-on-the-left) at 15:56:02 on Friday, 25 November 2016

.FILE PROPERTIES

RUN TITLE: j1a A335-Station Road Rbt DS1PM
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA

ARM A - Coles Close
ARM B - Bishopstoke Road
ARM C - Station Hill
ARM D - A335 Romsey Road
ARM E - Twyford Road

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.30	6.90	2.20	10.00	33.00	60.0	0.464	16.584
ARM B	4.20	4.90	10.10	10.00	33.00	45.0	0.542	21.670
ARM C	4.00	4.90	16.20	6.00	33.00	60.0	0.471	18.809
ARM D	7.30	7.60	8.40	22.00	31.00	45.0	0.741	36.405
ARM E	3.10	5.90	8.10	11.00	33.00	40.0	0.538	20.697

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j1a A335-Station Road Rbt DS1PM

DEMAND SET TITLE: j1a A335-Station Road Rbt DS1PM

T33

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS / (PERCENTAGE OF H.V.S)				
		ARM A	ARM B	ARM C	ARM D	ARM E
17.00 - 18.00						
	ARM A	0.228	0.000	0.298	0.228	0.246
		835.0	0.0	1090.0	836.0	900.0
		(10.0)	(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.246	0.228	0.000	0.298	0.228
		900.0	835.0	0.0	1090.0	836.0
		(10.0)	(10.0)	(10.0)	(10.0)	(10.0)
	ARM C	0.228	0.246	0.228	0.000	0.298
		836.0	900.0	835.0	0.0	1090.0
		(10.0)	(10.0)	(10.0)	(10.0)	(10.0)

```
I                    I        I        I        I        I        I        I
I                    I  ARM  D I  0.298 I  0.228 I  0.246 I  0.228 I  0.000 I
I                    I        I 1090.0 I  836.0 I  900.0 I  835.0 I    0.0 I
I                    I        I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
I                    I        I        I        I        I        I        I
I                    I  ARM  E I  0.000 I  0.298 I  0.228 I  0.246 I  0.228 I
I                    I        I    0.0 I 1090.0 I  836.0 I  900.0 I  835.0 I
I                    I        I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
I                    I        I        I        I        I        I        I
--------------------------------------------------------------------------
```

.   QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

```
.------------------------------------------------------------------------------------------------------------------ T70
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END      DELAY    GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE   (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                               (RFC)    (PEDS/MIN) (VEHS) (VEHS) TIME SEGMENT)  TIME SEGMENT)   VEHICLE (MIN) I
-                                                                                                              -
I 17.00-17.15                                                                                                  I
I ARM A       0.00      6.27   0.000   - -      -    0.0    0.0       0.0            -              0.000     I
I ARM B      25.43     13.71   1.855   - -      -    0.0  177.0    1335.3            -              6.578     I
I ARM C      15.32      8.04   1.905   - -      -    0.0  110.2     833.9            -              7.057     I
I ARM D       6.88     18.65   0.369   - -      -    0.0    0.6       8.4            -              0.084     I
I ARM E      13.38      8.64   1.548   - -      -    0.0   72.8     557.3            -              4.429     I
I                                                                                                              I
----------------------------------------------------------------------------------------------------------------
.---------------------------------------------------------------------------------------------------------------
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END      DELAY    GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE   (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                               (RFC)    (PEDS/MIN) (VEHS) (VEHS) TIME SEGMENT)  TIME SEGMENT)   VEHICLE (MIN) I
-                                                                                                              -
I 17.15-17.30                                                                                                  I
I ARM A       0.00      6.21   0.000   - -      -    0.0    0.0       0.0            -              0.000     I
I ARM B      25.43     13.67   1.860   - -      -  177.0  353.4    3978.1            -             19.499     I
I ARM C      15.32      8.01   1.913   - -      -  110.2  219.9    2475.8            -             20.775     I
I ARM D       6.88     18.60   0.370   - -      -    0.6    0.6       8.7            -              0.085     I
I ARM E      13.38      8.60   1.556   - -      -   72.8  144.6    1631.0            -             12.819     I
I                                                                                                              I
----------------------------------------------------------------------------------------------------------------
.---------------------------------------------------------------------------------------------------------------
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END      DELAY    GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE   (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                               (RFC)    (PEDS/MIN) (VEHS) (VEHS) TIME SEGMENT)  TIME SEGMENT)   VEHICLE (MIN) I
-                                                                                                              -
I 17.30-17.45                                                                                                  I
I ARM A       0.00      6.21   0.000   - -      -    0.0    0.0       0.0            -              0.000     I
I ARM B      25.43     13.67   1.861   - -      -  353.4  529.9    6624.8            -             32.400     I
I ARM C      15.32      8.01   1.913   - -      -  219.9  329.6    4121.0            -             34.453     I
I ARM D       6.88     18.60   0.370   - -      -    0.6    0.6       8.8            -              0.085     I
I ARM E      13.38      8.60   1.556   - -      -  144.6  216.4    2707.4            -             21.141     I
I                                                                                                              I
----------------------------------------------------------------------------------------------------------------
.---------------------------------------------------------------------------------------------------------------
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END      DELAY    GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE   (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
I                               (RFC)    (PEDS/MIN) (VEHS) (VEHS) TIME SEGMENT)  TIME SEGMENT)   VEHICLE (MIN) I
-                                                                                                              -
I 17.45-18.00                                                                                                  I
I ARM A       0.00      6.21   0.000   - -      -    0.0    0.0       0.0            -              0.000     I
I ARM B      25.43     13.67   1.861   - -      -  529.9  706.3    9271.5            -             45.306     I
I ARM C      15.32      8.01   1.913   - -      -  329.6  439.3    5766.2            -             48.140     I
I ARM D       6.88     18.60   0.370   - -      -    0.6    0.6       8.8            -              0.085     I
I ARM E      13.38      8.60   1.556   - -      -  216.4  288.1    3783.5            -             29.479     I
I                                                                                                              I
----------------------------------------------------------------------------------------------------------------
```

.QUEUE AT ARM A

```
 TIME SEGMENT NO. OF
  ENDING      VEHICLES
              IN QUEUE

  17.15          0.0
  17.30          0.0
  17.45          0.0
  18.00          0.0
```

.QUEUE AT ARM B

```
 TIME SEGMENT NO. OF
  ENDING      VEHICLES
              IN QUEUE

  17.15        177.0  ****************************************************************************************************
  17.30        353.4  ****************************************************************************************************
  17.45        529.9  ****************************************************************************************************
  18.00        706.3  ****************************************************************************************************
```

.QUEUE AT ARM C

```
 TIME SEGMENT NO. OF
  ENDING      VEHICLES
              IN QUEUE

  17.15        110.2  ****************************************************************************************************
  17.30        219.9  ****************************************************************************************************
  17.45        329.6  ****************************************************************************************************
  18.00        439.3  ****************************************************************************************************
```

.QUEUE AT ARM D

```
 TIME SEGMENT NO. OF
  ENDING      VEHICLES
              IN QUEUE
```



```
  17.15          0.6  *
  17.30          0.6  *
  17.45          0.6  *
  18.00          0.6  *
```

.QUEUE AT ARM E

```
 TIME SEGMENT NO. OF
  ENDING      VEHICLES
              IN QUEUE

  17.15         72.8  *********************************************************************************
  17.30        144.6  ****************************************************************************************************
  17.45        216.4  ****************************************************************************************************
  18.00        288.1  ****************************************************************************************************
```

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

```
------------------------------------------------------------------------------- T75
I  ARM  I   TOTAL DEMAND  I     * QUEUEING *     I  * INCLUSIVE QUEUEING *  I
I       I                 I      * DELAY *       I         * DELAY *        I
I       I---------------------------------------------------------------------I
I       I  (VEH)   (VEH/H) I  (MIN)    (MIN/VEH) I    (MIN)      (MIN/VEH)  I
-------------------------------------------------------------------------------
I   A   I    0.0 I    0.0 I     0.0 I    0.00   I       0.0  I    0.00     I
I   B   I 1526.0 I 1526.0 I 21209.7 I   13.90   I   39457.8  I   25.86     I
I   C   I  919.0 I  919.0 I 13196.9 I   14.36   I   25247.8  I   27.47     I
I   D   I  413.0 I  413.0 I    34.7 I    0.08   I      34.7  I    0.08     I
I   E   I  803.0 I  803.0 I  8679.3 I   10.81   I   13504.9  I   16.82     I
-------------------------------------------------------------------------------
I  ALL  I 3661.0 I 3661.0 I 43120.6 I   11.78   I   78245.3  I   21.37     I
-------------------------------------------------------------------------------
```

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

END OF JOB

```
_____________________ A R C A D Y  6 _____________________

    ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY


    Analysis Program: Release 7.0 (FEBRUARY 2010)
                      Patch 15 Apr 2011
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_____________________________________________

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-------------------------------------------------------------------------------
 THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
 IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS  OF THE SOLUTION
-------------------------------------------------------------------------------

 Run with file:-
 "p:\10440\Traffic\Junctions\j1a A335-Station Hill Rbt\10440 j1a A335-Station Hill Rbt DS1AM + DEV.vai"
(drive-on-the-left ) at 16:01:22 on Friday, 25 November 2016


.FILE PROPERTIES
 ***************

    RUN TITLE: j1a A335-Station Road Rbt DS1AM+DEV
     LOCATION: Eastleigh
         DATE: 24/11/16
       CLIENT: Hallam Land Management
  ENUMERATOR: Matt.Moss [BCL25]
  JOB NUMBER: 10440
       STATUS: Preliminary
 DESCRIPTION: Existing Layout

.INPUT DATA
 **********
 ARM A - Coles Close
 ARM B - Bishopstoke Road
 ARM C - Station Hill
 ARM D - A335 Romsey Road
 ARM E - Twyford Road

.GEOMETRIC DATA
 --------------


 ------------------------------------------------------------------------------------------------------------------------ T5
 I ARM    I   V (M)   I    E (M)   I    L (M)   I    R (M)   I    D (M) I   PHI (DEG)  I  SLOPE  I INTERCEPT (PCU/MIN) I
 ------------------------------------------------------------------------------------------------------------------------
 I ARM  A I    3.30   I     6.90   I     2.20   I    10.00   I   33.00   I     60.0     I  0.464  I       16.584        I
 I ARM  B I    4.20   I     4.90   I    10.10   I    10.00   I   33.00   I     45.0     I  0.542  I       21.670        I
 I ARM  C I    4.00   I     4.90   I    16.20   I     6.00   I   33.00   I     60.0     I  0.471  I       18.809        I
 I ARM  D I    7.30   I     7.60   I     8.40   I    22.00   I   31.00   I     45.0     I  0.741  I       36.405        I
 I ARM  E I    3.10   I     5.90   I     8.10   I    11.00   I   33.00   I     40.0     I  0.538  I       20.697        I
 ------------------------------------------------------------------------------------------------------------------------

 V = approach half-width       L = effective flare length           D = inscribed circle diameter
 E = entry width               R = entry radius                     PHI = entry angle


.TRAFFIC DEMAND DATA
 -------------------

 Only sets included in the current run are shown
.SCALING FACTORS
 ------------------------ T13
 IARM  I FLOW SCALE(%) I
 ----------------------
 I A   I      100      I
 I B   I      100      I
 I C   I      100      I
 I D   I      100      I
 I E   I      100      I
 ----------------------

 TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(  60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j1a A335-Station Road Rbt DS1AM+DEV


 DEMAND SET TITLE:  j1a A335-Station Road Rbt DS1AM+DEV
 ------------------------------------------------------------------------------ T33
 I                   I         TURNING PROPORTIONS        I
 I                   I         TURNING COUNTS             I
 I                   I       (PERCENTAGE OF H.V.S)        I
 I                   I ---------------------------------------------------
 I       TIME        I FROM/T  I  ARM A I  ARM B I  ARM C I  ARM D I  ARM E I
 ------------------------------------------------------------------------------
 I   08.00 - 09.00   I         I        I        I        I        I        I
 I                   I  ARM  A I  0.274 I  0.000 I  0.344 I  0.202 I  0.180 I
 I                   I         I  806.0 I    0.0 I 1012.0 I  593.0 I  528.0 I
 I                   I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
 I                   I         I        I        I        I        I        I
 I                   I  ARM  B I  0.180 I  0.274 I  0.000 I  0.344 I  0.202 I
 I                   I         I  528.0 I  806.0 I    0.0 I 1012.0 I  593.0 I
 I                   I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
 I                   I         I        I        I        I        I        I
 I                   I  ARM  C I  0.202 I  0.180 I  0.274 I  0.000 I  0.344 I
 I                   I         I  593.0 I  528.0 I  806.0 I    0.0 I 1012.0 I
 I                   I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
```



```
 I                   I         I        I        I        I        I        I
 I                   I  ARM  D I  0.344 I  0.202 I  0.180 I  0.274 I  0.000 I
 I                   I         I 1012.0 I  593.0 I  528.0 I  806.0 I    0.0 I
 I                   I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
 I                   I         I        I        I        I        I        I
 I                   I  ARM  E I  0.000 I  0.344 I  0.202 I  0.180 I  0.274 I
 I                   I         I    0.0 I 1012.0 I  593.0 I  528.0 I  806.0 I
 I                   I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
 I                   I         I        I        I        I        I        I
 ------------------------------------------------------------------------------


.       QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT
        ---------------------------------------------------------

 ------------------------------------------------------------------------------------------------------------------------ T70
 I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END      DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
 I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE   (VEH.MIN/     (VEH.MIN/      PER ARRIVING  I
 I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
 -                                                                                                                  -
 I 08.00-08.15                                                                                                      I
 I ARM A       0.00      5.87   0.000   - -       -    0.0    0.0       0.0             -              0.000      I
 I ARM B      12.70     13.41   0.947   - -       -    0.0    9.2      98.8             -              0.604      I
 I ARM C      11.25      8.54   1.318   - -       -    0.0   43.6     342.6             -              2.832      I
 I ARM D       8.92     19.39   0.460   - -       -    0.0    0.8      12.1             -              0.095      I
 I ARM E      16.12      8.15   1.977   - -       -    0.0  120.5     910.6             -              7.632      I
 I                                                                                                                  I
 ------------------------------------------------------------------------------------------------------------------------
 ------------------------------------------------------------------------------------------------------------------------
 I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END      DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
 I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE   (VEH.MIN/     (VEH.MIN/      PER ARRIVING  I
 I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
 -                                                                                                                  -
 I 08.15-08.30                                                                                                      I
 I ARM A       0.00      5.83   0.000   - -       -    0.0    0.0       0.0             -              0.000      I
 I ARM B      12.70     13.42   0.946   - -       -    9.2   11.3     155.0             -              0.946      I
 I ARM C      11.25      8.32   1.352   - -       -   43.6   87.6     984.2             -              8.122      I
 I ARM D       8.92     19.20   0.464   - -       -    0.8    0.9      12.8             -              0.097      I
 I ARM E      16.12      8.02   2.010   - -       -  120.5  242.0    2719.0             -             22.766      I
 I                                                                                                                  I
 ------------------------------------------------------------------------------------------------------------------------
 ------------------------------------------------------------------------------------------------------------------------
 I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END      DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
 I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE   (VEH.MIN/     (VEH.MIN/      PER ARRIVING  I
 I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
 -                                                                                                                  -
 I 08.30-08.45                                                                                                      I
 I ARM A       0.00      5.83   0.000   - -       -    0.0    0.0       0.0             -              0.000      I
 I ARM B      12.70     13.43   0.946   - -       -   11.3   12.4     178.3             -              1.045      I
 I ARM C      11.25      8.29   1.357   - -       -   87.6  132.0    1647.3             -             13.440      I
 I ARM D       8.92     19.19   0.465   - -       -    0.9    0.9      12.9             -              0.097      I
 I ARM E      16.12      8.01   2.012   - -       -  242.0  363.6    4542.5             -             37.952      I
 I                                                                                                                  I
 ------------------------------------------------------------------------------------------------------------------------
 ------------------------------------------------------------------------------------------------------------------------
 I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END      DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
 I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE   (VEH.MIN/     (VEH.MIN/      PER ARRIVING  I
 I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
 -                                                                                                                  -
 I 08.45-09.00                                                                                                      I
 I ARM A       0.00      5.83   0.000   - -       -    0.0    0.0       0.0             -              0.000      I
 I ARM B      12.70     13.43   0.946   - -       -   12.4   13.2     192.4             -              1.100      I
 I ARM C      11.25      8.28   1.359   - -       -  132.0  176.6    2314.6             -             18.803      I
 I ARM D       8.92     19.19   0.465   - -       -    0.9    0.9      13.0             -              0.097      I
 I ARM E      16.12      8.01   2.013   - -       -  363.6  485.3    6367.2             -             53.133      I
 I                                                                                                                  I
 ------------------------------------------------------------------------------------------------------------------------

.QUEUE AT ARM A
 --------------

  TIME SEGMENT NO. OF
    ENDING     VEHICLES
               IN QUEUE

    08.15          0.0
    08.30          0.0
    08.45          0.0
    09.00          0.0


.QUEUE AT ARM B
 --------------

  TIME SEGMENT NO. OF
    ENDING     VEHICLES
               IN QUEUE

    08.15          9.2  *********
    08.30         11.3  ***********
    08.45         12.4  ************
    09.00         13.2  *************


.QUEUE AT ARM C
 --------------

  TIME SEGMENT NO. OF
    ENDING     VEHICLES
               IN QUEUE

    08.15         43.6  *******************************************
    08.30         87.6  ********************************************************************************************
    08.45        132.0  ********************************************************************************************************************
    09.00        176.6  ********************************************************************************************************************


.QUEUE AT ARM D
 --------------

  TIME SEGMENT NO. OF
    ENDING     VEHICLES
               IN QUEUE
```

```
 08.15          0.8  *
 08.30          0.9  *
 08.45          0.9  *
 09.00          0.9  *
```

.QUEUE AT ARM E

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	120.5	**
08.30	242.0	**
08.45	363.6	**
09.00	485.3	**

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * * DELAY * (MIN)	* QUEUEING * * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * * DELAY * (MIN)	* INCLUSIVE QUEUEING * * DELAY * (MIN/VEH)
A	0.0	0.0	0.0	0.00	0.0	0.00
B	762.0	762.0	624.5	0.82	631.0	0.83
C	675.0	675.0	5288.6	7.83	7171.8	10.62
D	535.0	535.0	50.8	0.10	50.8	0.10
E	967.0	967.0	14539.2	15.04	29249.0	30.25
ALL	2939.0	2939.0	20503.2	6.98	37102.6	12.62

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

END OF JOB

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

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Nine Mile Ride   Email: software@trl.co.uk
Wokingham, Berks.   Web: www.trlsoftware.co.uk
RG40 3GA,UK

Run with file:-
"p:\10440\Traffic\Junctions\j1a A335-Station Hill Rbt\10440 j1a A335-Station Hill Rbt DS1PM + DEV.vai"
(drive-on-the-left) at 15:55:57 on Friday, 25 November 2016

.FILE PROPERTIES

RUN TITLE: j1a A335-Station Road Rbt DS1PM+DEV
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA

ARM A - Coles Close
ARM B - Bishopstoke Road
ARM C - Station Hill
ARM D - A335 Romsey Road
ARM E - Twyford Road

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.30	6.90	2.20	10.00	33.00	60.0	0.464	16.584
ARM B	4.20	4.90	10.10	10.00	33.00	45.0	0.542	21.670
ARM C	4.00	4.90	16.20	6.00	33.00	60.0	0.471	18.809
ARM D	7.30	7.60	8.40	22.00	31.00	45.0	0.741	36.405
ARM E	3.10	5.90	8.10	11.00	33.00	40.0	0.538	20.697

V = approach half-width   L = effective flare length   D = inscribed circle diameter
E = entry width   R = entry radius   PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j1a A335-Station Road Rbt DS1+DEVPM

DEMAND SET TITLE: j1a A335-Station Road Rbt DS1+DEVPM

T33

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

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D	ARM E
17.00 - 18.00						
	ARM A	0.227	0.000	0.314	0.216	0.242
		880.0	0.0	1217.0	836.0	938.0
		(10.0)	(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.242	0.227	0.000	0.314	0.216
		938.0	880.0	0.0	1217.0	836.0
		(10.0)	(10.0)	(10.0)	(10.0)	(10.0)
	ARM C	0.216	0.242	0.227	0.000	0.314
		836.0	938.0	880.0	0.0	1217.0
		(10.0)	(10.0)	(10.0)	(10.0)	(10.0)

```
I                   I         I       I       I       I       I       I
I                   I  ARM  D I  0.314 I  0.216 I  0.242 I  0.227 I  0.000 I
I                   I         I 1217.0 I  836.0 I  938.0 I  880.0 I    0.0 I
I                   I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
I                   I         I       I       I       I       I       I
I                   I  ARM  E I  0.000 I  0.314 I  0.216 I  0.242 I  0.227 I
I                   I         I    0.0 I 1217.0 I  836.0 I  938.0 I  880.0 I
I                   I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
I                   I         I       I       I       I       I       I
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. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

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.------------------------------------------------------------------------------------------------------------------------------------- T70
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/     (VEH.MIN/      PER ARRIVING  I
I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
-                                                                                                                  -
I 17.00-17.15                                                                                                      I
I ARM A       0.00      6.21   0.000   - -       -    0.0    0.0       0.0             -              0.000     I
I ARM B      26.82     13.71   1.957   - -       -    0.0  197.7    1490.0             -              7.333     I
I ARM C      15.32      8.04   1.905   - -       -    0.0  110.2     833.8             -              7.057     I
I ARM D       7.85     18.89   0.416   - -       -    0.0    0.7      10.2             -              0.090     I
I ARM E      14.53      8.23   1.766   - -       -    0.0   95.8     727.0             -              6.034     I
I                                                                                                              I
 ------------------------------------------------------------------------------------------------------------------
.------------------------------------------------------------------------------------------------------------------
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/     (VEH.MIN/      PER ARRIVING  I
I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
-                                                                                                                  -
I 17.15-17.30                                                                                                      I
I ARM A       0.00      6.16   0.000   - -       -    0.0    0.0       0.0             -              0.000     I
I ARM B      26.82     13.68   1.961   - -       -  197.7  394.8    4444.0             -             21.758     I
I ARM C      15.32      8.01   1.912   - -       -  110.2  219.8    2475.0             -             20.768     I
I ARM D       7.85     18.83   0.417   - -       -    0.7    0.7      10.6             -              0.091     I
I ARM E      14.53      8.18   1.777   - -       -   95.8  191.1    2152.3             -             17.713     I
I                                                                                                              I
 ------------------------------------------------------------------------------------------------------------------
.------------------------------------------------------------------------------------------------------------------
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/     (VEH.MIN/      PER ARRIVING  I
I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
-                                                                                                                  -
I 17.30-17.45                                                                                                      I
I ARM A       0.00      6.16   0.000   - -       -    0.0    0.0       0.0             -              0.000     I
I ARM B      26.82     13.68   1.961   - -       -  394.8  591.9    7400.7             -             36.155     I
I ARM C      15.32      8.01   1.912   - -       -  219.8  329.4    4118.8             -             34.433     I
I ARM D       7.85     18.83   0.417   - -       -    0.7    0.7      10.7             -              0.091     I
I ARM E      14.53      8.18   1.777   - -       -  191.1  286.4    3581.9             -             29.343     I
I                                                                                                              I
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.------------------------------------------------------------------------------------------------------------------
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/     (VEH.MIN/      PER ARRIVING  I
I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
-                                                                                                                  -
I 17.45-18.00                                                                                                      I
I ARM A       0.00      6.16   0.000   - -       -    0.0    0.0       0.0             -              0.000     I
I ARM B      26.82     13.68   1.961   - -       -  591.9  789.1   10357.5             -             50.559     I
I ARM C      15.32      8.01   1.912   - -       -  329.4  439.0    5762.5             -             48.108     I
I ARM D       7.85     18.83   0.417   - -       -    0.7    0.7      10.7             -              0.091     I
I ARM E      14.53      8.18   1.777   - -       -  286.4  381.8    5011.5             -             40.984     I
I                                                                                                              I
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```

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	197.7	**********
17.30	394.8	**********
17.45	591.9	**********
18.00	789.1	**********

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	110.2	**********
17.30	219.8	**********
17.45	329.4	**********
18.00	439.0	**********

.QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	0.7	*
17.30	0.7	*
17.45	0.7	*
18.00	0.7	*

.QUEUE AT ARM E

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	95.8	**********
17.30	191.1	**********
17.45	286.4	**********
18.00	381.8	**********

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	0.0	0.0	0.0	0.00	0.0	0.00
B	1609.0	1609.0	23692.2	14.72	46454.9	28.87
C	919.0	919.0	13190.1	14.35	25215.5	27.44
D	471.0	471.0	42.2	0.09	42.2	0.09
E	872.0	872.0	11472.7	13.16	20381.6	23.37
ALL	3871.0	3871.0	48397.2	12.50	92094.2	23.79

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

END OF JOB

_____ A R C A D Y 6 _____

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

For sales and distribution information,
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Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

Run with file:-
"p:\10440\Traffic\Junctions\j1a A335-Station Hill Rbt\10440 j1a A335-Station Hill Rbt DS1AM+DEV+IMP.vai"
(drive-on-the-left) at 16:21:36 on Friday, 25 November 2016

.FILE PROPERTIES
****

RUN TITLE: j1a A335-Station Road Rbt DS1AM+DEV
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA
****
ARM A - Coles Close
ARM B - Bishopstoke Road
ARM C - Station Hill
ARM D - A335 Romsey Road
ARM E - Twyford Road

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.30	6.90	2.20	10.00	33.00	60.0	0.464	16.584
ARM B	4.20	5.50	10.10	10.00	33.00	45.0	0.561	23.249
ARM C	4.00	4.90	16.20	6.00	33.00	60.0	0.471	18.809
ARM D	7.30	7.60	8.40	22.00	31.00	45.0	0.741	36.405
ARM E	3.10	6.90	10.50	11.00	33.00	40.0	0.563	22.713

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100
E	100

TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j1a A335-Station Road Rbt DS1AM+DEV

DEMAND SET TITLE: j1a A335-Station Road Rbt DS1AM+DEV

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D	ARM E
08.00 - 09.00	ARM A	0.274	0.000	0.344	0.202	0.180
		806.0	0.0	1012.0	593.0	528.0
		(10.0)	(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.180	0.274	0.000	0.344	0.202
		528.0	806.0	0.0	1012.0	593.0
		(10.0)	(10.0)	(10.0)	(10.0)	(10.0)
	ARM C	0.202	0.180	0.274	0.000	0.344
		593.0	528.0	806.0	0.0	1012.0
		(10.0)	(10.0)	(10.0)	(10.0)	(10.0)

ARM D	0.344	0.202	0.180	0.274	0.000
	1012.0	593.0	528.0	806.0	0.0
	(10.0)	(10.0)	(10.0)	(10.0)	(10.0)
ARM E	0.000	0.344	0.202	0.180	0.274
	0.0	1012.0	593.0	528.0	806.0
	(10.0)	(10.0)	(10.0)	(10.0)	(10.0)

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	0.00	5.21	0.000	- -	-	0.0	0.0	0.0	-	0.000
ARM B	12.70	14.16	0.897	- -	-	0.0	6.5	75.7	-	0.457
ARM C	11.25	8.15	1.380	- -	-	0.0	48.9	380.8	-	3.275
ARM D	8.92	19.28	0.463	- -	-	0.0	0.9	12.3	-	0.096
ARM E	16.12	9.58	1.683	- -	-	0.0	99.5	755.9	-	5.400
08.15-08.30									
ARM A	0.00	5.16	0.000	- -	-	0.0	0.0	0.0	-	0.000
ARM B	12.70	14.16	0.897	- -	-	6.5	7.3	104.6	-	0.616
ARM C	11.25	7.97	1.411	- -	-	48.9	98.2	1103.4	-	9.448
ARM D	8.92	19.12	0.466	- -	-	0.9	0.9	12.9	-	0.098
ARM E	16.12	9.46	1.704	- -	-	99.5	199.4	2242.1	-	15.954
08.30-08.45									
ARM A	0.00	5.16	0.000	- -	-	0.0	0.0	0.0	-	0.000
ARM B	12.70	14.16	0.897	- -	-	7.3	7.7	112.8	-	0.641
ARM C	11.25	7.96	1.414	- -	-	98.2	147.6	1843.5	-	15.638
ARM D	8.92	19.12	0.466	- -	-	0.9	0.9	13.0	-	0.098
ARM E	16.12	9.46	1.704	- -	-	199.4	299.3	3740.5	-	26.506
08.45-09.00									
ARM A	0.00	5.16	0.000	- -	-	0.0	0.0	0.0	-	0.000
ARM B	12.70	14.16	0.897	- -	-	7.7	7.9	117.0	-	0.653
ARM C	11.25	7.95	1.415	- -	-	147.6	197.1	2585.2	-	21.848
ARM D	8.92	19.12	0.466	- -	-	0.9	0.9	13.1	-	0.098
ARM E	16.12	9.45	1.705	- -	-	299.3	399.3	5239.5	-	37.087

.QUEUE AT ARM A

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

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	6.5	******
08.30	7.3	*******
08.45	7.7	********
09.00	7.9	********

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	48.9	**
08.30	98.2	**
08.45	147.6	**
09.00	197.1	**

.QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE

08.15	0.9	*
08.30	0.9	*
08.45	0.9	*
09.00	0.9	*

.QUEUE AT ARM E

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	99.5	**
08.30	199.4	**
08.45	299.3	**
09.00	399.3	**

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * * DELAY *		* INCLUSIVE QUEUEING * * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	0.0	0.0	0.0	0.00	0.0	0.00
B	762.0	762.0	410.1	0.54	412.3	0.54
C	675.0	675.0	5912.9	8.76	8354.9	12.38
D	535.0	535.0	51.3	0.10	51.3	0.10
E	967.0	967.0	11978.0	12.39	20408.8	21.10
ALL	2939.0	2939.0	18352.3	6.24	29227.3	9.94

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

END OF JOB

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

For sales and distribution information,
program advice and maintenance, contact:

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THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:-
"p:\10440\Traffic\Junctions\j1a A335-Station Hill Rbt\10440 j1a A335-Station Hill Rbt DS1PM+DEV+IMP.vai"
(drive-on-the-left) at 16:23:26 on Friday, 25 November 2016

.FILE PROPERTIES

RUN TITLE: j1a A335-Station Road Rbt DS1PM+DEV
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA

ARM A - Coles Close
ARM B - Bishopstoke Road
ARM C - Station Hill
ARM D - A335 Romsey Road
ARM E - Twyford Road

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.30	6.90	2.20	10.00	33.00	60.0	0.464	16.584
ARM B	4.10	5.50	10.10	10.00	33.00	45.0	0.558	23.018
ARM C	4.00	4.90	16.20	6.00	33.00	60.0	0.471	18.809
ARM D	7.30	7.60	8.40	22.00	31.00	45.0	0.741	36.405
ARM E	3.30	6.90	10.50	11.00	33.00	40.0	0.572	23.441

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j1a A335-Station Road Rbt DS1+DEVPM

DEMAND SET TITLE: j1a A335-Station Road Rbt DS1+DEVPM

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D	ARM E
		TURNING PROPORTIONS / TURNING COUNTS / (PERCENTAGE OF H.V.S)				
17.00 - 18.00						
	ARM A	0.227	0.000	0.314	0.216	0.242
		880.0	0.0	1217.0	836.0	938.0
		(10.0)	(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.242	0.227	0.000	0.314	0.216
		938.0	880.0	0.0	1217.0	836.0
		(10.0)	(10.0)	(10.0)	(10.0)	(10.0)
	ARM C	0.216	0.242	0.227	0.000	0.314
		836.0	938.0	880.0	0.0	1217.0
		(10.0)	(10.0)	(10.0)	(10.0)	(10.0)

	ARM D	0.314	0.216	0.242	0.227	0.000	
		1217.0	836.0	938.0	880.0	0.0	
		(10.0)	(10.0)	(10.0)	(10.0)	(10.0)	
	ARM E	0.000	0.314	0.216	0.242	0.227	
		0.0	1217.0	836.0	938.0	880.0	
		(10.0)	(10.0)	(10.0)	(10.0)	(10.0)	

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	0.00	5.34	0.000	- - -	0.0	0.0	0.0	-	0.000
ARM B	26.82	14.10	1.902	- - -	0.0	191.9	1446.9	-	6.927
ARM C	15.32	7.44	2.059	- - -	0.0	119.1	899.4	-	8.222
ARM D	7.85	18.81	0.417	- - -	0.0	0.7	10.3	-	0.090
ARM E	14.53	10.19	1.426	- - -	0.0	67.3	518.6	-	3.507

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
ARM A	0.00	5.26	0.000	- - -	0.0	0.0	0.0	-	0.000
ARM B	26.82	14.04	1.910	- - -	191.9	383.5	4315.9	-	20.590
ARM C	15.32	7.40	2.069	- - -	119.1	237.8	2676.6	-	24.289
ARM D	7.85	18.77	0.418	- - -	0.7	0.7	10.7	-	0.092
ARM E	14.53	10.15	1.432	- - -	67.3	133.1	1503.4	-	10.043

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
ARM A	0.00	5.26	0.000	- - -	0.0	0.0	0.0	-	0.000
ARM B	26.82	14.04	1.910	- - -	383.5	575.2	7190.4	-	34.227
ARM C	15.32	7.40	2.069	- - -	237.8	356.5	4457.0	-	40.313
ARM D	7.85	18.77	0.418	- - -	0.7	0.7	10.7	-	0.092
ARM E	14.53	10.15	1.432	- - -	133.1	198.8	2489.7	-	16.497

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
ARM A	0.00	5.26	0.000	- - -	0.0	0.0	0.0	-	0.000
ARM B	26.82	14.04	1.910	- - -	575.2	766.8	10065.1	-	47.876
ARM C	15.32	7.40	2.069	- - -	356.5	475.2	6237.5	-	56.346
ARM D	7.85	18.76	0.418	- - -	0.7	0.7	10.8	-	0.092
ARM E	14.53	10.15	1.432	- - -	198.8	264.6	3475.7	-	22.957

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	0.0	
17.30	0.0	
17.45	0.0	
18.00	0.0	

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	191.9	**
17.30	383.5	**
17.45	575.2	**
18.00	766.8	**

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	119.1	**
17.30	237.8	**
17.45	356.5	**
18.00	475.2	**

.QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	0.7	*
17.30	0.7	*
17.45	0.7	*
18.00	0.7	*

10440 j1a A335-Station Hill Rbt DS1PM+DEV+IMP

.QUEUE AT ARM E

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	67.3	***
17.30	133.1	**
17.45	198.8	**
18.00	264.6	**

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * * DELAY * (MIN)	* QUEUEING * * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * * DELAY * (MIN)	* INCLUSIVE QUEUEING * * DELAY * (MIN/VEH)
A	0.0	0.0	0.0	0.00	0.0	0.00
B	1609.0	1609.0	23018.3	14.31	43958.4	27.32
C	919.0	919.0	14270.5	15.53	29519.0	32.12
D	471.0	471.0	42.4	0.09	42.4	0.09
E	872.0	872.0	7987.4	9.16	11435.2	13.11
ALL	3871.0	3871.0	45318.7	11.71	84955.0	21.95

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

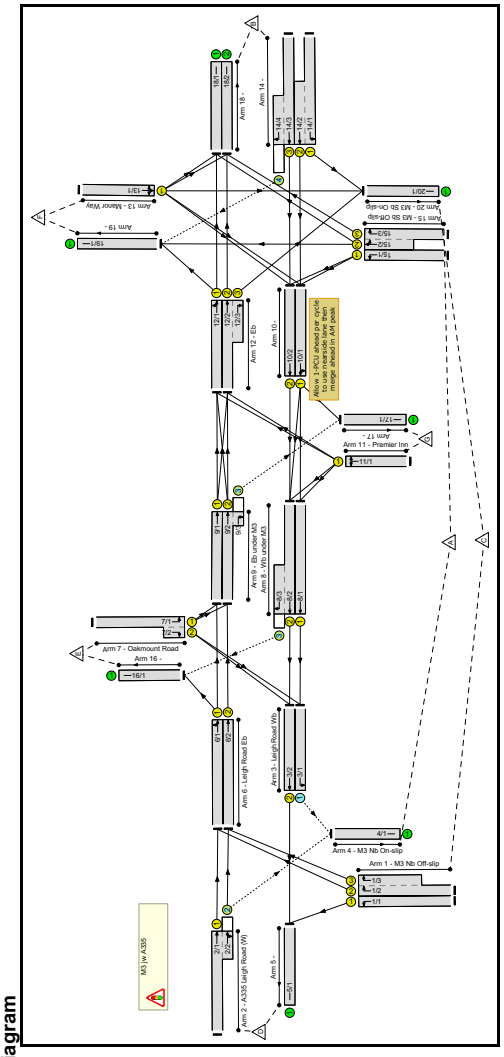
END OF JOB

Full Input Data And Results

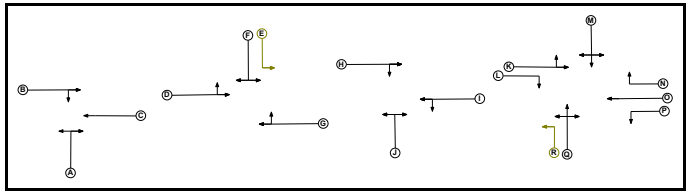
User and Project Details

Project:	**Land South of Allington Lane, Eastleigh**
Title:	**J2: M3 jw A335**
Location:	Eastleigh
File name:	10440J2-M3 jw A335.lsg3x
Author:	SMT
Company:	Brookbanks Ltd
Address:	Birmingham
Notes:	

Network Layout Diagram



Phase Diagram



Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	1		7	7
D	Traffic	2		7	7
E	Filter	2	F	4	0
F	Traffic	2		7	7
G	Traffic	2		7	7
H	Traffic	3		7	7
I	Traffic	3		7	7
J	Traffic	3		7	7
K	Traffic	4		7	7
L	Traffic	4		7	7
M	Traffic	4		7	7
N	Traffic	4		7	7
O	Traffic	4		7	7
P	Traffic	4		7	7
Q	Traffic	4		7	7
R	Filter	4	Q	4	0

Full Input Data And Results

Phase Intergreens Matrix

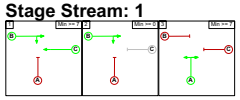
Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
A		5	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B	5		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C	5	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D	-	-	-		7	7	-	-	-	-	-	-	-	-	-	-	-	-
E	-	-	-	5		-	-	-	-	-	-	-	-	-	-	-	-	-
F	-	-	-	5	-		6	-	-	-	-	-	-	-	-	-	-	-
G	-	-	-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

Phases in Stage

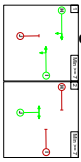
Stream	Stage No.	Phases in Stage
1	1	B C
1	2	B
1	3	A
2	1	D G
2	2	E G
2	3	F
3	1	H I
3	2	J
4	1	K N O P
4	2	K L R
4	3	P Q
4	4	M

Stage Diagram

Stage Stream: 1



Stage Stream: 2



Stage Stream: 3

Stage Stream: 4

Give-Way Lane Input Data

Junction: M3 jw A335											
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)**
2/2 (A335 Leigh Road (W))	4/1 (Right)	1439	0	3/1	1.09	All	2.00	-	0.50	2	2.00
3/1 (Leigh Road Wb)	4/1 (Left)	750	0	2/2	0.22	All	-	-	-	-	-
8/3 (Wb under M3)	16/1 (Right)	1439	0	6/1	1.09	All	2.00	-	0.50	2	2.00
				6/2	1.09	All					
9/3 (Eb under M3)	17/1 (Right)	1439	0	10/1	1.09	All	2.00	-	0.50	2	2.00
				10/2	1.09	All					
14/4	19/1 (Right)	1439	0	12/1	1.09	All	4.00	-	0.50	4	2.00
				12/2	1.09	All					

Lane Input Data

Junction: M3 jw A335

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 (M3 Nb Off-slip)	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Left	12.00
1/2 (M3 Nb Off-slip)	U	A	2	3	60.0	Geom	-	3.00	0.00	N	Arm 6 Right	18.00
1/3 (M3 Nb Off-slip)	U	A	2	3	9.0	Geom	-	3.00	0.00	N	Arm 6 Right	15.00
2/1 (A335 Leigh Road (W))	U	B	2	3	60.0	Geom	-	2.80	0.00	Y	Arm 6 Ahead	Inf
2/2 (A335 Leigh Road (W))	O	B	2	3	4.0	Geom	-	2.80	0.00	N	Arm 4 Right	Inf
											Arm 6 Ahead	Inf
3/1 (Leigh Road Wb)	O		2	3	16.0	Geom	-	3.50	0.00	Y	Arm 4 Left	12.00
3/2 (Leigh Road Wb)	U	C	2	3	16.0	Geom	-	3.00	0.00	N	Arm 5 Ahead	Inf
6/1 (Leigh Road Eb)	U	D	2	3	13.0	Geom	-	3.10	0.00	Y	Arm 9 Ahead	Inf
											Arm 16 Left	Inf
6/2 (Leigh Road Eb)	U	D	2	3	13.0	Geom	-	3.10	0.00	N	Arm 9 Ahead	Inf
7/1 (Oakmount Road)	U	F E	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 9 Left	10.00
7/2 (Oakmount Road)	U	F	2	3	3.0	Geom	-	2.90	0.00	N	Arm 3 Right	15.00
8/1 (Wb under M3)	U	G	2	3	19.0	Geom	-	3.00	0.00	Y	Arm 3 Ahead	Inf
8/2 (Wb under M3)	U	G	2	3	19.0	Geom	-	3.00	0.00	N	Arm 3 Ahead	Inf
8/3 (Wb under M3)	O	G	2	3	7.0	Geom	-	3.00	0.00	N	Arm 16 Right	10.00

Full Input Data And Results

9/1 (Eb under M3)	U	H	2	3	25.0	Geom	-	3.00	0.00	Y	Arm 12 Ahead	Inf
9/2 (Eb under M3)	U	H	2	3	25.0	Geom	-	3.00	0.00	N	Arm 12 Ahead	Inf
9/3 (Eb under M3)	O	H	2	3	2.0	Geom	-	3.00	0.00	N	Arm 17 Right	8.00
10/1	U	I	2	3	15.0	Geom	-	3.20	0.00	Y	Arm 8 Ahead	Inf
											Arm 17 Left	10.00
10/2	U	I	2	3	15.0	Geom	-	3.00	0.00	Y	Arm 8 Ahead	Inf
11/1 (Premier Inn)	U	J	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 8 Left	12.00
											Arm 12 Right	15.00
12/1 (Eb)	U	K	2	3	13.0	Geom	-	3.00	0.00	Y	Arm 18 Ahead	Inf
											Arm 19 Left	10.00
12/2 (Eb)	U	K	2	3	13.0	Geom	-	3.00	0.00	N	Arm 18 Ahead	Inf
12/3 (Eb)	U	L	2	3	6.0	Geom	-	3.00	0.00	N	Arm 20 Right	15.00
13/1 (Manor Way)	U	M	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 10 Right	15.00
											Arm 18 Left	12.00
											Arm 20 Ahead	Inf
14/1	U	P	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 20 Left	20.00
14/2	U	O	2	3	9.0	Geom	-	3.20	0.00	N	Arm 10 Ahead	Inf
14/3	U	O	2	3	60.0	Geom	-	3.20	0.00	N	Arm 10 Ahead	Inf
14/4	O	N	2	3	7.0	Geom	-	3.00	0.00	N	Arm 19 Right	10.00
15/1 (M3 Sb Off-slip)	U	Q R	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 10 Left	20.00
15/2 (M3 Sb Off-slip)	U	Q	2	3	7.0	Geom	-	3.20	0.00	N	Arm 18 Right	Inf
											Arm 19 Ahead	Inf
15/3 (M3 Sb Off-slip)	U	Q	2	3	60.0	Geom	-	3.20	0.00	N	Arm 18 Right	15.00

Full Input Data And Results

Scenario 1: '2036DS AM' (FG1: '2036DS AM', Plan 1: 'Proposed')

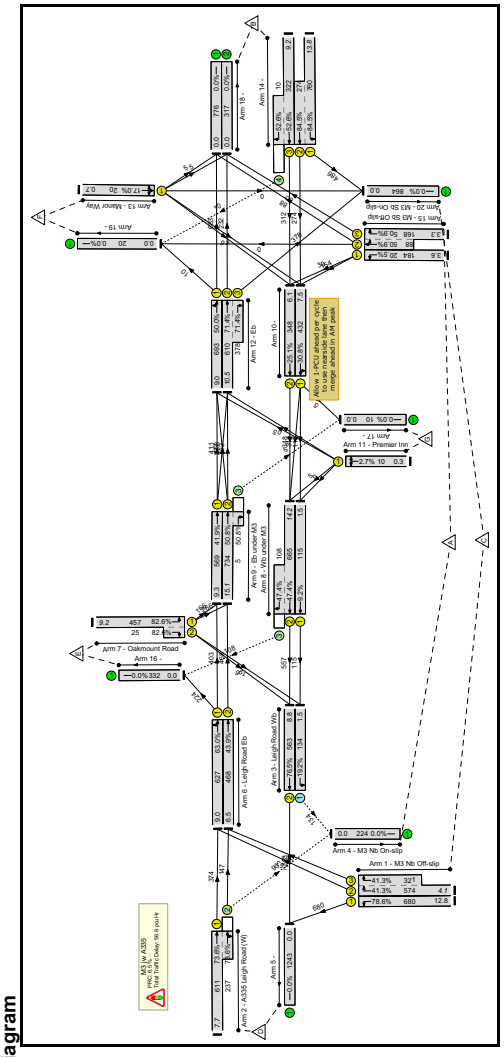
Traffic Flows, Desired

Desired Flow :

		Destination							
		A	B	C	D	E	F	G	Tot.
Origin	A	0	168	0	184	0	0	0	352
	B	115	0	486	358	108	10	5	1082
	C	0	365	6	680	203	0	0	1254
	D	90	340	145	0	21	10	5	611
	E	19	205	227	6	0	0	0	457
	F	0	10	0	10	0	0	0	20
	G	0	5	0	5	0	0	0	10
	Tot.	224	1093	864	1243	332	20	10	3786

Full Input Data And Results

Network Layout Diagram



Network Results

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	Average Excess Queue (pcu)
Network: J2: M3 jw A335	-	-	-	-	-	-	**84.5%**	**56.8**	-	-	-
M3 jw A335	-	-	-	-	-	-	**84.5%**	**56.8**	-	-	-
1/1	M3 Nb Off-slip Left	A	59	680	1702	865	78.6%	4.2	22.0	12.8	0.00
1/2+1/3	M3 Nb Off-slip Right	A	59	574	1897:1868	612+777	41.3 : 41.3%	1.8	11.1	4.1	0.00
2/1+2/2	A335 Leigh Road (W) Right Ahead	B	41	611	1895:2035	508+322	73.6 : 73.6%	4.0	23.5	7.7	0.00
3/1	Leigh Road Wb Left	-	-	134	1747	698	19.2%	0.1	3.5	1.5	0.00
3/2	Leigh Road Wb Ahead	C	41	563	2055	736	76.5%	5.2	33.0	8.8	0.00
4/1	M3 Nb On-slip	-	-	224	Inf	Inf	0.0%	0.0	0.0	0.0	0.00
5/1		-	-	1243	Inf	Inf	0.0%	0.0	0.0	0.0	0.00
6/1	Leigh Road Eb Ahead Left	D	60	627	1925	995	63.0%	2.2	12.6	9.0	0.08
6/2	Leigh Road Eb Ahead	D	60	468	2065	1067	43.9%	1.9	14.8	6.5	0.00
7/1+7/2	Oakmount Road Right Left	F	36:22	457	1665:1859	523+30	82.6 : 82.6%	4.7	36.9	9.2	0.00
8/1	Wb under M3 Ahead	G	76	115	1915	1245	9.2%	0.1	3.2	1.5	0.00
8/2+8/3	Wb under M3 Ahead Right	G	76	665	2055:1787	1176+228	47.4 : 47.4%	1.6	8.8	14.2	0.00
9/1	Eb under M3 Ahead	H	84	569	1915	1356	41.9%	2.1	13.3	9.3	0.00
9/2+9/3	Eb under M3 Ahead Right	H	84	734	2055:1731	1436+10	50.8 : 50.8%	2.9	14.2	15.1	0.05
10/1	Ahead Left	I	86	432	1932	1401	30.8%	1.4	11.8	7.5	0.02
10/2	Ahead	I	86	348	1915	1388	25.1%	1.6	16.3	6.1	0.00
11/1	Premier Inn Left Right	J	24	10	1766	368	2.7%	0.1	43.0	0.3	0.00
12/1	Eb Ahead Left	K	86	693	1911	1385	50.0%	2.0	10.3	9.0	0.15
12/2+12/3	Eb Ahead Right	K L	86:46	610	2055:1868	325+530	71.4 : 71.4%	3.8	22.5	10.5	0.12
13/1	Manor Way Right Left Ahead	M	7	20	1766	118	17.0%	0.4	71.3	0.7	0.00

Full Input Data And Results

14/1+14/2	Ahead Left	P O	41:34	760	1828:2075	575+324	84.5 : 84.5%	9.0	42.7	13.8	0.00
14/3+14/4	Ahead Right	O N	34	322	2075:1787	593+19	52.6 : 52.6%	3.7	41.8	9.2	0.00
15/1	M3 Sb Off-slip Left	Q	58	184	1828	899	20.5%	1.0	19.8	3.6	0.00
15/3+15/2	M3 Sb Off-slip Right Ahead	Q	9	168	1886:2075	157+173	50.9 : 50.9%	3.0	63.7	3.3	0.00
16/1		-	-	332	Inf	Inf	0.0%	0.0	0.0	0.0	0.00
17/1		-	-	10	Inf	Inf	0.0%	0.0	0.0	0.0	0.00
18/1		-	-	776	Inf	Inf	0.0%	0.0	0.0	0.0	0.00
18/2		-	-	317	Inf	Inf	0.0%	0.0	0.0	0.0	0.00
19/1		-	-	20	Inf	Inf	0.0%	0.0	0.0	0.0	0.00
20/1	M3 Sb On-slip	-	-	864	Inf	Inf	0.0%	0.0	0.0	0.0	0.00

C1	Stream: 1 PRC for Signalled Lanes (%):	14.5	Total Delay for Signalled Lanes (pcuHr):	15.08	Cycle Time (s): 120
C1	Stream: 2 PRC for Signalled Lanes (%):	9.0	Total Delay for Signalled Lanes (pcuHr):	10.53	Cycle Time (s): 120
C1	Stream: 3 PRC for Signalled Lanes (%):	77.3	Total Delay for Signalled Lanes (pcuHr):	8.11	Cycle Time (s): 120
C1	Stream: 4 PRC for Signalled Lanes (%):	6.5	Total Delay for Signalled Lanes (pcuHr):	22.92	Cycle Time (s): 120
	PRC Over All Lanes (%):	6.5	Total Delay Over All Lanes(pcuHr):	56.77	

Full Input Data And Results

Scenario 2: '2036DS PM' (FG2: '2036DS PM', Plan 1: 'Proposed')

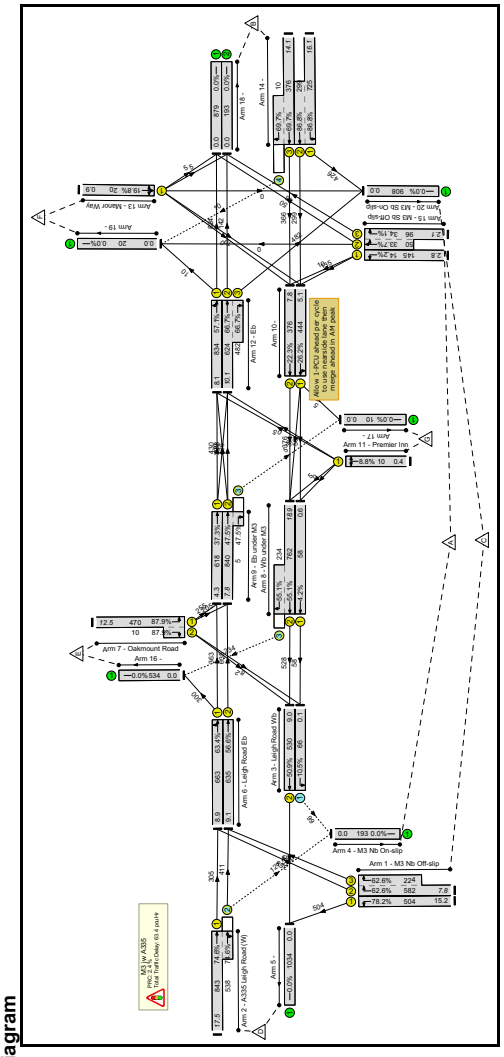
Traffic Flows, Desired

Desired Flow :

		Destination							
		A	B	C	D	E	F	G	Tot.
Origin	A	0	96	0	145	0	0	0	241
	B	58	0	426	368	234	10	5	1101
	C	0	303	17	504	262	0	0	1086
	D	127	436	227	0	38	10	5	843
	E	8	222	238	2	0	0	0	470
	F	0	10	0	10	0	0	0	20
	G	0	5	0	5	0	0	0	10
	Tot.	193	1072	908	1034	534	20	10	3771

Full Input Data And Results

Network Layout Diagram



Network Results

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	Average Excess Queue (pcu)
Network: J2: M3 jw A335	-	-	-	-	-	-	**87.9%**	**63.4**	-	-	-
M3 jw A335	-	-	-	-	-	-	**87.9%**	**63.4**	-	-	-
1/1	M3 Nb Off-slip Left	A	51	504	1702	644	78.2%	5.6	39.9	15.2	0.00
1/2+1/3	M3 Nb Off-slip Right	A	51	582	1897:1868	572+358	62.6 : 62.6%	3.7	22.9	7.8	0.00
2/1+2/2	A335 Leigh Road (W) Right Ahead	B	69	843	1895:2035	409+721	74.6 : 74.6%	5.8	24.6	17.5	0.00
3/1	Leigh Road Wb Left	-	-	66	1747	632	10.5%	0.1	3.2	0.1	0.00
3/2	Leigh Road Wb Ahead	C	69	530	2055	1042	50.9%	3.7	24.8	9.0	0.00
4/1	M3 Nb On-slip	-	-	193	Inf	Inf	0.0%	0.0	0.0	0.0	0.00
5/1		-	-	1034	Inf	Inf	0.0%	0.0	0.0	0.0	0.00
6/1	Leigh Road Eb Ahead Left	D	74	663	1925	1045	63.4%	2.9	15.9	8.9	0.06
6/2	Leigh Road Eb Ahead	D	74	635	2065	1121	56.6%	2.2	12.5	9.1	0.15
7/1+7/2	Oakmount Road Right Left	F	42:18	470	1665:1859	523+11	87.9 : 87.9%	6.3	48.2	12.5	0.00
8/1	Wb under M3 Ahead	G	100	58	1915	1395	4.2%	0.1	5.8	0.6	0.00
8/2+8/3	Wb under M3 Ahead Right	G	100	762	2055:1787	959+425	55.1 : 55.1%	3.8	18.1	18.9	0.27
9/1	Eb under M3 Ahead	H	120	618	1915	1655	37.3%	0.6	3.7	4.3	0.00
9/2+9/3	Eb under M3 Ahead Right	H	120	840	2055:1731	1757+11	47.5 : 47.5%	1.2	5.0	7.8	0.00
10/1	Ahead Left	I	122	444	1932	1697	26.2%	0.7	5.6	5.1	0.00
10/2	Ahead	I	122	376	1915	1682	22.3%	1.1	10.1	7.8	0.06
11/1	Premier Inn Left Right	J	8	10	1766	114	8.8%	0.2	79.1	0.4	0.00
12/1	Eb Ahead Left	K	106	834	1912	1461	57.1%	1.9	8.1	8.1	0.04
12/2+12/3	Eb Ahead Right	K L	106:65	624	2055:1868	213+723	66.7 : 66.7%	3.2	18.7	10.1	0.16
13/1	Manor Way Right Left Ahead	M	7	20	1766	101	19.8%	0.5	85.2	0.9	0.00

Full Input Data And Results

14/1+14/2	Ahead Left	P O	42:35	725	1828:2075	491+344	86.8 : 86.8%	11.3	56.1	16.1	0.00
14/3+14/4	Ahead Right	O N	35	376	2075:1787	525+14	69.7 : 69.7%	6.1	58.0	14.1	0.00
15/1	M3 Sb Off-slip Left	Q	77	145	1828	1018	14.2%	0.7	17.0	2.8	0.00
15/3+15/2	M3 Sb Off-slip Right Ahead	Q	9	96	1886:2075	135+148	34.1 : 33.7%	1.9	71.5	2.1	0.00
16/1		-	-	534	Inf	Inf	0.0%	0.0	0.0	0.0	0.00
17/1		-	-	10	Inf	Inf	0.0%	0.0	0.0	0.0	0.00
18/1		-	-	879	Inf	Inf	0.0%	0.0	0.0	0.0	0.00
18/2		-	-	193	Inf	Inf	0.0%	0.0	0.0	0.0	0.00
19/1		-	-	20	Inf	Inf	0.0%	0.0	0.0	0.0	0.00
20/1	M3 Sb On-slip	-	-	908	Inf	Inf	0.0%	0.0	0.0	0.0	0.00

C1	Stream: 1 PRC for Signalled Lanes (%):	15.1	Total Delay for Signalled Lanes (pcuHr):	18.71	Cycle Time (s): 140
C1	Stream: 2 PRC for Signalled Lanes (%):	2.4	Total Delay for Signalled Lanes (pcuHr):	15.36	Cycle Time (s): 140
C1	Stream: 3 PRC for Signalled Lanes (%):	89.3	Total Delay for Signalled Lanes (pcuHr):	3.76	Cycle Time (s): 140
C1	Stream: 4 PRC for Signalled Lanes (%):	3.7	Total Delay for Signalled Lanes (pcuHr):	25.53	Cycle Time (s): 140
	PRC Over All Lanes (%):	2.4	Total Delay Over All Lanes(pcuHr):	63.41	

Full Input Data And Results

Scenario 3: '2036DS+Dev AM' (FG3: '2036DS+Dev AM', Plan 1: 'Proposed')

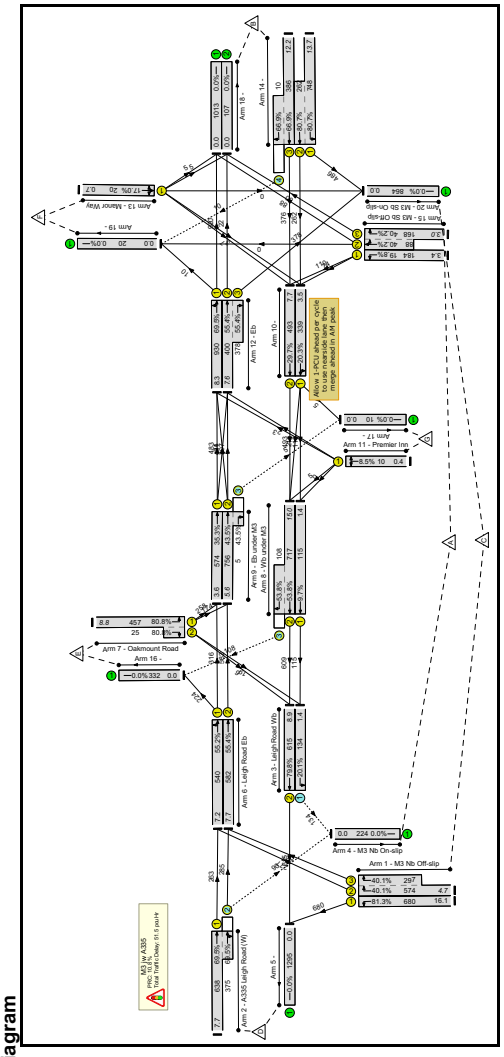
Traffic Flows, Desired

Desired Flow :

		Destination							
		A	B	C	D	E	F	G	Tot.
Origin	A	0	168	0	184	0	0	0	352
	B	115	0	486	410	108	10	5	1134
	C	0	365	6	680	203	0	0	1254
	D	90	367	145	0	21	10	5	638
	E	19	205	227	6	0	0	0	457
	F	0	10	0	10	0	0	0	20
	G	0	5	0	5	0	0	0	10
	Tot.	224	1120	864	1295	332	20	10	3865

Full Input Data And Results

Network Layout Diagram



Network Results

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	Average Excess Queue (pcu)
Network: J2: M3 jw A335	-	-	-	-	-	-	**81.3%**	**51.5**	-	-	-
M3 jw A335	-	-	-	-	-	-	**81.3%**	**51.5**	-	-	-
1/1	M3 Nb Off-slip Left	A	57	680	1702	837	81.3%	5.1	27.0	16.1	0.00
1/2+1/3	M3 Nb Off-slip Right	A	57	574	1897:1868	691+741	40.1 : 40.1%	2.1	13.3	4.7	0.00
2/1+2/2	A335 Leigh Road (W) Right Ahead	B	43	638	1895:2035	379+540	69.5 : 69.5%	4.4	24.7	7.7	0.00
3/1	Leigh Road Wb Left	-	-	134	1747	667	20.1%	0.1	3.8	1.4	0.00
3/2	Leigh Road Wb Ahead	C	43	615	2055	771	79.8%	3.4	19.9	8.9	0.00
4/1	M3 Nb On-slip	-	-	224	Inf	Inf	0.0%	0.0	0.0	0.0	0.00
5/1		-	-	1295	Inf	Inf	0.0%	0.0	0.0	0.0	0.00
6/1	Leigh Road Eb Ahead Left	D	59	540	1925	979	55.2%	2.1	13.9	7.2	0.01
6/2	Leigh Road Eb Ahead	D	59	582	2065	1050	55.4%	2.2	13.4	7.7	0.04
7/1+7/2	Oakmount Road Right Left	F	37:26	457	1665:1859	535+31	80.8 : 80.8%	4.4	34.5	8.8	0.00
8/1	Wb under M3 Ahead	G	72	115	1915	1181	9.7%	0.1	4.3	1.4	0.00
8/2+8/3	Wb under M3 Ahead Right	G	72	717	2055:1787	1131+201	53.8 : 53.8%	2.0	10.1	15.0	0.00
9/1	Eb under M3 Ahead	H	101	574	1915	1628	35.3%	0.6	4.0	3.6	0.00
9/2+9/3	Eb under M3 Ahead Right	H	101	756	2055:1731	1725+11	43.5 : 43.5%	0.9	4.3	5.6	0.00
10/1	Ahead Left	I	103	339	1931	1674	20.3%	0.4	4.6	3.5	0.00
10/2	Ahead	I	103	493	1915	1660	29.7%	1.1	8.1	7.7	0.02
11/1	Premier Inn Left Right	J	7	10	1766	118	8.5%	0.2	69.4	0.4	0.00
12/1	Eb Ahead Left	K	83	930	1912	1338	69.5%	2.2	8.5	8.3	0.03
12/2+12/3	Eb Ahead Right	K L	83:45	400	2055:1868	40+683	55.4 : 55.4%	2.9	26.5	7.6	0.01
13/1	Manor Way Right Left Ahead	M	7	20	1766	118	17.0%	0.4	71.3	0.7	0.00

14/1+14/2	Ahead Left	P O	42:32	748	1828:2075	602+325	80.7 : 80.7%	8.1	38.7	13.7	0.00
14/3+14/4	Ahead Right	O N	32	386	2075:1787	562+15	66.9 : 66.9%	5.1	47.9	12.2	0.00
15/1	M3 Sb Off-slip Left	Q	60	184	1828	929	19.8%	0.9	18.6	3.4	0.00
15/3+15/2	M3 Sb Off-slip Right Ahead	Q	12	168	1886:2075	199+219	40.2 : 40.2%	2.7	57.0	3.0	0.00
16/1		-	-	332	Inf	Inf	0.0%	0.0	0.0	0.0	0.00
17/1		-	-	10	Inf	Inf	0.0%	0.0	0.0	0.0	0.00
18/1		-	-	1013	Inf	Inf	0.0%	0.0	0.0	0.0	0.00
18/2		-	-	107	Inf	Inf	0.0%	0.0	0.0	0.0	0.00
19/1		-	-	20	Inf	Inf	0.0%	0.0	0.0	0.0	0.00
20/1	M3 Sb On-slip	-	-	864	Inf	Inf	0.0%	0.0	0.0	0.0	0.00

C1	Stream: 1 PRC for Signalled Lanes (%):	10.8	Total Delay for Signalled Lanes (pcuHr):	15.00	Cycle Time (s): 120
C1	Stream: 2 PRC for Signalled Lanes (%):	11.4	Total Delay for Signalled Lanes (pcuHr):	10.79	Cycle Time (s): 120
C1	Stream: 3 PRC for Signalled Lanes (%):	106.7	Total Delay for Signalled Lanes (pcuHr):	3.28	Cycle Time (s): 120
C1	Stream: 4 PRC for Signalled Lanes (%):	11.5	Total Delay for Signalled Lanes (pcuHr):	22.33	Cycle Time (s): 120
	PRC Over All Lanes (%):	10.8	Total Delay Over All Lanes(pcuHr):	51.55	

Full Input Data And Results

Scenario 4: '2036DS+Dev PM' (FG4: '2036DS+Dev PM', Plan 1: 'Proposed')

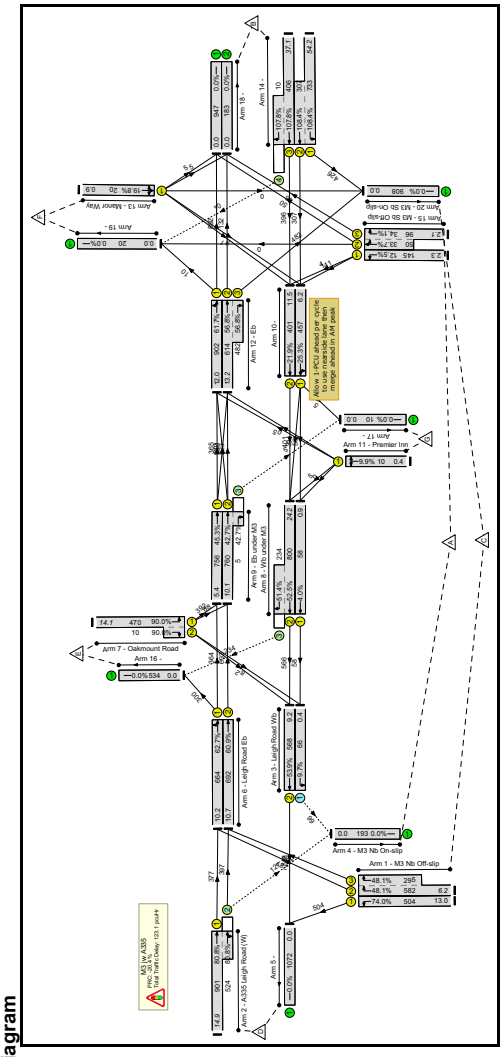
Traffic Flows, Desired

Desired Flow :

		Destination							
		A	B	C	D	E	F	G	Tot.
Origin	A	0	96	0	145	0	0	0	241
	B	58	0	426	406	234	10	5	1139
	C	0	303	17	504	262	0	0	1086
	D	127	494	227	0	38	10	5	901
	E	8	222	238	2	0	0	0	470
	F	0	10	0	10	0	0	0	20
	G	0	5	0	5	0	0	0	10
	Tot.	193	1130	908	1072	534	20	10	3867

Full Input Data And Results

Network Layout Diagram



Network Results

Item	Lane Description	Full Phase	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	Average Excess Queue (pcu)
Network: J2: M3 jw A335	-	-	-	-	-	-	**108.4%**	**123.1**	-	-	-
M3 jw A335	-	-	-	-	-	-	**108.4%**	**123.1**	-	-	-
1/1	M3 Nb Off-slip Left	A	54	504	1702	681	74.0%	4.3	30.9	13.0	0.00
1/2+1/3	M3 Nb Off-slip Right	A	54	582	1897:1868	596+613	48.1 : 48.1%	3.3	20.2	6.2	0.00
2/1+2/2	A335 Leigh Road (W) Right Ahead	B	66	901	1895:2035	467+649	80.8 : 80.8%	5.9	23.7	14.9	0.00
3/1	Leigh Road Wb Left	-	-	66	1747	635	9.7%	0.1	3.2	0.4	0.00
3/2	Leigh Road Wb Ahead	C	66	568	2055	998	53.9%	3.0	19.8	9.2	0.02
4/1	M3 Nb On-slip	-	-	193	Inf	Inf	0.0%	0.0	0.0	0.0	0.00
5/1		-	-	1072	Inf	Inf	0.0%	0.0	0.0	0.0	0.00
6/1	Leigh Road Eb Ahead Left	D	75	664	1925	1059	62.7%	2.6	14.3	10.2	0.32
6/2	Leigh Road Eb Ahead	D	75	692	2065	1136	60.9%	2.6	13.4	10.7	0.40
7/1+7/2	Oakmount Road Right Left	F	41:22	470	1665:1859	511+11	90.0 : 90.0%	7.6	58.1	14.1	0.00
8/1	Wb under M3 Ahead	G	96	58	1915	1340	4.0%	0.1	9.6	0.9	0.00
8/2+8/3	Wb under M3 Ahead Right	G	96	800	2055:1787	1021+422	52.5 : 51.4%	5.6	26.9	24.2	0.38
9/1	Eb under M3 Ahead	H	121	756	1915	1669	45.3%	0.9	4.3	5.4	0.00
9/2+9/3	Eb under M3 Ahead Right	H	121	760	2055:1731	1770+12	42.7 : 42.7%	1.4	6.7	10.1	0.00
10/1	Ahead Left	I	123	457	1932	1711	25.3%	0.2	1.7	6.2	0.00
10/2	Ahead	I	123	401	1915	1696	21.9%	0.2	1.9	11.5	0.17
11/1	Premier Inn Left Right	J	7	10	1766	101	9.9%	0.2	82.5	0.4	0.00
12/1	Eb Ahead Left	K	106	902	1912	1461	61.7%	1.8	7.2	12.0	0.46
12/2+12/3	Eb Ahead Right	K L	106:76	614	2055:1868	232+849	56.8 : 56.8%	2.8	16.4	13.2	0.47
13/1	Manor Way Right Left Ahead	M	7	20	1766	101	19.8%	0.5	85.2	0.9	0.00

Full Input Data And Results

14/1+14/2	Ahead Left	P O	31:24	733	1828:2075	393+283	108.4 : 108.4%	48.9	240.1	54.2	0.00
14/3+14/4	Ahead Right	O N	24	406	2075:1787	367+9	107.8 : 107.8%	28.7	254.5	37.1	0.00
15/1	M3 Sb Off-slip Left	Q	88	145	1828	1162	12.5%	0.5	11.9	2.3	0.00
15/3+15/2	M3 Sb Off-slip Right Ahead	Q	9	96	1886:2075	135+148	34.1 : 33.7%	1.9	71.5	2.1	0.00
16/1		-	-	534	Inf	Inf	0.0%	0.0	0.0	0.0	0.00
17/1		-	-	10	Inf	Inf	0.0%	0.0	0.0	0.0	0.00
18/1		-	-	947	Inf	Inf	0.0%	0.0	0.0	0.0	0.00
18/2		-	-	183	Inf	Inf	0.0%	0.0	0.0	0.0	0.00
19/1		-	-	20	Inf	Inf	0.0%	0.0	0.0	0.0	0.00
20/1	M3 Sb On-slip	-	-	908	Inf	Inf	0.0%	0.0	0.0	0.0	0.00

C1	Stream: 1 PRC for Signalled Lanes (%):	11.4	Total Delay for Signalled Lanes (pcuHr):	16.47	Cycle Time (s): 140
C1	Stream: 2 PRC for Signalled Lanes (%):	0.1	Total Delay for Signalled Lanes (pcuHr):	18.55	Cycle Time (s): 140
C1	Stream: 3 PRC for Signalled Lanes (%):	98.7	Total Delay for Signalled Lanes (pcuHr):	2.96	Cycle Time (s): 140
C1	Stream: 4 PRC for Signalled Lanes (%):	-20.4	Total Delay for Signalled Lanes (pcuHr):	85.04	Cycle Time (s): 140
	PRC Over All Lanes (%):	-20.4	Total Delay Over All Lanes(pcuHr):	123.07	

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

For sales and distribution information,
program advice and maintenance, contact:

TRL Limited   Tel: +44 (0) 1344 770758
Crowthorne House   Fax: +44 (0) 1344 770356
Nine Mile Ride   Email: software@trl.co.uk
Wokingham, Berks.   Web: www.trlsoftware.co.uk
RG40 3GA,UK

Run with file:-
"p:\10440\Traffic\Junctions\j3a A335-Wide Lane Rbt\10440 j3a A335-Wide Lane Rbt DS1AM.vai"
(drive-on-the-left) at 15:45:32 on Friday, 25 November 2016

.FILE PROPERTIES

RUN TITLE: j3a A335-Wide Lane Rbt DS1AM
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA

ARM A - Wide Lane (North)
ARM B - A335 (West)
ARM C - Wide Lane (South)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	5.80	8.90	11.00	13.00	27.00	60.0	0.673	32.628
ARM B	4.00	8.50	28.00	3.00	27.00	32.0	0.534	25.207
ARM C	2.90	9.00	30.00	7.00	28.00	25.0	0.668	30.860

V = approach half-width   L = effective flare length   D = inscribed circle diameter
E = entry width   R = entry radius   PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j3a A335-Wide Lane Rbt DS1AM

DEMAND SET TITLE: j3a A335-Wide Lane Rbt DS1AM

T33

TIME	FROM/T	ARM A	ARM B	ARM C
		TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S)		
08.00 - 09.00				
	ARM A	0.264	0.313	0.423
		1002.0	1191.0	1607.0
		(10.0)	(10.0)	(10.0)
	ARM B	0.423	0.264	0.313
		1607.0	1002.0	1191.0
		(10.0)	(10.0)	(10.0)
	ARM C	0.313	0.423	0.264
		1191.0	1607.0	1002.0
		(10.0)	(10.0)	(10.0)

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	16.02	19.18	0.835	- - -	0.0	4.5	58.1	-	0.269
ARM B	29.48	14.76	1.998	- - -	0.0	221.9	1670.9	-	7.666
ARM C	17.81	18.55	0.960	- - -	0.0	11.4	121.9	-	0.525

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
ARM A	16.02	18.93	0.846	- - -	4.5	5.1	73.0	-	0.331
ARM B	29.48	14.58	2.022	- - -	221.9	445.4	5004.3	-	22.975
ARM C	17.81	18.55	0.960	- - -	11.4	14.3	195.0	-	0.846

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
ARM A	16.02	18.90	0.847	- - -	5.1	5.2	77.5	-	0.341
ARM B	29.48	14.56	2.025	- - -	445.4	669.2	8359.5	-	38.376
ARM C	17.81	18.56	0.960	- - -	14.3	15.9	227.5	-	0.950

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
ARM A	16.02	18.88	0.848	- - -	5.2	5.3	79.5	-	0.344
ARM B	29.48	14.55	2.026	- - -	669.2	893.1	11717.7	-	53.766
ARM C	17.81	18.56	0.960	- - -	15.9	17.1	248.0	-	1.010

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	4.5	*****
08.30	5.1	*****
08.45	5.2	*****
09.00	5.3	*****

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	221.9	**
08.30	445.4	**
08.45	669.2	**
09.00	893.1	**

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	11.4	***********
08.30	14.3	**************
08.45	15.9	****************
09.00	17.1	*****************

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * * DELAY * (MIN)	* QUEUEING * * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * * DELAY * (MIN)	* INCLUSIVE QUEUEING * * DELAY * (MIN/VEH)
A	961.0	961.0	287.9	0.30	288.7	0.30
B	1769.0	1769.0	26752.3	15.12	54157.6	30.62
C	1068.8	1068.8	792.4	0.74	800.2	0.75
ALL	3798.8	3798.8	27832.7	7.33	55246.6	14.54

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
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END OF JOB

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

For sales and distribution information,
program advice and maintenance, contact:

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Nine Mile Ride — Email: software@trl.co.uk
Wokingham, Berks. — Web: www.trlsoftware.co.uk
RG40 3GA,UK

Run with file:-
"p:\10440\Traffic\Junctions\j3a A335-Wide Lane Rbt\10440 j3a A335-Wide Lane Rbt DS1PM.vai"
(drive-on-the-left) at 15:45:44 on Friday, 25 November 2016

.FILE PROPERTIES
****

RUN TITLE: j3a A335-Wide Lane Rbt DS1PM
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA
****

ARM A - Wide Lane (North)
ARM B - A335 (West)
ARM C - Wide Lane (South)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	5.80	8.90	11.00	13.00	27.00	60.0	0.673	32.628
ARM B	4.00	8.50	28.00	3.00	27.00	32.0	0.534	25.207
ARM C	2.90	9.00	30.00	7.00	28.00	25.0	0.668	30.860

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j3a A335-Wide Lane Rbt DS1PM

DEMAND SET TITLE: j3a A335-Wide Lane Rbt DS1PM

T33

TIME	FROM/TO	ARM A	ARM B	ARM C
		TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S)		
17.00 - 18.00	ARM A	0.283	0.223	0.495
		1071.0	844.0	1875.0
		(10.0)	(10.0)	(10.0)
	ARM B	0.495	0.283	0.223
		1875.0	1071.0	844.0
		(10.0)	(10.0)	(10.0)
	ARM C	0.223	0.495	0.283
		844.0	1875.0	1071.0
		(10.0)	(10.0)	(10.0)

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

10440 j3a A335-Wide Lane Rbt DS1PM

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	21.10	18.93	1.115	- - -	0.0	39.6	328.6	-	1.237
ARM B	25.68	12.87	1.996	- - -	0.0	193.3	1456.3	-	7.672
ARM C	16.38	17.92	0.914	- - -	0.0	7.7	89.5	-	0.416

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
ARM A	21.10	18.71	1.128	- - -	39.6	76.1	868.2	-	3.254
ARM B	25.68	12.71	2.021	- - -	193.3	387.9	4358.4	-	22.970
ARM C	16.38	17.93	0.914	- - -	7.7	8.8	124.8	-	0.572

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
ARM A	21.10	18.69	1.129	- - -	76.1	112.5	1414.2	-	5.171
ARM B	25.68	12.70	2.022	- - -	387.9	582.6	7278.3	-	38.302
ARM C	16.38	17.93	0.914	- - -	8.8	9.2	135.2	-	0.599

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
ARM A	21.10	18.68	1.129	- - -	112.5	148.8	1959.8	-	7.100
ARM B	25.68	12.70	2.022	- - -	582.6	777.3	10199.1	-	53.629
ARM C	16.38	17.93	0.913	- - -	9.2	9.5	140.6	-	0.606

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	39.6	**
17.30	76.1	**
17.45	112.5	***
18.00	148.8	***

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	193.3	***
17.30	387.9	***
17.45	582.6	***
18.00	777.3	***

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	7.7	********
17.30	8.8	*********
17.45	9.2	*********
18.00	9.5	*********

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * * DELAY * (MIN)	* QUEUEING * * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * * DELAY * (MIN)	* INCLUSIVE QUEUEING * * DELAY * (MIN/VEH)
A	1266.0	1266.0	4570.8	3.61	5163.6	4.08
B	1541.0	1541.0	23292.1	15.12	47078.4	30.55
C	983.0	983.0	490.1	0.50	492.6	0.50
ALL	3790.0	3790.0	28353.0	7.48	52734.7	13.91

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END OF JOB

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

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Patch 15 Apr 2011

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Nine Mile Ride Email: software@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk
RG40 3GA,UK

Run with file:-
"p:\10440\Traffic\Junctions\j3a A335-Wide Lane Rbt\10440 j3a A335-Wide Lane Rbt DS1AM+DEV.vai"
(drive-on-the-left) at 15:45:38 on Friday, 25 November 2016

.FILE PROPERTIES
****

RUN TITLE: j3a A335-Wide Lane Rbt DS1AM+DEV
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA
****
ARM A - Wide Lane (North)
ARM B - A335 (West)
ARM C - Wide Lane (South)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	5.80	8.90	11.00	13.00	27.00	60.0	0.673	32.628
ARM B	4.00	8.50	28.00	3.00	27.00	32.0	0.534	25.207
ARM C	2.90	9.00	30.00	7.00	28.00	25.0	0.668	30.860

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j3a A335-Wide Lane Rbt DS1AM+DEV

DEMAND SET TITLE: j3a A335-Wide Lane Rbt DS1AM+DEV

T33

TIME	FROM/T	ARM A	ARM B	ARM C
		TURNING PROPORTIONS (PERCENTAGE OF H.V.S)		
		TURNING COUNTS		
08.00 - 09.00	ARM A	0.268	0.305	0.427
		1080.0	1228.0	1719.0
		(10.0)	(10.0)	(10.0)
	ARM B	0.427	0.268	0.305
		1719.0	1080.0	1228.0
		(10.0)	(10.0)	(10.0)
	ARM C	0.305	0.427	0.268
		1228.0	1719.0	1080.0
		(10.0)	(10.0)	(10.0)

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING (MIN)	VEHICLE
08.00-08.15										
ARM A	16.27	18.64	0.873	- -	-	0.0	5.8	70.8	-	0.328
ARM B	30.53	14.45	2.113	- -	-	0.0	242.2	1822.6	-	8.537
ARM C	20.33	18.53	1.097	- -	-	0.0	34.8	294.1	-	1.137
08.15-08.30										
ARM A	16.27	18.45	0.882	- -	-	5.8	6.6	93.7	-	0.430
ARM B	30.53	14.26	2.141	- -	-	242.2	486.3	5463.5	-	25.633
ARM C	20.33	18.53	1.097	- -	-	34.8	62.8	733.5	-	2.804
08.30-08.45										
ARM A	16.27	18.44	0.882	- -	-	6.6	6.9	101.0	-	0.444
ARM B	30.53	14.24	2.144	- -	-	486.3	730.7	9127.2	-	42.813
ARM C	20.33	18.53	1.097	- -	-	62.8	90.3	1148.5	-	4.265
08.45-09.00										
ARM A	16.27	18.43	0.883	- -	-	6.9	7.0	104.3	-	0.452
ARM B	30.53	14.24	2.145	- -	-	730.7	975.1	12793.6	-	59.980
ARM C	20.33	18.53	1.097	- -	-	90.3	117.5	1558.5	-	5.725

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	5.8 ******
08.30	6.6 *******
08.45	6.9 *******
09.00	7.0 *******

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	242.2 **********
08.30	486.3 **********
08.45	730.7 **********
09.00	975.1 **********

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	34.8 **********
08.30	62.8 **********
08.45	90.3 **********
09.00	117.5 **********

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	976.0	976.0	369.7	0.38	371.1	0.38
B	1832.0	1832.0	29207.0	15.94	62605.0	34.17
C	1220.0	1220.0	3734.6	3.06	4107.2	3.37
ALL	4028.0	4028.0	33311.3	8.27	67083.3	16.65

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END OF JOB

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

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RG40 3GA,UK

Run with file:-
"p:\10440\Traffic\Junctions\j3a A335-Wide Lane Rbt\10440 j3a A335-Wide Lane Rbt DS1PM+DEV.vai"
(drive-on-the-left) at 15:45:52 on Friday, 25 November 2016

.FILE PROPERTIES
****

RUN TITLE: j3a A335-Wide Lane Rbt DS1PM+DEV
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA
****
ARM A - Wide Lane (North)
ARM B - A335 (West)
ARM C - Wide Lane (South)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	5.80	8.90	11.00	13.00	27.00	60.0	0.673	32.628
ARM B	4.00	8.50	28.00	3.00	27.00	32.0	0.534	25.207
ARM C	2.90	9.00	30.00	7.00	28.00	25.0	0.668	30.860

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j3a A335-Wide Lane Rbt DS1PM+DEV

DEMAND SET TITLE: j3a A335-Wide Lane Rbt DS1PM+DEV

T33

TIME	FROM/T	ARM A	ARM B	ARM C
17.00 - 18.00		TURNING PROPORTIONS (PERCENTAGE OF H.V.S)		
	ARM A	0.300	0.215	0.484
		1207.0	866.0	1948.0
		(10.0)	(10.0)	(10.0)
	ARM B	0.484	0.300	0.215
		1948.0	1207.0	866.0
		(10.0)	(10.0)	(10.0)
	ARM C	0.215	0.484	0.300
		866.0	1948.0	1207.0
		(10.0)	(10.0)	(10.0)

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	ARM	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15										
	ARM A	21.68	18.22	1.190	- -	0.0	56.7	450.9	-	1.724
	ARM B	27.37	12.73	2.151	- -	0.0	220.5	1659.7	-	8.815
	ARM C	17.97	17.83	1.008	- -	0.0	17.0	164.7	-	-0.056
17.15-17.30										
	ARM A	21.68	17.90	1.211	- -	56.7	113.7	1278.5	-	4.879
	ARM B	27.37	12.63	2.166	- -	220.5	441.5	4965.0	-	26.305
	ARM C	17.97	17.85	1.007	- -	17.0	24.7	315.3	-	1.368
17.30-17.45										
	ARM A	21.68	18.10	1.198	- -	113.7	167.5	2109.0	-	7.875
	ARM B	27.37	12.60	2.171	- -	441.5	662.9	8283.4	-	43.915
	ARM C	17.07	17.82	0.958	- -	24.7	24.6	369.5	-	1.423
17.45-18.00										
	ARM A	21.68	18.10	1.198	- -	167.5	221.3	2915.8	-	10.833
	ARM B	27.37	12.60	2.171	- -	662.9	884.4	11605.1	-	61.483
	ARM C	17.07	17.82	0.958	- -	24.6	24.5	368.3	-	1.418

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	56.7	**********
17.30	113.7	**********
17.45	167.5	**********
18.00	221.3	**********

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	220.5	**********
17.30	441.5	**********
17.45	662.9	**********
18.00	884.4	**********

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	17.0	**********
17.30	24.7	**********
17.45	24.6	**********
18.00	24.5	**********

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	1301.0	1301.0	6754.2	5.19	8106.6	6.23
B	1642.0	1642.0	26513.3	16.15	57543.7	35.04
C	1051.0	1051.0	1217.8	1.16	1234.7	1.17
ALL	3994.0	3994.0	34485.3	8.63	66885.0	16.75

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END OF JOB

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

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RG40 3GA,UK

Run with file:-
"p:\10440\Traffic\Junctions\j3a A335-Wide Lane Rbt\10440 j3a A335-Wide Lane Rbt DS1AM+DEV+IMP.vai"
(drive-on-the-left) at 16:53:59 on Friday, 25 November 2016

.FILE PROPERTIES
*****

RUN TITLE: j3a A335-Wide Lane Rbt DS1AM+DEV
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA
*****
ARM A - Wide Lane (North)
ARM B - A335 (West)
ARM C - Wide Lane (South)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	5.80	10.00	14.00	13.00	27.00	60.0	0.701	34.880
ARM B	4.00	9.90	30.00	3.00	27.00	32.0	0.563	27.555
ARM C	3.30	11.50	30.00	7.00	28.00	25.0	0.730	35.907

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j3a A335-Wide Lane Rbt DS1AM+DEV

DEMAND SET TITLE: j3a A335-Wide Lane Rbt DS1AM+DEV

T33

TIME	FROM/T	ARM A	ARM B	ARM C
08.00 - 09.00		TURNING PROPORTIONS (PERCENTAGE OF H.V.S)		
	ARM A	0.268	0.305	0.427
		1080.0	1228.0	1719.0
		(10.0)	(10.0)	(10.0)
	ARM B	0.427	0.268	0.305
		1719.0	1080.0	1228.0
		(10.0)	(10.0)	(10.0)
	ARM C	0.305	0.427	0.268
		1228.0	1719.0	1080.0
		(10.0)	(10.0)	(10.0)

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	16.27	19.18	0.848	- -	0.0	4.9	62.2	-	0.285
ARM B	30.53	15.86	1.926	- -	0.0	221.2	1666.7	-	7.118
ARM C	20.33	21.51	0.945	- -	0.0	10.5	116.3	-	0.435
08.15-08.30									
ARM A	16.27	18.93	0.859	- -	4.9	5.5	79.6	-	0.359
ARM B	30.53	15.66	1.950	- -	221.2	444.3	4991.8	-	21.356
ARM C	20.33	21.52	0.945	- -	10.5	12.5	173.9	-	0.654
08.30-08.45									
ARM A	16.27	18.90	0.861	- -	5.5	5.8	85.1	-	0.371
ARM B	30.53	15.64	1.952	- -	444.3	667.8	8340.8	-	35.639
ARM C	20.33	21.52	0.945	- -	12.5	13.5	195.1	-	0.707
08.45-09.00									
ARM A	16.27	18.89	0.861	- -	5.8	5.9	87.6	-	0.375
ARM B	30.53	15.63	1.953	- -	667.8	891.3	11692.9	-	49.947
ARM C	20.33	21.53	0.945	- -	13.5	14.1	207.1	-	0.735

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	4.9	*****
08.30	5.5	******
08.45	5.8	******
09.00	5.9	******

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	221.2	**********
08.30	444.3	**********
08.45	667.8	**********
09.00	891.3	**********

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	10.5	**********
08.30	12.5	**********
08.45	13.5	**********
09.00	14.1	**********

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	976.0	976.0	314.5	0.32	315.4	0.32
B	1832.0	1832.0	26692.3	14.57	52101.7	28.44
C	1220.0	1220.0	692.4	0.57	697.0	0.57
ALL	4028.0	4028.0	27699.2	6.88	53114.2	13.19

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

END OF JOB

_____ A R C A D Y 6 _____

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

For sales and distribution information,
program advice and maintenance, contact:

TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770356
Nine Mile Ride Email: software@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk
RG40 3GA,UK

Run with file:-
"p:\10440\Traffic\Junctions\j3a A335-Wide Lane Rbt\10440 j3a A335-Wide Lane Rbt DS1PM+DEV+IMP.vai"
(drive-on-the-left) at 16:53:06 on Friday, 25 November 2016

.FILE PROPERTIES
****

RUN TITLE: j3a A335-Wide Lane Rbt DS1PM+DEV
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA
****
ARM A - Wide Lane (North)
ARM B - A335 (West)
ARM C - Wide Lane (South)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	5.80	10.50	14.00	13.00	27.00	60.0	0.707	35.420
ARM B	4.00	9.90	30.00	3.00	27.00	32.0	0.563	27.555
ARM C	3.40	11.50	30.00	7.00	28.00	25.0	0.734	36.241

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j3a A335-Wide Lane Rbt DS1PM+DEV

DEMAND SET TITLE: j3a A335-Wide Lane Rbt DS1PM+DEV

T33

TIME	FROM/T	ARM A	ARM B	ARM C
17.00 - 18.00		TURNING PROPORTIONS (PERCENTAGE OF H.V.S)		
	ARM A	0.300	0.215	0.484
		1207.0	866.0	1948.0
		(10.0)	(10.0)	(10.0)
	ARM B	0.484	0.300	0.215
		1948.0	1207.0	866.0
		(10.0)	(10.0)	(10.0)
	ARM C	0.215	0.484	0.300
		866.0	1948.0	1207.0
		(10.0)	(10.0)	(10.0)

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	21.68	19.54	1.110	- -	0.0	39.4	328.2	-	1.198
ARM B	27.37	13.67	2.003	- -	0.0	206.5	1555.7	-	7.721
ARM C	17.97	20.91	0.859	- -	0.0	5.3	67.2	-	0.278
17.15-17.30									
ARM A	21.68	19.38	1.119	- -	39.4	74.7	856.8	-	3.091
ARM B	27.37	13.48	2.029	- -	206.5	414.7	4659.4	-	23.135
ARM C	17.97	20.92	0.859	- -	5.3	5.7	83.0	-	0.330
17.30-17.45									
ARM A	21.68	19.85	1.092	- -	74.7	102.6	1329.8	-	4.585
ARM B	27.37	13.41	2.041	- -	414.7	624.1	7791.7	-	38.839
ARM C	17.07	20.85	0.818	- -	5.7	4.8	76.0	-	0.273
17.45-18.00									
ARM A	21.68	19.88	1.091	- -	102.6	129.9	1743.5	-	5.957
ARM B	27.37	13.40	2.043	- -	624.1	833.7	10933.7	-	54.482
ARM C	17.07	20.85	0.819	- -	4.8	4.7	71.2	-	0.267

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	39.4	**********
17.30	74.7	**********
17.45	102.6	**********
18.00	129.9	**********

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	206.5	**********
17.30	414.7	**********
17.45	624.1	**********
18.00	833.7	**********

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	5.3	*****
17.30	5.7	******
17.45	4.8	*****
18.00	4.7	*****

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	1301.0	1301.0	4258.2	3.27	4682.5	3.60
B	1642.0	1642.0	24940.5	15.19	50876.2	30.98
C	1051.0	1051.0	297.4	0.28	298.0	0.28
ALL	3994.0	3994.0	29496.1	7.39	55856.7	13.99

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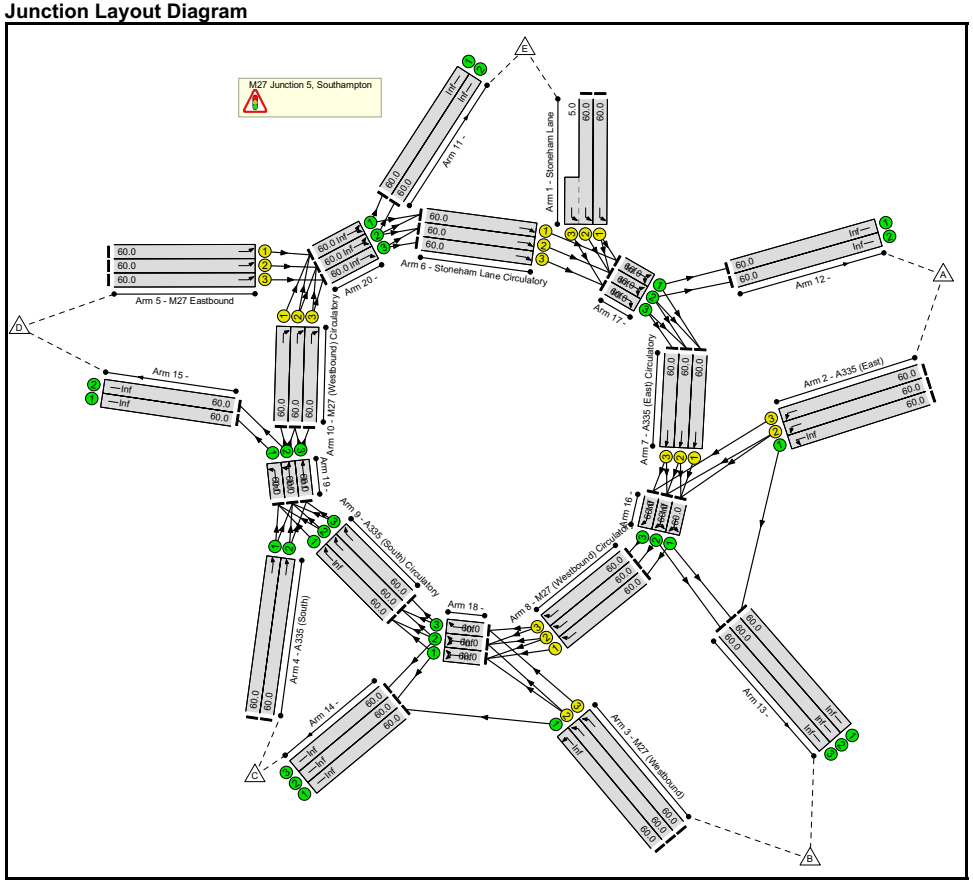
END OF JOB

Linsig Report

User and Project Details

Project:	**Land at Eastleigh**
Title:	**j4 M27 Junction 5 Traffic Signals**
Location:	Southampton
File name:	j4 M27 Junction 5 Traffic Signals Rbt.lsg3x
Author:	Matthew Moss
Company:	Brookbanks Consulting

Junction Layout Diagram



Linsig Report
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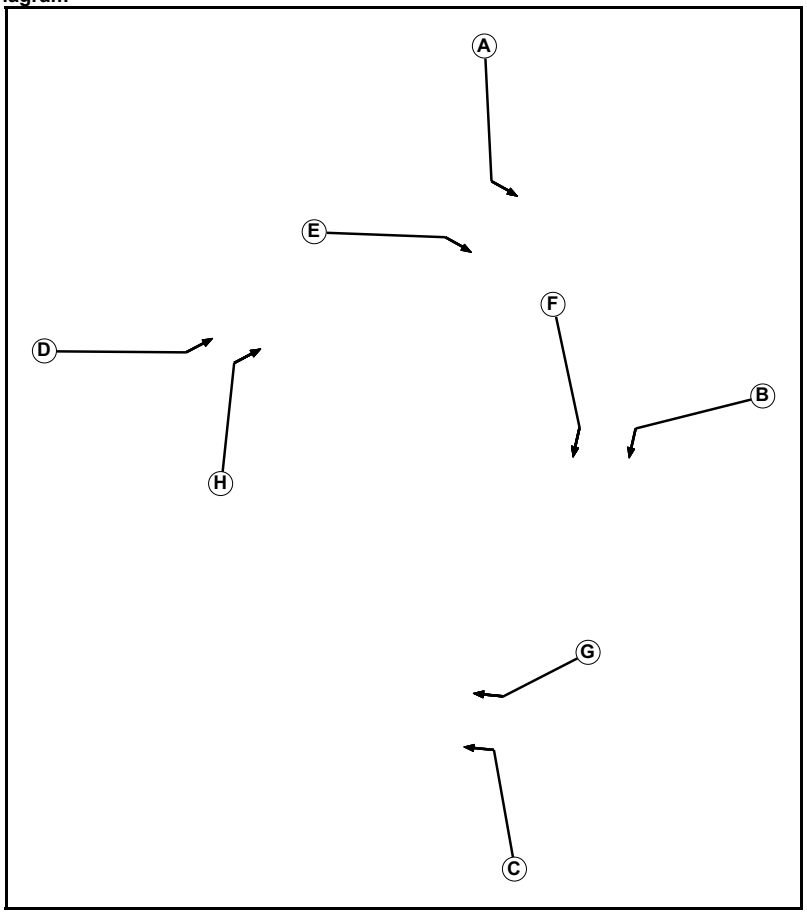
Phase Diagram



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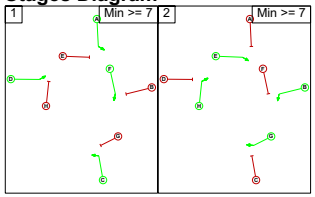
Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H
A		5	-	-	5	-	5	5
B	5		5	5	-	5	-	-
C	-	5		-	5	-	5	5
D	-	5	-		5	-	5	5
E	5	-	5	5		5	-	-
F	-	5	-	-	5		5	5
G	5	-	5	5	-	5		-
H	5	-	5	5	-	5	-	

Stages Diagram



Linsig Report
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Lane Input Data

Junction: M27 Junction 5, Southampton														
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 (Stoneham Lane)	U	A	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 17 Left	Inf
1/2 (Stoneham Lane)	U	A	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 17 Left	Inf
1/3 (Stoneham Lane)	U	A	2	3	5.0	Geom	-	3.65	0.00	Y	Arm 17 Left	Inf
2/2 (A335 (East))	U	B	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 16 Left	Inf
2/3 (A335 (East))	U	B	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 16 Left	Inf
3/2 (M27 (Westbound))	U	C	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 18 Ahead	Inf
3/3 (M27 (Westbound))	U	C	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 18 Ahead	Inf
4/1 (A335 (South))	U		2	3	60.0	Geom	-	3.25	0.00	Y	Arm 19 Ahead	Inf
4/2 (A335 (South))	U		2	3	60.0	Geom	-	3.30	0.00	Y	Arm 19 Ahead	Inf
5/1 (M27 Eastbound)	U	D	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 20 Ahead	Inf
5/2 (M27 Eastbound)	U	D	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 20 Ahead	Inf
5/3 (M27 Eastbound)	U	D	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 20 Ahead	Inf
6/1 (Stoneham Lane Circulatory)	U	E	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 17 Ahead	Inf
6/2 (Stoneham Lane Circulatory)	U	E	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 17 Ahead	Inf

6/3 (Stoneham Lane Circulatory)	U	E	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 17 Ahead	Inf
7/1 (A335 (East) Circulatory)	U	F	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 16 Ahead	Inf
7/2 (A335 (East) Circulatory)	U	F	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 16 Ahead	Inf
7/3 (A335 (East) Circulatory)	U	F	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 16 Ahead	Inf
8/1 (M27 (Westbound) Circulatory)	U	G	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 18 Ahead	Inf
8/2 (M27 (Westbound) Circulatory)	U	G	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 18 Ahead	Inf
8/3 (M27 (Westbound) Circulatory)	U	G	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 18 Ahead	Inf
9/2 (A335 (South) Circulatory)	U		2	3	60.0	Geom	-	4.50	0.00	Y	Arm 19 Ahead	Inf
9/3 (A335 (South) Circulatory)	U		2	3	60.0	Geom	-	4.50	0.00	Y	Arm 19 Ahead	Inf
10/1 (M27 (Westbound) Circulatory)	U	H	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 20 Right	Inf
10/2 (M27 (Westbound) Circulatory)	U	H	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 20 Right	Inf
10/3 (M27 (Westbound) Circulatory)	U	H	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 20 Right	Inf
16/1	U		2	3	60.0	Geom	-	3.25	0.00	Y	Arm 8 Ahead	Inf
											Arm 13 Left	Inf

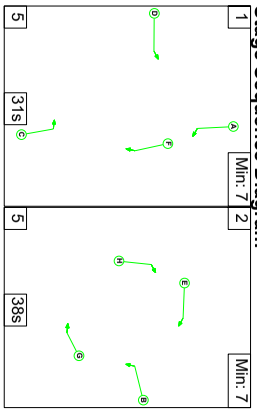
Scenario 1: 'DS1AM' (FG1: 'DS1AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	D	E	Tot.
A	0	649	430	517	10	1606
B	300	0	775	0	225	1300
C	210	505	0	557	319	1591
D	930	0	84	0	138	1152
E	346	960	8	44	0	1358
Tot.	1786	2114	1297	1118	692	7007

Stage Sequence Diagram



Junction Layout Diagram

Linsig Report
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Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: j4 M27 Junction 5 Traffic Signals	-	-	-		-	-	-	-	-	-	**79.3%**	**0**	**0**	**0**	**57.6**	-	-
M27 Junction 5, Southampton	-	-	-		-	-	-	-	-	-	**79.3%**	**0**	**0**	**0**	**57.6**	-	-
1/1	Stoneham Lane Left	U	A		1	31	-	567	1980	802	70.7%	-	-	-	4.3	27.2	11.4
1/2+1/3	Stoneham Lane Left	U	A		1	31	-	791	1980:1980	540+458	79.3 : 79.3%	-	-	-	5.9	26.7	11.9
2/2	A335 (East) Left	U	B		1	38	-	483	1980	977	49.4%	-	-	-	2.3	17.0	7.5
2/3	A335 (East) Left	U	B		1	38	-	474	1980	977	48.5%	-	-	-	2.2	16.9	7.3
3/2	M27 (Westbound) Ahead	U	C		1	31	-	261	1980	802	32.5%	-	-	-	1.4	19.4	4.2
3/3	M27 (Westbound) Ahead	U	C		1	31	-	264	1980	802	32.9%	-	-	-	1.4	19.5	4.2
4/1	A335 (South) Ahead	U	-		-	-	-	836	1940	1940	43.1%	-	-	-	0.4	1.6	0.4
4/2	A335 (South) Ahead	U	-		-	-	-	755	1945	1945	38.8%	-	-	-	0.3	1.5	0.3
5/1	M27 Eastbound Ahead	U	D		1	31	-	388	1980	802	48.4%	-	-	-	2.3	21.7	6.7
5/2	M27 Eastbound Ahead	U	D		1	31	-	383	1965	796	48.1%	-	-	-	2.3	21.7	6.6
5/3	M27 Eastbound Ahead	U	D		1	31	-	381	1965	796	47.9%	-	-	-	2.3	21.7	6.6

Linsig Report
P:\10440\Traffic\Junctions\j4t M27 j5 Traffic Signal Rbt\j4 M27 Junction 5 Traffic Signals Rbt.lsg3x

6/1	Stoneham Lane Circulatory Ahead	U	E		1	38	-	769	1980	977	78.7%	-	-	-	5.6	26.4	18.0
6/2	Stoneham Lane Circulatory Ahead	U	E		1	38	-	758	1980	977	77.5%	-	-	-	5.6	26.7	17.8
6/3	Stoneham Lane Circulatory Ahead	U	E		1	38	-	502	1980	977	51.4%	-	-	-	1.5	10.8	3.4
7/1	A335 (East) Circulatory Ahead	U	F		1	31	-	510	1980	802	63.6%	-	-	-	1.9	13.7	4.0
7/2	A335 (East) Circulatory Ahead	U	F		1	31	-	541	1980	802	67.5%	-	-	-	3.2	21.1	8.3
7/3	A335 (East) Circulatory Ahead	U	F		1	31	-	550	1980	802	68.6%	-	-	-	3.2	20.8	10.0
8/1	M27 (Westbound) Circulatory Ahead	U	G		1	38	-	160	1980	977	16.4%	-	-	-	0.7	15.1	2.3
8/2	M27 (Westbound) Circulatory Ahead	U	G		1	38	-	446	1980	977	45.6%	-	-	-	1.1	9.2	2.3
8/3	M27 (Westbound) Circulatory Ahead	U	G		1	38	-	487	1980	977	49.8%	-	-	-	1.2	8.8	2.2
9/2	A335 (South) Circulatory Ahead	U	-		-	-	-	282	2065	2065	13.7%	-	-	-	0.1	1.0	0.1
9/3	A335 (South) Circulatory Ahead	U	-		-	-	-	253	2065	2065	12.3%	-	-	-	0.1	1.0	0.1
10/1	M27 (Westbound) Circulatory Right	U	H		1	38	-	504	1980	977	51.6%	-	-	-	2.6	18.7	10.3

10/2	M27 (Westbound) Circulatory Right	U	H		1	38	-	519	1980	977	53.1%	-	-	-	2.6	18.3	9.7
10/3	M27 (Westbound) Circulatory Right	U	H		1	38	-	546	1980	977	55.9%	-	-	-	2.8	18.2	9.1
16/1	Ahead Left	U	-		-	-	-	631	1940	1940	32.5%	-	-	-	0.3	1.5	3.6

C1 PRC for Signalled Lanes (%): 13.5 Total Delay for Signalled Lanes (pcuHr): 56.54 Cycle Time (s): 79
PRC Over All Lanes (%): 13.5 Total Delay Over All Lanes(pcuHr): 57.65

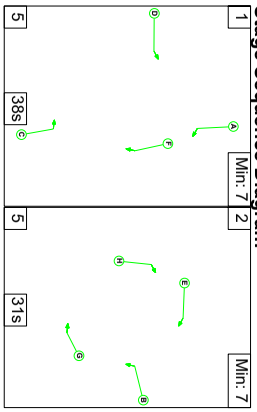
Scenario 2: 'DS1PM' (FG2: 'DS1PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	D	E	Tot.
A	0	716	512	511	135	1874
B	283	0	735	0	319	1337
C	184	462	0	633	236	1515
D	671	0	33	0	102	806
E	419	1051	0	101	0	1571
Tot.	1557	2229	1280	1245	792	7103

Stage Sequence Diagram



Junction Layout Diagram

Linsig Report
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Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: j4 M27 Junction 5 Traffic Signals	-	-	-		-	-	-	-	-	-	**77.2%**	**0**	**0**	**0**	**58.2**	-	-
M27 Junction 5, Southampton	-	-	-		-	-	-	-	-	-	**77.2%**	**0**	**0**	**0**	**58.2**	-	-
1/1	Stoneham Lane Left	U	A		1	38	-	659	1980	977	67.4%	-	-	-	3.8	20.8	11.8
1/2+1/3	Stoneham Lane Left	U	A		1	38	-	912	1980:1980	598+606	75.7 : 75.7%	-	-	-	5.0	19.6	11.0
2/2	A335 (East) Left	U	B		1	31	-	597	1980	802	74.4%	-	-	-	4.8	28.7	12.5
2/3	A335 (East) Left	U	B		1	31	-	561	1980	802	69.9%	-	-	-	4.2	26.9	11.3
3/2	M27 (Westbound) Ahead	U	C		1	38	-	300	1980	977	30.7%	-	-	-	1.2	14.6	4.1
3/3	M27 (Westbound) Ahead	U	C		1	38	-	302	1980	977	30.9%	-	-	-	1.2	14.6	4.2
4/1	A335 (South) Ahead	U	-		-	-	-	791	1940	1940	40.8%	-	-	-	0.3	1.6	0.3
4/2	A335 (South) Ahead	U	-		-	-	-	724	1945	1945	37.2%	-	-	-	0.3	1.5	0.3
5/1	M27 Eastbound Ahead	U	D		1	38	-	273	1980	977	27.9%	-	-	-	1.1	14.3	3.7
5/2	M27 Eastbound Ahead	U	D		1	38	-	267	1965	970	27.5%	-	-	-	1.1	14.3	3.6
5/3	M27 Eastbound Ahead	U	D		1	38	-	266	1965	970	27.4%	-	-	-	1.1	14.3	3.6

6/1	Stoneham Lane Circulatory Ahead	U	E		1	31	-	619	1980	802	77.2%	-	-	-	4.7	27.3	11.1
6/2	Stoneham Lane Circulatory Ahead	U	E		1	31	-	618	1980	802	77.1%	-	-	-	4.7	27.3	11.2
6/3	Stoneham Lane Circulatory Ahead	U	E		1	31	-	396	1980	802	49.4%	-	-	-	1.3	12.1	2.3
7/1	A335 (East) Circulatory Ahead	U	F		1	38	-	521	1980	977	53.3%	-	-	-	1.4	10.0	3.7
7/2	A335 (East) Circulatory Ahead	U	F		1	38	-	563	1980	977	57.6%	-	-	-	1.9	12.2	5.7
7/3	A335 (East) Circulatory Ahead	U	F		1	38	-	563	1980	977	57.6%	-	-	-	2.1	13.4	7.5
8/1	M27 (Westbound) Circulatory Ahead	U	G		1	31	-	246	1980	802	30.7%	-	-	-	1.0	14.2	2.6
8/2	M27 (Westbound) Circulatory Ahead	U	G		1	31	-	481	1980	802	60.0%	-	-	-	1.9	13.9	3.2
8/3	M27 (Westbound) Circulatory Ahead	U	G		1	31	-	565	1980	802	70.4%	-	-	-	2.2	14.0	3.1
9/2	A335 (South) Circulatory Ahead	U	-		-	-	-	369	2065	2065	17.9%	-	-	-	0.1	1.1	0.1
9/3	A335 (South) Circulatory Ahead	U	-		-	-	-	368	2065	2065	17.8%	-	-	-	0.1	1.1	0.1
10/1	M27 (Westbound) Circulatory Right	U	H		1	31	-	521	1980	802	65.0%	-	-	-	4.3	29.7	11.5

Linsig Report
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10/2	M27 (Westbound) Circulatory Right	U	H		1	31	-	537	1980	802	67.0%	-	-	-	4.0	27.0	11.6
10/3	M27 (Westbound) Circulatory Right	U	H		1	31	-	561	1980	802	69.9%	-	-	-	4.2	27.0	11.4
16/1	Ahead Left	U	-		-	-	-	694	1940	1940	35.8%	-	-	-	0.3	1.4	1.4

C1

PRC for Signalled Lanes (%): 16.6
PRC Over All Lanes (%): 16.6

Total Delay for Signalled Lanes (pcuHr): 57.08
Total Delay Over All Lanes(pcuHr): 58.21

Cycle Time (s): 79

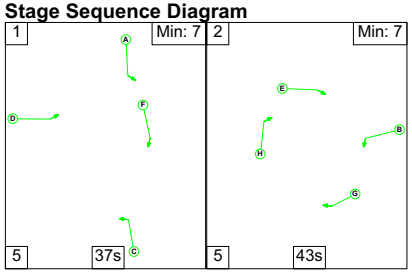
Scenario 3: 'DS1AM+DEV' (FG3: 'DS1AM+DEV', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	649	430	629	10	1718
	B	300	0	775	0	225	1300
	C	210	505	0	557	319	1591
	D	993	0	84	0	138	1215
	E	346	960	8	44	0	1358
	Tot.	1849	2114	1297	1230	692	7182

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: j4 M27 Junction 5 Traffic Signals	-	-	-		-	-	-	-	-	-	**79.5%**	**0**	**0**	**0**	**66.4**	-	-
M27 Junction 5, Southampton	-	-	-		-	-	-	-	-	-	**79.5%**	**0**	**0**	**0**	**66.4**	-	-
1/1	Stoneham Lane Left	U	A		1	37	-	596	1980	836	71.3%	-	-	-	4.8	28.9	13.5
1/2+1/3	Stoneham Lane Left	U	A		1	37	-	762	1980:1980	599+360	79.5 : 79.5%	-	-	-	6.2	29.4	14.8
2/2	A335 (East) Left	U	B		1	43	-	556	1980	968	57.4%	-	-	-	3.2	20.7	10.4
2/3	A335 (East) Left	U	B		1	43	-	513	1980	968	53.0%	-	-	-	2.8	19.8	9.4
3/2	M27 (Westbound) Ahead	U	C		1	37	-	264	1980	836	31.6%	-	-	-	1.5	20.5	4.6
3/3	M27 (Westbound) Ahead	U	C		1	37	-	261	1980	836	31.2%	-	-	-	1.5	20.4	4.5
4/1	A335 (South) Ahead	U	-		-	-	-	834	1940	1940	43.0%	-	-	-	0.4	1.6	0.4
4/2	A335 (South) Ahead	U	-		-	-	-	757	1945	1945	38.9%	-	-	-	0.3	1.5	0.3
5/1	M27 Eastbound Ahead	U	D		1	37	-	403	1980	836	48.2%	-	-	-	2.6	23.0	7.7
5/2	M27 Eastbound Ahead	U	D		1	37	-	405	1965	830	48.8%	-	-	-	2.6	23.2	7.8
5/3	M27 Eastbound Ahead	U	D		1	37	-	407	1965	830	49.1%	-	-	-	2.6	23.2	7.8

6/1	Stoneham Lane Circulatory Ahead	U	E		1	43	-	757	1980	968	78.2%	-	-	-	6.7	32.1	20.3
6/2	Stoneham Lane Circulatory Ahead	U	E		1	43	-	758	1980	968	78.3%	-	-	-	6.7	31.8	20.3
6/3	Stoneham Lane Circulatory Ahead	U	E		1	43	-	577	1980	968	59.6%	-	-	-	2.0	12.2	4.2
7/1	A335 (East) Circulatory Ahead	U	F		1	37	-	479	1980	836	57.3%	-	-	-	1.5	11.0	2.2
7/2	A335 (East) Circulatory Ahead	U	F		1	37	-	590	1980	836	70.6%	-	-	-	3.7	22.8	11.1
7/3	A335 (East) Circulatory Ahead	U	F		1	37	-	532	1980	836	63.6%	-	-	-	3.8	25.6	12.0
8/1	M27 (Westbound) Circulatory Ahead	U	G		1	43	-	264	1980	968	27.3%	-	-	-	0.8	10.6	2.2
8/2	M27 (Westbound) Circulatory Ahead	U	G		1	43	-	416	1980	968	43.0%	-	-	-	1.4	11.8	3.1
8/3	M27 (Westbound) Circulatory Ahead	U	G		1	43	-	525	1980	968	54.2%	-	-	-	1.4	9.6	2.4
9/2	A335 (South) Circulatory Ahead	U	-		-	-	-	273	2065	2065	13.2%	-	-	-	0.1	1.0	0.1
9/3	A335 (South) Circulatory Ahead	U	-		-	-	-	262	2065	2065	12.7%	-	-	-	0.1	1.0	0.1
10/1	M27 (Westbound) Circulatory Right	U	H		1	43	-	504	1980	968	52.1%	-	-	-	3.2	23.0	11.7

Linsig Report
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10/2	M27 (Westbound) Circulatory Right	U	H		1	43	-	512	1980	968	52.9%	-	-	-	3.1	22.0	11.2
10/3	M27 (Westbound) Circulatory Right	U	H		1	43	-	553	1980	968	57.1%	-	-	-	3.2	20.6	10.3
16/1	Ahead Left	U	-		-	-	-	713	1940	1940	36.8%	-	-	-	0.3	1.5	0.3

C1 PRC for Signalled Lanes (%): 13.2 Total Delay for Signalled Lanes (pcuHr): 65.28 Cycle Time (s): 90
PRC Over All Lanes (%): 13.2 Total Delay Over All Lanes(pcuHr): 66.41

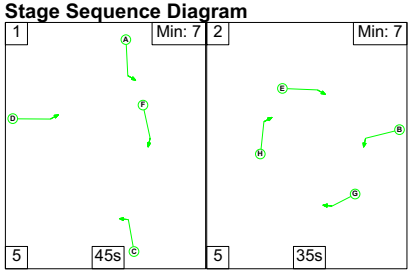
Scenario 4: 'DS1PM+DEV' (FG4: 'DS1PM+DEV', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	D	E	Tot.
A	0	716	512	584	135	1947
B	283	0	735	0	319	1337
C	184	462	0	633	236	1515
D	772	0	33	0	102	907
E	419	1051	0	101	0	1571
Tot.	1658	2229	1280	1318	792	7277

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: j4 M27 Junction 5 Traffic Signals	-	-	-		-	-	-	-	-	-	**79.5%**	**0**	**0**	**0**	**68.3**	-	-
M27 Junction 5, Southampton	-	-	-		-	-	-	-	-	-	**79.5%**	**0**	**0**	**0**	**68.3**	-	-
1/1	Stoneham Lane Left	U	A		1	45	-	624	1980	1012	61.7%	-	-	-	3.5	20.3	11.9
1/2+1/3	Stoneham Lane Left	U	A		1	45	-	947	1980:1980	618+586	78.7 : 78.7%	-	-	-	5.8	21.9	14.7
2/2	A335 (East) Left	U	B		1	35	-	630	1980	792	79.5%	-	-	-	6.1	34.6	15.7
2/3	A335 (East) Left	U	B		1	35	-	601	1980	792	75.9%	-	-	-	5.4	32.5	14.4
3/2	M27 (Westbound) Ahead	U	C		1	45	-	293	1980	1012	29.0%	-	-	-	1.2	15.1	4.4
3/3	M27 (Westbound) Ahead	U	C		1	45	-	309	1980	1012	30.5%	-	-	-	1.3	15.3	4.7
4/1	A335 (South) Ahead	U	-		-	-	-	832	1940	1940	42.9%	-	-	-	0.4	1.6	0.4
4/2	A335 (South) Ahead	U	-		-	-	-	683	1945	1945	35.1%	-	-	-	0.3	1.4	0.3
5/1	M27 Eastbound Ahead	U	D		1	45	-	306	1980	1012	30.2%	-	-	-	1.3	15.3	4.6
5/2	M27 Eastbound Ahead	U	D		1	45	-	301	1965	1004	30.0%	-	-	-	1.3	15.3	4.5
5/3	M27 Eastbound Ahead	U	D		1	45	-	300	1965	1004	29.9%	-	-	-	1.3	15.2	4.5

6/1	Stoneham Lane Circulatory Ahead	U	E		1	35	-	620	1980	792	78.3%	-	-	-	5.6	32.4	14.0
6/2	Stoneham Lane Circulatory Ahead	U	E		1	35	-	619	1980	792	78.2%	-	-	-	6.0	35.0	15.1
6/3	Stoneham Lane Circulatory Ahead	U	E		1	35	-	495	1980	792	62.5%	-	-	-	1.9	13.7	3.1
7/1	A335 (East) Circulatory Ahead	U	F		1	45	-	379	1980	1012	37.5%	-	-	-	0.8	7.6	1.4
7/2	A335 (East) Circulatory Ahead	U	F		1	45	-	680	1980	1012	67.2%	-	-	-	2.9	15.1	11.5
7/3	A335 (East) Circulatory Ahead	U	F		1	45	-	588	1980	1012	58.1%	-	-	-	2.6	16.0	11.4
8/1	M27 (Westbound) Circulatory Ahead	U	G		1	35	-	363	1980	792	45.8%	-	-	-	1.6	16.0	3.7
8/2	M27 (Westbound) Circulatory Ahead	U	G		1	35	-	401	1980	792	50.6%	-	-	-	1.5	13.8	2.8
8/3	M27 (Westbound) Circulatory Ahead	U	G		1	35	-	601	1980	792	75.9%	-	-	-	2.7	16.0	3.5
9/2	A335 (South) Circulatory Ahead	U	-		-	-	-	415	2065	2065	20.1%	-	-	-	0.1	1.1	0.7
9/3	A335 (South) Circulatory Ahead	U	-		-	-	-	322	2065	2065	15.6%	-	-	-	0.1	1.0	0.1
10/1	M27 (Westbound) Circulatory Right	U	H		1	35	-	540	1980	792	68.2%	-	-	-	5.0	33.7	13.4

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10/2	M27 (Westbound) Circulatory Right	U	H		1	35	-	543	1980	792	68.6%	-	-	-	5.1	33.5	13.5
10/3	M27 (Westbound) Circulatory Right	U	H		1	35	-	536	1980	792	67.7%	-	-	-	4.4	29.5	12.2
16/1	Ahead Left	U	-		-	-	-	669	1940	1940	34.5%	-	-	-	0.3	1.4	0.3

C1 PRC for Signalled Lanes (%): 13.1 Total Delay for Signalled Lanes (pcuHr): 67.22 Cycle Time (s): 90
PRC Over All Lanes (%): 13.1 Total Delay Over All Lanes(pcuHr): 68.35

_____ A R C A D Y 6 _____

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

For sales and distribution information,
program advice and maintenance, contact:

TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770356
Nine Mile Ride Email: software@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk
RG40 3GA,UK

Run with file:-
"p:\10440\Traffic\Junctions\j5a A27-Wide Lane Rbt\10440 j5a A27-Wide Lane Rbt DS1AM.vai"
(drive-on-the-left) at 15:39:31 on Friday, 25 November 2016

.FILE PROPERTIES
****

RUN TITLE: j5a A27-Wide Lane Rbt DS1AM
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA
****
ARM A - Wide Lane (North)
ARM B - Mansbridge Road
ARM C - Wide Lane (West)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.50	8.20	30.00	17.00	33.00	42.0	0.712	34.307
ARM B	4.90	7.70	17.00	23.00	33.00	57.0	0.661	31.036
ARM C	2.80	6.30	22.00	17.00	33.00	29.0	0.621	25.719

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j5a A27-Wide Lane Rbt DS1AM

DEMAND SET TITLE: j5a A27-Wide Lane Rbt DS1AM

T33

TIME	FROM/T	ARM A	ARM B	ARM C
08.00 - 09.00		TURNING PROPORTIONS (PERCENTAGE OF H.V.S)		
		TURNING COUNTS		
	ARM A	0.335	0.415	0.250
		875.0	1086.0	653.0
		(10.0)	(10.0)	(10.0)
	ARM B	0.250	0.335	0.415
		653.0	875.0	1086.0
		(10.0)	(10.0)	(10.0)
	ARM C	0.415	0.250	0.335
		1086.0	653.0	875.0
		(10.0)	(10.0)	(10.0)

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	10.05	21.36	0.470	- - -	0.0	0.9	12.7	-	0.087
ARM B	21.05	21.69	0.970	- - -	0.0	13.2	139.5	-	0.505
ARM C	12.47	13.98	0.892	- - -	0.0	6.2	73.3	-	0.451
08.15-08.30									
ARM A	10.05	21.09	0.476	- - -	0.9	0.9	13.4	-	0.090
ARM B	21.05	21.60	0.975	- - -	13.2	17.6	234.2	-	0.869
ARM C	12.47	13.76	0.906	- - -	6.2	7.6	105.9	-	0.653
08.30-08.45									
ARM A	10.05	21.05	0.477	- - -	0.9	0.9	13.6	-	0.091
ARM B	21.05	21.59	0.975	- - -	17.6	20.4	285.9	-	1.016
ARM C	12.47	13.72	0.909	- - -	7.6	8.3	120.1	-	0.712
08.45-09.00									
ARM A	10.05	21.03	0.478	- - -	0.9	0.9	13.6	-	0.091
ARM B	21.05	21.59	0.975	- - -	20.4	22.4	321.5	-	1.115
ARM C	12.47	13.70	0.910	- - -	8.3	8.7	127.9	-	0.742

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	0.9	*
08.30	0.9	*
08.45	0.9	*
09.00	0.9	*

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	13.2	*************
08.30	17.6	*****************
08.45	20.4	********************
09.00	22.4	**********************

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	6.2	******
08.30	7.6	********
08.45	8.3	********
09.00	8.7	*********

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	603.0	603.0	53.4	0.09	53.4	0.09
B	1263.0	1263.0	981.1	0.78	992.7	0.79
C	748.0	748.0	427.2	0.57	430.0	0.57
ALL	2614.0	2614.0	1461.7	0.56	1476.1	0.56

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
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* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

For sales and distribution information,
program advice and maintenance, contact:

TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770356
Nine Mile Ride Email: software@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk
RG40 3GA,UK

Run with file:-
"p:\10440\Traffic\Junctions\j5a A27-Wide Lane Rbt\10440 j5a A27-Wide Lane Rbt DS1PM.vai"
(drive-on-the-left) at 15:39:42 on Friday, 25 November 2016

.FILE PROPERTIES
****

RUN TITLE: j5a A27-Wide Lane Rbt DS1PM
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA
****
ARM A - Wide Lane (North)
ARM B - Mansbridge Road
ARM C - Wide Lane (West)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.50	8.20	30.00	17.00	33.00	42.0	0.712	34.307
ARM B	4.90	7.70	17.00	23.00	33.00	57.0	0.661	31.036
ARM C	2.80	6.30	22.00	17.00	33.00	29.0	0.621	25.719

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j5a A27-Wide Lane Rbt DS1PM

DEMAND SET TITLE: j5a A27-Wide Lane Rbt DS1PM

T33

TIME	FROM/T	TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
17.00 - 18.00	ARM A	0.335	0.415	0.250
		875.0	1086.0	653.0
		(10.0)	(10.0)	(10.0)
	ARM B	0.250	0.335	0.415
		653.0	875.0	1086.0
		(10.0)	(10.0)	(10.0)
	ARM C	0.415	0.250	0.335
		1086.0	653.0	875.0
		(10.0)	(10.0)	(10.0)

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	19.40	22.43	0.865	- - -	0.0	5.6	70.4	-	0.270
ARM B	12.12	17.73	0.683	- - -	0.0	2.1	28.7	-	0.170
ARM C	15.25	15.08	1.011	- - -	0.0	15.9	153.5	-	0.784
17.15-17.30									
ARM A	19.40	22.20	0.874	- - -	5.6	6.3	90.1	-	0.342
ARM B	12.12	17.50	0.692	- - -	2.1	2.2	32.3	-	0.185
ARM C	15.25	14.96	1.019	- - -	15.9	24.8	308.2	-	1.588
17.30-17.45									
ARM A	19.40	22.16	0.875	- - -	6.3	6.5	96.4	-	0.352
ARM B	12.12	17.47	0.694	- - -	2.2	2.2	33.2	-	0.187
ARM C	15.25	14.96	1.020	- - -	24.8	32.3	429.1	-	2.112
17.45-18.00									
ARM A	19.40	22.14	0.876	- - -	6.5	6.7	99.3	-	0.357
ARM B	12.12	17.46	0.694	- - -	2.2	2.2	33.5	-	0.187
ARM C	15.25	14.95	1.020	- - -	32.3	39.0	535.3	-	2.572

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	5.6	******
17.30	6.3	******
17.45	6.5	*******
18.00	6.7	*******

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	2.1	**
17.30	2.2	**
17.45	2.2	**
18.00	2.2	**

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	15.9	****************
17.30	24.8	************************
17.45	32.3	********************************
18.00	39.0	**

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	1164.0	1164.0	356.2	0.31	357.2	0.31
B	727.0	727.0	127.7	0.18	127.8	0.18
C	915.0	915.0	1426.1	1.56	1477.1	1.61
ALL	2806.0	2806.0	1910.0	0.68	1962.1	0.70

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
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END OF JOB

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

For sales and distribution information,
program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

Run with file:-
"p:\10440\Traffic\Junctions\j5a A27-Wide Lane Rbt\10440 j5a A27-Wide Lane Rbt DS1AM+DEV.vai"
(drive-on-the-left) at 15:39:36 on Friday, 25 November 2016

.FILE PROPERTIES
 ****

RUN TITLE: j5a A27-Wide Lane Rbt DS1AM+DEV
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA
 ****
ARM A - Wide Lane (North)
ARM B - Mansbridge Road
ARM C - Wide Lane (West)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.50	8.20	30.00	17.00	33.00	42.0	0.712	34.307
ARM B	4.90	7.70	17.00	23.00	33.00	57.0	0.661	31.036
ARM C	2.80	6.30	22.00	17.00	33.00	29.0	0.621	25.719

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS
T13

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

TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j5a A27-Wide Lane Rbt DS1AM+DEV

DEMAND SET TITLE: j5a A27-Wide Lane Rbt DS1AM+DEV

T33

TIME	FROM/T	TURNING PROPORTIONS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
08.00 - 09.00	ARM A	0.349	0.390	0.261
		1105.0	1236.0	826.0
		(10.0)I	(10.0)I	(10.0)I
	ARM B	0.261	0.349	0.390
		826.0	1105.0	1236.0
		(10.0)I	(10.0)I	(10.0)I
	ARM C	0.390	0.261	0.349
		1236.0	826.0	1105.0
		(10.0)I	(10.0)I	(10.0)I

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	11.32	20.60	0.549	- -	-	0.0	1.2	17.1	-	0.106
ARM B	27.38	20.78	1.318	- -	-	0.0	102.0	784.0	-	2.577
ARM C	14.10	13.15	1.072	- -	-	0.0	22.6	199.2	-	1.124
08.15-08.30									
ARM A	11.32	20.41	0.554	- -	-	1.2	1.2	18.3	-	0.110
ARM B	27.38	20.66	1.325	- -	-	102.0	202.9	2287.0	-	7.473
ARM C	14.10	13.11	1.076	- -	-	22.6	39.0	463.6	-	2.591
08.30-08.45									
ARM A	11.32	20.39	0.555	- -	-	1.2	1.2	18.5	-	0.110
ARM B	27.38	20.65	1.326	- -	-	202.9	304.0	3801.7	-	12.351
ARM C	14.10	13.11	1.075	- -	-	39.0	54.6	702.8	-	3.766
08.45-09.00									
ARM A	11.32	20.38	0.555	- -	-	1.2	1.2	18.6	-	0.110
ARM B	27.38	20.64	1.327	- -	-	304.0	405.1	5318.3	-	17.251
ARM C	14.10	13.11	1.075	- -	-	54.6	69.9	934.2	-	4.920

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	1.2	*
08.30	1.2	*
08.45	1.2	*
09.00	1.2	*

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	102.0	**********
08.30	202.9	**********
08.45	304.0	**********
09.00	405.1	**********

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	22.6	**********
08.30	39.0	**********
08.45	54.6	**********
09.00	69.9	**********

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	(VEH/H)	* QUEUEING * DELAY * (MIN)	(MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	(MIN/VEH)
A	679.0	679.0	72.6	0.11	72.6	0.11
B	1643.0	1643.0	12191.1	7.42	16166.7	9.84
C	846.0	846.0	2299.7	2.72	2486.0	2.94
ALL	3168.0	3168.0	14563.4	4.60	18725.3	5.91

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END OF JOB

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

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Wokingham, Berks. Web: www.trlsoftware.co.uk
RG40 3GA,UK

Run with file:-
"p:\10440\Traffic\Junctions\j5a A27-Wide Lane Rbt\10440 j5a A27-Wide Lane Rbt DS1PM+DEV.vai"
(drive-on-the-left) at 15:39:48 on Friday, 25 November 2016

.FILE PROPERTIES
****

RUN TITLE: j5a A27-Wide Lane Rbt DS1PM+DEV
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA
****
ARM A - Wide Lane (North)
ARM B - Mansbridge Road
ARM C - Wide Lane (West)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.50	8.20	30.00	17.00	33.00	42.0	0.712	34.307
ARM B	4.90	7.70	17.00	23.00	33.00	57.0	0.661	31.036
ARM C	2.80	6.30	22.00	17.00	33.00	29.0	0.621	25.719

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j5a A27-Wide Lane Rbt DS1PM+DEV

DEMAND SET TITLE: j5a A27-Wide Lane Rbt DS1PM+DEV

T33

TIME	FROM/T	ARM A	ARM B	ARM C
		TURNING PROPORTIONS (PERCENTAGE OF H.V.S)		
		TURNING COUNTS		
17.00 - 18.00	ARM A	0.306 (10.0)	0.249 (10.0)	0.445 (10.0)
		1039.0	844.0	1511.0
	ARM B	0.445 (10.0)	0.306 (10.0)	0.249 (10.0)
		1511.0	1039.0	844.0
	ARM C	0.249 (10.0)	0.445 (10.0)	0.306 (10.0)
		844.0	1511.0	1039.0

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING (MIN)	VEHICLE
17.00-17.15										
ARM A	21.67	21.28	1.018	- -	0.0	20.6	195.2	-	0.692	
ARM B	16.03	15.62	1.027	- -	0.0	18.3	172.0	-	0.840	
ARM C	18.87	12.62	1.495	- -	0.0	95.7	730.1	-	3.972	
17.15-17.30										
ARM A	21.67	21.29	1.018	- -	20.6	31.2	391.3	-	1.401	
ARM B	16.03	15.32	1.047	- -	18.3	32.0	380.4	-	1.874	
ARM C	18.87	12.34	1.528	- -	95.7	193.6	2169.3	-	11.865	
17.30-17.45										
ARM A	21.67	21.30	1.017	- -	31.2	40.1	535.8	-	1.831	
ARM B	16.03	15.27	1.050	- -	32.0	45.0	578.7	-	2.717	
ARM C	18.87	12.30	1.535	- -	193.6	292.1	3642.7	-	19.872	
17.45-18.00										
ARM A	21.67	21.31	1.017	- -	40.1	48.0	661.6	-	2.215	
ARM B	16.03	15.24	1.052	- -	45.0	57.8	771.7	-	3.547	
ARM C	18.87	12.28	1.536	- -	292.1	390.9	5123.1	-	27.910	

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	20.6	**********
17.30	31.2	***************
17.45	40.1	********************
18.00	48.0	************************

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	18.3	*********
17.30	32.0	***************
17.45	45.0	*********************
18.00	57.8	***************************

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	95.7	**********
17.30	193.6	**********
17.45	292.1	**********
18.00	390.9	**********

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	1300.0	1300.0	1783.9	1.37	1838.0	1.41
B	962.0	962.0	1902.9	1.98	2012.6	2.09
C	1132.0	1132.0	11665.2	10.30	17887.8	15.80
ALL	3394.0	3394.0	15352.0	4.52	21738.4	6.40

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
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END OF JOB

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

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Wokingham, Berks. — Web: www.trlsoftware.co.uk
RG40 3GA,UK

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:-
"p:\10440\Traffic\Junctions\j5a A27-Wide Lane Rbt\10440 j5a A27-Wide Lane Rbt DS1AM+DEV+IMP.vai"
(drive-on-the-left) at 08:03:31 on Monday, 28 November 2016

.FILE PROPERTIES
****

RUN TITLE: j5a A27-Wide Lane Rbt DS1AM+DEV
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA
****

ARM A - Wide Lane (North)
ARM B - Mansbridge Road
ARM C - Wide Lane (West)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.00	10.50	30.00	17.00	33.00	42.0	0.852	45.796
ARM B	6.50	10.50	30.00	23.00	33.00	57.0	0.805	42.882
ARM C	3.50	9.00	30.00	17.00	33.00	29.0	0.734	34.999

V = approach half-width   L = effective flare length   D = inscribed circle diameter
E = entry width   R = entry radius   PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j5a A27-Wide Lane Rbt DS1AM+DEV

DEMAND SET TITLE: j5a A27-Wide Lane Rbt DS1AM+DEV

T33

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

TIME	FROM/TO	ARM A	ARM B	ARM C
08.00 - 09.00				
	ARM A	0.349	0.390	0.261
		1105.0	1236.0	826.0
		(10.0)	(10.0)	(10.0)
	ARM B	0.261	0.349	0.390
		826.0	1105.0	1236.0
		(10.0)	(10.0)	(10.0)
	ARM C	0.390	0.261	0.349
		1236.0	826.0	1105.0
		(10.0)	(10.0)	(10.0)

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

10440 j5a A27-Wide Lane Rbt DS1AM+DEV+IMP

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	11.32	26.50	0.427	- - -	0.0	0.7	10.8	-	0.065
ARM B	27.38	29.57	0.926	- - -	0.0	9.5	111.7	-	0.306
ARM C	14.10	16.95	0.832	- - -	0.0	4.4	55.8	-	0.296

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
ARM A	11.32	26.21	0.432	- - -	0.7	0.8	11.3	-	0.067
ARM B	27.38	29.48	0.929	- - -	9.5	10.9	154.6	-	0.424
ARM C	14.10	16.70	0.844	- - -	4.4	4.9	71.1	-	0.369

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
ARM A	11.32	26.18	0.432	- - -	0.8	0.8	11.4	-	0.067
ARM B	27.38	29.47	0.929	- - -	10.9	11.5	168.5	-	0.444
ARM C	14.10	16.68	0.846	- - -	4.9	5.1	75.9	-	0.380

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
ARM A	11.32	26.17	0.432	- - -	0.8	0.8	11.4	-	0.067
ARM B	27.38	29.47	0.929	- - -	11.5	11.9	175.5	-	0.453
ARM C	14.10	16.67	0.846	- - -	5.1	5.2	77.9	-	0.384

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	0.7	*
08.30	0.8	*
08.45	0.8	*
09.00	0.8	*

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	9.5	*********
08.30	10.9	***********
08.45	11.5	************
09.00	11.9	************

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	4.4	****
08.30	4.9	*****
08.45	5.1	*****
09.00	5.2	*****

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * * DELAY * (MIN)	* QUEUEING * * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * * DELAY * (MIN)	* INCLUSIVE QUEUEING * * DELAY * (MIN/VEH)
A	679.0	679.0	44.8	0.07	44.8	0.07
B	1643.0	1643.0	610.3	0.37	612.7	0.37
C	846.0	846.0	280.7	0.33	281.5	0.33
ALL	3168.0	3168.0	935.7	0.30	939.0	0.30

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

END OF JOB

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

For sales and distribution information,
program advice and maintenance, contact:

TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770356
Nine Mile Ride Email: software@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk
RG40 3GA,UK

Run with file:-
"p:\10440\Traffic\Junctions\j5a A27-Wide Lane Rbt\10440 j5a A27-Wide Lane Rbt DS1PM+DEV+IMP.vai"
(drive-on-the-left) at 08:02:28 on Monday, 28 November 2016

.FILE PROPERTIES
****

RUN TITLE: j5a A27-Wide Lane Rbt DS1PM+DEV
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA
****

ARM A - Wide Lane (North)
ARM B - Mansbridge Road
ARM C - Wide Lane (West)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.00	10.50	30.00	17.00	33.00	42.0	0.852	45.796
ARM B	6.50	10.50	30.00	23.00	33.00	57.0	0.805	42.882
ARM C	3.50	10.00	30.00	17.00	33.00	29.0	0.757	36.869

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j5a A27-Wide Lane Rbt DS1PM+DEV

DEMAND SET TITLE: j5a A27-Wide Lane Rbt DS1PM+DEV

T33

TIME	FROM/T	ARM A	ARM B	ARM C
		TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S)		
17.00 - 18.00				
	ARM A	0.306	0.249	0.445
		1039.0	844.0	1511.0
		(10.0)	(10.0)	(10.0)
	ARM B	0.445	0.306	0.249
		1511.0	1039.0	844.0
		(10.0)	(10.0)	(10.0)
	ARM C	0.249	0.445	0.306
		844.0	1511.0	1039.0
		(10.0)	(10.0)	(10.0)

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

10440 j5a A27-Wide Lane Rbt DS1PM+DEV+IMP

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	21.67	25.93	0.836	- - -	0.0	4.7	61.1	-	0.207
ARM B	16.03	21.61	0.742	- - -	0.0	2.8	37.6	-	0.169
ARM C	18.87	19.55	0.965	- - -	0.0	12.1	128.6	-	0.523

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
ARM A	21.67	25.56	0.848	- - -	4.7	5.2	75.2	-	0.251
ARM B	16.03	21.32	0.752	- - -	2.8	2.9	43.1	-	0.188
ARM C	18.87	19.39	0.973	- - -	12.1	16.4	216.9	-	0.902

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
ARM A	21.67	25.49	0.850	- - -	5.2	5.4	79.7	-	0.258
ARM B	16.03	21.28	0.753	- - -	2.9	3.0	44.5	-	0.190
ARM C	18.87	19.38	0.973	- - -	16.4	19.1	267.1	-	1.060

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
ARM A	21.67	25.46	0.851	- - -	5.4	5.5	81.8	-	0.261
ARM B	16.03	21.26	0.754	- - -	3.0	3.0	45.0	-	0.191
ARM C	18.87	19.38	0.974	- - -	19.1	21.0	301.3	-	1.172

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	4.7	*****
17.30	5.2	*****
17.45	5.4	*****
18.00	5.5	*****

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	2.8	***
17.30	2.9	***
17.45	3.0	***
18.00	3.0	***

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	12.1	************
17.30	16.4	****************
17.45	19.1	*******************
18.00	21.0	*********************

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * * DELAY * (MIN)	* QUEUEING * * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * * DELAY * (MIN)	* INCLUSIVE QUEUEING * * DELAY * (MIN/VEH)
A	1300.0	1300.0	297.7	0.23	298.3	0.23
B	962.0	962.0	170.1	0.18	170.4	0.18
C	1132.0	1132.0	913.8	0.81	925.2	0.82
ALL	3394.0	3394.0	1381.7	0.41	1393.9	0.41

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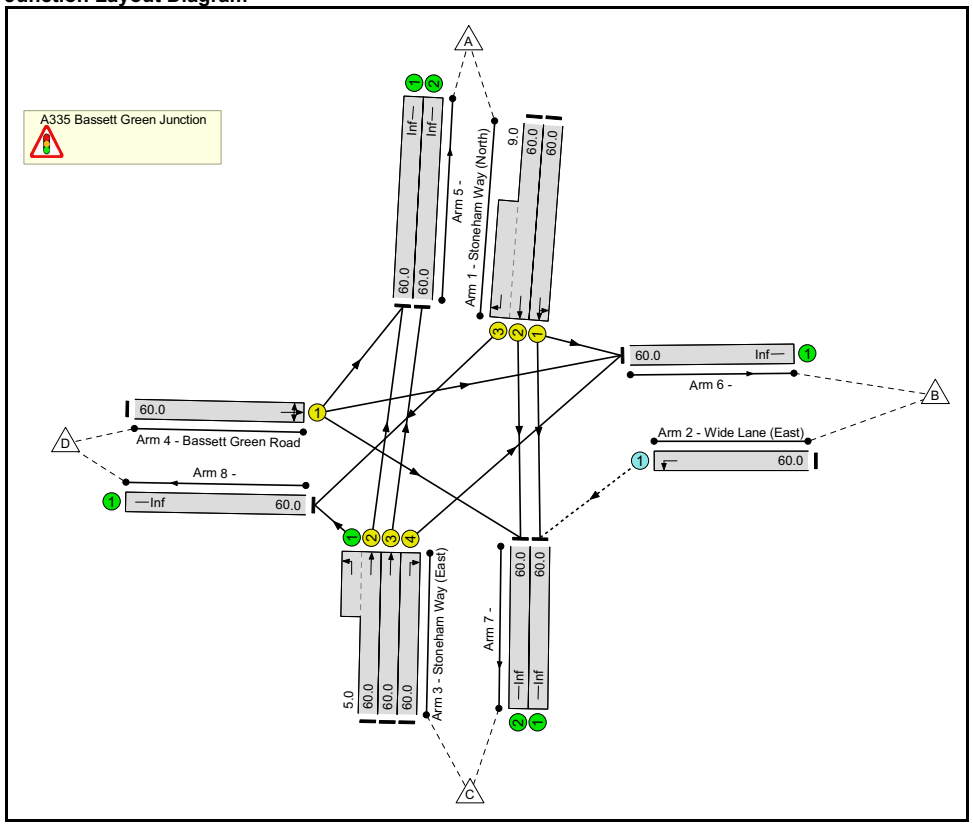
END OF JOB

Linsig Report

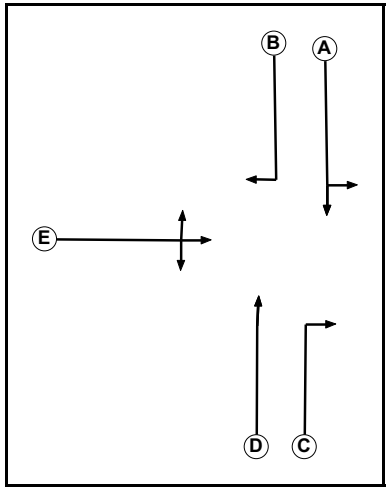
User and Project Details

Project:	**Land at Eastleigh**
Title:	**J6 A335 Wide Lane Junction**
Location:	Hampshire
File name:	j6 A335 Wide Lane Junction.lsg3x
Author:	Matthew Moss
Company:	Brookbanks Consulting

Junction Layout Diagram



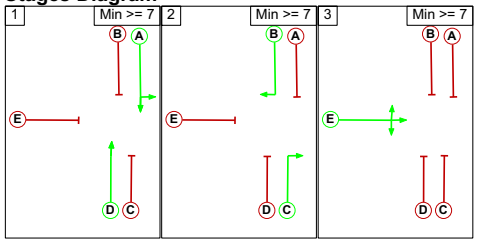
Phase Diagram



Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E
A		5	5	-	5
B	5		-	5	5
C	5	-		5	5
D	-	5	5		5
E	5	5	5	5	

Stages Diagram



Lane Input Data

Junction: A335 Bassett Green Junction												
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 (Stoneham Way (North))	U	A	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 6 Left	Inf
											Arm 7 Ahead	Inf
1/2 (Stoneham Way (North))	U	A	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 7 Ahead	Inf
1/3 (Stoneham Way (North))	U	B	2	3	9.0	Geom	-	3.65	0.00	Y	Arm 8 Right	Inf
2/1 (Wide Lane (East))	O		2	3	60.0	Geom	-	4.40	0.00	Y	Arm 7 Left	Inf
3/1 (Stoneham Way (East))	U		2	3	5.0	Geom	-	5.00	0.00	Y	Arm 8 Left	Inf
3/2 (Stoneham Way (East))	U	D	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 5 Ahead	Inf
3/3 (Stoneham Way (East))	U	D	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 5 Ahead	Inf
3/4 (Stoneham Way (East))	U	C	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 6 Right	Inf
4/1 (Bassett Green Road)	U	E	2	3	60.0	Geom	-	4.00	0.00	Y	Arm 5 Left	Inf
											Arm 6 Ahead	Inf
											Arm 7 Right	Inf

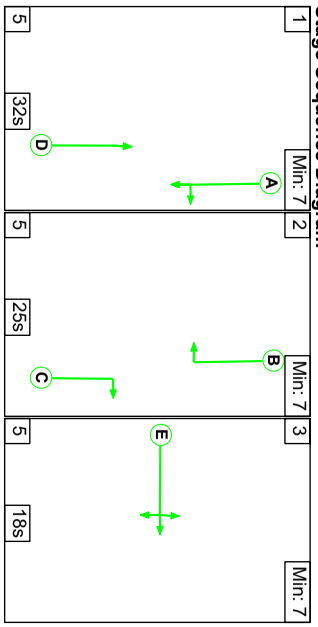
Scenario 1: 'DS1AM' (FG1: 'DSAM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	D	Tot.
A	0	0	914	385	1299
B	0	0	709	0	709
C	1223	487	0	0	1710
D	368	0	0	0	368
Tot.	1591	487	1623	385	4086

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: J6 A335 Wide Lane Junction	-	-	-		-	-	-	-	-	-	**86.7%**	**60**	**649**	**0**	**44.0**	-	-
A335 Bassett Green Junction	-	-	-		-	-	-	-	-	-	**86.7%**	**60**	**649**	**0**	**44.0**	-	-
1/1	Stoneham Way (North) Left Ahead	U	A		1	32	-	612	1980	726	84.3%	-	-	-	7.0	41.2	16.5
1/2+1/3	Stoneham Way (North) Ahead Right	U	A B		1	32:25	-	687	1980:1980	379+483	79.7 : 79.7%	-	-	-	6.7	35.2	10.4
2/1	Wide Lane (East) Left	O	-		-	-	-	709	2055	1362	52.1%	60	649	0	2.0	10.4	9.6
3/2+3/1	Stoneham Way (East) Ahead Left	U	D -		1	32	-	612	1945:2115	713+0	85.8 : 0.0%	-	-	-	7.3	43.2	17.0
3/3	Stoneham Way (East) Ahead	U	D		1	32	-	611	1945	713	85.7%	-	-	-	7.3	43.0	16.9
3/4	Stoneham Way (East) Right	U	C		1	25	-	487	1945	562	86.7%	-	-	-	7.1	52.6	14.5
4/1	Bassett Green Road Left Ahead Right	U	E		1	18	-	368	2015	425	86.5%	-	-	-	6.4	62.7	11.7

C1 PRC for Signalled Lanes (%): 3.8 Total Delay for Signalled Lanes (pcuHr): 41.91 Cycle Time (s): 90
PRC Over All Lanes (%): 3.8 Total Delay Over All Lanes(pcuHr): 43.95

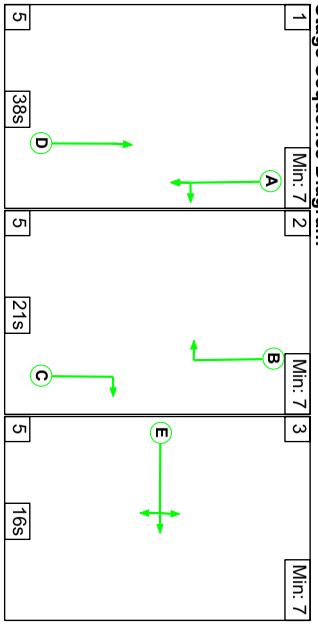
Scenario 2: 'DS1PM' (FG2: 'DS1PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	D	Tot.
A	0	0	958	325	1283
B	0	0	579	0	579
C	0	0	0	0	0
D	291	0	0	0	291
Tot.	291	0	1537	325	2153

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: J6 A335 Wide Lane Junction	-	-	-		-	-	-	-	-	-	**76.5%**	**117**	**462**	**0**	**17.2**	-	-
A335 Bassett Green Junction	-	-	-		-	-	-	-	-	-	**76.5%**	**117**	**462**	**0**	**17.2**	-	-
1/1	Stoneham Way (North) Left Ahead	U	A		1	38	-	641	1980	858	74.7%	-	-	-	5.3	29.6	14.8
1/2+1/3	Stoneham Way (North) Ahead Right	U	A B		1	38:21	-	642	1980:1980	416+427	76.1 : 76.1%	-	-	-	5.9	32.9	8.9
2/1	Wide Lane (East) Left	O	-		-	-	-	579	2055	1281	45.2%	117	462	0	1.7	10.5	8.0
3/2+3/1	Stoneham Way (East) Ahead Left	U	D -		1	38	-	0	1945:2115	538+538	0.0 : 0.0%	-	-	-	0.0	0.0	0.0
3/3	Stoneham Way (East) Ahead	U	D		1	38	-	0	1945	843	0.0%	-	-	-	0.0	0.0	0.0
3/4	Stoneham Way (East) Right	U	C		1	21	-	0	1945	475	0.0%	-	-	-	0.0	0.0	0.0
4/1	Bassett Green Road Left Ahead Right	U	E		1	16	-	291	2015	381	76.5%	-	-	-	4.4	54.0	8.4

C1 PRC for Signalled Lanes (%): 17.7 Total Delay for Signalled Lanes (pcuHr): 15.49 Cycle Time (s): 90
PRC Over All Lanes (%): 17.7 Total Delay Over All Lanes(pcuHr): 17.18

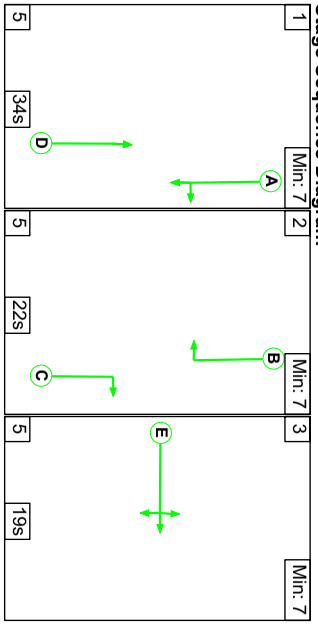
Scenario 3: 'DS1AM+DEV' (FG3: 'DS1AM+DEV', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	D	Tot.
A	0	0	914	385	1299
B	0	0	939	0	939
C	0	0	0	0	0
D	368	0	0	0	368
Tot.	368	0	1853	385	2606

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: J6 A335 Wide Lane Junction	-	-	-		-	-	-	-	-	-	**85.3%**	**65**	**874**	**0**	**24.1**	-	-
A335 Bassett Green Junction	-	-	-		-	-	-	-	-	-	**85.3%**	**65**	**874**	**0**	**24.1**	-	-
1/1	Stoneham Way (North) Left Ahead	U	A		1	34	-	649	1980	770	84.3%	-	-	-	7.1	39.3	17.2
1/2+1/3	Stoneham Way (North) Ahead Right	U	A B		1	34:22	-	650	1980:1980	311+451	85.3 : 85.3%	-	-	-	7.5	41.6	11.6
2/1	Wide Lane (East) Left	O	-		-	-	-	939	2055	1321	71.1%	65	874	0	3.9	15.1	16.6
3/2+3/1	Stoneham Way (East) Ahead Left	U	D -		1	34	-	0	1945:2115	493+493	0.0 : 0.0%	-	-	-	0.0	0.0	0.0
3/3	Stoneham Way (East) Ahead	U	D		1	34	-	0	1945	756	0.0%	-	-	-	0.0	0.0	0.0
3/4	Stoneham Way (East) Right	U	C		1	22	-	0	1945	497	0.0%	-	-	-	0.0	0.0	0.0
4/1	Bassett Green Road Left Ahead Right	U	E		1	19	-	368	2015	448	82.2%	-	-	-	5.6	54.7	10.9

C1 PRC for Signalled Lanes (%): 5.5 Total Delay for Signalled Lanes (pcuHr): 20.18 Cycle Time (s): 90
PRC Over All Lanes (%): 5.5 Total Delay Over All Lanes(pcuHr): 24.12

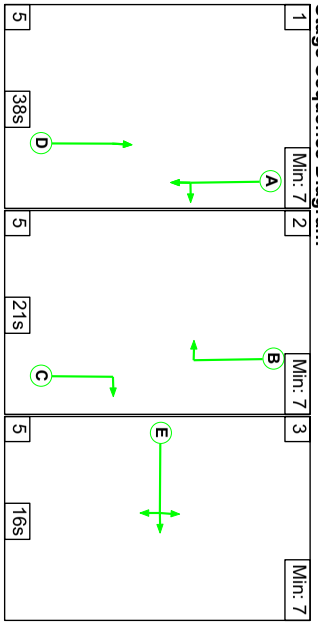
Scenario 4: 'DS1PM+DEV' (FG4: 'DS1PM+DEV', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	D	Tot.
A	0	0	958	325	1283
B	0	0	719	0	719
C	0	0	0	0	0
D	291	0	0	0	291
Tot.	291	0	1677	325	2293

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: J6 A335 Wide Lane Junction	-	-	-		-	-	-	-	-	-	**76.5%**	**117**	**602**	**0**	**17.9**	-	-
A335 Bassett Green Junction	-	-	-		-	-	-	-	-	-	**76.5%**	**117**	**602**	**0**	**17.9**	-	-
1/1	Stoneham Way (North) Left Ahead	U	A		1	38	-	641	1980	858	74.7%	-	-	-	5.3	29.6	14.8
1/2+1/3	Stoneham Way (North) Ahead Right	U	A B		1	38:21	-	642	1980:1980	416+427	76.1 : 76.1%	-	-	-	5.9	32.9	8.9
2/1	Wide Lane (East) Left	O	-		-	-	-	719	2055	1281	56.1%	117	602	0	2.5	12.3	11.0
3/2+3/1	Stoneham Way (East) Ahead Left	U	D -		1	38	-	0	1945:2115	538+538	0.0 : 0.0%	-	-	-	0.0	0.0	0.0
3/3	Stoneham Way (East) Ahead	U	D		1	38	-	0	1945	843	0.0%	-	-	-	0.0	0.0	0.0
3/4	Stoneham Way (East) Right	U	C		1	21	-	0	1945	475	0.0%	-	-	-	0.0	0.0	0.0
4/1	Bassett Green Road Left Ahead Right	U	E		1	16	-	291	2015	381	76.5%	-	-	-	4.4	54.0	8.4

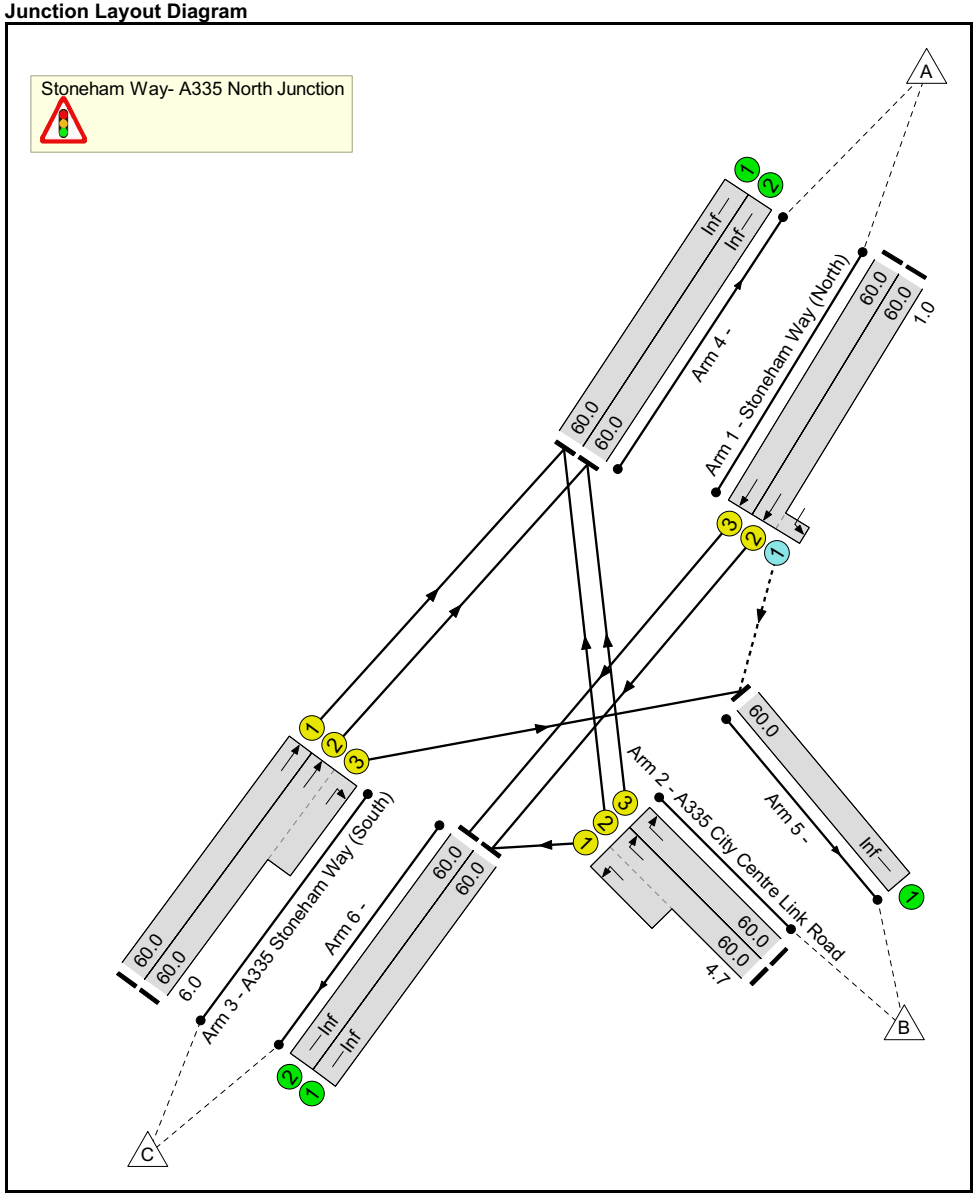
C1 PRC for Signalled Lanes (%): 17.7 Total Delay for Signalled Lanes (pcuHr): 15.49 Cycle Time (s): 90
PRC Over All Lanes (%): 17.7 Total Delay Over All Lanes(pcuHr): 17.94

Linsig Report

User and Project Details

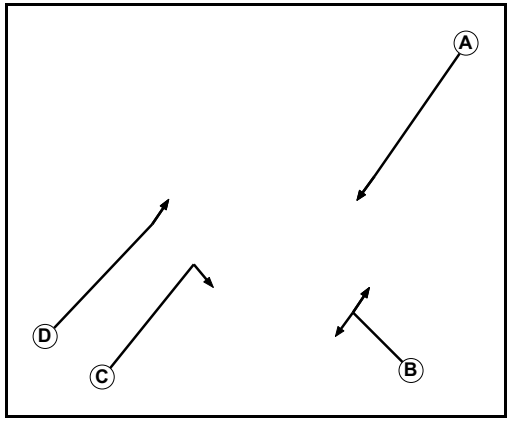
Project:	**Land at Eastleigh**
Title:	**10440**
Location:	A335 North Stoneham Way Traffic Signals
File name:	j7 North Stoneham Way Traffic Signals.lsg3x
Author:	Matthew Moss
Company:	Brookbanks Consulting

Junction Layout Diagram



Linsig Report
P:\10440\Traffic\Junctions\j7t A335-Stoneham Way Traffic Signals\j7 North Stoneham Way Traffic Signals.lsg3x

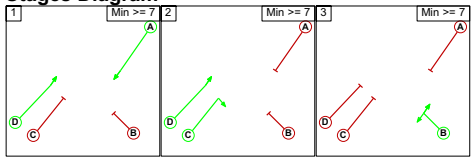
Phase Diagram



Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D
A		5	5	-
B	5		5	5
C	5	5		-
D	-	5	-	

Stages Diagram



Lane Input Data

Junction: Stoneham Way- A335 North Junction

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 (Stoneham Way (North))	O		2	3	1.0	Geom	-	5.00	0.00	Y	Arm 5 Left	Inf
1/2 (Stoneham Way (North))	U	A	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 6 Ahead	Inf
1/3 (Stoneham Way (North))	U	A	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 6 Ahead	Inf
2/1 (A335 City Centre Link Road)	U	B	2	3	4.7	Geom	-	3.30	0.00	Y	Arm 6 Left	Inf
2/2 (A335 City Centre Link Road)	U	B	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 4 Right	Inf
2/3 (A335 City Centre Link Road)	U	B	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 4 Right	Inf
3/1 (A335 Stoneham Way (South))	U	D	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 4 Ahead	Inf
3/2 (A335 Stoneham Way (South))	U	D	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 4 Ahead	Inf
3/3 (A335 Stoneham Way (South))	U	C	2	3	6.0	Geom	-	3.30	0.00	Y	Arm 5 Right	Inf

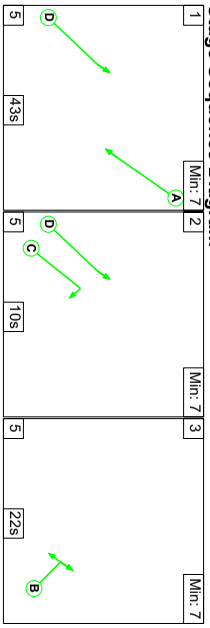
Scenario 1: 'DS1AM' (FG1: 'DS1AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin	Destination A	B	C	Tot.
A	0	1049	564	1613
B	769	0	0	769
C	1022	143	0	1165
Tot.	1791	1192	564	3547

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: 10440	-	-	-		-	-	-	-	-	-	**80.2%**	**65**	**984**	**0**	**21.5**	-	-
Stoneham Way- A335 North Junction	-	-	-		-	-	-	-	-	-	**80.2%**	**65**	**984**	**0**	**21.5**	-	-
1/2+1/1	Stoneham Way (North) Left Ahead	U+O	A -		1	43	-	1049	1945:2115	0+1922	0.0 : 54.6%	65	984	0	0.8	2.7	5.3
1/3	Stoneham Way (North) Ahead	U	A		1	43	-	564	1945	951	59.3%	-	-	-	3.3	21.2	10.8
2/2+2/1	A335 City Centre Link Road Right Left	U	B		1	22	-	385	1945:1945	497+0	77.5 : 0.0%	-	-	-	5.0	46.7	10.5
2/3	A335 City Centre Link Road Right	U	B		1	22	-	384	1945	497	77.3%	-	-	-	5.0	46.5	10.5
3/1	A335 Stoneham Way (South) Ahead	U	D		1	58	-	1022	1945	1275	80.2%	-	-	-	5.2	18.3	20.4
3/2+3/3	A335 Stoneham Way (South) Ahead Right	U	D C		1	58:10	-	143	1945:1945	0+238	0.0 : 60.2%	-	-	-	2.2	56.1	4.1

C1 PRC for Signalled Lanes (%): 12.3 Total Delay for Signalled Lanes (pcuHr): 21.49 Cycle Time (s): 90
PRC Over All Lanes (%): 12.3 Total Delay Over All Lanes(pcuHr): 21.49

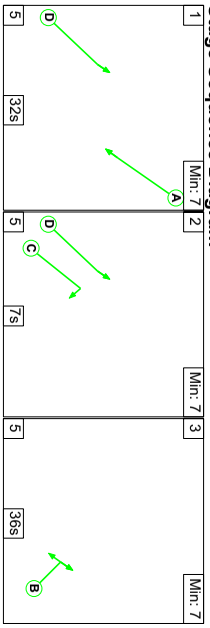
Scenario 2: 'DS1PM' (FG2: 'DS1PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	Tot.
A	0	1054	470	1524
B	1219	0	22	1241
C	759	25	0	784
Tot.	1978	1079	492	3549

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: 10440	-	-	-		-	-	-	-	-	-	**78.5%**	**94**	**960**	**0**	**20.3**	-	-
Stoneham Way- A335 North Junction	-	-	-		-	-	-	-	-	-	**78.5%**	**94**	**960**	**0**	**20.3**	-	-
1/2+1/1	Stoneham Way (North) Left Ahead	U+O	A -		1	32	-	1118	1945:2115	81+1342	78.5 : 78.5%	94	960	0	2.2	7.0	5.0
1/3	Stoneham Way (North) Ahead	U	A		1	32	-	406	1945	713	56.9%	-	-	-	3.2	28.6	8.8
2/2+2/1	A335 City Centre Link Road Right Left	U	B		1	36	-	633	1945:1945	799+29	76.4 : 76.4%	-	-	-	5.6	31.8	14.8
2/3	A335 City Centre Link Road Right	U	B		1	36	-	608	1945	800	76.0%	-	-	-	5.4	31.9	14.6
3/1	A335 Stoneham Way (South) Ahead	U	D		1	44	-	382	1945	973	39.3%	-	-	-	1.8	17.0	6.2
3/2+3/3	A335 Stoneham Way (South) Ahead Right	U	D C		1	44:7	-	402	1945:1945	929+62	40.6 : 40.6%	-	-	-	2.1	18.5	6.1

C1 PRC for Signalled Lanes (%): 14.6 Total Delay for Signalled Lanes (pcuHr): 20.26 Cycle Time (s): 90
PRC Over All Lanes (%): 14.6 Total Delay Over All Lanes(pcuHr): 20.26

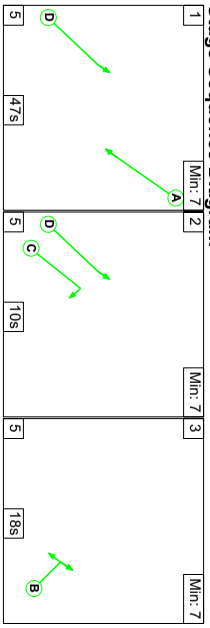
Scenario 3: 'DS1AM+DEV' (FG3: 'DS1AM+DEV', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	Tot.
A	0	1188	655	1843
B	624	0	0	624
C	1064	143	0	1207
Tot.	1688	1331	655	3674

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: 10440	-	-	-		-	-	-	-	-	-	**78.1%**	**65**	**1123**	**0**	**20.1**	-	-
Stoneham Way- A335 North Junction	-	-	-		-	-	-	-	-	-	**78.1%**	**65**	**1123**	**0**	**20.1**	-	-
1/2+1/1	Stoneham Way (North) Left Ahead	U+O	A -		1	47	-	1188	1945:2115	0+1922	0.0 : 61.8%	65	1123	0	1.1	3.3	6.7
1/3	Stoneham Way (North) Ahead	U	A		1	47	-	655	1945	1037	63.1%	-	-	-	3.5	19.5	12.3
2/2+2/1	A335 City Centre Link Road Right Left	U	B		1	18	-	312	1945:1945	411+0	76.0 : 0.0%	-	-	-	4.4	51.1	8.8
2/3	A335 City Centre Link Road Right	U	B		1	18	-	312	1945	411	76.0%	-	-	-	4.4	51.1	8.8
3/1	A335 Stoneham Way (South) Ahead	U	D		1	62	-	1064	1945	1362	78.1%	-	-	-	4.4	14.9	19.2
3/2+3/3	A335 Stoneham Way (South) Ahead Right	U	D C		1	62:10	-	143	1945:1945	0+238	0.0 : 60.2%	-	-	-	2.2	56.1	4.1

C1 PRC for Signalled Lanes (%): 15.2 Total Delay for Signalled Lanes (pcuHr): 20.11 Cycle Time (s): 90
PRC Over All Lanes (%): 15.2 Total Delay Over All Lanes(pcuHr): 20.11

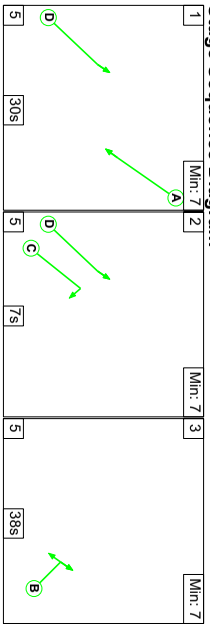
Scenario 4: 'DS1PM+DEV' (FG4: 'DS1PM+DEV', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	Tot.
A	0	1137	526	1663
B	1351	0	22	1373
C	843	25	0	868
Tot.	2194	1162	548	3904

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: 10440	-	-	-		-	-	-	-	-	-	**89.6%**	**101**	**1036**	**0**	**26.4**	-	-
Stoneham Way- A335 North Junction	-	-	-		-	-	-	-	-	-	**89.6%**	**101**	**1036**	**0**	**26.4**	-	-
1/2+1/1	Stoneham Way (North) Left Ahead	U+O	A -		1	30	-	1209	1945:2115	80+1269	89.6 : 89.6%	101	1036	0	5.0	14.9	14.1
1/3	Stoneham Way (North) Ahead	U	A		1	30	-	454	1945	670	67.8%	-	-	-	4.2	33.5	10.6
2/2+2/1	A335 City Centre Link Road Right Left	U	B		1	38	-	700	1945:1945	843+27	80.4 : 80.4%	-	-	-	6.3	32.5	16.8
2/3	A335 City Centre Link Road Right	U	B		1	38	-	673	1945	843	79.8%	-	-	-	6.1	32.5	16.3
3/1	A335 Stoneham Way (South) Ahead	U	D		1	42	-	423	1945	929	45.5%	-	-	-	2.3	19.2	7.5
3/2+3/3	A335 Stoneham Way (South) Ahead Right	U	D C		1	42:7	-	445	1945:1945	893+53	47.0 : 47.0%	-	-	-	2.5	20.5	7.4

C1 PRC for Signalled Lanes (%): 0.5 Total Delay for Signalled Lanes (pcuHr): 26.39 Cycle Time (s): 90
PRC Over All Lanes (%): 0.5 Total Delay Over All Lanes(pcuHr): 26.39

Linsig Report
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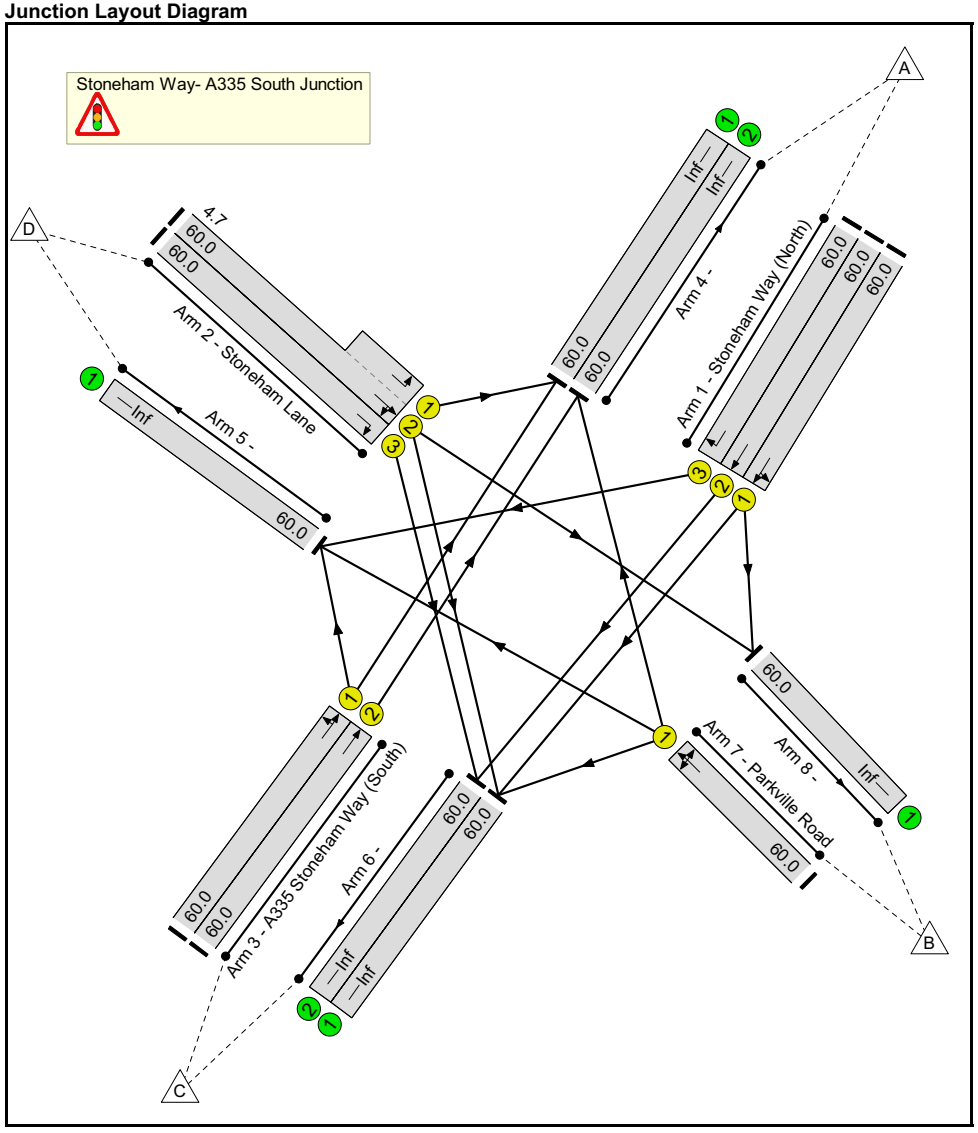
Linsig Report

User and Project Details

Project:	**Land at Eastleigh**
Title:	**10440**
Location:	A335 Stoneham Way / Stoneham lane Traffic Signals
File name:	j7 South Stoneham Way Traffic Signals.lsg3x
Author:	Matthew Moss
Company:	Brookbanks Consulting

Junction Layout Diagram



Linsig Report
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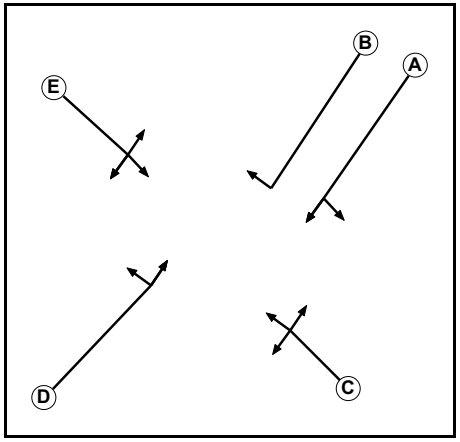
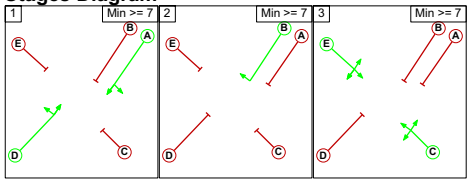
Phase Diagram



Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E
A		5	5	-	5
B	5		5	5	5
C	5	5		5	-
D	-	5	5		5
E	5	5	-	5	

Stages Diagram



Lane Input Data

Junction: Stoneham Way- A335 South Junction

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 (Stoneham Way (North))	U	A	2	3	60.0	Geom	-	3.10	0.00	Y	Arm 6 Ahead	Inf
											Arm 8 Left	Inf
1/2 (Stoneham Way (North))	U	A	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 6 Ahead	Inf
1/3 (Stoneham Way (North))	U	B	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 5 Right	Inf
2/1 (Stoneham Lane)	U	E	2	3	4.7	Geom	-	3.30	0.00	Y	Arm 4 Left	Inf
2/2 (Stoneham Lane)	U	E	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 6 Right	Inf
											Arm 8 Ahead	Inf
2/3 (Stoneham Lane)	U	E	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 6 Right	Inf
3/1 (A335 Stoneham Way (South))	U	D	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 4 Ahead	Inf
											Arm 5 Left	Inf
3/2 (A335 Stoneham Way (South))	U	D	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 4 Ahead	Inf
7/1 (Parkville Road)	U	C	2	3	60.0	Geom	-	2.70	0.00	Y	Arm 4 Right	Inf
											Arm 5 Ahead	Inf
											Arm 6 Left	Inf

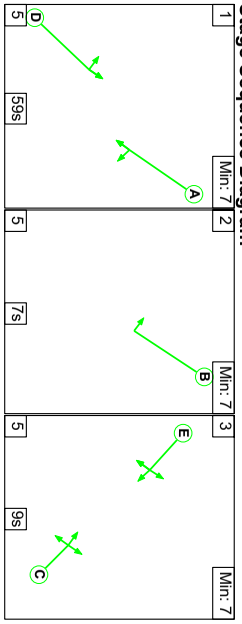
Scenario 1: 'DS1AM' (FG1: 'DS1AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	D	Tot.
A	0	1	501	63	565
B	1	0	1	1	3
C	993	0	0	2	995
D	82	1	88	0	171
Tot.	1076	2	590	66	1734

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: 10440	-	-	-		-	-	-	-	-	-	**40.0%**	**0**	**0**	**0**	**6.6**	-	-
Stoneham Way- A335 South Junction	-	-	-		-	-	-	-	-	-	**40.0%**	**0**	**0**	**0**	**6.6**	-	-
1/1	Stoneham Way (North) Ahead Left	U	A		1	59	-	248	1925	1283	19.3%	-	-	-	0.5	7.5	2.5
1/2	Stoneham Way (North) Ahead	U	A		1	59	-	254	1945	1297	19.6%	-	-	-	0.5	7.5	2.5
1/3	Stoneham Way (North) Right	U	B		1	7	-	63	1945	173	36.4%	-	-	-	1.0	54.9	1.8
2/2+2/1	Stoneham Lane Left Right Ahead	U	E		1	9	-	168	1945:1945	215+205	40.0 : 40.0%	-	-	-	2.1	44.3	2.3
2/3	Stoneham Lane Right	U	E		1	9	-	3	1945	216	1.4%	-	-	-	0.0	44.4	0.1
3/1	A335 Stoneham Way (South) Ahead Left	U	D		1	59	-	497	1945	1297	38.3%	-	-	-	1.2	9.0	5.8
3/2	A335 Stoneham Way (South) Ahead	U	D		1	59	-	498	1945	1297	38.4%	-	-	-	1.2	9.0	5.8
7/1	Parkville Road Right Ahead Left	U	C		1	9	-	3	1885	209	1.4%	-	-	-	0.0	44.7	0.1

C1 PRC for Signalled Lanes (%): 125.1 Total Delay for Signalled Lanes (pcuHr): 6.63 Cycle Time (s): 90
PRC Over All Lanes (%): 125.1 Total Delay Over All Lanes(pcuHr): 6.63

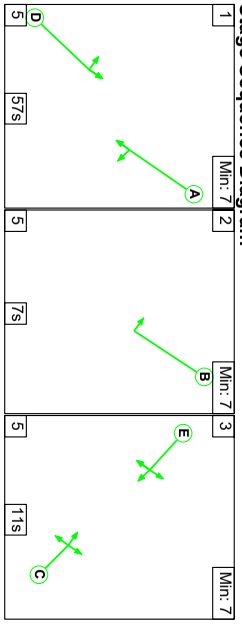
Scenario 2: 'DS1PM' (FG2: 'DS1PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	D	Tot.
A	0	1	453	39	493
B	1	0	1	1	3
C	710	0	0	10	720
D	74	1	58	0	133
Tot.	785	2	512	50	1349

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: 10440	-	-	-		-	-	-	-	-	-	**28.7%**	**0**	**0**	**0**	**5.0**	-	-
Stoneham Way- A335 South Junction	-	-	-		-	-	-	-	-	-	**28.7%**	**0**	**0**	**0**	**5.0**	-	-
1/1	Stoneham Way (North) Ahead Left	U	A		1	57	-	224	1925	1241	18.1%	-	-	-	0.5	8.2	2.4
1/2	Stoneham Way (North) Ahead	U	A		1	57	-	230	1945	1253	18.3%	-	-	-	0.5	8.2	2.4
1/3	Stoneham Way (North) Right	U	B		1	7	-	39	1945	173	22.6%	-	-	-	0.6	51.6	1.0
2/2+2/1	Stoneham Lane Left Right Ahead	U	E		1	11	-	85	1945:1945	39+259	28.5 : 28.5%	-	-	-	1.0	43.5	1.9
2/3	Stoneham Lane Right	U	E		1	11	-	48	1945	259	18.5%	-	-	-	0.6	43.2	1.2
3/1	A335 Stoneham Way (South) Ahead Left	U	D		1	57	-	360	1945	1253	28.7%	-	-	-	0.9	9.0	4.1
3/2	A335 Stoneham Way (South) Ahead	U	D		1	57	-	360	1945	1253	28.7%	-	-	-	0.9	9.0	4.1
7/1	Parkville Road Right Ahead Left	U	C		1	11	-	3	1885	251	1.2%	-	-	-	0.0	41.5	0.1

C1 PRC for Signalled Lanes (%): 213.4 Total Delay for Signalled Lanes (pcuHr): 5.03 Cycle Time (s): 90
PRC Over All Lanes (%): 213.4 Total Delay Over All Lanes(pcuHr): 5.03

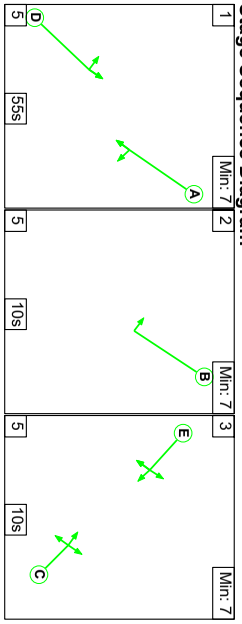
Scenario 3: 'DS1AM+DEV' (FG3: 'DS1AM+DEV', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	D	Tot.
A	0	1	592	103	696
B	1	0	1	1	3
C	1035	0	0	2	1037
D	100	1	88	0	189
Tot.	1136	2	681	106	1925

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: 10440	-	-	-		-	-	-	-	-	-	**43.3%**	**0**	**0**	**0**	**8.7**	-	-
Stoneham Way- A335 South Junction	-	-	-		-	-	-	-	-	-	**43.3%**	**0**	**0**	**0**	**8.7**	-	-
1/1	Stoneham Way (North) Ahead Left	U	A		1	55	-	294	1925	1198	24.5%	-	-	-	0.8	9.6	3.4
1/2	Stoneham Way (North) Ahead	U	A		1	55	-	299	1945	1210	24.7%	-	-	-	0.8	9.6	3.5
1/3	Stoneham Way (North) Right	U	B		1	10	-	103	1945	238	43.3%	-	-	-	1.4	49.9	2.8
2/2+2/1	Stoneham Lane Left Right Ahead	U	E		1	10	-	141	1945:1945	97+238	42.1 : 42.1%	-	-	-	1.8	45.5	2.7
2/3	Stoneham Lane Right	U	E		1	10	-	48	1945	238	20.2%	-	-	-	0.6	45.0	1.2
3/1	A335 Stoneham Way (South) Ahead Left	U	D		1	55	-	519	1945	1210	42.9%	-	-	-	1.6	11.4	7.0
3/2	A335 Stoneham Way (South) Ahead	U	D		1	55	-	518	1945	1210	42.8%	-	-	-	1.6	11.4	7.0
7/1	Parkville Road Right Ahead Left	U	C		1	10	-	3	1885	230	1.3%	-	-	-	0.0	43.0	0.1

C1 PRC for Signalled Lanes (%): 107.7 Total Delay for Signalled Lanes (pcuHr): 8.69 Cycle Time (s): 90
PRC Over All Lanes (%): 107.7 Total Delay Over All Lanes(pcuHr): 8.69

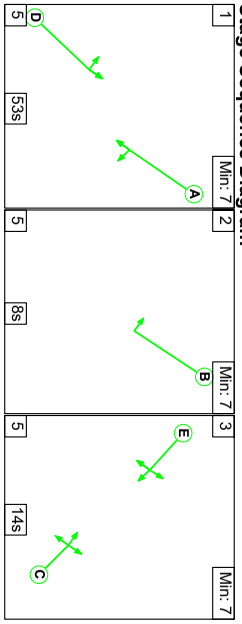
Scenario 4: 'DS1PM+DEV' (FG4: 'DS1PM+DEV', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	D	Tot.
A	0	1	509	64	574
B	1	0	1	1	3
C	794	0	0	10	804
D	111	1	58	0	170
Tot.	906	2	568	75	1551

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: 10440	-	-	-		-	-	-	-	-	-	**34.4%**	**0**	**0**	**0**	**6.9**	-	-
Stoneham Way- A335 South Junction	-	-	-		-	-	-	-	-	-	**34.4%**	**0**	**0**	**0**	**6.9**	-	-
1/1	Stoneham Way (North) Ahead Left	U	A		1	53	-	252	1925	1155	21.8%	-	-	-	0.7	10.3	3.0
1/2	Stoneham Way (North) Ahead	U	A		1	53	-	258	1945	1167	22.1%	-	-	-	0.7	10.3	3.1
1/3	Stoneham Way (North) Right	U	B		1	8	-	64	1945	195	32.9%	-	-	-	0.9	51.5	1.7
2/2+2/1	Stoneham Lane Left Right Ahead	U	E		1	14	-	112	1945:1945	3+324	34.2 : 34.2%	-	-	-	1.3	41.5	2.7
2/3	Stoneham Lane Right	U	E		1	14	-	58	1945	324	17.9%	-	-	-	0.6	39.0	1.3
3/1	A335 Stoneham Way (South) Ahead Left	U	D		1	53	-	402	1945	1167	34.4%	-	-	-	1.3	11.4	5.3
3/2	A335 Stoneham Way (South) Ahead	U	D		1	53	-	402	1945	1167	34.4%	-	-	-	1.3	11.4	5.3
7/1	Parkville Road Right Ahead Left	U	C		1	14	-	3	1885	314	1.0%	-	-	-	0.0	37.5	0.1

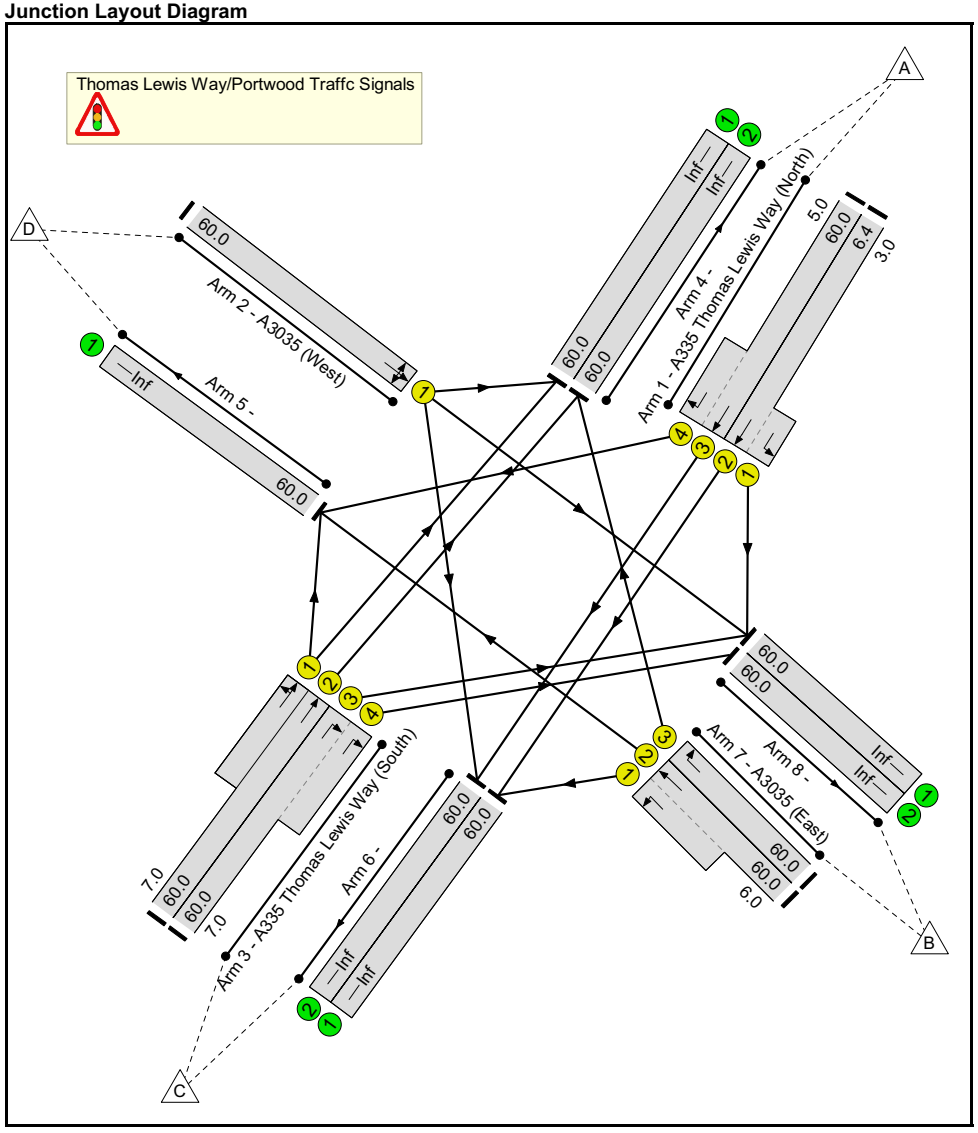
C1 PRC for Signalled Lanes (%): 161.3 Total Delay for Signalled Lanes (pcuHr): 6.88 Cycle Time (s): 90
PRC Over All Lanes (%): 161.3 Total Delay Over All Lanes(pcuHr): 6.88

Linsig Report

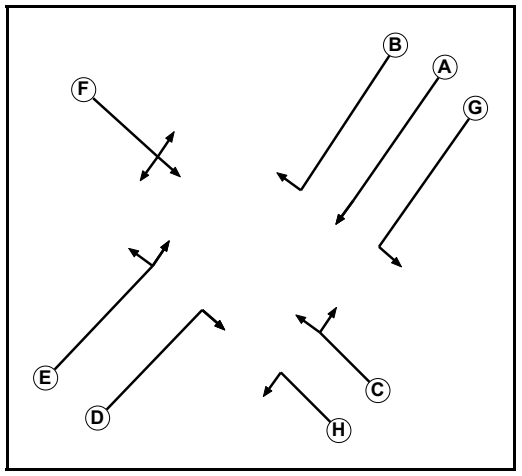
User and Project Details

Project:	**Land at Eastleigh**
Title:	**10440**
Location:	A335 /A3035 Traffic Signals
File name:	j8 A335-A3035 Traffic Signals.lsg3x
Author:	Matthew Moss
Company:	Brookbanks Consulting

Junction Layout Diagram



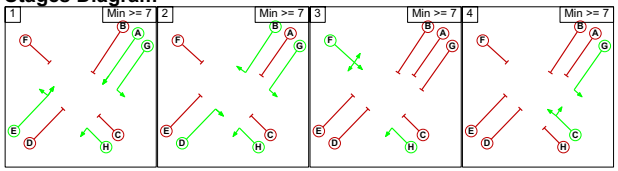
Phase Diagram



Phase Intergreens Matrix

		Starting Phase							
		A	B	C	D	E	F	G	H
Terminating Phase	A		5	5	5	-	5	-	-
	B	5		5	-	5	5	-	-
	C	5	5		5	5	5	-	5
	D	5	-	5		5	5	-	-
	E	-	5	5	5		5	-	-
	F	5	5	5	5	5		5	-
	G	-	-	-	-	-	5		-
	H	-	-	5	-	-	-	-	

Stages Diagram



Lane Input Data

Junction: Thomas Lewis Way/Portwood Traffc Signals

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 (A335 Thomas Lewis Way (North))	U	G	2	3	3.0	Geom	-	5.00	0.00	Y	Arm 8 Left	Inf
1/2 (A335 Thomas Lewis Way (North))	U	A	2	3	6.4	Geom	-	3.10	0.00	Y	Arm 6 Ahead	Inf
1/3 (A335 Thomas Lewis Way (North))	U	A	2	3	60.0	Geom	-	3.10	0.00	Y	Arm 6 Ahead	Inf
1/4 (A335 Thomas Lewis Way (North))	U	B	2	3	5.0	Geom	-	4.30	0.00	Y	Arm 5 Right	Inf
2/1 (A3035 (West))	U	F	2	3	60.0	Geom	-	4.90	0.00	Y	Arm 4 Left	Inf
											Arm 6 Right	Inf
											Arm 8 Ahead	Inf
3/1 (A335 Thomas Lewis Way (South))	U	E	2	3	7.0	Geom	-	3.00	0.00	Y	Arm 4 Ahead	Inf
											Arm 5 Left	Inf
3/2 (A335 Thomas Lewis Way (South))	U	E	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 4 Ahead	Inf
3/3 (A335 Thomas Lewis Way (South))	U	D	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 8 Right	Inf
3/4 (A335 Thomas Lewis Way (South))	U	D	2	3	7.0	Geom	-	3.00	0.00	Y	Arm 8 Right	Inf
7/1 (A3035 (East))	U	H	2	3	6.0	Geom	-	4.20	0.00	Y	Arm 6 Left	Inf
7/2 (A3035 (East))	U	C	2	3	60.0	Geom	-	3.20	0.00	Y	Arm 5 Ahead	Inf
7/3 (A3035 (East))	U	C	2	3	60.0	Geom	-	3.20	0.00	Y	Arm 4 Right	Inf

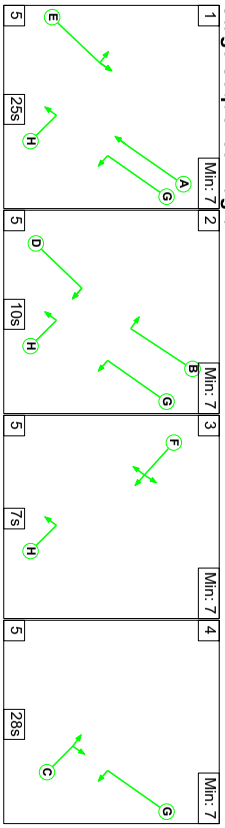
Scenario 1: 'DS1AM' (FG1: 'DS1AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	D	Tot.
A	0	0	706	25	731
B	54	0	749	297	1100
C	516	340	0	0	856
D	56	71	0	0	127
Tot.	626	411	1455	322	2814

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: 10440	-	-	-		-	-	-	-	-	-	**88.6%**	**0**	**0**	**0**	**28.6**	-	-
Thomas Lewis Way/Portwood Traffc Signals	-	-	-		-	-	-	-	-	-	**88.6%**	**0**	**0**	**0**	**28.6**	-	-
1/2+1/1	A335 Thomas Lewis Way (North) Ahead Left	U	A G		1	25:73	-	349	1925:2115	548+0	63.7 : 0.0%	-	-	-	3.6	37.0	8.4
1/3+1/4	A335 Thomas Lewis Way (North) Right Ahead	U	A B		1	25:10	-	382	1925:2045	541+38	66.0 : 66.0%	-	-	-	4.0	37.5	8.9
2/1	A3035 (West) Left Right Ahead	U	F		1	7	-	127	2105	187	67.9%	-	-	-	2.4	68.7	4.1
3/2+3/1	A335 Thomas Lewis Way (South) Ahead Left	U	E		1	25	-	516	1915:1915	418+418	61.7 : 61.7%	-	-	-	4.6	31.9	6.0
3/3+3/4	A335 Thomas Lewis Way (South) Right	U	D		1	10	-	340	1915:1915	234+234	72.6 : 72.6%	-	-	-	4.9	51.8	5.4
7/2+7/1	A3035 (East) Ahead Left	U	C H		1	28:52	-	1046	1935:2035	335+845	88.6 : 88.6%	-	-	-	8.7	30.1	21.1
7/3	A3035 (East) Right	U	C		1	28	-	54	1935	623	8.7%	-	-	-	0.4	24.5	1.0

C1 PRC for Signalled Lanes (%): 1.6 Total Delay for Signalled Lanes (pcuHr): 28.56 Cycle Time (s): 90
PRC Over All Lanes (%): 1.6 Total Delay Over All Lanes(pcuHr): 28.56

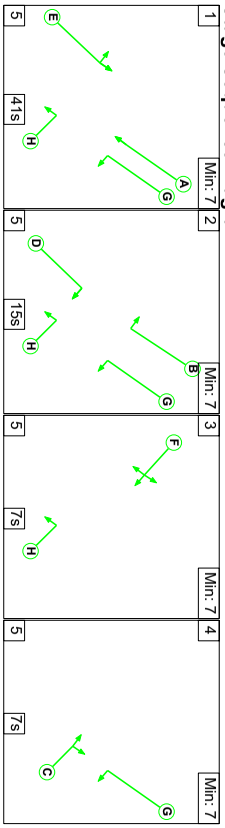
Scenario 2: 'DS1PM' (FG2: 'DS1PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	D	Tot.
A	0	35	496	105	636
B	52	0	401	131	584
C	885	503	0	86	1474
D	18	18	0	0	36
Tot.	955	556	897	322	2730

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: 10440	-	-	-		-	-	-	-	-	-	**82.5%**	**0**	**0**	**0**	**22.8**	-	-
Thomas Lewis Way/Portwood Traffc Signals	-	-	-		-	-	-	-	-	-	**82.5%**	**0**	**0**	**0**	**22.8**	-	-
1/2+1/1	A335 Thomas Lewis Way (North) Ahead Left	U	A G		1	41:73	-	531	1925:2115	844+60	58.8 : 58.8%	-	-	-	3.2	21.8	10.2
1/3+1/4	A335 Thomas Lewis Way (North) Right Ahead	U	A B		1	41:15	-	105	1925:2045	0+359	0.0 : 29.2%	-	-	-	1.1	39.1	2.5
2/1	A3035 (West) Left Right Ahead	U	F		1	7	-	36	2105	187	19.2%	-	-	-	0.5	50.0	0.9
3/2+3/1	A335 Thomas Lewis Way (South) Ahead Left	U	E		1	41	-	971	1915:1915	588+589	82.5 : 82.5%	-	-	-	7.0	26.0	14.2
3/3+3/4	A335 Thomas Lewis Way (South) Right	U	D		1	15	-	503	1915:1915	311+312	80.8 : 80.8%	-	-	-	6.9	49.6	8.0
7/2+7/1	A3035 (East) Ahead Left	U	C H		1	7:73	-	532	1935:2035	172+527	76.2 : 76.2%	-	-	-	3.2	21.8	4.7
7/3	A3035 (East) Right	U	C		1	7	-	52	1935	172	30.2%	-	-	-	0.8	53.4	1.4

C1 PRC for Signalled Lanes (%): 9.0 Total Delay for Signalled Lanes (pcuHr): 22.80 Cycle Time (s): 90
PRC Over All Lanes (%): 9.0 Total Delay Over All Lanes(pcuHr): 22.80

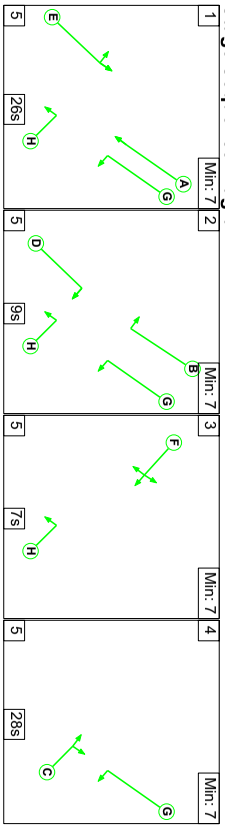
Scenario 3: 'DS1AM+DEV' (FG3: 'DS1AM+DEV', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	D	Tot.
A	0	54	559	61	674
B	0	0	340	71	411
C	821	749	0	0	1570
D	32	297	0	0	329
Tot.	853	1100	899	132	2984

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: 10440	-	-	-		-	-	-	-	-	-	**88.6%**	**0**	**0**	**0**	**31.6**	-	-
Thomas Lewis Way/Portwood Traffc Signals	-	-	-		-	-	-	-	-	-	**88.6%**	**0**	**0**	**0**	**31.6**	-	-
1/2+1/1	A335 Thomas Lewis Way (North) Ahead Left	U	A G		1	26:73	-	405	1925:2115	569+0	71.2 : 0.0%	-	-	-	4.4	39.0	10.2
1/3+1/4	A335 Thomas Lewis Way (North) Right Ahead	U	A B		1	26:9	-	448	1925:2045	559+43	74.4 : 74.4%	-	-	-	5.0	40.2	11.0
2/1	A3035 (West) Left Right Ahead	U	F		1	7	-	132	2105	187	70.5%	-	-	-	2.6	71.2	4.3
3/2+3/1	A335 Thomas Lewis Way (South) Ahead Left	U	E		1	26	-	559	1915:1915	429+428	65.2 : 65.2%	-	-	-	4.9	31.8	6.6
3/3+3/4	A335 Thomas Lewis Way (South) Right	U	D		1	9	-	340	1915:1915	213+213	79.9 : 79.9%	-	-	-	5.6	59.2	6.0
7/2+7/1	A3035 (East) Ahead Left	U	C H		1	28:52	-	1046	1935:2035	335+845	88.6 : 88.6%	-	-	-	8.7	30.1	21.1
7/3	A3035 (East) Right	U	C		1	28	-	54	1935	623	8.7%	-	-	-	0.4	24.5	1.0

C1 PRC for Signalled Lanes (%): 1.6 Total Delay for Signalled Lanes (pcuHr): 31.64 Cycle Time (s): 90
PRC Over All Lanes (%): 1.6 Total Delay Over All Lanes(pcuHr): 31.64

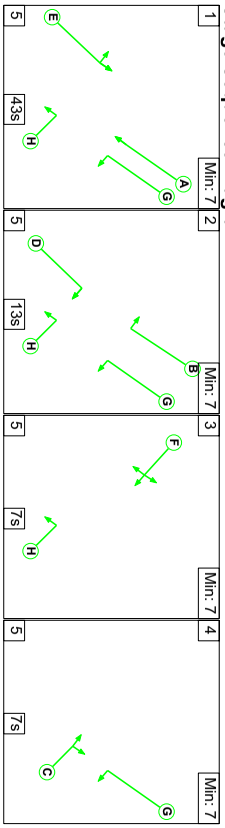
Scenario 4: 'DS1PM+DEV' (FG4: 'DS1PM+DEV', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	D	Tot.
A	0	35	564	110	709
B	52	0	401	131	584
C	995	503	0	86	1584
D	24	18	0	0	42
Tot.	1071	556	965	327	2919

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: 10440	-	-	-		-	-	-	-	-	-	**88.7%**	**0**	**0**	**0**	**26.5**	-	-
Thomas Lewis Way/Portwood Traffc Signals	-	-	-		-	-	-	-	-	-	**88.7%**	**0**	**0**	**0**	**26.5**	-	-
1/2+1/1	A335 Thomas Lewis Way (North) Ahead Left	U	A G		1	43:73	-	599	1925:2115	889+55	63.4 : 63.4%	-	-	-	3.6	21.7	11.7
1/3+1/4	A335 Thomas Lewis Way (North) Right Ahead	U	A B		1	43:13	-	110	1925:2045	0+314	0.0 : 35.1%	-	-	-	1.3	42.8	2.7
2/1	A3035 (West) Left Right Ahead	U	F		1	7	-	42	2105	187	22.4%	-	-	-	0.6	50.6	1.1
3/2+3/1	A335 Thomas Lewis Way (South) Ahead Left	U	E		1	43	-	1081	1915:1915	609+610	88.7 : 88.7%	-	-	-	8.9	29.5	19.2
3/3+3/4	A335 Thomas Lewis Way (South) Right	U	D		1	13	-	503	1915:1915	290+291	86.7 : 86.7%	-	-	-	8.2	58.6	9.1
7/2+7/1	A3035 (East) Ahead Left	U	C H		1	7:73	-	532	1935:2035	172+527	76.2 : 76.2%	-	-	-	3.2	21.8	4.7
7/3	A3035 (East) Right	U	C		1	7	-	52	1935	172	30.2%	-	-	-	0.8	53.4	1.4

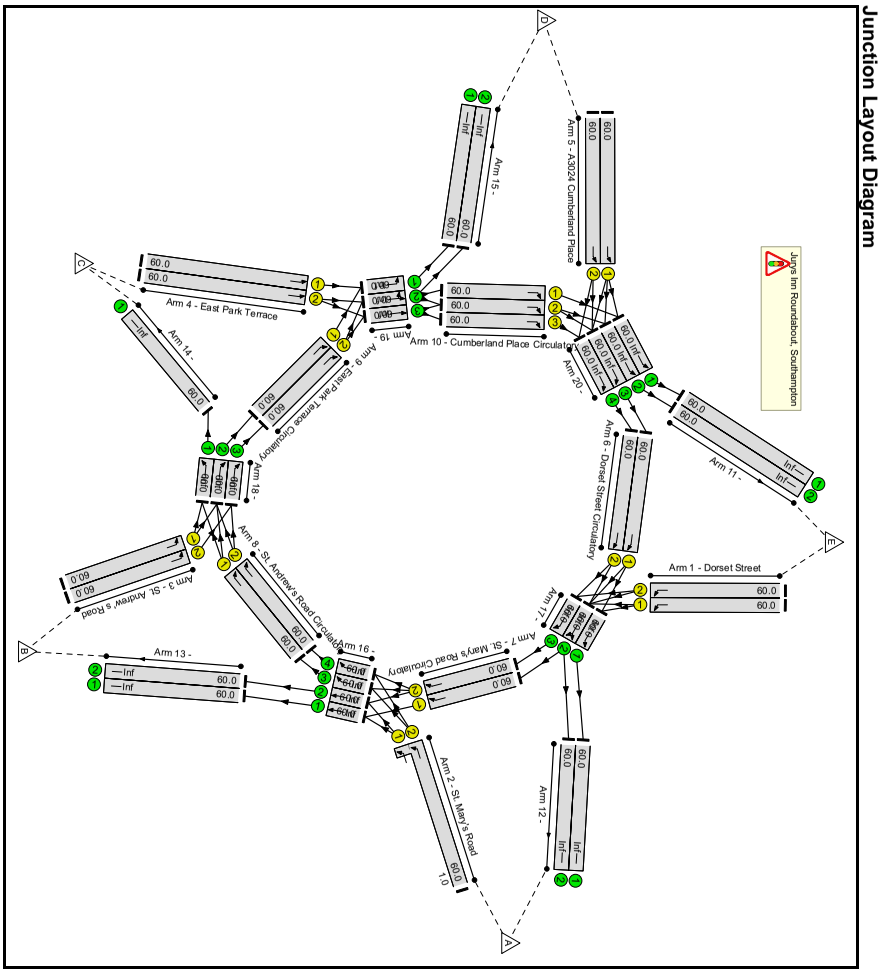
C1 PRC for Signalled Lanes (%): 1.5 Total Delay for Signalled Lanes (pcuHr): 26.55 Cycle Time (s): 90
PRC Over All Lanes (%): 1.5 Total Delay Over All Lanes(pcuHr): 26.55

Linsig Report

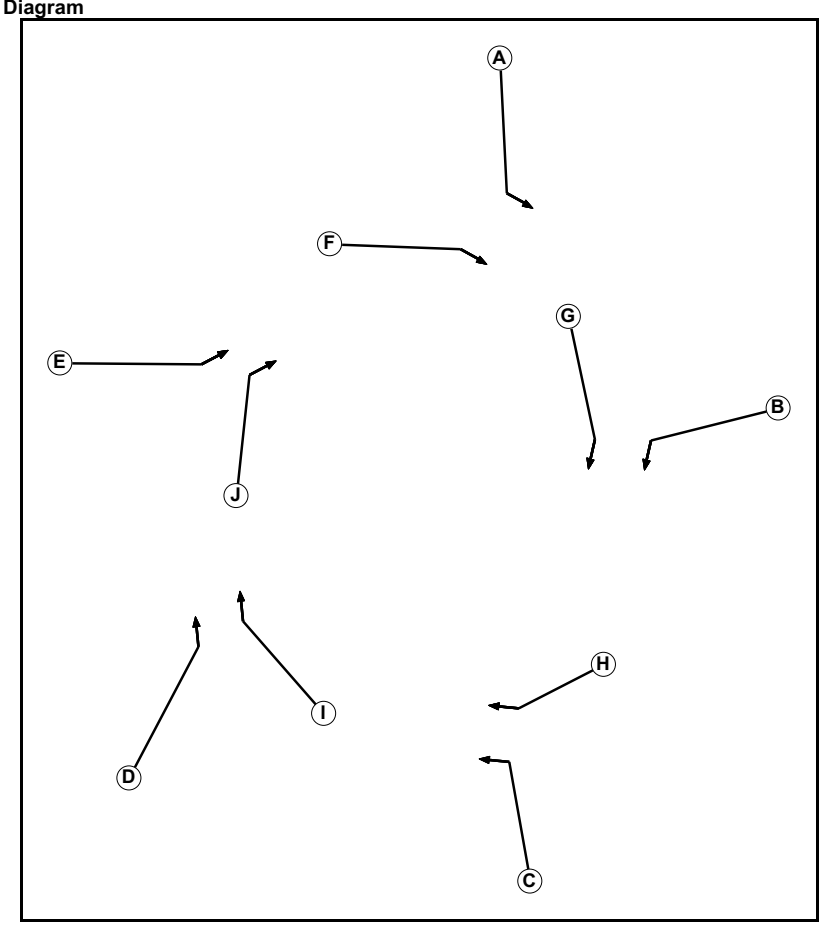
User and Project Details

Project:	**Land at Eastleigh**
Title:	**j9 Jurys Inn Roundabout**
Location:	Southampton
File name:	j9 A335-Traffic Signals Rbt.lsg3x
Author:	Matthew Moss
Company:	Brookbanks Consulting

Junction Layout Diagram



Phase Diagram



Linsig Report
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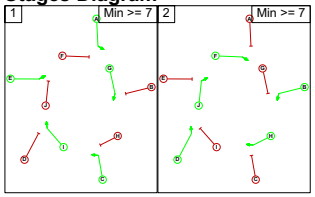
Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J
A		5	-	5	-	5	-	5	-	5
B	5		5	-	5	-	5	-	5	-
C	-	5		5	-	5	-	5	-	5
D	5	-	5		5	-	5	-	5	-
E	-	5	-	5		5	-	5	-	5
F	5	-	5	-	5		5	-	5	-
G	-	5	-	5	-	5		5	-	5
H	5	-	5	-	5	-	5		5	-
I	-	5	-	5	-	5	-	5		5
J	5	-	5	-	5	-	5	-	5	

Stages Diagram



Lane Input Data

Junction: Jurys Inn Roundabout, Southampton

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 (Dorset Street)	U	A	2	3	60.0	Geom	-	4.20	0.00	Y	Arm 17 Left	Inf
1/2 (Dorset Street)	U	A	2	3	60.0	Geom	-	4.20	0.00	Y	Arm 17 Left	Inf
2/1 (St. Mary's Road)	U	B	2	3	1.0	Geom	-	3.50	0.00	Y	Arm 16 Left	Inf
2/2 (St. Mary's Road)	U	B	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 16 Left	Inf
3/1 (St. Andrew' s Road)	U	C	2	3	60.0	Geom	-	3.70	0.00	Y	Arm 18 Left	Inf
3/2 (St. Andrew' s Road)	U	C	2	3	60.0	Geom	-	3.70	0.00	Y	Arm 18 Left	Inf
4/1 (East Park Terrace)	U	D	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 19 Ahead	Inf
4/2 (East Park Terrace)	U	D	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 19 Ahead	Inf
5/1 (A3024 Cumberland Place)	U	E	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 20 Ahead	Inf
5/2 (A3024 Cumberland Place)	U	E	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 20 Ahead	Inf
6/1 (Dorset Street Circulatory)	U	F	2	3	60.0	Geom	-	5.00	0.00	Y	Arm 17 Ahead	Inf
6/2 (Dorset Street Circulatory)	U	F	2	3	60.0	Geom	-	5.00	0.00	Y	Arm 17 Ahead	Inf
7/1 (St. Mary's Road Circulatory)	U	G	2	3	60.0	Geom	-	5.00	0.00	Y	Arm 16 Ahead	Inf
7/2 (St. Mary's Road Circulatory)	U	G	2	3	60.0	Geom	-	5.00	0.00	N	Arm 16 Ahead	Inf

Linsig Report
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8/1 (St. Andrew's Road Circulatory)	U	H	2	3	60.0	Geom	-	4.25	0.00	Y	Arm 18 Ahead	Inf
8/2 (St. Andrew's Road Circulatory)	U	H	2	3	60.0	Geom	-	4.50	0.00	Y	Arm 18 Ahead	Inf
9/1 (East Park Terrace Circulatory)	U	I	2	3	60.0	Geom	-	4.50	0.00	Y	Arm 19 Ahead	Inf
9/2 (East Park Terrace Circulatory)	U	I	2	3	60.0	Geom	-	4.50	0.00	Y	Arm 19 Ahead	Inf
10/1 (Cumberland Place Circulatory)	U	J	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 20 Right	Inf
10/2 (Cumberland Place Circulatory)	U	J	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 20 Right	Inf
10/3 (Cumberland Place Circulatory)	U	J	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 20 Right	Inf

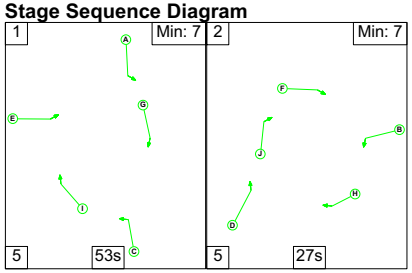
Scenario 1: 'DS1AM' (FG1: 'DS1AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	1	275	57	333
	B	0	0	0	939	462	1401
	C	2	0	0	94	309	405
	D	273	489	11	0	144	917
	E	132	561	387	323	0	1403
	Tot.	407	1050	399	1631	972	4459

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: j9 Jurys Inn Roundabout	-	-	-		-	-	-	-	-	-	**83.6%**	**0**	**0**	**0**	**67.0**	-	-
Jurys Inn Roundabout, Southampton	-	-	-		-	-	-	-	-	-	**83.6%**	**0**	**0**	**0**	**67.0**	-	-
1/1	Dorset Street Left	U	A		1	53	-	641	2035	1221	52.5%	-	-	-	2.4	13.6	9.8
1/2	Dorset Street Left	U	A		1	53	-	762	2035	1221	62.4%	-	-	-	3.3	15.4	12.9
2/2+2/1	St. Mary's Road Left	U	B		1	27	-	333	1965:1965	608+0	54.8 : 0.0%	-	-	-	3.0	32.4	7.4
3/1	St. Andrew' s Road Left	U	C		1	53	-	694	1985	1191	58.3%	-	-	-	2.8	14.7	11.3
3/2	St. Andrew' s Road Left	U	C		1	53	-	707	1985	1191	59.4%	-	-	-	2.9	14.9	11.5
4/1	East Park Terrace Ahead	U	D		1	27	-	94	1940	604	15.6%	-	-	-	0.7	26.0	1.8
4/2	East Park Terrace Ahead	U	D		1	27	-	311	1945	605	51.4%	-	-	-	2.7	31.5	6.8
5/1	A3024 Cumberland Place Ahead	U	E		1	53	-	453	1965	1179	38.4%	-	-	-	1.5	11.8	6.1
5/2	A3024 Cumberland Place Ahead	U	E		1	53	-	464	1965	1179	39.4%	-	-	-	1.5	11.9	6.4
6/1	Dorset Street Circulatory Ahead	U	F		1	27	-	382	2115	658	58.1%	-	-	-	4.6	43.4	10.2
6/2	Dorset Street Circulatory Ahead	U	F		1	27	-	393	2115	658	59.7%	-	-	-	4.8	43.8	10.5

7/1	St. Mary's Road Circulatory Ahead	U	G		1	53	-	806	2115	1269	63.5%	-	-	-	3.4	15.2	16.8
7/2	St. Mary's Road Circulatory Ahead	U	G		1	53	-	965	2255	1353	71.3%	-	-	-	3.3	12.2	14.4
8/1	St. Andrew's Road Circulatory Ahead	U	H		1	27	-	517	2040	635	81.5%	-	-	-	6.6	45.8	14.8
8/2	St. Andrew's Road Circulatory Ahead	U	H		1	27	-	537	2065	642	83.6%	-	-	-	5.2	35.0	13.9
9/1	East Park Terrace Circulatory Ahead	U	I		1	53	-	1028	2065	1239	83.0%	-	-	-	5.8	20.5	25.4
9/2	East Park Terrace Circulatory Ahead	U	I		1	53	-	1028	2065	1239	83.0%	-	-	-	5.8	20.2	25.3
10/1	Cumberland Place Circulatory Right	U	J		1	27	-	403	1965	611	65.9%	-	-	-	3.5	31.5	9.7
10/2	Cumberland Place Circulatory Right	U	J		1	27	-	425	1980	616	69.0%	-	-	-	3.1	26.5	7.9
10/3	Cumberland Place Circulatory Right	U	J		1	27	-	2	1965	611	0.3%	-	-	-	0.0	10.1	0.0

C1 PRC for Signalled Lanes (%): 7.7 Total Delay for Signalled Lanes (pcuHr): 67.00 Cycle Time (s): 90
PRC Over All Lanes (%): 7.7 Total Delay Over All Lanes(pcuHr): 67.00

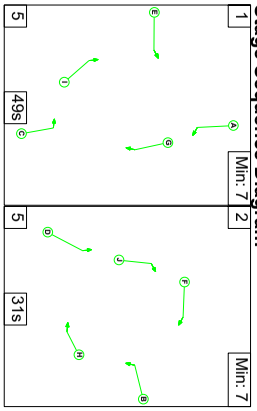
Scenario 2: 'DS1PM' (FG2: 'DS1PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	D	E	Tot.
A	0	0	0	450	52	502
B	15	0	0	514	543	1072
C	29	0	0	38	346	413
D	309	733	14	0	149	1205
E	266	465	196	129	0	1056
Tot.	619	1198	210	1131	1090	4248

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: j9 Jurys Inn Roundabout	-	-	-		-	-	-	-	-	-	**75.9%**	**0**	**0**	**0**	**65.3**	-	-
Jurys Inn Roundabout, Southampton	-	-	-		-	-	-	-	-	-	**75.9%**	**0**	**0**	**0**	**65.3**	-	-
1/1	Dorset Street Left	U	A		1	49	-	524	2035	1131	46.3%	-	-	-	2.2	14.9	8.1
1/2	Dorset Street Left	U	A		1	49	-	532	2035	1131	47.1%	-	-	-	2.2	15.0	8.4
2/2+2/1	St. Mary's Road Left	U	B		1	31	-	502	1965:1965	695+0	72.2 : 0.0%	-	-	-	4.8	34.4	12.2
3/1	St. Andrew' s Road Left	U	C		1	49	-	467	1985	1103	42.3%	-	-	-	1.9	14.5	7.1
3/2	St. Andrew' s Road Left	U	C		1	49	-	605	1985	1103	54.9%	-	-	-	2.8	16.4	10.2
4/1	East Park Terrace Ahead	U	D		1	31	-	38	1940	690	5.5%	-	-	-	0.2	21.9	0.7
4/2	East Park Terrace Ahead	U	D		1	31	-	375	1945	692	54.2%	-	-	-	3.0	28.8	8.0
5/1	A3024 Cumberland Place Ahead	U	E		1	49	-	603	1965	1092	55.2%	-	-	-	2.8	16.5	10.2
5/2	A3024 Cumberland Place Ahead	U	E		1	49	-	602	1965	1092	55.1%	-	-	-	2.8	16.5	10.1
6/1	Dorset Street Circulatory Ahead	U	F		1	31	-	546	2115	752	72.6%	-	-	-	6.9	45.6	15.0
6/2	Dorset Street Circulatory Ahead	U	F		1	31	-	554	2115	752	73.7%	-	-	-	6.7	43.8	14.9

Linsig Report
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7/1	St. Mary's Road Circulatory Ahead	U	G		1	49	-	717	2115	1175	61.0%	-	-	-	4.0	19.9	16.4
7/2	St. Mary's Road Circulatory Ahead	U	G		1	49	-	820	2255	1253	65.5%	-	-	-	4.1	18.2	18.5
8/1	St. Andrew's Road Circulatory Ahead	U	H		1	31	-	396	2040	725	54.6%	-	-	-	2.7	24.5	7.4
8/2	St. Andrew's Road Circulatory Ahead	U	H		1	31	-	445	2065	734	60.6%	-	-	-	2.1	17.3	4.4
9/1	East Park Terrace Circulatory Ahead	U	I		1	49	-	832	2065	1147	72.5%	-	-	-	4.6	19.9	19.8
9/2	East Park Terrace Circulatory Ahead	U	I		1	49	-	871	2065	1147	75.9%	-	-	-	4.0	16.6	20.2
10/1	Cumberland Place Circulatory Right	U	J		1	31	-	466	1965	699	66.7%	-	-	-	3.6	28.1	10.5
10/2	Cumberland Place Circulatory Right	U	J		1	31	-	475	1980	704	67.5%	-	-	-	3.7	27.8	10.6
10/3	Cumberland Place Circulatory Right	U	J		1	31	-	44	1965	699	6.3%	-	-	-	0.2	13.6	0.5

C1 PRC for Signalled Lanes (%): 18.5 Total Delay for Signalled Lanes (pcuHr): 65.29 Cycle Time (s): 90
PRC Over All Lanes (%): 18.5 Total Delay Over All Lanes(pcuHr): 65.29

Linsig Report
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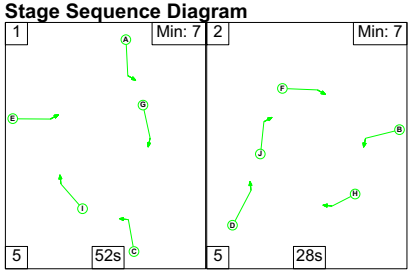
Scenario 3: 'DS1AM+DEV' (FG3: 'DS1AM+DEV', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	0	1	275	57	333
	B	0	0	0	939	469	1408
	C	2	0	0	94	316	412
	D	273	489	11	0	168	941
	E	132	579	405	389	0	1505
	Tot.	407	1068	417	1697	1010	4599

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: j9 Jurys Inn Roundabout	-	-	-		-	-	-	-	-	-	**88.2%**	**0**	**0**	**0**	**74.1**	-	-
Jurys Inn Roundabout, Southampton	-	-	-		-	-	-	-	-	-	**88.2%**	**0**	**0**	**0**	**74.1**	-	-
1/1	Dorset Street Left	U	A		1	52	-	706	2035	1198	58.9%	-	-	-	3.0	15.3	11.7
1/2	Dorset Street Left	U	A		1	52	-	799	2035	1198	66.7%	-	-	-	3.8	17.0	14.3
2/2+2/1	St. Mary's Road Left	U	B		1	28	-	333	1965:1965	629+0	52.9 : 0.0%	-	-	-	2.9	31.1	7.3
3/1	St. Andrew' s Road Left	U	C		1	52	-	654	1985	1169	55.9%	-	-	-	2.7	14.8	10.6
3/2	St. Andrew' s Road Left	U	C		1	52	-	754	1985	1169	64.5%	-	-	-	3.5	16.6	13.3
4/1	East Park Terrace Ahead	U	D		1	28	-	94	1940	625	15.0%	-	-	-	0.7	25.1	1.8
4/2	East Park Terrace Ahead	U	D		1	28	-	318	1945	627	50.7%	-	-	-	2.7	30.5	6.9
5/1	A3024 Cumberland Place Ahead	U	E		1	52	-	468	1965	1157	40.4%	-	-	-	1.6	12.6	6.6
5/2	A3024 Cumberland Place Ahead	U	E		1	52	-	473	1965	1157	40.9%	-	-	-	1.7	12.6	6.7
6/1	Dorset Street Circulatory Ahead	U	F		1	28	-	379	2115	682	55.6%	-	-	-	4.4	42.2	10.1
6/2	Dorset Street Circulatory Ahead	U	F		1	28	-	396	2115	682	58.1%	-	-	-	4.7	42.8	10.6

7/1	St. Mary's Road Circulatory Ahead	U	G		1	52	-	865	2115	1245	69.5%	-	-	-	3.9	16.2	18.4
7/2	St. Mary's Road Circulatory Ahead	U	G		1	52	-	1008	2255	1328	75.9%	-	-	-	3.8	13.5	16.6
8/1	St. Andrew's Road Circulatory Ahead	U	H		1	28	-	558	2040	657	84.9%	-	-	-	7.4	48.0	16.5
8/2	St. Andrew's Road Circulatory Ahead	U	H		1	28	-	580	2065	665	87.2%	-	-	-	6.4	39.5	17.0
9/1	East Park Terrace Circulatory Ahead	U	I		1	52	-	1056	2065	1216	86.8%	-	-	-	7.5	25.6	27.6
9/2	East Park Terrace Circulatory Ahead	U	I		1	52	-	1073	2065	1216	88.2%	-	-	-	7.1	24.0	28.3
10/1	Cumberland Place Circulatory Right	U	J		1	28	-	409	1965	633	64.6%	-	-	-	3.3	29.5	9.7
10/2	Cumberland Place Circulatory Right	U	J		1	28	-	433	1980	638	67.9%	-	-	-	3.0	25.2	8.3
10/3	Cumberland Place Circulatory Right	U	J		1	28	-	2	1965	633	0.3%	-	-	-	0.0	9.7	0.0

C1

PRC for Signalled Lanes (%): 2.0 Total Delay for Signalled Lanes (pcuHr): 74.13 Cycle Time (s): 90
PRC Over All Lanes (%): 2.0 Total Delay Over All Lanes(pcuHr): 74.13

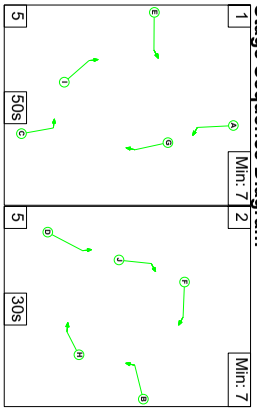
Scenario 4: 'DS1PM+DEV' (FG4: 'DS1PM+DEV', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	D	E	Tot.
A	0	0	0	450	52	502
B	33	0	0	514	543	1090
C	47	0	0	38	346	431
D	309	733	14	0	213	1269
E	266	476	207	168	0	1117
Tot.	655	1209	221	1170	1154	4409

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: j9 Jurys Inn Roundabout	-	-	-		-	-	-	-	-	-	**78.5%**	**0**	**0**	**0**	**69.3**	-	-
Jurys Inn Roundabout, Southampton	-	-	-		-	-	-	-	-	-	**78.5%**	**0**	**0**	**0**	**69.3**	-	-
1/1	Dorset Street Left	U	A		1	50	-	539	2035	1153	46.7%	-	-	-	2.2	14.4	8.4
1/2	Dorset Street Left	U	A		1	50	-	578	2035	1153	50.1%	-	-	-	2.4	14.9	9.2
2/2+2/1	St. Mary's Road Left	U	B		1	30	-	502	1965:1965	673+0	74.6 : 0.0%	-	-	-	5.1	36.5	12.5
3/1	St. Andrew' s Road Left	U	C		1	50	-	445	1985	1125	39.6%	-	-	-	1.7	13.5	6.5
3/2	St. Andrew' s Road Left	U	C		1	50	-	645	1985	1125	57.3%	-	-	-	2.9	16.3	10.9
4/1	East Park Terrace Ahead	U	D		1	30	-	38	1940	668	5.7%	-	-	-	0.2	22.6	0.7
4/2	East Park Terrace Ahead	U	D		1	30	-	393	1945	670	58.7%	-	-	-	3.4	30.7	8.7
5/1	A3024 Cumberland Place Ahead	U	E		1	50	-	636	1965	1113	57.1%	-	-	-	2.9	16.3	10.7
5/2	A3024 Cumberland Place Ahead	U	E		1	50	-	633	1965	1113	56.8%	-	-	-	2.8	16.2	10.7
6/1	Dorset Street Circulatory Ahead	U	F		1	30	-	564	2115	728	77.4%	-	-	-	7.6	48.4	15.8
6/2	Dorset Street Circulatory Ahead	U	F		1	30	-	572	2115	728	78.5%	-	-	-	7.2	45.4	15.6

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7/1	St. Mary's Road Circulatory Ahead	U	G		1	50	-	741	2115	1199	61.8%	-	-	-	4.0	19.3	16.9
7/2	St. Mary's Road Circulatory Ahead	U	G		1	50	-	857	2255	1278	67.1%	-	-	-	4.1	17.3	19.2
8/1	St. Andrew's Road Circulatory Ahead	U	H		1	30	-	431	2040	703	61.3%	-	-	-	3.3	27.2	8.7
8/2	St. Andrew's Road Circulatory Ahead	U	H		1	30	-	460	2065	711	64.7%	-	-	-	2.5	19.9	5.2
9/1	East Park Terrace Circulatory Ahead	U	I		1	50	-	845	2065	1170	72.2%	-	-	-	4.8	20.6	20.1
9/2	East Park Terrace Circulatory Ahead	U	I		1	50	-	915	2065	1170	78.2%	-	-	-	4.4	17.2	21.5
10/1	Cumberland Place Circulatory Right	U	J		1	30	-	470	1965	677	69.4%	-	-	-	3.8	29.2	10.6
10/2	Cumberland Place Circulatory Right	U	J		1	30	-	471	1980	682	69.1%	-	-	-	3.8	28.7	10.6
10/3	Cumberland Place Circulatory Right	U	J		1	30	-	80	1965	677	11.8%	-	-	-	0.3	15.2	1.0

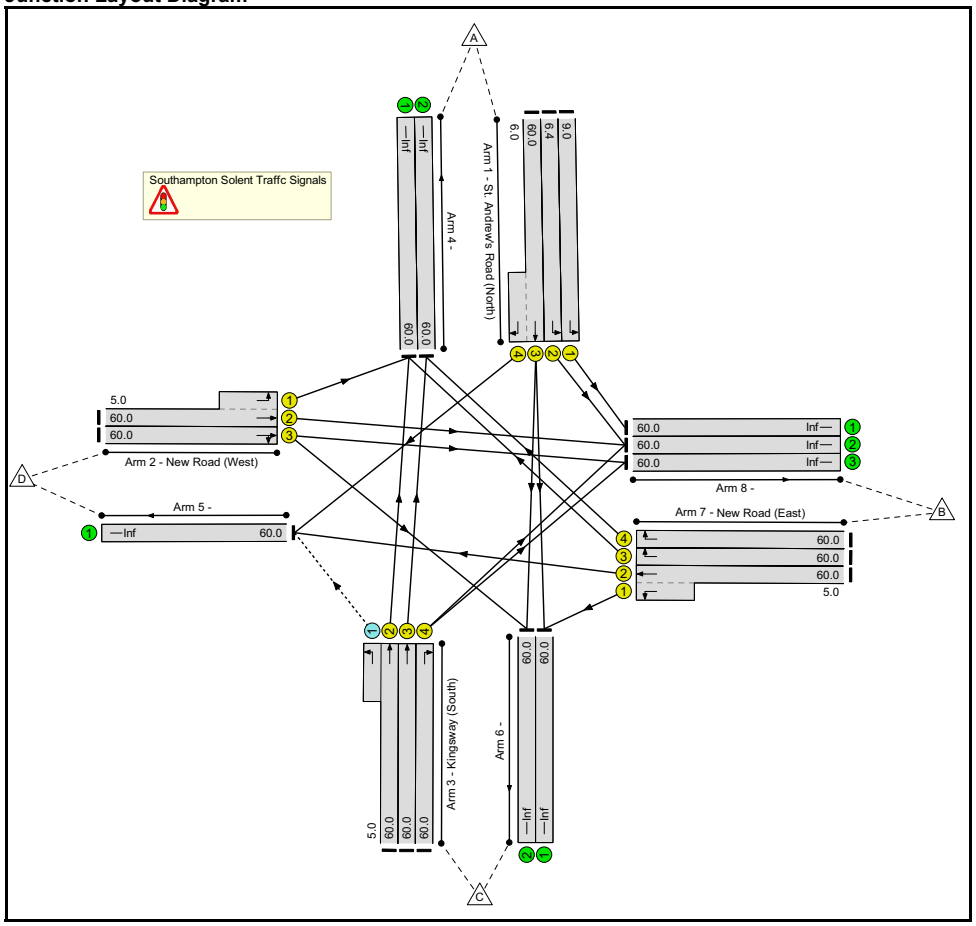
C1 PRC for Signalled Lanes (%): 14.6 Total Delay for Signalled Lanes (pcuHr): 69.32 Cycle Time (s): 90
PRC Over All Lanes (%): 14.6 Total Delay Over All Lanes(pcuHr): 69.32

Linsig Report

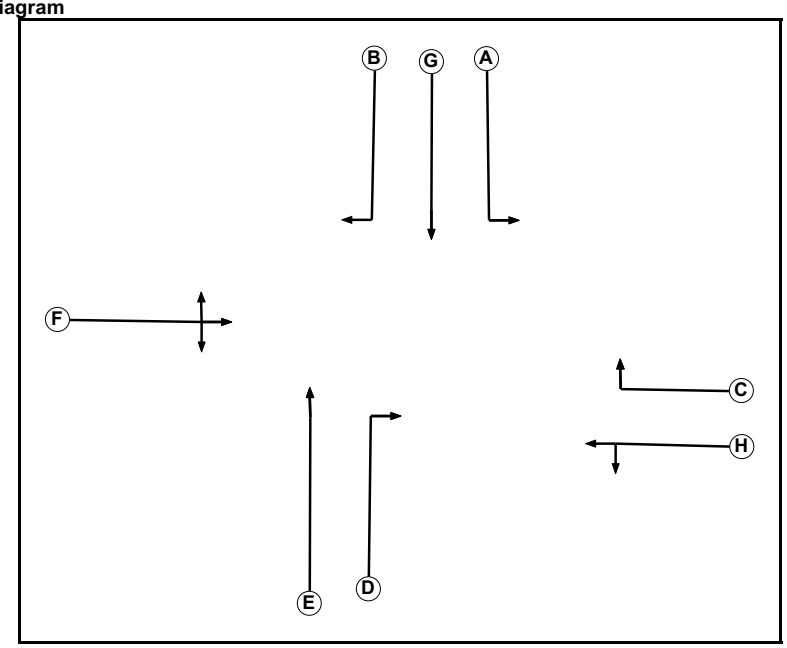
User and Project Details

Project:	**Land at Eastleigh**
Title:	**10440**
Location:	j10 A3024-Kingsway Traffic Signals
File name:	j10 A3024-Kingsway Traffic Signals.lsg3x
Author:	Matthew Moss
Company:	Brookbanks Consulting

Junction Layout Diagram



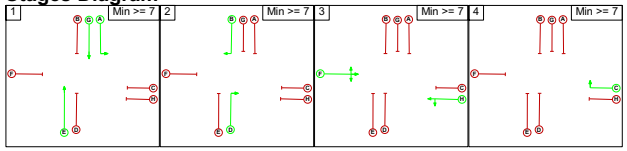
Phase Diagram



Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H
A		5	5	5	-	5	-	5
B	5		5	-	5	5	5	5
C	5	5		5	5	5	5	5
D	5	-	5		5	5	5	5
E	-	5	5	5		5	-	5
F	5	5	5	5	5		5	-
G	-	5	5	5	-	5		5
H	5	5	5	5	5	-	5	

Stages Diagram



Lane Input Data

Junction: Southampton Solent Traffc Signals

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 (St. Andrew's Road (North))	U	A	2	3	9.0	Geom	-	3.30	0.00	Y	Arm 8 Left	Inf
1/2 (St. Andrew's Road (North))	U	A	2	3	6.4	Geom	-	3.30	0.00	Y	Arm 8 Left	Inf
1/3 (St. Andrew's Road (North))	U	G	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 6 Ahead	Inf
1/4 (St. Andrew's Road (North))	U	B	2	3	6.0	Geom	-	3.50	0.00	Y	Arm 5 Right	Inf
2/1 (New Road (West))	U	F	2	3	5.0	Geom	-	5.00	0.00	Y	Arm 4 Left	Inf
2/2 (New Road (West))	U	F	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 8 Ahead	Inf
2/3 (New Road (West))	U	F	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 6 Right Arm 8 Ahead	Inf Inf
3/1 (Kingsway (South))	O		2	3	5.0	Geom	-	5.00	0.00	N	Arm 5 Left	Inf
3/2 (Kingsway (South))	U	E	2	3	60.0	Geom	-	3.80	0.00	Y	Arm 4 Ahead	Inf
3/3 (Kingsway (South))	U	E	2	3	60.0	Geom	-	3.80	0.00	Y	Arm 4 Ahead	Inf
3/4 (Kingsway (South))	U	D	2	3	60.0	Geom	-	4.40	0.00	Y	Arm 8 Right	Inf
7/1 (New Road (East))	U	H	2	3	5.0	Geom	-	4.20	0.00	Y	Arm 6 Left	Inf
7/2 (New Road (East))	U	H	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 5 Ahead	Inf
7/3 (New Road (East))	U	C	2	3	60.0	Geom	-	3.40	0.00	Y	Arm 4 Right	Inf

Linsig Report
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7/4 (New Road (East))	U	C	2	3	60.0	Geom	-	3.40	0.00	Y	Arm 4 Right	Inf

Linsig Report
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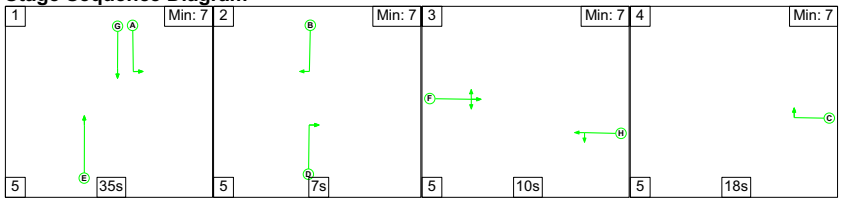
Scenario 1: 'DS1AM' (FG1: 'DS1AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	454	605	0	1059
	B	612	0	0	0	612
	C	790	80	0	0	870
	D	0	362	0	0	362
	Tot.	1402	896	605	0	2903

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: 10440	-	-	-		-	-	-	-	-	-	**77.0%**	**0**	**0**	**0**	**30.2**	-	-
Southampton Solent Traffc Signals	-	-	-		-	-	-	-	-	-	**77.0%**	**0**	**0**	**0**	**30.2**	-	-
1/1	St. Andrew's Road (North) Left	U	A		1	35	-	227	1945	778	29.2%	-	-	-	1.4	21.6	4.1
1/2	St. Andrew's Road (North) Left	U	A		1	35	-	227	1945	778	29.2%	-	-	-	1.4	21.6	4.1
1/3+1/4	St. Andrew's Road (North) Right Ahead	U	G B		1	35:7	-	605	1965:1965	786+0	77.0 : 0.0%	-	-	-	5.6	33.2	14.8
2/2+2/1	New Road (West) Left Ahead	U	F		1	10	-	181	1965:2115	240+0	75.4 : 0.0%	-	-	-	3.4	67.2	5.8
2/3	New Road (West) Right Ahead	U	F		1	10	-	181	1965	240	75.4%	-	-	-	3.4	67.2	5.8
3/2+3/1	Kingsway (South) Ahead Left	U+O	E -		1	35	-	395	1995:2255	798+0	49.5 : 0.0%	0	0	0	2.7	24.7	7.9
3/3	Kingsway (South) Ahead	U	E		1	35	-	395	1995	798	49.5%	-	-	-	2.7	24.7	7.8
3/4	Kingsway (South) Right	U	D		1	7	-	80	2055	183	43.8%	-	-	-	1.3	56.3	2.3
7/2+7/1	New Road (East) Ahead Left	U	H		1	10	-	0	1965:2035	222+222	0.0 : 0.0%	-	-	-	0.0	0.0	0.0
7/3	New Road (East) Right	U	C		1	18	-	306	1955	413	74.1%	-	-	-	4.2	49.6	8.5
7/4	New Road (East) Right	U	C		1	18	-	306	1955	413	74.1%	-	-	-	4.2	49.6	8.5

C1	PRC for Signalled Lanes (%):	16.9	Total Delay for Signalled Lanes (pcuHr):	30.16	Cycle Time (s):	90	
	PRC Over All Lanes (%):	16.9	Total Delay Over All Lanes(pcuHr):	30.16			

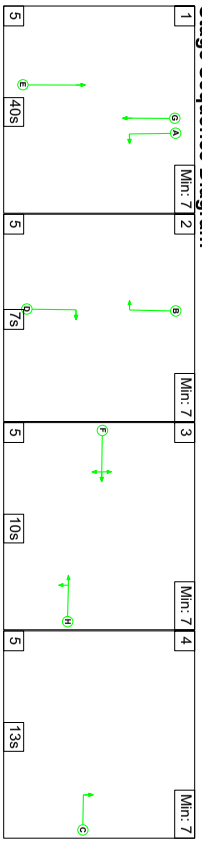
Scenario 2: 'DS1PM' (FG2: 'DS1PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	D	Tot.
A	0	553	652	0	1205
B	426	0	0	0	426
C	646	90	0	0	736
D	0	358	0	0	358
Tot.	1072	1001	652	0	2725

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: 10440	-	-	-		-	-	-	-	-	-	**74.5%**	**0**	**0**	**0**	**25.8**	-	-
Southampton Solent Traffc Signals	-	-	-		-	-	-	-	-	-	**74.5%**	**0**	**0**	**0**	**25.8**	-	-
1/1	St. Andrew's Road (North) Left	U	A		1	40	-	277	1945	886	31.3%	-	-	-	1.4	18.5	4.6
1/2	St. Andrew's Road (North) Left	U	A		1	40	-	276	1945	886	31.1%	-	-	-	1.4	18.5	4.6
1/3+1/4	St. Andrew's Road (North) Right Ahead	U	G B		1	40:7	-	652	1965:1965	895+0	72.8 : 0.0%	-	-	-	4.9	27.3	14.5
2/2+2/1	New Road (West) Left Ahead	U	F		1	10	-	179	1965:2115	240+0	74.5 : 0.0%	-	-	-	3.3	66.3	5.7
2/3	New Road (West) Right Ahead	U	F		1	10	-	179	1965	240	74.5%	-	-	-	3.3	66.3	5.7
3/2+3/1	Kingsway (South) Ahead Left	U+O	E -		1	40	-	323	1995:2255	909+0	35.5 : 0.0%	0	0	0	1.7	19.0	5.5
3/3	Kingsway (South) Ahead	U	E		1	40	-	323	1995	909	35.5%	-	-	-	1.7	19.0	5.5
3/4	Kingsway (South) Right	U	D		1	7	-	90	2055	183	49.3%	-	-	-	1.5	58.3	2.6
7/2+7/1	New Road (East) Ahead Left	U	H		1	10	-	0	1965:2035	222+222	0.0 : 0.0%	-	-	-	0.0	0.0	0.0
7/3	New Road (East) Right	U	C		1	13	-	213	1955	304	70.0%	-	-	-	3.3	55.3	6.2
7/4	New Road (East) Right	U	C		1	13	-	213	1955	304	70.0%	-	-	-	3.3	55.3	6.2

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C1	PRC for Signalled Lanes (%):	20.8	Total Delay for Signalled Lanes (pcuHr):	25.79	Cycle Time (s):	90
	PRC Over All Lanes (%):	20.8	Total Delay Over All Lanes(pcuHr):	25.79		

Linsig Report
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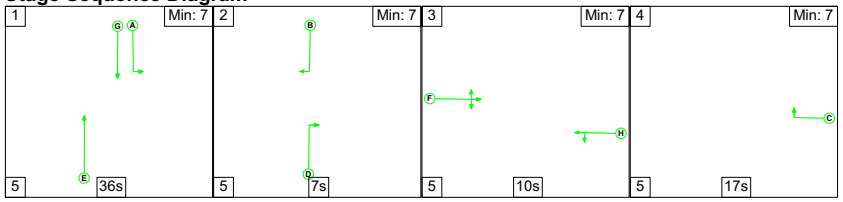
Scenario 3: 'DS1AM+DEV' (FG3: 'DS1AM+DEV', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin	Destination				
	A	B	C	D	Tot.
A	0	454	623	0	1077
B	612	0	0	0	612
C	797	80	0	0	877
D	0	362	0	0	362
Tot.	1409	896	623	0	2928

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: 10440	-	-	-		-	-	-	-	-	-	**78.3%**	**0**	**0**	**0**	**30.8**	-	-
Southampton Solent Traffc Signals	-	-	-		-	-	-	-	-	-	**78.3%**	**0**	**0**	**0**	**30.8**	-	-
1/1	St. Andrew's Road (North) Left	U	A		1	36	-	227	1945	800	28.4%	-	-	-	1.3	20.8	4.0
1/2	St. Andrew's Road (North) Left	U	A		1	36	-	227	1945	800	28.4%	-	-	-	1.3	20.8	4.0
1/3+1/4	St. Andrew's Road (North) Right Ahead	U	G B		1	36:7	-	623	1965:1965	808+0	77.1 : 0.0%	-	-	-	5.6	32.4	15.0
2/2+2/1	New Road (West) Left Ahead	U	F		1	10	-	181	1965:2115	240+0	75.4 : 0.0%	-	-	-	3.4	67.2	5.8
2/3	New Road (West) Right Ahead	U	F		1	10	-	181	1965	240	75.4%	-	-	-	3.4	67.2	5.8
3/2+3/1	Kingsway (South) Ahead Left	U+O	E -		1	36	-	399	1995:2255	820+0	48.6 : 0.0%	0	0	0	2.6	23.8	7.8
3/3	Kingsway (South) Ahead	U	E		1	36	-	398	1995	820	48.5%	-	-	-	2.6	23.8	7.8
3/4	Kingsway (South) Right	U	D		1	7	-	80	2055	183	43.8%	-	-	-	1.3	56.3	2.3
7/2+7/1	New Road (East) Ahead Left	U	H		1	10	-	0	1965:2035	222+222	0.0 : 0.0%	-	-	-	0.0	0.0	0.0
7/3	New Road (East) Right	U	C		1	17	-	306	1955	391	78.3%	-	-	-	4.6	54.5	9.0
7/4	New Road (East) Right	U	C		1	17	-	306	1955	391	78.3%	-	-	-	4.6	54.5	9.0

C1	PRC for Signalled Lanes (%):	15.0	Total Delay for Signalled Lanes (pcuHr):	30.77	Cycle Time (s):	90	
	PRC Over All Lanes (%):	15.0	Total Delay Over All Lanes(pcuHr):	30.77			

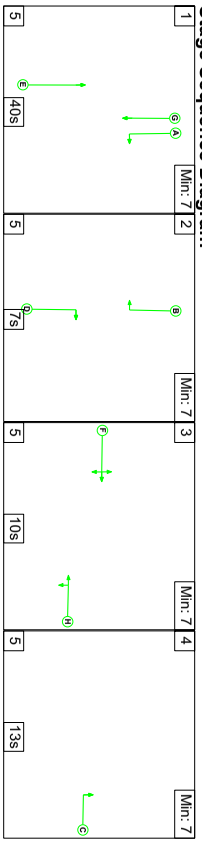
Scenario 4: 'DS1PM+DEV' (FG4: 'DS1PM+DEV', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	D	Tot.
A	0	553	663	0	1216
B	426	0	0	0	426
C	664	90	0	0	754
D	0	358	0	0	358
Tot.	1090	1001	663	0	2754

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: 10440	-	-	-		-	-	-	-	-	-	**74.5%**	**0**	**0**	**0**	**26.1**	-	-
Southampton Solent Traffc Signals	-	-	-		-	-	-	-	-	-	**74.5%**	**0**	**0**	**0**	**26.1**	-	-
1/1	St. Andrew's Road (North) Left	U	A		1	40	-	277	1945	886	31.3%	-	-	-	1.4	18.5	4.6
1/2	St. Andrew's Road (North) Left	U	A		1	40	-	276	1945	886	31.1%	-	-	-	1.4	18.5	4.6
1/3+1/4	St. Andrew's Road (North) Right Ahead	U	G B		1	40:7	-	663	1965:1965	895+0	74.1 : 0.0%	-	-	-	5.1	27.8	14.9
2/2+2/1	New Road (West) Left Ahead	U	F		1	10	-	179	1965:2115	240+0	74.5 : 0.0%	-	-	-	3.3	66.3	5.7
2/3	New Road (West) Right Ahead	U	F		1	10	-	179	1965	240	74.5%	-	-	-	3.3	66.3	5.7
3/2+3/1	Kingsway (South) Ahead Left	U+O	E -		1	40	-	332	1995:2255	909+0	36.5 : 0.0%	0	0	0	1.8	19.1	5.7
3/3	Kingsway (South) Ahead	U	E		1	40	-	332	1995	909	36.5%	-	-	-	1.8	19.1	5.6
3/4	Kingsway (South) Right	U	D		1	7	-	90	2055	183	49.3%	-	-	-	1.5	58.3	2.6
7/2+7/1	New Road (East) Ahead Left	U	H		1	10	-	0	1965:2035	229+115	0.0 : 0.0%	-	-	-	0.0	0.0	0.0
7/3	New Road (East) Right	U	C		1	13	-	213	1955	304	70.0%	-	-	-	3.3	55.3	6.2
7/4	New Road (East) Right	U	C		1	13	-	213	1955	304	70.0%	-	-	-	3.3	55.3	6.2

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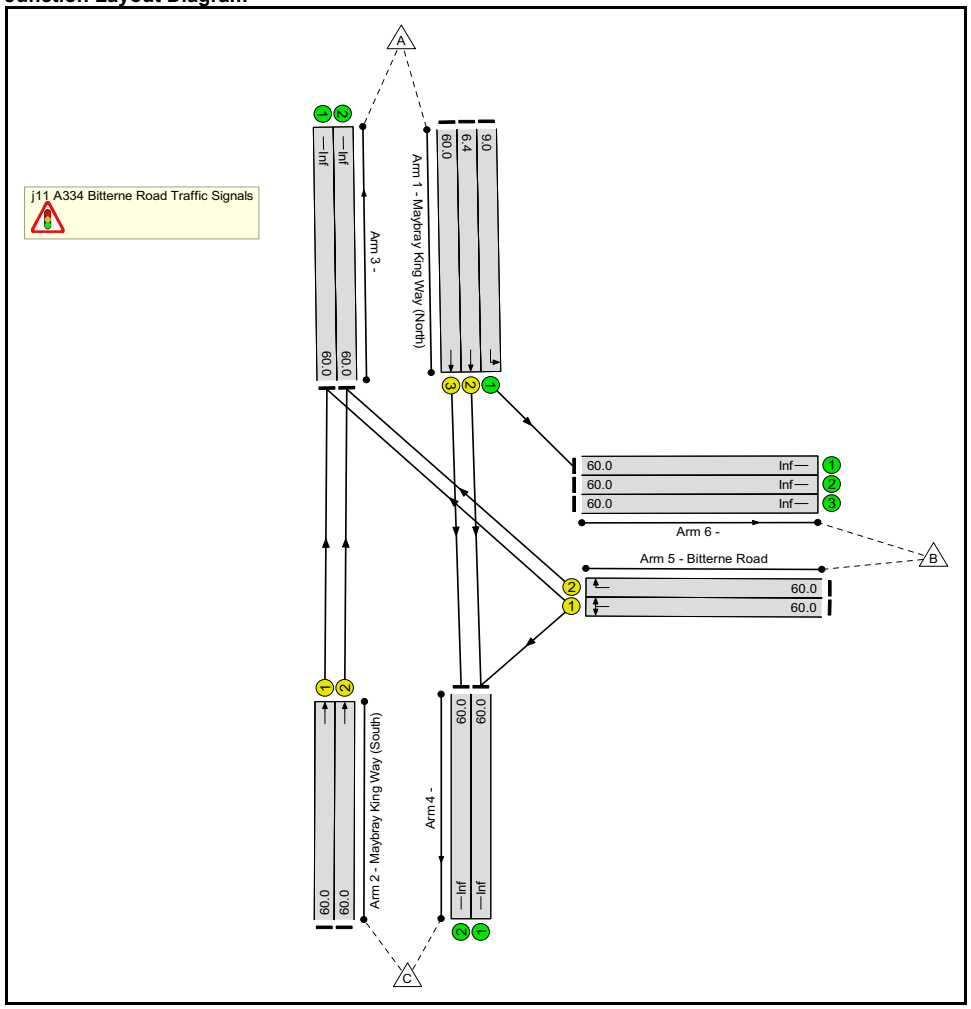
C1	PRC for Signalled Lanes (%):	20.8	Total Delay for Signalled Lanes (pcuHr):	26.08	Cycle Time (s):	90
	PRC Over All Lanes (%):	20.8	Total Delay Over All Lanes(pcuHr):	26.08		

Linsig Report

User and Project Details

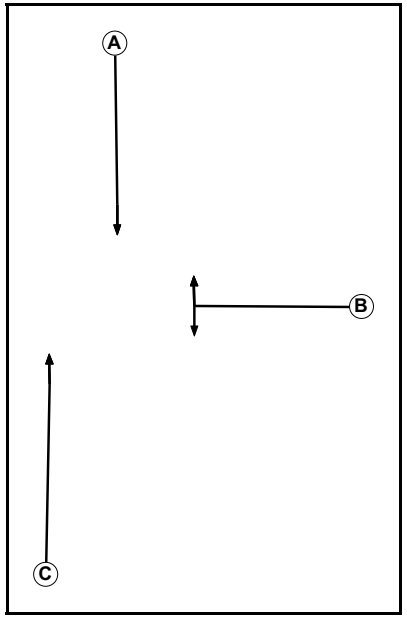
Project:	**Land at Eastleigh**
Title:	**10440**
Location:	j11 A334-Bitterne Road Traffic Signals
File name:	j11 A334-Bitterne Road Traffic Signals.lsg3x
Author:	Matthew Moss
Company:	Brookbanks Consulting

Junction Layout Diagram



Linsig Report
P:\10440\Traffic\Junctions\j11t A334-Bitterne Road Traffic Signals\j11 A334-Bitterne Road Traffic Signals.lsg3x

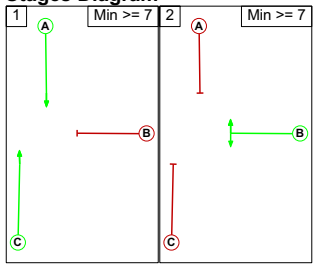
Phase Diagram



Phase Intergreens Matrix

		Starting Phase		
		A	B	C
Terminating Phase	A		5	-
	B	5		5
	C	-	5	

Stages Diagram



Lane Input Data

Junction: j11 A334 Bitterne Road Traffic Signals												
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 (Maybray King Way (North))	U		2	3	9.0	Geom	-	5.00	0.00	Y	Arm 6 Left	Inf
1/2 (Maybray King Way (North))	U	A	2	3	6.4	Geom	-	3.20	0.00	Y	Arm 4 Ahead	Inf
1/3 (Maybray King Way (North))	U	A	2	3	60.0	Geom	-	3.20	0.00	Y	Arm 4 Ahead	Inf
2/1 (Maybray King Way (South))	U	C	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 3 Ahead	Inf
2/2 (Maybray King Way (South))	U	C	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 3 Ahead	Inf
5/1 (Bitterne Road)	U	B	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 3 Right	Inf
											Arm 4 Left	Inf
5/2 (Bitterne Road)	U	B	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 3 Right	Inf

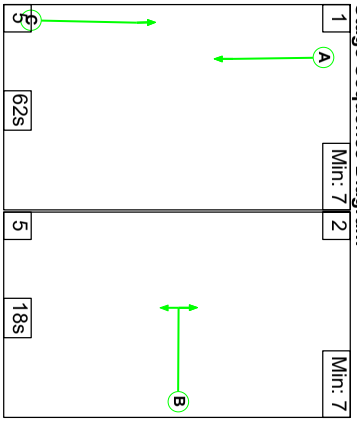
Scenario 1: 'DS1AM' (FG1: 'DS1AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

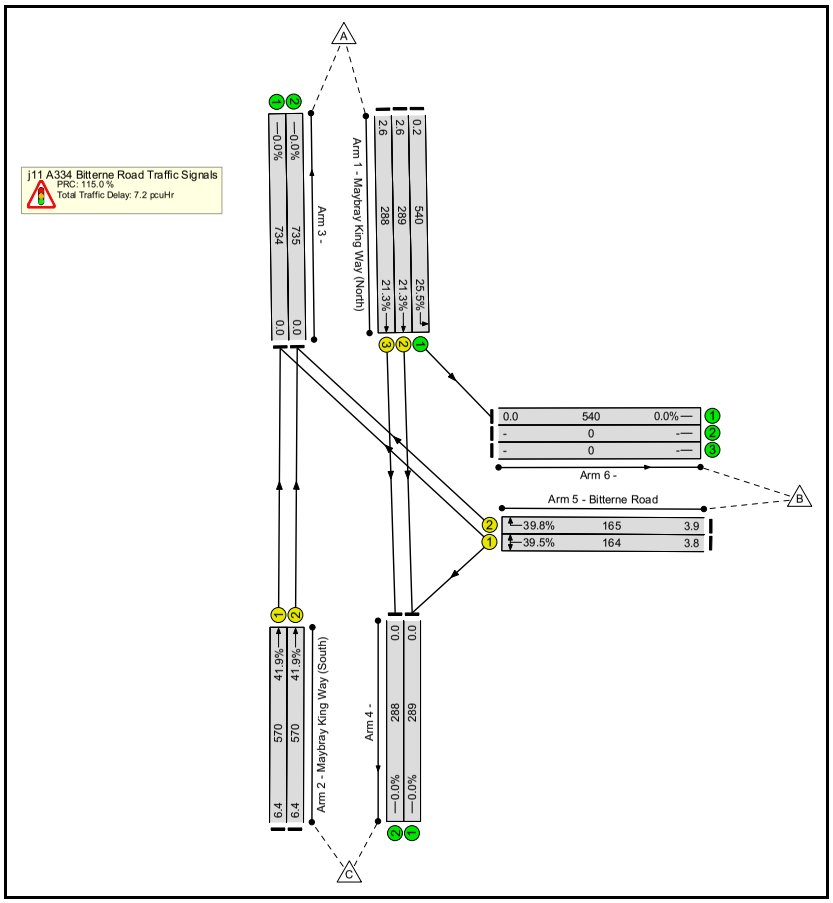
Actual Flow :

Origin \ Destination	A	B	C	Tot.
A	0	540	577	1117
B	329	0	0	329
C	1140	0	0	1140
Tot.	1469	540	577	2586

Stage Sequence Diagram



Junction Layout Diagram



Linsig Report
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Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: 10440	-	-	-		-	-	-	-	-	-	**41.9%**	**0**	**0**	**0**	**7.2**	-	-
j11 A334 Bitterne Road Traffic Signals	-	-	-		-	-	-	-	-	-	**41.9%**	**0**	**0**	**0**	**7.2**	-	-
1/1	Maybray King Way (North) Left	U	-		-	-	-	540	2115	2115	25.5%	-	-	-	0.2	1.1	0.2
1/2	Maybray King Way (North) Ahead	U	A		1	62	-	289	1935	1355	21.3%	-	-	-	0.5	6.5	2.6
1/3	Maybray King Way (North) Ahead	U	A		1	62	-	288	1935	1355	21.3%	-	-	-	0.5	6.5	2.6
2/1	Maybray King Way (South) Ahead	U	C		1	62	-	570	1945	1362	41.9%	-	-	-	1.3	8.0	6.4
2/2	Maybray King Way (South) Ahead	U	C		1	62	-	570	1945	1362	41.9%	-	-	-	1.3	8.0	6.4
5/1	Bitterne Road Right Left	U	B		1	18	-	164	1965	415	39.5%	-	-	-	1.7	37.7	3.8
5/2	Bitterne Road Right	U	B		1	18	-	165	1965	415	39.8%	-	-	-	1.7	37.8	3.9

C1 PRC for Signalled Lanes (%): 115.0 Total Delay for Signalled Lanes (pcuHr): 7.02 Cycle Time (s): 90
PRC Over All Lanes (%): 115.0 Total Delay Over All Lanes(pcuHr): 7.19

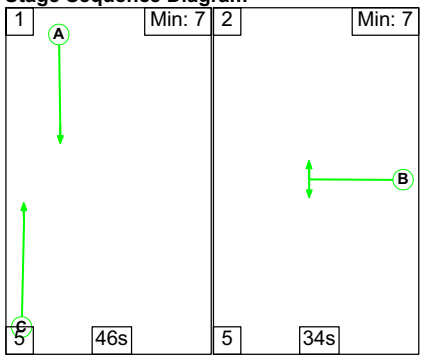
Linsig Report
P:\10440\Traffic\Junctions\j11t A334-Bitterne Road Traffic Signals\j11 A334-Bitterne Road Traffic Signals.lsg3x
Scenario 2: 'DS1PM' (FG2: 'DS1PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

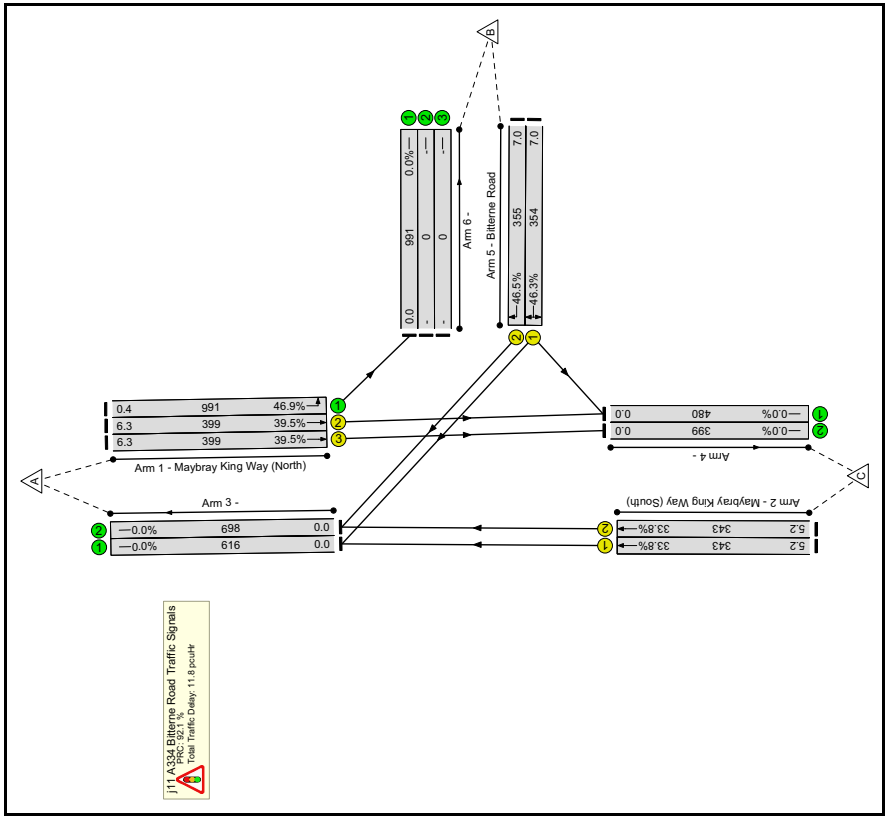
Actual Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	991	798	1789
	B	628	0	81	709
	C	686	0	0	686
	Tot.	1314	991	879	3184

Stage Sequence Diagram



Junction Layout Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: 10440	-	-	-		-	-	-	-	-	-	**46.9%**	**0**	**0**	**0**	**11.8**	-	-
j11 A334 Bitterne Road Traffic Signals	-	-	-		-	-	-	-	-	-	**46.9%**	**0**	**0**	**0**	**11.8**	-	-
1/1	Maybray King Way (North) Left	U	-		-	-	-	991	2115	2115	46.9%	-	-	-	0.4	1.6	0.4
1/2	Maybray King Way (North) Ahead	U	A		1	46	-	399	1935	1010	39.5%	-	-	-	1.8	15.9	6.3
1/3	Maybray King Way (North) Ahead	U	A		1	46	-	399	1935	1010	39.5%	-	-	-	1.8	15.9	6.3
2/1	Maybray King Way (South) Ahead	U	C		1	46	-	343	1945	1016	33.8%	-	-	-	1.4	15.1	5.2
2/2	Maybray King Way (South) Ahead	U	C		1	46	-	343	1945	1016	33.8%	-	-	-	1.4	15.1	5.2
5/1	Bitterne Road Right Left	U	B		1	34	-	354	1965	764	46.3%	-	-	-	2.4	24.9	7.0
5/2	Bitterne Road Right	U	B		1	34	-	355	1965	764	46.5%	-	-	-	2.5	24.9	7.0

C1 PRC for Signalled Lanes (%): 93.7 Total Delay for Signalled Lanes (pcuHr): 11.31 Cycle Time (s): 90
PRC Over All Lanes (%): 92.1 Total Delay Over All Lanes(pcuHr): 11.75

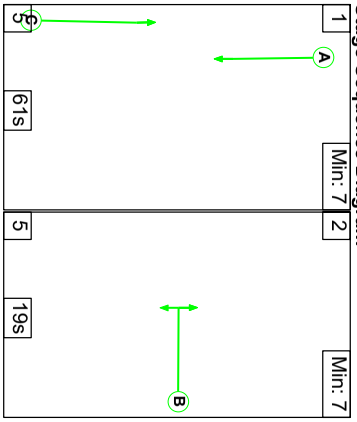
Scenario 3: 'DS1AM+DEV' (FG3: 'DS1AM+DEV', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	Tot.
A	0	558	577	1135
B	374	0	0	374
C	1140	0	0	1140
Tot.	1514	558	577	2649

Stage Sequence Diagram



Linsig Report
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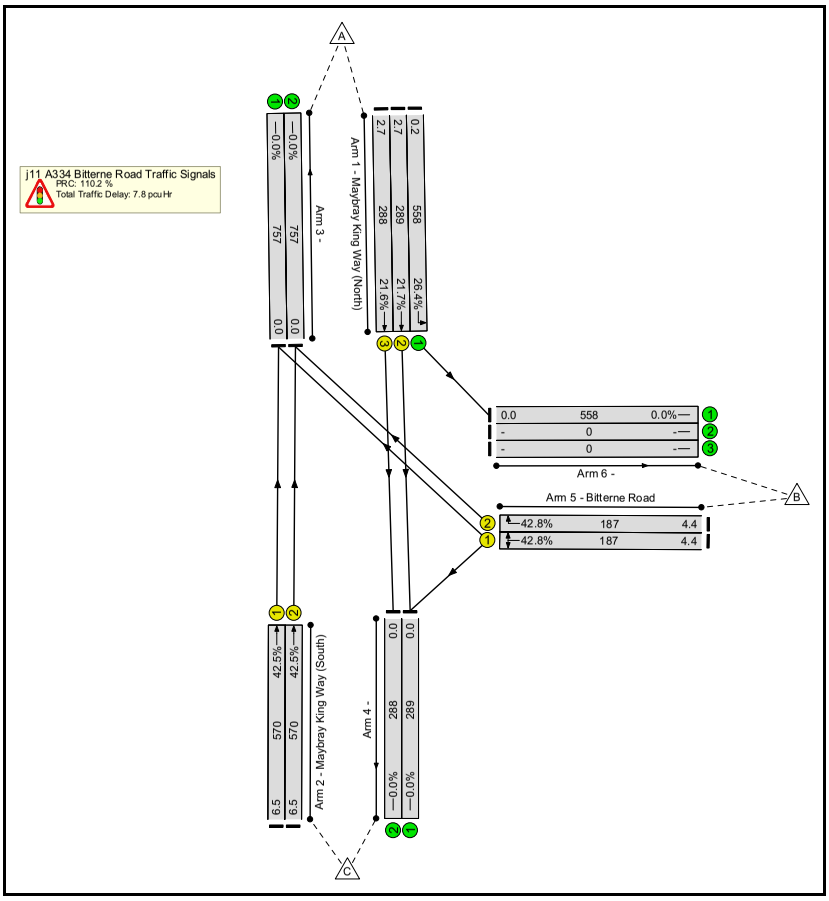
Junction Layout Diagram



Linsig Report
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Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: 10440	-	-	-		-	-	-	-	-	-	**42.8%**	**0**	**0**	**0**	**7.8**	-	-
j11 A334 Bitterne Road Traffic Signals	-	-	-		-	-	-	-	-	-	**42.8%**	**0**	**0**	**0**	**7.8**	-	-
1/1	Maybray King Way (North) Left	U	-		-	-	-	558	2115	2115	26.4%	-	-	-	0.2	1.2	0.2
1/2	Maybray King Way (North) Ahead	U	A		1	61	-	289	1935	1333	21.7%	-	-	-	0.5	6.8	2.7
1/3	Maybray King Way (North) Ahead	U	A		1	61	-	288	1935	1333	21.6%	-	-	-	0.5	6.8	2.7
2/1	Maybray King Way (South) Ahead	U	C		1	61	-	570	1945	1340	42.5%	-	-	-	1.3	8.5	6.5
2/2	Maybray King Way (South) Ahead	U	C		1	61	-	570	1945	1340	42.5%	-	-	-	1.3	8.5	6.5
5/1	Bitterne Road Right Left	U	B		1	19	-	187	1965	437	42.8%	-	-	-	1.9	37.3	4.4
5/2	Bitterne Road Right	U	B		1	19	-	187	1965	437	42.8%	-	-	-	1.9	37.3	4.4

C1 PRC for Signalled Lanes (%): 110.2 Total Delay for Signalled Lanes (pcuHr): 7.66 Cycle Time (s): 90
PRC Over All Lanes (%): 110.2 Total Delay Over All Lanes(pcuHr): 7.84

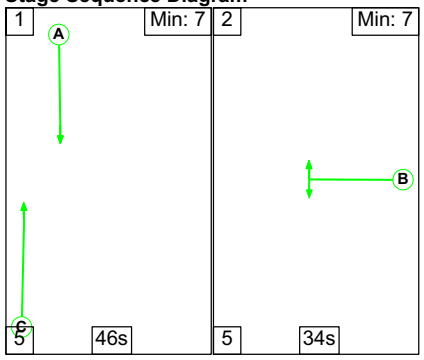
Linsig Report
P:\10440\Traffic\Junctions\j11t A334-Bitterne Road Traffic Signals\j11 A334-Bitterne Road Traffic Signals.lsg3x
Scenario 4: 'DS1PM+DEV' (FG4: 'DS1PM+DEV', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

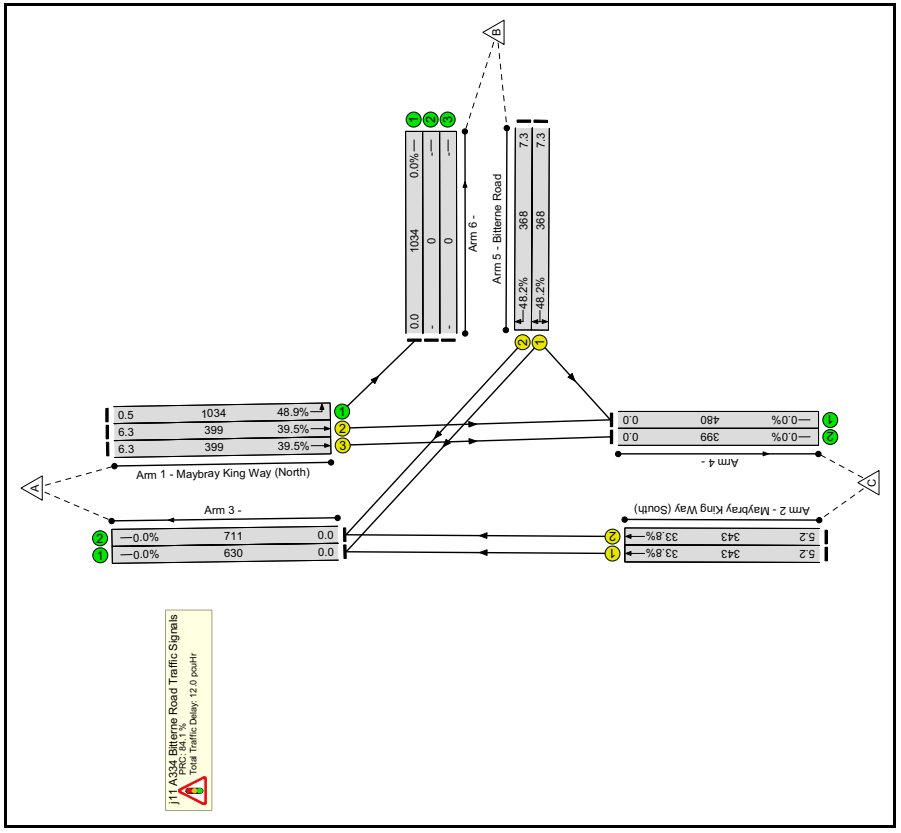
Actual Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	1034	798	1832
	B	655	0	81	736
	C	686	0	0	686
	Tot.	1341	1034	879	3254

Stage Sequence Diagram



Junction Layout Diagram



Linsig Report
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Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: 10440	-	-	-		-	-	-	-	-	-	**48.9%**	0	0	0	**12.0**	-	-
j11 A334 Bitterne Road Traffic Signals	-	-	-		-	-	-	-	-	-	**48.9%**	0	0	0	**12.0**	-	-
1/1	Maybray King Way (North) Left	U	-		-	-	-	1034	2115	2115	48.9%	-	-	-	0.5	1.7	0.5
1/2	Maybray King Way (North) Ahead	U	A		1	46	-	399	1935	1010	39.5%	-	-	-	1.8	15.9	6.3
1/3	Maybray King Way (North) Ahead	U	A		1	46	-	399	1935	1010	39.5%	-	-	-	1.8	15.9	6.3
2/1	Maybray King Way (South) Ahead	U	C		1	46	-	343	1945	1016	33.8%	-	-	-	1.4	15.1	5.2
2/2	Maybray King Way (South) Ahead	U	C		1	46	-	343	1945	1016	33.8%	-	-	-	1.4	15.1	5.2
5/1	Bitterne Road Right Left	U	B		1	34	-	368	1965	764	48.2%	-	-	-	2.6	25.2	7.3
5/2	Bitterne Road Right	U	B		1	34	-	368	1965	764	48.2%	-	-	-	2.6	25.2	7.3

C1 PRC for Signalled Lanes (%): 86.9 Total Delay for Signalled Lanes (pcuHr): 11.56 Cycle Time (s): 90
PRC Over All Lanes (%): 84.1 Total Delay Over All Lanes(pcuHr): 12.04

```
                                  10440 j12a A27 Kanes Hill Rbt DS1AM
_________________ A R C A D Y  6 _________________

    ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

    Analysis Program: Release 7.0 (FEBRUARY 2010)
                      Patch 15 Apr 2011
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 -------------------------------------------------------------------------
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 -------------------------------------------------------------------------

 Run with file:-
  "p:\10440\Traffic\Junctions\j12a A27 Kanes Hill Rbt\10440 j12a A27 Kanes Hill Rbt DS1AM.vai"
(drive-on-the-left ) at 14:49:58 on Friday, 25 November 2016

.FILE PROPERTIES
 ***************

   RUN TITLE: j12a A27 Kanes Hill Rbt DS1AM
    LOCATION: Eastleigh
        DATE: 24/11/16
      CLIENT: Hallam Land Management
  ENUMERATOR: Matt.Moss [BCL25]
  JOB NUMBER: 10440
      STATUS: Preliminary
 DESCRIPTION: Existing Layout

.INPUT DATA
 **********
 ARM A - Moorhill Road
 ARM B - Charles Watts Way
 ARM C - Upper Northam Drive
 ARM D - Kanes Hill
 ARM E - Thornhill Park Road

.GEOMETRIC DATA
 --------------

 ------------------------------------------------------------------------------------------------------- T5
 I ARM    I  V (M)  I    E (M)  I    L (M)  I    R (M)  I     D (M) I  PHI (DEG)  I  SLOPE  I INTERCEPT (PCU/MIN) I
 -------------------------------------------------------------------------------------------------------
 I ARM  A I   3.10  I     9.40  I     8.40  I    27.00  I   67.00   I     32.0    I  0.490  I       25.156        I
 I ARM  B I   4.30  I     9.90  I    18.50  I    21.00  I   67.00   I     29.0    I  0.598  I       36.289        I
 I ARM  C I   3.50  I     9.50  I    25.80  I    16.00  I   67.00   I     37.0    I  0.563  I       33.767        I
 I ARM  D I   3.70  I     9.40  I    31.80  I    44.00  I   67.00   I     34.0    I  0.611  I       37.451        I
 I ARM  E I   3.80  I     7.20  I    11.60  I    15.00  I   67.00   I     54.0    I  0.465  I       25.257        I
 -------------------------------------------------------------------------------------------------------

 V = approach half-width       L = effective flare length          D = inscribed circle diameter
 E = entry width               R = entry radius                    PHI = entry angle

 **WARNING** ARM D Effective flare length is outside normal range.
  Treat capacities with increasing caution.

.TRAFFIC DEMAND DATA
 -------------------

 Only sets included in the current run are shown
.SCALING FACTORS
.---------------------- T13
 IARM  I FLOW SCALE(%) I
 ----------------------
 I A   I      100      I
 I B   I      100      I
 I C   I      100      I
 I D   I      100      I
 I E   I      100      I
 ----------------------

 TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(  60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j12a A27 Kanes Hill Rbt DS1AM


 DEMAND SET TITLE:  j12a A27 Kanes Hill Rbt DS1AM
.--------------------------------------------------------------------- T33
 I                    I        TURNING PROPORTIONS       I
 I                    I        TURNING COUNTS            I
 I                    I       (PERCENTAGE OF H.V.S)      I
 I                    ----------------------------------------------------
 I         TIME       I FROM/T  I  ARM A I  ARM B I  ARM C I  ARM D I  ARM E I
 ---------------------------------------------------------------------
 I    08.00 - 09.00   I         I        I        I        I        I        I
 I                    I  ARM  A I  0.260 I  0.187 I  0.243 I  0.038 I  0.272 I
 I                    I         I  993.0 I  716.0 I  929.0 I  145.0 I 1042.0 I
 I                    I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
 I                    I         I        I        I        I        I        I
 I                    I  ARM  B I  0.272 I  0.260 I  0.187 I  0.243 I  0.038 I
 I                    I         I 1042.0 I  993.0 I  716.0 I  929.0 I  145.0 I
 I                    I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
 I                    I         I        I        I        I        I        I
```

ARM C	0.038	0.272	0.260	0.187	0.243
	145.0	1042.0	993.0	716.0	929.0
	(10.0)	(10.0)	(10.0)	(10.0)	(10.0)
ARM D	0.243	0.038	0.272	0.260	0.187
	929.0	145.0	1042.0	993.0	716.0
	(10.0)	(10.0)	(10.0)	(10.0)	(10.0)
ARM E	0.187	0.243	0.038	0.272	0.260
	716.0	929.0	145.0	1042.0	993.0
	(10.0)	(10.0)	(10.0)	(10.0)	(10.0)

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	21.52	12.09	1.779	- - -	0.0	142.6	1078.2	-	6.081
ARM B	13.40	18.55	0.722	- - -	0.0	2.5	34.0	-	0.183
ARM C	3.10	15.38	0.202	- - -	0.0	0.3	3.7	-	0.081
ARM D	13.13	22.15	0.593	- - -	0.0	1.4	20.4	-	0.109
ARM E	12.60	12.48	1.009	- - -	0.0	14.1	136.6	-	0.853

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
ARM A	21.52	11.85	1.816	- - -	142.6	287.6	3226.6	-	18.303
ARM B	13.40	18.43	0.727	- - -	2.5	2.6	38.3	-	0.198
ARM C	3.10	15.20	0.204	- - -	0.3	0.3	3.8	-	0.083
ARM D	13.13	22.06	0.595	- - -	1.4	1.5	21.7	-	0.112
ARM E	12.60	12.42	1.014	- - -	14.1	21.3	268.5	-	1.680

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
ARM A	21.52	11.82	1.821	- - -	287.6	433.1	5405.5	-	30.621
ARM B	13.40	18.42	0.728	- - -	2.6	2.6	39.1	-	0.199
ARM C	3.10	15.18	0.204	- - -	0.3	0.3	3.8	-	0.083
ARM D	13.13	22.06	0.595	- - -	1.5	1.5	21.9	-	0.112
ARM E	12.60	12.43	1.014	- - -	21.3	27.2	365.0	-	2.176

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
ARM A	21.52	11.80	1.824	- - -	433.1	578.9	7590.5	-	42.983
ARM B	13.40	18.41	0.728	- - -	2.6	2.6	39.4	-	0.199
ARM C	3.10	15.18	0.204	- - -	0.3	0.3	3.8	-	0.083
ARM D	13.13	22.06	0.595	- - -	1.5	1.5	21.9	-	0.112
ARM E	12.60	12.43	1.014	- - -	27.2	32.3	446.9	-	2.605

.QUEUE AT ARM A

```
 TIME SEGMENT NO. OF
  ENDING      VEHICLES
              IN QUEUE

  08.15        142.6  ****************************************************************************************************
  08.30        287.6  ****************************************************************************************************
  08.45        433.1  ****************************************************************************************************
  09.00        578.9  ****************************************************************************************************
```

.QUEUE AT ARM B

```
 TIME SEGMENT NO. OF
  ENDING      VEHICLES
              IN QUEUE

  08.15          2.5  **
  08.30          2.6  ***
  08.45          2.6  ***
  09.00          2.6  ***
```

.QUEUE AT ARM C

```
 TIME SEGMENT NO. OF
  ENDING      VEHICLES
              IN QUEUE

  08.15          0.3
  08.30          0.3
  08.45          0.3
  09.00          0.3
```

.QUEUE AT ARM D

```
 TIME SEGMENT NO. OF
```



```
  ENDING      VEHICLES
              IN QUEUE

  08.15          1.4  *
  08.30          1.5  *
  08.45          1.5  *
  09.00          1.5  *
```

.QUEUE AT ARM E

```
 TIME SEGMENT NO. OF
  ENDING      VEHICLES
              IN QUEUE

  08.15         14.1  **************
  08.30         21.3  *********************
  08.45         27.2  ***************************
  09.00         32.3  ********************************
```

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * * DELAY * (MIN)	* QUEUEING * * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * * DELAY * (MIN)	* INCLUSIVE QUEUEING * * DELAY * (MIN/VEH)
A	1291.0	1291.0	17300.8	13.40	31506.1	24.40
B	804.0	804.0	150.8	0.19	151.0	0.19
C	186.0	186.0	15.1	0.08	15.1	0.08
D	788.0	788.0	85.9	0.11	85.9	0.11
E	756.0	756.0	1217.1	1.61	1259.1	1.67
ALL	3825.0	3825.0	18769.7	4.91	33017.3	8.63

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

END OF JOB

```
          ____________________ A R C A D Y  6 ____________________

              ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY


              Analysis Program: Release 7.0 (FEBRUARY 2010)
                                Patch 15 Apr 2011
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          Wokingham, Berks.        Web:   www.trlsoftware.co.uk
          RG40 3GA,UK

 -------------------------------------------------------------------------------
  THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
  IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS  OF THE SOLUTION
 -------------------------------------------------------------------------------

 Run with file:-
 "p:\10440\Traffic\Junctions\j12a A27 Kanes Hill Rbt\10440 j12a A27 Kanes Hill Rbt DS1PM.vai"
(drive-on-the-left ) at 08:14:50 on Monday, 28 November 2016


.FILE PROPERTIES
 ***************

    RUN TITLE: j12a A27 Kanes Hill Rbt DS1PM
     LOCATION: Eastleigh
         DATE: 24/11/16
       CLIENT: Hallam Land Management
  ENUMERATOR: Matt.Moss [BCL25]
  JOB NUMBER: 10440
       STATUS: Preliminary
 DESCRIPTION: Existing Layout

.INPUT DATA
 **********
 ARM A - Moorhill Road
 ARM B - Charles Watts Way
 ARM C - Upper Northam Drive
 ARM D - Kanes Hill
 ARM E - Thornhill Park Road

.GEOMETRIC DATA
 --------------

 ------------------------------------------------------------------------------------------------------------------------ T5
 I ARM    I   V (M)   I    E (M)   I    L (M)   I    R (M)   I    D (M) I   PHI (DEG)  I  SLOPE  I INTERCEPT (PCU/MIN) I
 ------------------------------------------------------------------------------------------------------------------------
 I ARM  A I    3.10   I     9.40   I     8.40   I    27.00   I   67.00   I     32.0     I  0.490  I       25.156        I
 I ARM  B I    4.30   I     9.90   I    18.50   I    21.00   I   67.00   I     29.0     I  0.598  I       36.289        I
 I ARM  C I    3.50   I     9.50   I    25.80   I    16.00   I   67.00   I     37.0     I  0.563  I       33.767        I
 I ARM  D I    3.70   I     9.40   I    31.80   I    44.00   I   67.00   I     34.0     I  0.611  I       37.451        I
 I ARM  E I    3.80   I     7.20   I    11.60   I    15.00   I   67.00   I     54.0     I  0.465  I       25.257        I
 ------------------------------------------------------------------------------------------------------------------------

 V = approach half-width       L = effective flare length            D = inscribed circle diameter
 E = entry width               R = entry radius                      PHI = entry angle

 **WARNING** ARM D Effective flare length is outside normal range.
  Treat capacities with increasing caution.


.TRAFFIC DEMAND DATA
 -------------------

 Only sets included in the current run are shown
.SCALING FACTORS
.---------------------- T13
 IARM  I FLOW SCALE(%) I
 ----------------------
 I A   I      100      I
 I B   I      100      I
 I C   I      100      I
 I D   I      100      I
 I E   I      100      I
 ----------------------

 TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD -(  60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j12a A27 Kanes Hill Rbt DS1PM


 DEMAND SET TITLE:  j12a A27 Kanes Hill Rbt DS1PM
.------------------------------------------------------------------------------ T33
 I                    I         TURNING PROPORTIONS         I
 I                    I         TURNING COUNTS              I
 I                    I        (PERCENTAGE OF H.V.S)        I
 I                    ---------------------------------------
 I       TIME         I FROM/T  I  ARM A I  ARM B I  ARM C I  ARM D I  ARM E I
 ---------------------------------------------------------------------------
 I   17.00 - 18.00    I         I        I        I        I        I        I
 I                    I  ARM  A I  0.239 I  0.206 I  0.236 I  0.033 I  0.286 I
 I                    I         I  800.0 I  691.0 I  790.0 I  112.0 I  959.0 I
 I                    I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
 I                    I         I        I        I        I        I        I
 I                    I  ARM  B I  0.286 I  0.239 I  0.206 I  0.236 I  0.033 I
 I                    I         I  959.0 I  800.0 I  691.0 I  790.0 I  112.0 I
 I                    I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
 I                    I         I        I        I        I        I        I
```



```
 I                    I  ARM  C I  0.033 I  0.286 I  0.239 I  0.206 I  0.236 I
 I                    I         I  112.0 I  959.0 I  800.0 I  691.0 I  790.0 I
 I                    I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
 I                    I         I        I        I        I        I        I
 I                    I  ARM  D I  0.236 I  0.033 I  0.286 I  0.239 I  0.206 I
 I                    I         I  790.0 I  112.0 I  959.0 I  800.0 I  691.0 I
 I                    I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
 I                    I         I        I        I        I        I        I
 I                    I  ARM  E I  0.206 I  0.236 I  0.033 I  0.286 I  0.239 I
 I                    I         I  691.0 I  790.0 I  112.0 I  959.0 I  800.0 I
 I                    I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
 I                    I         I        I        I        I        I        I
 ---------------------------------------------------------------------------


.       QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT
        ---------------------------------------------------------
.------------------------------------------------------------------------------------------------------------------------ T70
 I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END      DELAY     GEOMETRIC DELAY    AVERAGE DELAY I
 I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE   (VEH.MIN/     (VEH.MIN/       PER ARRIVING  I
 I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
 -                                                                                                               -
 I 17.00-17.15                                                                                                   I
 I ARM A      22.03     12.21   1.804   - -       -    0.0  148.5     1122.0             -              6.254     I
 I ARM B      11.92     18.43   0.647   - -       -    0.0    1.8       24.9             -              0.148     I
 I ARM C       2.87     16.10   0.178   - -       -    0.0    0.2        3.2             -              0.075     I
 I ARM D      13.55     22.92   0.591   - -       -    0.0    1.4       20.3             -              0.105     I
 I ARM E      14.00     13.02   1.075   - -       -    0.0   22.9      201.2             -              1.144     I
 I                                                                                                               I
 ------------------------------------------------------------------------------------------------------------------------
.------------------------------------------------------------------------------------------------------------------------
 I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END      DELAY     GEOMETRIC DELAY    AVERAGE DELAY I
 I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE   (VEH.MIN/     (VEH.MIN/       PER ARRIVING  I
 I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
 -                                                                                                               -
 I 17.15-17.30                                                                                                   I
 I ARM A      22.03     12.02   1.833   - -       - 148.5  298.6     3353.3             -             18.739     I
 I ARM B      11.92     18.32   0.651   - -       -    1.8    1.8       27.2             -              0.156     I
 I ARM C       2.87     15.96   0.180   - -       -    0.2    0.2        3.3             -              0.076     I
 I ARM D      13.55     22.86   0.593   - -       -    1.4    1.4       21.5             -              0.107     I
 I ARM E      14.00     12.96   1.080   - -       -   22.9   39.9      472.4             -              2.661     I
 I                                                                                                               I
 ------------------------------------------------------------------------------------------------------------------------
.------------------------------------------------------------------------------------------------------------------------
 I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END      DELAY     GEOMETRIC DELAY    AVERAGE DELAY I
 I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE   (VEH.MIN/     (VEH.MIN/       PER ARRIVING  I
 I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
 -                                                                                                               -
 I 17.30-17.45                                                                                                   I
 I ARM A      22.03     12.00   1.836   - -       - 298.6  449.0     5607.5             -             31.270     I
 I ARM B      11.92     18.32   0.651   - -       -    1.8    1.8       27.6             -              0.156     I
 I ARM C       2.87     15.95   0.180   - -       -    0.2    0.2        3.3             -              0.076     I
 I ARM D      13.55     22.85   0.593   - -       -    1.4    1.4       21.7             -              0.107     I
 I ARM E      14.00     12.97   1.080   - -       -   39.9   56.1      720.8             -              3.902     I
 I                                                                                                               I
 ------------------------------------------------------------------------------------------------------------------------
.------------------------------------------------------------------------------------------------------------------------
 I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END      DELAY     GEOMETRIC DELAY    AVERAGE DELAY I
 I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE   (VEH.MIN/     (VEH.MIN/       PER ARRIVING  I
 I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
 -                                                                                                               -
 I 17.45-18.00                                                                                                   I
 I ARM A      22.03     11.99   1.837   - -       - 449.0  599.6     7864.7             -             43.823     I
 I ARM B      11.92     18.31   0.651   - -       -    1.8    1.8       27.7             -              0.156     I
 I ARM C       2.87     15.95   0.180   - -       -    0.2    0.2        3.3             -              0.076     I
 I ARM D      13.55     22.85   0.593   - -       -    1.4    1.4       21.7             -              0.107     I
 I ARM E      14.00     12.97   1.080   - -       -   56.1   72.1      962.1             -              5.116     I
 I                                                                                                               I
 ------------------------------------------------------------------------------------------------------------------------

.QUEUE AT ARM A
 --------------

  TIME SEGMENT NO. OF
    ENDING      VEHICLES
                IN QUEUE

    17.15         148.5  ********************************************************************************************
    17.30         298.6  ********************************************************************************************
    17.45         449.0  ********************************************************************************************
    18.00         599.6  ********************************************************************************************


.QUEUE AT ARM B
 --------------

  TIME SEGMENT NO. OF
    ENDING      VEHICLES
                IN QUEUE

    17.15           1.8  **
    17.30           1.8  **
    17.45           1.8  **
    18.00           1.8  **


.QUEUE AT ARM C
 --------------

  TIME SEGMENT NO. OF
    ENDING      VEHICLES
                IN QUEUE

    17.15           0.2
    17.30           0.2
    17.45           0.2
    18.00           0.2


.QUEUE AT ARM D
 --------------

  TIME SEGMENT NO. OF
```

ENDING	VEHICLES IN QUEUE	
17.15	1.4	*
17.30	1.4	*
17.45	1.4	*
18.00	1.4	*

.QUEUE AT ARM E

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	22.9	**********
17.30	39.9	**********
17.45	56.1	**********
18.00	72.1	**********

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	1321.8	1321.8	17947.5	13.58	32933.4	24.92
B	715.2	715.2	107.3	0.15	107.4	0.15
C	172.2	172.2	13.0	0.08	13.0	0.08
D	813.0	813.0	85.2	0.10	85.2	0.10
E	840.0	840.0	2356.5	2.81	2557.0	3.04
ALL	3862.2	3862.2	20509.5	5.31	35695.9	9.24

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

END OF JOB

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

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Run with file:-
"p:\10440\Traffic\Junctions\j12a A27 Kanes Hill Rbt\10440 j12a A27 Kanes Hill Rbt DS1AM+DEV.vai"
(drive-on-the-left) at 14:50:09 on Friday, 25 November 2016

.FILE PROPERTIES

RUN TITLE: j12a A27 Kanes Hill Rbt DS1AM+DEV
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA

ARM A - Moorhill Road
ARM B - Charles Watts Way
ARM C - Upper Northam Drive
ARM D - Kanes Hill
ARM E - Thornhill Park Road

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.10	9.40	8.40	27.00	67.00	32.0	0.490	25.156
ARM B	4.30	9.90	18.50	21.00	67.00	29.0	0.598	36.289
ARM C	3.50	9.50	25.80	16.00	67.00	37.0	0.563	33.767
ARM D	3.70	9.40	31.80	44.00	67.00	34.0	0.611	37.451
ARM E	3.80	7.20	11.60	15.00	67.00	54.0	0.465	25.257

V = approach half-width
E = entry width
L = effective flare length
R = entry radius
D = inscribed circle diameter
PHI = entry angle

WARNING ARM D Effective flare length is outside normal range.
Treat capacities with increasing caution.

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j12a A27 Kanes Hill Rbt DS1AM+DEV

DEMAND SET TITLE: j12a A27 Kanes Hill Rbt DS1AM+DEV

T33

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

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D	ARM E
08.00 - 09.00	ARM A	0.262	0.192	0.246	0.037	0.263
		1038.0	760.0	973.0	145.0	1042.0
		(10.0)	(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.263	0.262	0.192	0.246	0.037
		1042.0	1038.0	760.0	973.0	145.0
		(10.0)	(10.0)	(10.0)	(10.0)	(10.0)

```
I                   I  ARM  C I  0.037 I  0.263 I  0.262 I  0.192 I  0.246 I
I                   I         I  145.0 I 1042.0 I 1038.0 I  760.0 I  973.0 I
I                   I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
I                   I         I       I       I       I       I       I
I                   I  ARM  D I  0.246 I  0.037 I  0.263 I  0.262 I  0.192 I
I                   I         I  973.0 I  145.0 I 1042.0 I 1038.0 I  760.0 I
I                   I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
I                   I         I       I       I       I       I       I
I                   I  ARM  E I  0.192 I  0.246 I  0.037 I  0.263 I  0.262 I
I                   I         I  760.0 I  973.0 I  145.0 I 1042.0 I 1038.0 I
I                   I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
I                   I         I       I       I       I       I       I
```

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	23.00	12.07	1.906	- -	0.0	165.0	1245.4	-	7.031
ARM B	13.83	18.66	0.741	- -	0.0	2.7	36.9	-	0.193
ARM C	3.10	15.28	0.203	- -	0.0	0.3	3.7	-	0.082
ARM D	13.13	22.10	0.594	- -	0.0	1.4	20.5	-	0.109
ARM E	12.90	12.45	1.036	- -	0.0	17.1	158.4	-	0.971
08.15-08.30									
ARM A	23.00	11.84	1.943	- -	165.0	332.5	3731.3	-	21.160
ARM B	13.83	18.55	0.746	- -	2.7	2.8	42.0	-	0.211
ARM C	3.10	15.10	0.205	- -	0.3	0.3	3.8	-	0.083
ARM D	13.13	22.01	0.597	- -	1.4	1.5	21.8	-	0.113
ARM E	12.90	12.39	1.041	- -	17.1	27.7	337.8	-	2.062
08.30-08.45									
ARM A	23.00	11.81	1.948	- -	332.5	500.3	6245.8	-	35.384
ARM B	13.83	18.54	0.746	- -	2.8	2.9	42.9	-	0.212
ARM C	3.10	15.09	0.205	- -	0.3	0.3	3.9	-	0.083
ARM D	13.13	22.00	0.597	- -	1.5	1.5	22.0	-	0.113
ARM E	12.90	12.39	1.041	- -	27.7	37.1	486.5	-	2.837
08.45-09.00									
ARM A	23.00	11.80	1.950	- -	500.3	668.4	8765.1	-	49.621
ARM B	13.83	18.53	0.746	- -	2.9	2.9	43.3	-	0.212
ARM C	3.10	15.08	0.206	- -	0.3	0.3	3.9	-	0.084
ARM D	13.13	22.00	0.597	- -	1.5	1.5	22.1	-	0.113
ARM E	12.90	12.39	1.041	- -	37.1	46.0	623.3	-	3.553

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	165.0	**********
08.30	332.5	**********
08.45	500.3	**********
09.00	668.4	**********

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	2.7	***
08.30	2.8	***
08.45	2.9	***
09.00	2.9	***

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.3
08.30	0.3
08.45	0.3
09.00	0.3

.QUEUE AT ARM D

TIME SEGMENT NO. OF

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	1.4	*
08.30	1.5	*
08.45	1.5	*
09.00	1.5	*

.QUEUE AT ARM E

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	17.1	**********
08.30	27.7	**********
08.45	37.1	**********
09.00	46.0	**********

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	1380.0	1380.0	19987.6	14.48	38922.5	28.20
B	830.0	830.0	165.2	0.20	165.4	0.20
C	186.0	186.0	15.3	0.08	15.3	0.08
D	788.0	788.0	86.4	0.11	86.4	0.11
E	774.0	774.0	1606.1	2.08	1691.3	2.19
ALL	3958.0	3958.0	21860.5	5.52	40881.0	10.33

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

END OF JOB

```
_____________________ A R C A D Y  6 _____________________

    ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY


    Analysis Program: Release 7.0 (FEBRUARY 2010)
                      Patch 15 Apr 2011
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-------------------------------------------------------------------------------
 THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
 IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS  OF THE SOLUTION
-------------------------------------------------------------------------------

Run with file:-
"p:\10440\Traffic\Junctions\j12a A27 Kanes Hill Rbt\10440 j12a A27 Kanes Hill Rbt DS1PM+DEV.vai"
(drive-on-the-left ) at 14:50:31 on Friday, 25 November 2016


.FILE PROPERTIES
 ***************

   RUN TITLE: j12a A27 Kanes Hill Rbt DS1PM+DEV
    LOCATION: Eastleigh
        DATE: 24/11/16
      CLIENT: Hallam Land Management
 ENUMERATOR: Matt.Moss [BCL25]
 JOB NUMBER: 10440
      STATUS: Preliminary
 DESCRIPTION: Existing Layout

.INPUT DATA
 **********
 ARM A - Moorhill Road
 ARM B - Charles Watts Way
 ARM C - Upper Northam Drive
 ARM D - Kanes Hill
 ARM E - Thornhill Park Road

.GEOMETRIC DATA
 --------------

 ------------------------------------------------------------------------------------------------------------------------ T5
 I ARM    I   V (M)   I    E (M)   I    L (M)   I    R (M)   I    D (M) I   PHI (DEG)  I  SLOPE  I INTERCEPT (PCU/MIN) I
 ------------------------------------------------------------------------------------------------------------------------
 I ARM  A I    3.10   I     9.40   I     8.40   I    27.00   I   67.00   I     32.0     I  0.490  I       25.156        I
 I ARM  B I    4.30   I     9.90   I    18.50   I    21.00   I   67.00   I     29.0     I  0.598  I       36.289        I
 I ARM  C I    3.50   I     9.50   I    25.80   I    16.00   I   67.00   I     37.0     I  0.563  I       33.767        I
 I ARM  D I    3.70   I     9.40   I    31.80   I    44.00   I   67.00   I     34.0     I  0.611  I       37.451        I
 I ARM  E I    3.80   I     7.20   I    11.60   I    15.00   I   67.00   I     54.0     I  0.465  I       25.257        I
 ------------------------------------------------------------------------------------------------------------------------

 V = approach half-width       L = effective flare length            D = inscribed circle diameter
 E = entry width               R = entry radius                      PHI = entry angle

 **WARNING** ARM D Effective flare length is outside normal range.
  Treat capacities with increasing caution.


.TRAFFIC DEMAND DATA
 -------------------

 Only sets included in the current run are shown
.SCALING FACTORS
.---------------------- T13
 IARM  I FLOW SCALE(%) I
 ----------------------
 I A   I      100      I
 I B   I      100      I
 I C   I      100      I
 I D   I      100      I
 I E   I      100      I
 ----------------------

 TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD -(  60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j12a A27 Kanes Hill Rbt DS1PM+DEV


 DEMAND SET TITLE:  j12a A27 Kanes Hill Rbt DS1PM+DEV
.------------------------------------------------------------------------------ T33
 I                    I         TURNING PROPORTIONS         I
 I                    I         TURNING COUNTS              I
 I                    I        (PERCENTAGE OF H.V.S)        I
 I                    ---------------------------------------
 I       TIME         I FROM/T  I  ARM A I  ARM B I  ARM C I  ARM D I  ARM E I
 ---------------------------------------------------------------------------
 I   17.00 - 18.00    I         I        I        I        I        I        I
 I                    I  ARM  A I  0.321 I  0.244 I  0.216 I  0.037 I  0.181 I
 I                    I         I 1323.0 I 1005.0 I  890.0 I  152.0 I  747.0 I
 I                    I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
 I                    I         I        I        I        I        I        I
 I                    I  ARM  B I  0.181 I  0.321 I  0.244 I  0.216 I  0.037 I
 I                    I         I  747.0 I 1323.0 I 1005.0 I  890.0 I  152.0 I
 I                    I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
 I                    I         I        I        I        I        I        I
```



```
 I                    I  ARM  C I  0.037 I  0.181 I  0.321 I  0.244 I  0.216 I
 I                    I         I  152.0 I  747.0 I 1323.0 I 1005.0 I  890.0 I
 I                    I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
 I                    I         I        I        I        I        I        I
 I                    I  ARM  D I  0.216 I  0.037 I  0.181 I  0.321 I  0.244 I
 I                    I         I  890.0 I  152.0 I  747.0 I 1323.0 I 1005.0 I
 I                    I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
 I                    I         I        I        I        I        I        I
 I                    I  ARM  E I  0.244 I  0.216 I  0.037 I  0.181 I  0.321 I
 I                    I         I 1005.0 I  890.0 I  152.0 I  747.0 I 1323.0 I
 I                    I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
 I                    I         I        I        I        I        I        I
 ---------------------------------------------------------------------------


.       QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT
        ---------------------------------------------------------
.------------------------------------------------------------------------------------------------------------------------ T70
 I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END      DELAY     GEOMETRIC DELAY    AVERAGE DELAY I
 I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE   (VEH.MIN/     (VEH.MIN/       PER ARRIVING  I
 I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
 -                                                                                                                  -
 I 17.00-17.15                                                                                                      I
 I ARM A      22.97     11.92   1.927   - -       -    0.0  166.8     1258.4             -              7.168      I
 I ARM B      15.35     19.42   0.790   - -       -    0.0    3.5       46.4             -              0.221      I
 I ARM C       3.75     15.06   0.249   - -       -    0.0    0.3        4.8             -              0.088      I
 I ARM D      11.83     21.29   0.556   - -       -    0.0    1.2       17.6             -              0.104      I
 I ARM E      14.72     12.58   1.170   - -       -    0.0   37.0      301.2             -              1.706      I
 I                                                                                                                  I
 ------------------------------------------------------------------------------------------------------------------------
.------------------------------------------------------------------------------------------------------------------------
 I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END      DELAY     GEOMETRIC DELAY    AVERAGE DELAY I
 I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE   (VEH.MIN/     (VEH.MIN/       PER ARRIVING  I
 I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
 -                                                                                                                  -
 I 17.15-17.30                                                                                                      I
 I ARM A      22.97     11.77   1.951   - -       - 166.8  334.7     3761.5             -             21.422      I
 I ARM B      15.35     19.36   0.793   - -       -    3.5    3.7       54.1             -              0.247      I
 I ARM C       3.75     14.91   0.252   - -       -    0.3    0.3        5.0             -              0.090      I
 I ARM D      11.83     21.19   0.559   - -       -    1.2    1.3       18.7             -              0.107      I
 I ARM E      14.72     12.51   1.177   - -       -   37.0   70.5      806.6             -              4.498      I
 I                                                                                                                  I
 ------------------------------------------------------------------------------------------------------------------------
.------------------------------------------------------------------------------------------------------------------------
 I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END      DELAY     GEOMETRIC DELAY    AVERAGE DELAY I
 I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE   (VEH.MIN/     (VEH.MIN/       PER ARRIVING  I
 I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
 -                                                                                                                  -
 I 17.30-17.45                                                                                                      I
 I ARM A      22.97     11.77   1.952   - -       - 334.7  502.7     6280.9             -             35.697      I
 I ARM B      15.35     19.36   0.793   - -       -    3.7    3.7       55.5             -              0.249      I
 I ARM C       3.75     14.90   0.252   - -       -    0.3    0.3        5.0             -              0.090      I
 I ARM D      11.83     21.18   0.559   - -       -    1.3    1.3       18.8             -              0.107      I
 I ARM E      14.72     12.51   1.177   - -       -   70.5 103.8     1307.4             -              7.127      I
 I                                                                                                                  I
 ------------------------------------------------------------------------------------------------------------------------
.------------------------------------------------------------------------------------------------------------------------
 I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END      DELAY     GEOMETRIC DELAY    AVERAGE DELAY I
 I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE   (VEH.MIN/     (VEH.MIN/       PER ARRIVING  I
 I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
 -                                                                                                                  -
 I 17.45-18.00                                                                                                      I
 I ARM A      22.97     11.76   1.952   - -       - 502.7  670.8     8801.2             -             49.984      I
 I ARM B      15.35     19.36   0.793   - -       -    3.7    3.8       56.1             -              0.249      I
 I ARM C       3.75     14.90   0.252   - -       -    0.3    0.3        5.0             -              0.090      I
 I ARM D      11.83     21.18   0.559   - -       -    1.3    1.3       18.9             -              0.107      I
 I ARM E      14.72     12.51   1.177   - -       - 103.8  137.0     1806.5             -              9.766      I
 I                                                                                                                  I
 ------------------------------------------------------------------------------------------------------------------------

.QUEUE AT ARM A
 --------------

  TIME SEGMENT NO. OF
    ENDING      VEHICLES
                IN QUEUE

    17.15         166.8  ********************************************************************************************
    17.30         334.7  ********************************************************************************************
    17.45         502.7  ********************************************************************************************
    18.00         670.8  ********************************************************************************************


.QUEUE AT ARM B
 --------------

  TIME SEGMENT NO. OF
    ENDING      VEHICLES
                IN QUEUE

    17.15           3.5  ****
    17.30           3.7  ****
    17.45           3.7  ****
    18.00           3.8  ****


.QUEUE AT ARM C
 --------------

  TIME SEGMENT NO. OF
    ENDING      VEHICLES
                IN QUEUE

    17.15           0.3
    17.30           0.3
    17.45           0.3
    18.00           0.3


.QUEUE AT ARM D
 --------------

  TIME SEGMENT NO. OF
```

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	1.2	*
17.30	1.3	*
17.45	1.3	*
18.00	1.3	*

.QUEUE AT ARM E

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	37.0	************************************
17.30	70.5	**
17.45	103.8	**
18.00	137.0	**

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	1378.0	1378.0	20102.0	14.59	39223.4	28.46
B	921.0	921.0	212.3	0.23	212.6	0.23
C	225.0	225.0	19.8	0.09	19.8	0.09
D	710.0	710.0	74.0	0.10	74.0	0.10
E	883.0	883.0	4221.6	4.78	4972.5	5.63
ALL	4117.0	4117.0	24629.7	5.98	44502.4	10.81

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

END OF JOB

_____ A R C A D Y 6 _____

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

_____

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Run with file:-
"p:\10440\Traffic\Junctions\j12a A27 Kanes Hill Rbt\10440 j12a A27 Kanes Hill Rbt DS1AM+DEV+IMP.vai"
(drive-on-the-left) at 08:33:02 on Monday, 28 November 2016

.FILE PROPERTIES

RUN TITLE: j12a A27 Kanes Hill Rbt DS1AM+DEV
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA

ARM A - Moorhill Road
ARM B - Charles Watts Way
ARM C - Upper Northam Drive
ARM D - Kanes Hill
ARM E - Thornhill Park Road

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.10	9.90	10.40	27.00	67.00	32.0	0.507	26.914
ARM B	4.30	9.90	18.50	21.00	67.00	29.0	0.598	36.289
ARM C	3.50	9.50	25.80	16.00	67.00	37.0	0.563	33.767
ARM D	3.70	9.40	31.80	44.00	67.00	34.0	0.611	37.451
ARM E	3.80	7.70	14.10	15.00	67.00	54.0	0.479	26.686

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM D Effective flare length is outside normal range.
Treat capacities with increasing caution.

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

IARM	I FLOW SCALE(%)
A	100
B	100
C	100
D	100
E	100

TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j12a A27 Kanes Hill Rbt DS1AM+DEV

DEMAND SET TITLE: j12a A27 Kanes Hill Rbt DS1AM+DEV

T33

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS / (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C	ARM D	ARM E
08.00 - 09.00	ARM A	0.262	0.192	0.246	0.037	0.263
		1038.0	760.0	973.0	145.0	1042.0
		(10.0)	(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.263	0.262	0.192	0.246	0.037
		1042.0	1038.0	760.0	973.0	145.0
		(10.0)	(10.0)	(10.0)	(10.0)	(10.0)

```
I                   I  ARM  C I  0.037 I  0.263 I  0.262 I  0.192 I  0.246 I
I                   I         I  145.0 I 1042.0 I 1038.0 I  760.0 I  973.0 I
I                   I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
I                   I         I       I       I       I       I       I
I                   I  ARM  D I  0.246 I  0.037 I  0.263 I  0.262 I  0.192 I
I                   I         I  973.0 I  145.0 I 1042.0 I 1038.0 I  760.0 I
I                   I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
I                   I         I       I       I       I       I       I
I                   I  ARM  E I  0.192 I  0.246 I  0.037 I  0.263 I  0.262 I
I                   I         I  760.0 I  973.0 I  145.0 I 1042.0 I 1038.0 I
I                   I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
I                   I         I       I       I       I       I       I
-------------------------------------------------------------------------------
```

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

```
--------------------------------------------------------------------------------------------------------------------- T70
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/     (VEH.MIN/      PER ARRIVING  I
I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
-                                                                                                               -
I 08.00-08.15                                                                                                   I
I ARM A      23.00     13.12   1.753   - -       -    0.0  149.4     1129.8             -             5.868     I
I ARM B      13.83     18.01   0.768   - -       -    0.0    3.1       41.4             -             0.219     I
I ARM C       3.10     14.84   0.209   - -       -    0.0    0.3        3.8             -             0.085     I
I ARM D      13.13     21.70   0.605   - -       -    0.0    1.5       21.3             -             0.114     I
I ARM E      12.90     13.31   0.969   - -       -    0.0   10.8      111.8             -             0.676     I
I                                                                                                               I
---------------------------------------------------------------------------------------------------------------------
---------------------------------------------------------------------------------------------------------------------
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/     (VEH.MIN/      PER ARRIVING  I
I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
-                                                                                                               -
I 08.15-08.30                                                                                                   I
I ARM A      23.00     12.88   1.786   - -       -  149.4  301.3     3380.8             -            17.639     I
I ARM B      13.83     17.90   0.773   - -       -    3.1    3.3       48.1             -             0.244     I
I ARM C       3.10     14.65   0.212   - -       -    0.3    0.3        4.0             -             0.087     I
I ARM D      13.13     21.61   0.608   - -       -    1.5    1.5       22.8             -             0.118     I
I ARM E      12.90     13.24   0.974   - -       -   10.8   14.6      192.7             -             1.177     I
I                                                                                                               I
---------------------------------------------------------------------------------------------------------------------
---------------------------------------------------------------------------------------------------------------------
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/     (VEH.MIN/      PER ARRIVING  I
I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
-                                                                                                               -
I 08.30-08.45                                                                                                   I
I ARM A      23.00     12.84   1.792   - -       -  301.3  453.8     5663.2             -            29.526     I
I ARM B      13.83     17.89   0.773   - -       -    3.3    3.3       49.4             -             0.246     I
I ARM C       3.10     14.63   0.212   - -       -    0.3    0.3        4.0             -             0.087     I
I ARM D      13.13     21.60   0.608   - -       -    1.5    1.5       23.0             -             0.118     I
I ARM E      12.90     13.24   0.974   - -       -   14.6   17.1      238.5             -             1.391     I
I                                                                                                               I
---------------------------------------------------------------------------------------------------------------------
---------------------------------------------------------------------------------------------------------------------
I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/     (VEH.MIN/      PER ARRIVING  I
I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
-                                                                                                               -
I 08.45-09.00                                                                                                   I
I ARM A      23.00     12.82   1.794   - -       -  453.8  606.5     7951.9             -            41.445     I
I ARM B      13.83     17.88   0.773   - -       -    3.3    3.3       50.0             -             0.246     I
I ARM C       3.10     14.62   0.212   - -       -    0.3    0.3        4.0             -             0.087     I
I ARM D      13.13     21.60   0.608   - -       -    1.5    1.5       23.1             -             0.118     I
I ARM E      12.90     13.25   0.974   - -       -   17.1   18.9      270.3             -             1.539     I
I                                                                                                               I
---------------------------------------------------------------------------------------------------------------------
```

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	149.4	**********
08.30	301.3	**********
08.45	453.8	**********
09.00	606.5	**********

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	3.1	***
08.30	3.3	***
08.45	3.3	***
09.00	3.3	***

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.3
08.30	0.3
08.45	0.3
09.00	0.3

.QUEUE AT ARM D

TIME SEGMENT NO. OF

ENDING	VEHICLES IN QUEUE	
08.15	1.5	**
08.30	1.5	**
08.45	1.5	**
09.00	1.5	**

.QUEUE AT ARM E

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	10.8	**********
08.30	14.6	**********
08.45	17.1	**********
09.00	18.9	**********

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

```
---------------------------------------------------------------------------------- T75
I  ARM  I   TOTAL DEMAND  I     * QUEUEING *    I  * INCLUSIVE QUEUEING *  I
I       I                 I      * DELAY *      I         * DELAY *        I
I       I-----------------------------------------------------------------I
I       I  (VEH)  (VEH/H) I  (MIN)    (MIN/VEH) I    (MIN)      (MIN/VEH)  I
----------------------------------------------------------------------------------
I   A   I 1380.0 I 1380.0 I 18125.6 I   13.13   I   32472.0  I    23.53    I
I   B   I  830.0 I  830.0 I   189.0 I    0.23   I     189.3  I     0.23    I
I   C   I  186.0 I  186.0 I    15.8 I    0.09   I      15.8  I     0.09    I
I   D   I  788.0 I  788.0 I    90.3 I    0.11   I      90.4  I     0.11    I
I   E   I  774.0 I  774.0 I   813.3 I    1.05   I     826.7  I     1.07    I
----------------------------------------------------------------------------------
I  ALL  I 3958.0 I 3958.0 I 19234.0 I    4.86   I   33594.3  I     8.49    I
----------------------------------------------------------------------------------
```

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

END OF JOB

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

For sales and distribution information,
program advice and maintenance, contact:

TRL Limited — Tel: +44 (0) 1344 770758
Crowthorne House — Fax: +44 (0) 1344 770356
Nine Mile Ride — Email: software@trl.co.uk
Wokingham, Berks. — Web: www.trlsoftware.co.uk
RG40 3GA,UK

Run with file:-
"p:\10440\Traffic\Junctions\j12a A27 Kanes Hill Rbt\10440 j12a A27 Kanes Hill Rbt DS1PM+DEV+IMP.vai"
(drive-on-the-left) at 08:31:37 on Monday, 28 November 2016

.FILE PROPERTIES
****

RUN TITLE: j12a A27 Kanes Hill Rbt DS1PM+DEV
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA
****
ARM A - Moorhill Road
ARM B - Charles Watts Way
ARM C - Upper Northam Drive
ARM D - Kanes Hill
ARM E - Thornhill Park Road

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.10	9.90	10.40	26.90	67.00	32.0	0.507	26.910
ARM B	4.30	9.90	18.50	21.00	67.00	29.0	0.598	36.289
ARM C	3.50	9.50	25.80	16.00	67.00	37.0	0.563	33.767
ARM D	3.70	9.40	31.80	44.00	67.00	34.0	0.611	37.451
ARM E	3.80	8.00	14.10	15.00	67.00	54.0	0.483	27.057

V = approach half-width　L = effective flare length　D = inscribed circle diameter
E = entry width　R = entry radius　PHI = entry angle

WARNING ARM D Effective flare length is outside normal range.
Treat capacities with increasing caution.

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j12a A27 Kanes Hill Rbt DS1PM+DEV

DEMAND SET TITLE: j12a A27 Kanes Hill Rbt DS1PM+DEV

T33

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

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D	ARM E
17.00 - 18.00						
	ARM A	0.321	0.244	0.216	0.037	0.181
		1323.0	1005.0	890.0	152.0	747.0
		(10.0)	(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.181	0.321	0.244	0.216	0.037
		747.0	1323.0	1005.0	890.0	152.0
		(10.0)	(10.0)	(10.0)	(10.0)	(10.0)
	ARM C	0.037	0.181	0.321	0.244	0.216
		152.0	747.0	1323.0	1005.0	890.0
		(10.0)	(10.0)	(10.0)	(10.0)	(10.0)
	ARM D	0.216	0.037	0.181	0.321	0.244
		890.0	152.0	747.0	1323.0	1005.0
		(10.0)	(10.0)	(10.0)	(10.0)	(10.0)
	ARM E	0.244	0.216	0.037	0.181	0.321
		1005.0	890.0	152.0	747.0	1323.0
		(10.0)	(10.0)	(10.0)	(10.0)	(10.0)

10440 j12a A27 Kanes Hill Rbt DS1PM+DEV+IMP

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	22.97	12.80	1.794	- - -	0.0	153.7	1161.5	-	6.176
ARM B	15.35	18.75	0.819	- - -	0.0	4.1	53.2	-	0.256
ARM C	3.75	14.56	0.258	- - -	0.0	0.3	5.0	-	0.092
ARM D	11.83	20.86	0.567	- - -	0.0	1.3	18.4	-	0.109
ARM E	14.72	13.71	1.074	- - -	0.0	23.5	206.9	-	1.118

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
ARM A	22.97	12.58	1.826	- - -	153.7	309.5	3474.5	-	18.544
ARM B	15.35	18.65	0.823	- - -	4.1	4.4	64.1	-	0.298
ARM C	3.75	14.37	0.261	- - -	0.3	0.4	5.2	-	0.094
ARM D	11.83	20.73	0.571	- - -	1.3	1.3	19.6	-	0.112
ARM E	14.72	13.63	1.080	- - -	23.5	41.4	488.3	-	2.608

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
ARM A	22.97	12.56	1.828	- - -	309.5	465.6	5813.7	-	30.963
ARM B	15.35	18.65	0.823	- - -	4.4	4.5	66.5	-	0.300
ARM C	3.75	14.36	0.261	- - -	0.4	0.4	5.3	-	0.094
ARM D	11.83	20.73	0.571	- - -	1.3	1.3	19.8	-	0.112
ARM E	14.72	13.63	1.080	- - -	41.4	58.4	748.8	-	3.854

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
ARM A	22.97	12.55	1.830	- - -	465.6	621.8	8156.0	-	43.418
ARM B	15.35	18.64	0.823	- - -	4.5	4.5	67.5	-	0.302
ARM C	3.75	14.35	0.261	- - -	0.4	0.4	5.3	-	0.094
ARM D	11.83	20.72	0.571	- - -	1.3	1.3	19.8	-	0.112
ARM E	14.72	13.63	1.080	- - -	58.4	75.2	1002.4	-	5.067

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	153.7	***
17.30	309.5	***
17.45	465.6	***
18.00	621.8	***

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	4.1	****
17.30	4.4	****
17.45	4.5	****
18.00	4.5	*****

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.3
17.30	0.4
17.45	0.4
18.00	0.4

.QUEUE AT ARM D

TIME SEGMENT NO. OF

ENDING	VEHICLES IN QUEUE	
17.15	1.3	*
17.30	1.3	*
17.45	1.3	*
18.00	1.3	*

.QUEUE AT ARM E

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	23.5	************************
17.30	41.4	***
17.45	58.4	**
18.00	75.2	**

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)	T75
A	1378.0	1378.0	18605.8	13.50	34007.3	24.68	
B	921.0	921.0	251.3	0.27	251.9	0.27	
C	225.0	225.0	20.8	0.09	20.8	0.09	
D	710.0	710.0	77.6	0.11	77.6	0.11	
E	883.0	883.0	2446.4	2.77	2653.9	3.01	
ALL	4117.0	4117.0	21401.9	5.20	37011.4	8.99	

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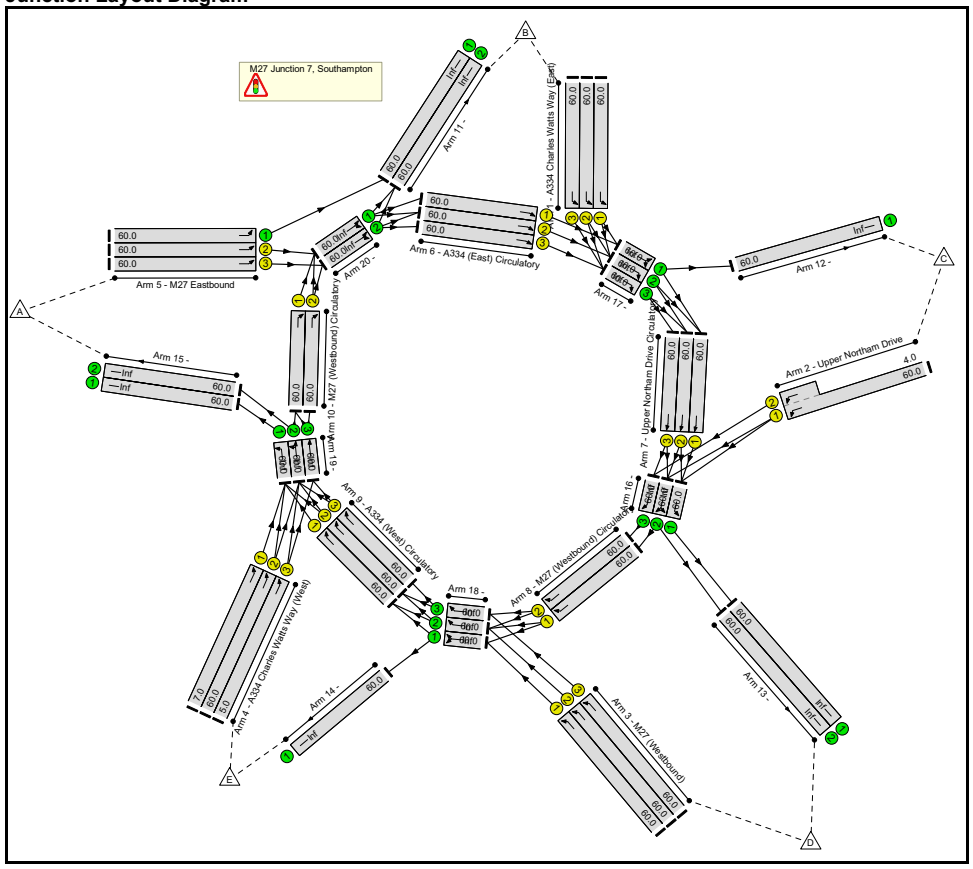
END OF JOB

Linsig Report

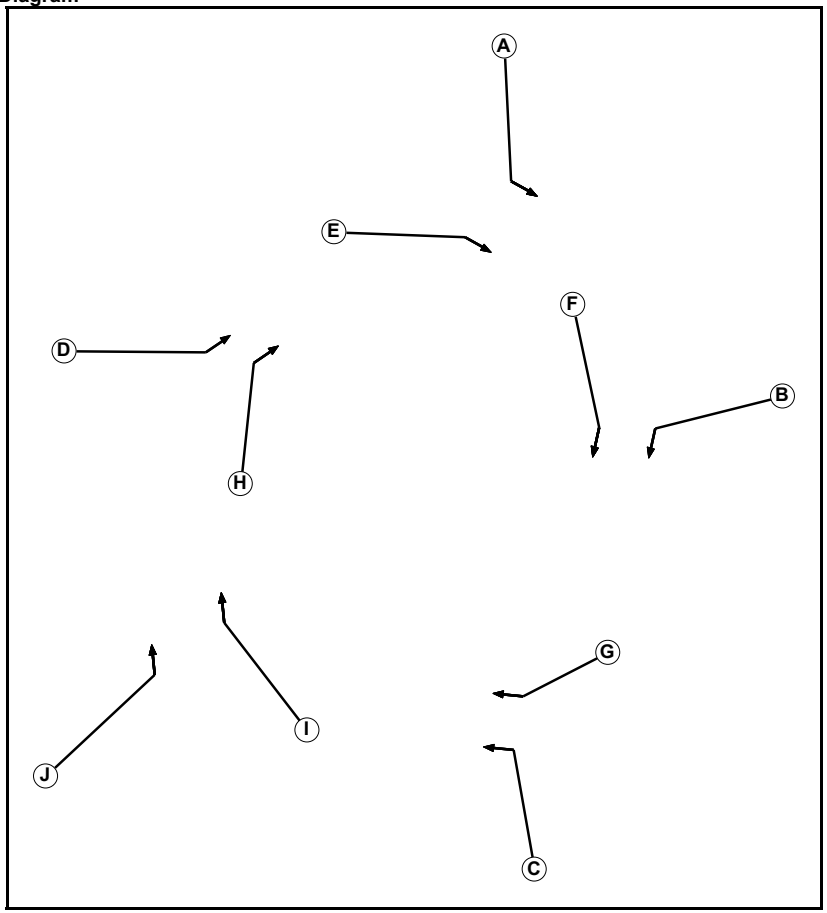
User and Project Details

Project:	**Land at Eastleigh**
Title:	**j13 M27 Junction 7 Traffic Signals**
Location:	Southampton
File name:	j13 M27 Junction 7 Traffic Signals Rbt.lsg3x
Author:	Matthew Moss
Company:	Brookbanks Consulting

Junction Layout Diagram



Phase Diagram



Linsig Report
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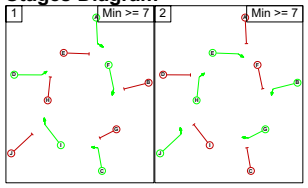
Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J
A		5	-	-	5	-	5	5	-	5
B	5		5	5	-	5	-	-	5	-
C	-	5		-	5	-	5	5	-	5
D	-	5	-		5	-	5	5	-	5
E	5	-	5	5		5	-	-	5	-
F	-	5	-	-	5		5	5	-	5
G	5	-	5	5	-	5		-	5	-
H	5	-	5	5	-	5	-		5	-
I	-	5	-	-	5	-	5	5		5
J	5	-	5	5	-	5	-	-	5	

Stages Diagram



Lane Input Data

Junction: M27 Junction 7, Southampton

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 (A334 Charles Watts Way (East))	U	A	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 17 Left	Inf
1/2 (A334 Charles Watts Way (East))	U	A	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 17 Left	Inf
1/3 (A334 Charles Watts Way (East))	U	A	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 17 Left	Inf
2/1 (Upper Northam Drive)	U	B	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 16 Left	Inf
2/2 (Upper Northam Drive)	U	B	2	3	4.0	Geom	-	3.65	0.00	Y	Arm 16 Left	Inf
3/1 (M27 (Westbound))	U	C	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 18 Ahead	Inf
3/2 (M27 (Westbound))	U	C	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 18 Ahead	Inf
3/3 (M27 (Westbound))	U	C	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 18 Ahead	Inf
4/1 (A334 Charles Watts Way (West))	U	J	2	3	7.0	Geom	-	3.65	0.00	Y	Arm 19 Ahead	Inf
4/2 (A334 Charles Watts Way (West))	U	J	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 19 Ahead	Inf
4/3 (A334 Charles Watts Way (West))	U	J	2	3	5.0	Geom	-	3.30	0.00	Y	Arm 19 Ahead	Inf
5/1 (M27 Eastbound)	U		2	3	60.0	Geom	-	3.65	0.00	Y	Arm 11 Left	Inf
5/2 (M27 Eastbound)	U	D	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 20 Ahead	Inf
5/3 (M27 Eastbound)	U	D	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 20 Ahead	Inf

Linsig Report
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6/1 (A334 (East) Circulatory)	U	E	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 17 Ahead	Inf
6/2 (A334 (East) Circulatory)	U	E	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 17 Ahead	Inf
6/3 (A334 (East) Circulatory)	U	E	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 17 Ahead	Inf
7/1 (Upper Northam Drive Circulatory)	U	F	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 16 Ahead	Inf
7/2 (Upper Northam Drive Circulatory)	U	F	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 16 Ahead	Inf
7/3 (Upper Northam Drive Circulatory)	U	F	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 16 Ahead	Inf
8/1 (M27 (Westbound) Circulatory)	U	G	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 18 Ahead	Inf
8/2 (M27 (Westbound) Circulatory)	U	G	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 18 Ahead	Inf
9/1 (A334 (West) Circulatory)	U	I	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 19 Ahead	Inf
9/2 (A334 (West) Circulatory)	U	I	2	3	60.0	Geom	-	4.50	0.00	Y	Arm 19 Ahead	Inf
9/3 (A334 (West) Circulatory)	U	I	2	3	60.0	Geom	-	4.50	0.00	Y	Arm 19 Ahead	Inf
10/1 (M27 (Westbound) Circulatory)	U	H	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 20 Right	Inf
10/2 (M27 (Westbound) Circulatory)	U	H	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 20 Right	Inf
16/1	U		2	3	60.0	Geom	-	3.25	0.00	Y	Arm 13 Left	Inf

Linsig Report
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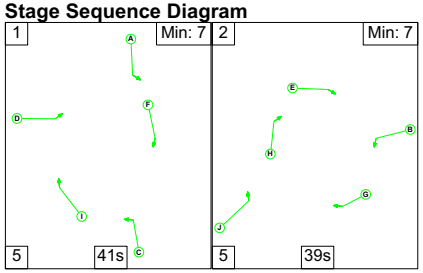
Scenario 1: 'DS1AM' (FG1: 'DS1AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	D	E	Tot.
A	0	966	6	0	77	1049
B	676	0	35	781	126	1618
C	230	0	0	62	66	358
D	0	795	45	0	539	1379
E	690	286	29	29	0	1034
Tot.	1596	2047	115	872	808	5438

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: j13 M27 Junction 7 Traffic Signals	-	-	-		-	-	-	-	-	-	**69.3%**	**0**	**0**	**0**	**62.8**	-	-
M27 Junction 7, Southampton	-	-	-		-	-	-	-	-	-	**69.3%**	**0**	**0**	**0**	**62.8**	-	-
1/1	A334 Charles Watts Way (East) Left	U	A		1	41	-	540	1980	924	58.4%	-	-	-	3.3	22.3	10.5
1/2	A334 Charles Watts Way (East) Left	U	A		1	41	-	536	1980	924	58.0%	-	-	-	3.3	22.2	10.4
1/3	A334 Charles Watts Way (East) Left	U	A		1	41	-	542	1980	924	58.7%	-	-	-	3.4	22.3	10.6
2/1+2/2	Upper Northam Drive Left	U	B		1	39	-	358	1980:1980	529+512	34.4 : 34.4%	-	-	-	1.8	17.9	3.0
3/1	M27 (Westbound) Ahead	U	C		1	41	-	539	1980	924	58.3%	-	-	-	3.3	22.2	10.4
3/2	M27 (Westbound) Ahead	U	C		1	41	-	412	1980	924	44.6%	-	-	-	2.3	19.7	7.3
3/3	M27 (Westbound) Ahead	U	C		1	41	-	428	1980	924	46.3%	-	-	-	2.4	20.0	7.7
4/1	A334 Charles Watts Way (West) Ahead	U	J		1	39	-	350	1980	880	39.8%	-	-	-	2.0	20.3	6.2
4/2	A334 Charles Watts Way (West) Ahead	U	J		1	39	-	341	1940	862	39.5%	-	-	-	1.9	20.3	6.0
4/3	A334 Charles Watts Way (West) Ahead	U	J		1	39	-	343	1945	864	39.7%	-	-	-	1.9	20.3	6.0

5/1	M27 Eastbound Left	U	-		-	-	-	966	1980	1980	48.8%	-	-	-	0.5	1.8	0.5
5/2	M27 Eastbound Ahead	U	D		1	41	-	40	1965	917	4.4%	-	-	-	0.2	15.1	0.6
5/3	M27 Eastbound Ahead	U	D		1	41	-	43	1965	917	4.7%	-	-	-	0.2	15.2	0.6
6/1	A334 (East) Circulatory Ahead	U	E		1	39	-	80	1980	880	9.1%	-	-	-	0.1	6.6	0.3
6/2	A334 (East) Circulatory Ahead	U	E		1	39	-	59	1980	880	6.7%	-	-	-	0.3	20.1	0.9
6/3	A334 (East) Circulatory Ahead	U	E		1	39	-	47	1980	880	5.3%	-	-	-	0.3	26.8	1.0
7/1	Upper Northam Drive Circulatory Ahead	U	F		1	41	-	501	1980	924	54.2%	-	-	-	1.4	9.7	2.5
7/2	Upper Northam Drive Circulatory Ahead	U	F		1	41	-	586	1980	924	63.4%	-	-	-	2.1	12.7	3.6
7/3	Upper Northam Drive Circulatory Ahead	U	F		1	41	-	602	1980	924	65.2%	-	-	-	2.1	12.8	7.1
8/1	M27 (Westbound) Circulatory Ahead	U	G		1	39	-	575	1980	880	65.3%	-	-	-	5.0	31.3	14.8
8/2	M27 (Westbound) Circulatory Ahead	U	G		1	39	-	600	1980	880	68.2%	-	-	-	4.7	28.1	15.4
9/1	A334 (West) Circulatory Ahead	U	I		1	41	-	415	1980	924	44.9%	-	-	-	3.9	33.8	10.8
9/2	A334 (West) Circulatory Ahead	U	I		1	41	-	663	2065	964	68.8%	-	-	-	3.6	19.7	15.5

Linsig Report
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9/3	A334 (West) Circulatory Ahead	U	I		1	41	-	668	2065	964	69.3%	-	-	-	3.6	19.4	15.5
10/1	M27 (Westbound) Circulatory Right	U	H		1	39	-	589	1980	880	66.9%	-	-	-	4.5	27.8	15.0
10/2	M27 (Westbound) Circulatory Right	U	H		1	39	-	595	1980	880	67.6%	-	-	-	4.5	27.1	15.1
16/1	Left	U	-		-	-	-	501	1940	1940	25.8%	-	-	-	0.2	1.3	0.2

C1 PRC for Signalled Lanes (%): 29.8 Total Delay for Signalled Lanes (pcuHr): 62.14 Cycle Time (s): 90
PRC Over All Lanes (%): 29.8 Total Delay Over All Lanes(pcuHr): 62.79

Linsig Report
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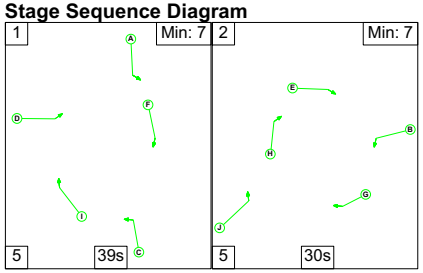
Scenario 2: 'DS1PM' (FG2: 'DS1PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	D	E	Tot.
A	0	1108	51	0	117	1276
B	774	0	24	1049	74	1921
C	131	0	0	50	30	211
D	0	758	41	0	487	1286
E	356	277	28	83	0	744
Tot.	1261	2143	144	1182	708	5438

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: j13 M27 Junction 7 Traffic Signals	-	-	-		-	-	-	-	-	-	**78.8%**	**0**	**0**	**0**	**60.0**	-	-
M27 Junction 7, Southampton	-	-	-		-	-	-	-	-	-	**78.8%**	**0**	**0**	**0**	**60.0**	-	-
1/1	A334 Charles Watts Way (East) Left	U	A		1	39	-	638	1980	1003	63.6%	-	-	-	3.4	19.1	11.0
1/2	A334 Charles Watts Way (East) Left	U	A		1	39	-	643	1980	1003	64.1%	-	-	-	3.4	19.2	11.1
1/3	A334 Charles Watts Way (East) Left	U	A		1	39	-	640	1980	1003	63.8%	-	-	-	3.4	19.2	11.0
2/1+2/2	Upper Northam Drive Left	U	B		1	30	-	211	1980:1980	567+319	23.8 : 23.8%	-	-	-	1.1	18.2	2.1
3/1	M27 (Westbound) Ahead	U	C		1	39	-	487	1980	1003	48.6%	-	-	-	2.2	16.3	7.4
3/2	M27 (Westbound) Ahead	U	C		1	39	-	391	1980	1003	39.0%	-	-	-	1.6	14.9	5.5
3/3	M27 (Westbound) Ahead	U	C		1	39	-	408	1980	1003	40.7%	-	-	-	1.7	15.2	5.9
4/1	A334 Charles Watts Way (West) Ahead	U	J		1	30	-	250	1980	777	32.2%	-	-	-	1.4	20.1	4.0
4/2	A334 Charles Watts Way (West) Ahead	U	J		1	30	-	248	1940	761	32.6%	-	-	-	1.4	20.2	4.0
4/3	A334 Charles Watts Way (West) Ahead	U	J		1	30	-	246	1945	763	32.2%	-	-	-	1.4	20.2	3.9

5/1	M27 Eastbound Left	U	-		-	-	-	1108	1980	1980	56.0%	-	-	-	0.6	2.1	0.6
5/2	M27 Eastbound Ahead	U	D		1	39	-	113	1965	995	11.4%	-	-	-	0.4	12.3	1.4
5/3	M27 Eastbound Ahead	U	D		1	39	-	55	1965	995	5.5%	-	-	-	0.2	11.8	0.6
6/1	A334 (East) Circulatory Ahead	U	E		1	30	-	133	1980	777	17.1%	-	-	-	0.7	18.2	1.5
6/2	A334 (East) Circulatory Ahead	U	E		1	30	-	125	1980	777	16.1%	-	-	-	0.9	24.6	2.0
6/3	A334 (East) Circulatory Ahead	U	E		1	30	-	62	1980	777	8.0%	-	-	-	0.4	26.1	1.2
7/1	Upper Northam Drive Circulatory Ahead	U	F		1	39	-	527	1980	1003	52.6%	-	-	-	1.4	9.8	3.2
7/2	Upper Northam Drive Circulatory Ahead	U	F		1	39	-	790	1980	1003	78.8%	-	-	-	3.4	15.5	11.3
7/3	Upper Northam Drive Circulatory Ahead	U	F		1	39	-	780	1980	1003	77.8%	-	-	-	3.2	14.7	11.3
8/1	M27 (Westbound) Circulatory Ahead	U	G		1	30	-	564	1980	777	72.6%	-	-	-	5.2	32.9	13.5
8/2	M27 (Westbound) Circulatory Ahead	U	G		1	30	-	562	1980	777	72.3%	-	-	-	4.7	30.1	13.4
9/1	A334 (West) Circulatory Ahead	U	I		1	39	-	394	1980	1003	39.3%	-	-	-	2.5	23.2	9.0
9/2	A334 (West) Circulatory Ahead	U	I		1	39	-	656	2065	1046	62.7%	-	-	-	2.8	15.4	12.5

Linsig Report
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9/3	A334 (West) Circulatory Ahead	U	I		1	39	-	654	2065	1046	62.5%	-	-	-	2.8	15.5	12.3
10/1	M27 (Westbound) Circulatory Right	U	H		1	30	-	591	1980	777	76.1%	-	-	-	4.8	29.1	14.0
10/2	M27 (Westbound) Circulatory Right	U	H		1	30	-	596	1980	777	76.7%	-	-	-	4.9	29.3	14.1
16/1	Left	U	-		-	-	-	527	1940	1940	27.2%	-	-	-	0.2	1.3	0.2

C1

PRC for Signalled Lanes (%): 14.2 Total Delay for Signalled Lanes (pcuHr): 59.22 Cycle Time (s): 79

PRC Over All Lanes (%): 14.2 Total Delay Over All Lanes(pcuHr): 60.04

Linsig Report
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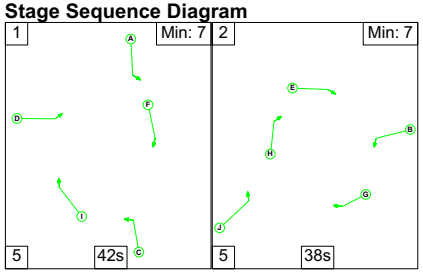
Scenario 3: 'DS1AM+DEV' (FG3: 'DS1AM+DEV', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	966	6	0	77	1049
	B	676	0	35	869	126	1706
	C	230	0	0	62	66	358
	D	0	848	45	0	565	1458
	E	690	286	29	73	0	1078
	Tot.	1596	2100	115	1004	834	5649

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: j13 M27 Junction 7 Traffic Signals	-	-	-		-	-	-	-	-	-	**74.7%**	**0**	**0**	**0**	**67.4**	-	-
M27 Junction 7, Southampton	-	-	-		-	-	-	-	-	-	**74.7%**	**0**	**0**	**0**	**67.4**	-	-
1/1	A334 Charles Watts Way (East) Left	U	A		1	42	-	571	1980	946	60.4%	-	-	-	3.5	22.0	11.2
1/2	A334 Charles Watts Way (East) Left	U	A		1	42	-	569	1980	946	60.1%	-	-	-	3.5	22.0	11.0
1/3	A334 Charles Watts Way (East) Left	U	A		1	42	-	566	1980	946	59.8%	-	-	-	3.4	21.9	11.0
2/1+2/2	Upper Northam Drive Left	U	B		1	38	-	358	1980:1980	549+444	36.0 : 36.0%	-	-	-	1.9	18.7	3.4
3/1	M27 (Westbound) Ahead	U	C		1	42	-	565	1980	946	59.7%	-	-	-	3.4	21.9	10.9
3/2	M27 (Westbound) Ahead	U	C		1	42	-	418	1980	946	44.2%	-	-	-	2.2	19.0	7.2
3/3	M27 (Westbound) Ahead	U	C		1	42	-	475	1980	946	50.2%	-	-	-	2.6	20.0	8.6
4/1	A334 Charles Watts Way (West) Ahead	U	J		1	38	-	366	1980	858	42.7%	-	-	-	2.2	21.4	6.7
4/2	A334 Charles Watts Way (West) Ahead	U	J		1	38	-	358	1940	841	42.6%	-	-	-	2.1	21.4	6.5
4/3	A334 Charles Watts Way (West) Ahead	U	J		1	38	-	354	1945	843	42.0%	-	-	-	2.1	21.3	6.5

5/1	M27 Eastbound Left	U	-		-	-	-	966	1980	1980	48.8%	-	-	-	0.5	1.8	0.5
5/2	M27 Eastbound Ahead	U	D		1	42	-	39	1965	939	4.2%	-	-	-	0.2	14.5	0.5
5/3	M27 Eastbound Ahead	U	D		1	42	-	44	1965	939	4.7%	-	-	-	0.2	14.6	0.6
6/1	A334 (East) Circulatory Ahead	U	E		1	38	-	94	1980	858	11.0%	-	-	-	0.2	8.6	0.4
6/2	A334 (East) Circulatory Ahead	U	E		1	38	-	88	1980	858	10.3%	-	-	-	0.5	18.7	1.1
6/3	A334 (East) Circulatory Ahead	U	E		1	38	-	48	1980	858	5.6%	-	-	-	0.4	27.7	1.1
7/1	Upper Northam Drive Circulatory Ahead	U	F		1	42	-	450	1980	946	47.6%	-	-	-	1.2	9.7	3.0
7/2	Upper Northam Drive Circulatory Ahead	U	F		1	42	-	686	1980	946	72.5%	-	-	-	2.7	14.2	10.9
7/3	Upper Northam Drive Circulatory Ahead	U	F		1	42	-	685	1980	946	72.4%	-	-	-	2.7	14.1	11.2
8/1	M27 (Westbound) Circulatory Ahead	U	G		1	38	-	588	1980	858	68.5%	-	-	-	5.2	31.8	15.2
8/2	M27 (Westbound) Circulatory Ahead	U	G		1	38	-	587	1980	858	68.4%	-	-	-	4.7	28.7	15.1
9/1	A334 (West) Circulatory Ahead	U	I		1	42	-	389	1980	946	41.1%	-	-	-	3.4	31.4	10.1
9/2	A334 (West) Circulatory Ahead	U	I		1	42	-	690	2065	987	69.9%	-	-	-	3.9	20.3	16.2

Linsig Report
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9/3	A334 (West) Circulatory Ahead	U	I		1	42	-	720	2065	987	73.0%	-	-	-	4.0	20.0	17.1
10/1	M27 (Westbound) Circulatory Right	U	H		1	38	-	640	1980	858	74.6%	-	-	-	5.4	30.2	16.8
10/2	M27 (Westbound) Circulatory Right	U	H		1	38	-	641	1980	858	74.7%	-	-	-	5.3	30.0	16.9
16/1	Left	U	-		-	-	-	450	1940	1940	23.2%	-	-	-	0.2	1.2	0.2

C1 PRC for Signalled Lanes (%): 20.5 Total Delay for Signalled Lanes (pcuHr): 66.82 Cycle Time (s): 90
PRC Over All Lanes (%): 20.5 Total Delay Over All Lanes(pcuHr): 67.44

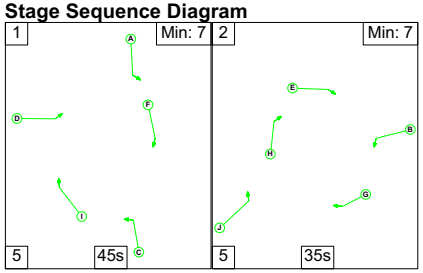
Scenario 4: 'DS1PM+DEV' (FG4: 'DS1PM+DEV', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	1108	51	0	117	1276
	B	774	0	24	1107	74	1979
	C	131	0	0	50	30	211
	D	0	836	41	0	526	1403
	E	356	277	28	112	0	773
	Tot.	1261	2221	144	1269	747	5642

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: j13 M27 Junction 7 Traffic Signals	-	-	-		-	-	-	-	-	-	**81.9%**	**0**	**0**	**0**	**71.3**	-	-
M27 Junction 7, Southampton	-	-	-		-	-	-	-	-	-	**81.9%**	**0**	**0**	**0**	**71.3**	-	-
1/1	A334 Charles Watts Way (East) Left	U	A		1	45	-	661	1980	1012	65.3%	-	-	-	3.9	21.2	13.1
1/2	A334 Charles Watts Way (East) Left	U	A		1	45	-	663	1980	1012	65.5%	-	-	-	3.9	21.3	13.1
1/3	A334 Charles Watts Way (East) Left	U	A		1	45	-	655	1980	1012	64.7%	-	-	-	3.8	21.1	12.7
2/1+2/2	Upper Northam Drive Left	U	B		1	35	-	211	1980:1980	571+315	23.8 : 23.8%	-	-	-	1.2	19.9	2.3
3/1	M27 (Westbound) Ahead	U	C		1	45	-	526	1980	1012	52.0%	-	-	-	2.7	18.3	9.2
3/2	M27 (Westbound) Ahead	U	C		1	45	-	379	1980	1012	37.5%	-	-	-	1.7	16.1	6.0
3/3	M27 (Westbound) Ahead	U	C		1	45	-	498	1980	1012	49.2%	-	-	-	2.5	17.9	8.5
4/1	A334 Charles Watts Way (West) Ahead	U	J		1	35	-	261	1980	792	33.0%	-	-	-	1.6	22.1	4.7
4/2	A334 Charles Watts Way (West) Ahead	U	J		1	35	-	255	1940	776	32.9%	-	-	-	1.6	22.1	4.6
4/3	A334 Charles Watts Way (West) Ahead	U	J		1	35	-	257	1945	778	33.0%	-	-	-	1.6	22.1	4.7

5/1	M27 Eastbound Left	U	-		-	-	-	1108	1980	1980	56.0%	-	-	-	0.6	2.1	0.6
5/2	M27 Eastbound Ahead	U	D		1	45	-	99	1965	1004	9.9%	-	-	-	0.4	13.3	1.3
5/3	M27 Eastbound Ahead	U	D		1	45	-	69	1965	1004	6.9%	-	-	-	0.3	13.1	0.9
6/1	A334 (East) Circulatory Ahead	U	E		1	35	-	146	1980	792	18.4%	-	-	-	0.9	21.2	1.9
6/2	A334 (East) Circulatory Ahead	U	E		1	35	-	126	1980	792	15.9%	-	-	-	1.0	27.7	2.1
6/3	A334 (East) Circulatory Ahead	U	E		1	35	-	77	1980	792	9.7%	-	-	-	0.6	30.2	1.7
7/1	Upper Northam Drive Circulatory Ahead	U	F		1	45	-	565	1980	1012	55.8%	-	-	-	1.7	10.9	4.2
7/2	Upper Northam Drive Circulatory Ahead	U	F		1	45	-	805	1980	1012	79.5%	-	-	-	3.6	16.1	13.5
7/3	Upper Northam Drive Circulatory Ahead	U	F		1	45	-	814	1980	1012	80.4%	-	-	-	3.7	16.4	14.2
8/1	M27 (Westbound) Circulatory Ahead	U	G		1	35	-	561	1980	792	70.8%	-	-	-	5.8	37.0	15.0
8/2	M27 (Westbound) Circulatory Ahead	U	G		1	35	-	565	1980	792	71.3%	-	-	-	5.4	34.1	15.1
9/1	A334 (West) Circulatory Ahead	U	I		1	45	-	368	1980	1012	36.4%	-	-	-	2.7	26.0	9.5
9/2	A334 (West) Circulatory Ahead	U	I		1	45	-	681	2065	1055	64.5%	-	-	-	3.6	19.2	15.5

Linsig Report
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9/3	A334 (West) Circulatory Ahead	U	I		1	45	-	733	2065	1055	69.4%	-	-	-	3.7	18.1	16.7
10/1	M27 (Westbound) Circulatory Right	U	H		1	35	-	645	1980	792	81.4%	-	-	-	6.5	36.1	17.8
10/2	M27 (Westbound) Circulatory Right	U	H		1	35	-	649	1980	792	81.9%	-	-	-	6.4	35.3	17.9
16/1	Left	U	-		-	-	-	565	1940	1940	29.1%	-	-	-	0.2	1.3	0.2

C1

PRC for Signalled Lanes (%): 9.8 Total Delay for Signalled Lanes (pcuHr): 70.45 Cycle Time (s): 90

PRC Over All Lanes (%): 9.8 Total Delay Over All Lanes(pcuHr): 71.29

_____ A R C A D Y 6 _____

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

For sales and distribution information,
program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

Run with file:-
"p:\10440\Traffic\Junctions\j14a Charles Watts Way-Turnpike Way Rbt\
10440 j14a Charles Watts Way-Turnpike Way Rbt DS1AM.vai"
(drive-on-the-left) at 14:50:47 on Friday, 25 November 2016

.FILE PROPERTIES
****

RUN TITLE: j14a Charles Watts Way-Turnpike Way Rbt DS1AM
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA
****
ARM A - Tollbar Way
ARM B - Charles Watts Way (East)
ARM C - Turnpike Way
ARM D - Charles Watts Way (West)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.30	8.30	8.40	41.00	55.00	28.0	0.740	41.818
ARM B	6.90 *	6.90	8.20	27.00	55.00	46.0	0.627	33.352
ARM C	3.50	5.80	15.80	28.00	55.00	39.0	0.545	25.157
ARM D	7.10 *	7.10	7.60	30.00	55.00	48.0	0.636	34.200

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM B - INPUT VALUE OF V (7.30) OUTSIDE ACCEPTABLE RANGE -
HAS BEEN RESET AS INDICATED ABOVE (*). (AG17 REF. 6.3.1).

WARNING ARM D - INPUT VALUE OF V (7.30) OUTSIDE ACCEPTABLE RANGE -
HAS BEEN RESET AS INDICATED ABOVE (*). (AG17 REF. 6.3.1).

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j14a Charles Watts Way-Turnpike Way Rbt DS1AM

DEMAND SET TITLE: j14a Charles Watts Way-Turnpike Way Rbt DS1AM

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
08.00 - 09.00	ARM A	0.433	0.169	0.365	0.033
		1620.0	631.0	1364.0	123.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.033	0.433	0.169	0.365
		123.0	1620.0	631.0	1364.0
		(10.0)	(10.0)	(10.0)	(10.0)

	ARM C	0.365	0.033	0.433	0.169
		1364.0	123.0	1620.0	631.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM D	0.169	0.365	0.033	0.433
		631.0	1364.0	123.0	1620.0
		(10.0)	(10.0)	(10.0)	(10.0)

.QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	ARM	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15										
	ARM A	11.73	18.93	0.620	- -	-	0.0	1.6	22.4	-	0.135
	ARM B	14.53	17.15	0.847	- -	-	0.0	4.8	60.6	-	0.312
	ARM C	1.88	8.15	0.231	- -	-	0.0	0.3	4.2	-	0.159
	ARM D	34.15	22.69	1.505	- -	-	0.0	173.8	1316.5	-	3.923
08.15-08.30										
	ARM A	11.73	18.83	0.623	- -	-	1.6	1.6	24.2	-	0.141
	ARM B	14.53	17.09	0.850	- -	-	4.8	5.2	76.0	-	0.377
	ARM C	1.88	7.99	0.236	- -	-	0.3	0.3	4.5	-	0.164
	ARM D	34.15	22.57	1.513	- -	-	173.8	347.6	3910.0	-	11.623
08.30-08.45										
	ARM A	11.73	18.83	0.623	- -	-	1.6	1.6	24.5	-	0.141
	ARM B	14.53	17.09	0.850	- -	-	5.2	5.4	79.6	-	0.383
	ARM C	1.88	7.98	0.236	- -	-	0.3	0.3	4.6	-	0.164
	ARM D	34.15	22.56	1.514	- -	-	347.6	521.4	6517.2	-	19.324
08.45-09.00										
	ARM A	11.73	18.83	0.623	- -	-	1.6	1.6	24.6	-	0.141
	ARM B	14.53	17.09	0.850	- -	-	5.4	5.4	81.1	-	0.386
	ARM C	1.88	7.98	0.236	- -	-	0.3	0.3	4.6	-	0.164
	ARM D	34.15	22.56	1.514	- -	-	521.4	695.3	9125.0	-	27.023

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	1.6	**
08.30	1.6	**
08.45	1.6	**
09.00	1.6	**

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	4.8	*****
08.30	5.2	*****
08.45	5.4	*****
09.00	5.4	*****

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	0.3	
08.30	0.3	
08.45	0.3	
09.00	0.3	

.QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	173.8	**********
08.30	347.6	**********
08.45	521.4	**********
09.00	695.3	**********

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * * DELAY * (MIN)	* QUEUEING * * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * * DELAY * (MIN)	* INCLUSIVE QUEUEING * * DELAY * (MIN/VEH)
A	704.0	704.0	95.7	0.14	95.8	0.14
B	872.0	872.0	297.4	0.34	298.2	0.34
C	113.0	113.0	18.0	0.16	18.0	0.16
D	2049.0	2049.0	20868.8	10.18	31582.9	15.41
ALL	3737.9	3737.9	21279.8	5.69	31994.9	8.56

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
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* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

For sales and distribution information,
program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

Run with file:-
"p:\10440\Traffic\Junctions\j14a Charles Watts Way-Turnpike Way Rbt\
10440 j14a Charles Watts Way-Turnpike Way Rbt DS1PM.vai"
(drive-on-the-left) at 14:50:58 on Friday, 25 November 2016

.FILE PROPERTIES

RUN TITLE: j14a Charles Watts Way-Turnpike Way Rbt DS1PM
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA

ARM A - Tollbar Way
ARM B - Charles Watts Way (East)
ARM C - Turnpike Way
ARM D - Charles Watts Way (West)

.GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.30	8.30	8.40	41.00	55.00	28.0	0.740	41.818
ARM B	6.90 *	6.90	8.20	27.00	55.00	46.0	0.627	33.352
ARM C	3.50	5.80	15.80	28.00	55.00	39.0	0.545	25.157
ARM D	7.10 *	7.10	7.60	30.00	55.00	48.0	0.636	34.200

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM B - INPUT VALUE OF V (7.30) OUTSIDE ACCEPTABLE RANGE -
HAS BEEN RESET AS INDICATED ABOVE (*). (AG17 REF. 6.3.1).

WARNING ARM D - INPUT VALUE OF V (7.30) OUTSIDE ACCEPTABLE RANGE -
HAS BEEN RESET AS INDICATED ABOVE (*). (AG17 REF. 6.3.1).

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j14a Charles Watts Way-Turnpike Way Rbt DS1PM

DEMAND SET TITLE: j14a Charles Watts Way-Turnpike Way Rbt DS1PM

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

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
17.00 - 18.00					
	ARM A	0.459	0.190	0.292	0.059
		1923.0	796.0	1226.0	249.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.059	0.459	0.190	0.292
		249.0	1923.0	796.0	1226.0
		(10.0)	(10.0)	(10.0)	(10.0)

	ARM C	0.292	0.059	0.459	0.190
		1226.0	249.0	1923.0	796.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM D	0.190	0.292	0.059	0.459
		796.0	1226.0	249.0	1923.0
		(10.0)	(10.0)	(10.0)	(10.0)

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	12.58	19.15	0.657	- - -	0.0	1.9	26.0	-	0.147
ARM B	19.62	16.61	1.181	- - -	0.0	50.0	400.3	-	1.687
ARM C	1.95	6.91	0.282	- - -	0.0	0.4	5.5	-	0.200
ARM D	35.75	21.11	1.694	- - -	0.0	221.1	1667.9	-	5.333

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
ARM A	12.58	19.08	0.660	- - -	1.9	1.9	28.3	-	0.154
ARM B	19.62	16.55	1.185	- - -	50.0	96.3	1097.3	-	4.568
ARM C	1.95	6.78	0.288	- - -	0.4	0.4	5.9	-	0.207
ARM D	35.75	20.98	1.704	- - -	221.1	442.6	4977.8	-	15.893

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
ARM A	12.58	19.08	0.660	- - -	1.9	1.9	28.7	-	0.154
ARM B	19.62	16.55	1.185	- - -	96.3	142.3	1789.5	-	7.328
ARM C	1.95	6.77	0.288	- - -	0.4	0.4	6.0	-	0.207
ARM D	35.75	20.97	1.705	- - -	442.6	664.3	8302.0	-	26.455

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
ARM A	12.58	19.07	0.660	- - -	1.9	1.9	28.8	-	0.154
ARM B	19.62	16.55	1.185	- - -	142.3	188.4	2480.4	-	10.091
ARM C	1.95	6.77	0.288	- - -	0.4	0.4	6.0	-	0.207
ARM D	35.75	20.97	1.705	- - -	664.3	886.0	11626.9	-	37.023

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	1.9	**
17.30	1.9	**
17.45	1.9	**
18.00	1.9	**

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	50.0	**
17.30	96.3	**
17.45	142.3	**
18.00	188.4	**

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.4
17.30	0.4
17.45	0.4
18.00	0.4

.QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	221.1	**
17.30	442.6	**
17.45	664.3	**
18.00	886.0	**

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * * DELAY * (MIN)	* QUEUEING * * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * * DELAY * (MIN)	* INCLUSIVE QUEUEING * * DELAY * (MIN/VEH)
A	755.0	755.0	111.8	0.15	111.9	0.15
B	1177.0	1177.0	5767.4	4.90	6839.4	5.81
C	117.0	117.0	23.4	0.20	23.4	0.20
D	2145.0	2145.0	26574.6	12.39	45287.7	21.11
ALL	4194.0	4194.0	32477.3	7.74	52262.4	12.46

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END OF JOB

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

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RG40 3GA,UK

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Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

Run with file:-
"p:\10440\Traffic\Junctions\j14a Charles Watts Way-Turnpike Way Rbt\
10440 j14a Charles Watts Way-Turnpike Way Rbt DS1AM+DEV.vai"
(drive-on-the-left) at 14:50:52 on Friday, 25 November 2016

.FILE PROPERTIES

RUN TITLE: j14a Charles Watts Way-Turnpike Way Rbt DS1AM+DEV
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA

ARM A - Tollbar Way
ARM B - Charles Watts Way (East)
ARM C - Turnpike Way
ARM D - Charles Watts Way (West)

.GEOMETRIC DATA

T5

ARM		V (M)		E (M)		L (M)		R (M)		D (M)		PHI (DEG)		SLOPE		INTERCEPT (PCU/MIN)
ARM A	I	7.30	I	8.30	I	8.40	I	41.00	I	55.00	I	28.0	I	0.740	I	41.818
ARM B	I	6.90 *	I	6.90	I	8.20	I	27.00	I	55.00	I	46.0	I	0.627	I	33.352
ARM C	I	3.50	I	5.80	I	15.80	I	28.00	I	55.00	I	39.0	I	0.545	I	25.157
ARM D	I	7.10 *	I	7.10	I	7.60	I	30.00	I	55.00	I	48.0	I	0.636	I	34.200

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM B - INPUT VALUE OF V (7.30) OUTSIDE ACCEPTABLE RANGE -
HAS BEEN RESET AS INDICATED ABOVE (*). (AG17 REF. 6.3.1).

WARNING ARM D - INPUT VALUE OF V (7.30) OUTSIDE ACCEPTABLE RANGE -
HAS BEEN RESET AS INDICATED ABOVE (*). (AG17 REF. 6.3.1).

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

IARM	I FLOW SCALE(%) I
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j14a Charles Watts Way-Turnpike Way Rbt DS1AM+DEV

DEMAND SET TITLE: j14a Charles Watts Way-Turnpike Way Rbt DS1AM+DEV

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
08.00 - 09.00	ARM A	0.439	0.174	0.356	0.032
		1683.0	666.0	1364.0	123.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.032	0.439	0.174	0.356
		123.0	1683.0	666.0	1364.0
		(10.0)	(10.0)	(10.0)	(10.0)

	ARM C	0.356	0.032	0.439	0.174
		1364.0	123.0	1683.0	666.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM D	0.174	0.356	0.032	0.439
		666.0	1364.0	123.0	1683.0
		(10.0)	(10.0)	(10.0)	(10.0)

.QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	ARM	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15										
	ARM A	12.90	19.19	0.672	- -	-	0.0	2.0	27.6	- 0.153
	ARM B	14.53	16.63	0.874	- -	-	0.0	5.7	69.4	- 0.362
	ARM C	1.88	7.92	0.238	- -	-	0.0	0.3	4.4	- 0.165
	ARM D	34.62	22.32	1.551	- -	-	0.0	186.2	1409.0	- 4.266
08.15-08.30										
	ARM A	12.90	19.09	0.676	- -	-	2.0	2.0	30.3	- 0.161
	ARM B	14.53	16.57	0.877	- -	-	5.7	6.3	91.1	- 0.462
	ARM C	1.88	7.74	0.243	- -	-	0.3	0.3	4.7	- 0.171
	ARM D	34.62	22.17	1.561	- -	-	186.2	372.9	4193.9	- 12.681
08.30-08.45										
	ARM A	12.90	19.09	0.676	- -	-	2.0	2.1	30.8	- 0.161
	ARM B	14.53	16.57	0.877	- -	-	6.3	6.6	96.9	- 0.474
	ARM C	1.88	7.73	0.244	- -	-	0.3	0.3	4.8	- 0.171
	ARM D	34.62	22.16	1.562	- -	-	372.9	559.8	6995.4	- 21.104
08.45-09.00										
	ARM A	12.90	19.09	0.676	- -	-	2.1	2.1	30.9	- 0.162
	ARM B	14.53	16.57	0.877	- -	-	6.6	6.7	99.6	- 0.480
	ARM C	1.88	7.72	0.244	- -	-	0.3	0.3	4.8	- 0.171
	ARM D	34.62	22.16	1.562	- -	-	559.8	746.6	9798.1	- 29.533

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	2.0	**
08.30	2.0	**
08.45	2.1	**
09.00	2.1	**

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	5.7	******
08.30	6.3	******
08.45	6.6	*******
09.00	6.7	*******

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	0.3	
08.30	0.3	
08.45	0.3	
09.00	0.3	

.QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	186.2	**********
08.30	372.9	**********
08.45	559.8	**********
09.00	746.6	**********

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * * DELAY * (MIN)	* QUEUEING * * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * * DELAY * (MIN)	* INCLUSIVE QUEUEING * * DELAY * (MIN/VEH)
A	774.0	774.0	119.7	0.15	119.8	0.15
B	872.0	872.0	357.0	0.41	358.4	0.41
C	113.0	113.0	18.7	0.17	18.7	0.17
D	2077.0	2077.0	22396.4	10.78	34975.2	16.84
ALL	3836.0	3836.0	22891.8	5.97	35472.1	9.25

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

END OF JOB

ARCADY 6

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RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

Run with file:-
"p:\10440\Traffic\Junctions\j14a Charles Watts Way-Turnpike Way Rbt\
10440 j14a Charles Watts Way-Turnpike Way Rbt DS1PM+DEV.vai"
(drive-on-the-left) at 14:51:05 on Friday, 25 November 2016

.FILE PROPERTIES

RUN TITLE: j14a Charles Watts Way-Turnpike Way Rbt DS1PM+DEV
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA

ARM A - Tollbar Way
ARM B - Charles Watts Way (East)
ARM C - Turnpike Way
ARM D - Charles Watts Way (West)

.GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.30	8.30	8.40	41.00	55.00	28.0	0.740	41.818
ARM B	6.90 *	6.90	8.20	27.00	55.00	46.0	0.627	33.352
ARM C	3.50	5.80	15.80	28.00	55.00	39.0	0.545	25.157
ARM D	7.10 *	7.10	7.60	30.00	55.00	48.0	0.636	34.200

V = approach half-width E = entry width L = effective flare length R = entry radius D = inscribed circle diameter PHI = entry angle

WARNING ARM B - INPUT VALUE OF V (7.30) OUTSIDE ACCEPTABLE RANGE - HAS BEEN RESET AS INDICATED ABOVE (*). (AG17 REF. 6.3.1).

WARNING ARM D - INPUT VALUE OF V (7.30) OUTSIDE ACCEPTABLE RANGE - HAS BEEN RESET AS INDICATED ABOVE (*). (AG17 REF. 6.3.1).

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j14a Charles Watts Way-Turnpike Way Rbt DS1PM+DEV

DEMAND SET TITLE: j14a Charles Watts Way-Turnpike Way Rbt DS1PM+DEV

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

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
17.00 - 18.00					
	ARM A	0.459	0.199	0.285	0.058
		1974.0	856.0	1226.0	249.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.058	0.459	0.199	0.285
		249.0	1974.0	856.0	1226.0
		(10.0)	(10.0)	(10.0)	(10.0)

ARM C	0.285	0.058	0.459	0.199
	1226.0	249.0	1974.0	856.0
	(10.0)	(10.0)	(10.0)	(10.0)
ARM D	0.199	0.285	0.058	0.459
	856.0	1226.0	249.0	1974.0
	(10.0)	(10.0)	(10.0)	(10.0)

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	13.25	19.41	0.683	- - -	0.0	2.1	28.9	-	0.156
ARM B	19.62	16.40	1.196	- - -	0.0	52.8	420.1	-	1.788
ARM C	1.95	6.92	0.282	- - -	0.0	0.4	5.5	-	0.199
ARM D	36.93	21.00	1.758	- - -	0.0	240.2	1810.5	-	5.809

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
ARM A	13.25	19.35	0.685	- - -	2.1	2.1	31.7	-	0.164
ARM B	19.62	16.34	1.201	- - -	52.8	102.2	1162.5	-	4.894
ARM C	1.95	6.80	0.287	- - -	0.4	0.4	5.9	-	0.206
ARM D	36.93	20.88	1.769	- - -	240.2	480.9	5408.5	-	17.341

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
ARM A	13.25	19.35	0.685	- - -	2.1	2.1	32.1	-	0.164
ARM B	19.62	16.34	1.201	- - -	102.2	151.4	1902.0	-	7.882
ARM C	1.95	6.79	0.287	- - -	0.4	0.4	6.0	-	0.207
ARM D	36.93	20.88	1.769	- - -	480.9	721.8	9020.4	-	28.866

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
ARM A	13.25	19.35	0.685	- - -	2.1	2.2	32.3	-	0.164
ARM B	19.62	16.34	1.201	- - -	151.4	200.6	2640.4	-	10.877
ARM C	1.95	6.79	0.287	- - -	0.4	0.4	6.0	-	0.207
ARM D	36.93	20.87	1.769	- - -	721.8	962.6	12632.8	-	40.410

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	2.1	**
17.30	2.1	**
17.45	2.1	**
18.00	2.2	**

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	52.8	***
17.30	102.2	***
17.45	151.4	***
18.00	200.6	***

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.4
17.30	0.4
17.45	0.4
18.00	0.4

.QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	240.2	***
17.30	480.9	***
17.45	721.8	***
18.00	962.6	***

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * * DELAY * (MIN)	* QUEUEING * * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * * DELAY * (MIN)	* INCLUSIVE QUEUEING * * DELAY * (MIN/VEH)
A	795.0	795.0	124.9	0.16	125.0	0.16
B	1177.0	1177.0	6125.1	5.20	7356.8	6.25
C	117.0	117.0	23.3	0.20	23.3	0.20
D	2215.8	2215.8	28872.2	13.03	51067.1	23.05
ALL	4304.8	4304.8	35145.6	8.16	58572.3	13.61

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

END OF JOB

_____ A R C A D Y 6 _____

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

For sales and distribution information,
program advice and maintenance, contact:

TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770356
Nine Mile Ride Email: software@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk
RG40 3GA,UK

Run with file:-
"p:\10440\Traffic\Junctions\j14a Charles Watts Way-Turnpike Way Rbt\
10440 j14a Charles Watts Way-Turnpike Way Rbt DS1AM+DEV+IMP.vai"
(drive-on-the-left) at 08:41:01 on Monday, 28 November 2016

.FILE PROPERTIES
****

RUN TITLE: j14a Charles Watts Way-Turnpike Way Rbt DS1AM+DEV
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA
****
ARM A - Tollbar Way
ARM B - Charles Watts Way (East)
ARM C - Turnpike Way
ARM D - Charles Watts Way (West)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	7.30	8.30	8.40	41.00	55.00	28.0	0.740	35.818
ARM B	7.30	7.30	8.20	27.00	55.00	46.0	0.648	35.286
ARM C	3.50	5.80	15.80	28.00	55.00	39.0	0.545	25.157
ARM D	7.30	7.50	7.60	30.00	55.00	48.0	0.656	36.052

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j14a Charles Watts Way-Turnpike Way Rbt DS1AM+DEV

DEMAND SET TITLE: j14a Charles Watts Way-Turnpike Way Rbt DS1AM+DEV

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
08.00 - 09.00		TURNING PROPORTIONS			
		TURNING COUNTS			
		(PERCENTAGE OF H.V.S)			
	ARM A	0.439	0.174	0.356	0.032
		1683.0	666.0	1364.0	123.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.032	0.439	0.174	0.356
		123.0	1683.0	666.0	1364.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM C	0.356	0.032	0.439	0.174
		1364.0	123.0	1683.0	666.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM D	0.174	0.356	0.032	0.439

	666.0	1364.0	123.0 / 1683.0
	(10.0)	(10.0)	(10.0) / (10.0)

.QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	12.90	18.33	0.704	- -	0.0	2.3	31.4	-	0.175
ARM B	14.53	17.53	0.829	- -	0.0	4.3	55.4	-	0.284
ARM C	1.88	7.55	0.249	- -	0.0	0.3	4.7	-	0.175
ARM D	34.62	23.70	1.460	- -	0.0	165.8	1258.1	-	3.587
08.15-08.30									
ARM A	12.90	18.24	0.707	- -	2.3	2.4	35.0	-	0.187
ARM B	14.53	17.44	0.833	- -	4.3	4.7	68.1	-	0.335
ARM C	1.88	7.39	0.255	- -	0.3	0.3	5.0	-	0.181
ARM D	34.62	23.57	1.469	- -	165.8	331.6	3731.1	-	10.626
08.30-08.45									
ARM A	12.90	18.23	0.707	- -	2.4	2.4	35.6	-	0.187
ARM B	14.53	17.44	0.833	- -	4.7	4.8	70.9	-	0.340
ARM C	1.88	7.39	0.255	- -	0.3	0.3	5.1	-	0.181
ARM D	34.62	23.56	1.469	- -	331.6	497.5	6218.6	-	17.653
08.45-09.00									
ARM A	12.90	18.23	0.708	- -	2.4	2.4	35.8	-	0.188
ARM B	14.53	17.44	0.833	- -	4.8	4.8	72.1	-	0.341
ARM C	1.88	7.39	0.255	- -	0.3	0.3	5.1	-	0.181
ARM D	34.62	23.56	1.469	- -	497.5	663.4	8706.8	-	24.689

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	2.3	**
08.30	2.4	**
08.45	2.4	**
09.00	2.4	**

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	4.3	****
08.30	4.7	*****
08.45	4.8	*****
09.00	4.8	*****

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.3
08.30	0.3
08.45	0.3
09.00	0.3

.QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	165.8	**********
08.30	331.6	**********
08.45	497.5	**********
09.00	663.4	**********

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND	* QUEUEING *	* INCLUSIVE QUEUEING *

		* DELAY *		* DELAY *	
	(VEH) (VEH/H)	(MIN) (MIN/VEH)		(MIN) (MIN/VEH)	
A	774.0 774.0	137.7 0.18		137.9 0.18	
B	872.0 872.0	266.4 0.31		267.1 0.31	
C	113.0 113.0	19.9 0.18		19.9 0.18	
D	2077.0 2077.0	19914.5 9.59		29255.6 14.09	
ALL	3836.0 3836.0	20338.5 5.30		29680.4 7.74	

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

END OF JOB

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

Run with file:-
"p:\10440\Traffic\Junctions\j14a Charles Watts Way-Turnpike Way Rbt\
10440 j14a Charles Watts Way-Turnpike Way Rbt DS1PM+DEV+IMP.vai"
(drive-on-the-left) at 08:39:55 on Monday, 28 November 2016

.FILE PROPERTIES

RUN TITLE: j14a Charles Watts Way-Turnpike Way Rbt DS1PM+DEV
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA

ARM A - Tollbar Way
ARM B - Charles Watts Way (East)
ARM C - Turnpike Way
ARM D - Charles Watts Way (West)

.GEOMETRIC DATA

T5

ARM		V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM	A	7.30	8.30	8.40	41.00	55.00	28.0	0.740	41.818
ARM	B	7.30	7.30	8.20	27.00	55.00	46.0	0.648	35.286
ARM	C	3.50	5.80	15.80	28.00	55.00	39.0	0.545	25.157
ARM	D	7.30	7.50	7.60	30.00	55.00	48.0	0.656	36.052

V = approach half-width
E = entry width
L = effective flare length
R = entry radius
D = inscribed circle diameter
PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD - (60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j14a Charles Watts Way-Turnpike Way Rbt DS1PM+DEV

DEMAND SET TITLE: j14a Charles Watts Way-Turnpike Way Rbt DS1PM+DEV

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
17.00 - 18.00		TURNING PROPORTIONS			
		TURNING COUNTS			
		(PERCENTAGE OF H.V.S)			
	ARM A	0.459	0.199	0.285	0.058
		1974.0	856.0	1226.0	249.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.058	0.459	0.199	0.285
		249.0	1974.0	856.0	1226.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM C	0.285	0.058	0.459	0.199
		1226.0	249.0	1974.0	856.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM D	0.199	0.285	0.058	0.459

```
I                 I        I  856.0 I 1226.0 I  249.0 I 1974.0 I
I                 I        I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
I                 I        I        I        I        I        I
-------------------------------------------------------------------
```

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)		PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15										
ARM A	13.25	18.49	0.717	- -	-	0.0	2.4	33.2	-	0.180
ARM B	19.62	17.35	1.131	- -	-	0.0	40.4	332.0	-	1.359
ARM C	1.95	6.30	0.310	- -	-	0.0	0.4	6.2	-	0.227
ARM D	36.93	22.10	1.671	- -	-	0.0	224.0	1690.2	-	5.160
17.15-17.30										
ARM A	13.25	18.41	0.720	- -	-	2.4	2.5	37.1	-	0.193
ARM B	19.62	17.28	1.135	- -	-	40.4	76.0	873.2	-	3.531
ARM C	1.95	6.14	0.318	- -	-	0.4	0.5	6.8	-	0.238
ARM D	36.93	21.93	1.684	- -	-	224.0	449.0	5047.7	-	15.416
17.30-17.45										
ARM A	13.25	18.41	0.720	- -	-	2.5	2.5	37.7	-	0.194
ARM B	19.62	17.28	1.135	- -	-	76.0	111.3	1404.6	-	5.547
ARM C	1.95	6.13	0.318	- -	-	0.5	0.5	6.9	-	0.239
ARM D	36.93	21.92	1.685	- -	-	449.0	674.2	8424.2	-	25.680
17.45-18.00										
ARM A	13.25	18.41	0.720	- -	-	2.5	2.5	38.0	-	0.194
ARM B	19.62	17.28	1.135	- -	-	111.3	146.5	1933.2	-	7.569
ARM C	1.95	6.12	0.318	- -	-	0.5	0.5	6.9	-	0.240
ARM D	36.93	21.92	1.685	- -	-	674.2	899.4	11801.8	-	35.950

.QUEUE AT ARM A

```
 TIME SEGMENT NO. OF
  ENDING      VEHICLES
              IN QUEUE

  17.15          2.4  **
  17.30          2.5  ***
  17.45          2.5  ***
  18.00          2.5  ***
```

.QUEUE AT ARM B

```
 TIME SEGMENT NO. OF
  ENDING      VEHICLES
              IN QUEUE

  17.15         40.4  ****************************************
  17.30         76.0  ****************************************************************************
  17.45        111.3  ******************************************************************************************
  18.00        146.5  ******************************************************************************************
```

.QUEUE AT ARM C

```
 TIME SEGMENT NO. OF
  ENDING      VEHICLES
              IN QUEUE

  17.15          0.4
  17.30          0.5
  17.45          0.5
  18.00          0.5
```

.QUEUE AT ARM D

```
 TIME SEGMENT NO. OF
  ENDING      VEHICLES
              IN QUEUE

  17.15        224.0  ******************************************************************************************
  17.30        449.0  ******************************************************************************************
  17.45        674.2  ******************************************************************************************
  18.00        899.4  ******************************************************************************************
```

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	795.0	795.0	145.9	0.18	146.1	0.18
B	1177.0	1177.0	4543.1	3.86	5163.9	4.39
C	117.0	117.0	26.8	0.23	26.8	0.23
D	2215.8	2215.8	26963.9	12.17	45417.5	20.50
ALL	4304.8	4304.8	31679.7	7.36	50754.4	11.79

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

END OF JOB

_____ A R C A D Y 6 _____

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

For sales and distribution information,
program advice and maintenance, contact:

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Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

Run with file:-
"p:\10440\Traffic\Junctions\j15a Charles Watts Way-Botley Road Rbt\
10440 j15a Charles Watts Way-Botley Road Rbt DS1AM.vai"
(drive-on-the-left) at 11:12:18 on Monday, 28 November 2016

.FILE PROPERTIES
****

RUN TITLE: j15a Charles Watts Way-Botley Road Rbt DS1AM
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA
****
ARM A - Botley Road
ARM B - Grange Road
ARM C - Wildern Lane
ARM D - Charles Watts Way

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.10	8.00	70.00	65.00	86.00	33.0	0.538	36.712
ARM B	6.50	7.90	30.00	28.00	86.00	26.0	0.568	40.062
ARM C	4.20	6.20	36.00	26.00	86.00	28.0	0.482	30.328
ARM D	6.90	10.30	14.00	40.00	86.00	24.0	0.627	46.521

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range.
Treat capacities with increasing caution.

WARNING ARM C Effective flare length is outside normal range.
Treat capacities with increasing caution.

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j15a Charles Watts Way-Turnpike Way Rbt DS1AM

DEMAND SET TITLE: j15a Charles Watts Way-Turnpike Way Rbt DS1AM

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
		TURNING PROPORTIONS			
		TURNING COUNTS			
		(PERCENTAGE OF H.V.S)			
08.00 - 09.00	ARM A	0.371	0.288	0.312	0.028
		1620.0	1258.0	1364.0	123.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.028	0.371	0.288	0.312
		123.0	1620.0	1258.0	1364.0
		(10.0)	(10.0)	(10.0)	(10.0)

ARM C	0.312	0.028	0.371	0.288	
	1364.0	123.0	1620.0	1258.0	
	(10.0)	(10.0)	(10.0)	(10.0)	
ARM D	0.288	0.312	0.028	0.371	
	1258.0	1364.0	123.0	1620.0	
	(10.0)	(10.0)	(10.0)	(10.0)	

.QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	11.18	21.39	0.523	- -	0.0	1.1	15.5	-	0.097
ARM B	14.53	26.38	0.551	- -	0.0	1.2	17.4	-	0.083
ARM C	1.88	16.41	0.115	- -	0.0	0.1	1.9	-	0.069
ARM D	22.83	35.25	0.648	- -	0.0	1.8	25.9	-	0.079
08.15-08.30									
ARM A	11.18	21.32	0.524	- -	1.1	1.1	16.3	-	0.099
ARM B	14.53	26.32	0.552	- -	1.2	1.2	18.3	-	0.085
ARM C	1.88	16.35	0.115	- -	0.1	0.1	1.9	-	0.069
ARM D	22.83	35.21	0.648	- -	1.8	1.8	27.3	-	0.081
08.30-08.45									
ARM A	11.18	21.32	0.525	- -	1.1	1.1	16.4	-	0.099
ARM B	14.53	26.32	0.552	- -	1.2	1.2	18.4	-	0.085
ARM C	1.88	16.35	0.115	- -	0.1	0.1	1.9	-	0.069
ARM D	22.83	35.21	0.648	- -	1.8	1.8	27.5	-	0.081
08.45-09.00									
ARM A	11.18	21.32	0.525	- -	1.1	1.1	16.5	-	0.099
ARM B	14.53	26.32	0.552	- -	1.2	1.2	18.4	-	0.085
ARM C	1.88	16.34	0.115	- -	0.1	0.1	1.9	-	0.069
ARM D	22.83	35.21	0.648	- -	1.8	1.8	27.5	-	0.081

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	1.1 *
08.30	1.1 *
08.45	1.1 *
09.00	1.1 *

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	1.2 *
08.30	1.2 *
08.45	1.2 *
09.00	1.2 *

.QUEUE AT ARM C

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

.QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	1.8 **
08.30	1.8 **
08.45	1.8 **
09.00	1.8 **

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	671.0	671.0	64.8	0.10	64.8	0.10
B	871.9	871.9	72.5	0.08	72.5	0.08
C	112.9	112.9	7.7	0.07	7.7	0.07
D	1369.8	1369.8	108.3	0.08	108.3	0.08
ALL	3025.6	3025.6	253.3	0.08	253.4	0.08

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

END OF JOB

Run with file:-
"p:\10440\Traffic\Junctions\j15a Charles Watts Way-Botley Road Rbt\
10440 j15a Charles Watts Way-Botley Road Rbt DS1PM.vai"
(drive-on-the-left) at 14:51:37 on Friday, 25 November 2016

.FILE PROPERTIES
****

RUN TITLE: j15a Charles Watts Way-Botley Road Rbt DS1PM
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA
****
ARM A - Botley Road
ARM B - Grange Road
ARM C - Wildern Lane
ARM D - Charles Watts Way

.GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.10	8.00	70.00	65.00	86.00	33.0	0.538	36.712
ARM B	6.50	7.90	30.00	28.00	86.00	26.0	0.568	40.062
ARM C	4.20	6.20	36.00	26.00	86.00	28.0	0.482	30.328
ARM D	6.90	10.30	14.00	40.00	86.00	24.0	0.627	46.521

V = approach half-width E = entry width
L = effective flare length R = entry radius
D = inscribed circle diameter PHI = entry angle

WARNING ARM A Effective flare length is outside normal range.
Treat capacities with increasing caution.

WARNING ARM C Effective flare length is outside normal range.
Treat capacities with increasing caution.

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j15a Charles Watts Way-Botley Road Rbt DS1PM

DEMAND SET TITLE: j15a Charles Watts Way-Botley Road Rbt DS1PM

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

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
17.00 - 18.00					
	ARM A	0.339	0.208	0.382	0.071
		1184.0	727.0	1334.0	247.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.071	0.339	0.208	0.382
		247.0	1184.0	727.0	1334.0
		(10.0)	(10.0)	(10.0)	(10.0)

	ARM C	0.382	0.071	0.339	0.208
		1334.0	247.0	1184.0	727.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM D	0.208	0.382	0.071	0.339
		727.0	1334.0	247.0	1184.0
		(10.0)	(10.0)	(10.0)	(10.0)

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	18.15	21.10	0.860	- - -	0.0	5.4	67.6	-	0.278
ARM B	17.02	23.24	0.732	- - -	0.0	2.6	36.2	-	0.152
ARM C	2.25	14.29	0.157	- - -	0.0	0.2	2.7	-	0.083
ARM D	20.53	33.07	0.621	- - -	0.0	1.6	23.2	-	0.078

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
ARM A	18.15	21.03	0.863	- - -	5.4	5.8	84.6	-	0.337
ARM B	17.02	23.06	0.738	- - -	2.6	2.7	40.6	-	0.165
ARM C	2.25	14.14	0.159	- - -	0.2	0.2	2.8	-	0.084
ARM D	20.53	32.95	0.623	- - -	1.6	1.6	24.5	-	0.080

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
ARM A	18.15	21.02	0.863	- - -	5.8	6.0	88.6	-	0.341
ARM B	17.02	23.05	0.738	- - -	2.7	2.8	41.4	-	0.165
ARM C	2.25	14.14	0.159	- - -	0.2	0.2	2.8	-	0.084
ARM D	20.53	32.94	0.623	- - -	1.6	1.6	24.6	-	0.080

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
ARM A	18.15	21.02	0.863	- - -	6.0	6.1	90.3	-	0.344
ARM B	17.02	23.05	0.738	- - -	2.8	2.8	41.7	-	0.166
ARM C	2.25	14.14	0.159	- - -	0.2	0.2	2.8	-	0.084
ARM D	20.53	32.94	0.623	- - -	1.6	1.6	24.7	-	0.080

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	5.4	*****
17.30	5.8	******
17.45	6.0	******
18.00	6.1	******

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	2.6	***
17.30	2.7	***
17.45	2.8	***
18.00	2.8	***

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.2
17.30	0.2
17.45	0.2
18.00	0.2

.QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	1.6	**
17.30	1.6	**
17.45	1.6	**
18.00	1.6	**

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * * DELAY * (MIN)	* QUEUEING * * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * * DELAY * (MIN)	* INCLUSIVE QUEUEING * * DELAY * (MIN/VEH)
A	1089.0	1089.0	331.0	0.30	331.9	0.30
B	1021.0	1021.0	160.0	0.16	160.1	0.16
C	135.0	135.0	11.2	0.08	11.2	0.08
D	1232.0	1232.0	97.0	0.08	97.0	0.08
ALL	3477.0	3477.0	599.2	0.17	600.3	0.17

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

END OF JOB

```
_____________________ A R C A D Y  6 _____________________

    ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY


    Analysis Program: Release 7.0 (FEBRUARY 2010)
                      Patch 15 Apr 2011
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-------------------------------------------------------------------------------

Run with file:-
"p:\10440\Traffic\Junctions\j15a Charles Watts Way-Botley Road Rbt\
 10440 j15a Charles Watts Way-Botley Road Rbt DS1AM+DEV.vai"
(drive-on-the-left ) at 11:12:25 on Monday, 28 November 2016


.FILE PROPERTIES
 ***************

   RUN TITLE: j15a Charles Watts Way-Botley Road Rbt DS1AM+DEV
    LOCATION: Eastleigh
        DATE: 24/11/16
      CLIENT: Hallam Land Management
  ENUMERATOR: Matt.Moss [BCL25]
  JOB NUMBER: 10440
      STATUS: Preliminary
 DESCRIPTION: Existing Layout

.INPUT DATA
 **********
 ARM A - Botley Road
 ARM B - Grange Road
 ARM C - Wildern Lane
 ARM D - Charles Watts Way

.GEOMETRIC DATA
 --------------


 ------------------------------------------------------------------------------------------------------------------------ T5
 I ARM    I   V (M)   I    E (M)   I    L (M)   I    R (M)   I    D (M) I   PHI (DEG)  I  SLOPE  I INTERCEPT (PCU/MIN) I
 ------------------------------------------------------------------------------------------------------------------------
 I ARM  A I    3.10   I     8.00   I    70.00   I    65.00   I   86.00   I     33.0     I  0.538  I       36.712        I
 I ARM  B I    6.50   I     7.90   I    30.00   I    28.00   I   86.00   I     26.0     I  0.568  I       40.062        I
 I ARM  C I    4.20   I     6.20   I    36.00   I    26.00   I   86.00   I     28.0     I  0.482  I       30.328        I
 I ARM  D I    6.90   I    10.30   I    14.00   I    40.00   I   86.00   I     24.0     I  0.627  I       46.521        I
 ------------------------------------------------------------------------------------------------------------------------

 V = approach half-width       L = effective flare length            D = inscribed circle diameter
 E = entry width               R = entry radius                      PHI = entry angle

 **WARNING** ARM A Effective flare length is outside normal range.
  Treat capacities with increasing caution.

 **WARNING** ARM C Effective flare length is outside normal range.
  Treat capacities with increasing caution.


.TRAFFIC DEMAND DATA
 -------------------

 Only sets included in the current run are shown
.SCALING FACTORS
.------------------------ T13
 IARM  I FLOW SCALE(%) I
 ------------------------
 I A   I      100      I
 I B   I      100      I
 I C   I      100      I
 I D   I      100      I
 ------------------------

 TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(  60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j14a Charles Watts Way-Botley Road Rbt DS1AM+DEV


 DEMAND SET TITLE:  j14a Charles Watts Way-Botley Road Rbt DS1AM+DEV
.------------------------------------------------------------------------ T33
 I                   I         TURNING PROPORTIONS                     I
 I                   I         TURNING COUNTS                          I
 I                   I       (PERCENTAGE OF H.V.S)                     I
 I                   ------------------------------------------------
 I       TIME        I FROM/T  I  ARM A I  ARM B I  ARM C I  ARM D I
 ------------------------------------------------------------------------
 I   08.00 - 09.00   I         I       I       I       I       I
 I                   I  ARM  A I  0.249 I  0.366 I  0.330 I  0.055 I
 I                   I         I  879.0 I 1291.0 I 1165.0 I  194.0 I
 I                   I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
 I                   I         I       I       I       I       I
 I                   I  ARM  B I  0.055 I  0.249 I  0.366 I  0.330 I
 I                   I         I  194.0 I  879.0 I 1291.0 I 1165.0 I
 I                   I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
```



```
 I                   I         I       I       I       I       I
 I                   I  ARM  C I  0.330 I  0.055 I  0.249 I  0.366 I
 I                   I         I 1165.0 I  194.0 I  879.0 I 1291.0 I
 I                   I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
 I                   I         I       I       I       I       I
 I                   I  ARM  D I  0.366 I  0.330 I  0.055 I  0.249 I
 I                   I         I 1291.0 I 1165.0 I  194.0 I  879.0 I
 I                   I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
 I                   I         I       I       I       I       I
 ------------------------------------------------------------------


.       QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT
        ---------------------------------------------------------
.------------------------------------------------------------------------------------------------------------------------ T70
 I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
 I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
 I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
 -                                                                                                                -
 I 08.00-08.15                                                                                                    I
 I ARM A      11.73     22.23   0.528   - -       -    0.0    1.1       15.8             -              0.094     I
 I ARM B      21.53     27.84   0.774   - -       -    0.0    3.3       44.6             -              0.149     I
 I ARM C       3.27     16.62   0.197   - -       -    0.0    0.2        3.6             -              0.075     I
 I ARM D      22.83     35.11   0.650   - -       -    0.0    1.8       26.2             -              0.080     I
 I                                                                                                                I
 ------------------------------------------------------------------------------------------------------------------------
.------------------------------------------------------------------------------------------------------------------------
 I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
 I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
 I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
 -                                                                                                                -
 I 08.15-08.30                                                                                                    I
 I ARM A      11.73     22.16   0.529   - -       -    1.1    1.1       16.7             -              0.096     I
 I ARM B      21.53     27.79   0.775   - -       -    3.3    3.4       49.9             -              0.159     I
 I ARM C       3.27     16.53   0.198   - -       -    0.2    0.2        3.7             -              0.075     I
 I ARM D      22.83     35.05   0.651   - -       -    1.8    1.9       27.7             -              0.082     I
 I                                                                                                                I
 ------------------------------------------------------------------------------------------------------------------------
.------------------------------------------------------------------------------------------------------------------------
 I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
 I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
 I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
 -                                                                                                                -
 I 08.30-08.45                                                                                                    I
 I ARM A      11.73     22.16   0.529   - -       -    1.1    1.1       16.8             -              0.096     I
 I ARM B      21.53     27.79   0.775   - -       -    3.4    3.4       50.6             -              0.160     I
 I ARM C       3.27     16.53   0.198   - -       -    0.2    0.2        3.7             -              0.075     I
 I ARM D      22.83     35.05   0.651   - -       -    1.9    1.9       27.8             -              0.082     I
 I                                                                                                                I
 ------------------------------------------------------------------------------------------------------------------------
.------------------------------------------------------------------------------------------------------------------------
 I  TIME      DEMAND  CAPACITY  DEMAND/   PEDESTRIAN  START   END       DELAY     GEOMETRIC DELAY   AVERAGE DELAY I
 I         (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/      PER ARRIVING  I
 I                             (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
 -                                                                                                                -
 I 08.45-09.00                                                                                                    I
 I ARM A      11.73     22.16   0.529   - -       -    1.1    1.1       16.8             -              0.096     I
 I ARM B      21.53     27.79   0.775   - -       -    3.4    3.4       50.9             -              0.160     I
 I ARM C       3.27     16.53   0.198   - -       -    0.2    0.2        3.7             -              0.075     I
 I ARM D      22.83     35.05   0.651   - -       -    1.9    1.9       27.9             -              0.082     I
 I                                                                                                                I
 ------------------------------------------------------------------------------------------------------------------------

.QUEUE AT ARM A
 --------------

  TIME SEGMENT NO. OF
    ENDING      VEHICLES
                IN QUEUE

    08.15           1.1  *
    08.30           1.1  *
    08.45           1.1  *
    09.00           1.1  *


.QUEUE AT ARM B
 --------------

  TIME SEGMENT NO. OF
    ENDING      VEHICLES
                IN QUEUE

    08.15           3.3  ***
    08.30           3.4  ***
    08.45           3.4  ***
    09.00           3.4  ***


.QUEUE AT ARM C
 --------------

  TIME SEGMENT NO. OF
    ENDING      VEHICLES
                IN QUEUE

    08.15           0.2
    08.30           0.2
    08.45           0.2
    09.00           0.2


.QUEUE AT ARM D
 --------------

  TIME SEGMENT NO. OF
    ENDING      VEHICLES
                IN QUEUE

    08.15           1.8  **
    08.30           1.9  **
    08.45           1.9  **
    09.00           1.9  **
```

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * * DELAY * (MIN)	* QUEUEING * * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * * DELAY * (MIN)	* INCLUSIVE QUEUEING * * DELAY * (MIN/VEH)
A	704.0	704.0	66.1	0.09	66.1	0.09
B	1292.0	1292.0	196.0	0.15	196.2	0.15
C	196.0	196.0	14.6	0.07	14.6	0.07
D	1370.0	1370.0	109.6	0.08	109.7	0.08
ALL	3562.0	3562.0	386.3	0.11	386.6	0.11

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

END OF JOB

_____ A R C A D Y 6 _____

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

_____

For sales and distribution information,
program advice and maintenance, contact:

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RG40 3GA,UK

Tel: +44 (0) 1344 770758
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Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

Run with file:-
"p:\10440\Traffic\Junctions\j15a Charles Watts Way-Botley Road Rbt\
10440 j15a Charles Watts Way-Botley Road Rbt DS1PM+DEV.vai"
(drive-on-the-left) at 14:51:46 on Friday, 25 November 2016

.FILE PROPERTIES

RUN TITLE: j15a Charles Watts Way-Botley Road Rbt DS1PM+DEV+DEV
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA

ARM A - Botley Road
ARM B - Grange Road
ARM C - Wildern Lane
ARM D - Charles Watts Way

.GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.10	8.00	70.00	65.00	86.00	33.0	0.538	36.712
ARM B	6.50	7.90	30.00	28.00	86.00	26.0	0.568	40.062
ARM C	4.20	6.20	36.00	26.00	86.00	28.0	0.482	30.328
ARM D	6.90	10.30	14.00	40.00	86.00	24.0	0.627	46.521

V = approach half-width E = entry width
L = effective flare length R = entry radius
D = inscribed circle diameter PHI = entry angle

WARNING ARM A Effective flare length is outside normal range.
Treat capacities with increasing caution.

WARNING ARM C Effective flare length is outside normal range.
Treat capacities with increasing caution.

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j15a Charles Watts Way-Botley Road Rbt DS1PM+DEV

DEMAND SET TITLE: j15a Charles Watts Way-Botley Road Rbt DS1PM+DEV

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

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
17.00 - 18.00					
	ARM A	0.331	0.220	0.379	0.069
		1184.0	786.0	1355.0	247.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.069	0.331	0.220	0.379
		247.0	1184.0	786.0	1355.0
		(10.0)	(10.0)	(10.0)	(10.0)

ARM C	0.379	0.069	0.331	0.220
	1355.0	247.0	1184.0	786.0
	(10.0)	(10.0)	(10.0)	(10.0)
ARM D	0.220	0.379	0.069	0.331
	786.0	1355.0	247.0	1184.0
	(10.0)	(10.0)	(10.0)	(10.0)

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	18.83	21.15	0.890	- - -	0.0	6.7	80.9	-	0.322
ARM B	17.67	23.16	0.763	- - -	0.0	3.1	41.6	-	0.170
ARM C	2.50	14.19	0.176	- - -	0.0	0.2	3.1	-	0.085
ARM D	20.53	32.87	0.625	- - -	0.0	1.6	23.5	-	0.080

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
ARM A	18.83	21.07	0.894	- - -	6.7	7.4	106.7	-	0.419
ARM B	17.67	22.96	0.769	- - -	3.1	3.2	47.5	-	0.188
ARM C	2.50	14.03	0.178	- - -	0.2	0.2	3.2	-	0.087
ARM D	20.53	32.73	0.627	- - -	1.6	1.7	24.9	-	0.082

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
ARM A	18.83	21.07	0.894	- - -	7.4	7.7	113.9	-	0.431
ARM B	17.67	22.95	0.770	- - -	3.2	3.3	48.8	-	0.189
ARM C	2.50	14.02	0.178	- - -	0.2	0.2	3.2	-	0.087
ARM D	20.53	32.72	0.628	- - -	1.7	1.7	25.1	-	0.082

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
ARM A	18.83	21.07	0.894	- - -	7.7	7.9	117.2	-	0.435
ARM B	17.67	22.94	0.770	- - -	3.3	3.3	49.3	-	0.189
ARM C	2.50	14.02	0.178	- - -	0.2	0.2	3.2	-	0.087
ARM D	20.53	32.72	0.628	- - -	1.7	1.7	25.1	-	0.082

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	6.7	*******
17.30	7.4	*******
17.45	7.7	********
18.00	7.9	********

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	3.1	***
17.30	3.2	***
17.45	3.3	***
18.00	3.3	***

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.2
17.30	0.2
17.45	0.2
18.00	0.2

.QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	1.6	**
17.30	1.7	**
17.45	1.7	**
18.00	1.7	**

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * * DELAY * (MIN)	* QUEUEING * * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * * DELAY * (MIN)	* INCLUSIVE QUEUEING * * DELAY * (MIN/VEH)
A	1130.0	1130.0	418.6	0.37	420.1	0.37
B	1060.0	1060.0	187.3	0.18	187.5	0.18
C	150.0	150.0	12.8	0.09	12.8	0.09
D	1232.0	1232.0	98.7	0.08	98.7	0.08
ALL	3572.0	3572.0	717.3	0.20	719.1	0.20

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
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END OF JOB

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

For sales and distribution information,
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Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

Run with file:-
"p:\10440\Traffic\Junctions\j15a Charles Watts Way-Botley Road Rbt\
10440 j15a Charles Watts Way-Botley Road Rbt DS1AM+DEV+IMP.vai"
(drive-on-the-left) at 08:47:46 on Monday, 28 November 2016

.FILE PROPERTIES

RUN TITLE: j15a Charles Watts Way-Botley Road Rbt DS1AM+DEV
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA

ARM A - Botley Road
ARM B - Grange Road
ARM C - Wildern Lane
ARM D - Charles Watts Way

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.10	8.40	70.00	65.00	86.00	33.0	0.550	38.072
ARM B	6.50	7.90	30.00	28.00	86.00	26.0	0.568	40.062
ARM C	4.20	6.20	36.00	26.00	86.00	28.0	0.482	30.328
ARM D	6.90	10.30	14.00	40.00	86.00	24.0	0.627	46.521

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

WARNING ARM A Effective flare length is outside normal range.
Treat capacities with increasing caution.

WARNING ARM C Effective flare length is outside normal range.
Treat capacities with increasing caution.

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j14a Charles Watts Way-Botley Road Rbt DS1AM+DEV

DEMAND SET TITLE: j14a Charles Watts Way-Botley Road Rbt DS1AM+DEV

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
08.00 - 09.00	ARM A	0.249	0.366	0.330	0.055
		879.0	1291.0	1165.0	194.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.055	0.249	0.366	0.330
		194.0	879.0	1291.0	1165.0
		(10.0)	(10.0)	(10.0)	(10.0)

ARM C	0.330	0.055	0.249	0.366	
	1165.0	194.0	879.0	1291.0	
	(10.0)	(10.0)	(10.0)	(10.0)	
ARM D	0.366	0.330	0.055	0.249	
	1291.0	1165.0	194.0	879.0	
	(10.0)	(10.0)	(10.0)	(10.0)	

.QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	11.18	23.23	0.481	- -	0.0	0.9	13.3	-	0.082
ARM B	21.53	28.03	0.768	- -	0.0	3.2	43.5	-	0.145
ARM C	3.27	16.69	0.196	- -	0.0	0.2	3.5	-	0.074
ARM D	22.83	35.19	0.649	- -	0.0	1.8	26.1	-	0.079
08.15-08.30									
ARM A	11.18	23.15	0.483	- -	0.9	0.9	13.9	-	0.084
ARM B	21.53	27.99	0.769	- -	3.2	3.3	48.4	-	0.154
ARM C	3.27	16.61	0.197	- -	0.2	0.2	3.6	-	0.075
ARM D	22.83	35.14	0.650	- -	1.8	1.8	27.5	-	0.081
08.30-08.45									
ARM A	11.18	23.15	0.483	- -	0.9	0.9	13.9	-	0.084
ARM B	21.53	27.99	0.769	- -	3.3	3.3	49.1	-	0.155
ARM C	3.27	16.61	0.197	- -	0.2	0.2	3.7	-	0.075
ARM D	22.83	35.14	0.650	- -	1.8	1.8	27.6	-	0.081
08.45-09.00									
ARM A	11.18	23.15	0.483	- -	0.9	0.9	14.0	-	0.084
ARM B	21.53	27.99	0.769	- -	3.3	3.3	49.4	-	0.155
ARM C	3.27	16.61	0.197	- -	0.2	0.2	3.7	-	0.075
ARM D	22.83	35.14	0.650	- -	1.8	1.8	27.7	-	0.081

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	0.9	*
08.30	0.9	*
08.45	0.9	*
09.00	0.9	*

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	3.2	***
08.30	3.3	***
08.45	3.3	***
09.00	3.3	***

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.2
08.30	0.2
08.45	0.2
09.00	0.2

.QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	1.8	**
08.30	1.8	**
08.45	1.8	**
09.00	1.8	**

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	671.0	671.0	55.1	0.08	55.1	0.08
B	1292.0	1292.0	190.5	0.15	190.7	0.15
C	196.0	196.0	14.5	0.07	14.5	0.07
D	1370.0	1370.0	108.9	0.08	108.9	0.08
ALL	3529.0	3529.0	368.9	0.10	369.2	0.10

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
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* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

_____ A R C A D Y 6 _____

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

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Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

Run with file:-
"p:\10440\Traffic\Junctions\j15a Charles Watts Way-Botley Road Rbt\
10440 j15a Charles Watts Way-Botley Road Rbt DS1PM+DEV+IMP.vai"
(drive-on-the-left) at 08:44:24 on Monday, 28 November 2016

.FILE PROPERTIES

RUN TITLE: j15a Charles Watts Way-Botley Road Rbt DS1PM+DEV+DEV
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA

ARM A - Botley Road
ARM B - Grange Road
ARM C - Wildern Lane
ARM D - Charles Watts Way

.GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.10	8.40	70.00	65.00	86.00	33.0	0.550	38.072
ARM B	6.50	7.90	30.00	28.00	86.00	26.0	0.568	40.062
ARM C	4.20	6.20	36.00	26.00	86.00	28.0	0.482	30.328
ARM D	6.90	10.30	14.00	40.00	86.00	24.0	0.627	46.521

V = approach half-width E = entry width
L = effective flare length R = entry radius
D = inscribed circle diameter PHI = entry angle

WARNING ARM A Effective flare length is outside normal range.
Treat capacities with increasing caution.

WARNING ARM C Effective flare length is outside normal range.
Treat capacities with increasing caution.

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j15a Charles Watts Way-Botley Road Rbt DS1PM+DEV

DEMAND SET TITLE: j15a Charles Watts Way-Botley Road Rbt DS1PM+DEV

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

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
17.00 - 18.00					
	ARM A	0.331	0.220	0.379	0.069
		1184.0	786.0	1355.0	247.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.069	0.331	0.220	0.379
		247.0	1184.0	786.0	1355.0
		(10.0)	(10.0)	(10.0)	(10.0)

	ARM C	0.379	0.069	0.331	0.220
		1355.0	247.0	1184.0	786.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM D	0.220	0.379	0.069	0.331
		786.0	1355.0	247.0	1184.0
		(10.0)	(10.0)	(10.0)	(10.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	18.83	22.12	0.851	- - -	0.0	5.1	65.0	-	0.255
ARM B	17.67	23.12	0.764	- - -	0.0	3.1	41.9	-	0.171
ARM C	2.50	14.17	0.176	- - -	0.0	0.2	3.1	-	0.085
ARM D	20.53	32.84	0.625	- - -	0.0	1.6	23.6	-	0.080

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
ARM A	18.83	22.04	0.855	- - -	5.1	5.5	79.9	-	0.305
ARM B	17.67	22.95	0.770	- - -	3.1	3.2	47.8	-	0.188
ARM C	2.50	14.02	0.178	- - -	0.2	0.2	3.2	-	0.087
ARM D	20.53	32.72	0.627	- - -	1.6	1.7	24.9	-	0.082

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
ARM A	18.83	22.03	0.855	- - -	5.5	5.6	83.2	-	0.309
ARM B	17.67	22.94	0.770	- - -	3.2	3.3	48.9	-	0.189
ARM C	2.50	14.01	0.178	- - -	0.2	0.2	3.2	-	0.087
ARM D	20.53	32.72	0.628	- - -	1.7	1.7	25.1	-	0.082

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
ARM A	18.83	22.03	0.855	- - -	5.6	5.7	84.7	-	0.310
ARM B	17.67	22.94	0.770	- - -	3.3	3.3	49.4	-	0.189
ARM C	2.50	14.01	0.178	- - -	0.2	0.2	3.2	-	0.087
ARM D	20.53	32.72	0.628	- - -	1.7	1.7	25.2	-	0.082

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	5.1	*****
17.30	5.5	*****
17.45	5.6	******
18.00	5.7	******

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	3.1	***
17.30	3.2	***
17.45	3.3	***
18.00	3.3	***

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.2
17.30	0.2
17.45	0.2
18.00	0.2

QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	1.6	**
17.30	1.7	**
17.45	1.7	**
18.00	1.7	**

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * * DELAY * (MIN)	* QUEUEING * * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * * DELAY * (MIN)	* INCLUSIVE QUEUEING * * DELAY * (MIN/VEH)
A	1130.0	1130.0	312.8	0.28	313.5	0.28
B	1060.0	1060.0	188.0	0.18	188.2	0.18
C	150.0	150.0	12.8	0.09	12.8	0.09
D	1232.0	1232.0	98.7	0.08	98.8	0.08
ALL	3572.0	3572.0	612.3	0.17	613.4	0.17

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

END OF JOB

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

For sales and distribution information,
program advice and maintenance, contact:

TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770356
Nine Mile Ride Email: software@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk
RG40 3GA,UK

Run with file:-
"p:\10440\Traffic\Junctions\j16a Tollbar Way-Botley Road Rbt\10440 j16a Tollbar Way-Botley Road Rbt DS1AM.vai"
(drive-on-the-left) at 14:52:05 on Friday, 25 November 2016

.FILE PROPERTIES
****

RUN TITLE: j16a Charles Watts Way-Botley Road Rbt DS1AM
LOCATION: Eastleigh
DATE: 25/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA
****
ARM A - Tollbar Way (North)
ARM B - Botley Road (East)
ARM C - Tollbar Way (South)
ARM D - Botley Road (West)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.00	7.50	25.00	20.00	50.00	35.0	0.643	31.844
ARM B	4.00	7.00	15.00	20.00	50.00	35.0	0.610	28.927
ARM C	7.00	7.00	0.00	15.00	50.00	35.0	0.665	34.160
ARM D	3.50	7.00	20.00	15.00	50.00	35.0	0.595	28.029

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j16a Charles Watts Way-Botley Road Rbt DS1AM

DEMAND SET TITLE: j16a Charles Watts Way-Botley Road Rbt DS1AM

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
		TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S)			
08.00 - 09.00					
	ARM A	0.277	0.204	0.279	0.240
		847.0	625.0	854.0	734.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.240	0.277	0.204	0.279
		734.0	847.0	625.0	854.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM C	0.279	0.240	0.277	0.204
		854.0	734.0	847.0	625.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM D	0.204	0.279	0.240	0.277
		625.0	854.0	734.0	847.0

		(10.0)	(10.0)	(10.0)	(10.0)

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)		PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15										
ARM A	15.82	16.60	0.953	- -	-	0.0	10.3	111.1	-	0.542
ARM B	9.63	12.77	0.754	- -	-	0.0	2.8	37.3	-	0.286
ARM C	10.98	18.32	0.599	- -	-	0.0	1.5	20.6	-	0.133
ARM D	14.57	14.93	0.976	- -	-	0.0	11.9	122.8	-	0.655

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)		PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30										
ARM A	15.82	16.31	0.970	- -	-	10.3	14.5	189.5	-	0.951
ARM B	9.63	12.40	0.777	- -	-	2.8	3.2	46.6	-	0.352
ARM C	10.98	18.01	0.610	- -	-	1.5	1.5	22.7	-	0.142
ARM D	14.57	14.76	0.987	- -	-	11.9	17.1	221.0	-	1.200

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)		PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45										
ARM A	15.82	16.25	0.973	- -	-	14.5	17.4	240.3	-	1.152
ARM B	9.63	12.33	0.781	- -	-	3.2	3.4	50.0	-	0.365
ARM C	10.98	17.95	0.612	- -	-	1.5	1.6	23.2	-	0.143
ARM D	14.57	14.74	0.988	- -	-	17.1	20.9	286.4	-	1.481

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)		PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00										
ARM A	15.82	16.23	0.975	- -	-	17.4	19.5	277.6	-	1.301
ARM B	9.63	12.29	0.784	- -	-	3.4	3.5	51.6	-	0.373
ARM C	10.98	17.93	0.613	- -	-	1.6	1.6	23.4	-	0.144
ARM D	14.57	14.73	0.989	- -	-	20.9	23.9	336.9	-	1.703

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	10.3	**********
08.30	14.5	***************
08.45	17.4	*****************
09.00	19.5	********************

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	2.8	***
08.30	3.2	***
08.45	3.4	***
09.00	3.5	***

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	1.5	*
08.30	1.5	**
08.45	1.6	**
09.00	1.6	**

.QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	11.9	************
08.30	17.1	*****************
08.45	20.9	*********************
09.00	23.9	************************

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND	* QUEUEING * * DELAY *	* INCLUSIVE QUEUEING * * DELAY *

	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	949.0	949.0	818.5	0.86	830.3	0.87
B	578.0	578.0	185.4	0.32	185.9	0.32
C	659.0	659.0	90.0	0.14	90.1	0.14
D	874.0	874.0	967.1	1.11	986.5	1.13
ALL	3060.0	3060.0	2061.0	0.67	2092.8	0.68

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
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END OF JOB

Run with file:-
"p:\10440\Traffic\Junctions\j16a Tollbar Way-Botley Road Rbt\10440 j16a Tollbar Way-Botley Road Rbt DS1PM.vai"
(drive-on-the-left) at 11:40:29 on Monday, 28 November 2016

.FILE PROPERTIES
****

RUN TITLE: j16a Charles Watts Way-Botley Road Rbt DS1PM
LOCATION: Eastleigh
DATE: 25/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA
****
ARM A - Tollbar Way (North)
ARM B - Botley Road (East)
ARM C - Tollbar Way (South)
ARM D - Botley Road (West)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.00	7.50	25.00	20.00	50.00	35.0	0.643	31.844
ARM B	4.00	7.00	15.00	20.00	50.00	35.0	0.610	28.927
ARM C	7.00	7.00	0.00	15.00	50.00	35.0	0.665	34.160
ARM D	3.50	7.00	20.00	15.00	50.00	35.0	0.595	28.029

V = approach half-width E = entry width
L = effective flare length R = entry radius
D = inscribed circle diameter PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j16a Charles Watts Way-Botley Road Rbt DS1PM

DEMAND SET TITLE: j16a Charles Watts Way-Botley Road Rbt DS1PM

T33

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS / (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C	ARM D
17.00 - 18.00					
	ARM A	0.286	0.253	0.207	0.255
		968.0	856.0	701.0	863.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.255	0.286	0.253	0.207
		863.0	968.0	856.0	701.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM C	0.207	0.255	0.286	0.253
		701.0	863.0	968.0	856.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM D	0.253	0.207	0.255	0.286
		856.0	701.0	863.0	968.0

```
I                    I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
I                    I         I        I        I        I        I
--------------------------------------------------------------------
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. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	13.28	15.35	0.865	- - -	0.0	5.3	65.1	-	0.371
ARM B	11.23	13.48	0.833	- - -	0.0	4.3	53.8	-	0.361
ARM C	16.40	18.59	0.882	- - -	0.0	6.2	74.8	-	0.343
ARM D	19.57	12.64	1.548	- - -	0.0	105.6	803.8	-	4.362

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
ARM A	13.28	15.27	0.870	- - -	5.3	5.9	85.4	-	0.474
ARM B	11.23	13.33	0.842	- - -	4.3	4.8	69.4	-	0.453
ARM C	16.40	18.38	0.892	- - -	6.2	7.1	101.1	-	0.463
ARM D	19.57	12.35	1.584	- - -	105.6	213.8	2396.0	-	13.069

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
ARM A	13.28	15.27	0.870	- - -	5.9	6.2	91.0	-	0.486
ARM B	11.23	13.33	0.843	- - -	4.8	5.0	73.9	-	0.466
ARM C	16.40	18.37	0.893	- - -	7.1	7.5	110.2	-	0.483
ARM D	19.57	12.33	1.587	- - -	213.8	322.5	4022.1	-	21.857

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
ARM A	13.28	15.26	0.870	- - -	6.2	6.3	93.6	-	0.493
ARM B	11.23	13.32	0.843	- - -	5.0	5.1	75.9	-	0.470
ARM C	16.40	18.36	0.893	- - -	7.5	7.7	114.4	-	0.492
ARM D	19.57	12.32	1.589	- - -	322.5	431.2	5652.3	-	30.695

.QUEUE AT ARM A

```
 TIME SEGMENT NO. OF
  ENDING      VEHICLES
              IN QUEUE

  17.15          5.3  *****
  17.30          5.9  ******
  17.45          6.2  ******
  18.00          6.3  ******
```

.QUEUE AT ARM B

```
 TIME SEGMENT NO. OF
  ENDING      VEHICLES
              IN QUEUE

  17.15          4.3  ****
  17.30          4.8  *****
  17.45          5.0  *****
  18.00          5.1  *****
```

.QUEUE AT ARM C

```
 TIME SEGMENT NO. OF
  ENDING      VEHICLES
              IN QUEUE

  17.15          6.2  ******
  17.30          7.1  *******
  17.45          7.5  ********
  18.00          7.7  ********
```

.QUEUE AT ARM D

```
 TIME SEGMENT NO. OF
  ENDING      VEHICLES
              IN QUEUE

  17.15        105.6  ******************************************************************************************
  17.30        213.8  ******************************************************************************************
  17.45        322.5  ******************************************************************************************
  18.00        431.2  ******************************************************************************************
```

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

```
I  ARM  I   TOTAL DEMAND  I     * QUEUEING *    I  * INCLUSIVE QUEUEING *  I
I       I                 I      * DELAY *      I         * DELAY *        I
```


	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	797.0	797.0	335.0	0.42	336.3	0.42
B	674.0	674.0	273.0	0.41	274.0	0.41
C	984.0	984.0	400.5	0.41	402.1	0.41
D	1174.0	1174.0	12874.2	10.97	20421.2	17.39
ALL	3629.0	3629.0	13882.7	3.83	21433.6	5.91

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

END OF JOB

_____ A R C A D Y 6 _____

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

For sales and distribution information,
program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

Run with file:-
"p:\10440\Traffic\Junctions\j16a Tollbar Way-Botley Road Rbt\
10440 j16a Tollbar Way-Botley Road Rbt DS1AM+DEV.vai"
(drive-on-the-left) at 14:52:09 on Friday, 25 November 2016

.FILE PROPERTIES

RUN TITLE: j16a Charles Watts Way-Botley Road Rbt DS1AM+DEV
LOCATION: Eastleigh
DATE: 25/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA

ARM A - Tollbar Way (North)
ARM B - Botley Road (East)
ARM C - Tollbar Way (South)
ARM D - Botley Road (West)

.GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.00	7.50	25.00	20.00	50.00	35.0	0.643	31.844
ARM B	4.00	7.00	15.00	20.00	50.00	35.0	0.610	28.927
ARM C	7.00	7.00	0.00	15.00	50.00	35.0	0.665	34.160
ARM D	3.50	7.00	20.00	15.00	50.00	35.0	0.595	28.029

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

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

TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j16a Charles Watts Way-Botley Road Rbt DS1AM+DEV

DEMAND SET TITLE: j16a Charles Watts Way-Botley Road Rbt DS1AM+DEV

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

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
08.00 - 09.00	ARM A	0.263	0.210	0.280	0.247
		873.0	697.0	932.0	822.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.247	0.263	0.210	0.280
		822.0	873.0	697.0	932.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM C	0.280	0.247	0.263	0.210
		932.0	822.0	873.0	697.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM D	0.210	0.280	0.247	0.263

		697.0	932.0	822.0	873.0
		(10.0)	(10.0)	(10.0)	(10.0)

.QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	17.85	16.37	1.090	- -	0.0	30.1	257.3	-	1.140
ARM B	10.40	12.48	0.834	- -	0.0	4.3	53.1	-	0.387
ARM C	11.87	17.96	0.661	- -	0.0	1.9	26.3	-	0.158
ARM D	15.30	14.41	1.062	- -	0.0	22.6	200.9	-	1.037
08.15-08.30									
ARM A	17.85	16.11	1.108	- -	30.1	57.0	654.4	-	2.901
ARM B	10.40	12.25	0.849	- -	4.3	5.0	70.5	-	0.507
ARM C	11.87	17.70	0.671	- -	1.9	2.0	29.3	-	0.171
ARM D	15.30	14.25	1.074	- -	22.6	40.1	471.5	-	2.428
08.30-08.45									
ARM A	17.85	16.09	1.109	- -	57.0	83.9	1057.0	-	4.526
ARM B	10.40	12.23	0.850	- -	5.0	5.2	76.5	-	0.528
ARM C	11.87	17.67	0.672	- -	2.0	2.0	30.0	-	0.172
ARM D	15.30	14.23	1.075	- -	40.1	56.9	727.8	-	3.597
08.45-09.00									
ARM A	17.85	16.08	1.110	- -	83.9	110.6	1458.8	-	6.180
ARM B	10.40	12.23	0.851	- -	5.2	5.3	79.1	-	0.535
ARM C	11.87	17.66	0.672	- -	2.0	2.0	30.3	-	0.172
ARM D	15.30	14.23	1.075	- -	56.9	73.4	977.8	-	4.743

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	30.1	******************************
08.30	57.0	**********
08.45	83.9	**********
09.00	110.6	**********

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	4.3	****
08.30	5.0	*****
08.45	5.2	*****
09.00	5.3	*****

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	1.9	**
08.30	2.0	**
08.45	2.0	**
09.00	2.0	**

.QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	22.6	**********
08.30	40.1	**********
08.45	56.9	**********
09.00	73.4	**********

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND	* QUEUEING *	* INCLUSIVE QUEUEING *

		* DELAY *		* DELAY *	
	(VEH) (VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	1071.0 1071.0	3427.4	3.20	3808.1	3.56
B	624.0 624.0	279.1	0.45	280.3	0.45
C	712.0 712.0	115.9	0.16	116.1	0.16
D	918.0 918.0	2378.1	2.59	2567.6	2.80
ALL	3325.0 3325.0	6200.6	1.86	6772.1	2.04

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

END OF JOB

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

Run with file:-
"p:\10440\Traffic\Junctions\j16a Tollbar Way-Botley Road Rbt\
10440 j16a Tollbar Way-Botley Road Rbt DS1PM+DEV.vai"
(drive-on-the-left) at 15:27:12 on Friday, 25 November 2016

.FILE PROPERTIES

RUN TITLE: j16a Charles Watts Way-Botley Road Rbt DS1PM+DEV
LOCATION: Eastleigh
DATE: 25/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA

ARM A - Tollbar Way (North)
ARM B - Botley Road (East)
ARM C - Tollbar Way (South)
ARM D - Botley Road (West)

.GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.00	7.50	25.00	20.00	50.00	35.0	0.643	31.844
ARM B	4.00	7.00	15.00	20.00	50.00	35.0	0.610	28.927
ARM C	7.00	7.00	0.00	15.00	50.00	35.0	0.665	34.160
ARM D	3.50	7.00	20.00	15.00	50.00	35.0	0.595	28.029

V = approach half-width E = entry width
L = effective flare length R = entry radius
D = inscribed circle diameter PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

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

TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD - (60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j16a Charles Watts Way-Botley Road Rbt DS1PM+DEV

DEMAND SET TITLE: j16a Charles Watts Way-Botley Road Rbt DS1PM+DEV

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
17.00 - 18.00	TURNING PROPORTIONS				
	ARM A	0.260	0.265	0.195	0.279
		970.0	990.0	727.0	1042.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.279	0.260	0.265	0.195
		1042.0	970.0	990.0	727.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM C	0.195	0.279	0.260	0.265
		727.0	1042.0	970.0	990.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM D	0.265	0.195	0.279	0.260
	TURNING COUNTS (PERCENTAGE OF H.V.S)				

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I                   I         I  990.0 I  727.0 I 1042.0 I  970.0 I
I                   I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
I                   I         I        I        I        I        I
--------------------------------------------------------------------
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. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	14.62	15.73	0.929	- - -	0.0	8.4	94.1	-	0.495
ARM B	12.38	13.40	0.924	- - -	0.0	7.7	86.6	-	0.540
ARM C	15.10	17.98	0.840	- - -	0.0	4.6	58.8	-	0.291
ARM D	20.05	13.02	1.540	- - -	0.0	107.2	816.0	-	4.297

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
ARM A	14.62	15.66	0.933	- - -	8.4	10.2	141.1	-	0.743
ARM B	12.38	13.22	0.937	- - -	7.7	9.9	134.8	-	0.852
ARM C	15.10	17.67	0.854	- - -	4.6	5.3	75.9	-	0.370
ARM D	20.05	12.72	1.576	- - -	107.2	217.2	2433.5	-	12.892

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
ARM A	14.62	15.66	0.933	- - -	10.2	11.0	159.7	-	0.807
ARM B	12.38	13.20	0.938	- - -	9.9	11.1	158.3	-	0.955
ARM C	15.10	17.63	0.857	- - -	5.3	5.6	81.8	-	0.386
ARM D	20.05	12.68	1.582	- - -	217.2	327.9	4088.1	-	21.611

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
ARM A	14.62	15.66	0.933	- - -	11.0	11.6	170.1	-	0.836
ARM B	12.38	13.20	0.938	- - -	11.1	11.8	172.1	-	1.013
ARM C	15.10	17.61	0.858	- - -	5.6	5.7	84.6	-	0.393
ARM D	20.05	12.66	1.584	- - -	327.9	438.7	5749.2	-	30.379

.QUEUE AT ARM A

```
 TIME SEGMENT NO. OF
  ENDING      VEHICLES
              IN QUEUE

  17.15          8.4  ********
  17.30         10.2  **********
  17.45         11.0  ***********
  18.00         11.6  ************
```

.QUEUE AT ARM B

```
 TIME SEGMENT NO. OF
  ENDING      VEHICLES
              IN QUEUE

  17.15          7.7  ********
  17.30          9.9  **********
  17.45         11.1  ***********
  18.00         11.8  ************
```

.QUEUE AT ARM C

```
 TIME SEGMENT NO. OF
  ENDING      VEHICLES
              IN QUEUE

  17.15          4.6  *****
  17.30          5.3  *****
  17.45          5.6  ******
  18.00          5.7  ******
```

.QUEUE AT ARM D

```
 TIME SEGMENT NO. OF
  ENDING      VEHICLES
              IN QUEUE

  17.15        107.2  ******************************************************************************************
  17.30        217.2  ******************************************************************************************
  17.45        327.9  ******************************************************************************************
  18.00        438.7  ******************************************************************************************
```

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

```
I  ARM  I   TOTAL DEMAND  I     * QUEUEING *    I  * INCLUSIVE QUEUEING *  I
```


ARM	(VEH)	(VEH/H)	* DELAY * (MIN)	* DELAY * (MIN/VEH)	* DELAY * (MIN)	* DELAY * (MIN/VEH)
A	877.0	877.0	565.1	0.64	569.4	0.65
B	743.0	743.0	551.8	0.74	557.1	0.75
C	906.0	906.0	301.1	0.33	302.0	0.33
D	1203.0	1203.0	13086.8	10.88	20687.8	17.20
ALL	3729.0	3729.0	14504.7	3.89	22116.2	5.93

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
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* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

_____ A R C A D Y 6 _____

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

For sales and distribution information,
program advice and maintenance, contact:

TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770356
Nine Mile Ride Email: software@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk
RG40 3GA,UK

Run with file:-
"p:\10440\Traffic\Junctions\j16a Tollbar Way-Botley Road Rbt\
10440 j16a Tollbar Way-Botley Road Rbt DS1AM+DEV+IMP.vai"
(drive-on-the-left) at 09:24:01 on Monday, 28 November 2016

.FILE PROPERTIES

RUN TITLE: j16a Charles Watts Way-Botley Road Rbt DS1AM+DEV
LOCATION: Eastleigh
DATE: 25/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA

ARM A - Tollbar Way (North)
ARM B - Botley Road (East)
ARM C - Tollbar Way (South)
ARM D - Botley Road (West)

.GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.50	9.00	28.50	19.90	50.00	35.0	0.704	37.157
ARM B	4.00	8.60	17.00	20.00	50.00	35.0	0.646	32.083
ARM C	7.00	7.00	0.00	15.00	50.00	35.0	0.665	34.160
ARM D	3.50	8.00	22.00	15.00	50.00	35.0	0.622	30.353

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

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

TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j16a Charles Watts Way-Botley Road Rbt DS1AM+DEV

DEMAND SET TITLE: j16a Charles Watts Way-Botley Road Rbt DS1AM+DEV

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

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
08.00 - 09.00	ARM A	0.263	0.210	0.280	0.247
		873.0	697.0	932.0	822.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.247	0.263	0.210	0.280
		822.0	873.0	697.0	932.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM C	0.280	0.247	0.263	0.210
		932.0	822.0	873.0	697.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM D	0.210	0.280	0.247	0.263
		697.0	932.0	822.0	873.0
		(10.0)	(10.0)	(10.0)	(10.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	17.85	19.60	0.911	- - -	0.0	7.7	89.9	-	0.383
ARM B	10.40	13.53	0.769	- - -	0.0	3.1	40.0	-	0.285
ARM C	11.87	17.27	0.687	- - -	0.0	2.1	29.1	-	0.176
ARM D	15.30	15.76	0.971	- - -	0.0	11.7	121.7	-	0.617
08.15-08.30									
ARM A	17.85	19.28	0.926	- - -	7.7	9.6	132.0	-	0.574
ARM B	10.40	13.18	0.789	- - -	3.1	3.5	50.0	-	0.351
ARM C	11.87	16.99	0.699	- - -	2.1	2.3	33.1	-	0.195
ARM D	15.30	15.59	0.982	- - -	11.7	16.5	214.9	-	1.112
08.30-08.45									
ARM A	17.85	19.22	0.929	- - -	9.6	10.6	152.0	-	0.634
ARM B	10.40	13.12	0.793	- - -	3.5	3.6	53.5	-	0.363
ARM C	11.87	16.94	0.701	- - -	2.3	2.3	34.1	-	0.197
ARM D	15.30	15.57	0.983	- - -	16.5	19.9	274.5	-	1.353
08.45-09.00									
ARM A	17.85	19.19	0.930	- - -	10.6	11.2	163.6	-	0.666
ARM B	10.40	13.09	0.795	- - -	3.6	3.7	55.2	-	0.369
ARM C	11.87	16.92	0.701	- - -	2.3	2.3	34.6	-	0.197
ARM D	15.30	15.56	0.983	- - -	19.9	22.5	318.8	-	1.531

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	7.7	********
08.30	9.6	**********
08.45	10.6	**********
09.00	11.2	**********

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	3.1	***
08.30	3.5	***
08.45	3.6	****
09.00	3.7	****

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	2.1	**
08.30	2.3	**
08.45	2.3	**
09.00	2.3	**

.QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	11.7	**********
08.30	16.5	**********
08.45	19.9	**********
09.00	22.5	**********

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND	* QUEUEING *	* INCLUSIVE QUEUEING *

		* DELAY *		* DELAY *	
	(VEH) (VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	1071.0 1071.0	537.5	0.50	540.7	0.50
B	624.0 624.0	198.8	0.32	199.3	0.32
C	712.0 712.0	130.9	0.18	131.1	0.18
D	918.0 918.0	929.9	1.01	946.2	1.03
ALL	3325.0 3325.0	1797.1	0.54	1817.3	0.55

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

END OF JOB

_____ A R C A D Y 6 _____

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

_____

For sales and distribution information,
program advice and maintenance, contact:

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Web: www.trlsoftware.co.uk

Run with file:-
"p:\10440\Traffic\Junctions\j16a Tollbar Way-Botley Road Rbt\
10440 j16a Tollbar Way-Botley Road Rbt DS1PM+DEV+IMP.vai"
(drive-on-the-left) at 09:22:59 on Monday, 28 November 2016

.FILE PROPERTIES
****

RUN TITLE: j16a Charles Watts Way-Botley Road Rbt DS1PM+DEV
LOCATION: Eastleigh
DATE: 25/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA
****

ARM A - Tollbar Way (North)
ARM B - Botley Road (East)
ARM C - Tollbar Way (South)
ARM D - Botley Road (West)

.GEOMETRIC DATA
\-\-\-\-\-\-\-\-\-\-\-\-\-

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	4.50	9.00	28.50	20.00	50.00	35.0	0.704	37.166
ARM B	4.00	8.60	17.00	20.00	50.00	35.0	0.646	32.083
ARM C	7.00	7.00	0.00	15.00	50.00	35.0	0.665	34.160
ARM D	3.50	8.00	22.00	15.00	50.00	35.0	0.622	30.353

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA
\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-

Only sets included in the current run are shown
.SCALING FACTORS
T13

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

TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD - (60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j16a Charles Watts Way-Botley Road Rbt DS1PM+DEV

DEMAND SET TITLE: j16a Charles Watts Way-Botley Road Rbt DS1PM+DEV

T33

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS / (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C	ARM D
17.00 - 18.00	ARM A	0.260	0.265	0.195	0.279
		970.0	990.0	727.0	1042.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.279	0.260	0.265	0.195
		1042.0	970.0	990.0	727.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM C	0.195	0.279	0.260	0.265
		727.0	1042.0	970.0	990.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM D	0.265	0.195	0.279	0.260

I	I	I 990.0 I	727.0 I	1042.0 I	970.0 I	
I	I	I (10.0)I	(10.0)I	(10.0)I	(10.0)I	
I	I	I	I	I	I	

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

I TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN) I
I 17.00-17.15									I
I ARM A	14.62	18.58	0.787	- -	-	0.0	3.4	45.4	-	0.228 I
I ARM B	12.38	14.87	0.833	- -	-	0.0	4.4	54.7	-	0.332 I
I ARM C	15.10	17.51	0.862	- -	-	0.0	5.3	66.0	-	0.328 I
I ARM D	20.05	14.47	1.385	- -	-	0.0	86.1	661.4	-	3.138 I
I 17.15-17.30									I
I ARM A	14.62	18.46	0.792	- -	-	3.4	3.6	53.4	-	0.257 I
I ARM B	12.38	14.75	0.839	- -	-	4.4	4.8	69.2	-	0.407 I
I ARM C	15.10	17.32	0.872	- -	-	5.3	6.0	86.5	-	0.424 I
I ARM D	20.05	14.21	1.411	- -	-	86.1	173.8	1949.1	-	9.274 I
I 17.30-17.45									I
I ARM A	14.62	18.46	0.792	- -	-	3.6	3.7	55.0	-	0.259 I
I ARM B	12.38	14.75	0.840	- -	-	4.8	4.9	73.0	-	0.416 I
I ARM C	15.10	17.31	0.872	- -	-	6.0	6.3	92.8	-	0.437 I
I ARM D	20.05	14.19	1.413	- -	-	173.8	261.7	3265.7	-	15.450 I
I 17.45-18.00									I
I ARM A	14.62	18.46	0.792	- -	-	3.7	3.7	55.6	-	0.260 I
I ARM B	12.38	14.75	0.840	- -	-	4.9	5.0	74.6	-	0.418 I
I ARM C	15.10	17.31	0.872	- -	-	6.3	6.4	95.6	-	0.442 I
I ARM D	20.05	14.19	1.412	- -	-	261.7	349.5	4583.9	-	21.627 I

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	3.4	***
17.30	3.6	****
17.45	3.7	****
18.00	3.7	****

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	4.4	****
17.30	4.8	*****
17.45	4.9	*****
18.00	5.0	*****

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	5.3	*****
17.30	6.0	******
17.45	6.3	******
18.00	6.4	******

.QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	86.1	**********
17.30	173.8	**********
17.45	261.7	**********
18.00	349.5	**********

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I ARM I	TOTAL DEMAND I	* QUEUEING * I	* INCLUSIVE QUEUEING * I

I ARM	I TOTAL DEMAND (VEH)	(VEH/H)	* QUEUEING * I (MIN)	(MIN/VEH)	I (MIN)	* INCLUSIVE QUEUEING * (MIN/VEH)	I
I A	I 877.0 I	877.0 I	209.4 I	0.24	I 209.8	I 0.24	I
I B	I 743.0 I	743.0 I	271.5 I	0.37	I 272.4	I 0.37	I
I C	I 906.0 I	906.0 I	340.9 I	0.38	I 342.1	I 0.38	I
I D	I 1203.0 I	1203.0 I	10460.1 I	8.70	I 14763.0	I 12.27	I
I ALL	I 3729.0 I	3729.0 I	11282.0 I	3.03	I 15587.3	I 4.18	I

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* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

_____ A R C A D Y 6 _____

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

For sales and distribution information,
program advice and maintenance, contact:

TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770356
Nine Mile Ride Email: software@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk
RG40 3GA,UK

Run with file:-
"p:\10440\Traffic\Junctions\j17a B3035 Botley Road-Moorgreen Road Rbt\
10440 j17a B3035 Botley Road-Moorgreen Road Rbt DS1AM.vai"
(drive-on-the-left) at 15:15:28 on Friday, 25 November 2016

.FILE PROPERTIES
****

RUN TITLE: j17a B3035 Botley Road-Moorgreen Road Rbt DS1AM
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA
****
ARM A - Moorgreen Road (North)
ARM B - Botley Road (East)
ARM C - Botley Road (West)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	2.80	4.40	4.40	11.00	13.00	63.0	0.453	15.113
ARM B	3.30	3.30	0.00	3.00	13.00	80.0	0.286	9.156
ARM C	3.50	3.90	3.40	14.00	13.00	64.0	0.475	16.483

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j17a B3035 Botley Road-Moorgreen Road DS1AM

DEMAND SET TITLE: j17a B3035 Botley Road-Moorgreen Road DS1AM

T33

		TURNING PROPORTIONS		
		TURNING COUNTS		
		(PERCENTAGE OF H.V.S)		
TIME	FROM/T	ARM A	ARM B	ARM C
08.00 - 09.00				
	ARM A	0.407	0.181	0.412
		835.0	371.0	845.0
		(10.0)	(10.0)	(10.0)
	ARM B	0.412	0.407	0.181
		845.0	835.0	371.0
		(10.0)	(10.0)	(10.0)
	ARM C	0.181	0.412	0.407
		371.0	845.0	835.0
		(10.0)	(10.0)	(10.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	7.83	8.58	0.913	- -	0.0	6.3	69.8	-	0.705
ARM B	12.68	5.27	2.406	- -	0.0	111.9	843.7	-	10.989
ARM C	14.42	11.52	1.252	- -	0.0	47.1	372.5	-	2.266
08.15-08.30									
ARM A	7.83	8.53	0.919	- -	6.3	7.8	107.5	-	1.070
ARM B	12.68	5.17	2.453	- -	111.9	224.6	2523.2	-	32.779
ARM C	14.42	11.47	1.257	- -	47.1	91.4	1039.2	-	6.226
08.30-08.45									
ARM A	7.83	8.53	0.919	- -	7.8	8.6	123.3	-	1.173
ARM B	12.68	5.16	2.459	- -	224.6	337.4	4214.9	-	54.767
ARM C	14.42	11.47	1.257	- -	91.4	135.7	1703.9	-	10.048
08.45-09.00									
ARM A	7.83	8.53	0.918	- -	8.6	9.0	132.3	-	1.227
ARM B	12.68	5.15	2.461	- -	337.4	450.4	5908.4	-	76.685
ARM C	14.42	11.47	1.257	- -	135.7	180.1	2368.6	-	13.893

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	6.3	******
08.30	7.8	********
08.45	8.6	********
09.00	9.0	********

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	111.9	**********
08.30	224.6	**********
08.45	337.4	**********
09.00	450.4	**********

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	47.1	**********
08.30	91.4	**********
08.45	135.7	**********
09.00	180.1	**********

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	470.0	470.0	432.9	0.92	437.7	0.93
B	761.0	761.0	13490.2	17.73	33165.9	43.58
C	865.0	865.0	5484.2	6.34	6898.1	7.97
ALL	2096.0	2096.0	19407.3	9.26	40501.6	19.32

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END OF JOB

_____ A R C A D Y 6 _____

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

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Wokingham, Berks. Web: www.trlsoftware.co.uk
RG40 3GA,UK

Run with file:-
"p:\10440\Traffic\Junctions\j17a B3035 Botley Road-Moorgreen Road Rbt\
10440 j17a B3035 Botley Road-Moorgreen Road Rbt DS1PM.vai"
(drive-on-the-left) at 15:15:39 on Friday, 25 November 2016

.FILE PROPERTIES

RUN TITLE: j17a B3035 Botley Road-Moorgreen Road Rbt DS1PM
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA

ARM A - Moorgreen Road (North)
ARM B - Botley Road (East)
ARM C - Botley Road (West)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	2.80	4.40	4.40	11.00	13.00	63.0	0.453	15.113
ARM B	3.30	3.30	0.00	3.00	13.00	80.0	0.286	9.156
ARM C	3.50	3.90	3.40	14.00	13.00	64.0	0.475	16.483

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j17a B3035 Botley Road-Moorgreen Road DS1PM

DEMAND SET TITLE: j17a B3035 Botley Road-Moorgreen Road DS1PM

T33

TIME	FROM/T	ARM A	ARM B	ARM C
		TURNING PROPORTIONS		
		TURNING COUNTS		
		(PERCENTAGE OF H.V.S)		
17.00 - 18.00				
	ARM A	0.382	0.190	0.428
		822.0	410.0	921.0
		(10.0)	(10.0)	(10.0)
	ARM B	0.428	0.382	0.190
		921.0	822.0	410.0
		(10.0)	(10.0)	(10.0)
	ARM C	0.190	0.428	0.382
		410.0	921.0	822.0
		(10.0)	(10.0)	(10.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	7.83	8.64	0.906	- -	0.0	6.1	67.9	-	0.683
ARM B	13.78	5.36	2.571	- -	0.0	127.0	956.5	-	12.227
ARM C	14.72	11.59	1.270	- -	0.0	50.3	395.8	-	2.385
17.15-17.30									
ARM A	7.83	8.59	0.912	- -	6.1	7.4	102.9	-	1.021
ARM B	13.78	5.26	2.618	- -	127.0	254.7	2862.8	-	36.509
ARM C	14.72	11.55	1.274	- -	50.3	97.9	1111.7	-	6.595
17.30-17.45									
ARM A	7.83	8.59	0.912	- -	7.4	8.1	117.0	-	1.107
ARM B	13.78	5.25	2.624	- -	254.7	382.7	4780.8	-	60.908
ARM C	14.72	11.55	1.275	- -	97.9	145.5	1825.7	-	10.686
17.45-18.00									
ARM A	7.83	8.59	0.912	- -	8.1	8.5	124.8	-	1.155
ARM B	13.78	5.25	2.626	- -	382.7	510.7	6700.5	-	85.297
ARM C	14.72	11.55	1.275	- -	145.5	193.1	2539.7	-	14.790

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	6.1	******
17.30	7.4	*******
17.45	8.1	********
18.00	8.5	*********

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	127.0	**********
17.30	254.7	**********
17.45	382.7	**********
18.00	510.7	**********

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	50.3	**********
17.30	97.9	**********
17.45	145.5	**********
18.00	193.1	**********

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	470.0	470.0	412.6	0.88	416.8	0.89
B	827.0	827.0	15300.6	18.50	40143.5	48.54
C	883.0	883.0	5872.8	6.65	7487.7	8.48
ALL	2180.0	2180.0	21586.1	9.90	48048.1	22.04

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END OF JOB

_____ A R C A D Y 6 _____

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011
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RG40 3GA,UK

Run with file:-
"p:\10440\Traffic\Junctions\j17a B3035 Botley Road-Moorgreen Road Rbt\
10440 j17a B3035 Botley Road-Moorgreen Road Rbt DS1AM+DEV.vai"
(drive-on-the-left) at 15:15:33 on Friday, 25 November 2016

.FILE PROPERTIES
****

RUN TITLE: j17a B3035 Botley Road-Moorgreen Road Rbt DS1AM+DEV
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA
****
ARM A - Moorgreen Road (North)
ARM B - Botley Road (East)
ARM C - Botley Road (West)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	2.80	4.40	4.40	11.00	13.00	63.0	0.453	15.113
ARM B	3.30	3.30	0.00	3.00	13.00	80.0	0.286	9.156
ARM C	3.50	3.90	3.40	14.00	13.00	64.0	0.475	16.483

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j17a B3035 Botley Road-Moorgreen Road DS1AM+DEV

DEMAND SET TITLE: j17a B3035 Botley Road-Moorgreen Road DS1AM+DEV

T33

TIME	FROM/T	ARM A	ARM B	ARM C
		TURNING PROPORTIONS		
		TURNING COUNTS		
		(PERCENTAGE OF H.V.S)		
08.00 - 09.00	ARM A	0.394	0.187	0.419
		835.0	397.0	889.0
		(10.0)	(10.0)	(10.0)
	ARM B	0.419	0.394	0.187
		889.0	835.0	397.0
		(10.0)	(10.0)	(10.0)
	ARM C	0.187	0.419	0.394
		397.0	889.0	835.0
		(10.0)	(10.0)	(10.0)

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	ARM	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15										
	ARM A	7.82	8.62	0.907	- -	0.0	6.1	67.9	-	0.686
	ARM B	13.12	5.33	2.463	- -	0.0	117.6	886.2	-	11.415
	ARM C	14.42	11.56	1.247	- -	0.0	46.5	368.4	-	2.231
08.15-08.30										
	ARM A	7.82	8.56	0.913	- -	6.1	7.5	103.3	-	1.029
	ARM B	13.12	5.23	2.510	- -	117.6	235.9	2651.1	-	34.044
	ARM C	14.42	11.52	1.252	- -	46.5	90.2	1025.6	-	6.121
08.30-08.45										
	ARM A	7.82	8.57	0.913	- -	7.5	8.2	117.6	-	1.120
	ARM B	13.12	5.21	2.516	- -	235.9	354.5	4428.0	-	56.866
	ARM C	14.42	11.51	1.252	- -	90.2	133.8	1680.0	-	9.880
08.45-09.00										
	ARM A	7.82	8.57	0.913	- -	8.2	8.6	125.6	-	1.169
	ARM B	13.12	5.21	2.517	- -	354.5	473.1	6206.6	-	79.630
	ARM C	14.42	11.51	1.252	- -	133.8	177.4	2334.3	-	13.649

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	6.1	******
08.30	7.5	*******
08.45	8.2	********
09.00	8.6	*********

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	117.6	**********
08.30	235.9	**********
08.45	354.5	**********
09.00	473.1	**********

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	46.5	**********
08.30	90.2	**********
08.45	133.8	**********
09.00	177.4	**********

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	469.0	469.0	414.5	0.88	418.7	0.89
B	787.0	787.0	14172.0	18.01	35647.8	45.29
C	865.0	865.0	5408.3	6.25	6775.7	7.83
ALL	2121.1	2121.1	19994.8	9.43	42842.2	20.20

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END OF JOB

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

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RG40 3GA,UK

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Run with file:-
"p:\10440\Traffic\Junctions\j17a B3035 Botley Road-Moorgreen Road Rbt\
10440 j17a B3035 Botley Road-Moorgreen Road Rbt DS1PM+DEV.vai"
(drive-on-the-left) at 15:15:44 on Friday, 25 November 2016

.FILE PROPERTIES

RUN TITLE: j17a B3035 Botley Road-Moorgreen Road Rbt DS1PM+DEV
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA

ARM A - Moorgreen Road (North)
ARM B - Botley Road (East)
ARM C - Botley Road (West)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	2.80	4.40	4.40	11.00	13.00	63.0	0.453	15.113
ARM B	3.30	3.30	0.00	3.00	13.00	80.0	0.286	9.156
ARM C	3.50	3.90	3.40	14.00	13.00	64.0	0.475	16.483

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j17a B3035 Botley Road-Moorgreen Road DS1PM+DEV

DEMAND SET TITLE: j17a B3035 Botley Road-Moorgreen Road DS1PM+DEV

T33

TIME	FROM/T	ARM A	ARM B	ARM C
		TURNING PROPORTIONS TURNING COUNTS (PERCENTAGE OF H.V.S)		
17.00 - 18.00	ARM A	0.370	0.202	0.428
		822.0	449.0	950.0
		(10.0)	(10.0)	(10.0)
	ARM B	0.428	0.370	0.202
		950.0	822.0	449.0
		(10.0)	(10.0)	(10.0)
	ARM C	0.202	0.428	0.370
		449.0	950.0	822.0
		(10.0)	(10.0)	(10.0)

10440 j17a B3035 Botley Road-Moorgreen Road Rbt DS1PM+DEV

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	7.87	8.71	0.903	- - -	0.0	6.0	67.1	-	0.671
ARM B	14.43	5.41	2.667	- - -	0.0	135.9	1023.6	-	12.936
ARM C	14.72	11.64	1.265	- - -	0.0	49.7	391.4	-	2.350

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
ARM A	7.87	8.65	0.909	- - -	6.0	7.3	101.1	-	0.997
ARM B	14.43	5.32	2.715	- - -	135.9	272.7	3064.7	-	38.632
ARM C	14.72	11.60	1.269	- - -	49.7	96.6	1097.4	-	6.489

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
ARM A	7.87	8.65	0.909	- - -	7.3	7.9	114.6	-	1.080
ARM B	14.43	5.30	2.721	- - -	272.7	409.6	5117.4	-	64.571
ARM C	14.72	11.59	1.269	- - -	96.6	143.5	1801.0	-	10.500

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
ARM A	7.87	8.66	0.909	- - -	7.9	8.3	121.9	-	1.119
ARM B	14.43	5.30	2.723	- - -	409.6	546.6	7171.6	-	90.410
ARM C	14.72	11.59	1.270	- - -	143.5	190.4	2504.4	-	14.537

.QUEUE AT ARM A

```
TIME SEGMENT NO. OF
 ENDING      VEHICLES
             IN QUEUE

 17.15          6.0  ******
 17.30          7.3  *******
 17.45          7.9  ********
 18.00          8.3  ********
```

.QUEUE AT ARM B

```
TIME SEGMENT NO. OF
 ENDING      VEHICLES
             IN QUEUE

 17.15        135.9  ******************************************************************************************
 17.30        272.7  ******************************************************************************************
 17.45        409.6  ******************************************************************************************
 18.00        546.6  ******************************************************************************************
```

.QUEUE AT ARM C

```
TIME SEGMENT NO. OF
 ENDING      VEHICLES
             IN QUEUE

 17.15         49.7  **************************************************
 17.30         96.6  ******************************************************************************************
 17.45        143.5  ******************************************************************************************
 18.00        190.4  ******************************************************************************************
```

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * * DELAY * (MIN)	* QUEUEING * * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * * DELAY * (MIN)	* INCLUSIVE QUEUEING * * DELAY * (MIN/VEH)
A	472.0	472.0	404.8	0.86	408.8	0.87
B	866.0	866.0	16377.2	18.91	44555.7	51.45
C	883.0	883.0	5794.1	6.56	7357.9	8.33
ALL	2221.0	2221.0	22576.2	10.16	52322.4	23.56

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

END OF JOB

_____ A R C A D Y 6 _____

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011
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TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770356
Nine Mile Ride Email: software@trl.co.uk
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RG40 3GA,UK

Run with file:-
"p:\10440\Traffic\Junctions\j17a B3035 Botley Road-Moorgreen Road Rbt\
10440 j17a B3035 Botley Road-Moorgreen Road Rbt DS1AM+DEV+IMP.vai"
(drive-on-the-left) at 09:30:49 on Monday, 28 November 2016

.FILE PROPERTIES
****

RUN TITLE: j17a B3035 Botley Road-Moorgreen Road Rbt DS1AM+DEV
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA
****
ARM A - Moorgreen Road (North)
ARM B - Botley Road (East)
ARM C - Botley Road (West)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	2.80	4.40	4.40	11.00	13.00	63.0	0.453	15.113
ARM B	3.30	3.50	1.00	3.00	13.00	80.0	0.291	9.494
ARM C	3.50	3.90	3.40	14.00	13.00	64.0	0.475	16.483

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j17a B3035 Botley Road-Moorgreen Road DS1AM+DEV

DEMAND SET TITLE: j17a B3035 Botley Road-Moorgreen Road DS1AM+DEV

T33

		TURNING PROPORTIONS		
		TURNING COUNTS		
		(PERCENTAGE OF H.V.S)		
TIME	FROM/T	ARM A	ARM B	ARM C
08.00 - 09.00				
	ARM A	0.394	0.187	0.419
		835.0	397.0	889.0
		(10.0)	(10.0)	(10.0)
	ARM B	0.419	0.394	0.187
		889.0	835.0	397.0
		(10.0)	(10.0)	(10.0)
	ARM C	0.187	0.419	0.394
		397.0	889.0	835.0
		(10.0)	(10.0)	(10.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	7.82	8.61	0.908	- -	-	0.0	6.2	68.3	-	0.689
ARM B	13.12	5.60	2.342	- -	-	0.0	113.5	856.1	-	10.481
ARM C	14.42	11.45	1.259	- -	-	0.0	47.9	378.6	-	2.315
08.15-08.30									
ARM A	7.82	8.55	0.914	- -	-	6.2	7.5	104.1	-	1.040
ARM B	13.12	5.50	2.385	- -	-	113.5	227.8	2559.3	-	31.249
ARM C	14.42	11.41	1.263	- -	-	47.9	93.2	1058.7	-	6.362
08.30-08.45									
ARM A	7.82	8.56	0.914	- -	-	7.5	8.2	118.7	-	1.126
ARM B	13.12	5.49	2.390	- -	-	227.8	342.2	4274.5	-	52.195
ARM C	14.42	11.41	1.264	- -	-	93.2	138.4	1736.9	-	10.300
08.45-09.00									
ARM A	7.82	8.56	0.914	- -	-	8.2	8.7	126.8	-	1.175
ARM B	13.12	5.48	2.392	- -	-	342.2	456.7	5991.4	-	73.086
ARM C	14.42	11.41	1.264	- -	-	138.4	183.6	2414.9	-	14.244

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	6.2	******
08.30	7.5	********
08.45	8.2	********
09.00	8.7	*********

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	113.5	**********
08.30	227.8	**********
08.45	342.2	**********
09.00	456.7	**********

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	47.9	**********
08.30	93.2	**********
08.45	138.4	**********
09.00	183.6	**********

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
A	469.0	469.0	418.0	0.89	422.4	0.90
B	787.0	787.0	13681.4	17.38	32694.1	41.54
C	865.0	865.0	5589.0	6.46	7066.6	8.17
ALL	2121.1	2121.1	19688.4	9.28	40183.1	18.94

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
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* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

_____ A R C A D Y 6 _____

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011
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Nine Mile Ride Email: software@trl.co.uk
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RG40 3GA,UK

Run with file:-
"p:\10440\Traffic\Junctions\j17a B3035 Botley Road-Moorgreen Road Rbt\
10440 j17a B3035 Botley Road-Moorgreen Road Rbt DS1PM+DEV+IMP.vai"
(drive-on-the-left) at 09:28:53 on Monday, 28 November 2016

.FILE PROPERTIES
****

RUN TITLE: j17a B3035 Botley Road-Moorgreen Road Rbt DS1PM+DEV
LOCATION: Eastleigh
DATE: 24/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA
****
ARM A - Moorgreen Road (North)
ARM B - Botley Road (East)
ARM C - Botley Road (West)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	2.80	4.40	4.40	11.00	13.00	63.0	0.453	15.113
ARM B	3.30	3.50	1.00	3.00	13.00	80.0	0.291	9.494
ARM C	3.50	3.90	3.40	14.00	13.00	64.0	0.475	16.483

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j17a B3035 Botley Road-Moorgreen Road DS1PM+DEV

DEMAND SET TITLE: j17a B3035 Botley Road-Moorgreen Road DS1PM+DEV

T33

TIME	FROM/T	ARM A	ARM B	ARM C
17.00 - 18.00		TURNING PROPORTIONS		
		TURNING COUNTS		
		(PERCENTAGE OF H.V.S)		
	ARM A	0.370	0.202	0.428
		822.0	449.0	950.0
		(10.0)	(10.0)	(10.0)
	ARM B	0.428	0.370	0.202
		950.0	822.0	449.0
		(10.0)	(10.0)	(10.0)
	ARM C	0.202	0.428	0.370
		449.0	950.0	822.0
		(10.0)	(10.0)	(10.0)

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	7.87	8.70	0.904	- -	0.0	6.0	67.5	-	0.674
ARM B	14.43	5.69	2.539	- -	0.0	131.9	993.3	-	11.959
ARM C	14.72	11.53	1.276	- -	0.0	51.1	401.5	-	2.427
17.15-17.30									
ARM A	7.87	8.64	0.910	- -	6.0	7.3	101.8	-	1.002
ARM B	14.43	5.59	2.582	- -	131.9	264.5	2972.7	-	35.677
ARM C	14.72	11.49	1.280	- -	51.1	99.6	1130.2	-	6.731
17.30-17.45									
ARM A	7.87	8.65	0.910	- -	7.3	8.0	115.4	-	1.084
ARM B	14.43	5.58	2.587	- -	264.5	397.3	4963.6	-	59.506
ARM C	14.72	11.49	1.281	- -	99.6	148.0	1857.1	-	10.923
17.45-18.00									
ARM A	7.87	8.65	0.910	- -	8.0	8.4	122.9	-	1.132
ARM B	14.43	5.58	2.589	- -	397.3	530.2	6956.1	-	83.314
ARM C	14.72	11.49	1.281	- -	148.0	196.5	2583.9	-	15.118

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	6.0	******
17.30	7.3	*******
17.45	8.0	********
18.00	8.4	********

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	131.9	**********
17.30	264.5	**********
17.45	397.3	**********
18.00	530.2	**********

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	51.1	**********
17.30	99.6	**********
17.45	148.0	**********
18.00	196.5	**********

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * * DELAY * (MIN)	* QUEUEING * * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * * DELAY * (MIN)	* INCLUSIVE QUEUEING * * DELAY * (MIN/VEH)
A	472.0	472.0	407.6	0.86	411.7	0.87
B	866.0	866.0	15885.8	18.34	41091.5	47.45
C	883.0	883.0	5972.7	6.76	7652.9	8.67
ALL	2221.0	2221.0	22666.1	10.03	49156.1	22.13

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

END OF JOB

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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EMAIL: software@trl.co.uk

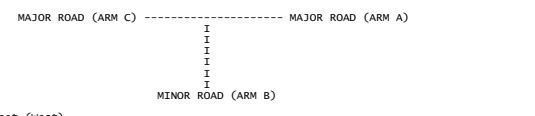
Run with file:-
"P:\10440\Traffic\Junctions\j18p B3035 Botley Road-St. James Road PJ\j18p Botley Road-St. James Road DS1AM.vpi"
(drive-on-the-left) at 14:30:46 on Friday, 25 November 2016

.RUN INFORMATION

RUN TITLE	: j18p 10440 Botley Road/St. James Road DS1AM
LOCATION	: Eastleigh
DATE	: 25/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS High Street (West)
ARM B IS St. James Road
ARM C IS Botley Road (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)150.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 150.0 M.
- VISIBILITY TO RIGHT	(VB-A) 150.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	4.40 M.
WIDTH AT 5 M FROM JUNCTION	2.20 M.
WIDTH AT 10 M FROM JUNCTION	2.20 M.
WIDTH AT 15 M FROM JUNCTION	2.20 M.
WIDTH AT 20 M FROM JUNCTION	2.20 M.
- LENGTH OF FLARED SECTION	1 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
660.83	0.24	0.24

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

.TRAFFIC DEMAND DATA

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

.Demand set: j18p 10440 Botley Road/St. James Road DS1AM

TIME PERIOD BEGINS 08.00 AND ENDS 09.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j18p 10440 Botley Road/St. James Road DS1AM

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
08.00 - 09.00	ARM A	0.000	0.377	0.623
		0.0	162.0	268.0
		(0.0)%	(10.0)%	(10.0)%
	ARM B	1.000	0.000	0.000
		4.0	0.0	0.0
		(10.0)%	(0.0)%	(10.0)%
	ARM C	1.000	0.000	0.000
		249.0	0.0	0.0
		(10.0)%	(10.0)%	(0.0)%

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

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.00	6.57	0.000		0.00	0.00	0.0		0.00
B-A	0.07	6.74	0.010		0.00	0.01	0.1		0.15
C-A	4.15								
C-B	0.00	8.26	0.000		0.00	0.00	0.0		0.00
A-B	2.70								
A-C	4.47								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.00	6.57	0.000		0.00	0.00	0.0		0.00
B-A	0.07	6.74	0.010		0.01	0.01	0.1		0.15
C-A	4.15								
C-B	0.00	8.26	0.000		0.00	0.00	0.0		0.00
A-B	2.70								
A-C	4.47								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.00	6.57	0.000		0.00	0.00	0.0		0.00
B-A	0.07	6.74	0.010		0.01	0.01	0.2		0.15
C-A	4.15								
C-B	0.00	8.26	0.000		0.00	0.00	0.0		0.00
A-B	2.70								
A-C	4.47								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.00	6.57	0.000		0.00	0.00	0.0		0.00
B-A	0.07	6.74	0.010		0.01	0.01	0.2		0.15
C-A	4.15								
C-B	0.00	8.26	0.000		0.00	0.00	0.0		0.00
A-B	2.70								
A-C	4.47								

QUEUE FOR STREAM B-C

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

QUEUE FOR STREAM B-A

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

QUEUE FOR STREAM C-B

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	4.0	4.0	0.6	0.15	0.6	0.15
C-A	249.0	249.0				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	162.0	162.0				
A-C	268.0	268.0				
ALL	683.0	683.0	0.6	0.00	0.6	0.00

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

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

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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EMAIL: software@trl.co.uk

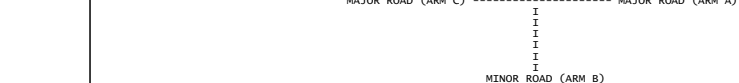
Run with file:-
"P:\10440\Traffic\Junctions\j18p B3035 Botley Road-St. James Road PJ\j18p Botley Road-St. James Road DS1PM.vpi"
(drive-on-the-left) at 14:30:58 on Friday, 25 November 2016

.RUN INFORMATION

RUN TITLE	: j18p 10440 Botley Road/St. James Road DS1PM
LOCATION	: Eastleigh
DATE	: 25/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS High Street (West)
ARM B IS St. James Road
ARM C IS Botley Road (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM		MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W)	7.00 M.
CENTRAL RESERVE WIDTH	(WCR)	0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B)	2.20 M.
- VISIBILITY	(VC-B)	150.00 M.
- BLOCKS TRAFFIC (SPACES)		NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C)	150.0 M.
- VISIBILITY TO RIGHT	(VB-A)	150.0 M.
- LANE 1 WIDTH	(WB-C)	-
- LANE 2 WIDTH	(WB-A)	-
WIDTH AT 0 M FROM JUNCTION		4.40 M.
WIDTH AT 5 M FROM JUNCTION		2.20 M.
WIDTH AT 10 M FROM JUNCTION		2.20 M.
WIDTH AT 15 M FROM JUNCTION		2.20 M.
WIDTH AT 20 M FROM JUNCTION		2.20 M.
- LENGTH OF FLARED SECTION		1 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For Slope For Opposing STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
660.83	0.24	0.24

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

.TRAFFIC DEMAND DATA

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

.Demand set: j18p 10440 Botley Road/St. James Road DS1PM

TIME PERIOD BEGINS 17.00 AND ENDS 18.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j18p 10440 Botley Road/St. James Road DS1PM

TIME	TURNING PROPORTIONS / TURNING COUNTS / (PERCENTAGE OF H.V.S) FROM/TO	ARM A	ARM B	ARM C
17.00 - 18.00	ARM A	0.000	0.431	0.569
		0.0	194.0	256.0
		(0.0)	(10.0)	(10.0)
	ARM B	1.000	0.000	0.000
		49.0	0.0	0.0
		(10.0)	(0.0)	(10.0)
	ARM C	1.000	0.000	0.000
		232.0	0.0	0.0
		(10.0)	(10.0)	(0.0)

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

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.00	6.38	0.000		0.00	0.00	0.0		0.00
B-A	0.82	6.78	0.120		0.00	0.14	1.9		0.17
C-A	3.87								
C-B	0.00	8.18	0.000		0.00	0.00	0.0		0.00
A-B	3.23								
A-C	4.27								
17.15-17.30									
B-C	0.00	6.38	0.000		0.00	0.00	0.0		0.00
B-A	0.82	6.78	0.120		0.14	0.14	2.0		0.17
C-A	3.87								
C-B	0.00	8.18	0.000		0.00	0.00	0.0		0.00
A-B	3.23								
A-C	4.27								
17.30-17.45									
B-C	0.00	6.38	0.000		0.00	0.00	0.0		0.00
B-A	0.82	6.78	0.120		0.14	0.14	2.0		0.17
C-A	3.87								
C-B	0.00	8.18	0.000		0.00	0.00	0.0		0.00
A-B	3.23								
A-C	4.27								
17.45-18.00									
B-C	0.00	6.38	0.000		0.00	0.00	0.0		0.00
B-A	0.82	6.78	0.120		0.14	0.14	2.0		0.17
C-A	3.87								
C-B	0.00	8.18	0.000		0.00	0.00	0.0		0.00
A-B	3.23								
A-C	4.27								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

QUEUE FOR STREAM B-A

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

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	49.0	49.0	8.1	0.16	8.1	0.16
C-A	232.0	232.0				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	194.0	194.0				
A-C	256.0	256.0				
ALL	731.0	731.0	8.1	0.01	8.1	0.01

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

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

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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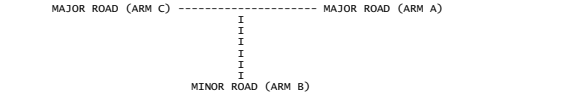
Run with file:-
"P:\10440\Traffic\Junctions\j18p B3035 Botley Road-St. James Road PJ\
j18p Botley Road-St. James Road DS1AM+DEV.vpi"
(drive-on-the-left) at 14:30:52 on Friday, 25 November 2016

.RUN INFORMATION

RUN TITLE	: j18p 10440 Botley Road/St. James Road DS1AM+DEV
LOCATION	: Eastleigh
DATE	: 25/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS High Street (West)
ARM B IS St. James Road
ARM C IS Botley Road (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)150.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 150.0 M.
- VISIBILITY TO RIGHT	(VB-A) 150.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	4.40 M.
WIDTH AT 5 M FROM JUNCTION	2.20 M.
WIDTH AT 10 M FROM JUNCTION	2.20 M.
WIDTH AT 15 M FROM JUNCTION	2.20 M.
WIDTH AT 20 M FROM JUNCTION	2.20 M.
- LENGTH OF FLARED SECTION	1 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
660.83	0.24	0.24

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

.TRAFFIC DEMAND DATA

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

.Demand set: j18p 10440 Botley Road/St. James Road DS1AM+DEV

TIME PERIOD BEGINS 08.00 AND ENDS 09.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j18p 10440 Botley Road/St. James Road DS1AM+DEV

TIME	FROM/TO	TURNING PROPORTIONS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
08.00 - 09.00				
	ARM A	0.000	0.377	0.623
		0.0	162.0	268.0
		(0.0)	(10.0)	(10.0)
	ARM B	1.000	0.000	0.000
		4.0	0.0	0.0
		(10.0)	(0.0)	(10.0)
	ARM C	1.000	0.000	0.000
		249.0	0.0	0.0
		(10.0)	(10.0)	(0.0)

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

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.00	6.51	0.000		0.00	0.00	0.0		0.00
B-A	0.32	6.74	0.047		0.00	0.05	0.7		0.16
C-A	4.15								
C-B	0.00	8.26	0.000		0.00	0.00	0.0		0.00
A-B	2.70								
A-C	4.47								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.00	6.51	0.000		0.00	0.00	0.0		0.00
B-A	0.32	6.74	0.047		0.05	0.05	0.7		0.16
C-A	4.15								
C-B	0.00	8.26	0.000		0.00	0.00	0.0		0.00
A-B	2.70								
A-C	4.47								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.00	6.51	0.000		0.00	0.00	0.0		0.00
B-A	0.32	6.74	0.047		0.05	0.05	0.7		0.16
C-A	4.15								
C-B	0.00	8.26	0.000		0.00	0.00	0.0		0.00
A-B	2.70								
A-C	4.47								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.00	6.51	0.000		0.00	0.00	0.0		0.00
B-A	0.32	6.74	0.047		0.05	0.05	0.7		0.16
C-A	4.15								
C-B	0.00	8.26	0.000		0.00	0.00	0.0		0.00
A-B	2.70								
A-C	4.47								

QUEUE FOR STREAM B-C

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

QUEUE FOR STREAM B-A

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

QUEUE FOR STREAM C-B

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	19.0	19.0	2.9	0.15	2.9	0.15
C-A	249.0	249.0				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	162.0	162.0				
A-C	268.0	268.0				
ALL	698.0	698.0	2.9	0.00	2.9	0.00

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

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

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

Run with file:-
"P:\10440\Traffic\Junctions\j18p B3035 Botley Road-St. James Road PJ\
j18p Botley Road-St. James Road DS1PM+DEV.vpi"
(drive-on-the-left) at 14:31:04 on Friday, 25 November 2016

.RUN INFORMATION

RUN TITLE	: j18p 10440 Botley Road/St. James Road DS1PM+DEV
LOCATION	: Eastleigh
DATE	: 25/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

ARM A IS High Street (West)
ARM B IS St. James Road
ARM C IS Botley Road (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)150.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 150.0 M.
- VISIBILITY TO RIGHT	(VB-A) 150.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	4.40 M.
WIDTH AT 5 M FROM JUNCTION	2.20 M.
WIDTH AT 10 M FROM JUNCTION	2.20 M.
WIDTH AT 15 M FROM JUNCTION	2.20 M.
WIDTH AT 20 M FROM JUNCTION	2.20 M.
- LENGTH OF FLARED SECTION	1 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
660.83	0.24	0.24

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

.TRAFFIC DEMAND DATA

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

.Demand set: j18p 10440 Botley Road/St. James Road DS1PM+DEV

TIME PERIOD BEGINS 17.00 AND ENDS 18.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j18p 10440 Botley Road/St. James Road DS1PM+DEV

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS / (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
17.00 - 18.00	ARM A	0.000 (0.0)	0.431 (194.0)	0.569 (256.0)
	ARM B	0.831 (49.0)	0.000 (0.0)	0.169 (10.0)
	ARM C	1.000 (232.0)	0.000 (0.0)	0.000 (0.0)

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

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.17	7.05	0.024		0.00	0.02	0.3		0.15
B-A	0.82	6.68	0.122		0.00	0.14	2.0		0.17
C-A	3.87								
C-B	0.00	8.18	0.000		0.00	0.00	0.0		0.00
A-B	3.23								
A-C	4.27								
17.15-17.30									
B-C	0.17	7.05	0.024		0.02	0.02	0.4		0.15
B-A	0.82	6.68	0.122		0.14	0.14	2.1		0.17
C-A	3.87								
C-B	0.00	8.18	0.000		0.00	0.00	0.0		0.00
A-B	3.23								
A-C	4.27								
17.30-17.45									
B-C	0.17	7.05	0.024		0.02	0.02	0.4		0.15
B-A	0.82	6.68	0.122		0.14	0.14	2.1		0.17
C-A	3.87								
C-B	0.00	8.18	0.000		0.00	0.00	0.0		0.00
A-B	3.23								
A-C	4.27								
17.45-18.00									
B-C	0.17	7.05	0.024		0.02	0.02	0.4		0.15
B-A	0.82	6.68	0.122		0.14	0.14	2.1		0.17
C-A	3.87								
C-B	0.00	8.18	0.000		0.00	0.00	0.0		0.00
A-B	3.23								
A-C	4.27								

.
QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

.
QUEUE FOR STREAM B-A

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

.
QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

.
QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	10.0	10.0	1.4	0.14	1.4	0.14
B-A	49.0	49.0	8.2	0.17	8.2	0.17
C-A	232.0	232.0				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	194.0	194.0				
A-C	256.0	256.0				
ALL	741.0	741.0	9.6	0.01	9.6	0.01

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

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

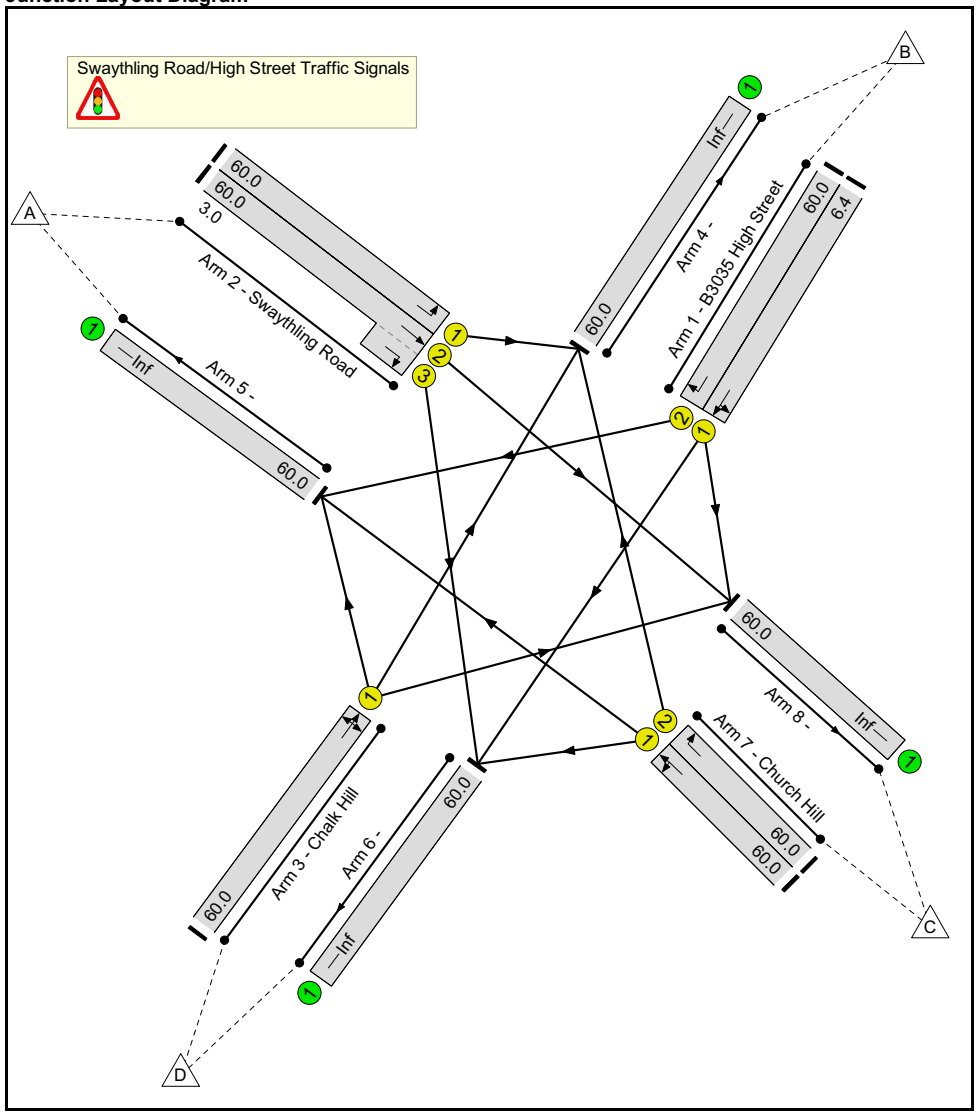
Linsig Report

User and Project Details

Project:	**Land at Eastleigh**
Title:	**10440**
Location:	j19 A27/B3035 Traffic Signals
File name:	j19t A27-B3035 Traffic Signals.lsg3x
Author:	Matthew Moss
Company:	Brookbanks Consulting

Linsig Report
P:\10440\Traffic\Junctions\j19t A27-B3035 Traffic Signals\j19t A27-B3035 Traffic Signals.lsg3x

Junction Layout Diagram



Linsig Report
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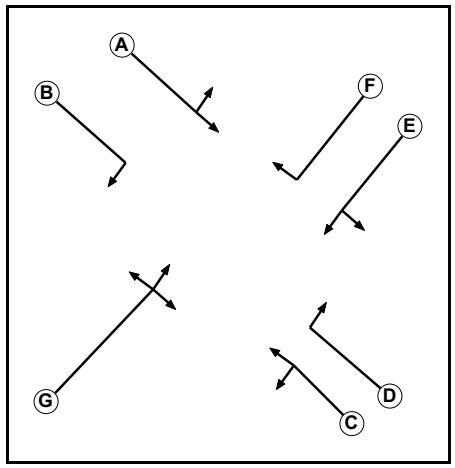
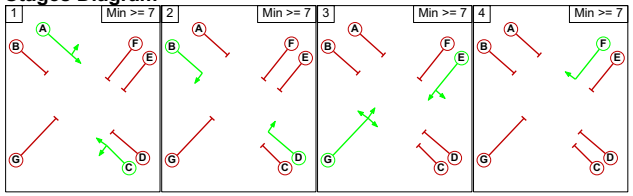
Phase Diagram



Phase Intergreens Matrix

		Starting Phase						
		A	B	C	D	E	F	G
Terminating Phase	A		5	5	5	5	5	5
	B	5		5	5	5	5	5
	C	5	5		5	5	5	5
	D	5	5	5		5	5	5
	E	5	5	5	5		5	5
	F	5	5	5	5	5		5
	G	5	5	5	5	5	5	

Stages Diagram



Lane Input Data

Junction: Swaythling Road/High Street Traffic Signals													
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 (B3035 High Street)	U	E	2	3	6.4	Geom	-	2.80	0.00	Y	Arm 6 Ahead	Inf
											Arm 8 Left	Inf
1/2 (B3035 High Street)	U	F	2	3	60.0	Geom	-	2.80	0.00	Y	Arm 5 Right	Inf
2/1 (Swaythling Road)	U	A	2	3	60.0	Geom	-	3.20	0.00	Y	Arm 4 Left	Inf
2/2 (Swaythling Road)	U	A	2	3	60.0	Geom	-	3.20	0.00	Y	Arm 8 Ahead	Inf
2/3 (Swaythling Road)	U	B	2	3	3.0	Geom	-	3.20	0.00	Y	Arm 6 Right	Inf
3/1 (Chalk Hill)	U	G	2	3	60.0	Geom	-	5.00	0.00	Y	Arm 4 Ahead	Inf
											Arm 5 Left	Inf
											Arm 8 Right	Inf
7/1 (Church Hill)	U	C	2	3	60.0	Geom	-	3.20	0.00	Y	Arm 5 Ahead	Inf
											Arm 6 Left	Inf
7/2 (Church Hill)	U	D	2	3	60.0	Geom	-	3.20	0.00	Y	Arm 4 Right	Inf

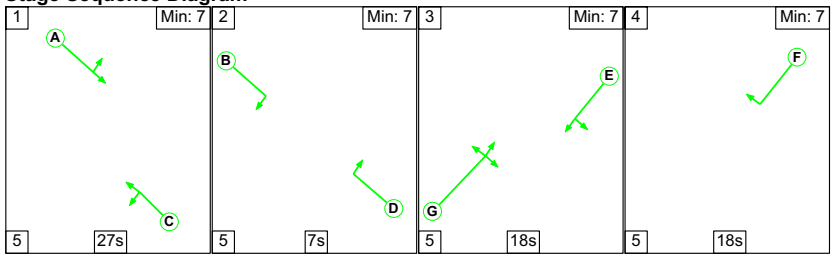
Scenario 1: 'DS1AM' (FG1: 'DS1AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	257	209	0	466
	B	205	0	8	98	311
	C	308	0	0	0	308
	D	23	172	37	0	232
	Tot.	536	429	254	98	1317

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: 10440	-	-	-		-	-	-	-	-	-	**52.0%**	**0**	**0**	**0**	**12.4**	-	-
Swaythling Road/High Street Traffic Signals	-	-	-		-	-	-	-	-	-	**52.0%**	**0**	**0**	**0**	**12.4**	-	-
1/1	B3035 High Street Ahead Left	U	E		1	18	-	106	1895	400	26.5%	-	-	-	1.1	35.8	2.4
1/2	B3035 High Street Right	U	F		1	18	-	205	1895	400	51.2%	-	-	-	2.3	40.6	5.0
2/1	Swaythling Road Left	U	A		1	27	-	257	1935	602	42.7%	-	-	-	2.1	29.8	5.4
2/2+2/3	Swaythling Road Right Ahead	U	A B		1	27:7	-	209	1935:1935	593+0	35.2 ; 0.0%	-	-	-	1.7	28.7	4.3
3/1	Chalk Hill Ahead Left Right	U	G		1	18	-	232	2115	447	52.0%	-	-	-	2.6	39.8	5.6
7/1	Church Hill Ahead Left	U	C		1	27	-	308	1935	602	51.2%	-	-	-	2.7	31.5	6.8
7/2	Church Hill Right	U	D		1	7	-	0	1935	172	0.0%	-	-	-	0.0	0.0	0.0
		C1			PRC for Signalled Lanes (%): 73.2 PRC Over All Lanes (%): 73.2			Total Delay for Signalled Lanes (pcuHr): 12.42 Total Delay Over All Lanes(pcuHr): 12.42			Cycle Time (s): 90					

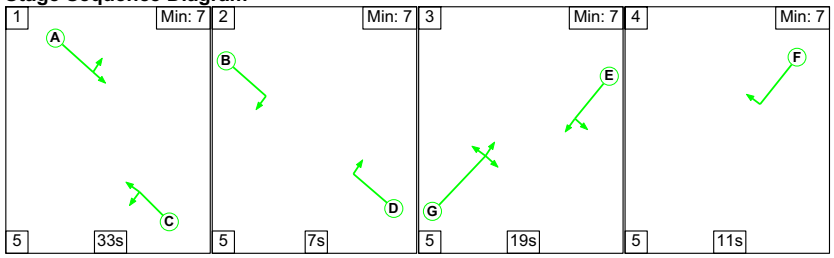
Linsig Report
P:\10440\Traffic\Junctions\j19t A27-B3035 Traffic Signals\j19t A27-B3035 Traffic Signals.lsg3x
Scenario 2: 'DS1PM' (FG2: 'DS1PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	D	Tot.
A	0	349	406	1	756
B	135	0	86	157	378
C	204	0	0	0	204
D	10	151	24	0	185
Tot.	349	500	516	158	1523

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: 10440	-	-	-		-	-	-	-	-	-	**57.7%**	**0**	**0**	**0**	**13.6**	-	-
Swaythling Road/High Street Traffic Signals	-	-	-		-	-	-	-	-	-	**57.7%**	**0**	**0**	**0**	**13.6**	-	-
1/1	B3035 High Street Ahead Left	U	E		1	19	-	243	1895	421	57.7%	-	-	-	2.8	41.3	6.1
1/2	B3035 High Street Right	U	F		1	11	-	135	1895	253	53.4%	-	-	-	1.9	51.5	3.7
2/1	Swaythling Road Left	U	A		1	33	-	349	1935	731	47.7%	-	-	-	2.5	26.0	7.0
2/2+2/3	Swaythling Road Right Ahead	U	A B		1	33:7	-	407	1935:1935	721+2	56.3 : 56.3%	-	-	-	3.2	28.0	8.7
3/1	Chalk Hill Ahead Left Right	U	G		1	19	-	185	2115	470	39.4%	-	-	-	1.9	36.1	4.2
7/1	Church Hill Ahead Left	U	C		1	33	-	204	1935	731	27.9%	-	-	-	1.3	22.9	3.7
7/2	Church Hill Right	U	D		1	7	-	0	1935	172	0.0%	-	-	-	0.0	0.0	0.0

C1
PRC for Signalled Lanes (%): 56.0
PRC Over All Lanes (%): 56.0
Total Delay for Signalled Lanes (pcuHr): 13.56
Total Delay Over All Lanes(pcuHr): 13.56
Cycle Time (s): 90

Linsig Report
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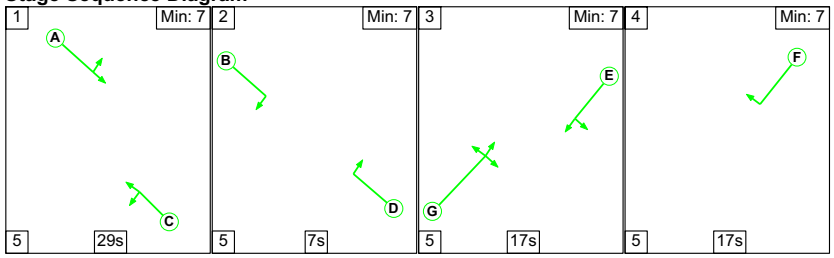
Scenario 3: 'DS1AM+DEV' (FG3: 'DS1AM+DEV', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	D	Tot.
A	0	257	298	0	555
B	205	0	8	98	311
C	352	0	0	0	352
D	23	172	37	0	232
Tot.	580	429	343	98	1450

Stage Sequence Diagram



Linsig Report
P:\10440\Traffic\Junctions\j19t A27-B3035 Traffic Signals\j19t A27-B3035 Traffic Signals.lsg3x

Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: 10440	-	-	-		-	-	-	-	-	-	**54.8%**	**0**	**0**	**0**	**13.6**	-	-
Swaythling Road/High Street Traffic Signals	-	-	-		-	-	-	-	-	-	**54.8%**	**0**	**0**	**0**	**13.6**	-	-
1/1	B3035 High Street Ahead Left	U	E		1	17	-	106	1895	379	28.0%	-	-	-	1.1	37.1	2.4
1/2	B3035 High Street Right	U	F		1	17	-	205	1895	379	54.1%	-	-	-	2.4	42.6	5.1
2/1	Swaythling Road Left	U	A		1	29	-	257	1935	645	39.8%	-	-	-	2.0	27.7	5.3
2/2+2/3	Swaythling Road Right Ahead	U	A B		1	29:7	-	298	1935:1935	636+0	46.9 : 0.0%	-	-	-	2.4	29.1	6.3
3/1	Chalk Hill Ahead Left Right	U	G		1	17	-	232	2115	423	54.8%	-	-	-	2.7	41.7	5.8
7/1	Church Hill Ahead Left	U	C		1	29	-	352	1935	645	54.6%	-	-	-	3.0	30.6	7.7
7/2	Church Hill Right	U	D		1	7	-	0	1935	172	0.0%	-	-	-	0.0	0.0	0.0

C1
PRC for Signalled Lanes (%): 64.1
PRC Over All Lanes (%): 64.1
Total Delay for Signalled Lanes (pcuHr): 13.58
Total Delay Over All Lanes(pcuHr): 13.58
Cycle Time (s): 90

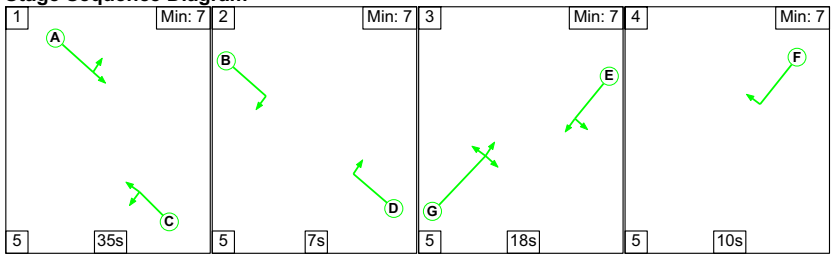
Linsig Report
P:\10440\Traffic\Junctions\j19t A27-B3035 Traffic Signals\j19t A27-B3035 Traffic Signals.lsg3x
Scenario 4: 'DS1PM+DEV' (FG4: 'DS1PM+DEV', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	D	Tot.
A	0	349	462	1	812
B	135	0	86	157	378
C	286	0	0	0	286
D	10	151	24	0	185
Tot.	431	500	572	158	1661

Stage Sequence Diagram



Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: 10440	-	-	-		-	-	-	-	-	-	**60.7%**	**0**	**0**	**0**	**14.6**	-	-
Swaythling Road/High Street Traffic Signals	-	-	-		-	-	-	-	-	-	**60.7%**	**0**	**0**	**0**	**14.6**	-	-
1/1	B3035 High Street Ahead Left	U	E		1	18	-	243	1895	400	60.7%	-	-	-	2.9	43.5	6.2
1/2	B3035 High Street Right	U	F		1	10	-	135	1895	232	58.3%	-	-	-	2.1	55.7	3.9
2/1	Swaythling Road Left	U	A		1	35	-	349	1935	774	45.1%	-	-	-	2.3	24.0	6.7
2/2+2/3	Swaythling Road Right Ahead	U	A B		1	35:7	-	463	1935:1935	764+2	60.5 : 60.5%	-	-	-	3.5	27.5	9.9
3/1	Chalk Hill Ahead Left Right	U	G		1	18	-	185	2115	447	41.4%	-	-	-	1.9	37.6	4.3
7/1	Church Hill Ahead Left	U	C		1	35	-	286	1935	774	37.0%	-	-	-	1.8	22.7	5.3
7/2	Church Hill Right	U	D		1	7	-	0	1935	172	0.0%	-	-	-	0.0	0.0	0.0

C1
PRC for Signalled Lanes (%): 48.2
PRC Over All Lanes (%): 48.2
Total Delay for Signalled Lanes (pcuHr): 14.62
Total Delay Over All Lanes(pcuHr): 14.62
Cycle Time (s): 90

_____ A R C A D Y 6 _____

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

For sales and distribution information,
program advice and maintenance, contact:

TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770356
Nine Mile Ride Email: software@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk
RG40 3GA,UK

Run with file:-
"p:\10440\Traffic\Junctions\j20a A27-Allington Lane Rbt\
10440 j20a A27 Mansbridge Road-Allington Lane Rbt DS1AM.vai"
(drive-on-the-left) at 14:53:30 on Friday, 25 November 2016

.FILE PROPERTIES

RUN TITLE: j20a A27 Mansbridge Road-Allington Lane Rbt DS1AM
LOCATION: Eastleigh
DATE: 25/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA

ARM A - Allington Lane (North)
ARM B - Mansbridge Road (East)
ARM C - Townhill Way (South)
ARM D - Mansbridge Road (West)

.GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.70	6.00	10.00	20.00	28.00	25.0	0.634	25.816
ARM B	3.00	4.00	5.00	10.00	28.00	25.0	0.518	17.654
ARM C	3.00	6.00	10.00	10.00	28.00	25.0	0.574	22.158
ARM D	3.00	6.00	10.00	20.00	28.00	25.0	0.603	23.277

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

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

TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j20a A27 Mansbridge Road-Allington Lane Rbt DS1AM

DEMAND SET TITLE: j20a A27 Mansbridge Road-Allington Lane Rbt DS1AM

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

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
08.00 - 09.00	ARM A	0.460	0.195	0.186	0.158
		1128.0	479.0	456.0	388.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.158	0.460	0.195	0.186
		388.0	1128.0	479.0	456.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM C	0.186	0.158	0.460	0.195
		456.0	388.0	1128.0	479.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM D	0.195	0.186	0.158	0.460

		479.0	456.0	388.0 1128.0
		(10.0)	(10.0)	(10.0) (10.0)

.QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	9.63	12.38	0.778	- -	0.0	3.2	41.1	-	0.318
ARM B	8.93	6.38	1.401	- -	0.0	40.7	317.7	-	3.547
ARM C	11.60	11.28	1.029	- -	0.0	15.2	143.2	-	0.983
ARM D	10.68	11.09	0.963	- -	0.0	9.6	99.6	-	0.734
08.15-08.30									
ARM A	9.63	12.08	0.798	- -	3.2	3.6	52.1	-	0.397
ARM B	8.93	6.09	1.467	- -	40.7	83.4	930.5	-	10.504
ARM C	11.60	11.18	1.038	- -	15.2	24.6	301.4	-	2.060
ARM D	10.68	10.90	0.980	- -	9.6	13.8	178.4	-	1.337
08.30-08.45									
ARM A	9.63	12.02	0.801	- -	3.6	3.8	55.9	-	0.410
ARM B	8.93	6.04	1.479	- -	83.4	126.8	1576.4	-	17.670
ARM C	11.60	11.17	1.038	- -	24.6	32.9	432.8	-	2.815
ARM D	10.68	10.88	0.982	- -	13.8	16.9	231.4	-	1.645
08.45-09.00									
ARM A	9.63	12.00	0.803	- -	3.8	3.9	57.7	-	0.418
ARM B	8.93	6.02	1.484	- -	126.8	170.5	2230.1	-	24.909
ARM C	11.60	11.17	1.038	- -	32.9	40.7	553.1	-	3.511
ARM D	10.68	10.87	0.983	- -	16.9	19.2	271.4	-	1.885

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	3.2	***
08.30	3.6	****
08.45	3.8	****
09.00	3.9	****

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	40.7	**
08.30	83.4	**********
08.45	126.8	**********
09.00	170.5	**********

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	15.2	***************
08.30	24.6	************************
08.45	32.9	*********************************
09.00	40.7	**

.QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	9.6	**********
08.30	13.8	**************
08.45	16.9	*****************
09.00	19.2	********************

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND	* QUEUEING *	* INCLUSIVE QUEUEING *

		* DELAY *		* DELAY *	
	(VEH) (VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	578.0 578.0	206.9	0.36	207.5	0.36
B	536.0 536.0	5054.7	9.43	7471.3	13.94
C	696.0 696.0	1430.4	2.06	1504.7	2.16
D	641.0 641.0	780.8	1.22	797.8	1.24
ALL	2450.9 2450.9	7472.8	3.05	9981.4	4.07

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END OF JOB

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

For sales and distribution information,
program advice and maintenance, contact:

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Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

Run with file:-
"p:\10440\Traffic\Junctions\j20a A27-Allington Lane Rbt\
10440 j20a A27 Mansbridge Road-Allington Lane Rbt DS1PM.vai"
(drive-on-the-left) at 14:53:54 on Friday, 25 November 2016

.FILE PROPERTIES

RUN TITLE: j20a A27 Mansbridge Road-Allington Lane Rbt DS1PM
LOCATION: Eastleigh
DATE: 25/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA

ARM A - Allington Lane (North)
ARM B - Mansbridge Road (East)
ARM C - Townhill Way (South)
ARM D - Mansbridge Road (West)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.70	6.00	10.00	20.00	28.00	25.0	0.634	25.816
ARM B	3.00	4.00	5.00	10.00	28.00	25.0	0.518	17.654
ARM C	3.00	6.00	10.00	10.00	28.00	25.0	0.574	22.158
ARM D	3.00	6.00	10.00	20.00	28.00	25.0	0.603	23.277

V = approach half-width E = entry width L = effective flare length R = entry radius D = inscribed circle diameter PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD - (60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j20a A27 Mansbridge Road-Allington Lane Rbt DS1PM

DEMAND SET TITLE: j20a A27 Mansbridge Road-Allington Lane Rbt DS1PM

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
17.00 - 18.00		TURNING PROPORTIONS			
		TURNING COUNTS			
		(PERCENTAGE OF H.V.S)			
	ARM A	0.283	0.146	0.313	0.258
		682.0	353.0	755.0	622.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.258	0.283	0.146	0.313
		622.0	682.0	353.0	755.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM C	0.313	0.258	0.283	0.146
		755.0	622.0	682.0	353.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM D	0.146	0.313	0.258	0.283

		353.0	755.0	622.0	682.0
		(10.0)	(10.0)	(10.0)	(10.0)

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	9.75	12.56	0.776	- - -	0.0	3.2	40.8	-	0.312
ARM B	5.17	6.87	0.753	- - -	0.0	2.7	33.3	-	0.496
ARM C	7.15	12.47	0.573	- - -	0.0	1.3	18.2	-	0.182
ARM D	17.48	14.28	1.224	- - -	0.0	52.1	412.4	-	2.015

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
ARM A	9.75	12.44	0.783	- - -	3.2	3.4	49.6	-	0.364
ARM B	5.17	6.73	0.768	- - -	2.7	3.0	43.0	-	0.617
ARM C	7.15	12.31	0.581	- - -	1.3	1.4	20.1	-	0.193
ARM D	17.48	14.15	1.236	- - -	52.1	102.3	1157.8	-	5.618

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
ARM A	9.75	12.44	0.784	- - -	3.4	3.5	51.7	-	0.369
ARM B	5.17	6.73	0.768	- - -	3.0	3.1	45.9	-	0.628
ARM C	7.15	12.30	0.581	- - -	1.4	1.4	20.5	-	0.194
ARM D	17.48	14.14	1.236	- - -	102.3	152.4	1910.3	-	9.134

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
ARM A	9.75	12.44	0.784	- - -	3.5	3.5	52.5	-	0.370
ARM B	5.17	6.72	0.768	- - -	3.1	3.2	47.0	-	0.633
ARM C	7.15	12.30	0.581	- - -	1.4	1.4	20.6	-	0.194
ARM D	17.48	14.14	1.236	- - -	152.4	202.6	2663.1	-	12.661

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	3.2	***
17.30	3.4	***
17.45	3.5	***
18.00	3.5	****

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	2.7	***
17.30	3.0	***
17.45	3.1	***
18.00	3.2	***

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	1.3	*
17.30	1.4	*
17.45	1.4	*
18.00	1.4	*

.QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	52.1	**
17.30	102.3	**
17.45	152.4	**
18.00	202.6	**

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING *		* INCLUSIVE QUEUEING *	
			* DELAY *		* DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	585.0	585.0	194.6	0.33	195.1	0.33
B	310.0	310.0	169.2	0.55	169.9	0.55
C	429.0	429.0	79.4	0.19	79.5	0.19
D	1049.0	1049.0	6143.6	5.86	7595.7	7.24
ALL	2373.0	2373.0	6586.8	2.78	8040.2	3.39

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END OF JOB

_____ A R C A D Y 6 _____

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

For sales and distribution information,
program advice and maintenance, contact:

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Nine Mile Ride Email: software@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk
RG40 3GA,UK

Run with file:-
"p:\10440\Traffic\Junctions\j20a A27-Allington Lane Rbt\
10440 j20a A27 Mansbridge Road-Allington Lane Rbt DS1AM+DEV.vai"
(drive-on-the-left) at 14:53:49 on Friday, 25 November 2016

.FILE PROPERTIES
****

RUN TITLE: j20a A27 Mansbridge Road-Allington Lane Rbt DS1AM+DEV
LOCATION: Eastleigh
DATE: 25/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA
****
ARM A - Allington Lane (North)
ARM B - Mansbridge Road (East)
ARM C - Townhill Way (South)
ARM D - Mansbridge Road (West)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.70	6.00	10.00	20.00	28.00	25.0	0.634	25.816
ARM B	3.00	4.00	5.00	10.00	28.00	25.0	0.518	17.654
ARM C	3.00	6.00	10.00	10.00	28.00	25.0	0.574	22.158
ARM D	3.00	6.00	10.00	20.00	28.00	25.0	0.603	23.277

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j20a A27 Mansbridge Road-Allington Lane Rbt DS1AM+DEV

DEMAND SET TITLE: j20a A27 Mansbridge Road-Allington Lane Rbt DS1AM+DEV

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
		TURNING PROPORTIONS			
		TURNING COUNTS			
		(PERCENTAGE OF H.V.S)			
08.00 - 09.00					
	ARM A	0.466	0.229	0.168	0.136
		1508.0	742.0	545.0	441.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.136	0.466	0.229	0.168
		441.0	1508.0	742.0	545.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM C	0.168	0.136	0.466	0.229
		545.0	441.0	1508.0	742.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM D	0.229	0.168	0.136	0.466
		742.0	545.0	441.0	1508.0
		(10.0)	(10.0)	(10.0)	(10.0)

.QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	18.33	12.78	1.434	- -	0.0	85.5	655.2	-	3.514
ARM B	9.67	5.15	1.875	- -	0.0	68.8	523.0	-	7.023
ARM C	12.33	10.65	1.158	- -	0.0	30.3	250.2	-	1.694
ARM D	13.60	10.97	1.240	- -	0.0	43.2	343.2	-	2.206
08.15-08.30									
ARM A	18.33	12.62	1.452	- -	85.5	171.2	1925.3	-	10.305
ARM B	9.67	5.06	1.912	- -	68.8	138.0	1550.7	-	20.732
ARM C	12.33	10.65	1.158	- -	30.3	56.1	648.4	-	4.288
ARM D	13.60	10.85	1.254	- -	43.2	84.6	958.7	-	6.095
08.30-08.45									
ARM A	18.33	12.61	1.454	- -	171.2	257.0	3211.7	-	17.096
ARM B	9.67	5.05	1.913	- -	138.0	207.2	2588.5	-	34.415
ARM C	12.33	10.65	1.158	- -	56.1	81.5	1032.0	-	6.652
ARM D	13.60	10.83	1.255	- -	84.6	126.2	1581.3	-	9.887
08.45-09.00									
ARM A	18.33	12.61	1.454	- -	257.0	342.9	4499.3	-	23.890
ARM B	9.67	5.05	1.913	- -	207.2	276.4	3626.6	-	48.106
ARM C	12.33	10.65	1.158	- -	81.5	106.8	1412.4	-	9.010
ARM D	13.60	10.83	1.255	- -	126.2	167.7	2204.6	-	13.708

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	85.5
08.30	171.2
08.45	257.0
09.00	342.9

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	68.8
08.30	138.0
08.45	207.2
09.00	276.4

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	30.3
08.30	56.1
08.45	81.5
09.00	106.8

.QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	43.2
08.30	84.6
08.45	126.2
09.00	167.7

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND	* QUEUEING *	* INCLUSIVE QUEUEING *

			* DELAY *		* DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	1100.0	1100.0	10291.5	9.36	14952.8	13.59
B	580.0	580.0	8288.9	14.29	15846.3	27.32
C	740.0	740.0	3342.9	4.52	3878.4	5.24
D	816.0	816.0	5087.7	6.23	6386.3	7.83
ALL	3236.0	3236.0	27010.9	8.35	41063.8	12.69

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
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END OF JOB

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

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RG40 3GA,UK

Tel: +44 (0) 1344 770758
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Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

Run with file:-
"p:\10440\Traffic\Junctions\j20a A27-Allington Lane Rbt\
10440 j20a A27 Mansbridge Road-Allington Lane Rbt DS1PM+DEV.vai"
(drive-on-the-left) at 14:53:58 on Friday, 25 November 2016

.FILE PROPERTIES

RUN TITLE: j20a A27 Mansbridge Road-Allington Lane Rbt DS1PM+DEV
LOCATION: Eastleigh
DATE: 25/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA

ARM A - Allington Lane (North)
ARM B - Mansbridge Road (East)
ARM C - Townhill Way (South)
ARM D - Mansbridge Road (West)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.70	6.00	10.00	20.00	28.00	25.0	0.634	25.816
ARM B	3.00	4.00	5.00	10.00	28.00	25.0	0.518	17.654
ARM C	3.00	6.00	10.00	10.00	28.00	25.0	0.574	22.158
ARM D	3.00	6.00	10.00	20.00	28.00	25.0	0.603	23.277

V = approach half-width E = entry width
L = effective flare length R = entry radius
D = inscribed circle diameter PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD - (60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j20a A27 Mansbridge Road-Allington Lane Rbt DS1PM+DEV

DEMAND SET TITLE: j20a A27 Mansbridge Road-Allington Lane Rbt DS1PM+DEV

T33

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

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
17.00 - 18.00	ARM A	0.285	0.258	0.252	0.205
		917.0	832.0	811.0	661.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.205	0.285	0.258	0.252
		661.0	917.0	832.0	811.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM C	0.252	0.205	0.285	0.258
		811.0	661.0	917.0	832.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM D	0.258	0.252	0.205	0.285

```
                                    10440 j20a A27 Mansbridge Road-Allington Lane Rbt DS1PM+DEV
 I                    I         I  832.0 I  811.0 I  661.0 I  917.0 I
 I                    I         I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
 I                    I         I        I        I        I        I
 --------------------------------------------------------------------


.       QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT
        -------------------------------------------------------
.------------------------------------------------------------------------------------------------------------------- T70
 I  TIME      DEMAND  CAPACITY  DEMAND/    PEDESTRIAN  START   END       DELAY      GEOMETRIC DELAY    AVERAGE DELAY I
 I          (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/        PER ARRIVING  I
 I                               (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
 -                                                                                                                 -
 I 17.00-17.15                                                                                                     I
 I ARM A      15.27      13.60   1.123   - -        -    0.0   31.4      262.6            -                1.393     I
 I ARM B       7.18       6.40   1.123   - -        -    0.0   17.1      147.8            -                1.753     I
 I ARM C       7.87      11.65   0.675   - -        -    0.0    2.0       26.7            -                0.248     I
 I ARM D      23.37      13.66   1.711   - -        -    0.0  147.1     1112.3            -                5.534     I
 I                                                                                                                 I
 -------------------------------------------------------------------------------------------------------------------
.-------------------------------------------------------------------------------------------------------------------
 I  TIME      DEMAND  CAPACITY  DEMAND/    PEDESTRIAN  START   END       DELAY      GEOMETRIC DELAY    AVERAGE DELAY I
 I          (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/        PER ARRIVING  I
 I                               (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
 -                                                                                                                 -
 I 17.15-17.30                                                                                                     I
 I ARM A      15.27      13.56   1.126   - -        -   31.4   57.7      668.8            -                3.493     I
 I ARM B       7.18       6.27   1.146   - -        -   17.1   31.6      366.5            -                4.264     I
 I ARM C       7.87      11.49   0.684   - -        -    2.0    2.1       30.8            -                0.274     I
 I ARM D      23.37      13.49   1.732   - -        -  147.1  295.2     3316.8            -               16.510     I
 I                                                                                                                 I
 -------------------------------------------------------------------------------------------------------------------
.-------------------------------------------------------------------------------------------------------------------
 I  TIME      DEMAND  CAPACITY  DEMAND/    PEDESTRIAN  START   END       DELAY      GEOMETRIC DELAY    AVERAGE DELAY I
 I          (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/        PER ARRIVING  I
 I                               (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
 -                                                                                                                 -
 I 17.30-17.45                                                                                                     I
 I ARM A      15.27      13.56   1.126   - -        -   57.7   83.6     1059.9            -                5.377     I
 I ARM B       7.18       6.26   1.148   - -        -   31.6   45.9      581.6            -                6.502     I
 I ARM C       7.87      11.48   0.685   - -        -    2.1    2.1       31.7            -                0.276     I
 I ARM D      23.37      13.48   1.734   - -        -  295.2  443.5     5540.4            -               27.508     I
 I                                                                                                                 I
 -------------------------------------------------------------------------------------------------------------------
.-------------------------------------------------------------------------------------------------------------------
 I  TIME      DEMAND  CAPACITY  DEMAND/    PEDESTRIAN  START   END       DELAY      GEOMETRIC DELAY    AVERAGE DELAY I
 I          (VEH/MIN) (VEH/MIN) CAPACITY      FLOW     QUEUE  QUEUE    (VEH.MIN/      (VEH.MIN/        PER ARRIVING  I
 I                               (RFC)     (PEDS/MIN) (VEHS) (VEHS)  TIME SEGMENT)  TIME SEGMENT)    VEHICLE (MIN) I
 -                                                                                                                 -
 I 17.45-18.00                                                                                                     I
 I ARM A      15.27      13.56   1.126   - -        -   83.6  109.4     1447.3            -                7.260     I
 I ARM B       7.18       6.26   1.148   - -        -   45.9   60.0      794.0            -                8.739     I
 I ARM C       7.87      11.48   0.686   - -        -    2.1    2.1       32.0            -                0.277     I
 I ARM D      23.37      13.47   1.734   - -        -  443.5  591.9     7765.8            -               38.519     I
 I                                                                                                                 I
 -------------------------------------------------------------------------------------------------------------------

.QUEUE AT ARM A
 --------------

  TIME SEGMENT NO. OF
   ENDING      VEHICLES
               IN QUEUE

   17.15          31.4  *******************************
   17.30          57.7  *********************************************************
   17.45          83.6  ***********************************************************************************
   18.00         109.4  *****************************************************************************************

.QUEUE AT ARM B
 --------------

  TIME SEGMENT NO. OF
   ENDING      VEHICLES
               IN QUEUE

   17.15          17.1  *****************
   17.30          31.6  *******************************
   17.45          45.9  *********************************************
   18.00          60.0  ***********************************************************

.QUEUE AT ARM C
 --------------

  TIME SEGMENT NO. OF
   ENDING      VEHICLES
               IN QUEUE

   17.15           2.0  **
   17.30           2.1  **
   17.45           2.1  **
   18.00           2.1  **

.QUEUE AT ARM D
 --------------

  TIME SEGMENT NO. OF
   ENDING      VEHICLES
               IN QUEUE

   17.15         147.1  *****************************************************************************************
   17.30         295.2  *****************************************************************************************
   17.45         443.5  *****************************************************************************************
   18.00         591.9  *****************************************************************************************
.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD
                 -------------------------------------------

 ---------------------------------------------------------------------------- T75
 I  ARM  I   TOTAL DEMAND  I     * QUEUEING *    I  * INCLUSIVE QUEUEING *  I
```



```
                                    10440 j20a A27 Mansbridge Road-Allington Lane Rbt DS1PM+DEV
I       I                 I     * DELAY *      I          * DELAY *        I
I       I-------------------------------------------------------------------I
I       I  (VEH)   (VEH/H)  I  (MIN)    (MIN/VEH)  I    (MIN)      (MIN/VEH)  I
-----------------------------------------------------------------------------
I   A   I  916.0 I  916.0 I  3438.7 I    3.75    I    3879.8  I     4.24    I
I   B   I  431.0 I  431.0 I  1890.0 I    4.39    I    2177.6  I     5.05    I
I   C   I  472.0 I  472.0 I   121.2 I    0.26    I     121.4  I     0.26    I
I   D   I 1402.0 I 1402.0 I 17735.3 I   12.65    I   30736.8  I    21.92    I
-----------------------------------------------------------------------------
I  ALL  I 3221.0 I 3221.0 I 23185.2 I    7.20    I   36915.5  I    11.46    I
-----------------------------------------------------------------------------
* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB
```

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

For sales and distribution information,
program advice and maintenance, contact:

TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770356
Nine Mile Ride Email: software@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk
RG40 3GA,UK

Run with file:-
"p:\10440\Traffic\Junctions\j21a Allington Lane-Oak Vale Rbt\10440 j21a Allington Lane-Oak Vale Rbt DS1AM.vai"
(drive-on-the-left) at 14:54:09 on Friday, 25 November 2016

.FILE PROPERTIES
*****

RUN TITLE: j21a Allington Lane-Oak Vale Rbt DS1AM
LOCATION: Eastleigh
DATE: 25/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA
*****
ARM A - Allington Lane (North)
ARM B - Oak Vale (East)
ARM C - Allington Lane (South)
ARM D - Upmill Close (West)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.75	5.00	10.00	10.00	26.00	20.0	0.592	23.113
ARM B	2.80	4.50	5.00	10.00	26.00	20.0	0.529	17.992
ARM C	3.40	4.40	0.00	10.00	26.00	20.0	0.516	16.926
ARM D	3.00	4.00	5.00	15.00	26.00	20.0	0.546	18.565

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j21a Allington Lane-Oak Vale Rbt Rbt DS1AM

DEMAND SET TITLE: j21a Allington Lane-Oak Vale Rbt Rbt DS1AM

T33

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

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
08.00 - 09.00	ARM A	0.000	0.453	0.000	0.547
		0.0	479.0	0.0	578.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.547	0.000	0.453	0.000
		578.0	0.0	479.0	0.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM C	0.000	0.547	0.000	0.453
		0.0	578.0	0.0	479.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM D	0.453	0.000	0.547	0.000
		479.0	0.0	578.0	0.0

(10.0) (10.0) (10.0) (10.0)

.QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	9.63	18.46	0.522	- -	0.0	1.1	15.4	-	0.112
ARM B	0.00	14.95	0.000	- -	0.0	0.0	0.0	-	0.000
ARM C	7.98	12.69	0.629	- -	0.0	1.6	22.5	-	0.203
ARM D	0.00	15.98	0.000	- -	0.0	0.0	0.0	-	0.000
08.15-08.30									
ARM A	9.63	18.43	0.523	- -	1.1	1.1	16.2	-	0.114
ARM B	0.00	14.93	0.000	- -	0.0	0.0	0.0	-	0.000
ARM C	7.98	12.67	0.630	- -	1.6	1.7	24.9	-	0.213
ARM D	0.00	15.94	0.000	- -	0.0	0.0	0.0	-	0.000
08.30-08.45									
ARM A	9.63	18.43	0.523	- -	1.1	1.1	16.3	-	0.114
ARM B	0.00	14.93	0.000	- -	0.0	0.0	0.0	-	0.000
ARM C	7.98	12.67	0.630	- -	1.7	1.7	25.1	-	0.213
ARM D	0.00	15.94	0.000	- -	0.0	0.0	0.0	-	0.000
08.45-09.00									
ARM A	9.63	18.43	0.523	- -	1.1	1.1	16.4	-	0.114
ARM B	0.00	14.93	0.000	- -	0.0	0.0	0.0	-	0.000
ARM C	7.98	12.67	0.630	- -	1.7	1.7	25.3	-	0.213
ARM D	0.00	15.94	0.000	- -	0.0	0.0	0.0	-	0.000

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	1.1	*
08.30	1.1	*
08.45	1.1	*
09.00	1.1	*

.QUEUE AT ARM B

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

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	1.6	**
08.30	1.7	**
08.45	1.7	**
09.00	1.7	**

.QUEUE AT ARM D

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

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND	* QUEUEING * * DELAY *	* INCLUSIVE QUEUEING * * DELAY *

		(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)	
I	A	578.0	578.0	64.2	0.11	64.3	0.11	I
I	B	0.0	0.0	0.0	0.00	0.0	0.00	I
I	C	479.0	479.0	97.8	0.20	97.9	0.20	I
I	D	0.0	0.0	0.0	0.00	0.0	0.00	I
I	ALL	1057.0	1057.0	162.0	0.15	162.2	0.15	I

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
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* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

For sales and distribution information,
program advice and maintenance, contact:

TRL Limited
Crowthorne House
Nine Mile Ride
Wokingham, Berks.
RG40 3GA,UK

Tel: +44 (0) 1344 770758
Fax: +44 (0) 1344 770356
Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

Run with file:-
"p:\10440\Traffic\Junctions\j21a Allington Lane-Oak Vale Rbt\10440 j21a Allington Lane-Oak Vale Rbt DS1PM.vai"
(drive-on-the-left) at 14:54:19 on Friday, 25 November 2016

.FILE PROPERTIES

RUN TITLE: j21a Allington Lane-Oak Vale Rbt DS1PM
LOCATION: Eastleigh
DATE: 25/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA

ARM A - Allington Lane (North)
ARM B - Oak Vale (East)
ARM C - Allington Lane (South)
ARM D - Upmill Close (West)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.75	5.00	10.00	10.00	26.00	20.0	0.592	23.113
ARM B	2.80	4.50	5.00	10.00	26.00	20.0	0.529	17.992
ARM C	3.40	3.40	0.00	10.00	26.00	20.0	0.516	16.926
ARM D	3.00	4.00	5.00	15.00	26.00	20.0	0.546	18.565

V = approach half-width
E = entry width
L = effective flare length
R = entry radius
D = inscribed circle diameter
PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j21a Allington Lane-Oak Vale Rbt Rbt DS1PM

DEMAND SET TITLE: j21a Allington Lane-Oak Vale Rbt Rbt DS1PM

T33

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS / (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C	ARM D
17.00 - 18.00	ARM A	0.000	0.624	0.000	0.376
		0.0	585.0	0.0	353.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.376	0.000	0.624	0.000
		353.0	0.0	585.0	0.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM C	0.000	0.376	0.000	0.624
		0.0	353.0	0.0	585.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM D	0.624	0.000	0.376	0.000
		585.0	0.0	353.0	0.0

```
I                   I        I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
I                   I        I        I        I        I        I
-------------------------------------------------------------------
```

.QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	9.75	19.71	0.495	- -	-	0.0	1.0	13.9	-	0.099
ARM B	0.00	15.87	0.000	- -	-	0.0	0.0	0.0	-	0.000
ARM C	5.88	13.51	0.436	- -	-	0.0	0.8	10.9	-	0.130
ARM D	0.00	17.25	0.000	- -	-	0.0	0.0	0.0	-	0.000
17.15-17.30									
ARM A	9.75	19.70	0.495	- -	-	1.0	1.0	14.6	-	0.101
ARM B	0.00	15.86	0.000	- -	-	0.0	0.0	0.0	-	0.000
ARM C	5.88	13.49	0.436	- -	-	0.8	0.8	11.5	-	0.131
ARM D	0.00	17.23	0.000	- -	-	0.0	0.0	0.0	-	0.000
17.30-17.45									
ARM A	9.75	19.70	0.495	- -	-	1.0	1.0	14.6	-	0.101
ARM B	0.00	15.86	0.000	- -	-	0.0	0.0	0.0	-	0.000
ARM C	5.88	13.49	0.436	- -	-	0.8	0.8	11.5	-	0.131
ARM D	0.00	17.23	0.000	- -	-	0.0	0.0	0.0	-	0.000
17.45-18.00									
ARM A	9.75	19.70	0.495	- -	-	1.0	1.0	14.6	-	0.101
ARM B	0.00	15.86	0.000	- -	-	0.0	0.0	0.0	-	0.000
ARM C	5.88	13.49	0.436	- -	-	0.8	0.8	11.5	-	0.131
ARM D	0.00	17.23	0.000	- -	-	0.0	0.0	0.0	-	0.000

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	1.0	*
17.30	1.0	*
17.45	1.0	*
18.00	1.0	*

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	0.8	*
17.30	0.8	*
17.45	0.8	*
18.00	0.8	*

.QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	* QUEUEING * (VEH/H)	* DELAY * (MIN)	* INCLUSIVE QUEUEING * (MIN/VEH)	* DELAY * (MIN)	(MIN/VEH)
A	585.0	585.0	57.7	0.10	57.7	0.10
B	0.0	0.0	0.0	0.00	0.0	0.00
C	353.0	353.0	45.4	0.13	45.4	0.13
D	0.0	0.0	0.0	0.00	0.0	0.00
ALL	938.0	938.0	103.1	0.11	103.1	0.11

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

END OF JOB

10440 j21a Allington Lane-Oak Vale Rbt DS1PM

_____ A R C A D Y 6 _____

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

For sales and distribution information,
program advice and maintenance, contact:

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Nine Mile Ride Email: software@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk
RG40 3GA,UK

Run with file:-
"p:\10440\Traffic\Junctions\j21a Allington Lane-Oak Vale Rbt\
10440 j21a Allington Lane-Oak Vale Rbt DS1AM+DEV.vai"
(drive-on-the-left) at 14:54:14 on Friday, 25 November 2016

.FILE PROPERTIES

RUN TITLE: j21a Allington Lane-Oak Vale Rbt DS1AM+DEV
LOCATION: Eastleigh
DATE: 25/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA

ARM A - Allington Lane (North)
ARM B - Oak Vale (East)
ARM C - Allington Lane (South)
ARM D - Upmill Close (West)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.75	5.00	10.00	10.00	26.00	20.0	0.592	23.113
ARM B	2.80	4.50	5.00	10.00	26.00	20.0	0.529	17.992
ARM C	3.40	3.40	0.00	10.00	26.00	20.0	0.516	16.926
ARM D	3.00	4.00	5.00	15.00	26.00	20.0	0.546	18.565

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j21a Allington Lane-Oak Vale Rbt Rbt DS1AM+DEV

DEMAND SET TITLE: j21a Allington Lane-Oak Vale Rbt Rbt DS1AM+DEV

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
08.00 - 09.00		TURNING PROPORTIONS / TURNING COUNTS / (PERCENTAGE OF H.V.S)			
	ARM A	0.000	0.403	0.000	0.597
		0.0	742.0	0.0	1100.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.597	0.000	0.403	0.000
		1100.0	0.0	742.0	0.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM C	0.000	0.597	0.000	0.403
		0.0	1100.0	0.0	742.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM D	0.403	0.000	0.597	0.000

		742.0	0.0	1100.0	0.0
		(10.0)	(10.0)	(10.0)	(10.0)

.QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	18.33	17.49	1.048	- -	0.0	23.4	210.9	-	0.896
ARM B	0.00	12.16	0.000	- -	0.0	0.0	0.0	-	0.000
ARM C	12.37	10.22	1.210	- -	0.0	36.4	293.1	-	2.039
ARM D	0.00	15.00	0.000	- -	0.0	0.0	0.0	-	0.000
08.15-08.30									
ARM A	18.33	17.46	1.050	- -	23.4	38.9	469.1	-	1.988
ARM B	0.00	11.98	0.000	- -	0.0	0.0	0.0	-	0.000
ARM C	12.37	10.06	1.230	- -	36.4	71.3	807.6	-	5.581
ARM D	0.00	14.96	0.000	- -	0.0	0.0	0.0	-	0.000
08.30-08.45									
ARM A	18.33	17.47	1.050	- -	38.9	53.3	692.1	-	2.812
ARM B	0.00	11.95	0.000	- -	0.0	0.0	0.0	-	0.000
ARM C	12.37	10.03	1.233	- -	71.3	106.4	1332.3	-	9.042
ARM D	0.00	14.97	0.000	- -	0.0	0.0	0.0	-	0.000
08.45-09.00									
ARM A	18.33	17.47	1.050	- -	53.3	67.2	903.6	-	3.602
ARM B	0.00	11.94	0.000	- -	0.0	0.0	0.0	-	0.000
ARM C	12.37	10.02	1.234	- -	106.4	141.6	1859.6	-	12.533
ARM D	0.00	14.97	0.000	- -	0.0	0.0	0.0	-	0.000

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	23.4	**********
08.30	38.9	**********
08.45	53.3	**********
09.00	67.2	**********

.QUEUE AT ARM B

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

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	36.4	**********
08.30	71.3	**********
08.45	106.4	**********
09.00	141.6	**********

.QUEUE AT ARM D

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

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND	* QUEUEING *	* INCLUSIVE QUEUEING *

			* DELAY *		* DELAY *	
		(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	I	1100.0	1100.0	2275.7	2.07	2404.8	2.19
B	I	0.0	0.0	0.0	0.00	0.0	0.00
C	I	742.0	742.0	4292.5	5.78	5292.4	7.13
D	I	0.0	0.0	0.0	0.00	0.0	0.00
ALL	I	1842.0	1842.0	6568.2	3.57	7697.2	4.18

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

END OF JOB

ARCADY 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

For sales and distribution information,
program advice and maintenance, contact:

TRL Limited
Crowthorne House
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Tel: +44 (0) 1344 770758
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Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

Run with file:-
"p:\10440\Traffic\Junctions\j21a Allington Lane-Oak Vale Rbt\
10440 j21a Allington Lane-Oak Vale Rbt DS1PM+DEV.vai"
(drive-on-the-left) at 14:54:25 on Friday, 25 November 2016

.FILE PROPERTIES

RUN TITLE: j21a Allington Lane-Oak Vale Rbt DS1PM+DEV
LOCATION: Eastleigh
DATE: 25/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA

ARM A - Allington Lane (North)
ARM B - Oak Vale (East)
ARM C - Allington Lane (South)
ARM D - Upmill Close (west)

.GEOMETRIC DATA

T5

ARM		V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM	A	3.75	5.00	10.00	10.00	26.00	20.0	0.592	23.113
ARM	B	2.80	4.50	5.00	10.00	26.00	20.0	0.529	17.992
ARM	C	3.40	3.40	0.00	10.00	26.00	20.0	0.516	16.926
ARM	D	3.00	4.00	5.00	15.00	26.00	20.0	0.546	18.565

V = approach half-width
E = entry width
L = effective flare length
R = entry radius
D = inscribed circle diameter
PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD - (60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j21a Allington Lane-Oak Vale Rbt Rbt DS1PM+DEV

DEMAND SET TITLE: j21a Allington Lane-Oak Vale Rbt Rbt DS1PM+DEV

T33

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

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
17.00 - 18.00	ARM A	0.000	0.476	0.000	0.524
		0.0	832.0	0.0	916.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.524	0.000	0.476	0.000
		916.0	0.0	832.0	0.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM C	0.000	0.524	0.000	0.476
		0.0	916.0	0.0	832.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM D	0.476	0.000	0.524	0.000

		832.0	0.0	916.0	0.0
		(10.0)	(10.0)	(10.0)	(10.0)

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	15.27	17.56	0.869	- - -	0.0	5.6	68.6	-	0.338
ARM B	0.00	13.45	0.000	- - -	0.0	0.0	0.0	-	0.000
ARM C	13.87	11.36	1.221	- - -	0.0	41.6	332.5	-	2.068
ARM D	0.00	15.07	0.000	- - -	0.0	0.0	0.0	-	0.000

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
ARM A	15.27	17.52	0.871	- - -	5.6	6.1	88.4	-	0.422
ARM B	0.00	13.34	0.000	- - -	0.0	0.0	0.0	-	0.000
ARM C	13.87	11.27	1.231	- - -	41.6	80.8	918.4	-	5.632
ARM D	0.00	15.02	0.000	- - -	0.0	0.0	0.0	-	0.000

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
ARM A	15.27	17.52	0.872	- - -	6.1	6.3	93.3	-	0.433
ARM B	0.00	13.34	0.000	- - -	0.0	0.0	0.0	-	0.000
ARM C	13.87	11.26	1.231	- - -	80.8	120.0	1506.0	-	9.071
ARM D	0.00	15.02	0.000	- - -	0.0	0.0	0.0	-	0.000

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
ARM A	15.27	17.52	0.872	- - -	6.3	6.4	95.6	-	0.437
ARM B	0.00	13.34	0.000	- - -	0.0	0.0	0.0	-	0.000
ARM C	13.87	11.26	1.232	- - -	120.0	159.1	2093.3	-	12.539
ARM D	0.00	15.02	0.000	- - -	0.0	0.0	0.0	-	0.000

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	5.6	******
17.30	6.1	******
17.45	6.3	******
18.00	6.4	******

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	41.6	**
17.30	80.8	***
17.45	120.0	**
18.00	159.1	**

.QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	916.0	916.0	345.8	0.38	347.0	0.38
B	0.0	0.0	0.0	0.00	0.0	0.00
C	832.0	832.0	4850.2	5.83	5974.6	7.18
D	0.0	0.0	0.0	0.00	0.0	0.00
ALL	1748.0	1748.0	5196.0	2.97	6321.6	3.62

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
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END OF JOB

_____ A R C A D Y 6 _____

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

For sales and distribution information,
program advice and maintenance, contact:

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Nine Mile Ride Email: software@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk
RG40 3GA,UK

Run with file:-
"p:\10440\Traffic\Junctions\j21a Allington Lane-Oak Vale Rbt\
10440 j21a Allington Lane-Oak Vale Rbt DS1AM+DEV+IMP.vai"
(drive-on-the-left) at 09:49:30 on Monday, 28 November 2016

.FILE PROPERTIES

RUN TITLE: j21a Allington Lane-Oak Vale Rbt DS1AM+DEV
LOCATION: Eastleigh
DATE: 25/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA

ARM A - Allington Lane (North)
ARM B - Oak Vale (East)
ARM C - Allington Lane (South)
ARM D - Upmill Close (West)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.75	9.00	15.00	10.00	26.00	20.0	0.690	30.997
ARM B	2.80	4.50	5.00	10.00	26.00	20.0	0.529	17.992
ARM C	3.40	9.00	5.50	10.00	26.00	20.0	0.597	23.473
ARM D	3.00	4.00	5.00	15.00	26.00	20.0	0.546	18.565

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j21a Allington Lane-Oak Vale Rbt Rbt DS1AM+DEV

DEMAND SET TITLE: j21a Allington Lane-Oak Vale Rbt Rbt DS1AM+DEV

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
		TURNING PROPORTIONS			
		TURNING COUNTS			
		(PERCENTAGE OF H.V.S)			
08.00 - 09.00	ARM A	0.000	0.403	0.000	0.597
		0.0	742.0	0.0	1100.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.597	0.000	0.403	0.000
		1100.0	0.0	742.0	0.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM C	0.000	0.597	0.000	0.403
		0.0	1100.0	0.0	742.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM D	0.403	0.000	0.597	0.000
		742.0	0.0	1100.0	0.0
		(10.0)	(10.0)	(10.0)	(10.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	18.33	23.21	0.790	- -	0.0	3.5	47.4	-	0.188
ARM B	0.00	11.70	0.000	- -	0.0	0.0	0.0	-	0.000
ARM C	12.37	14.89	0.831	- -	0.0	4.3	54.2	-	0.329
ARM D	0.00	14.23	0.000	- -	0.0	0.0	0.0	-	0.000
08.15-08.30									
ARM A	18.33	23.10	0.794	- -	3.5	3.7	54.7	-	0.208
ARM B	0.00	11.62	0.000	- -	0.0	0.0	0.0	-	0.000
ARM C	12.37	14.81	0.835	- -	4.3	4.7	67.8	-	0.397
ARM D	0.00	14.14	0.000	- -	0.0	0.0	0.0	-	0.000
08.30-08.45									
ARM A	18.33	23.09	0.794	- -	3.7	3.8	56.0	-	0.209
ARM B	0.00	11.62	0.000	- -	0.0	0.0	0.0	-	0.000
ARM C	12.37	14.81	0.835	- -	4.7	4.8	71.1	-	0.403
ARM D	0.00	14.13	0.000	- -	0.0	0.0	0.0	-	0.000
08.45-09.00									
ARM A	18.33	23.09	0.794	- -	3.8	3.8	56.6	-	0.210
ARM B	0.00	11.62	0.000	- -	0.0	0.0	0.0	-	0.000
ARM C	12.37	14.81	0.835	- -	4.8	4.9	72.5	-	0.405
ARM D	0.00	14.13	0.000	- -	0.0	0.0	0.0	-	0.000

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	3.5	****
08.30	3.7	****
08.45	3.8	****
09.00	3.8	****

.QUEUE AT ARM B

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

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	4.3	****
08.30	4.7	*****
08.45	4.8	*****
09.00	4.9	*****

.QUEUE AT ARM D

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

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND	* QUEUEING *	* INCLUSIVE QUEUEING *

			* DELAY *		* DELAY *	
		(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	I	1100.0	1100.0	214.8	0.20	215.1	0.20
B	I	0.0	0.0	0.0	0.00	0.0	0.00
C	I	742.0	742.0	265.5	0.36	266.3	0.36
D	I	0.0	0.0	0.0	0.00	0.0	0.00
ALL	I	1842.0	1842.0	480.3	0.26	481.4	0.26

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

END OF JOB

_____ A R C A D Y 6 _____

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

_____

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RG40 3GA,UK

Tel: +44 (0) 1344 770758
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Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

Run with file:-
"p:\10440\Traffic\Junctions\j21a Allington Lane-Oak Vale Rbt\
10440 j21a Allington Lane-Oak Vale Rbt DS1PM+DEV+IMP.vai"
(drive-on-the-left) at 09:53:19 on Monday, 28 November 2016

.FILE PROPERTIES
****

RUN TITLE: j21a Allington Lane-Oak Vale Rbt DS1PM+DEV
LOCATION: Eastleigh
DATE: 25/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA
****
ARM A - Allington Lane (North)
ARM B - Oak Vale (East)
ARM C - Allington Lane (South)
ARM D - Upmill Close (west)

.GEOMETRIC DATA
\-\-\-\-\-\-\-\-\-\-\-\-\-

ARM		V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM	A	3.75	9.00	15.00	10.00	26.00	20.0	0.690	30.997
ARM	B	2.80	4.50	5.00	10.00	26.00	20.0	0.529	17.992
ARM	C	3.40	9.00	5.50	10.00	26.00	20.0	0.597	23.473
ARM	D	3.00	4.00	5.00	15.00	26.00	20.0	0.546	18.565

V = approach half-width E = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA
\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-

Only sets included in the current run are shown
.SCALING FACTORS

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

TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD - (60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j21a Allington Lane-Oak Vale Rbt Rbt DS1PM+DEV

DEMAND SET TITLE: j21a Allington Lane-Oak Vale Rbt Rbt DS1PM+DEV

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
17.00 - 18.00	ARM A	0.000	0.476	0.000	0.524
		0.0	832.0	0.0	916.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.524	0.000	0.476	0.000
		916.0	0.0	832.0	0.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM C	0.000	0.524	0.000	0.476
		0.0	916.0	0.0	832.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM D	0.476	0.000	0.524	0.000

I	I	I 832.0 I	0.0 I	916.0 I	0.0 I
I	I	I (10.0)I	(10.0)I	(10.0)I	(10.0)I
I	I	I	I	I	I

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	15.27	23.28	0.656	- -	-	0.0	1.9	26.2	-	0.121
ARM B	0.00	13.37	0.000	- -	-	0.0	0.0	0.0	-	0.000
ARM C	13.87	16.60	0.835	- -	-	0.0	4.5	56.6	-	0.305
ARM D	0.00	14.29	0.000	- -	-	0.0	0.0	0.0	-	0.000
17.15-17.30									
ARM A	15.27	23.18	0.659	- -	-	1.9	1.9	28.3	-	0.126
ARM B	0.00	13.34	0.000	- -	-	0.0	0.0	0.0	-	0.000
ARM C	13.87	16.57	0.837	- -	-	4.5	4.8	69.9	-	0.362
ARM D	0.00	14.20	0.000	- -	-	0.0	0.0	0.0	-	0.000
17.30-17.45									
ARM A	15.27	23.17	0.659	- -	-	1.9	1.9	28.6	-	0.127
ARM B	0.00	13.34	0.000	- -	-	0.0	0.0	0.0	-	0.000
ARM C	13.87	16.56	0.837	- -	-	4.8	4.9	72.7	-	0.366
ARM D	0.00	14.20	0.000	- -	-	0.0	0.0	0.0	-	0.000
17.45-18.00									
ARM A	15.27	23.17	0.659	- -	-	1.9	1.9	28.7	-	0.127
ARM B	0.00	13.34	0.000	- -	-	0.0	0.0	0.0	-	0.000
ARM C	13.87	16.56	0.837	- -	-	4.9	5.0	73.9	-	0.367
ARM D	0.00	14.20	0.000	- -	-	0.0	0.0	0.0	-	0.000

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	1.9	**
17.30	1.9	**
17.45	1.9	**
18.00	1.9	**

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	4.5	****
17.30	4.8	*****
17.45	4.9	*****
18.00	5.0	*****

.QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND	* QUEUEING * (VEH)	(VEH/H)	* INCLUSIVE QUEUEING * (MIN)	(MIN/VEH)	* DELAY * (MIN)	(MIN/VEH)
A	916.0	916.0	111.9	0.12	112.0	0.12
B	0.0	0.0	0.0	0.00	0.0	0.00
C	832.0	832.0	273.0	0.33	273.8	0.33
D	0.0	0.0	0.0	0.00	0.0	0.00
ALL	1748.0	1748.0	384.9	0.22	385.8	0.22

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

END OF JOB

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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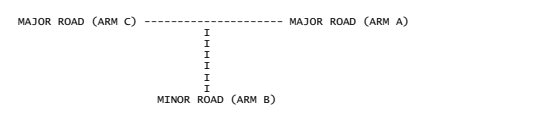
Run with file:-
"P:\10440\Traffic\Junctions\j22p Allington Lane-Quob Lane PJ\j22p Allington Lane-Quob Lane DS1AM.vpi"
(drive-on-the-left) at 14:30:06 on Friday, 25 November 2016

.RUN INFORMATION

RUN TITLE	: j22p 10440 Allington Lane/Quob Lane DS1AM
LOCATION	: Eastleigh
DATE	: 25/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Allington Lane (West)
ARM B IS Quob Lane
ARM C IS Allington Lane (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.30 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)150.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 150.0 M.
- VISIBILITY TO RIGHT	(VB-A) 150.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	8.80 M.
WIDTH AT 5 M FROM JUNCTION	8.80 M.
WIDTH AT 10 M FROM JUNCTION	8.80 M.
WIDTH AT 15 M FROM JUNCTION	2.20 M.
WIDTH AT 20 M FROM JUNCTION	2.20 M.
- LENGTH OF FLARED SECTION	1 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
660.83	0.25	0.25

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

.TRAFFIC DEMAND DATA

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

.Demand set: j22p 10440 Allington Lane/Quob Lane DS1AM

TIME PERIOD BEGINS 08.00 AND ENDS 09.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j22p 10440 Allington Lane/Quob Lane DS1AM

TIME	FROM/TO	TURNING PROPORTIONS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
08.00 - 09.00	ARM A	0.000	0.000	1.000
		0.0	0.0	303.0
		(0.0)	(10.0)	(10.0)
	ARM B	0.379	0.000	0.621
		94.0	0.0	154.0
		(10.0)	(0.0)	(10.0)
	ARM C	0.908	0.092	0.000
		347.0	35.0	0.0
		(10.0)	(10.0)	(0.0)

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

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	2.57	9.63	0.267		0.00	0.36	5.2		0.14
B-A	1.57	7.01	0.223		0.00	0.28	4.0		0.18
C-A	5.78								
C-B	0.58	8.74	0.067		0.00	0.07	1.0		0.12
A-B	0.00								
A-C	5.05								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	2.57	9.62	0.267		0.36	0.36	5.4		0.14
B-A	1.57	7.01	0.224		0.28	0.29	4.3		0.18
C-A	5.78								
C-B	0.58	8.74	0.067		0.07	0.07	1.1		0.12
A-B	0.00								
A-C	5.05								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	2.57	9.62	0.267		0.36	0.36	5.4		0.14
B-A	1.57	7.01	0.224		0.29	0.29	4.3		0.18
C-A	5.78								
C-B	0.58	8.74	0.067		0.07	0.07	1.1		0.12
A-B	0.00								
A-C	5.05								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	2.57	9.62	0.267		0.36	0.36	5.4		0.14
B-A	1.57	7.01	0.224		0.29	0.29	4.3		0.18
C-A	5.78								
C-B	0.58	8.74	0.067		0.07	0.07	1.1		0.12
A-B	0.00								
A-C	5.05								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.4
08.30	0.4
08.45	0.4
09.00	0.4

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.3
08.30	0.3
08.45	0.3
09.00	0.3

QUEUE FOR STREAM C-B

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	154.0	154.0	21.4	0.14	21.4	0.14
B-A	94.0	94.0	16.9	0.18	16.9	0.18
C-A	347.0	347.0				
C-B	35.0	35.0	4.2	0.12	4.2	0.12
A-B	0.0	0.0				
A-C	303.0	303.0				
ALL	933.0	933.0	42.6	0.05	42.6	0.05

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

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

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

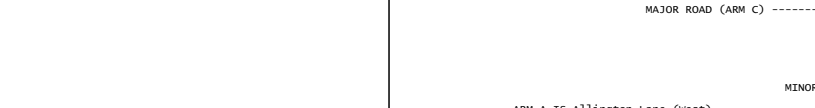
Run with file:-
"P:\10440\Traffic\Junctions\j22p Allington Lane-Quob Lane PJ\j22p Allington Lane-Quob Lane DS1PM.vpi"
(drive-on-the-left) at 14:30:18 on Friday, 25 November 2016

.RUN INFORMATION

RUN TITLE	: j22p 10440 Allington Lane/Quob Lane DS1PM
LOCATION	: Eastleigh
DATE	: 25/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Allington Lane (West)
ARM B IS Quob Lane
ARM C IS Allington Lane (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM		MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W)	6.30 M.
CENTRAL RESERVE WIDTH	(WCR)	0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B)	2.20 M.
- VISIBILITY	(VC-B)	150.00 M.
- BLOCKS TRAFFIC (SPACES)		NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C)	150.0 M.
- VISIBILITY TO RIGHT	(VB-A)	150.0 M.
- LANE 1 WIDTH	(WB-C)	-
- LANE 2 WIDTH	(WB-A)	-
WIDTH AT 0 M FROM JUNCTION		8.80 M.
WIDTH AT 5 M FROM JUNCTION		8.80 M.
WIDTH AT 10 M FROM JUNCTION		8.80 M.
WIDTH AT 15 M FROM JUNCTION		2.20 M.
WIDTH AT 20 M FROM JUNCTION		2.20 M.
- LENGTH OF FLARED SECTION		1 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For Slope For Opposing STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
660.83	0.25	0.25

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

.TRAFFIC DEMAND DATA

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

.Demand set: j22p 10440 Allington Lane/Quob Lane DS1PM

TIME PERIOD BEGINS 17.00 AND ENDS 18.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j22p 10440 Allington Lane/Quob Lane DS1PM

TIME	FROM/TO	ARM A	ARM B	ARM C
17.00 - 18.00	ARM A	0.000	0.000	1.000
		0.0	0.0	268.0
		(0.0)	(10.0)	(10.0)
	ARM B	0.192	0.000	0.808
		77.0	0.0	325.0
		(10.0)	(0.0)	(10.0)
	ARM C	0.810	0.190	0.000
		325.0	76.0	0.0
		(10.0)	(10.0)	(0.0)

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

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	2.60	10.26	0.253		0.00	0.34	4.8		0.13
B-A	0.62	6.92	0.089		0.00	0.10	1.4		0.16
C-A	5.42								
C-B	1.27	8.88	0.143		0.00	0.16	2.4		0.13
A-B	0.00								
A-C	4.47								
17.15-17.30									
B-C	2.60	10.26	0.254		0.34	0.34	5.1		0.13
B-A	0.62	6.92	0.089		0.10	0.10	1.5		0.16
C-A	5.42								
C-B	1.27	8.88	0.143		0.16	0.17	2.5		0.13
A-B	0.00								
A-C	4.47								
17.30-17.45									
B-C	2.60	10.26	0.254		0.34	0.34	5.1		0.13
B-A	0.62	6.92	0.089		0.10	0.10	1.5		0.16
C-A	5.42								
C-B	1.27	8.88	0.143		0.17	0.17	2.5		0.13
A-B	0.00								
A-C	4.47								
17.45-18.00									
B-C	2.60	10.26	0.254		0.34	0.34	5.1		0.13
B-A	0.62	6.92	0.089		0.10	0.10	1.5		0.16
C-A	5.42								
C-B	1.27	8.88	0.143		0.17	0.17	2.5		0.13
A-B	0.00								
A-C	4.47								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.3
17.30	0.3
17.45	0.3
18.00	0.3

QUEUE FOR STREAM B-A

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

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.2
17.30	0.2
17.45	0.2
18.00	0.2

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	156.0	156.0	20.0	0.13	20.0	0.13
B-A	37.0	37.0	5.8	0.16	5.8	0.16
C-A	325.0	325.0				
C-B	76.0	76.0	9.8	0.13	9.8	0.13
A-B	0.0	0.0				
A-C	268.0	268.0				
ALL	862.0	862.0	35.6	0.04	35.6	0.04

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

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

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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Run with file:-
"P:\10440\Traffic\Junctions\j22p Allington Lane-Quob Lane PJ\j22p Allington Lane-Quob Lane DS1AM+DEV.vpi"
(drive-on-the-left) at 14:30:12 on Friday, 25 November 2016

.RUN INFORMATION

RUN TITLE	: j22p 10440 Allington Lane/Quob Lane DS1AM+DEV
LOCATION	: Eastleigh
DATE	: 25/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

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

ARM A IS Allington Lane (West)
ARM B IS Quob Lane
ARM C IS Allington Lane (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.30 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)150.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 150.0 M.
- VISIBILITY TO RIGHT	(VB-A) 150.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	8.80 M.
WIDTH AT 5 M FROM JUNCTION	8.80 M.
WIDTH AT 10 M FROM JUNCTION	8.80 M.
WIDTH AT 15 M FROM JUNCTION	2.20 M.
WIDTH AT 20 M FROM JUNCTION	2.20 M.
- LENGTH OF FLARED SECTION	1 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
660.83	0.25	0.25

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

.TRAFFIC DEMAND DATA

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

.Demand set: j22p 10440 Allington Lane/Quob Lane DS1AM+DEV

TIME PERIOD BEGINS 08.00 AND ENDS 09.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j22p 10440 Allington Lane/Quob Lane DS1AM+DEV

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

TIME	FROM/TO	ARM A	ARM B	ARM C
08.00 - 09.00	ARM A	0.000	0.243	0.757
		0.0	132.0	412.0
		(0.0)I	(10.0)I	(10.0)I
	ARM B	0.323	0.000	0.677
		94.0	0.0	197.0
		(10.0)I	(0.0)I	(10.0)I
	ARM C	0.870	0.130	0.000
		367.0	55.0	0.0
		(10.0)I	(10.0)I	(0.0)I

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

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	3.28	8.71	0.377		0.00	0.59	8.4		0.18
B-A	1.57	5.87	0.267		0.00	0.36	5.0		0.23
C-A	6.12								
C-B	0.92	7.73	0.119		0.00	0.13	1.9		0.15
A-B	2.20								
A-C	6.85								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	3.28	8.69	0.378		0.59	0.60	9.0		0.18
B-A	1.57	5.86	0.268		0.36	0.36	5.4		0.23
C-A	6.12								
C-B	0.92	7.73	0.119		0.13	0.13	2.0		0.15
A-B	2.20								
A-C	6.85								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	3.28	8.69	0.378		0.60	0.60	9.0		0.18
B-A	1.57	5.86	0.268		0.36	0.36	5.4		0.23
C-A	6.12								
C-B	0.92	7.73	0.119		0.13	0.13	2.0		0.15
A-B	2.20								
A-C	6.85								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	3.28	8.69	0.378		0.60	0.60	9.1		0.18
B-A	1.57	5.86	0.268		0.36	0.36	5.4		0.23
C-A	6.12								
C-B	0.92	7.73	0.119		0.13	0.13	2.0		0.15
A-B	2.20								
A-C	6.85								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	0.6	*
08.30	0.6	*
08.45	0.6	*
09.00	0.6	*

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.4
08.30	0.4
08.45	0.4
09.00	0.4

QUEUE FOR STREAM C-B

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	197.0	197.0	35.5	0.18	35.5	0.18
B-A	94.0	94.0	21.3	0.23	21.3	0.23
C-A	367.0	367.0				
C-B	55.0	55.0	7.9	0.14	7.9	0.14
A-B	131.8	131.8				
A-C	411.2	411.2				
ALL	1256.0	1256.0	64.7	0.05	64.8	0.05

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

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

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

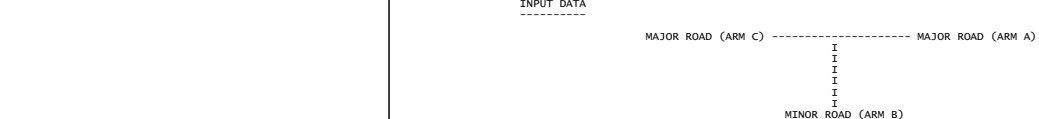
Run with file:-
"P:\10440\Traffic\Junctions\j22p Allington Lane-Quob Lane PJ\j22p Allington Lane-Quob Lane DS1PM+DEV.vpi"
(drive-on-the-left) at 14:30:23 on Friday, 25 November 2016

.RUN INFORMATION

RUN TITLE	: j22p 10440 Allington Lane/Quob Lane DS1PM
LOCATION	: Eastleigh
DATE	: 25/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Allington Lane (West)
ARM B IS Quob Lane
ARM C IS Allington Lane (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 6.30 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)150.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 150.0 M.
- VISIBILITY TO RIGHT	(VB-A) 150.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	8.80 M.
WIDTH AT 5 M FROM JUNCTION	8.80 M.
WIDTH AT 10 M FROM JUNCTION	8.80 M.
WIDTH AT 15 M FROM JUNCTION	2.20 M.
WIDTH AT 20 M FROM JUNCTION	2.20 M.
- LENGTH OF FLARED SECTION	1 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For Slope For Opposing STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
660.83	0.25	0.25

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

.TRAFFIC DEMAND DATA

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

.Demand set: j22p 10440 Allington Lane/Quob Lane DS1PM

TIME PERIOD BEGINS 17.00 AND ENDS 18.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j22p 10440 Allington Lane/Quob Lane DS1PM

TIME	FROM/TO	TURNING PROPORTIONS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
17.00 - 18.00	ARM A	0.000	0.365	0.635
		0.0	239.0	415.0
		(0.0)	(10.0)	(10.0)
	ARM B	0.350	0.000	0.650
		77.0	0.0	143.0
		(10.0)	(0.0)	(10.0)
	ARM C	0.760	0.240	0.000
		364.0	115.0	0.0
		(10.0)	(10.0)	(0.0)

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

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	2.38	8.61	0.277		0.00	0.38	5.4		0.16
B-A	1.28	5.39	0.238		0.00	0.31	4.3		0.24
C-A	6.07								
C-B	1.92	7.26	0.264		0.00	0.35	5.0		0.19
A-B	3.98								
A-C	6.92								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	2.38	8.60	0.277		0.38	0.38	5.7		0.16
B-A	1.28	5.38	0.239		0.31	0.31	4.6		0.24
C-A	6.07								
C-B	1.92	7.26	0.264		0.35	0.36	5.3		0.19
A-B	3.98								
A-C	6.92								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	2.38	8.60	0.277		0.38	0.38	5.7		0.16
B-A	1.28	5.37	0.239		0.31	0.31	4.7		0.24
C-A	6.07								
C-B	1.92	7.26	0.264		0.36	0.36	5.3		0.19
A-B	3.98								
A-C	6.92								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	2.38	8.60	0.277		0.38	0.38	5.7		0.16
B-A	1.28	5.37	0.239		0.31	0.31	4.7		0.24
C-A	6.07								
C-B	1.92	7.26	0.264		0.36	0.36	5.4		0.19
A-B	3.98								
A-C	6.92								

.

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.4
17.30	0.4
17.45	0.4
18.00	0.4

.

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.3
17.30	0.3
17.45	0.3
18.00	0.3

.

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.4
17.30	0.4
17.45	0.4
18.00	0.4

.

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	143.0	143.0	22.5	0.16	22.5	0.16
B-A	77.0	77.0	18.3	0.24	18.3	0.24
C-A	364.0	364.0				
C-B	115.0	115.0	21.0	0.18	21.1	0.18
A-B	239.0	239.0				
A-C	415.0	415.0				
ALL	1353.0	1353.0	61.9	0.05	61.9	0.05

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

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

_____ A R C A D Y 6 _____

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

For sales and distribution information,
program advice and maintenance, contact:

TRL Limited
Crowthorne House
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RG40 3GA,UK

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Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

Run with file:-
"p:\10440\Traffic\Junctions\j23a Quob Lane-Barbe Baker Avenue Rbt\
10440 j23a Quob Lane-Barbe Baker Avenue Rbt DS1AM.vai"
(drive-on-the-left) at 14:54:40 on Friday, 25 November 2016

.FILE PROPERTIES

RUN TITLE: j23a Quob Lane-Barbe Baker Avenue Rbt DS1AM
LOCATION: Eastleigh
DATE: 25/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA

ARM A - Quob Lane (North)
ARM B - Quob Farm Close (East)
ARM C - Quob Lane (South)
ARM D - Barbe Baker Avenue (West)

.GEOMETRIC DATA

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.00	3.70	5.00	20.00	22.00	30.0	0.531	17.591
ARM B	2.70	3.00	0.00	20.00	22.00	30.0	0.500	15.150
ARM C	2.90	3.20	5.00	15.00	22.00	30.0	0.502	15.657
ARM D	2.70	3.00	0.00	10.00	22.00	30.0	0.476	14.409

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

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

TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j23a Quob Lane-Barbe Baker Avenue Rbt DS1AM

DEMAND SET TITLE: j23a Quob Lane-Barbe Baker Avenue Rbt DS1AM

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

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
08.00 - 09.00	ARM A	0.000	0.394	0.324	0.282
		0.0	247.0	203.0	177.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.282	0.000	0.394	0.324
		177.0	0.0	247.0	203.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM C	0.324	0.282	0.000	0.394
		203.0	177.0	0.0	247.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM D	0.394	0.324	0.282	0.000
		247.0	203.0	177.0	0.0
		(10.0)	(10.0)	(10.0)	(10.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	0.58	14.82	0.039	- - -	0.0	0.0	0.6	-	0.070
ARM B	2.37	13.55	0.175	- - -	0.0	0.2	3.1	-	0.089
ARM C	7.17	13.44	0.533	- - -	0.0	1.1	15.8	-	0.156
ARM D	0.33	10.74	0.031	- - -	0.0	0.0	0.5	-	0.096
08.15-08.30									
ARM A	0.58	14.81	0.039	- - -	0.0	0.0	0.6	-	0.070
ARM B	2.37	13.55	0.175	- - -	0.2	0.2	3.2	-	0.089
ARM C	7.17	13.43	0.534	- - -	1.1	1.1	16.9	-	0.160
ARM D	0.33	10.71	0.031	- - -	0.0	0.0	0.5	-	0.096
08.30-08.45									
ARM A	0.58	14.81	0.039	- - -	0.0	0.0	0.6	-	0.070
ARM B	2.37	13.55	0.175	- - -	0.2	0.2	3.2	-	0.089
ARM C	7.17	13.43	0.534	- - -	1.1	1.1	17.0	-	0.160
ARM D	0.33	10.71	0.031	- - -	0.0	0.0	0.5	-	0.096
08.45-09.00									
ARM A	0.58	14.81	0.039	- - -	0.0	0.0	0.6	-	0.070
ARM B	2.37	13.55	0.175	- - -	0.2	0.2	3.2	-	0.089
ARM C	7.17	13.43	0.534	- - -	1.1	1.1	17.0	-	0.160
ARM D	0.33	10.71	0.031	- - -	0.0	0.0	0.5	-	0.096

.QUEUE AT ARM A

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

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.2
08.30	0.2
08.45	0.2
09.00	0.2

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	1.1 *
08.30	1.1 *
08.45	1.1 *
09.00	1.1 *

.QUEUE AT ARM D

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

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND	* QUEUEING *	* INCLUSIVE QUEUEING *

		* DELAY *		* DELAY *	
	(VEH) (VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	35.0 35.0	2.4	0.07	2.4	0.07
B	142.0 142.0	12.6	0.09	12.6	0.09
C	430.0 430.0	66.7	0.16	66.8	0.16
D	20.0 20.0	1.9	0.10	1.9	0.10
ALL	627.0 627.0	83.6	0.13	83.7	0.13

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

END OF JOB

Run with file:-
"p:\10440\Traffic\Junctions\j23a Quob Lane-Barbe Baker Avenue Rbt\
10440 j23a Quob Lane-Barbe Baker Avenue Rbt DS1PM.vai"
(drive-on-the-left) at 14:54:56 on Friday, 25 November 2016

.FILE PROPERTIES
 ****

RUN TITLE: j23a Quob Lane-Barbe Baker Avenue Rbt DS1PM
LOCATION: Eastleigh
DATE: 25/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA
 ****
ARM A - Quob Lane (North)
ARM B - Quob Farm Close (East)
ARM C - Quob Lane (South)
ARM D - Barbe Baker Avenue (West)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.00	3.70	5.00	20.00	22.00	30.0	0.531	17.591
ARM B	2.70	3.00	0.00	20.00	22.00	30.0	0.500	15.150
ARM C	2.90	3.20	5.00	15.00	22.00	30.0	0.502	15.657
ARM D	2.70	3.00	0.00	10.00	22.00	30.0	0.476	14.409

V = approach half-width E = entry width
L = effective flare length R = entry radius
D = inscribed circle diameter PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS
 ----------------- T13

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

TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD - (60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j23a Quob Lane-Barbe Baker Avenue Rbt DS1PM

DEMAND SET TITLE: j23a Quob Lane-Barbe Baker Avenue Rbt DS1PM
 ---------- T33

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

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
17.00 - 18.00	ARM A	0.000	0.310	0.278	0.412
		0.0	194.0	174.0	258.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.412	0.000	0.310	0.278
		258.0	0.0	194.0	174.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM C	0.278	0.412	0.000	0.310
		174.0	258.0	0.0	194.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM D	0.310	0.278	0.412	0.000

I	I	I 194.0	I 174.0	I 258.0	I 0.0 I
I	I	I (10.0)	I (10.0)	I (10.0)	I (10.0) I

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	1.27	14.66	0.086	- - -	0.0	0.1	1.4	-	0.075
ARM B	3.03	13.33	0.227	- - -	0.0	0.3	4.2	-	0.097
ARM C	6.08	12.93	0.470	- - -	0.0	0.9	12.4	-	0.144
ARM D	0.05	10.53	0.005	- - -	0.0	0.0	0.1	-	0.095

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
ARM A	1.27	14.64	0.087	- - -	0.1	0.1	1.4	-	0.075
ARM B	3.03	13.32	0.227	- - -	0.3	0.3	4.4	-	0.097
ARM C	6.08	12.92	0.471	- - -	0.9	0.9	13.2	-	0.146
ARM D	0.05	10.51	0.005	- - -	0.0	0.0	0.1	-	0.096

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
ARM A	1.27	14.64	0.087	- - -	0.1	0.1	1.4	-	0.075
ARM B	3.03	13.32	0.227	- - -	0.3	0.3	4.4	-	0.097
ARM C	6.08	12.92	0.471	- - -	0.9	0.9	13.2	-	0.146
ARM D	0.05	10.51	0.005	- - -	0.0	0.0	0.1	-	0.096

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
ARM A	1.27	14.64	0.087	- - -	0.1	0.1	1.4	-	0.075
ARM B	3.03	13.32	0.227	- - -	0.3	0.3	4.4	-	0.097
ARM C	6.08	12.92	0.471	- - -	0.9	0.9	13.3	-	0.146
ARM D	0.05	10.51	0.005	- - -	0.0	0.0	0.1	-	0.096

.QUEUE AT ARM A

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

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.3
17.30	0.3
17.45	0.3
18.00	0.3

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.9 *
17.30	0.9 *
17.45	0.9 *
18.00	0.9 *

.QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	76.0	76.0	5.6	0.07	5.6	0.07
B	181.8	181.8	17.4	0.10	17.4	0.10
C	365.0	365.0	52.1	0.14	52.1	0.14
D	3.0	3.0	0.3	0.09	0.3	0.09
ALL	625.8	625.8	75.4	0.12	75.5	0.12

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

END OF JOB

_____ A R C A D Y 6 _____

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

For sales and distribution information,
program advice and maintenance, contact:

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Crowthorne House
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RG40 3GA,UK

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Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

Run with file:-
"p:\10440\Traffic\Junctions\j23a Quob Lane-Barbe Baker Avenue Rbt\
10440 j23a Quob Lane-Barbe Baker Avenue Rbt DS1AM+DEV.vai"
(drive-on-the-left) at 14:54:49 on Friday, 25 November 2016

.FILE PROPERTIES

RUN TITLE: j23a Quob Lane-Barbe Baker Avenue Rbt DS1AM+DEV
LOCATION: Eastleigh
DATE: 25/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA

ARM A - Quob Lane (North)
ARM B - Quob Farm Close (East)
ARM C - Quob Lane (South)
ARM D - Barbe Baker Avenue (West)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.00	3.70	5.00	20.00	22.00	30.0	0.531	15.591
ARM B	2.70	3.00	0.00	20.00	22.00	30.0	0.500	15.150
ARM C	2.90	3.20	5.00	15.00	22.00	30.0	0.502	15.657
ARM D	2.70	3.00	0.00	10.00	22.00	30.0	0.476	14.409

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j23a Quob Lane-Barbe Baker Avenue Rbt DS1AM+DEV

DEMAND SET TITLE: j23a Quob Lane-Barbe Baker Avenue Rbt DS1AM+DEV

T33

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

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
08.00 - 09.00	ARM A	0.000	0.393	0.282	0.326
		0.0	283.0	203.0	235.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.326	0.000	0.393	0.282
		235.0	0.0	283.0	203.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM C	0.282	0.326	0.000	0.393
		203.0	235.0	0.0	283.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM D	0.393	0.282	0.326	0.000

	283.0	203.0	235.0
	(10.0)	(10.0)	(10.0)

.QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	1.55	14.56	0.106	- -	0.0	0.1	1.7	-	0.077
ARM B	2.37	13.25	0.179	- -	0.0	0.2	3.1	-	0.092
ARM C	7.77	13.26	0.586	- -	0.0	1.4	19.2	-	0.176
ARM D	0.33	10.52	0.032	- -	0.0	0.0	0.5	-	0.098
08.15-08.30									
ARM A	1.55	14.54	0.107	- -	0.1	0.1	1.8	-	0.077
ARM B	2.37	13.25	0.179	- -	0.2	0.2	3.3	-	0.092
ARM C	7.77	13.26	0.586	- -	1.4	1.4	20.8	-	0.182
ARM D	0.33	10.49	0.032	- -	0.0	0.0	0.5	-	0.098
08.30-08.45									
ARM A	1.55	14.54	0.107	- -	0.1	0.1	1.8	-	0.077
ARM B	2.37	13.25	0.179	- -	0.2	0.2	3.3	-	0.092
ARM C	7.77	13.26	0.586	- -	1.4	1.4	21.0	-	0.182
ARM D	0.33	10.49	0.032	- -	0.0	0.0	0.5	-	0.098
08.45-09.00									
ARM A	1.55	14.54	0.107	- -	0.1	0.1	1.8	-	0.077
ARM B	2.37	13.25	0.179	- -	0.2	0.2	3.3	-	0.092
ARM C	7.77	13.26	0.586	- -	1.4	1.4	21.0	-	0.182
ARM D	0.33	10.49	0.032	- -	0.0	0.0	0.5	-	0.098

.QUEUE AT ARM A

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

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.2
08.30	0.2
08.45	0.2
09.00	0.2

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	1.4 *
08.30	1.4 *
08.45	1.4 *
09.00	1.4 *

.QUEUE AT ARM D

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

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND	* QUEUEING *	* INCLUSIVE QUEUEING *

			* DELAY *		* DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	93.0	93.0	7.1	0.08	7.1	0.08
B	142.2	142.2	12.9	0.09	12.9	0.09
C	466.0	466.0	82.0	0.18	82.0	0.18
D	20.0	20.0	1.9	0.10	1.9	0.10
ALL	721.2	721.2	103.9	0.14	104.0	0.14

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

END OF JOB

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

For sales and distribution information,
program advice and maintenance, contact:

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Nine Mile Ride — Email: software@trl.co.uk
Wokingham, Berks. — Web: www.trlsoftware.co.uk
RG40 3GA,UK

Run with file:-
"p:\10440\Traffic\Junctions\j23a Quob Lane-Barbe Baker Avenue Rbt\
10440 j23a Quob Lane-Barbe Baker Avenue Rbt DS1PM+DEV.vai"
(drive-on-the-left) at 14:55:01 on Friday, 25 November 2016

.FILE PROPERTIES

RUN TITLE: j23a Quob Lane-Barbe Baker Avenue Rbt DS1PM+DEV
LOCATION: Eastleigh
DATE: 25/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA

ARM A - Quob Lane (North)
ARM B - Quob Farm Close (East)
ARM C - Quob Lane (South)
ARM D - Barbe Baker Avenue (West)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.00	3.70	5.00	20.00	22.00	30.0	0.531	17.591
ARM B	2.70	3.00	0.00	20.00	22.00	30.0	0.500	15.150
ARM C	2.90	3.20	5.00	15.00	22.00	30.0	0.502	15.657
ARM D	2.70	3.00	0.00	10.00	22.00	30.0	0.476	14.409

V = approach half-width — L = effective flare length — D = inscribed circle diameter
E = entry width — R = entry radius — PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j23a Quob Lane-Barbe Baker Avenue Rbt DS1PM+DEV

DEMAND SET TITLE: j23a Quob Lane-Barbe Baker Avenue Rbt DS1PM+DEV

T33

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
		TURNING PROPORTIONS / TURNING COUNTS / (PERCENTAGE OF H.V.S)			
17.00 - 18.00					
	ARM A	0.000	0.342	0.243	0.415
		0.0	245.0	174.0	297.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.415	0.000	0.342	0.243
		297.0	0.0	245.0	174.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM C	0.243	0.415	0.000	0.342
		174.0	297.0	0.0	245.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM D	0.342	0.243	0.415	0.000

I	I	I 245.0 I	174.0 I	297.0 I	0.0 I
I	I	I (10.0)I	(10.0)I	(10.0)I	(10.0)I
I	I	I	I	I	I

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

I TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I 17.00-17.15										I
I ARM A	1.92	14.47	0.133	- -	-	0.0	0.2	2.2	-	0.080	I
I ARM B	3.03	13.13	0.231	- -	-	0.0	0.3	4.3	-	0.099	I
I ARM C	6.93	12.84	0.540	- -	-	0.0	1.1	16.1	-	0.165	I
I ARM D	0.05	10.36	0.005	- -	-	0.0	0.0	0.1	-	0.097	I
I										I

I TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I 17.15-17.30										I
I ARM A	1.92	14.45	0.133	- -	-	0.2	0.2	2.3	-	0.080	I
I ARM B	3.03	13.13	0.231	- -	-	0.3	0.3	4.5	-	0.099	I
I ARM C	6.93	12.83	0.540	- -	-	1.1	1.2	17.3	-	0.169	I
I ARM D	0.05	10.33	0.005	- -	-	0.0	0.0	0.1	-	0.097	I
I										I

I TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I 17.30-17.45										I
I ARM A	1.92	14.45	0.133	- -	-	0.2	0.2	2.3	-	0.080	I
I ARM B	3.03	13.13	0.231	- -	-	0.3	0.3	4.5	-	0.099	I
I ARM C	6.93	12.83	0.540	- -	-	1.2	1.2	17.4	-	0.170	I
I ARM D	0.05	10.33	0.005	- -	-	0.0	0.0	0.1	-	0.097	I
I										I

I TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)	I
I 17.45-18.00										I
I ARM A	1.92	14.45	0.133	- -	-	0.2	0.2	2.3	-	0.080	I
I ARM B	3.03	13.13	0.231	- -	-	0.3	0.3	4.5	-	0.099	I
I ARM C	6.93	12.83	0.540	- -	-	1.2	1.2	17.5	-	0.170	I
I ARM D	0.05	10.33	0.005	- -	-	0.0	0.0	0.1	-	0.097	I
I										I

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	0.2	
17.30	0.2	
17.45	0.2	
18.00	0.2	

.QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	0.3	
17.30	0.3	
17.45	0.3	
18.00	0.3	

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	1.1	*
17.30	1.2	*
17.45	1.2	*
18.00	1.2	*

.QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I ARM I	TOTAL DEMAND I	* QUEUEING * I	* INCLUSIVE QUEUEING * I

I ARM I	TOTAL DEMAND (VEH) I	(VEH/H) I	* QUEUEING * (MIN) I	(MIN/VEH) I	* INCLUSIVE QUEUEING * (MIN) I	(MIN/VEH) I
I A I	115.0 I	115.0 I	9.1 I	0.08 I	9.1 I	0.08 I
I B I	181.8 I	181.8 I	17.8 I	0.10 I	17.8 I	0.10 I
I C I	416.0 I	416.0 I	68.4 I	0.16 I	68.4 I	0.16 I
I D I	3.0 I	3.0 I	0.3 I	0.10 I	0.3 I	0.10 I
I ALL I	715.8 I	715.8 I	95.5 I	0.13 I	95.5 I	0.13 I

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

END OF JOB

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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PROGRAM ADVICE AND MAINTENANCE CONTACT:
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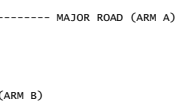
Run with file:-
"P:\10440\Traffic\Junctions\j24p Moorgreen Road-Burnetts Lane PJ\j24p Moorgreen Road-Burnetts Lane DS1AM.vpi"
(drive-on-the-left) at 14:29:28 on Friday, 25 November 2016

.RUN INFORMATION

RUN TITLE	: j24p 10440 Moorgreen Road/Burnetts Lane DS1AM
LOCATION	: Eastleigh
DATE	: 25/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Moorgreen Road (West)
ARM B IS Burnetts Lane
ARM C IS Bubb Lane (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.50 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)150.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 150.0 M.
- VISIBILITY TO RIGHT	(VB-A) 150.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	4.40 M.
WIDTH AT 5 M FROM JUNCTION	2.20 M.
WIDTH AT 10 M FROM JUNCTION	2.20 M.
WIDTH AT 15 M FROM JUNCTION	2.20 M.
WIDTH AT 20 M FROM JUNCTION	2.20 M.
- LENGTH OF FLARED SECTION	2 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
660.83	0.24	0.24

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

.TRAFFIC DEMAND DATA

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

.Demand set: j24p 10440 Moorgreen Road/Burnetts Lane DS1AM

TIME PERIOD BEGINS 08.00 AND ENDS 09.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j24p 10440 Moorgreen Road/Burnetts Lane DS1AM

TIME	FROM/TO	ARM A	ARM B	ARM C
08.00 - 09.00		TURNING PROPORTIONS (PERCENTAGE OF H.V.S)		
	ARM A	0.000	0.156	0.844
		0.0	24.0	130.0
		(0.0)	(10.0)	(10.0)
	ARM B	1.000	0.000	0.000
		49.0	0.0	0.0
		(10.0)	(0.0)	(10.0)
	ARM C	1.000	0.000	0.000
		359.0	0.0	0.0
		(10.0)	(10.0)	(0.0)

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

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.00	6.99	0.000		0.00	0.00	0.0		0.00
B-A	0.82	7.30	0.112		0.00	0.12	1.8		0.15
C-A	5.98								
C-B	0.00	9.40	0.000		0.00	0.00	0.0		0.00
A-B	0.40								
A-C	2.17								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.00	6.99	0.000		0.00	0.00	0.0		0.00
B-A	0.82	7.30	0.112		0.12	0.13	1.9		0.15
C-A	5.98								
C-B	0.00	9.40	0.000		0.00	0.00	0.0		0.00
A-B	0.40								
A-C	2.17								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.00	6.99	0.000		0.00	0.00	0.0		0.00
B-A	0.82	7.30	0.112		0.13	0.13	1.9		0.15
C-A	5.98								
C-B	0.00	9.40	0.000		0.00	0.00	0.0		0.00
A-B	0.40								
A-C	2.17								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.00	6.99	0.000		0.00	0.00	0.0		0.00
B-A	0.82	7.30	0.112		0.13	0.13	1.9		0.15
C-A	5.98								
C-B	0.00	9.40	0.000		0.00	0.00	0.0		0.00
A-B	0.40								
A-C	2.17								

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QUEUE FOR STREAM B-C

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

QUEUE FOR STREAM B-A

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

QUEUE FOR STREAM C-B

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	49.0	49.0	7.4	0.15	7.4	0.15
C-A	359.0	359.0				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	24.0	24.0				
A-C	130.0	130.0				
ALL	562.0	562.0	7.4	0.01	7.4	0.01

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

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

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

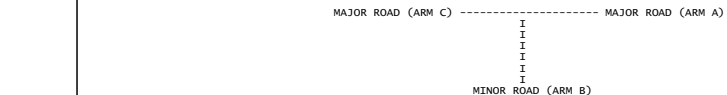
Run with file:-
"P:\10440\Traffic\Junctions\j24p Moorgreen Road-Burnetts Lane PJ\j24p Moorgreen Road-Burnetts Lane DS1PM.vpi"
(drive-on-the-left) at 14:29:41 on Friday, 25 November 2016

.RUN INFORMATION

RUN TITLE	: j24p 10440 Moorgreen Road/Burnetts Lane DS1PM
LOCATION	: Eastleigh
DATE	: 25/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Moorgreen Road (West)
ARM B IS Burnetts Lane
ARM C IS Bubb Lane (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.50 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)150.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 150.0 M.
- VISIBILITY TO RIGHT	(VB-A) 150.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	4.40 M.
WIDTH AT 5 M FROM JUNCTION	2.20 M.
WIDTH AT 10 M FROM JUNCTION	2.20 M.
WIDTH AT 15 M FROM JUNCTION	2.20 M.
WIDTH AT 20 M FROM JUNCTION	2.20 M.
- LENGTH OF FLARED SECTION	2 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
660.83	0.24	0.24

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

.TRAFFIC DEMAND DATA

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

.Demand set: j24p 10440 Moorgreen Road/Burnetts Lane DS1PM

TIME PERIOD BEGINS 17.00 AND ENDS 18.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j24p 10440 Moorgreen Road/Burnetts Lane DS1PM

TIME	FROM/TO	ARM A	ARM B	ARM C
17.00 - 18.00	ARM A	0.000	0.270	0.730
		0.0	92.0	249.0
		(0.0)	(10.0)	(10.0)
	ARM B	1.000	0.000	0.000
		45.0	0.0	0.0
		(10.0)	(0.0)	(10.0)
	ARM C	1.000	0.000	0.000
		220.0	0.0	0.0
		(10.0)	(10.0)	(0.0)

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

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.00	6.57	0.000		0.00	0.00	0.0		0.00
B-A	0.75	7.06	0.106		0.00	0.12	1.7		0.16
C-A	3.67								
C-B	0.00	8.65	0.000		0.00	0.00	0.0		0.00
A-B	1.53								
A-C	4.15								
17.15-17.30									
B-C	0.00	6.57	0.000		0.00	0.00	0.0		0.00
B-A	0.75	7.06	0.106		0.12	0.12	1.8		0.16
C-A	3.67								
C-B	0.00	8.65	0.000		0.00	0.00	0.0		0.00
A-B	1.53								
A-C	4.15								
17.30-17.45									
B-C	0.00	6.57	0.000		0.00	0.00	0.0		0.00
B-A	0.75	7.06	0.106		0.12	0.12	1.8		0.16
C-A	3.67								
C-B	0.00	8.65	0.000		0.00	0.00	0.0		0.00
A-B	1.53								
A-C	4.15								
17.45-18.00									
B-C	0.00	6.57	0.000		0.00	0.00	0.0		0.00
B-A	0.75	7.06	0.106		0.12	0.12	1.8		0.16
C-A	3.67								
C-B	0.00	8.65	0.000		0.00	0.00	0.0		0.00
A-B	1.53								
A-C	4.15								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

QUEUE FOR STREAM B-A

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

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	45.0	45.0	7.0	0.16	7.0	0.16
C-A	220.0	220.0				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	92.0	92.0				
A-C	249.0	249.0				
ALL	606.0	606.0	7.0	0.01	7.0	0.01

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

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

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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TRL SOFTWARE SALES
TEL: CROWTHORNE (01344) 770758, FAX: 770356
EMAIL: software@trl.co.uk

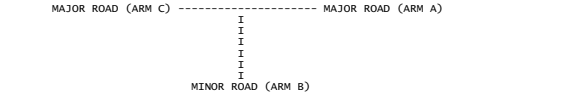
Run with file:-
"P:\10440\Traffic\Junctions\j24p Moorgreen Road-Burnetts Lane PJ\
j24p Moorgreen Road-Burnetts Lane DS1AM+DEV.vpi"
(drive-on-the-left) at 14:29:34 on Friday, 25 November 2016

.RUN INFORMATION

RUN TITLE	: j24p 10440 Moorgreen Road/Burnetts Lane DS1AM+DEV
LOCATION	: Eastleigh
DATE	: 25/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Moorgreen Road (West)
ARM B IS Burnetts Lane
ARM C IS Bubb Lane (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.50 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)150.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 150.0 M.
- VISIBILITY TO RIGHT	(VB-A) 150.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	4.40 M.
WIDTH AT 5 M FROM JUNCTION	2.20 M.
WIDTH AT 10 M FROM JUNCTION	2.20 M.
WIDTH AT 15 M FROM JUNCTION	2.20 M.
WIDTH AT 20 M FROM JUNCTION	2.20 M.
- LENGTH OF FLARED SECTION	2 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
660.83	0.24	0.24

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

.TRAFFIC DEMAND DATA

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

.Demand set: j24p 10440 Moorgreen Road/Burnetts Lane DS1AM+DEV

TIME PERIOD BEGINS 08.00 AND ENDS 09.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j24p 10440 Moorgreen Road/Burnetts Lane DS1AM+DEV

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
08.00 - 09.00	ARM A	0.000 (0.0)	0.156 (24.0)	0.844 (130.0)
	ARM B	0.287 (49.0)	0.000 (0.0)	0.713 (122.0)
	ARM C	0.833 (359.0)	0.167 (72.0)	0.000 (0.0)

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

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	2.64	9.20	0.287		0.00	0.40	5.7		0.15
B-A	1.06	5.87	0.181		0.00	0.22	3.1		0.21
C-A	5.98								
C-B	1.20	9.40	0.128		0.00	0.15	2.1		0.12
A-B	0.40								
A-C	2.17								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	2.64	9.20	0.287		0.40	0.40	6.0		0.15
B-A	1.06	5.86	0.181		0.22	0.22	3.3		0.21
C-A	5.98								
C-B	1.20	9.40	0.128		0.15	0.15	2.2		0.12
A-B	0.40								
A-C	2.17								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	2.64	9.20	0.287		0.40	0.40	6.0		0.15
B-A	1.06	5.86	0.181		0.22	0.22	3.3		0.21
C-A	5.98								
C-B	1.20	9.40	0.128		0.15	0.15	2.2		0.12
A-B	0.40								
A-C	2.17								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	2.64	9.20	0.287		0.40	0.40	6.0		0.15
B-A	1.06	5.86	0.181		0.22	0.22	3.3		0.21
C-A	5.98								
C-B	1.20	9.40	0.128		0.15	0.15	2.2		0.12
A-B	0.40								
A-C	2.17								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.4
08.30	0.4
08.45	0.4
09.00	0.4

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.2
08.30	0.2
08.45	0.2
09.00	0.2

QUEUE FOR STREAM C-B

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	158.4	158.4	23.7	0.15	23.7	0.15
B-A	63.6	63.6	12.9	0.20	12.9	0.20
C-A	359.0	359.0				
C-B	72.0	72.0	8.7	0.12	8.7	0.12
A-B	24.0	24.0				
A-C	130.0	130.0				
ALL	807.0	807.0	45.3	0.06	45.3	0.06

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

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

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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Run with file:-
"P:\10440\Traffic\Junctions\j24p Moorgreen Road-Burnetts Lane PJ\
j24p Moorgreen Road-Burnetts Lane DS1PM+DEV.vpi"
(drive-on-the-left) at 14:29:47 on Friday, 25 November 2016

.RUN INFORMATION

RUN TITLE	: j24p 10440 Moorgreen Road/Burnetts Lane DS1PM+DEV
LOCATION	: Eastleigh
DATE	: 25/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

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

ARM A IS Moorgreen Road (West)
ARM B IS Burnetts Lane
ARM C IS Bubb Lane (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 7.50 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 2.20 M.
- VISIBILITY	(VC-B)150.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 150.0 M.
- VISIBILITY TO RIGHT	(VB-A) 150.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	4.40 M.
WIDTH AT 5 M FROM JUNCTION	2.20 M.
WIDTH AT 10 M FROM JUNCTION	2.20 M.
WIDTH AT 15 M FROM JUNCTION	2.20 M.
WIDTH AT 20 M FROM JUNCTION	2.20 M.
- LENGTH OF FLARED SECTION	2 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For Slope For Opposing STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
660.83	0.24	0.24

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

.TRAFFIC DEMAND DATA

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

.Demand set: j24p 10440 Moorgreen Road/Burnetts Lane DS1PM+DEV

TIME PERIOD BEGINS 17.00 AND ENDS 18.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j24p 10440 Moorgreen Road/Burnetts Lane DS1PM+DEV

TIME	FROM/TO	TURNING PROPORTIONS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
17.00 - 18.00	ARM A	0.000	0.270	0.730
		0.0	92.0	249.0
		(0.0)	(10.0)	(10.0)
	ARM B	1.000	0.000	0.000
		45.0	0.0	0.0
		(10.0)	(0.0)	(10.0)
	ARM C	1.000	0.000	0.000
		220.0	0.0	0.0
		(10.0)	(10.0)	(0.0)

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

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.00	6.57	0.000		0.00	0.00	0.0		0.00
B-A	0.75	7.06	0.106		0.00	0.12	1.7		0.16
C-A	3.67								
C-B	0.00	8.65	0.000		0.00	0.00	0.0		0.00
A-B	1.53								
A-C	4.15								
17.15-17.30									
B-C	0.00	6.57	0.000		0.00	0.00	0.0		0.00
B-A	0.75	7.06	0.106		0.12	0.12	1.8		0.16
C-A	3.67								
C-B	0.00	8.65	0.000		0.00	0.00	0.0		0.00
A-B	1.53								
A-C	4.15								
17.30-17.45									
B-C	0.00	6.57	0.000		0.00	0.00	0.0		0.00
B-A	0.75	7.06	0.106		0.12	0.12	1.8		0.16
C-A	3.67								
C-B	0.00	8.65	0.000		0.00	0.00	0.0		0.00
A-B	1.53								
A-C	4.15								
17.45-18.00									
B-C	0.00	6.57	0.000		0.00	0.00	0.0		0.00
B-A	0.75	7.06	0.106		0.12	0.12	1.8		0.16
C-A	3.67								
C-B	0.00	8.65	0.000		0.00	0.00	0.0		0.00
A-B	1.53								
A-C	4.15								

.
QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

.
QUEUE FOR STREAM B-A

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

.
QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

.
QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	45.0	45.0	7.0	0.16	7.0	0.16
C-A	220.0	220.0				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	92.0					
A-C	249.0	249.0				
ALL	606.0	606.0	7.0	0.01	7.0	0.01

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

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

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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EMAIL: software@trl.co.uk

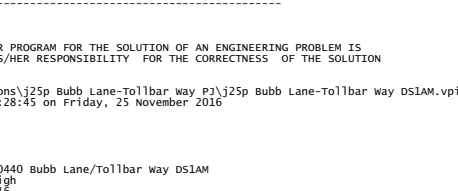
Run with file:-
"P:\10440\Traffic\Junctions\j25p Bubb Lane-Tollbar Way PJ\j25p Bubb Lane-Tollbar Way DS1AM.vpi"
(drive-on-the-left) at 14:28:45 on Friday, 25 November 2016

.RUN INFORMATION

RUN TITLE : j25p 10440 Bubb Lane/Tollbar Way DS1AM
LOCATION : Eastleigh
DATE : 25/11/16
CLIENT : Hallam Land Management
ENUMERATOR : Matt.Moss [BCL25]
JOB NUMBER : 10440
STATUS : Preliminary
DESCRIPTION : Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Tollbar Way (West)
ARM B IS Bubb Lane
ARM C IS Tollbar Way (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.50 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.30 M.
- VISIBILITY	(VC-B)150.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 150.0 M.
- VISIBILITY TO RIGHT	(VB-A) 150.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	4.40 M.
WIDTH AT 5 M FROM JUNCTION	2.20 M.
WIDTH AT 10 M FROM JUNCTION	2.20 M.
WIDTH AT 15 M FROM JUNCTION	2.20 M.
WIDTH AT 20 M FROM JUNCTION	2.20 M.
- LENGTH OF FLARED SECTION	2 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
739.94	0.23	0.23

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

.TRAFFIC DEMAND DATA

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

.Demand set: j25p 10440 Bubb Lane/Tollbar Way DS1AM

TIME PERIOD BEGINS 08.00 AND ENDS 09.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j25p 10440 Bubb Lane/Tollbar Way DS1AM

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
08.00 - 09.00	ARM A	0.000	0.023	0.977
		0.0	13.0	554.0
		(0.0)I	(10.0)I	(10.0)I
	ARM B	0.038	0.000	0.962
		5.0	0.0	125.0
		(10.0)I	(0.0)I	(10.0)I
	ARM C	0.660	0.340	0.000
		673.0	346.0	0.0
		(10.0)I	(10.0)I	(0.0)I

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

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	2.08	8.38	0.249		0.00	0.33	4.7		0.16
B-A	0.08	2.61	0.032		0.00	0.03	0.4		0.40
C-A	11.22								
C-B	5.77	9.03	0.638		0.00	1.67	22.5		0.29
A-B	0.22								
A-C	9.23								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	2.08	8.38	0.249		0.33	0.33	4.9		0.16
B-A	0.08	2.58	0.032		0.03	0.03	0.5		0.40
C-A	11.22								
C-B	5.77	9.03	0.638		1.67	1.72	25.5		0.30
A-B	0.22								
A-C	9.23								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	2.08	8.38	0.249		0.33	0.33	4.9		0.16
B-A	0.08	2.58	0.032		0.03	0.03	0.5		0.40
C-A	11.22								
C-B	5.77	9.03	0.638		1.72	1.73	25.9		0.31
A-B	0.22								
A-C	9.23								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	2.08	8.38	0.249		0.33	0.33	4.9		0.16
B-A	0.08	2.58	0.032		0.03	0.03	0.5		0.40
C-A	11.22								
C-B	5.77	9.03	0.638		1.73	1.74	26.1		0.31
A-B	0.22								
A-C	9.23								

.

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	0.3	
08.30	0.3	
08.45	0.3	
09.00	0.3	

QUEUE FOR STREAM B-A

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

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	1.7	**
08.30	1.7	**
08.45	1.7	**
09.00	1.7	**

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	(VEH/H)	* QUEUEING * DELAY * (MIN)	(MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	(MIN/VEH)
B-C	125.0	125.0	19.5	0.16	19.5	0.16
B-A	5.0	5.0	1.9	0.39	1.9	0.39
C-A	673.0	673.0				
C-B	346.0	346.0	100.0	0.29	100.2	0.29
A-B	13.0	13.0				
A-C	554.0	554.0				
ALL	1716.0	1716.0	121.4	0.07	121.6	0.07

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

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

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

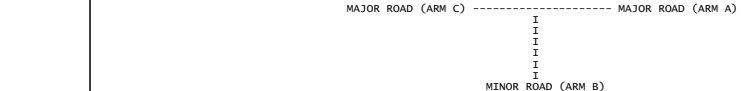
Run with file:-
"P:\10440\Traffic\Junctions\j25p Bubb Lane-Tollbar Way PJ\j25p Bubb Lane-Tollbar Way DS1PM.vpi"
(drive-on-the-left) at 14:28:57 on Friday, 25 November 2016

.RUN INFORMATION

RUN TITLE	: j25p 10440 Bubb Lane/Tollbar Way DS1PM
LOCATION	: Eastleigh
DATE	: 25/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Tollbar Way (West)
ARM B IS Bubb Lane
ARM C IS Tollbar Way (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.50 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.30 M.
- VISIBILITY	(VC-B)150.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 150.0 M.
- VISIBILITY TO RIGHT	(VB-A) 150.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	4.40 M.
WIDTH AT 5 M FROM JUNCTION	2.20 M.
WIDTH AT 10 M FROM JUNCTION	2.20 M.
WIDTH AT 15 M FROM JUNCTION	2.20 M.
WIDTH AT 20 M FROM JUNCTION	2.20 M.
- LENGTH OF FLARED SECTION	2 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For Slope For Opposing STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
739.94	0.23	0.23

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

.TRAFFIC DEMAND DATA

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

.Demand set: j25p 10440 Bubb Lane/Tollbar Way DS1PM

TIME PERIOD BEGINS 17.00 AND ENDS 18.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j25p 10440 Bubb Lane/Tollbar Way DS1PM

TIME	FROM/TO	TURNING PROPORTIONS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
17.00 - 18.00	ARM A	0.000	0.015	0.985
		0.0	10.0	645.0
		(0.0)	(10.0)	(10.0)
	ARM B	0.044	0.000	0.956
		11.0	0.0	238.0
		(10.0)	(0.0)	(10.0)
	ARM C	0.720	0.280	0.000
		540.0	210.0	0.0
		(10.0)	(10.0)	(0.0)

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

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	3.97	8.01	0.495		0.00	0.95	13.2		0.24
B-A	0.18	2.96	0.062		0.00	0.06	0.9		0.36
C-A	9.00								
C-B	3.50	8.69	0.403		0.00	0.66	9.3		0.19
A-B	0.17								
A-C	10.75								
17.15-17.30									
B-C	3.97	8.00	0.496		0.95	0.97	14.4		0.25
B-A	0.18	2.94	0.062		0.06	0.07	1.0		0.36
C-A	9.00								
C-B	3.50	8.69	0.403		0.66	0.67	10.0		0.19
A-B	0.17								
A-C	10.75								
17.30-17.45									
B-C	3.97	8.00	0.496		0.97	0.97	14.5		0.25
B-A	0.18	2.94	0.062		0.07	0.07	1.0		0.36
C-A	9.00								
C-B	3.50	8.69	0.403		0.67	0.67	10.0		0.19
A-B	0.17								
A-C	10.75								
17.45-18.00									
B-C	3.97	8.00	0.496		0.97	0.97	14.6		0.25
B-A	0.18	2.94	0.062		0.07	0.07	1.0		0.36
C-A	9.00								
C-B	3.50	8.69	0.403		0.67	0.67	10.0		0.19
A-B	0.17								
A-C	10.75								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	1.0	*
17.30	1.0	*
17.45	1.0	*
18.00	1.0	*

QUEUE FOR STREAM B-A

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

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	0.7	*
17.30	0.7	*
17.45	0.7	*
18.00	0.7	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	238.0	238.0	56.8	0.24	56.8	0.24
B-A	11.0	11.0	3.8	0.35	3.8	0.35
C-A	540.0	540.0				
C-B	210.0	210.0	39.3	0.19	39.4	0.19
A-B	10.0	10.0				
A-C	645.0	645.0				
ALL	1654.0	1654.0	99.9	0.06	100.0	0.06

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

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

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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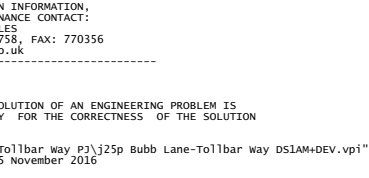
Run with file:-
"P:\10440\Traffic\Junctions\j25p Bubb Lane-Tollbar Way PJ\j25p Bubb Lane-Tollbar Way DS1AM+DEV.vpi"
(drive-on-the-left) at 14:42:17 on Friday, 25 November 2016

.RUN INFORMATION

RUN TITLE	: j25p 10440 Bubb Lane/Tollbar Way DS1AM+DEV
LOCATION	: Eastleigh
DATE	: 25/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Tollbar Way (West)
ARM B IS Bubb Lane
ARM C IS Tollbar Way (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.50 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.30 M.
- VISIBILITY	(VC-B)150.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 150.0 M.
- VISIBILITY TO RIGHT	(VB-A) 150.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	4.40 M.
WIDTH AT 5 M FROM JUNCTION	2.20 M.
WIDTH AT 10 M FROM JUNCTION	2.20 M.
WIDTH AT 15 M FROM JUNCTION	2.20 M.
WIDTH AT 20 M FROM JUNCTION	2.20 M.
- LENGTH OF FLARED SECTION	2 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
739.94	0.23	0.23

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

.TRAFFIC DEMAND DATA

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

.Demand set: j25p 10440 Bubb Lane/Tollbar Way DS1AM+DEV

TIME PERIOD BEGINS 08.00 AND ENDS 09.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j25p 10440 Bubb Lane/Tollbar Way DS1AM+DEV

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
08.00 - 09.00	ARM A	0.000	0.133	0.867
		0.0	85.0	554.0
		(0.0)I	(10.0)I	(10.0)I
	ARM B	0.504	0.000	0.496
		127.0	0.0	125.0
		(10.0)I	(0.0)I	(10.0)I
	ARM C	0.660	0.340	0.000
		673.0	346.0	0.0
		(10.0)I	(10.0)I	(0.0)I

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

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	2.08	5.88	0.354		0.00	0.53	7.4		0.26
B-A	2.12	3.22	0.658		0.00	1.66	20.4		0.77
C-A	11.22								
C-B	5.77	8.76	0.659		0.00	1.82	24.2		0.31
A-B	1.42								
A-C	9.23								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	2.08	5.58	0.374		0.53	0.58	8.5		0.29
B-A	2.12	3.17	0.667		1.66	1.82	26.4		0.92
C-A	11.22								
C-B	5.77	8.76	0.659		1.82	1.87	27.7		0.33
A-B	1.42								
A-C	9.23								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	2.08	5.55	0.375		0.58	0.59	8.8		0.29
B-A	2.12	3.17	0.667		1.82	1.88	27.8		0.93
C-A	11.22								
C-B	5.77	8.76	0.659		1.87	1.89	28.2		0.33
A-B	1.42								
A-C	9.23								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	2.08	5.54	0.376		0.59	0.60	8.9		0.29
B-A	2.12	3.17	0.667		1.88	1.91	28.5		0.94
C-A	11.22								
C-B	5.77	8.76	0.659		1.89	1.90	28.4		0.33
A-B	1.42								
A-C	9.23								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	0.5	*
08.30	0.6	*
08.45	0.6	*
09.00	0.6	*

.

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	1.7	**
08.30	1.8	**
08.45	1.9	**
09.00	1.9	**

.

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	1.8	**
08.30	1.9	**
08.45	1.9	**
09.00	1.9	**

.

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	125.0	125.0	33.7	0.27	33.8	0.27
B-A	127.0	127.0	103.1	0.81	103.7	0.82
C-A	673.0	673.0				
C-B	346.0	346.0	108.5	0.31	108.7	0.31
A-B	85.0	85.0				
A-C	554.0	554.0				
ALL	1910.0	1910.0	245.3	0.13	246.2	0.13

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

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

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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EMAIL: software@trl.co.uk

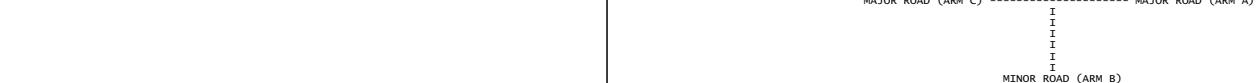
Run with file:-
"P:\10440\Traffic\Junctions\j25p Bubb Lane-Tollbar Way PJ\j25p Bubb Lane-Tollbar Way DS1PM+DEV.vpi"
(drive-on-the-left) at 14:29:11 on Friday, 25 November 2016

.RUN INFORMATION

RUN TITLE	: j25p 10440 Bubb Lane/Tollbar Way DS1PM+DEV
LOCATION	: Eastleigh
DATE	: 25/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Tollbar Way (West)
ARM B IS Bubb Lane
ARM C IS Tollbar Way (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.50 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.30 M.
- VISIBILITY	(VC-B)150.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 150.0 M.
- VISIBILITY TO RIGHT	(VB-A) 150.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	4.40 M.
WIDTH AT 5 M FROM JUNCTION	2.20 M.
WIDTH AT 10 M FROM JUNCTION	2.20 M.
WIDTH AT 15 M FROM JUNCTION	2.20 M.
WIDTH AT 20 M FROM JUNCTION	2.20 M.
- LENGTH OF FLARED SECTION	2 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For Slope For Opposing STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
739.94	0.23	0.23

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

.TRAFFIC DEMAND DATA

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

.Demand set: j25p 10440 Bubb Lane/Tollbar Way DS1PM+DEV

TIME PERIOD BEGINS 17.00 AND ENDS 18.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j25p 10440 Bubb Lane/Tollbar Way DS1PM+DEV

TIME	FROM/TO	ARM A	ARM B	ARM C
17.00 - 18.00	ARM A		0.000	0.155	0.845
			0.0	118.0	645.0
			(0.0)	(10.0)	(10.0)
	ARM B	0.277	0.000	0.723
		91.0	0.0	238.0
		(10.0)	(0.0)	(10.0)
	ARM C	0.720	0.280	0.000
		540.0	210.0	0.0
		(10.0)	(10.0)	(0.0)

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

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	3.00	7.07	0.425		0.00	0.72	10.0		0.24
B-A	1.15	3.40	0.338		0.00	0.49	6.6		0.43
C-A	9.00								
C-B	3.50	8.28	0.423		0.00	0.72	10.0		0.21
A-B	1.97								
A-C	10.75								
17.15-17.30									
B-C	3.00	7.04	0.426		0.72	0.73	10.9		0.25
B-A	1.15	3.38	0.339		0.49	0.50	7.5		0.45
C-A	9.00								
C-B	3.50	8.28	0.423		0.72	0.72	10.8		0.21
A-B	1.97								
A-C	10.75								
17.30-17.45									
B-C	3.00	7.04	0.426		0.73	0.74	11.0		0.25
B-A	1.15	3.38	0.340		0.50	0.51	7.6		0.45
C-A	9.00								
C-B	3.50	8.28	0.423		0.72	0.73	10.9		0.21
A-B	1.97								
A-C	10.75								
17.45-18.00									
B-C	3.00	7.04	0.426		0.74	0.74	11.1		0.25
B-A	1.15	3.38	0.340		0.51	0.51	7.6		0.45
C-A	9.00								
C-B	3.50	8.28	0.423		0.73	0.73	10.9		0.21
A-B	1.97								
A-C	10.75								

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	0.7	*
17.30	0.7	*
17.45	0.7	*
18.00	0.7	*

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	0.5	
17.30	0.5	*
17.45	0.5	*
18.00	0.5	*

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	0.7	*
17.30	0.7	*
17.45	0.7	*
18.00	0.7	*

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	180.1	180.1	43.0	0.24	43.0	0.24
B-A	68.9	68.9	29.3	0.42	29.3	0.43
C-A	540.0	540.0				
C-B	210.0	210.0	42.6	0.20	42.7	0.20
A-B	118.0	118.0				
A-C	645.0	645.0				
ALL	1762.0	1762.0	114.9	0.07	115.0	0.07

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

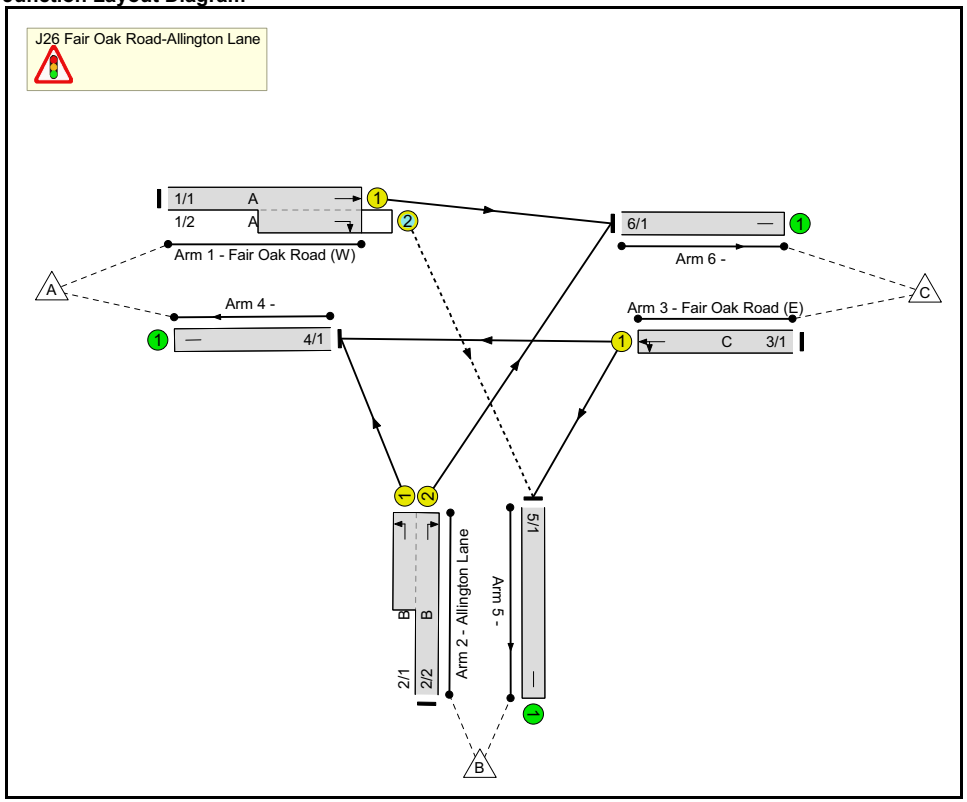
*******END OF RUN*******

Linsig Report

User and Project Details

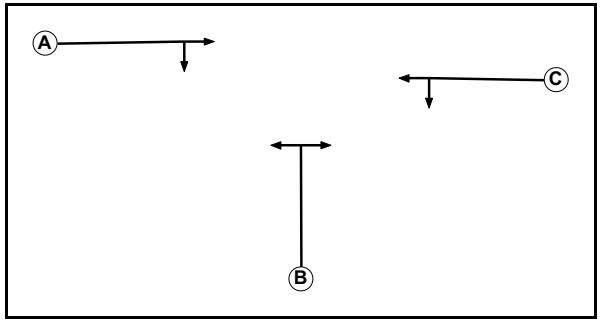
Project:	**Land at Eastleigh**
Title:	**HCC Improved Design**
Location:	
File name:	j26 Fair Oak Road-Allington Lane.lsg3x
Author:	MDM
Company:	Brookbanks Consulting Ltd

Junction Layout Diagram



Linsig Report
P:\10440\Traffic\Junctions\j26p Fair Oak Road-Allington Lane PJ\j26 Fair Oak Road-Allington Lane.lsg3x

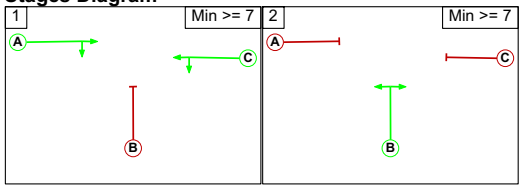
Phase Diagram



Phase Intergreens Matrix

		Starting Phase		
		A	B	C
Terminating Phase	A		5	-
	B	5		5
	C	-	5	

Stages Diagram



Linsig Report
P:\10440\Traffic\Junctions\j26p Fair Oak Road-Allington Lane PJ\j26 Fair Oak Road-Allington Lane.lsg3x

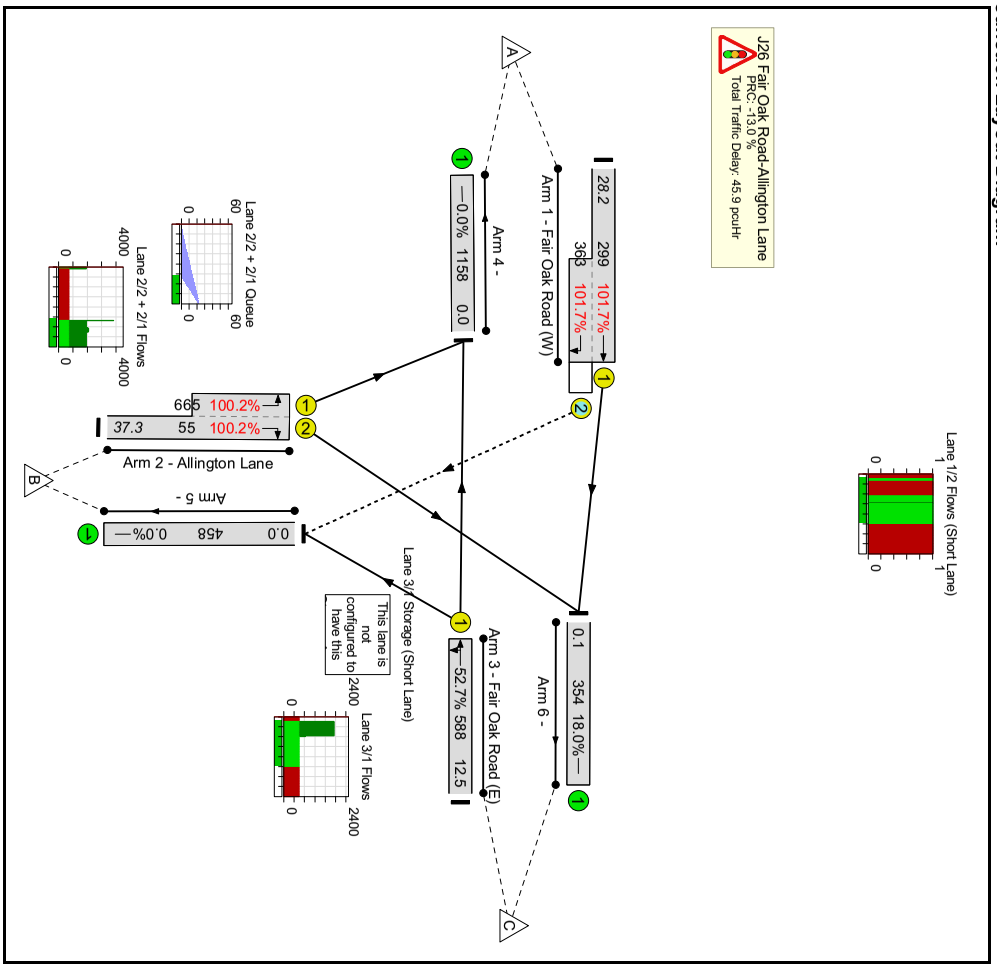
Lane Input Data

Junction: J26 Fair Oak Road-Allington Lane												
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 (Fair Oak Road (W))	U	A	2	3	60.0	Geom	-	3.15	0.00	Y	Arm 6 Ahead	Inf
1/2 (Fair Oak Road (W))	O	A	2	3	6.8	Geom	-	3.00	0.00	N	Arm 5 Right	Inf
2/1 (Allington Lane)	U	B	2	3	6.4	Geom	-	3.25	0.00	Y	Arm 4 Left	Inf
2/2 (Allington Lane)	U	B	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 6 Right	Inf
3/1 (Fair Oak Road (E))	U	C	2	3	4.0	Geom	-	3.25	0.00	Y	Arm 4 Ahead	Inf
											Arm 5 Left	Inf
6/1	U		2	3	4.0	Geom	-	3.50	0.00	Y		

Linsig Report
P:\10440\Traffic\Junctions\j26p Fair Oak Road-Allington Lane PJ\j26 Fair Oak Road-Allington Lane.lsg3x
Scenario 1: 'DS1 AM' (FG1: 'DS1 AM', Plan 1: 'Network Control Plan 1')
Traffic Flows, Actual
Actual Flow :

Origin \ Destination	A	B	C	Tot.
A	0	363	299	662
B	665	0	55	720
C	493	95	0	588
Tot.	1158	458	354	1970

Junction Layout Diagram



Linsig Report
P:\10440\Traffic\Junctions\j26p Fair Oak Road-Allington Lane PJ\j26 Fair Oak Road-Allington Lane.lsg3x

Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: HCC Improved Design	-	-	-		-	-	-	-	-	-	**101.7%**	**310**	**0**	**47**	**45.9**	-	-
J26 Fair Oak Road-Allington Lane	-	-	-		-	-	-	-	-	-	**101.7%**	**310**	**0**	**47**	**45.9**	-	-
1/1+1/2	Fair Oak Road (W) Right Ahead	U+O	A		1	68	-	662	1930:2055	294+357	101.7 : 101.7%	310	0	47	21.3	115.7	28.2
2/2+2/1	Allington Lane Left Right	U	B		1	42	-	720	1915:1940	55+664	100.2 : 100.2%	-	-	-	21.4	107.2	37.3
3/1	Fair Oak Road (E) Ahead Left	U	C		1	68	-	588	1940	1115	52.7%	-	-	-	3.1	19.0	12.5
6/1		U	-		-	-	-	354	1965	1965	18.0%	-	-	-	0.1	1.1	0.1

C1 PRC for Signalled Lanes (%): -13.0 Total Delay for Signalled Lanes (pcuHr): 45.80 Cycle Time (s): 120
PRC Over All Lanes (%): -13.0 Total Delay Over All Lanes(pcuHr): 45.91

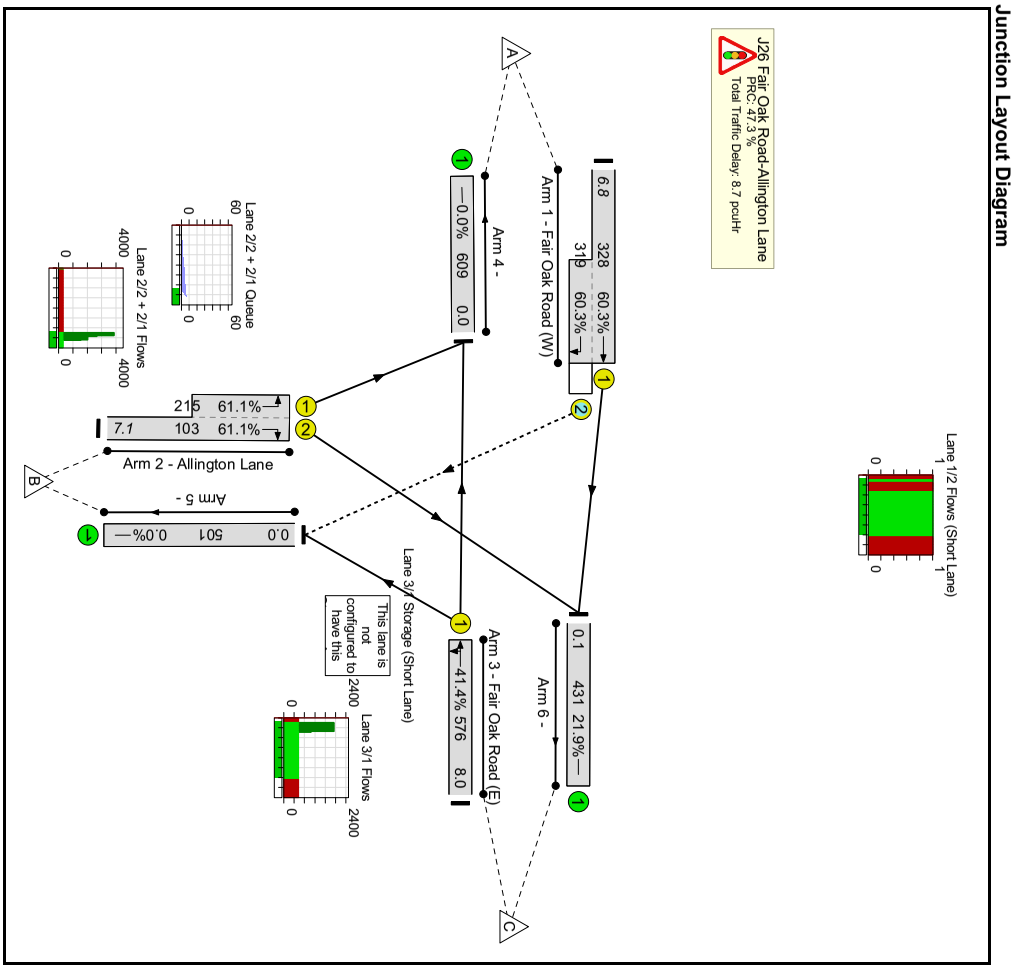
Scenario 2: 'DS1 PM' (FG2: 'DS1 PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin	Destination A	B	C	Tot.
A	0	319	328	647
B	215	0	103	318
C	394	182	0	576
Tot.	609	501	431	1541

Junction Layout Diagram



Linsig Report
P:\10440\Traffic\Junctions\j26p Fair Oak Road-Allington Lane PJ\j26 Fair Oak Road-Allington Lane.lsg3x

Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: HCC Improved Design	-	-	-		-	-	-	-	-	-	**61.1%**	**319**	**0**	**0**	**8.7**	-	-
J26 Fair Oak Road-Allington Lane	-	-	-		-	-	-	-	-	-	**61.1%**	**319**	**0**	**0**	**8.7**	-	-
1/1+1/2	Fair Oak Road (W) Right Ahead	U+O	A		1	85	-	647	1930:2055	544+529	60.3 : 60.3%	319	0	0	2.7	15.2	6.8
2/2+2/1	Allington Lane Left Right	U	B		1	25	-	318	1915:1940	169+352	61.1 : 61.1%	-	-	-	4.4	49.4	7.1
3/1	Fair Oak Road (E) Ahead Left	U	C		1	85	-	576	1940	1390	41.4%	-	-	-	1.4	9.1	8.0
6/1		U	-		-	-	-	431	1965	1965	21.9%	-	-	-	0.1	1.2	0.1

C1 PRC for Signalled Lanes (%): 47.3 Total Delay for Signalled Lanes (pcuHr): 8.54 Cycle Time (s): 120
PRC Over All Lanes (%): 47.3 Total Delay Over All Lanes(pcuHr): 8.68

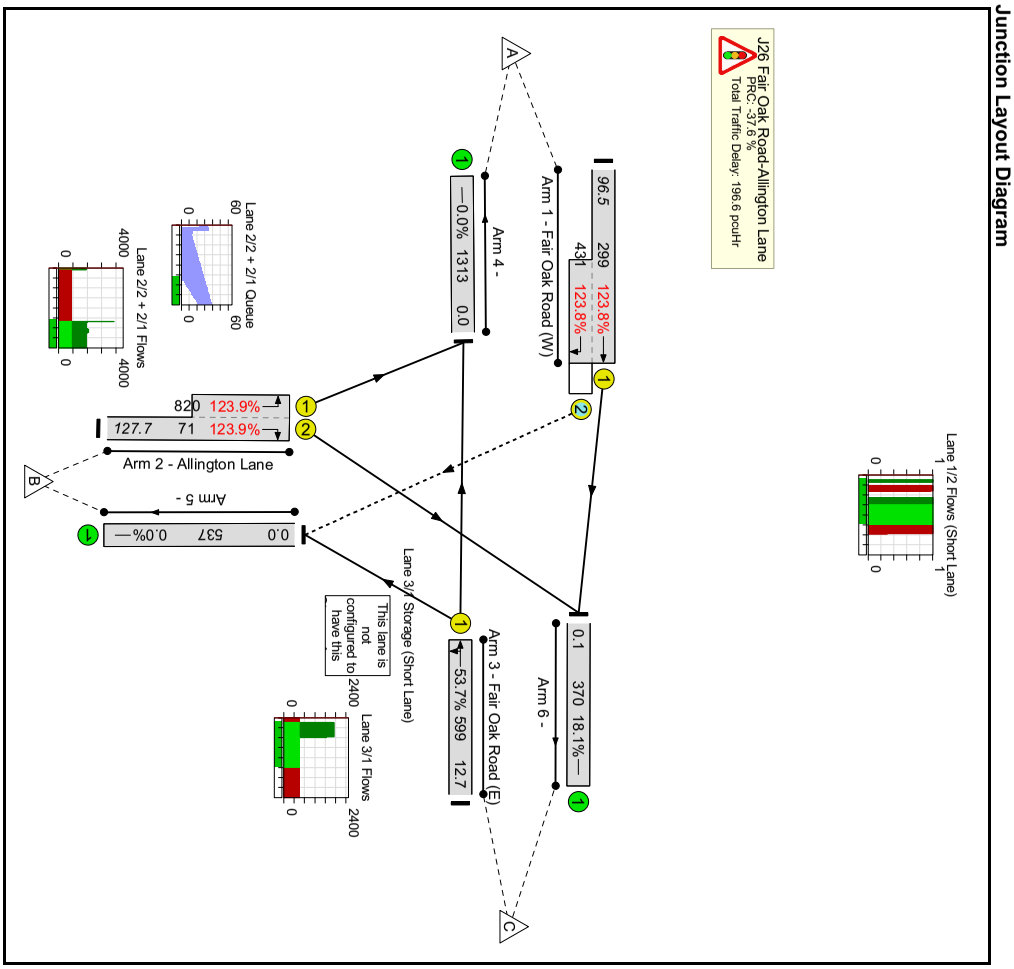
Linsig Report
P:\10440\Traffic\Junctions\j26p Fair Oak Road-Allington Lane PJ\j26 Fair Oak Road-Allington Lane.lsg3x
Scenario 3: 'DS1+DEV AM' (FG3: 'DS1+DEV AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	Tot.
A	0	431	299	730
B	820	0	71	891
C	493	106	0	599
Tot.	1313	537	370	2220

Junction Layout Diagram



Linsig Report
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Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: HCC Improved Design	-	-	-		-	-	-	-	-	-	**123.9%**	**301**	**0**	**47**	**196.6**	-	-
J26 Fair Oak Road-Allington Lane	-	-	-		-	-	-	-	-	-	**123.9%**	**301**	**0**	**47**	**196.6**	-	-
1/1+1/2	Fair Oak Road (W) Right Ahead	U+O	A		1	68	-	730	1930:2055	242+348	123.8 : 123.8%	301	0	47	83.7	412.5	96.5
2/2+2/1	Allington Lane Left Right	U	B		1	42	-	891	1915:1940	57+662	123.9 : 123.9%	-	-	-	109.7	443.0	127.7
3/1	Fair Oak Road (E) Ahead Left	U	C		1	68	-	599	1940	1115	53.7%	-	-	-	3.2	19.2	12.7
6/1		U	-		-	-	-	370	1965	1965	18.1%	-	-	-	0.1	1.1	0.1

C1 PRC for Signalled Lanes (%): -37.6 Total Delay for Signalled Lanes (pcuHr): 196.50 Cycle Time (s): 120
PRC Over All Lanes (%): -37.6 Total Delay Over All Lanes(pcuHr): 196.61

Linsig Report
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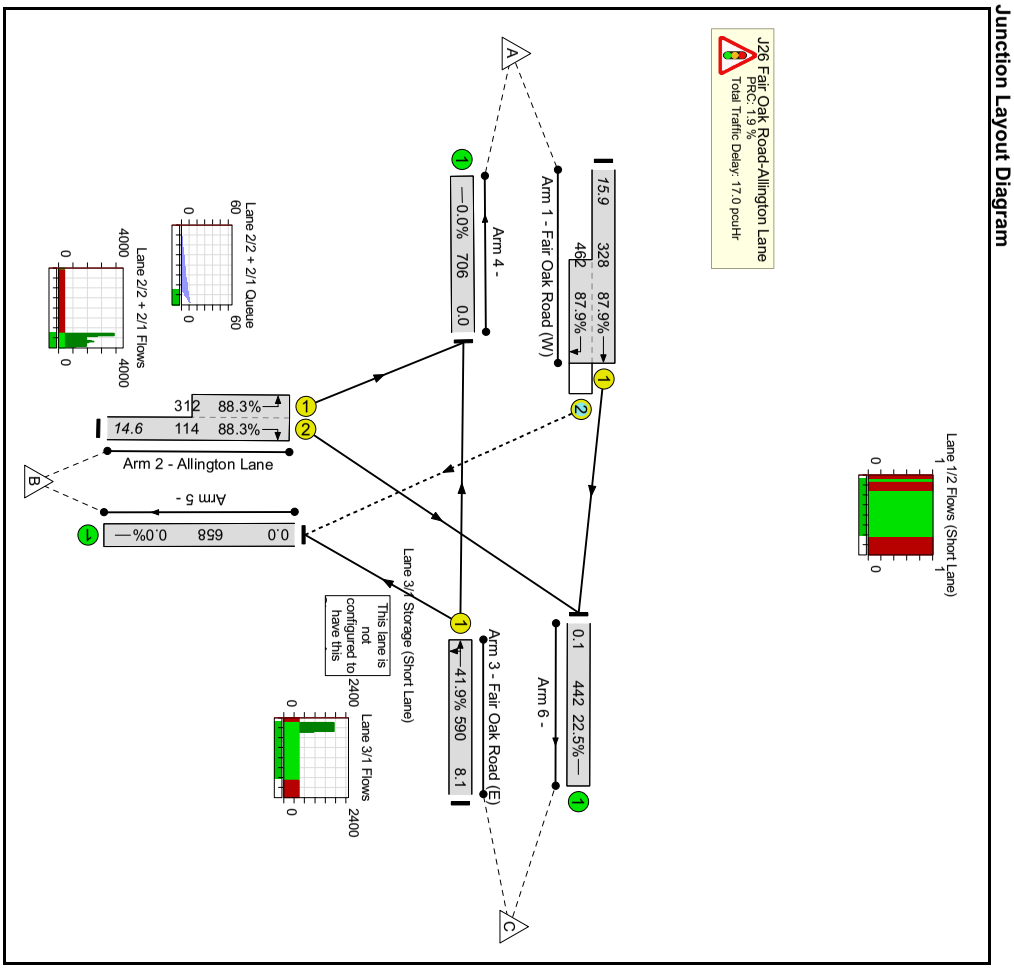
Scenario 4: 'DS1+DEV PM' (FG4: 'DS1+DEV PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	Tot.
A	0	462	328	790
B	312	0	114	426
C	394	196	0	590
Tot.	706	658	442	1806

Junction Layout Diagram



Linsig Report
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Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: HCC Improved Design	-	-	-		-	-	-	-	-	-	**88.3%**	**462**	**0**	**0**	**17.0**	-	-
J26 Fair Oak Road-Allington Lane	-	-	-		-	-	-	-	-	-	**88.3%**	**462**	**0**	**0**	**17.0**	-	-
1/1+1/2	Fair Oak Road (W) Right Ahead	U+O	A		1	86	-	790	1930:2055	373+526	87.9 : 87.9%	462	0	0	6.8	31.1	15.9
2/2+2/1	Allington Lane Left Right	U	B		1	24	-	426	1915:1940	129+353	88.3 : 88.3%	-	-	-	8.6	72.9	14.6
3/1	Fair Oak Road (E) Ahead Left	U	C		1	86	-	590	1940	1407	41.9%	-	-	-	1.4	8.7	8.1
6/1		U	-		-	-	-	442	1965	1965	22.5%	-	-	-	0.1	1.2	0.1

C1 PRC for Signalled Lanes (%): 1.9 Total Delay for Signalled Lanes (pcuHr): 16.88 Cycle Time (s): 120
PRC Over All Lanes (%): 1.9 Total Delay Over All Lanes(pcuHr): 17.03

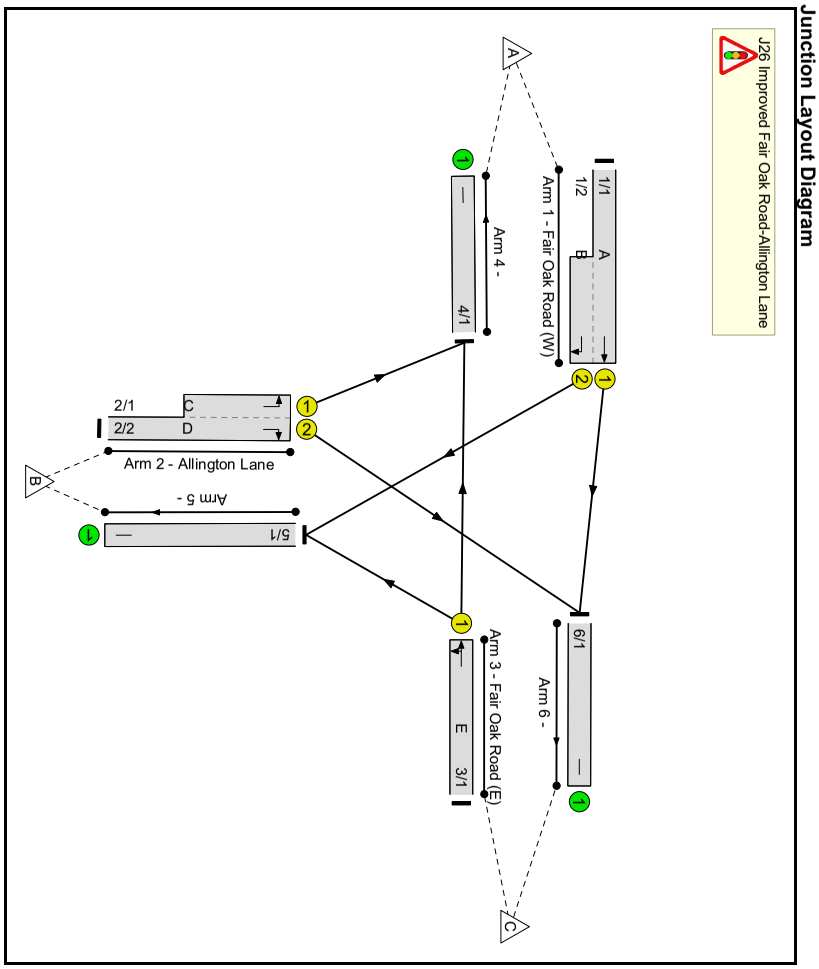
Linsig Report
P:\10440\Traffic\Junctions\j26p Fair Oak Road-Allington Lane PJ\j26 Improved Fair Oak Road-Allington Lane.lsg3x

Linsig Report

User and Project Details

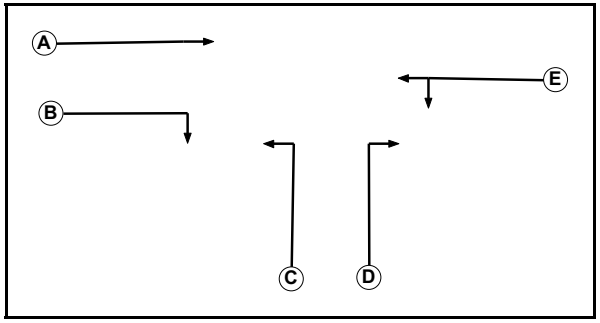
Project:	**Land at Eastleigh**
Title:	**BCL Improved Layout**
Location:	
File name:	j26 Improved Fair Oak Road-Allington Lane.lsg3x
Author:	SMT
Company:	Brookbanks Consulting Ltd

Junction Layout Diagram



Linsig Report
P:\10440\Traffic\Junctions\j26p Fair Oak Road-Allington Lane PJ\j26 Improved Fair Oak Road-Allington Lane.lsg3x

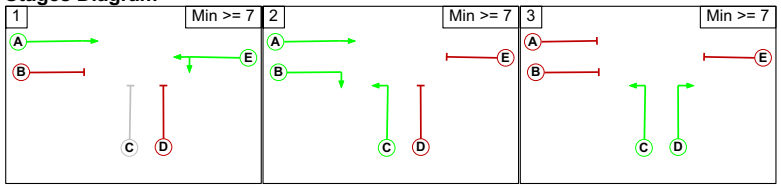
Phase Diagram



Phase Intergreens Matrix

		Starting Phase				
		A	B	C	D	E
Terminating Phase	A		-	-	5	-
	B	-		-	5	5
	C	-	-		-	-
	D	5	5	-		5
	E	-	5	-	5	

Stages Diagram



Linsig Report
P:\10440\Traffic\Junctions\j26p Fair Oak Road-Allington Lane PJ\j26 Improved Fair Oak Road-Allington Lane.lsg3x

Lane Input Data

Junction: J26 Improved Fair Oak Road-Allington Lane													
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 (Fair Oak Road (W))	U	A	2	3	60.0	Geom	-	3.15	0.00	Y	Arm 6 Ahead	Inf
1/2 (Fair Oak Road (W))	U	B	2	3	7.0	Geom	-	3.00	0.00	N	Arm 5 Right	Inf
2/1 (Allington Lane)	U	C	2	3	7.0	Geom	-	3.25	0.00	Y	Arm 4 Left	Inf
2/2 (Allington Lane)	U	D	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 6 Right	Inf
3/1 (Fair Oak Road (E))	U	E	2	3	4.0	Geom	-	3.25	0.00	Y	Arm 4 Ahead Arm 5 Left	Inf Inf
6/1	U		2	3	4.0	Geom	-	3.50	0.00	Y		

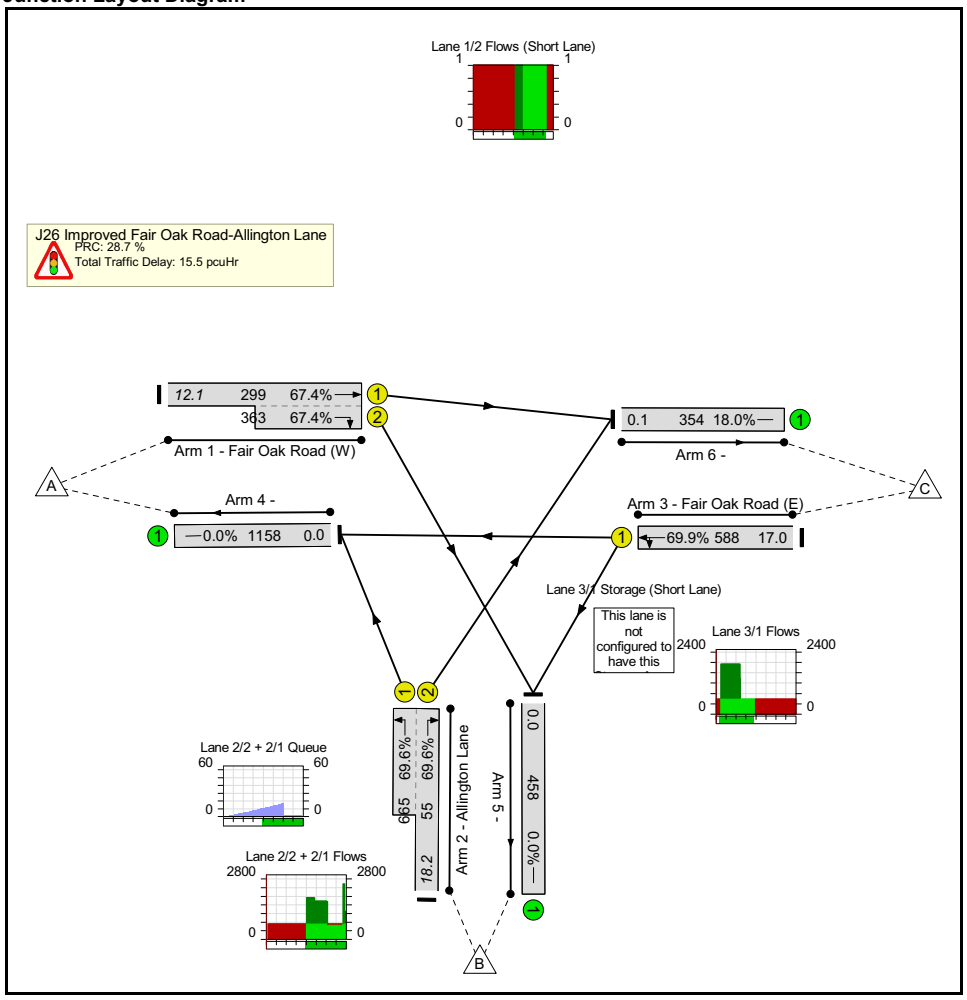
Linsig Report
P:\10440\Traffic\Junctions\j26p Fair Oak Road-Allington Lane PJ\j26 Improved Fair Oak Road-Allington Lane.lsg3x
Scenario 1: 'DS1 AM' (FG1: 'DS1 AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	Tot.
A	0	363	299	662
B	665	0	55	720
C	493	95	0	588
Tot.	1158	458	354	1970

Junction Layout Diagram



Linsig Report
P:\10440\Traffic\Junctions\j26p Fair Oak Road-Allington Lane PJ\j26 Improved Fair Oak Road-Allington Lane.lsg3x

Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: BCL Improved Layout	-	-	-		-	-	-	-	-	-	**69.9%**	**0**	**0**	**0**	**15.5**	-	-
J26 Improved Fair Oak Road-Allington Lane	-	-	-		-	-	-	-	-	-	**69.9%**	**0**	**0**	**0**	**15.5**	-	-
1/1+1/2	Fair Oak Road (W) Right Ahead	U	A B		1	103:47	-	662	1930:2055	444+538	67.4 : 67.4%	-	-	-	3.9	21.3	12.1
2/2+2/1	Allington Lane Left Right	U	D C		1	7:62	-	720	1915:1940	79+956	69.6 : 69.6%	-	-	-	5.8	29.1	18.2
3/1	Fair Oak Road (E) Ahead Left	U	E		1	51	-	588	1940	841	69.9%	-	-	-	5.7	34.7	17.0
6/1		U	-		-	-	-	354	1965	1965	18.0%	-	-	-	0.1	1.1	0.1

C1

PRC for Signalled Lanes (%): 28.7
PRC Over All Lanes (%): 28.7

Total Delay for Signalled Lanes (pcuHr): 15.40
Total Delay Over All Lanes(pcuHr): 15.51

Cycle Time (s): 120

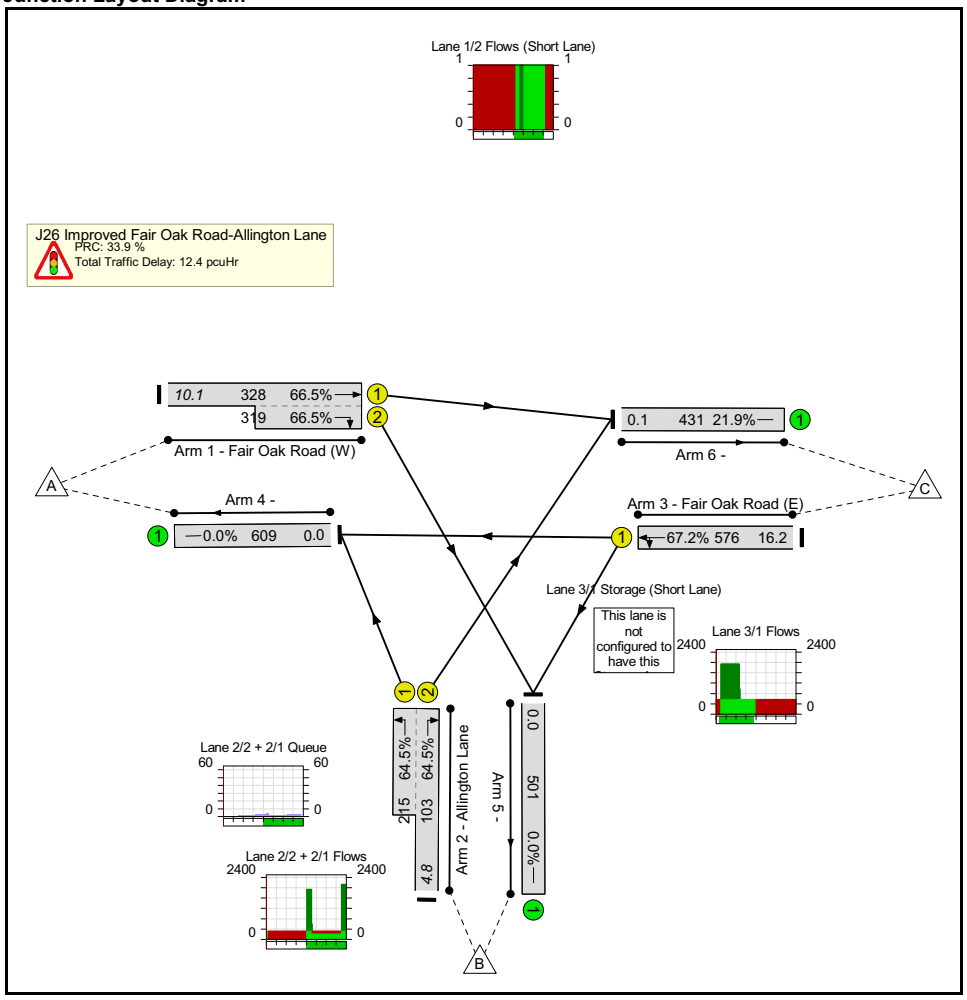
Linsig Report
P:\10440\Traffic\Junctions\j26p Fair Oak Road-Allington Lane PJ\j26 Improved Fair Oak Road-Allington Lane.lsg3x
Scenario 2: 'DS1 PM' (FG2: 'DS1 PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	319	328	647
	B	215	0	103	318
	C	394	182	0	576
	Tot.	609	501	431	1541

Junction Layout Diagram



Linsig Report
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Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: BCL Improved Layout	-	-	-		-	-	-	-	-	-	67.2%	0	0	0	12.4	-	-
J26 Improved Fair Oak Road-Allington Lane	-	-	-		-	-	-	-	-	-	67.2%	0	0	0	12.4	-	-
1/1+1/2	Fair Oak Road (W) Right Ahead	U	A B		1	101:44	-	647	1930:2055	493+480	66.5 : 66.5%	-	-	-	3.6	20.2	10.1
2/2+2/1	Allington Lane Left Right	U	D C		1	9:61	-	318	1915:1940	160+333	64.5 : 64.5%	-	-	-	3.4	38.1	4.8
3/1	Fair Oak Road (E) Ahead Left	U	E		1	52	-	576	1940	857	67.2%	-	-	-	5.3	33.0	16.2
6/1		U	-		-	-	-	431	1965	1965	21.9%	-	-	-	0.1	1.2	0.1
		C1															

PRC for Signalled Lanes (%): 33.9
PRC Over All Lanes (%): 33.9
Total Delay for Signalled Lanes (pcuHr): 12.28
Total Delay Over All Lanes(pcuHr): 12.42
Cycle Time (s): 120

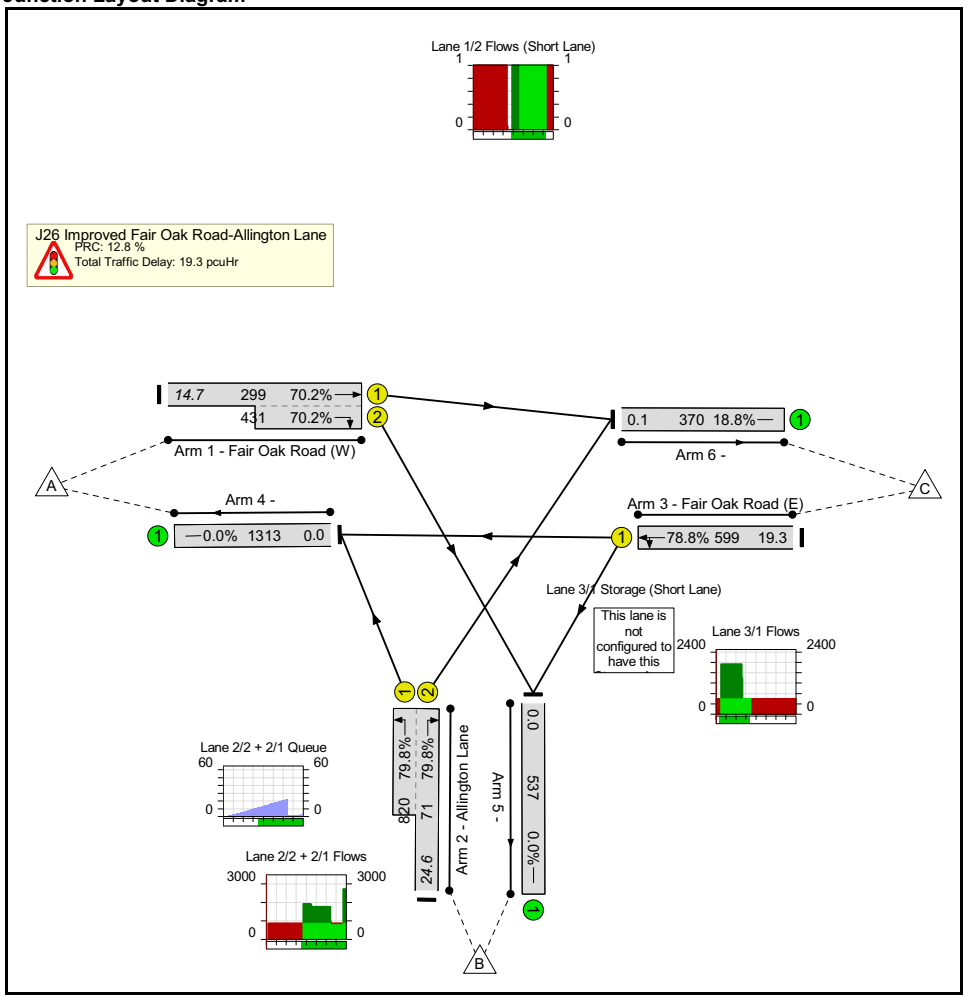
Linsig Report
P:\10440\Traffic\Junctions\j26p Fair Oak Road-Allington Lane PJ\j26 Improved Fair Oak Road-Allington Lane.lsg3x
Scenario 3: 'DS1+DEV AM' (FG3: 'DS1+DEV AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

Origin \ Destination	A	B	C	Tot.
A	0	431	299	730
B	820	0	71	891
C	493	106	0	599
Tot.	1313	537	370	2220

Junction Layout Diagram



Linsig Report
P:\10440\Traffic\Junctions\j26p Fair Oak Road-Allington Lane PJ\j26 Improved Fair Oak Road-Allington Lane.lsg3x

Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: BCL Improved Layout	-	-	-		-	-	-	-	-	-	**79.8%**	**0**	**0**	**0**	**19.3**	-	-
J26 Improved Fair Oak Road-Allington Lane	-	-	-		-	-	-	-	-	-	**79.8%**	**0**	**0**	**0**	**19.3**	-	-
1/1+1/2	Fair Oak Road (W) Right Ahead	U	A B		1	103:52	-	730	1930:2055	426+614	70.2 : 70.2%	-	-	-	4.4	21.7	14.7
2/2+2/1	Allington Lane Left Right	U	D C		1	7:67	-	891	1915:1940	89+1027	79.8 : 79.8%	-	-	-	7.6	30.7	24.6
3/1	Fair Oak Road (E) Ahead Left	U	E		1	46	-	599	1940	760	78.8%	-	-	-	7.2	43.1	19.3
6/1		U	-		-	-	-	370	1965	1965	18.8%	-	-	-	0.1	1.1	0.1

C1

PRC for Signalled Lanes (%): 12.8
PRC Over All Lanes (%): 12.8

Total Delay for Signalled Lanes (pcuHr): 19.16
Total Delay Over All Lanes(pcuHr): 19.27

Cycle Time (s): 120

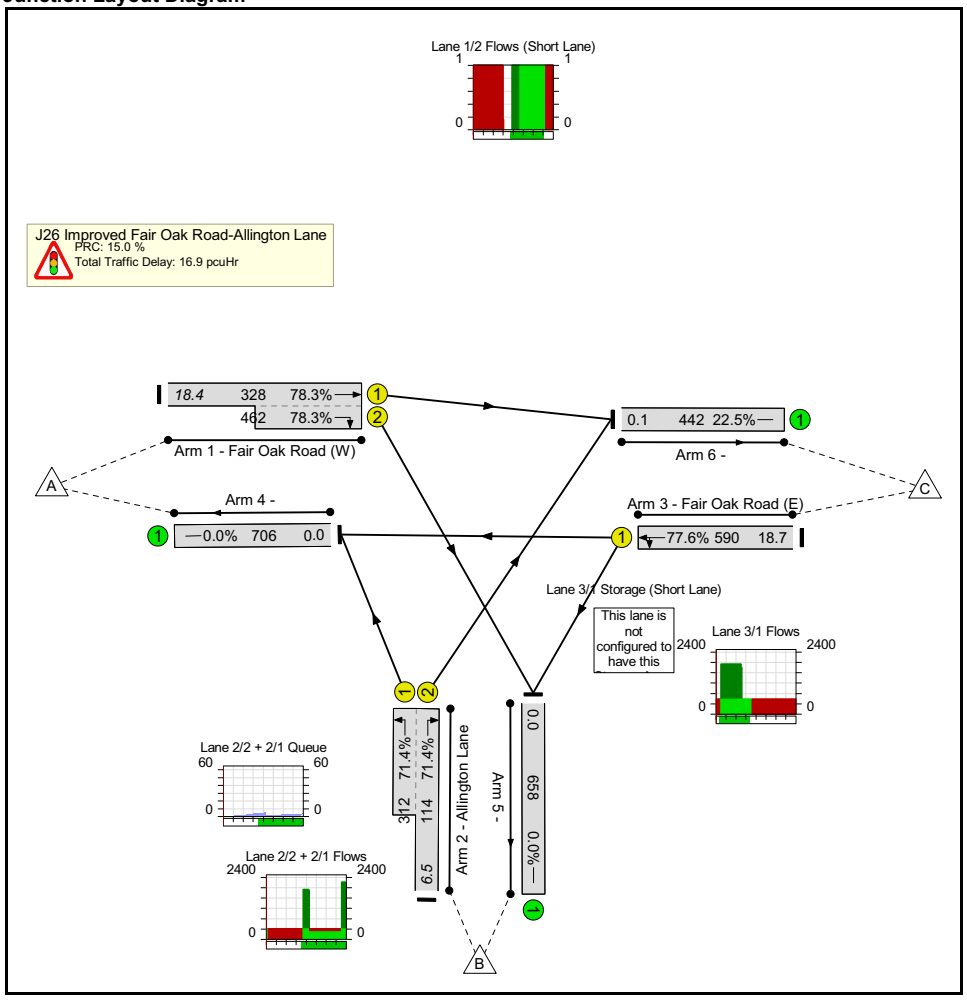
Linsig Report
P:\10440\Traffic\Junctions\j26p Fair Oak Road-Allington Lane PJ\j26 Improved Fair Oak Road-Allington Lane.lsg3x
Scenario 4: 'DS1+DEV PM' (FG4: 'DS1+DEV PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	462	328	790
	B	312	0	114	426
	C	394	196	0	590
	Tot.	706	658	442	1806

Junction Layout Diagram



Linsig Report
P:\10440\Traffic\Junctions\j26p Fair Oak Road-Allington Lane PJ\j26 Improved Fair Oak Road-Allington Lane.lsg3x

Link Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: BCL Improved Layout	-	-	-		-	-	-	-	-	-	**78.3%**	**0**	**0**	**0**	**16.9**	-	-
J26 Improved Fair Oak Road-Allington Lane	-	-	-		-	-	-	-	-	-	**78.3%**	**0**	**0**	**0**	**16.9**	-	-
1/1+1/2	Fair Oak Road (W) Right Ahead	U	A B		1	101:50	-	790	1930:2055	419+590	78.3 : 78.3%	-	-	-	5.8	26.3	18.4
2/2+2/1	Allington Lane Left Right	U	D C		1	9:67	-	426	1915:1940	160+437	71.4 : 71.4%	-	-	-	4.1	34.6	6.5
3/1	Fair Oak Road (E) Ahead Left	U	E		1	46	-	590	1940	760	77.6%	-	-	-	6.9	42.3	18.7
6/1		U	-		-	-	-	442	1965	1965	22.5%	-	-	-	0.1	1.2	0.1

C1

PRC for Signalled Lanes (%): 15.0
PRC Over All Lanes (%): 15.0

Total Delay for Signalled Lanes (pcuHr): 16.80
Total Delay Over All Lanes(pcuHr): 16.94

Cycle Time (s): 120

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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TRL SOFTWARE SALES
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EMAIL: software@trl.co.uk

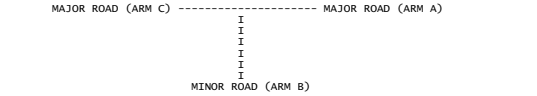
Run with file:-
"P:\10440\Traffic\Junctions\j27p East Alan Drayton Way-Fair Oak Road PJ\
j27p East Alan Drayton Way-Fair Oak Road DS1AM.vpi"
(drive-on-the-left) at 14:27:34 on Friday, 25 November 2016

.RUN INFORMATION

RUN TITLE	: j27p 10440 East Alan Drayton Way/Fair Oak Road DS1AM
LOCATION	: Eastleigh
DATE	: 25/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Alan Drayton Way (West)
ARM B IS Fair Oak Road
ARM C IS Alan Drayton Way (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.50 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.50 M.
- VISIBILITY	(VC-B)200.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 130.0 M.
- VISIBILITY TO RIGHT	(VB-A) 200.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	8.80 M.
WIDTH AT 5 M FROM JUNCTION	4.40 M.
WIDTH AT 10 M FROM JUNCTION	4.40 M.
WIDTH AT 15 M FROM JUNCTION	2.20 M.
WIDTH AT 20 M FROM JUNCTION	2.20 M.
- LENGTH OF FLARED SECTION	1 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
787.38	0.25	0.25

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

.TRAFFIC DEMAND DATA

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

.Demand set: j28p 10440 East Alan Drayton Way/Fair Oak Road DS1AM

TIME PERIOD BEGINS 08.00 AND ENDS 09.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j28p 10440 East Alan Drayton Way/Fair Oak Road DS1AM

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS / (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
08.00 - 09.00	ARM A	0.000 (0.0)	0.000 (0.0)	1.000 (10.0)
		0.0	0.0	539.0
	ARM B	0.000 (0.0)	0.000 (0.0)	1.000 (10.0)
		0.0	0.0	105.0
	ARM C	0.901 (10.0)	0.099 (0.0)	0.000 (0.0)
		1120.0	123.0	0.0
		(10.0)	(10.0)	(0.0)

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

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	1.75	9.87	0.177		0.00	0.21	3.1		0.12
B-A	0.00	3.30	0.000		0.00	0.00	0.0		0.00
C-A	18.67								
C-B	2.05	9.74	0.210		0.00	0.26	3.8		0.13
A-B	0.00								
A-C	8.93								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	1.75	9.87	0.177		0.21	0.21	3.2		0.12
B-A	0.00	3.30	0.000		0.00	0.00	0.0		0.00
C-A	18.67								
C-B	2.05	9.74	0.210		0.26	0.27	4.0		0.13
A-B	0.00								
A-C	8.93								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	1.75	9.87	0.177		0.21	0.21	3.2		0.12
B-A	0.00	3.30	0.000		0.00	0.00	0.0		0.00
C-A	18.67								
C-B	2.05	9.74	0.210		0.27	0.27	4.0		0.13
A-B	0.00								
A-C	8.93								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	1.75	9.87	0.177		0.21	0.22	3.2		0.12
B-A	0.00	3.30	0.000		0.00	0.00	0.0		0.00
C-A	18.67								
C-B	2.05	9.74	0.210		0.27	0.27	4.0		0.13
A-B	0.00								
A-C	8.93								

.

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.2
08.30	0.2
08.45	0.2
09.00	0.2

QUEUE FOR STREAM B-A

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

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.3
08.30	0.3
08.45	0.3
09.00	0.3

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	105.0	105.0	12.7	0.12	12.7	0.12
B-A	0.0	0.0	0.0	0.00	0.0	0.00
C-A	1120.0	1120.0				
C-B	123.0	123.0	15.7	0.13	15.7	0.13
A-B	0.0	0.0				
A-C	535.8	535.8				
ALL	1883.8	1883.8	28.5	0.02	28.5	0.02

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

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

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

Run with file:-
"P:\10440\Traffic\Junctions\j27p East Alan Drayton Way-Fair Oak Road PJ\
j27p East Alan Drayton Way-Fair Oak Road DS1PM.vp1"
(drive-on-the-left) at 14:27:45 on Friday, 25 November 2016

.RUN INFORMATION

RUN TITLE	: j27p 10440 East Alan Drayton Way/Fair Oak Road DS1PM
LOCATION	: Eastleigh
DATE	: 25/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

ARM A IS Alan Drayton Way (West)
ARM B IS Fair Oak Road
ARM C IS Alan Drayton Way (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.50 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.50 M.
- VISIBILITY	(VC-B)200.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 130.0 M.
- VISIBILITY TO RIGHT	(VB-A) 200.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	8.80 M.
WIDTH AT 5 M FROM JUNCTION	4.40 M.
WIDTH AT 10 M FROM JUNCTION	4.40 M.
WIDTH AT 15 M FROM JUNCTION	2.20 M.
WIDTH AT 20 M FROM JUNCTION	2.20 M.
- LENGTH OF FLARED SECTION	1 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For Slope For Opposing STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
787.38	0.25	0.25

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

.TRAFFIC DEMAND DATA

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

.Demand set: j27p 10440 East Alan Drayton Way/Fair Oak Road DS1PM

TIME PERIOD BEGINS 17.00 AND ENDS 18.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j27p 10440 East Alan Drayton Way/Fair Oak Road DS1PM

TIME	FROM/TO	ARM A	ARM B	ARM C
17.00 - 18.00				
	ARM A	0.000	0.000	1.000
		0.0	0.0	608.0
		(0.0)	(10.0)	(10.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	89.0
		(10.0)	(0.0)	(10.0)
	ARM C	0.753	0.247	0.000
		690.0	226.0	0.0
		(10.0)	(10.0)	(0.0)

TURNING PROPORTIONS (PERCENTAGE OF H.V.S)
TURNING COUNTS
TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA
DEFAULT PROPORTIONS OF HEAVY VEHICLES ARE USED

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	1.48	9.57	0.155		0.00	0.18	2.6		0.12
B-A	0.00	3.47	0.000		0.00	0.00	0.0		0.00
C-A	11.50								
C-B	3.77	9.44	0.399		0.00	0.65	9.2		0.17
A-B	0.00								
A-C	10.13								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	1.48	9.57	0.155		0.18	0.18	2.7		0.12
B-A	0.00	3.46	0.000		0.00	0.00	0.0		0.00
C-A	11.50								
C-B	3.77	9.44	0.399		0.65	0.66	9.8		0.18
A-B	0.00								
A-C	10.13								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	1.48	9.57	0.155		0.18	0.18	2.7		0.12
B-A	0.00	3.46	0.000		0.00	0.00	0.0		0.00
C-A	11.50								
C-B	3.77	9.44	0.399		0.66	0.66	9.9		0.18
A-B	0.00								
A-C	10.13								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	1.48	9.57	0.155		0.18	0.18	2.7		0.12
B-A	0.00	3.46	0.000		0.00	0.00	0.0		0.00
C-A	11.50								
C-B	3.77	9.44	0.399		0.66	0.66	9.9		0.18
A-B	0.00								
A-C	10.13								

.

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.2
17.30	0.2
17.45	0.2
18.00	0.2

.

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

.

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	0.7	*
17.30	0.7	*
17.45	0.7	*
18.00	0.7	*

.

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	89.0	89.0	10.8	0.12	10.8	0.12
B-A	0.0	0.0	0.0	0.00	0.0	0.00
C-A	690.0	690.0				
C-B	226.0	226.0	38.8	0.17	38.8	0.17
A-B	0.0	0.0				
A-C	608.0	608.0				
ALL	1613.0	1613.0	49.7	0.03	49.7	0.03

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

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

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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TEL: CROWTHORNE (01344) 770758, FAX: 770356
EMAIL: software@trl.co.uk

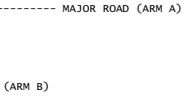
Run with file:-
"P:\10440\Traffic\Junctions\j27p East Alan Drayton Way-Fair Oak Road PJ\
j27p East Alan Drayton Way-Fair Oak Road DS1AM+DEV.vpi"
(drive-on-the-left) at 14:27:40 on Friday, 25 November 2016

.RUN INFORMATION

RUN TITLE	: j27p 10440 East Alan Drayton Way/Fair Oak Road DS1AM+DEV
LOCATION	: Eastleigh
DATE	: 25/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Alan Drayton Way (West)
ARM B IS Fair Oak Road
ARM C IS Alan Drayton Way (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.50 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.50 M.
- VISIBILITY	(VC-B)200.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 130.0 M.
- VISIBILITY TO RIGHT	(VB-A) 200.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	8.80 M.
WIDTH AT 5 M FROM JUNCTION	4.40 M.
WIDTH AT 10 M FROM JUNCTION	4.40 M.
WIDTH AT 15 M FROM JUNCTION	2.20 M.
WIDTH AT 20 M FROM JUNCTION	2.20 M.
- LENGTH OF FLARED SECTION	1 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
787.38	0.25	0.25

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

.TRAFFIC DEMAND DATA

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

.Demand set: j27p 10440 East Alan Drayton Way/Fair Oak Road DS1AM+DEV

TIME PERIOD BEGINS 08.00 AND ENDS 09.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j27p 10440 East Alan Drayton Way/Fair Oak Road DS1AM+DEV

TIME	FROM/TO	TURNING PROPORTIONS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
08.00 - 09.00	ARM A	0.000	0.000	1.000
		0.0	0.0	603.0
		(0.0)	(10.0)	(10.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	105.0
		(10.0)	(0.0)	(10.0)
	ARM C	0.911	0.089	0.000
		1260.0	123.0	0.0
		(10.0)	(10.0)	(0.0)

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

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	1.75	9.59	0.182		0.00	0.22	3.2		0.13
B-A	0.00	2.81	0.000		0.00	0.00	0.0		0.00
C-A	21.00								
C-B	2.05	9.46	0.217		0.00	0.27	3.9		0.13
A-B	0.00								
A-C	10.05								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	1.75	9.59	0.182		0.22	0.22	3.3		0.13
B-A	0.00	2.81	0.000		0.00	0.00	0.0		0.00
C-A	21.00								
C-B	2.05	9.46	0.217		0.27	0.27	4.1		0.13
A-B	0.00								
A-C	10.05								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	1.75	9.59	0.182		0.22	0.22	3.3		0.13
B-A	0.00	2.81	0.000		0.00	0.00	0.0		0.00
C-A	21.00								
C-B	2.05	9.46	0.217		0.27	0.28	4.1		0.13
A-B	0.00								
A-C	10.05								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	1.75	9.59	0.182		0.22	0.22	3.3		0.13
B-A	0.00	2.81	0.000		0.00	0.00	0.0		0.00
C-A	21.00								
C-B	2.05	9.46	0.217		0.28	0.28	4.1		0.14
A-B	0.00								
A-C	10.05								

.

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.2
08.30	0.2
08.45	0.2
09.00	0.2

QUEUE FOR STREAM B-A

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

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.3
08.30	0.3
08.45	0.3
09.00	0.3

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	105.0	105.0	13.2	0.13	13.2	0.13
B-A	0.0	0.0	0.0	0.00	0.0	0.00
C-A	1260.0	1260.0				
C-B	123.0	123.0	16.3	0.13	16.3	0.13
A-B	0.0	0.0				
A-C	603.0	603.0				
ALL	2091.0	2091.0	29.5	0.01	29.5	0.01

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

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

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

FOR SALES AND DISTRIBUTION INFORMATION,
PROGRAM ADVICE AND MAINTENANCE CONTACT:
TRL SOFTWARE SALES
TEL: CROWTHORNE (01344) 770758, FAX: 770356
EMAIL: software@trl.co.uk

Run with file:-
"P:\10440\Traffic\Junctions\j27p East Alan Drayton Way-Fair Oak Road PJ\
j27p East Alan Drayton Way-Fair Oak Road DS1PM+DEV.vpi"
(drive-on-the-left) at 14:27:51 on Friday, 25 November 2016

.RUN INFORMATION

RUN TITLE	: j27p 10440 East Alan Drayton Way/Fair Oak Road DS1PM+DEV
LOCATION	: Eastleigh
DATE	: 25/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

ARM A IS Alan Drayton Way (West)
ARM B IS Fair Oak Road
ARM C IS Alan Drayton Way (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.50 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.50 M.
- VISIBILITY	(VC-B)200.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 130.0 M.
- VISIBILITY TO RIGHT	(VB-A) 200.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	8.80 M.
WIDTH AT 5 M FROM JUNCTION	4.40 M.
WIDTH AT 10 M FROM JUNCTION	4.40 M.
WIDTH AT 15 M FROM JUNCTION	2.20 M.
WIDTH AT 20 M FROM JUNCTION	2.20 M.
- LENGTH OF FLARED SECTION	1 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For Slope For Opposing STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
787.38	0.25	0.25

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

.TRAFFIC DEMAND DATA

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

.Demand set: j27p 10440 East Alan Drayton Way/Fair Oak Road DS1PM+DEV

TIME PERIOD BEGINS 17.00 AND ENDS 18.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j27p 10440 East Alan Drayton Way/Fair Oak Road DS1PM+DEV

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
17.00 - 18.00	ARM A	0.000 (0.0)	0.000 (10.0)	1.000 (10.0)
		0.0	0.0	739.0
	ARM B	0.000 (0.0)	0.000 (10.0)	1.000 (10.0)
		0.0	0.0	89.0
	ARM C	0.775 (10.0)	0.225 (10.0)	0.000 (0.0)
		777.0	226.0	0.0

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

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	1.48	9.03	0.164		0.00	0.19	2.8		0.13
B-A	0.00	2.88	0.000		0.00	0.00	0.0		0.00
C-A	12.95								
C-B	3.77	8.91	0.423		0.00	0.72	10.1		0.19
A-B	0.00								
A-C	12.32								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	1.48	9.03	0.164		0.19	0.20	2.9		0.13
B-A	0.00	2.86	0.000		0.00	0.00	0.0		0.00
C-A	12.95								
C-B	3.77	8.91	0.423		0.72	0.72	10.8		0.19
A-B	0.00								
A-C	12.32								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	1.48	9.03	0.164		0.20	0.20	2.9		0.13
B-A	0.00	2.86	0.000		0.00	0.00	0.0		0.00
C-A	12.95								
C-B	3.77	8.91	0.423		0.72	0.73	10.9		0.19
A-B	0.00								
A-C	12.32								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	1.48	9.03	0.164		0.20	0.20	2.9		0.13
B-A	0.00	2.86	0.000		0.00	0.00	0.0		0.00
C-A	12.95								
C-B	3.77	8.91	0.423		0.73	0.73	10.9		0.19
A-B	0.00								
A-C	12.32								

.
QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.2
17.30	0.2
17.45	0.2
18.00	0.2

.
QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

.
QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	0.7	*
17.30	0.7	*
17.45	0.7	*
18.00	0.7	*

.
QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	89.0	89.0	11.6	0.13	11.6	0.13
B-A	0.0	0.0	0.0	0.00	0.0	0.00
C-A	777.0	777.0				
C-B	226.0	226.0	42.7	0.19	42.8	0.19
A-B	0.0	0.0				
A-C	739.0	739.0				
ALL	1831.0	1831.0	54.3	0.03	54.4	0.03

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

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

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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TEL: CROWTHORNE (01344) 770758, FAX: 770356
EMAIL: software@trl.co.uk

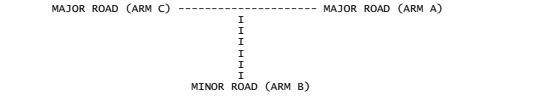
Run with file:-
"P:\10440\Traffic\Junctions\j28p West Alan Drayton Way-Fair Oak Road PJ\
j28p West Alan Drayton Way-Fair Oak Road DS1AM.vpi"
(drive-on-the-left) at 10:23:08 on Monday, 28 November 2016

.RUN INFORMATION

RUN TITLE	: j28p 10440 West Alan Drayton Way/Fair Oak Road DS1AM
LOCATION	: Eastleigh
DATE	: 25/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Alan Drayton Way (West)
ARM B IS Fair Oak Road
ARM C IS Alan Drayton Way (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.50 M.
- VISIBILITY	(VC-B)160.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 130.0 M.
- VISIBILITY TO RIGHT	(VB-A) 160.0 M.
- LANE 1 WIDTH	(WB-C) 4.00 M.
- LANE 2 WIDTH	(WB-A) 4.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
797.21	0.26	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
662.89	0.25	0.10	0.16	0.36

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
760.94	0.24	0.24

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

.TRAFFIC DEMAND DATA

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

.Demand set: j28p 10440 West Alan Drayton Way/Fair Oak Road DS1AM

TIME PERIOD BEGINS 08.00 AND ENDS 09.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j28p 10440 West Alan Drayton Way/Fair Oak Road DS1AM

TIME	FROM/TO	ARM A	ARM B	ARM C
08.00 - 09.00				
	ARM A	0.000	0.175	0.825
		0.0	107.0	505.0
		(0.0)	(10.0)	(10.0)
	ARM B	1.000	0.000	0.000
		259.0	0.0	0.0
		(10.0)	(0.0)	(10.0)
	ARM C	1.000	0.000	0.000
		1334.0	0.0	0.0
		(10.0)	(10.0)	(0.0)

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

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.00	7.32	0.000		0.00	0.00	0.0		0.00
B-A	4.20	4.22	0.996		0.00	7.32	71.4		1.44
C-A	22.23								
C-B	0.00	9.05	0.000		0.00	0.00	0.0		0.00
A-B	1.78								
A-C	8.42								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.00	7.31	0.000		0.00	0.00	0.0		0.00
B-A	4.20	4.22	0.996		7.32	10.47	134.9		2.62
C-A	22.23								
C-B	0.00	9.05	0.000		0.00	0.00	0.0		0.00
A-B	1.78								
A-C	8.42								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.00	7.31	0.000		0.00	0.00	0.0		0.00
B-A	4.20	4.22	0.996		10.47	12.86	175.6		3.24
C-A	22.23								
C-B	0.00	9.05	0.000		0.00	0.00	0.0		0.00
A-B	1.78								
A-C	8.42								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.00	7.31	0.000		0.00	0.00	0.0		0.00
B-A	4.20	4.22	0.996		12.86	14.85	208.2		3.73
C-A	22.23								
C-B	0.00	9.05	0.000		0.00	0.00	0.0		0.00
A-B	1.78								
A-C	8.42								

.

QUEUE FOR STREAM B-C

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

.

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	7.3	*******
08.30	10.5	**********
08.45	12.9	************
09.00	14.8	**************

QUEUE FOR STREAM C-B

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	(VEH/H)	* QUEUEING * DELAY * (MIN)	(MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	(MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	252.0	252.0	590.0	2.34	616.2	2.45
C-A	1334.0	1334.0				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	107.0	107.0				
A-C	505.0	505.0				
ALL	2198.0	2198.0	590.0	0.27	616.2	0.28

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

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

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

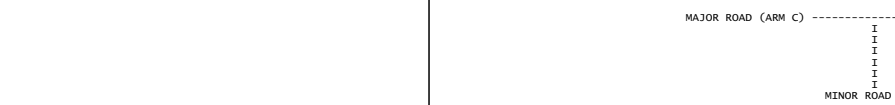
Run with file:-
"P:\10440\Traffic\Junctions\j28p West Alan Drayton Way-Fair Oak Road PJ\
j28p West Alan Drayton Way-Fair Oak Road DS1PM.vp1"
(drive-on-the-left) at 10:23:42 on Monday, 28 November 2016

.RUN INFORMATION

RUN TITLE	: j28p 10440 West Alan Drayton Way/Fair Oak Road DS1PM
LOCATION	: Eastleigh
DATE	: 25/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Alan Drayton Way (West)
ARM B IS Fair Oak Road
ARM C IS Alan Drayton Way (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.50 M.
- VISIBILITY	(VC-B)160.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 130.0 M.
- VISIBILITY TO RIGHT	(VB-A) 160.0 M.
- LANE 1 WIDTH	(WB-C) 4.00 M.
- LANE 2 WIDTH	(WB-A) 4.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
797.21	0.26	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
662.89	0.25	0.10	0.16	0.36

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
760.94	0.24	0.24

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

.TRAFFIC DEMAND DATA

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

.Demand set: j28p 10440 West Alan Drayton Way/Fair Oak Road DS1PM

TIME PERIOD BEGINS 17.00 AND ENDS 18.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j28p 10440 West Alan Drayton Way/Fair Oak Road DS1PM

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

TIME	FROM/TO	ARM A	ARM B	ARM C
17.00 - 18.00	ARM A	0.000	0.185	0.815
		0.0	144.0	636.0
		(0.0)	(10.0)	(10.0)
	ARM B	1.000	0.000	0.000
		147.0	0.0	0.0
		(10.0)	(0.0)	(10.0)
	ARM C	1.000	0.000	0.000
		784.0	0.0	0.0
		(10.0)	(0.0)	(0.0)

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

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.00	8.03	0.000		0.00	0.00	0.0		0.00
B-A	2.45	5.06	0.484		0.00	0.90	12.1		0.37
C-A	13.07								
C-B	0.00	8.36	0.000		0.00	0.00	0.0		0.00
A-B	2.40								
A-C	10.60								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.00	8.00	0.000		0.00	0.00	0.0		0.00
B-A	2.45	5.06	0.484		0.90	0.92	13.6		0.38
C-A	13.07								
C-B	0.00	8.36	0.000		0.00	0.00	0.0		0.00
A-B	2.40								
A-C	10.60								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.00	8.00	0.000		0.00	0.00	0.0		0.00
B-A	2.45	5.06	0.484		0.92	0.92	13.8		0.38
C-A	13.07								
C-B	0.00	8.36	0.000		0.00	0.00	0.0		0.00
A-B	2.40								
A-C	10.60								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.00	8.00	0.000		0.00	0.00	0.0		0.00
B-A	2.45	5.06	0.484		0.92	0.93	13.9		0.38
C-A	13.07								
C-B	0.00	8.36	0.000		0.00	0.00	0.0		0.00
A-B	2.40								
A-C	10.60								

.

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

.

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.9 *
17.30	0.9 *
17.45	0.9 *
18.00	0.9 *

.

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

.

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	147.0	147.0	53.4	0.36	53.5	0.36
C-A	784.0	784.0				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	144.0	144.0				
A-C	636.0	636.0				
ALL	1711.0	1711.0	53.4	0.03	53.5	0.03

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

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

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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EMAIL: software@trl.co.uk

Run with file:-
"P:\10440\Traffic\Junctions\j28p West Alan Drayton Way-Fair Oak Road PJ\
j28p West Alan Drayton Way-Fair Oak Road DS1AM+DEV.vpi"
(drive-on-the-left) at 10:23:25 on Monday, 28 November 2016

.RUN INFORMATION

RUN TITLE	: j28p 10440 West Alan Drayton Way/Fair Oak Road DS1AM+DEV
LOCATION	: Eastleigh
DATE	: 25/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

ARM A IS Alan Drayton Way (West)
ARM B IS Fair Oak Road
ARM C IS Alan Drayton Way (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.50 M.
- VISIBILITY	(VC-B)160.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 130.0 M.
- VISIBILITY TO RIGHT	(VB-A) 160.0 M.
- LANE 1 WIDTH	(WB-C) 4.00 M.
- LANE 2 WIDTH	(WB-A) 4.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
797.21	0.26	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
662.89	0.25	0.10	0.16	0.36

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
760.94	0.24	0.24

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

.TRAFFIC DEMAND DATA

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

.Demand set: j28p 10440 West Alan Drayton Way/Fair Oak Road DS1AM+DEV

TIME PERIOD BEGINS 08.00 AND ENDS 09.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j28p 10440 West Alan Drayton Way/Fair Oak Road DS1AM+DEV

TIME	FROM/TO	ARM A	ARM B	ARM C
08.00 - 09.00				
	ARM A	0.000	0.158	0.842
		0.0	107.0	569.0
		(0.0)	(10.0)	(10.0)
	ARM B	1.000	0.000	0.000
		252.0	0.0	0.0
		(10.0)	(0.0)	(10.0)
	ARM C	1.000	0.000	0.000
		1474.0	0.0	0.0
		(10.0)	(10.0)	(0.0)

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

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.00	7.11	0.000		0.00	0.00	0.0		0.00
B-A	4.20	3.58	1.173		0.00	13.11	112.2		2.44
C-A	24.57								
C-B	0.00	8.79	0.000		0.00	0.00	0.0		0.00
A-B	1.78								
A-C	9.48								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.00	7.11	0.000		0.00	0.00	0.0		0.00
B-A	4.20	3.58	1.173		13.11	23.07	272.1		5.61
C-A	24.57								
C-B	0.00	8.79	0.000		0.00	0.00	0.0		0.00
A-B	1.78								
A-C	9.48								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.00	7.11	0.000		0.00	0.00	0.0		0.00
B-A	4.20	3.58	1.173		23.07	32.70	418.5		8.27
C-A	24.57								
C-B	0.00	8.79	0.000		0.00	0.00	0.0		0.00
A-B	1.78								
A-C	9.48								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.00	7.11	0.000		0.00	0.00	0.0		0.00
B-A	4.20	3.58	1.173		32.70	42.20	561.8		10.90
C-A	24.57								
C-B	0.00	8.79	0.000		0.00	0.00	0.0		0.00
A-B	1.78								
A-C	9.48								

.QUEUE FOR STREAM B-C

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

.

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	13.1	*************
08.30	23.1	**********************
08.45	32.7	*********************************
09.00	42.2	**

QUEUE FOR STREAM C-B

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	252.0	252.0	1364.7	5.42	1613.4	6.40
C-A	1474.0	1474.0				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	107.0	107.0				
A-C	569.0	569.0				
ALL	2402.0	2402.0	1364.7	0.57	1613.4	0.67

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

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

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

Run with file:-
"P:\10440\Traffic\Junctions\j28p West Alan Drayton Way-Fair Oak Road PJ\
j28p West Alan Drayton Way-Fair Oak Road DS1PM+DEV.vpi"
(drive-on-the-left) at 10:24:03 on Monday, 28 November 2016

.RUN INFORMATION

RUN TITLE	: j28p 10440 West Alan Drayton Way/Fair Oak Road DS1PM+DEV
LOCATION	: Eastleigh
DATE	: 25/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

ARM A IS Alan Drayton Way (West)
ARM B IS Fair Oak Road
ARM C IS Alan Drayton Way (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.50 M.
- VISIBILITY	(VC-B)160.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 130.0 M.
- VISIBILITY TO RIGHT	(VB-A) 160.0 M.
- LANE 1 WIDTH	(WB-C) 4.00 M.
- LANE 2 WIDTH	(WB-A) 4.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
797.21	0.26	0.10

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
662.89	0.25	0.10	0.16	0.36

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
760.94	0.24	0.24

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

.TRAFFIC DEMAND DATA

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

.Demand set: j28p 10440 West Alan Drayton Way/Fair Oak Road DS1PM+DEV

TIME PERIOD BEGINS 17.00 AND ENDS 18.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j28p 10440 West Alan Drayton Way/Fair Oak Road DS1PM+DEV

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

TIME	FROM/TO	ARM A	ARM B	ARM C
17.00 - 18.00	ARM A	0.000	0.158	0.842
		0.0	144.0	767.0
		(0.0)	(10.0)	(10.0)
	ARM B	1.000	0.000	0.000
		147.0	0.0	0.0
		(10.0)	(0.0)	(10.0)
	ARM C	1.000	0.000	0.000
		871.0	0.0	0.0
		(10.0)	(0.0)	(0.0)

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

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME		DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15										
	B-C	0.00	7.35	0.000		0.00	0.00	0.0		0.00
	B-A	2.45	4.28	0.572		0.00	1.24	16.1		0.50
	C-A	14.52								
	C-B	0.00	7.83	0.000		0.00	0.00	0.0		0.00
	A-B	2.40								
	A-C	12.78								
17.15-17.30										
	B-C	0.00	7.31	0.000		0.00	0.00	0.0		0.00
	B-A	2.45	4.28	0.572		1.24	1.29	19.0		0.54
	C-A	14.52								
	C-B	0.00	7.83	0.000		0.00	0.00	0.0		0.00
	A-B	2.40								
	A-C	12.78								
17.30-17.45										
	B-C	0.00	7.31	0.000		0.00	0.00	0.0		0.00
	B-A	2.45	4.28	0.572		1.29	1.30	19.4		0.54
	C-A	14.52								
	C-B	0.00	7.83	0.000		0.00	0.00	0.0		0.00
	A-B	2.40								
	A-C	12.78								
17.45-18.00										
	B-C	0.00	7.30	0.000		0.00	0.00	0.0		0.00
	B-A	2.45	4.28	0.572		1.30	1.31	19.6		0.54
	C-A	14.52								
	C-B	0.00	7.83	0.000		0.00	0.00	0.0		0.00
	A-B	2.40								
	A-C	12.78								

.

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

.

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	1.2 *
17.30	1.3 *
17.45	1.3 *
18.00	1.3 *

.

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

.

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	147.0	147.0	74.2	0.50	74.4	0.51
C-A	871.0	871.0				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	144.0	144.0				
A-C	767.0	767.0				
ALL	1929.0	1929.0	74.2	0.04	74.4	0.04

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

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

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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EMAIL: software@trl.co.uk

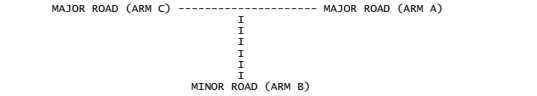
Run with file:-
"P:\10440\Traffic\Junctions\j28p West Alan Drayton Way-Fair Oak Road PJ\
j28p West Alan Drayton Way-Fair Oak Road DS1AM+DEV+IMP.vpi"
(drive-on-the-left) at 10:26:35 on Monday, 28 November 2016

.RUN INFORMATION

RUN TITLE	: j28p 10440 West Alan Drayton Way/Fair Oak Road DS1AM+DEV
LOCATION	: Eastleigh
DATE	: 25/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Alan Drayton Way (West)
ARM B IS Fair Oak Road
ARM C IS Alan Drayton Way (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.50 M.
- VISIBILITY	(VC-B)160.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 130.0 M.
- VISIBILITY TO RIGHT	(VB-A) 160.0 M.
- LANE 1 WIDTH	(WB-C) 4.50 M.
- LANE 2 WIDTH	(WB-A) 4.50 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For STREAM A-C	Opposing Slope For STREAM A-B	Opposing
833.49	0.27	0.11	

Intercept For STREAM B-A	Slope For STREAM A-C	Opposing Slope For STREAM A-B	Opposing Slope For STREAM C-A	Opposing Slope For STREAM C-B	Opposing
693.06	0.26	0.10	0.17	0.38	

Intercept For STREAM C-B	Slope For STREAM A-C	Opposing Slope For STREAM A-B	Opposing
760.94	0.24	0.24	

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

.TRAFFIC DEMAND DATA

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

.Demand set: j28p 10440 West Alan Drayton Way/Fair Oak Road DS1AM+DEV

TIME PERIOD BEGINS 08.00 AND ENDS 09.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j28p 10440 West Alan Drayton Way/Fair Oak Road DS1AM+DEV

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

TIME	FROM/TO	ARM A	ARM B	ARM C
08.00 - 09.00				
	ARM A	0.000	0.158	0.842
		0.0	107.0	569.0
		(0.0)	(10.0)	(10.0)
	ARM B	1.000	0.000	0.000
		252.0	0.0	0.0
		(10.0)	(0.0)	(10.0)
	ARM C	1.000	0.000	0.000
		1474.0	0.0	0.0
		(10.0)	(10.0)	(0.0)

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

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.00	7.43	0.000		0.00	0.00	0.0		0.00
B-A	4.20	3.74	1.122		0.00	11.39	100.3		2.13
C-A	24.57								
C-B	0.00	8.79	0.000		0.00	0.00	0.0		0.00
A-B	1.78								
A-C	9.48								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.00	7.43	0.000		0.00	0.00	0.0		0.00
B-A	4.20	3.74	1.122		11.39	19.27	230.9		4.66
C-A	24.57								
C-B	0.00	8.79	0.000		0.00	0.00	0.0		0.00
A-B	1.78								
A-C	9.48								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.00	7.43	0.000		0.00	0.00	0.0		0.00
B-A	4.20	3.74	1.122		19.27	26.67	344.9		6.64
C-A	24.57								
C-B	0.00	8.79	0.000		0.00	0.00	0.0		0.00
A-B	1.78								
A-C	9.48								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.00	7.43	0.000		0.00	0.00	0.0		0.00
B-A	4.20	3.74	1.122		26.67	33.89	454.4		8.55
C-A	24.57								
C-B	0.00	8.79	0.000		0.00	0.00	0.0		0.00
A-B	1.78								
A-C	9.48								

.QUEUE FOR STREAM B-C

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

.

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	11.4	***********
08.30	19.3	*******************
08.45	26.7	***************************
09.00	33.9	**********************************

QUEUE FOR STREAM C-B

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH) (VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
B-C	0.0 0.0	0.0	0.00	0.0	0.00
B-A	252.0 252.0	1130.4	4.49	1283.9	5.09
C-A	1474.0 1474.0				
C-B	0.0 0.0	0.0	0.00	0.0	0.00
A-B	107.0 107.0				
A-C	569.0 569.0				
ALL	2402.0 2402.0	1130.4	0.47	1283.9	0.53

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

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

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

Run with file:-
"P:\10440\Traffic\Junctions\j28p West Alan Drayton Way-Fair Oak Road PJ\
j28p West Alan Drayton Way-Fair Oak Road DS1PM+DEV+IMP.vpi"
(drive-on-the-left) at 10:25:37 on Monday, 28 November 2016

.RUN INFORMATION

RUN TITLE	: j28p 10440 West Alan Drayton Way/Fair Oak Road DS1PM+DEV
LOCATION	: Eastleigh
DATE	: 25/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

ARM A IS Alan Drayton Way (West)
ARM B IS Fair Oak Road
ARM C IS Alan Drayton Way (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.00 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.50 M.
- VISIBILITY	(VC-B)160.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 130.0 M.
- VISIBILITY TO RIGHT	(VB-A) 160.0 M.
- LANE 1 WIDTH	(WB-C) 4.50 M.
- LANE 2 WIDTH	(WB-A) 4.50 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
833.49	0.27	0.11

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
693.06	0.26	0.10	0.17	0.38

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
760.94	0.24	0.24

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

.TRAFFIC DEMAND DATA

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

.Demand set: j28p 10440 West Alan Drayton Way/Fair Oak Road DS1PM+DEV

TIME PERIOD BEGINS 17.00 AND ENDS 18.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j28p 10440 West Alan Drayton Way/Fair Oak Road DS1PM+DEV

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

TIME	FROM/TO	ARM A	ARM B	ARM C
17.00 - 18.00				
	ARM A	0.000	0.158	0.842
		0.0	144.0	767.0
		(0.0)	(10.0)	(10.0)
	ARM B	1.000	0.000	0.000
		147.0	0.0	0.0
		(10.0)	(0.0)	(10.0)
	ARM C	1.000	0.000	0.000
		871.0	0.0	0.0
		(10.0)	(0.0)	(0.0)

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

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.00	7.74	0.000		0.00	0.00	0.0		0.00
B-A	2.45	4.47	0.547		0.00	1.13	14.9		0.46
C-A	14.52								
C-B	0.00	7.83	0.000		0.00	0.00	0.0		0.00
A-B	2.40								
A-C	12.78								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.00	7.70	0.000		0.00	0.00	0.0		0.00
B-A	2.45	4.47	0.547		1.13	1.17	17.3		0.49
C-A	14.52								
C-B	0.00	7.83	0.000		0.00	0.00	0.0		0.00
A-B	2.40								
A-C	12.78								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.00	7.70	0.000		0.00	0.00	0.0		0.00
B-A	2.45	4.47	0.547		1.17	1.18	17.6		0.49
C-A	14.52								
C-B	0.00	7.83	0.000		0.00	0.00	0.0		0.00
A-B	2.40								
A-C	12.78								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.00	7.70	0.000		0.00	0.00	0.0		0.00
B-A	2.45	4.47	0.547		1.18	1.19	17.8		0.49
C-A	14.52								
C-B	0.00	7.83	0.000		0.00	0.00	0.0		0.00
A-B	2.40								
A-C	12.78								

.

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

.

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	1.1	*
17.30	1.2	*
17.45	1.2	*
18.00	1.2	*

.

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

.

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	147.0	147.0	67.6	0.46	67.8	0.46
C-A	871.0	871.0				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	144.0	144.0				
A-C	767.0	767.0				
ALL	1929.0	1929.0	67.6	0.04	67.8	0.04

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

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

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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EMAIL: software@trl.co.uk

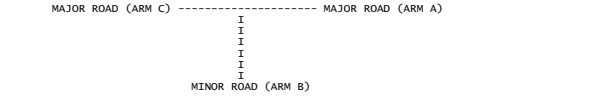
Run with file:-
"P:\10440\Traffic\Junctions\j29p B3037 Bishopstoke Road-Riverside PJ\
j29p B3037 Bishopstoke Road-Riverside DS1AM.vpi"
(drive-on-the-left) at 10:05:52 on Monday, 28 November 2016

.RUN INFORMATION

RUN TITLE	: j29p 10440 Bishopstoke Road/Riverside DS1AM
LOCATION	: Eastleigh
DATE	: 24/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Bishopstoke Way (West)
ARM B IS Riverside
ARM C IS Bishopstoke Way (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.80 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.50 M.
- VISIBILITY	(VC-B)120.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 120.0 M.
- VISIBILITY TO RIGHT	(VB-A) 120.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	4.40 M.
WIDTH AT 5 M FROM JUNCTION	2.20 M.
WIDTH AT 10 M FROM JUNCTION	2.20 M.
WIDTH AT 15 M FROM JUNCTION	2.20 M.
WIDTH AT 20 M FROM JUNCTION	2.20 M.
- LENGTH OF FLARED SECTION	4 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
734.50	0.23	0.23

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

.TRAFFIC DEMAND DATA

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

.Demand set: j29p 10440 Bishopstoke Road/Riverside DS1AM

TIME PERIOD BEGINS 08.00 AND ENDS 09.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j29p 10440 Bishopstoke Road/Riverside DS1AM

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
08.00 - 09.00				
	ARM A	0.000	0.331	0.669
		0.0	181.0	366.0
		(0.0)	(10.0)	(10.0)
	ARM B	1.000	0.000	0.000
		339.0	0.0	0.0
		(10.0)	(0.0)	(10.0)
	ARM C	1.000	0.000	0.000
		1051.0	0.0	0.0
		(10.0)	(10.0)	(0.0)

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

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.00	4.71	0.000		0.00	0.00	0.0		0.00
B-A	5.65	4.72	1.198		0.00	17.77	148.7		2.37
C-A	17.17								
C-B	0.00	9.00	0.000		0.00	0.00	0.0		0.00
A-B	3.13								
A-C	6.32								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.00	4.71	0.000		0.00	0.00	0.0		0.00
B-A	5.65	4.72	1.198		17.77	32.26	375.9		5.74
C-A	17.17								
C-B	0.00	9.00	0.000		0.00	0.00	0.0		0.00
A-B	3.13								
A-C	6.32								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.00	4.71	0.000		0.00	0.00	0.0		0.00
B-A	5.65	4.72	1.198		32.26	46.48	590.8		8.71
C-A	17.17								
C-B	0.00	9.00	0.000		0.00	0.00	0.0		0.00
A-B	3.13								
A-C	6.32								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.00	4.71	0.000		0.00	0.00	0.0		0.00
B-A	5.65	4.72	1.198		46.48	60.61	803.3		11.68
C-A	17.17								
C-B	0.00	9.00	0.000		0.00	0.00	0.0		0.00
A-B	3.13								
A-C	6.32								

.

QUEUE FOR STREAM B-C

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

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	17.8	******************
08.30	32.3	**********************************
08.45	46.5	**
09.00	60.6	**

QUEUE FOR STREAM C-B

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	339.0	339.0	1918.7	5.66	2308.2	6.81
C-A	1030.2	1030.2				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	187.6	187.6				
A-C	379.4	379.4				
ALL	1936.2	1936.2	1918.7	0.99	2308.2	1.19

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

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

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

Run with file:-
"P:\10440\Traffic\Junctions\j29p B3037 Bishopstoke Road-Riverside PJ\
j29p B3037 Bishopstoke Road-Riverside DS1PM.vpi"
(drive-on-the-left) at 10:06:45 on Monday, 28 November 2016

.RUN INFORMATION

RUN TITLE	: j29p 10440 Bishopstoke Road/Riverside DS1PM
LOCATION	: Eastleigh
DATE	: 24/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

ARM A IS Bishopstoke Way (West)
ARM B IS Riverside
ARM C IS Bishopstoke Way (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.80 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.50 M.
- VISIBILITY	(VC-B)120.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 120.0 M.
- VISIBILITY TO RIGHT	(VB-A) 120.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	4.40 M.
WIDTH AT 5 M FROM JUNCTION	2.20 M.
WIDTH AT 10 M FROM JUNCTION	2.20 M.
WIDTH AT 15 M FROM JUNCTION	2.20 M.
WIDTH AT 20 M FROM JUNCTION	2.20 M.
- LENGTH OF FLARED SECTION	4 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For Slope For Opposing STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
734.50	0.23	0.23

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

.TRAFFIC DEMAND DATA

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

.Demand set: j29p 10440 Bishopstoke Road/Riverside DS1PM

TIME PERIOD BEGINS 17.00 AND ENDS 18.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j29p 10440 Bishopstoke Road/Riverside DS1PM

TIME	FROM/TO	ARM A	ARM B	ARM C
17.00 - 18.00				
	ARM A	0.000	0.295	0.705
		0.0	229.0	547.0
		(0.0)	(10.0)	(10.0)
	ARM B	1.000	0.000	0.000
		246.0	0.0	0.0
		(10.0)	(0.0)	(10.0)
	ARM C	1.000	0.000	0.000
		684.0	0.0	0.0
		(10.0)	(10.0)	(0.0)

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

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.00	4.59	0.000		0.00	0.00	0.0		0.00
B-A	4.10	4.83	0.849		0.00	3.88	43.9		0.87
C-A	11.40								
C-B	0.00	8.22	0.000		0.00	0.00	0.0		0.00
A-B	3.82								
A-C	9.12								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.00	4.51	0.000		0.00	0.00	0.0		0.00
B-A	4.10	4.83	0.849		3.88	4.49	63.5		1.19
C-A	11.40								
C-B	0.00	8.22	0.000		0.00	0.00	0.0		0.00
A-B	3.82								
A-C	9.12								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.00	4.50	0.000		0.00	0.00	0.0		0.00
B-A	4.10	4.83	0.849		4.49	4.77	69.7		1.25
C-A	11.40								
C-B	0.00	8.22	0.000		0.00	0.00	0.0		0.00
A-B	3.82								
A-C	9.12								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.00	4.49	0.000		0.00	0.00	0.0		0.00
B-A	4.10	4.83	0.849		4.77	4.94	72.9		1.28
C-A	11.40								
C-B	0.00	8.22	0.000		0.00	0.00	0.0		0.00
A-B	3.82								
A-C	9.12								

.
QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

.
QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	3.9	****
17.30	4.5	****
17.45	4.8	*****
18.00	4.9	*****

.
QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

.
QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	246.0	246.0	250.0	1.02	252.5	1.03
C-A	684.0	684.0				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	229.0					
A-C	547.0	547.0				
ALL	1706.0	1706.0	250.0	0.15	252.5	0.15

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

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

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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EMAIL: software@trl.co.uk

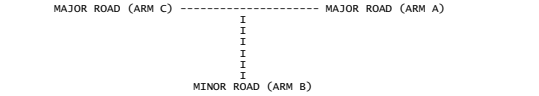
Run with file:-
"P:\10440\Traffic\Junctions\j29p B3037 Bishopstoke Road-Riverside PJ\
j29p B3037 Bishopstoke Road-Riverside DS1AM+DEV.vpi"
(drive-on-the-left) at 10:06:21 on Monday, 28 November 2016

.RUN INFORMATION

RUN TITLE	: j29p 10440 Bishopstoke Road/Riverside DS1AM
LOCATION	: Eastleigh
DATE	: 24/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Bishopstoke Way (West)
ARM B IS Riverside
ARM C IS Bishopstoke Way (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.80 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.50 M.
- VISIBILITY	(VC-B)120.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 120.0 M.
- VISIBILITY TO RIGHT	(VB-A) 120.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	4.40 M.
WIDTH AT 5 M FROM JUNCTION	2.20 M.
WIDTH AT 10 M FROM JUNCTION	2.20 M.
WIDTH AT 15 M FROM JUNCTION	2.20 M.
WIDTH AT 20 M FROM JUNCTION	2.20 M.
- LENGTH OF FLARED SECTION	4 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
734.50	0.23	0.23

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

.TRAFFIC DEMAND DATA

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

.Demand set: j29p 10440 Bishopstoke Road/Riverside DS1AM

TIME PERIOD BEGINS 08.00 AND ENDS 09.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j29p 10440 Bishopstoke Road/Riverside DS1AM

TIME	FROM/TO	TURNING PROPORTIONS / TURNING COUNTS (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C
08.00 - 09.00	ARM A	0.000 (0.0)	0.289 (10.0)	0.711 (10.0)
		0.0	181.0	445.0
	ARM B	1.000 (0.0)	0.000 (0.0)	0.000 (10.0)
		339.0	0.0	0.0
	ARM C	1.000 (0.0)	0.000 (0.0)	0.000 (10.0)
		1187.0	0.0	0.0

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

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.00	4.59	0.000		0.00	0.00	0.0		0.00
B-A	5.65	4.17	1.355		0.00	24.64	196.8		3.43
C-A	19.78								
C-B	0.00	8.78	0.000		0.00	0.00	0.0		0.00
A-B	3.02								
A-C	7.42								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.00	4.59	0.000		0.00	0.00	0.0		0.00
B-A	5.65	4.17	1.355		24.64	47.02	537.7		9.01
C-A	19.78								
C-B	0.00	8.78	0.000		0.00	0.00	0.0		0.00
A-B	3.02								
A-C	7.42								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.00	4.59	0.000		0.00	0.00	0.0		0.00
B-A	5.65	4.17	1.355		47.02	69.29	872.3		14.30
C-A	19.78								
C-B	0.00	8.78	0.000		0.00	0.00	0.0		0.00
A-B	3.02								
A-C	7.42								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.00	4.59	0.000		0.00	0.00	0.0		0.00
B-A	5.65	4.17	1.355		69.29	91.53	1206.1		19.61
C-A	19.78								
C-B	0.00	8.78	0.000		0.00	0.00	0.0		0.00
A-B	3.02								
A-C	7.42								

.

QUEUE FOR STREAM B-C

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

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	24.6	************************
08.30	47.0	**
08.45	69.3	**
09.00	91.5	**

QUEUE FOR STREAM C-B

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * (MIN)	* QUEUEING * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	339.0	339.0	2813.0	8.30	3817.6	11.26
C-A	1187.0	1187.0				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	181.0	181.0				
A-C	445.0	445.0				
ALL	2152.0	2152.0	2813.0	1.31	3817.6	1.77

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

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

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

Run with file:-
"P:\10440\Traffic\Junctions\j29p B3037 Bishopstoke Road-Riverside PJ\
j29p B3037 Bishopstoke Road-Riverside DS1PM+DEV.vpi"
(drive-on-the-left) at 10:07:05 on Monday, 28 November 2016

.RUN INFORMATION

RUN TITLE	: j29p 10440 Bishopstoke Road/Riverside DS1PM+DEV
LOCATION	: Eastleigh
DATE	: 24/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

ARM A IS Bishopstoke Way (West)
ARM B IS Riverside
ARM C IS Bishopstoke Way (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.80 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.50 M.
- VISIBILITY	(VC-B)120.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 120.0 M.
- VISIBILITY TO RIGHT	(VB-A) 120.0 M.
- LANE 1 WIDTH	(WB-C) -
- LANE 2 WIDTH	(WB-A) -
WIDTH AT 0 M FROM JUNCTION	4.40 M.
WIDTH AT 5 M FROM JUNCTION	2.20 M.
WIDTH AT 10 M FROM JUNCTION	2.20 M.
WIDTH AT 15 M FROM JUNCTION	2.20 M.
WIDTH AT 20 M FROM JUNCTION	2.20 M.
- LENGTH OF FLARED SECTION	4 VEHS

.SLOPES AND INTERCEPT

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

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

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

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

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

Intercept For Slope For Opposing STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
734.50	0.23	0.23

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

.TRAFFIC DEMAND DATA

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

.Demand set: j29p 10440 Bishopstoke Road/Riverside DS1PM+DEV

TIME PERIOD BEGINS 17.00 AND ENDS 18.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j29p 10440 Bishopstoke Road/Riverside DS1PM+DEV

TIME	FROM/TO	ARM A	ARM B	ARM C
17.00 - 18.00				
	ARM A	0.000	0.254	0.746
		0.0	229.0	674.0
		(0.0)	(10.0)	(10.0)
	ARM B	1.000	0.000	0.000
		246.0	0.0	0.0
		(10.0)	(0.0)	(10.0)
	ARM C	1.000	0.000	0.000
		767.0	0.0	0.0
		(10.0)	(10.0)	(0.0)

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

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.00	4.17	0.000		0.00	0.00	0.0		0.00
B-A	4.10	4.22	0.971		0.00	6.54	65.3		1.34
C-A	12.78								
C-B	0.00	7.74	0.000		0.00	0.00	0.0		0.00
A-B	3.82								
A-C	11.23								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-C	0.00	4.13	0.000		0.00	0.00	0.0		0.00
B-A	4.10	4.22	0.971		6.54	8.97	117.7		2.33
C-A	12.78								
C-B	0.00	7.74	0.000		0.00	0.00	0.0		0.00
A-B	3.82								
A-C	11.23								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.00	4.13	0.000		0.00	0.00	0.0		0.00
B-A	4.10	4.22	0.971		8.97	10.68	148.0		2.78
C-A	12.78								
C-B	0.00	7.74	0.000		0.00	0.00	0.0		0.00
A-B	3.82								
A-C	11.23								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.00	4.13	0.000		0.00	0.00	0.0		0.00
B-A	4.10	4.22	0.971		10.68	12.01	170.5		3.12
C-A	12.78								
C-B	0.00	7.74	0.000		0.00	0.00	0.0		0.00
A-B	3.82								
A-C	11.23								

.
QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	0.0	
17.30	0.0	
17.45	0.0	
18.00	0.0	

.
QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	6.5	*******
17.30	9.0	*********
17.45	10.7	**********
18.00	12.0	**********

.
QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

.
QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	246.0	246.0	501.5	2.04	518.6	2.11
C-A	767.0	767.0				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	229.0					
A-C	674.0	674.0				
ALL	1916.0	1916.0	501.5	0.26	518.6	0.27

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

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

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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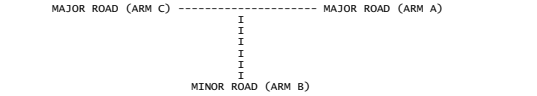
Run with file:-
"P:\10440\Traffic\Junctions\j29p B3037 Bishopstoke Road-Riverside PJ\
j29p B3037 Bishopstoke Road-Riverside DS1AM+DEV+IMP.vpi"
(drive-on-the-left) at 10:19:41 on Monday, 28 November 2016

.RUN INFORMATION

RUN TITLE	: j29p 10440 Bishopstoke Road/Riverside DS1AM
LOCATION	: Eastleigh
DATE	: 24/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Bishopstoke Way (West)
ARM B IS Riverside
ARM C IS Bishopstoke Way (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.80 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.50 M.
- VISIBILITY	(VC-B)120.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 120.0 M.
- VISIBILITY TO RIGHT	(VB-A) 120.0 M.
- LANE 1 WIDTH	(WB-C) 4.00 M.
- LANE 2 WIDTH	(WB-A) 4.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
769.51	0.24	0.09

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
635.97	0.23	0.09	0.15	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
734.50	0.23	0.23

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

.TRAFFIC DEMAND DATA

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

.Demand set: j29p 10440 Bishopstoke Road/Riverside DS1AM

TIME PERIOD BEGINS 08.00 AND ENDS 09.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j29p 10440 Bishopstoke Road/Riverside DS1AM

TIME	FROM/TO	ARM A	ARM B	ARM C
08.00 - 09.00				
	ARM A	0.000	0.289	0.711
		0.0	181.0	445.0
		(0.0)	(10.0)	(10.0)
	ARM B	1.000	0.000	0.000
		339.0	0.0	0.0
		(10.0)	(0.0)	(10.0)
	ARM C	1.000	0.000	0.000
		1187.0	0.0	0.0
		(10.0)	(10.0)	(0.0)

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

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

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-C	0.00	7.22	0.000		0.00	0.00	0.0		0.00
B-A	5.65	4.76	1.187		0.00	17.28	145.3		2.30
C-A	19.78								
C-B	0.00	8.78	0.000		0.00	0.00	0.0		0.00
A-B	3.02								
A-C	7.42								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-C	0.00	7.22	0.000		0.00	0.00	0.0		0.00
B-A	5.65	4.76	1.187		17.28	31.18	364.1		5.53
C-A	19.78								
C-B	0.00	8.78	0.000		0.00	0.00	0.0		0.00
A-B	3.02								
A-C	7.42								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.00	7.22	0.000		0.00	0.00	0.0		0.00
B-A	5.65	4.76	1.187		31.18	44.79	570.0		8.35
C-A	19.78								
C-B	0.00	8.78	0.000		0.00	0.00	0.0		0.00
A-B	3.02								
A-C	7.42								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.00	7.22	0.000		0.00	0.00	0.0		0.00
B-A	5.65	4.76	1.187		44.79	58.30	773.3		11.16
C-A	19.78								
C-B	0.00	8.78	0.000		0.00	0.00	0.0		0.00
A-B	3.02								
A-C	7.42								

.QUEUE FOR STREAM B-C

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

.

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
08.15	17.3	*****************
08.30	31.2	********************************
08.45	44.8	**
09.00	58.3	**

QUEUE FOR STREAM C-B

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

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	339.0	339.0	1852.6	5.46	2209.7	6.52
C-A	1187.0	1187.0				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	181.0	181.0				
A-C	445.0	445.0				
ALL	2152.0	2152.0	1852.6	0.86	2209.7	1.03

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

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

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

Run with file:-
"P:\10440\Traffic\Junctions\j29p B3037 Bishopstoke Road-Riverside PJ\
j29p B3037 Bishopstoke Road-Riverside DS1PM+DEV+IMP.vpi"
(drive-on-the-left) at 10:18:04 on Monday, 28 November 2016

.RUN INFORMATION

RUN TITLE	: j29p 10440 Bishopstoke Road/Riverside DS1PM+DEV
LOCATION	: Eastleigh
DATE	: 24/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

ARM A IS Bishopstoke Way (West)
ARM B IS Riverside
ARM C IS Bishopstoke Way (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.80 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.50 M.
- VISIBILITY	(VC-B)120.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 120.0 M.
- VISIBILITY TO RIGHT	(VB-A) 120.0 M.
- LANE 1 WIDTH	(WB-C) 4.00 M.
- LANE 2 WIDTH	(WB-A) 4.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
769.51	0.24	0.09

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
635.97	0.23	0.09	0.15	0.33

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
734.50	0.23	0.23

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

.TRAFFIC DEMAND DATA

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

.Demand set: j29p 10440 Bishopstoke Road/Riverside DS1PM+DEV

TIME PERIOD BEGINS 17.00 AND ENDS 18.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j29p 10440 Bishopstoke Road/Riverside DS1PM+DEV

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

TIME	FROM/TO	ARM A	ARM B	ARM C
17.00 - 18.00	ARM A	0.000	0.254	0.746
		0.0	229.0	674.0
		(0.0)	(10.0)	(10.0)
	ARM B	1.000	0.000	0.000
		246.0	0.0	0.0
		(10.0)	(0.0)	(10.0)
	ARM C	1.000	0.000	0.000
		767.0	0.0	0.0
		(10.0)	(0.0)	(0.0)

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

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-C	0.00	6.81	0.000		0.00	0.00	0.0		0.00
B-A	4.10	4.82	0.850		0.00	3.91	44.2		0.87
C-A	12.78								
C-B	0.00	7.74	0.000		0.00	0.00	0.0		0.00
A-B	3.82								
A-C	11.23								
17.15-17.30									
B-C	0.00	6.70	0.000		0.00	0.00	0.0		0.00
B-A	4.10	4.82	0.850		3.91	4.53	64.0		1.20
C-A	12.78								
C-B	0.00	7.74	0.000		0.00	0.00	0.0		0.00
A-B	3.82								
A-C	11.23								
17.30-17.45									
B-C	0.00	6.68	0.000		0.00	0.00	0.0		0.00
B-A	4.10	4.82	0.850		4.53	4.82	70.3		1.26
C-A	12.78								
C-B	0.00	7.74	0.000		0.00	0.00	0.0		0.00
A-B	3.82								
A-C	11.23								
17.45-18.00									
B-C	0.00	6.67	0.000		0.00	0.00	0.0		0.00
B-A	4.10	4.82	0.850		4.82	4.99	73.7		1.29
C-A	12.78								
C-B	0.00	7.74	0.000		0.00	0.00	0.0		0.00
A-B	3.82								
A-C	11.23								

.

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	0.0	
17.30	0.0	
17.45	0.0	
18.00	0.0	

.

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	3.9	****
17.30	4.5	*****
17.45	4.8	*****
18.00	5.0	*****

.

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

.

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * * DELAY * (MIN)	* QUEUEING * * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * * DELAY * (MIN)	* INCLUSIVE QUEUEING * * DELAY * (MIN/VEH)
B-C	0.0	0.0	0.0	0.00	0.0	0.00
B-A	246.0	246.0	252.2	1.03	254.8	1.04
C-A	767.0	767.0				
C-B	0.0	0.0	0.0	0.00	0.0	0.00
A-B	229.0	229.0				
A-C	674.0	674.0				
ALL	1916.0	1916.0	252.2	0.13	254.8	0.13

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

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

_____ A R C A D Y 6 _____

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011
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RG40 3GA,UK

Run with file:-
"p:\10440\Traffic\Junctions\j30a Quob Lane-Access Rbt\10440 j30a Quob Lane-Access Road Rbt DS1AM+DEV.vai"
(drive-on-the-left) at 14:55:22 on Friday, 25 November 2016

.FILE PROPERTIES
****

RUN TITLE: j30a Quob Lane-Access Road Rbt DS1AM+DEV
LOCATION: Eastleigh
DATE: 25/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA
****
ARM A - Quob Lane (North)
ARM B - Development Access Road (East)
ARM C - Quob Lane (South)
ARM D - Development Access Road (West)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.25	4.50	1.00	28.00	36.00	32.0	0.524	17.799
ARM B	3.25	4.50	1.00	25.00	36.00	36.0	0.515	17.480
ARM C	3.25	4.50	1.00	18.00	36.00	38.0	0.503	17.088
ARM D	3.25	4.50	1.00	15.00	36.00	48.0	0.480	16.283

V = approach half-width L = effective flare length D = inscribed circle diameter
E = entry width R = entry radius PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

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

TIME PERIOD BEGINS(08.00)AND ENDS(09.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j30a Quob Lane-Access Road Rbt DS1AM+DEV

DEMAND SET TITLE: j30a Quob Lane-Access Road Rbt DS1AM+DEV

T33

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

TIME	FROM/T	ARM A	ARM B	ARM C	ARM D
08.00 - 09.00	ARM A	0.049	0.442	0.257	0.252
		31.0	279.0	162.0	159.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.252	0.049	0.442	0.257
		159.0	31.0	279.0	162.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM C	0.257	0.252	0.049	0.442
		162.0	159.0	31.0	279.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM D	0.442	0.257	0.252	0.049
		279.0	162.0	159.0	31.0

(10.0) (10.0) (10.0) (10.0)

.QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
ARM A	3.67	15.15	0.242	- -	-	0.0	0.3	4.6	-	0.087
ARM B	1.23	14.59	0.085	- -	-	0.0	0.1	1.3	-	0.075
ARM C	4.73	14.62	0.324	- -	-	0.0	0.5	6.9	-	0.101
ARM D	0.90	13.28	0.068	- -	-	0.0	0.1	1.1	-	0.081
08.15-08.30									
ARM A	3.67	15.14	0.242	- -	-	0.3	0.3	4.8	-	0.087
ARM B	1.23	14.58	0.085	- -	-	0.1	0.1	1.4	-	0.075
ARM C	4.73	14.61	0.324	- -	-	0.5	0.5	7.1	-	0.101
ARM D	0.90	13.27	0.068	- -	-	0.1	0.1	1.1	-	0.081
08.30-08.45									
ARM A	3.67	15.14	0.242	- -	-	0.3	0.3	4.8	-	0.087
ARM B	1.23	14.58	0.085	- -	-	0.1	0.1	1.4	-	0.075
ARM C	4.73	14.61	0.324	- -	-	0.5	0.5	7.2	-	0.101
ARM D	0.90	13.27	0.068	- -	-	0.1	0.1	1.1	-	0.081
08.45-09.00									
ARM A	3.67	15.14	0.242	- -	-	0.3	0.3	4.8	-	0.087
ARM B	1.23	14.58	0.085	- -	-	0.1	0.1	1.4	-	0.075
ARM C	4.73	14.61	0.324	- -	-	0.5	0.5	7.2	-	0.101
ARM D	0.90	13.27	0.068	- -	-	0.1	0.1	1.1	-	0.081

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.3
08.30	0.3
08.45	0.3
09.00	0.3

.QUEUE AT ARM B

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

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.5
08.30	0.5
08.45	0.5
09.00	0.5

.QUEUE AT ARM D

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

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND	* QUEUEING * DELAY *	* INCLUSIVE QUEUEING * DELAY *

	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	220.0	220.0	18.9	0.09	19.0	0.09
B	74.0	74.0	5.5	0.07	5.5	0.07
C	284.0	284.0	28.3	0.10	28.3	0.10
D	54.0	54.0	4.3	0.08	4.3	0.08
ALL	632.0	632.0	57.1	0.09	57.1	0.09

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

END OF JOB

_____ A R C A D Y 6 _____

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)
Patch 15 Apr 2011

_____

For sales and distribution information,
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Email: software@trl.co.uk
Web: www.trlsoftware.co.uk

Run with file:-
"p:\10440\Traffic\Junctions\j30a Quob Lane-Access Rbt\10440 j30a Quob Lane-Access Road Rbt DS1PM+DEV.vai"
(drive-on-the-left) at 14:55:27 on Friday, 25 November 2016

.FILE PROPERTIES
****

RUN TITLE: j30a Quob Lane-Access Road Rbt DS1PM+DEV
LOCATION: Eastleigh
DATE: 25/11/16
CLIENT: Hallam Land Management
ENUMERATOR: Matt.Moss [BCL25]
JOB NUMBER: 10440
STATUS: Preliminary
DESCRIPTION: Existing Layout

.INPUT DATA
****
ARM A - Quob Lane (North)
ARM B - Development Access Road (East)
ARM C - Quob Lane (South)
ARM D - Development Access Road (West)

.GEOMETRIC DATA

T5

ARM	V (M)	E (M)	L (M)	R (M)	D (M)	PHI (DEG)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.25	4.50	1.00	28.00	36.00	32.0	0.524	17.799
ARM B	3.25	4.50	1.00	25.00	36.00	36.0	0.515	17.480
ARM C	3.25	4.50	1.00	18.00	36.00	38.0	0.503	17.088
ARM D	3.25	4.50	1.00	15.00	36.00	48.0	0.480	16.283

V = approach half-width
E = entry width
L = effective flare length
R = entry radius
D = inscribed circle diameter
PHI = entry angle

.TRAFFIC DEMAND DATA

Only sets included in the current run are shown
.SCALING FACTORS

T13

IARM	FLOW SCALE(%)
A	100
B	100
C	100
D	100

TIME PERIOD BEGINS(17.00)AND ENDS(18.00)
.LENGTH OF TIME PERIOD -(60) MINUTES
.LENGTH OF TIME SEGMENT - (15) MINUTES

.DEMAND FLOW PROFILES ARE INPUT DIRECTLY.
.DEMAND SET TITLE: j30a Quob Lane-Access Road Rbt DS1PM+DEV

DEMAND SET TITLE: j30a Quob Lane-Access Road Rbt DS1PM+DEV

T33

TIME	FROM/T	TURNING PROPORTIONS / TURNING COUNTS / (PERCENTAGE OF H.V.S) ARM A	ARM B	ARM C	ARM D
17.00 - 18.00					
	ARM A	0.067	0.334	0.273	0.326
		48.0	241.0	197.0	235.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM B	0.326	0.067	0.334	0.273
		235.0	48.0	241.0	197.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM C	0.273	0.326	0.067	0.334
		197.0	235.0	48.0	241.0
		(10.0)	(10.0)	(10.0)	(10.0)
	ARM D	0.334	0.273	0.326	0.067
		241.0	197.0	235.0	48.0

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I                   I        I ( 10.0)I ( 10.0)I ( 10.0)I ( 10.0)I
I                   I        I        I        I        I        I
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.QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
ARM A	5.85	15.10	0.388	- -	-	0.0	0.6	9.0	-	0.107
ARM B	1.50	13.64	0.110	- -	-	0.0	0.1	1.8	-	0.082
ARM C	4.07	13.87	0.293	- -	-	0.0	0.4	6.0	-	0.101
ARM D	0.58	13.05	0.045	- -	-	0.0	0.0	0.7	-	0.080
17.15-17.30									
ARM A	5.85	15.09	0.388	- -	-	0.6	0.6	9.4	-	0.108
ARM B	1.50	13.63	0.110	- -	-	0.1	0.1	1.8	-	0.082
ARM C	4.07	13.86	0.294	- -	-	0.4	0.4	6.2	-	0.102
ARM D	0.58	13.03	0.045	- -	-	0.0	0.0	0.7	-	0.080
17.30-17.45									
ARM A	5.85	15.09	0.388	- -	-	0.6	0.6	9.5	-	0.108
ARM B	1.50	13.63	0.110	- -	-	0.1	0.1	1.9	-	0.082
ARM C	4.07	13.86	0.294	- -	-	0.4	0.4	6.2	-	0.102
ARM D	0.58	13.03	0.045	- -	-	0.0	0.0	0.7	-	0.080
17.45-18.00									
ARM A	5.85	15.09	0.388	- -	-	0.6	0.6	9.5	-	0.108
ARM B	1.50	13.63	0.110	- -	-	0.1	0.1	1.9	-	0.082
ARM C	4.07	13.86	0.294	- -	-	0.4	0.4	6.2	-	0.102
ARM D	0.58	13.03	0.045	- -	-	0.0	0.0	0.7	-	0.080

.QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
17.15	0.6	*
17.30	0.6	*
17.45	0.6	*
18.00	0.6	*

.QUEUE AT ARM B

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

.QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.4
17.30	0.4
17.45	0.4
18.00	0.4

.QUEUE AT ARM D

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

.QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

ARM	TOTAL DEMAND (VEH)	* QUEUEING * DELAY * (VEH/H)	(MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)	(MIN)	(MIN/VEH)
A	351.0	351.0	37.4	0.11	37.4	0.11
B	90.0	90.0	7.3	0.08	7.3	0.08
C	244.0	244.0	24.6	0.10	24.6	0.10
D	35.0	35.0	2.8	0.08	2.8	0.08
ALL	720.0	720.0	72.0	0.10	72.1	0.10

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

END OF JOB

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

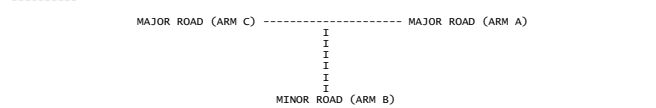
Run with file:-
"P:\10440\Traffic\Junctions\j31a Allington Lane-Access West\j31p Allington Lane-Access West DS1AM+DEV.vpi"
(drive-on-the-left) at 14:25:14 on Friday, 25 November 2016

.RUN INFORMATION

RUN TITLE	: j31p 10440 Allington Lane/Access West DS1AM+DEV
LOCATION	: Eastleigh
DATE	: 25/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Allington Lane (West)
ARM B IS Development Access Road
ARM C IS Allington Lane (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.80 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.50 M.
- VISIBILITY	(VC-B)120.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 120.0 M.
- VISIBILITY TO RIGHT	(VB-A) 120.0 M.
- LANE 1 WIDTH	(WB-C) 3.25 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
716.99	0.22	0.09

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
592.56	0.22	0.09	0.14	0.31

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
734.50	0.23	0.23

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

.TRAFFIC DEMAND DATA

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

.Demand set: j31p 10440 Allington Lane/Access West DS1AM+DEV

TIME PERIOD BEGINS 08.00 AND ENDS 09.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j31p 10440 Allington Lane/Access West DS1AM+DEV

TIME	FROM/TO	ARM A	ARM B	ARM C
08.00 - 09.00				
	ARM A	0.000	0.116	0.884
		0.0	66.0	501.0
		(0.0)	(10.0)	(10.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	43.0
		(10.0)	(0.0)	(10.0)
	ARM C	0.957	0.043	0.000
		441.0	20.0	0.0
		(10.0)	(10.0)	(0.0)

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

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

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-AC	0.72	8.94	0.081		0.00	0.09	1.3		0.12
C-A	7.35								
C-B	0.33	9.01	0.037		0.00	0.04	0.6		0.12
A-B	1.10								
A-C	8.33								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-AC	0.72	8.94	0.080		0.09	0.09	1.3		0.12
C-A	7.35								
C-B	0.33	9.00	0.037		0.04	0.04	0.6		0.12
A-B	1.10								
A-C	8.33								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-AC	0.72	8.94	0.080		0.09	0.09	1.3		0.12
C-A	7.35								
C-B	0.33	9.00	0.037		0.04	0.04	0.6		0.12
A-B	1.10								
A-C	8.33								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-AC	0.72	8.94	0.080		0.09	0.09	1.3		0.12
C-A	7.35								
C-B	0.33	9.00	0.037		0.04	0.04	0.6		0.12
A-B	1.10								
A-C	8.33								

.

QUEUE FOR STREAM B-AC

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

.

QUEUE FOR STREAM C-B

TIME SEGMENT	NO. OF VEHICLES

ENDING	IN QUEUE
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	43.0	43.0	5.2	0.12	5.2	0.12
C-A	440.9	440.9				
C-B	20.0	20.0	2.3	0.11	2.3	0.11
A-B	65.9	65.9				
A-C	500.1	500.1				
ALL	1069.9	1069.9	7.4	0.01	7.4	0.01

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

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

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

Run with file:-
"P:\10440\Traffic\Junctions\j31a Allington Lane-Access West\j31p Allington Lane-Access West DS1PM+DEV.vpi"
(drive-on-the-left) at 14:25:32 on Friday, 25 November 2016

.RUN INFORMATION

RUN TITLE	: j31p 10440 Allington Lane/Access West DS1PM+DEV
LOCATION	: Eastleigh
DATE	: 25/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

ARM A IS Allington Lane (West)
ARM B IS Development Access Road
ARM C IS Allington Lane (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.80 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.50 M.
- VISIBILITY	(VC-B)120.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 120.0 M.
- VISIBILITY TO RIGHT	(VB-A) 120.0 M.
- LANE 1 WIDTH	(WB-C) 3.25 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
716.99	0.22	0.09

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
592.56	0.22	0.09	0.14	0.31

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
734.50	0.23	0.23

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

.TRAFFIC DEMAND DATA

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

.Demand set: j31p 10440 Allington Lane/Access West DS1PM+DEV

TIME PERIOD BEGINS 17.00 AND ENDS 18.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j31p 10440 Allington Lane/Access West DS1PM+DEV

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

TIME	FROM/TO	ARM A	ARM B	ARM C
17.00 - 18.00	ARM A	0.000	0.161	0.839
		0.0	120.0	627.0
		(0.0)	(10.0)	(10.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	27.0
		(10.0)	(0.0)	(10.0)
	ARM C	0.912	0.088	0.000
		402.0	39.0	0.0
		(10.0)	(10.0)	(0.0)

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

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	0.45	8.39	0.054		0.00	0.06	0.8		0.13
C-A	6.70								
C-B	0.65	8.33	0.078		0.00	0.08	1.2		0.13
A-B	2.00								
A-C	10.45								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-AC	0.45	8.39	0.054		0.06	0.06	0.8		0.13
C-A	6.70								
C-B	0.65	8.33	0.078		0.08	0.08	1.3		0.13
A-B	2.00								
A-C	10.45								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-AC	0.45	8.39	0.054		0.06	0.06	0.8		0.13
C-A	6.70								
C-B	0.65	8.33	0.078		0.08	0.08	1.3		0.13
A-B	2.00								
A-C	10.45								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-AC	0.45	8.39	0.054		0.06	0.06	0.8		0.13
C-A	6.70								
C-B	0.65	8.33	0.078		0.08	0.08	1.3		0.13
A-B	2.00								
A-C	10.45								

QUEUE FOR STREAM B-AC

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

QUEUE FOR STREAM C-B

TIME SEGMENT	NO. OF VEHICLES

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

. QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	27.0	27.0	3.4	0.12	3.4	0.12
C-A	402.0	402.0				
C-B	39.0	39.0	5.0	0.13	5.0	0.13
A-B	120.0	120.0				
A-C	627.0	627.0				
ALL	1215.0	1215.0	8.4	0.01	8.4	0.01

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

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

TRL LIMITED

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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EMAIL: software@trl.co.uk

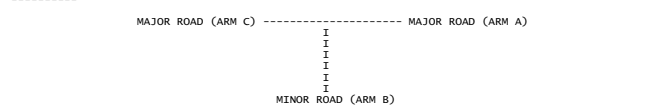
Run with file:-
"P:\10440\Traffic\Junctions\j32a Allington Lane-Access East\j32p Allington Lane-Access East DS1AM+DEV.vpi"
(drive-on-the-left) at 14:25:54 on Friday, 25 November 2016

.RUN INFORMATION

RUN TITLE	: j32p 10440 Allington Lane/Access East DS1AM+DEV
LOCATION	: Eastleigh
DATE	: 25/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Allington Lane (West)
ARM B IS Development Access Road
ARM C IS Allington Lane (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.80 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.50 M.
- VISIBILITY	(VC-B)120.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 120.0 M.
- VISIBILITY TO RIGHT	(VB-A) 120.0 M.
- LANE 1 WIDTH	(WB-C) 3.25 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
716.99	0.22	0.09

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
592.56	0.22	0.09	0.14	0.31

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
734.50	0.23	0.23

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

.TRAFFIC DEMAND DATA

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

.Demand set: j32p 10440 Allington Lane/Access East DS1AM+DEV

TIME PERIOD BEGINS 08.00 AND ENDS 09.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j32p 10440 Allington Lane/Access East DS1AM+DEV

TURNING PROPORTIONS (PERCENTAGE OF H.V.S)

TIME	FROM/TO	ARM A	ARM B	ARM C
08.00 - 09.00	ARM A	0.000	0.108	0.892
		0.0	66.0	543.0
		(0.0)	(10.0)	(10.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	86.0
		(10.0)	(0.0)	(10.0)
	ARM C	0.913	0.087	0.000
		422.0	40.0	0.0
		(10.0)	(10.0)	(0.0)

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

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-AC	1.43	8.78	0.163		0.00	0.19	2.8		0.14
C-A	7.02								
C-B	0.67	8.84	0.075		0.00	0.08	1.2		0.12
A-B	1.10								
A-C	9.05								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-AC	1.43	8.78	0.163		0.19	0.19	2.9		0.14
C-A	7.02								
C-B	0.67	8.84	0.075		0.08	0.08	1.2		0.12
A-B	1.10								
A-C	9.05								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-AC	1.43	8.78	0.163		0.19	0.19	2.9		0.14
C-A	7.02								
C-B	0.67	8.84	0.075		0.08	0.08	1.2		0.12
A-B	1.10								
A-C	9.05								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-AC	1.43	8.78	0.163		0.19	0.19	2.9		0.14
C-A	7.02								
C-B	0.67	8.84	0.075		0.08	0.08	1.2		0.12
A-B	1.10								
A-C	9.05								

QUEUE FOR STREAM B-AC

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
08.15	0.2
08.30	0.2
08.45	0.2
09.00	0.2

QUEUE FOR STREAM C-B

TIME SEGMENT	NO. OF VEHICLES

ENDING	IN QUEUE
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	86.0	86.0	11.5	0.13	11.5	0.13
C-A	421.1	421.1				
C-B	39.9	39.9	4.8	0.12	4.8	0.12
A-B	66.0	66.0				
A-C	543.0	543.0				
ALL	1156.0	1156.0	16.3	0.01	16.3	0.01

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

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

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

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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Run with file:-
"P:\10440\Traffic\Junctions\j32a Allington Lane-Access East\j32p Allington Lane-Access East DS1PM+DEV.vpi"
(drive-on-the-left) at 14:25:59 on Friday, 25 November 2016

.RUN INFORMATION

RUN TITLE	: j32p 10440 Allington Lane/Access East DS1PM+DEV
LOCATION	: Eastleigh
DATE	: 25/11/16
CLIENT	: Hallam Land Management
ENUMERATOR	: Matt.Moss [BCL25]
JOB NUMBER	: 10440
STATUS	: Preliminary
DESCRIPTION	: Existing layout

.MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA

ARM A IS Allington Lane (West)
ARM B IS Development Access Road
ARM C IS Allington Lane (East)

.STREAM LABELLING CONVENTION

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

.GEOMETRIC DATA

DATA ITEM	MINOR ROAD B
TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	(W) 10.80 M.
CENTRAL RESERVE WIDTH	(WCR) 0.00 M.
MAJOR ROAD RIGHT TURN - WIDTH	(WC-B) 3.50 M.
- VISIBILITY	(VC-B)120.00 M.
- BLOCKS TRAFFIC (SPACES)	NO (0)
MINOR ROAD - VISIBILITY TO LEFT	(VB-C) 120.0 M.
- VISIBILITY TO RIGHT	(VB-A) 120.0 M.
- LANE 1 WIDTH	(WB-C) 3.25 M.
- LANE 2 WIDTH	(WB-A) 0.00 M.

.SLOPES AND INTERCEPT

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

Intercept For STREAM B-C	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
716.99	0.22	0.09

Intercept For STREAM B-A	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B
592.56	0.22	0.09	0.14	0.31

Intercept For STREAM C-B	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-B
734.50	0.23	0.23

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

.TRAFFIC DEMAND DATA

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

.Demand set: j32p 10440 Allington Lane/Access East DS1PM+DEV

TIME PERIOD BEGINS 17.00 AND ENDS 18.00

LENGTH OF TIME PERIOD - 60 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.
DEMAND FLOW PROFILES ARE INPUT DIRECTLY

.Demand set: j32p 10440 Allington Lane/Access East DS1PM+DEV

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

TIME	FROM/TO	ARM A	ARM B	ARM C
17.00 - 18.00				
	ARM A	0.000	0.215	0.785
		0.0	120.0	438.0
		(0.0)	(10.0)	(10.0)
	ARM B	0.000	0.000	1.000
		0.0	0.0	54.0
		(10.0)	(0.0)	(10.0)
	ARM C	0.860	0.140	0.000
		479.0	78.0	0.0
		(10.0)	(10.0)	(0.0)

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

. QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR COMBINED DEMAND SETS
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-AC	0.90	9.09	0.099		0.00	0.11	1.6		0.12
C-A	8.00								
C-B	1.30	9.03	0.144		0.00	0.17	2.4		0.13
A-B	2.00								
A-C	7.30								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-AC	0.90	9.09	0.099		0.11	0.11	1.6		0.12
C-A	8.00								
C-B	1.30	9.03	0.144		0.17	0.17	2.5		0.13
A-B	2.00								
A-C	7.30								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-AC	0.90	9.09	0.099		0.11	0.11	1.6		0.12
C-A	8.00								
C-B	1.30	9.03	0.144		0.17	0.17	2.5		0.13
A-B	2.00								
A-C	7.30								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-AC	0.90	9.09	0.099		0.11	0.11	1.6		0.12
C-A	8.00								
C-B	1.30	9.03	0.144		0.17	0.17	2.5		0.13
A-B	2.00								
A-C	7.30								

.

QUEUE FOR STREAM B-AC

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

.

QUEUE FOR STREAM C-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
17.15	0.2
17.30	0.2
17.45	0.2
18.00	0.2

.

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND (VEH)	TOTAL DEMAND (VEH/H)	* QUEUEING * DELAY * (MIN)	* QUEUEING * DELAY * (MIN/VEH)	* INCLUSIVE QUEUEING * DELAY * (MIN)	* INCLUSIVE QUEUEING * DELAY * (MIN/VEH)
B-AC	54.0	54.0	6.5	0.12	6.5	0.12
C-A	479.9	479.9				
C-B	78.1	78.1	10.0	0.13	10.0	0.13
A-B	120.0	120.0				
A-C	438.0	438.0				
ALL	1170.0	1170.0	16.5	0.01	16.5	0.01

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

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