

TRANSPORT & INFRASTRUCTURE PLANNING

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Derbyshire
Transport Assessment

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CONTENTS

1.	INTRODUCTION.....	1
	Instruction	1
	Background.....	1
	Scoping Discussions	1
	Report Structure	2
2.	POLICY CONTEXT	3
	Introduction	3
	National Planning Policy	3
3.	EXISTING CONDITIONS	8
	Site Location.....	8
	Existing Use.....	8
	Local Highway Network.....	8
	Royal Hill Road	8
	Locko Road	9
	Locko Road/Chapel/Road/Church Street/West Road Junction	9
	Sitwell Street/A6096 Willowcroft Junction	10
	A6096 Willowcroft Road/A6005 Nottingham Road Junction	10
	Site Visit	11
	Personal Injury Collisions	20
4.	PROPOSED DEVELOPMENT	24
	Introduction	24
	Vehicular Access	24
	Pedestrian and Cyclist Access.....	25
	Parking Provision	25
	Servicing.....	25
5.	TRIP GENERATION, DISTRIBUTION AND ASSIGNMENT.....	26
	Introduction	26
	Trip Generation	26
	Trip Distribution	28
	Study Area	30
6.	ASSESSMENT PARAMETERS	31
	Introduction	31
	Assessment Years	31
	Traffic Growth Factors	31
7.	HIGHWAY IMPACT.....	33

Introduction	33
Modelling Software and Interpretation	33
Summary	41
8. SUMMARY AND CONCLUSIONS	42

FIGURES

- Figure 1. Site Location
- Figure 2. Local Highway Network
- Figure 3. 2km Pedestrian Isochrone
- Figure 4. Existing Public Rights of Way
- Figure 5. 5km Cycle Isochrone
- Figure 6. PIC Area of Interest
- Figure 7. Development Traffic Distribution
- Figure 8. Development Traffic Assignment (Vehicles)

TABLES

- Table 1. Traffic Flow Comparison
- Table 2. Key Local Amenities
- Table 3. GPJF Acceptable Walking Distances Guidance Table
- Table 4. Recommended Maximum Walking Distances to Bus Stops
- Table 5. Summary of Shuttle Bus S2 Weekday Services
- Table 6. Local Rail Services
- Table 7. Proposed Site Vehicle Trip Generation (90 dwellings)
- Table 8. Modal Split
- Table 9. Multi-Modal Trip Generation
- Table 10. TEMPRO Growth Factors
- Table 11. Site Access/Royal Hill Road Junctions 10 Capacity Assessment
- Table 12. Royal Hill Road/Locko Road Junctions 10 Capacity Assessment
- Table 13. Locko Road/Chapel Street/Church Streets/West Road Junctions 10 Capacity Assessment
- Table 14. Sitwell Street/A6096 Willowcroft Road J10 Capacity Assessment
- Table 15. A6096 Willowcroft Road/Nottingham Road LinSig Capacity Assessment

DRAWINGS

- RHR-BWB-GEN-XX-DR-TR-101-S2-P2 – PROPOSED SITE ACCESS ARRANGEMENT
- RHR-BWB-GEN-XX-DR-TR-110-S2-P1 – VEHICLE TRACKING- LARGE 4-AXLE REFUSE VEHICLE

APPENDICES

- APPENDIX 1: Indicative Site Layout
- APPENDIX 2: Pre-application Discussions
- APPENDIX 3: Scoping Discussions
- APPENDIX 4: Traffic Survey Results and Queue Survey
- APPENDIX 5: Traffic Flow Diagrams
- APPENDIX 6: Smartparc Extracted Flows
- APPENDIX 7: S1/S2 Shuttle Bus Information
- APPENDIX 8: PIC Data
- APPENDIX 9: Highway Boundary Information
- APPENDIX 10: TRICS Output

APPENDIX 11: Modal Split	
APPENDIX 12: Extracted Census Data	
APPENDIX 13: TEMPro Output	
APPENDIX 14: Site Access / Royal Hill Road J10 Results	
APPENDIX 15: Royal Hill Road / Locko Road J10 Results	
APPENDIX 16: Locko Road / Chapel Street / Church Street / West Road J10 Results	
APPENDIX 17: Sitwell Street / Willowcroft Road J10 Results	
APPENDIX 18: Willowcroft Road / Nottingham Road LINSIG Results	

1. INTRODUCTION

Instruction

- 1.1 BWB Consulting Ltd (BWB) has been instructed by Miller Homes Ltd (the applicant) to provide highways and transport advice and prepare a Transport Assessment (TA) report to support an outline planning application for a residential development for up to 90 dwellings including related infrastructure, landscaping and open space. All matters reserved except for access into the site from Royal Hill Road, Spondon, Derby. A separate Travel Plan (TP) has been produced to be read in conjunction with this TA, in support of the planning application.
- 1.2 A copy of the indicative site layout is included within **Appendix 1**.

Background

- 1.3 BWB produced a Technical Note in January 2020 in support of the proposed development site which considered a development of up to 150 dwellings (RHR-BWB-GEN-XX-RP-TR-0001-TN). This document was used to inform pre-application discussions with the Local Highway Authority (LHA) Derby City Council (DCC).
- 1.4 Since the pre-application discussions in 2020, the number of dwellings being proposed at the development was reduced by approximately a third to 90 dwellings in June 2023 and it is intended to submit an outline planning application on this basis.
- 1.5 The advice given through the pre-application discussions was that a TA and Travel Plan would be required to support an outline planning application. It was also previously advised that 85% percentile trip rates should be used and not average trip rates and consideration should be given to improving links to sustainable travel. It was also confirmed that visibility at the site access looked to be achievable, however it was suggested that on-site checks be carried out to ensure there are no physical barriers obscuring the visibility. Finally, it was advised that footways to the north and south need to be designed to ensure mobility impaired can cross. A copy of the pre-application discussions can be found within **Appendix 2**.

Scoping Discussions

- 1.6 BWB has engaged in pre-application scoping discussions with Andrew Gibbard at DCC, building on the previous advice provided as part of pre-application discussions in 2020. This engagement enabled agreement of key parameters of the TA (and Travel Plan) prior to writing this document and undertaking the associated junction modelling. Andrew Gibbard provided particular guidance in the approach to the junction modelling and the trip generation calculations for the proposed development, and this has been taken into consideration within this TA. It should be noted that these discussions were based on up to 100 dwellings, but as set out above this has since been reduced to 90. A copy of the scoping discussions had with DCC can be found at **Appendix 3**.

Report Structure

1.7 This TA is structured as follows:

- **Section 2: Policy Context** - summarises the key national and local planning policies relating to transport within the context of the scale and location of the proposed development;
- **Section 3: Existing Conditions** - Describes the local highway network and the existing sustainable travel facilities;
- **Section 4: Proposed Development** – Provides details of the proposed development, access arrangements, parking provision and how the site will be serviced;
- **Section 5: Trip Generation, Distribution and Assignment** – Quantifies the estimated multi-modal trip generation of the development proposals;
- **Section 6: Assessment Parameters** – Summarises the key assumptions relating to background traffic growth, committed developments and assessment year that have been accounted for as part of the TA;
- **Section 7: Highway Impact Assessment** – Quantified the traffic impact of the proposed development on the operation of the local highway network;
- **Section 8: Summary and Conclusions** – Summarises the findings of the report and offers conclusions in relation to the proposed development impact.

2. POLICY CONTEXT

Introduction

- 2.1 This section of the TA examines the context of the site and how this relates to the relevant transport and development planning policies and guidelines. It provides an overall spatial and planning context for the proposed development.
- 2.2 Policies have been adopted in national guidelines such as the Transport White Paper (2011) that seek to encourage more sustainable modes than the car and a planning system which places greater emphasis on the link between transport and land use planning policies to encourage transport decisions at a local level that are compatible with environmental and community goals and best reflect local circumstances and requirements.
- 2.3 The following national and local planning documents have been reviewed:
- The Transport White Paper (2011);
 - The National Planning Policy Framework (NPPF);
 - Derby Local Transport 3 (LTP3) 2011- 2026;
 - Derby City Local Plan – Part 1 2011 - 2028

National Planning Policy

The Transport White Paper (2011)

- 2.4 The Government's vision for a sustainable local transport system is set out in the January 2011 Transport White Paper: *"Creating Growth, Cutting Carbon – Making Sustainable Local Transport Happen."*
- 2.5 The White Paper acknowledges that transport provision is essential for economic growth if the Government is to improve the economic deficit which it is currently facing. The Paper also recognises however, that the current levels of carbon emissions from transport cannot be sustained if the nation is to meet its national commitments on climate change as well as creating a safer and cleaner environment in which to live. With this in mind, the Government highlights sustainable transport solutions as a means by which the economy can grow which will also see a positive impact on the local environment.
- 2.6 Whilst the Paper outlines the funding options which will be available for sustainable transport schemes, it also recognises that investment alone will not be enough and that help needs to be given to people to ensure that the transport choices they make are good for society as a whole. The Paper recognises that it is at the local level where most can be done to encourage sustainable transport modes and implement sustainable transport schemes. Solutions should be developed for the places they serve, tailored for the specific needs and behaviour patterns of individual communities.

- 2.7 Within the Paper, sustainable transport considers more than just public transport, walking and cycling schemes and acknowledges that it is not feasible for some trips to be undertaken by these modes. There is therefore a realisation that the car will continue to be an important mode of transport and a focus should be given to making car travel greener through electric and other low emission vehicles.

National Planning Policy Framework (NPPF)

- 2.8 The Government's National Planning Policy Framework (NPPF) replaced the majority of previous Planning Policy Statements (PPS) and Planning Policy Guidance Notes (PPG) documents on 27 March 2012, and was updated in July 2021. It sets out the Government's expectations and requirements from the planning system. It provides guidance for local councils to use when defining their own personal local and neighbourhood plans. This approach allows the planning system to be customised to reflect the needs and priorities of individual communities.
- 2.9 The NPPF defines the delivery of sustainable development through three roles:
- an economic objective;
 - a social objective; and
 - an environmental objective.
- 2.10 These objectives should be delivered through the preparation and implementation of plans and the application of the policies in this Framework; they are not criteria against which every decision can or should be judged. Planning policies and decisions should play an active role in guiding development towards sustainable solutions, but in doing so should take local circumstances into account, to reflect the character, needs and opportunities of each area
- 2.11 The NPPF states that Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:
- The potential impacts of development on transport networks can be addressed;
 - Opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;
 - Opportunities to promote walking, cycling and public transport use are identified and pursued;
 - The environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and
 - Patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places.

2.12 The NPPF requires planning policies to:

- Support an appropriate mix of uses across an area, and within larger scale sites, to minimise the number and length of journeys needed for employment, shopping, leisure, education and other activities;
- Be prepared with the active involvement of local highways authorities, other transport infrastructure providers and operators and neighbouring councils, so that strategies and investments for supporting sustainable transport and development patterns are aligned;
- Identify and protect, where there is robust evidence, sites and routes which could be critical in developing infrastructure to widen transport choice and realise opportunities for large scale development;
- Provide for high quality walking and cycling networks and supporting facilities such as cycle parking (drawing on Local Cycling and Walking Infrastructure Plans); and
- Provide for any large scale transport facilities that need to be located in the area, and the infrastructure and wider development required to support their operation, expansion and contribution to the wider economy.

2.13 In assessing sites that may be allocated for development in plans, or specific applications for development, NPPF paragraph 108 states that it should be ensured that:

- Appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;
- Safe and suitable access to the site can be achieved for all users;
- The design of streets, parking areas, other transport elements and associated standards reflects current national guidance, including the Design Guide and the National Model Design Code; and
- Any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.

2.14 Paragraph 111 of the NPPF goes on to state that *“Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe”*.

2.15 Within the context of the NPPF, paragraph 112 sets out that development should:

- Give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;
- Address the needs of people with disabilities and reduced mobility in relation to all modes of transport;

- Create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;
- Allow for the efficient delivery of goods, and access by service and emergency vehicles; and
- Be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.

2.16 Paragraph 113 seeks to ensure that, *“All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed.”*

Local Planning Policy

Derby Local Transport Plan 3 2011-2026

2.17 DCC's Local Transport Plan 3 (LTP) was published in April 2011 and the main transport goals are as follows:

- **GOAL 1:** To support growth and economic competitiveness
- **GOAL 2:** To Contribute to tackling climate change
- **GOAL 3:** To contribute to better safety, security and health for all people in Derby
- **GOAL 4:** To provide and promote greater choice and equality of opportunities for all
- **GOAL 5:** To improve the quality of life for all people living, working in or visiting Derby.

2.18 Derby's nine Transport challenges include the following:

- **CHALLENGE 1:** Provide network efficiency, reduce unnecessary delays and facilitate economic activity
- **CHALLENGE 2:** Maintain and improve transport infrastructure to address existing and future needs
- **CHALLENGE 3:** Minimise the effects of any unpredictable events on the transport network, and enhance adaptation to the effects of climate change
- **CHALLENGE 4:** Minimise the negative effects of travel and existing and new transport infrastructure on local communities, air quality and the wider environment

- **CHALLENGE 5:** Minimise transports contribution to climate change and improve energy efficiency
- **CHALLENGE 6:** Provide safer travel opportunities and reduce road casualties
- **CHALLENGE 7:** Provide good access to employment opportunities, key facilities and services for all residents and visitors to the Derby Local Transport Plan area
- **CHALLENGE 8:** Encourage and enable all people and businesses to use sustainable travel
- **CHALLENGE 9:** Enhance the integration of transport in the urban environment to provide safe, secure and multi-functional space, promoting greater social interaction and natural surveillance.

Derby City Local Plan – Core Strategy (2017 to 2028)

- 2.19 The Derby City Council Local Plan previously comprised of two parts, Part 1 being the 'Core Strategy' and Part 2 being the 'Site Allocations and Development Management Policies'. However, Part 2 has since been abandoned meaning the Local Plan now only consists of Part 1. Paragraph 1.2 states:

"The Core Strategy is the most important part of the Derby City Local Plan as it sets the overall strategic direction for planning the administrative area of Derby City over the period of 2011 to 2028. It does this by setting out a series of planning policies and guidance which will help to shape the form, function and location of new development."

- 2.20 The document has been created to address and meet the requirements of the NPPF regarding sustainable development. It covers a number of topics including guidance on allocated and strategic land, housing delivery, delivering a sustainable economy, local employment and parking standards at new and regenerated developments. The following describes the strategy for Transport.

- 2.21 Paragraph 4.37 says the following,

"Land use and the design of developments will continue to have a fundamental influence on the way people travel or choose to travel. The strategy proposes to ensure development is located in areas which already have good access to public transport, or where people can reach local shops and services by walking or cycling. It also seeks to ensure that new employment uses are easily accessible by all forms of travel."

- 2.22 Paragraph 4.38 says,

"While priority will be given to reducing the demand for travel, promoting 'active travel' and making efficiency improvements to the existing network, there will also inevitably be a need for capacity increases and new infrastructure."

3. EXISTING CONDITIONS

Site Location

- 3.1 The site is located to the west of Royal Hill Road in Spondon, Derby. Spondon is a suburb of Derby located 5km to the east of Derby City Centre. The site is bound to the north, south and west by open/farmers fields and to the east by residential properties.
- 3.2 **Figure 1** below presents the indicative location of the site.

Figure 1. Site Location



Existing Use

- 3.3 The site is currently used for agricultural purposes and horses are kept in the fields. There is also opportunity to walk along the edge of the site via a public footway which routes along the southern boundary of the site.

Local Highway Network

Royal Hill Road

- 3.4 Royal Hill Road routes west to east bending toward the north at the top and measures approximately 5.5 metres wide at its south-eastern end narrowing to 4.75 metres at its northern end where it becomes a private driveway. For the first 250 metres of Royal Hill Road from its junction with Locko Road, there are footways present on both sides of the

carriageway with a grass verge separating the footway from the carriageway. The section within the site frontage has a footway present on the eastern side of the carriageway only. There are no footways at its northern end when the carriageway becomes a private drive. Street lighting is present on the eastern side of the carriageway throughout most of its length apart from the first 75 metres at its southwestern end where street lighting is present on both sides.

- 3.5 At the site frontage, Royal Hill Road is subject to a 30mph limit. There is an informal pedestrian crossing with dropped kerbs and tactile paving located just to the south of the south-eastern corner of the site. There are some parking restrictions on the carriageway in the form of white lining to stop vehicles from parking over driveways. The carriageway is well lit with street lighting present.
- 3.6 Royal Hill Road provides access to several surrounding residential roads including Marina Drive, Charles Avenue and Windmill Meadow, all of which are access only. At its eastern end Royal Hill Road meets Locko Road forming a priority-controlled T-junction.
- 3.7 Royal Hill Road currently experiences parking issues which are linked to the school drop off/pick up times between 0830-0900 and 1500-1530. There are a number of schools in the area and typically many of the roads in the surrounding residential area experience a sudden increase in parked vehicles for 30 minutes in the morning and afternoon. These characteristics quickly dissipate and return to normal levels once the drop off/pick up activity is over. The presence of these vehicles obscures visibility for vehicles routing along Royal Hill Road in both directions. This was witnessed and experienced during a site visit undertaken on 11th July 2023.

Locko Road

- 3.8 Locko Road, to the south of the site, routes north to south through Spondon, the carriageway measures circa 6.5 metres wide, with 2 metres wide footways on both sides of the carriageway, with street lighting present. Locko Road is subject to a 30mph speed limit within Spondon increasing to the National 60mph Speed Limit circa 450 metres to the north of the junction with Royal Hill Road. 230 metres to the southwest of its junction with Royal Hill Road, Locko Road forms a priority controlled staggered crossroad junction with Chapel Street, Church Street and West Road. To the south, Locko Road provides access to Spondon and the A52. The A52 is the main route between Derby to the west, the M1 Junction 25 and Nottingham to the east.

Locko Road/Chapel Road/Church Street/West Road Junction

- 3.9 Immediately to the northeast of the Locko Road/Chapel Road/Church Street/West Road junction there is a signalised pedestrian crossing. The junction is well lit and there are double yellow lines on all approaches. This junction is located in close proximity to the St Werburghs Primary School so its layout ensures pedestrians are able to cross the road easily and those dropping children off to not park in a way that would make the junction unsafe to navigate for vehicles and vulnerable road users. Access to Sitwell Street is achievable from both Chapel Street and Church Street. Chapel Street leads to Sitwell Street East whilst Church Street leads to Sitwell Road West, both Sitwell Streets meet at a priority controlled mini roundabout with the A6096 Willowcroft Road.

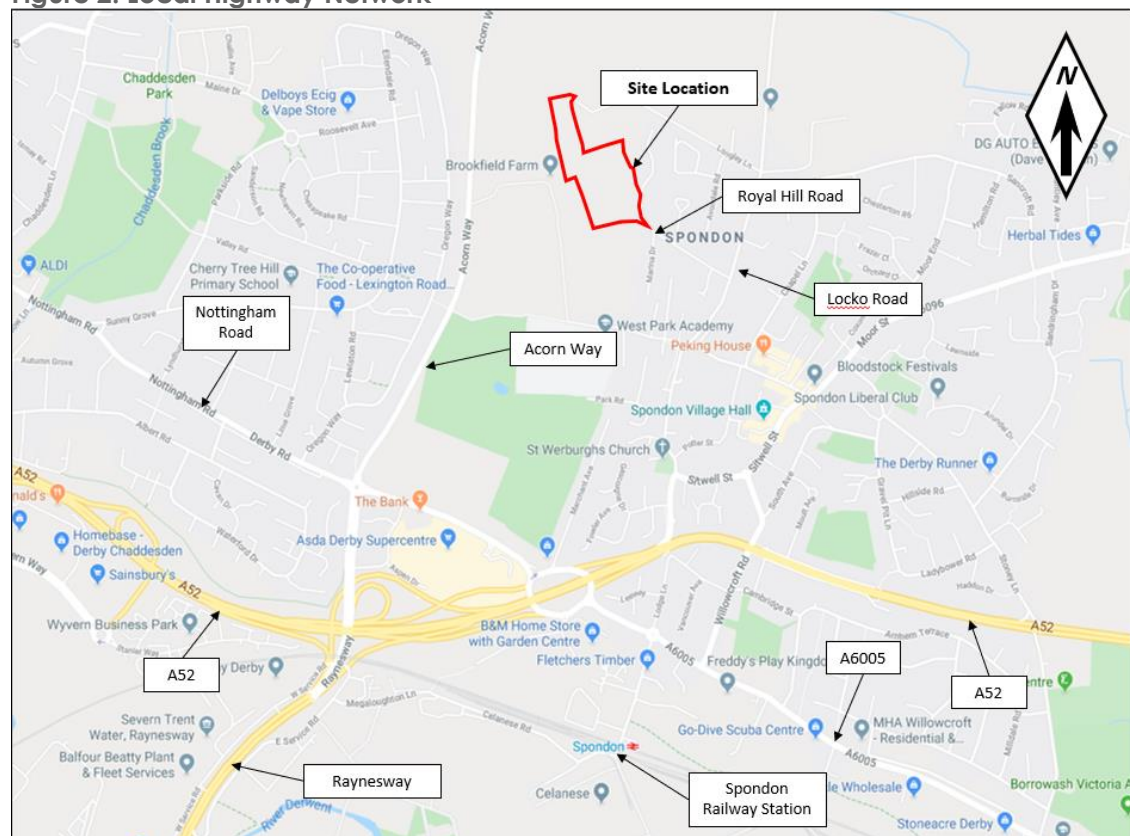
Sitwell Street/A6096 Willowcroft Junction

- 3.10 Both Sitwell Street East and West have double yellow or single yellow lines along both sides of the carriageway along its entire length, preventing vehicles from parking on both sides of the carriageway and ensures approaches to the junction have good visibility. The A6096 Willowcroft Road approach also has double yellow lines along its length on the western side of the carriageway whilst on the eastern side, double yellows lines are only present at the northern end of the road, where a bus stop is also present. There is also a bus stop present on Sitwell Road East approximately 20 metres to the east of the mini-roundabout junction. The junction is well lit and adequate signage is provided for drivers to be prepared to negotiate the roundabout. Willowcroft Road continues southbound where it routes under the A52 and meets A6005 Nottingham Road via a signal controlled T-junction.

A6096 Willowcroft Road/A6005 Nottingham Road Junction

- 3.11 The A6096 Willowcroft Road/A6005 Nottingham Road signal controlled junction has single lane approaches on all arms. On all approaches at the junction there is advance cycle stop lines, whilst on the A6005 Nottingham Road Eastern approach there is a signal controlled pedestrian crossing. On the other two approaches there are drop kerb pedestrian crossings, but these are not signalised. To the west Nottingham Road leads to the A52 via Spondon roundabout, whilst to the east it leads to Borrowwash. Opposite the junction to the north of Nottingham Road there is access to private drives and a small carpark. The junction is well lit and there are double yellow lines on all approaches to the junction. A detailed plan of the local highway network is shown in **Figure 2**.

Figure 2. Local Highway Network



Site Visit

- 3.12 A site visit was undertaken on 20th September 2022 between 1100-1200, the site frontage was examined to determine how this would provide the proposed site access. The junctions within the study area were observed and negotiated in a vehicle and sustainable travel opportunities were examined. Included within the onsite observations was the on-street parking on Royal Hill Road.
- 3.13 It was found that the proposed site access location would be appropriate with visibility achievable in both a northbound and southbound direction. Where the site access is proposed Royal Hill Road inclines slightly, both to the north and the south. Vehicle parking was observed along both sides of Royal Hill Road, but this did not occur in close proximity to the site frontage. Vehicle flows past the development site were very low with most traffic which routed along Royal Hill Road turning off into one of the side streets before reaching the site frontage. This is expected with the northern end of Royal Hill Road being a dead end.
- 3.14 The pedestrian routes surrounding the site were found to be well lit and include wide footways. The existing Public Rights of Way (PRoW) that routes along the southern boundary of the site was clearly sign posted as a walking route to Chaddesden.
- 3.15 A second site visit was undertaken on the afternoon of 11th July 2023 to determine the impact of school drop off/pick up on the Royal Hill Road following concerns by local residents received during the consultation process. During this site visit it was noted that there was an increase in vehicles parking along the eastern edge of Royal Hill Road along its length which obscured the visibility of cars routing in either direction. However, this situation occurs for a maximum of 30 minutes during the morning and afternoon drop off and pick up time periods.
- 3.16 In summary, the surrounding highway network is considered adequate to support sustainable and vehicular trips to and from the development site.

Traffic Surveys

- 3.17 Turning count traffic surveys were undertaken on Thursday 13th October 2022 at the following junctions as discussed and agreed with DCC.
- Royal Hill Road/Locko Road
 - Locko Road/Chapel Road/Church Street/West Road
 - Sitwell Street/Willowcroft Road
 - Willowcroft Road/Nottingham Road.
- 3.18 In addition to the four turning count surveys undertaken for the development an Automatic Turning Count (ATC) was also placed on Royal Hill Road in the approximate location of the proposed access. This ATC was operational for seven days between 7th and 13th October 2022.

- 3.19 The results of the traffic surveys are contained within **Appendix 4**. Also contained within **Appendix 4** are the queue survey results for the aforementioned surveyed junctions, which are used within Section 6 to ensure the base scenarios are representative of the existing operation of the junctions. The 2022 surveyed flows are shown within **Traffic Flow Diagrams 1 and 2** within **Appendix 5**. As the surveys were carried out in 2022, the surveyed flows have been growthed by one year to 2023 to provide a base scenario, the resulting flows can be found in **Diagrams 2 and 3** within **Appendix 5**.

Effects of Covid-19

- 3.20 As requested by DCC during scoping discussions, the 2022 surveys -were compared with pre-Covid traffic flows to determine if a factor needs to be applied to the recorded traffic flows to growth the survey data to represent pre-covid levels. The only junction within our study area where pre-Covid traffic levels were available was the Willowcroft Road/Nottingham Road junction. DCC did not hold any historic data for any of the other junctions within the study area.
- 3.21 These flows were extracted from the Smartparc TA and the recorded traffic flows were compared with historical 2014 traffic flow data as well as the 2020 survey data undertaken in support of the TA for Smartparc. The traffic flow comparison showed that nearly all movements at the junction were very similar to both the 2014 and 2020 flows. Only one movement showed notable increase/decrease in traffic when compared to previous data and this was for vehicles turning right out of Willowcroft Road onto Nottingham Road.
- 3.22 As only one movement was found to have significant increase or decrease in traffic flows it would not be appropriate to apply a growth factor to all flows at the junction. The comparison showed a significant increase in traffic on this movement during the morning peak hour and a significant decrease in the evening peak hour. The change in traffic flow is likely due to changes in peoples typical working hours brought on by flexible working throughout the pandemic. People are likely starting work earlier and finishing earlier and hence there would be much more peak spread post Covid-19.
- 3.23 **Table 1** shows a comparison of the 2022 survey data and the 2014 historic data which was extracted from the Smartparc TA, which had been provided by DCC, and is included in **Appendix 6**. and shows the difference between the recorded flows. The traffic surveys undertaken in support of the Smartparc development were completed on the 4th November 2020, which was also during the Covid-19 historical Pandemic, Therefore, it was not reasonable to compare to these flows.

Table 1. Traffic Flow Comparison

2022 AM (PCU)				2022 PM (PCU)			
From/To	A	B	C	From/To	A	B	C
A		35	258	A		62	404
B	816		37	B	498		68
C	377	69		C	410	82	
TOTAL	1592			TOTAL	1524		
2014 AM (PCU)				2014 (PCU)			
From/To	A	B	C	From/To	A	B	C
A		39	261	A		82	439
B	593		114	B	954		32
C	477	27		C	347	111	
TOTAL	1511			TOTAL	1965		

3.24 **Table 1** shows that in the morning peak hour, the overall flows at the junction are comparable between the 2022 surveys as in the 2014 historic data. In the evening peak, the total traffic flows in 2022 survey are significantly lower than in the historical data. However, most of the difference in flow is associated with the B-A movement. In order to account for the reduced traffic flow on this movement at the junction, a growth factor will be applied. To ensure the 2022 survey is comparable to the historic survey, an additional 441 vehicles would be required at the junction. This equates to an additional 29% when compared to the 2014 recorded traffic flows.

3.25 Therefore, a growth factor of 1.29 will be applied to the A to B movement in the evening peak period. It will also be applied to movements that feed into Willowcroft Road from the mini-roundabout junction with Sitwell Street, again this will only apply to the evening peak period.

Committed Developments

- 3.26 Paragraph 014 of the document 'Travel plans, transport assessments and statements in decision-taking' advises that, "An assessment of trips from all directly relevant committed developments in the area (i.e. development where there is a reasonable degree of certainty will proceed within the next three years)".
- 3.27 DCC's scoping advice confirmed that committed developments would need to be included within junction assessments. Andrew Gibbard also confirmed that Smartparc is the only committed development that needs to be considered within the junction assessments. Smartparc is a large industrial development to the south of Spondon and its planning reference is: 21/01033/VAR. The Transport Assessment for Smartparc has been examined and the committed development flows have been extracted. These flows can be found at **Appendix 6**.
- 3.28 The committed development flows which would impact the development are also shown in **Traffic Flow Diagrams 5** and **6** within **Appendix 5**. As the committed development flows were only shown at the Willowcroft/Nottingham Road signal controlled junction, the flows have been distributed throughout the study area using the existing turning proportions at the junctions, which were established during the surveys as agreed with DCC.

Local Facilities and Sustainable Travel

Local Facilities

- 3.29 The majority of trips that will be made by sustainable modes are for the purpose of commuting, short shopping trips, access to leisure facilities, trips to school and other destinations. Of particular interest are the levels of facilities and services that can be accessed locally including car parking facilities which allow visitation to the site.
- 3.30 **Table 2** presents a sample of key facilities near the site.

Table 2. Key Local Amenities

Amenity Type	Amenity	Approximate Walking Distance (metres)	Approximate Walking Time (minutes)
Education	Springfield Primary School	300m	4 mins
Hospitality/Hotel	The Vernon Arms	320m	4 mins
Education	West Park Secondary School	560m	7 mins
Education	St Werburghs Primary School	600m	7 mins
Hospitality	Empire Tandoori Takeaway	640m	8 mins
Leisure	Beauty Boutique	640m	8 mins
Medical	Chapel Street Medical Centre	800m	11 mins
Pet Care	Ashfield House Vets	800m	11 mins
Retail	Premier	800m	11 mins
Hospitality	Clock Bistro	800m	11 mins
Retail	Co-op	930m	12 mins
Medical	Spondon Derwent Vally Medical Practice	950m	12 mins
Car Care	Sitwell Garage Ltd	960m	12 mins
Worship	St Werburghs Church	1.1 km	14 mins

- 3.31 **Table 2** shows that there are many facilities within walking distance of the site including education, retail, hospitality, and recreation uses.

Pedestrian Travel

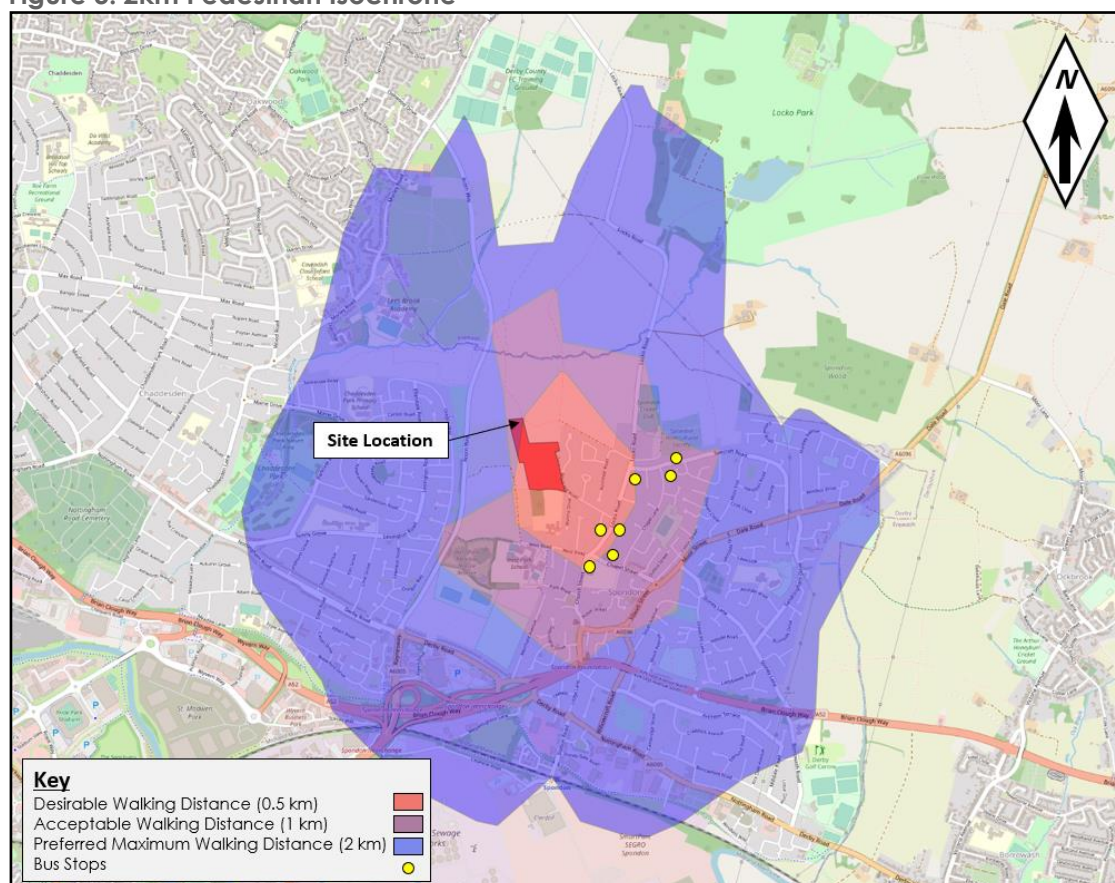
- 3.32 The Guidelines for Providing for Journeys on Foot (GPJF) document describes acceptable walking distances for pedestrians without mobility impairment. GPJF suggests that the maximum walking distance for town centres is approximately 800m, commuting/schools is approximately 2km and for other facilities is approximately 1.2km.
- 3.33 GPJF states that an average walking speed of approximately 1.4m/s (5km's/hr) can be assumed. The walking distance thresholds for commuting and other facilities set out in the GPJF document (within table 3.2) are summarised below in **Table 3**.

Table 3. GPJF Acceptable Walking Distances Guidance Table

Journey Purpose	Suggested Acceptable Walking Distance (Metres)		
	Town Centres	Commuting/ School/ Sight-Seeing	Elsewhere
Desirable	200	500	400
Acceptable	400	1,000	800
Preferred Maximum	800	2,000	1,200

3.34 **Figure 3** identifies a 2km walking distance from the proposed development site.

Figure 3. 2km Pedestrian Isochrone

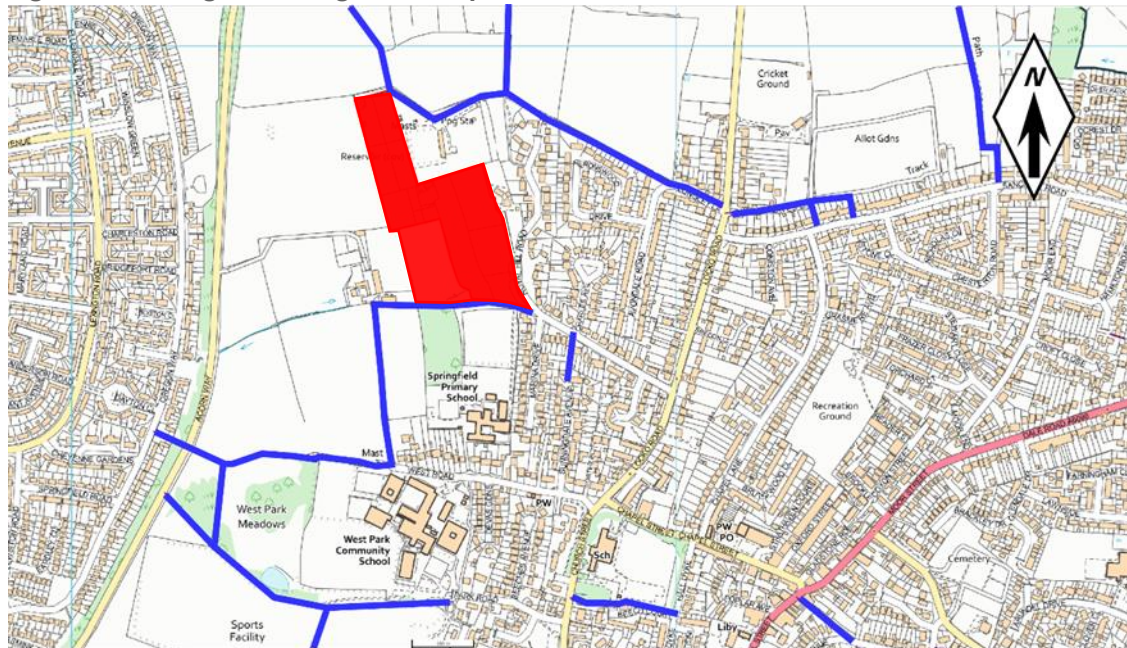


3.35 **Figure 3** shows that a large proportion of Spondon is accessible on foot including the aforementioned facilities in **Table 1**. The centre of Spondon is also within 2km of the proposed development site which provides an abundance of facilities including many employment opportunities, hospitality venues, retail and recreational uses. Roads within Spondon have lit pedestrian footways and are subject to a 30mph speed limit, which provides favourable conditions for pedestrians.

3.36 There are a number of Public Rights of Way (PRoW) in the area surrounding the site and these are shown in **Figure 4**. This includes a facility which routes along the southern edge

of the development which is located in close proximity to the proposed vehicular site access. The route continues westbound, along the edge of West Park Meadow Nature Reserve where it meets a pedestrian crossing over Acorn Way. Thus, providing a traffic free route into Chaddesden.

Figure 4. Existing Public Rights of Way

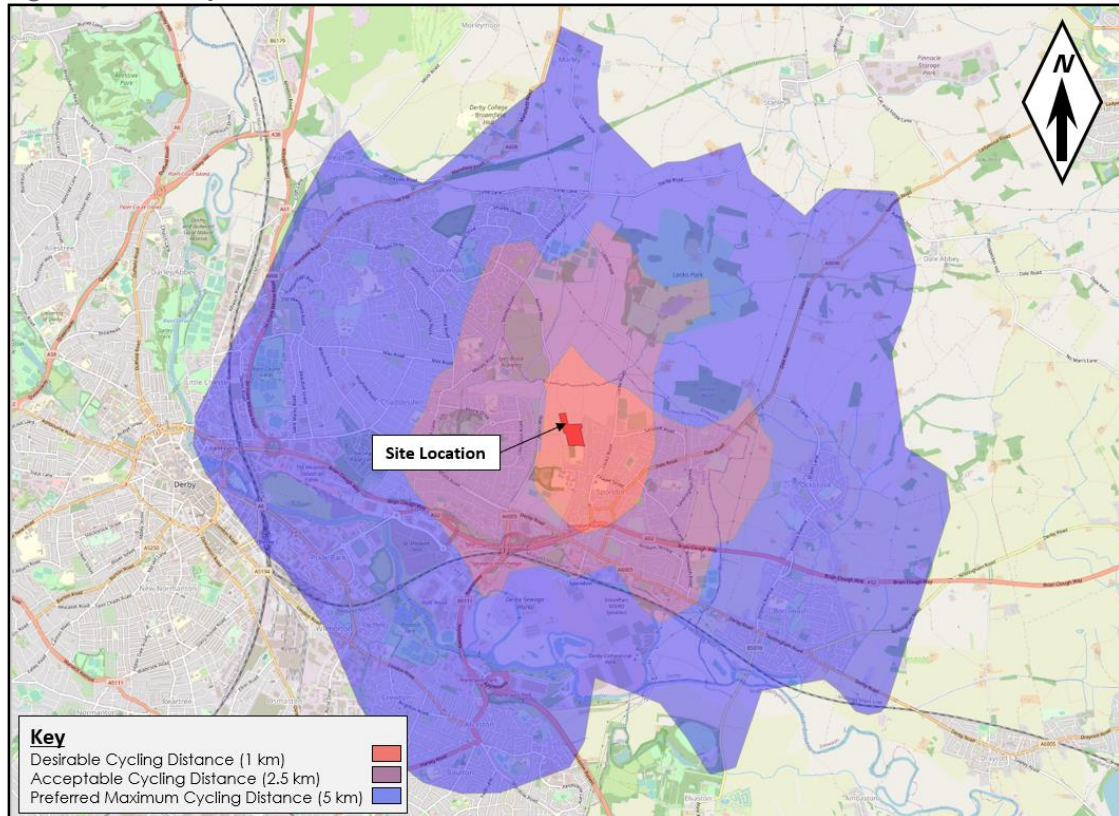


Cycle Travel.

3.37 Local Transport Note (LTN) 1/04 states that there are limits to the distances generally considered acceptable for cycling. The mean average length for cycling is 4km (2.4 miles), although journeys of up to three times this distance are not uncommon for regular commuters. It is widely considered that cycling has the potential to substitute for short car trips, particularly those under 5km, and form part of a longer multi modal journey by public transport. Cycling is therefore an important journey to work mode that has the potential to substitute for short car journeys.

3.38 **Figure 5** shows a 5km cycling distance centred at the proposed development site.

Figure 5. 5km Cycle Isochrone



- 3.39 **Figure 5** shows that all of Spondon is accessible within the maximum cycle distance from the development, which includes Spondon Railway Station, all of Chaddesden, Pride Park and approximately half of Oakwood to the west and all of Raynes Way to the south which provides a number of employment and retail opportunities.
- 3.40 There are some cycle facilities within Spondon although these are limited, including shared footway/cycleways, cycle lanes within the carriageway, and some cycle parking. Cyclists could make use of the existing offroad cycle routes to the west of the site. Cycle travel from the proposed development would be suited to more experienced cyclists as it would be required to travel within the carriageway.

Bus Services

- 3.41 The Guidelines for Planning for Public Transport in Developments, states that “*generally walking distances to bus stops in urban areas should be a maximum of 400m and preferably no more than 300m*”. However, the Buses in Urban Developments¹ guidance advises a more rigorous approach to catchment area planning as displayed in **Table 4**.

¹ Buses in Urban Developments, Chartered Institution of Highways and Transportation, 2018

Table 4. Recommended Maximum Walking Distances to Bus Stops

Situation	Maximum Walking Distance
Core bus corridors with two or more high-frequency services	500m
Single high-frequency routes (every 12 minutes or better)	400m
Less frequent routes	300m
Town/city centres	250m

- 3.42 The nearest bus stops to the site are located on Locko Road at its junction with Royal Hill Road approximately 350 metres walk distance from the centre of the development site. However, the buses which served these stops have recently been re-routed or cancelled. The 9/9A no longer routes along Locko Road and the Spondon Flyer has been cancelled. The nearest bus stop to the site for the bus route 9 is now located on Moor Street, approximately 850 metres from the site.
- 3.43 The Spondon Flyer was a regular bus service in Spondon, which served the nearest bus stops to the site as described above. However, the service has recently been cancelled due to low patronage meaning it was not viable to continue operation, not even on a reduced service basis.
- 3.44 Since this service has been cancelled, two small buses operated by Derbyshire Community Transport have been undertaking a 3 month trial run within Spondon. These buses are called the Spondon Shuttle Buses (route S1 and S2) and only operate within Spondon, the S1 serves southern Spondon whilst S2 serves northern Spondon. The S2 shuttle bus routes nearest to the site, routing and calling at stops on Church Street and Chapel Street. Some of the stops on the route are existing physical stops whilst others are hail and ride stops. When the bus trial reached the end of the trial period at the end of June it was decided to extend the trial for a further 3 months, the service is also continuing free of charge to passengers.
- 3.45 The aim of these buses is to reconnect local residents with the existing businesses and facilities in Spondon. Whilst these services only route within Spondon, they also share bus stops with the Ilkeston Flyer, which presents more opportunity to travel to areas further afield including Derby city centre. The Ilkeston Flyer is a regular service which routes between Cotmanhay and Derby City Centre via Spondon operating at a frequency of 1 service every 15 minutes. Further information on the services can be found at **Appendix 7** and **Table 5** shows the current timetables of the S2 shuttle bus for its stop on Chapel Street which lies approximately 500 metres to the south of the site.

Table 5. Summary of Shuttle Bus S2 Weekday Services

Service number and route	First Service		Last Service		Daytime Frequency
	Eastbound Route	Westbound Route	Eastbound Route	Westbound Route	
S2	1000	X	1400	X	2 per 1 hr

Note: Timetable information obtained (July 2023), First/ last service based on time service arrives/ leaves the nearest bus stop to the development site.

- 3.46 Both of the Spondon shuttle buses only operate Monday to Friday, with the S1 operating between 0945 and 1345 and the S2 operating between 1000 and 1400. Both buses do not operate at the weekend.

Rail Services

- 3.47 The nearest railway station to the site is to the south of Spondon approximately 2 km to the south of the development site and within a 2km walking or cycling journey. The railway station at Spondon has two platforms, and step free access. There are no cycle or car parking areas at Spondon Railway Station. It lies on the Derby – Nottingham line and the station is managed by East Midlands Rail. The CrossCountry line from Cardiff to Nottingham also stops at the station. There are no services from the station on a Sunday.
- 3.48 **Table 6** shows a sample of key destinations available from Spondon Railway Station direct.

Table 6. Local Rail Services

Destination	Approx. Weekday Daytime Frequency	Approx. Journey Time
Derby	60 mins during peaks	15 mins
Nottingham	60 mins during peaks	23 mins
Birmingham	120 mins during peaks	52 mins
Gloucester	1 direct service per day	1 hr 56 mins
Cardiff	1 direct service per day	3 hours

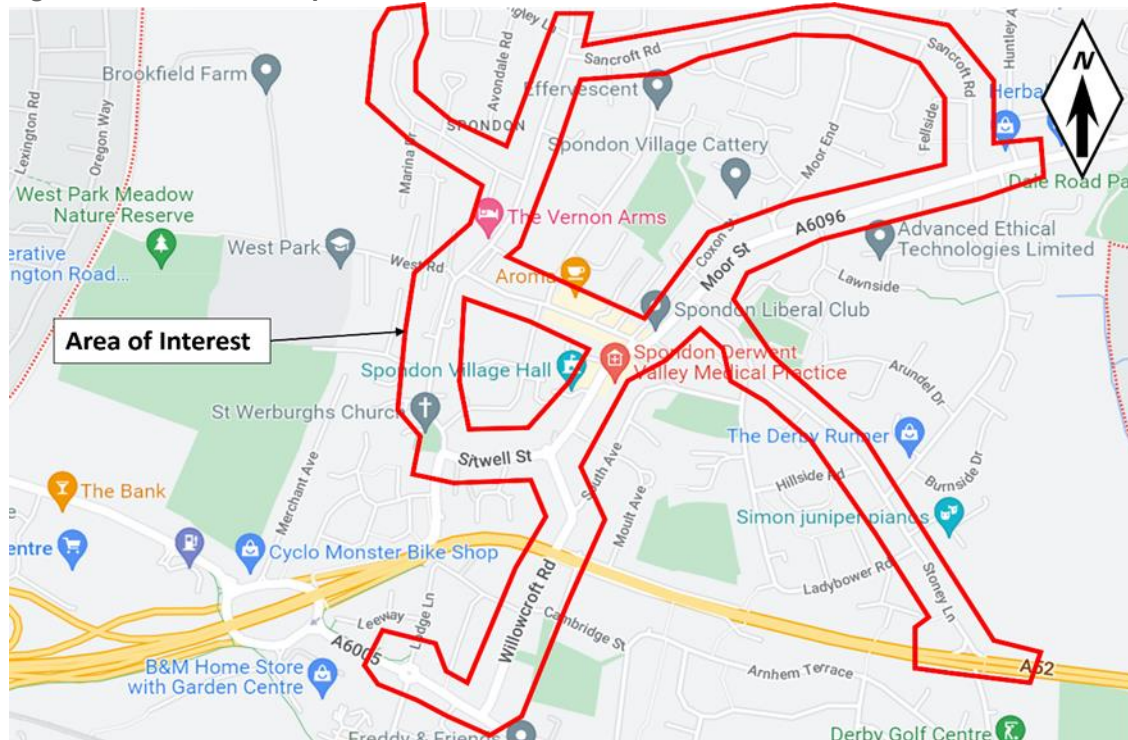
Note: Timetable information obtained (July 2023)

- 3.49 **Table 6** shows that Spondon Railway Station is served by a number of frequent services that provide access to a range of destinations during the morning and evening peak hours. Train services to Derby, Nottingham and Birmingham, present opportunities for future residents to commute to these areas for employment. Some of the journey times are sufficient for commuting and there are more employment opportunities in the achievable destinations.

Personal Injury Collisions

- 3.50 Personal Injury Collision (PIC) data has been received from DCC for the most recent 5-year period covering 1st August 2017 to 31st June 2023. The area of interest is shown below in **Figure 6**. The PIC data obtained from DCC can be found within **Appendix 8**.
- 3.51 The data has been summarised below and the information is analysed on a junction by junction basis in order to identify any existing highway safety concerns within the surrounding highway network.
- 3.52 **Figure 6** below presents the location of the PIC area of interest near to the proposed development.

Figure 6. Collision History



3.53 In total there have been 39 PICs recorded across the study area in the most recent five-year period, a large proportion of these were at random locations. However, there were a couple of clusters which occurred at the following junctions; Chapel Street/Sitwell Street/Moor Street mini roundabout and the A6005 Nottingham Road / Station Road roundabout. Although the PIC data received shows a number of PICs across the large study area, it is only deemed necessary to focus on the junctions which would be impacted by the trips associated with the development. This ensures that any existing issues are not exacerbated by the increased flows. Therefore, the following junctions/areas have been identified as requiring further assessment:

- All of Royal Hill Road and its junction with Locko Road
- Locko Road / Chapel Street / Church Street / West Road Staggered Crossroads
- Church Street / Lodge Lane / Sitwell Street T-junction
- Sitwell Street / A6096 Willowcroft Road Mini Roundabout
- Willowcroft Road / A6005 Nottingham Road Signal Junction
- A6005 Nottingham Road / Station Road Roundabout

Royal Hill Road and its Junction with Locko Road

3.54 Royal Hill Road provides access to the proposed site. No PIC's were recorded along the length of Royal Hill or at the Royal Hill Road/ Locko Road priority controlled T-junction in the last five years.

Locko Road / Chapel Street / Church Street / West Road

- 3.55 No PIC'S were recorded at this staggered crossroads junction in the last five years.

Church Street / Lodge Lane / Sitwell Street

- 3.56 Two PICs occurred at this location, the first PIC involved a vehicle which was turning left at the bend whilst another vehicle was approaching the bend from the south. The vehicle which was undertaking the bend, clipped the vehicle approaching the bend causing collision. This PIC was slight in severity and occurred at 2330 in dark and dry conditions.
- 3.57 The second PIC at this location involved a pedestrian which was crossing near to the junction, when a vehicle exited junction and clipped the pedestrian. Severity was slight, the conditions were light and dry and the PIC occurred during the morning peak hour.

Sitwell Street / A6096 Willowcroft Road

- 3.58 One PIC occurred at this location which involved a pedestrian that was walking on the pavement when a vehicle mounted the kerb and collided with them; the vehicle swerved to avoid an oncoming vehicle. The PIC was slight in severity and occurred in dark and dry conditions during the evening peak period.

Willowcroft Road / A6005 Nottingham Road

- 3.59 Two PICs occurred at this location. The first PIC involved a rear end shunt between a car and a van. The van was travelling southbound from Willowcroft Road and stopped as the traffic light turned amber and the car travelling behind collided with its rear. The PIC was slight in severity, occurred in light and dry conditions and was outside of the network peak periods.
- 3.60 The second PIC at this location involved a collision between a car and a motorcycle. The car pulled out of a side road as the motorcycle was overtaking stationary traffic on the offside causing collision. This PIC was serious in severity, occurred in light and dry conditions and was just before the morning peak period.

A6005 Nottingham Road / Station Road

- 3.61 Five PICs occurred at this location, four of which were slight in nature and one was serious. Of the four slight PICs, one involved a van which was travelling ahead at the roundabout which clipped a motorbike causing the rider to fall. The van driver fled the scene. The conditions were light and dry and the PIC occurred outside of the peak hours.
- 3.62 The second slight PIC at this location occurred between two cars, one was sat in stationary traffic in the left hand lane. The other car was turning right at the roundabout in the right hand lane and collided with the stationary vehicle. The conditions were dark and dry and it occurred outside of the peak periods.

- 3.63 The third slight PIC involved a car which clipped the back wheel of a pedal cycle causing the rider to fall, when both vehicles were travelling ahead at the roundabout. The conditions were light and dry and the PIC occurred outside of the peak periods.
- 3.64 The fourth slight PIC at this location involved a rear end shunt as one car approached stationary traffic. The conditions were light and snowy and the road was slippery. The PIC occurred at the weekend.
- 3.65 The serious PIC at this location occurred at the zebra crossing slightly to the northwest of the roundabout. The car collided with the pedestrian at the zebra crossing in dark and wet conditions.

Summary

- 3.66 There are no obvious trends in PICs recorded across the 5-year period. 10 PICs occurred at the junctions which would be impacted by the development within the study area with no obvious clusters noted at specific junctions or links. It is therefore considered that the PIC records do not need investigating in further detail and the PICs that occurred did not appear to be attributed to the existing conditions but were instead more due to driver error.
- 3.67 Based on the number and type of collisions occurring at each junction over a five-year period, it is considered that these are within the typical range given the size and level of use of each individual junction. Therefore, the collision analysis indicates that the existing highway layout that surrounds the proposed development is acceptable. Hence, no highway safety specific mitigation measures should be required to any off-site junctions to accommodate the additional demand of the traffic generated by the site.

4. PROPOSED DEVELOPMENT

Introduction

- 4.1 The proposed development comprises up to 90 dwellings including related infrastructure, landscaping and open space. All matters reserved except for access into the site from Royal Hill Road, Spondon. A copy of the indicative site layout is included within **Appendix 1**.

Vehicular Access

- 4.2 Vehicular access will be achieved via a priority-controlled T-junction on Royal Hill Road, the carriageway measures 5.5 metres wide with 2 metres wide footways on both sides of the access. The kerb radii measures 6 metres on both sides of the junction and 43 metres visibility is achievable to both the north and the south. This is in line with the 30mph speed limit on Royal Hill Road, although due to the layout and nature of the road vehicle speeds are likely to be less. The access is located between two slopes, where Royal Hill Road inclines both to the north and south. On site observations and measurements confirmed that visibility would also be achievable in the vertical alignment, this is due to the positioning of the access between two inclines. The proposed access arrangement has been designed inline with 'Delivering Streets and Places 2017' guidance.
- 4.3 Drawing number **RHR-BWB-GEN-XX-DR-TR-101 S2-P2** shows the proposed access arrangement. Highway boundary information has also been obtained for the development, which shows that the proposed access arrangement fits within the site boundary and the publicly maintainable highway and does not overrun any private land. The highway boundary information can be found at **Appendix 9**.
- 4.4 As previously discussed within Section 3, there are existing parking issues linked with the local schools ,on Royal Hill Road in the vicinity of the proposed site access junction. This is a typical characteristic of roads which are located in close proximity to a school. The increased level of parking only occurs for approximately 20-30 minutes coinciding with school drop off in the morning and pick up in the afternoon. The parking situation is an existing issue on Royal Hill Road which would not be exacerbated by the proposed development. It is likely that the inclusion of the site access junction would reduce the number of vehicles parking on Royal Hill Road. If vehicles continue to park along the eastern side of Royal Hill Road, this does not obscure the visibility for vehicles entering or exiting the site. The only manoeuvre that could be jeopardised at the junction would be vehicles entering the site right in from the north. However, as Royal Hill Road leads to a dead end to the north this manoeuvre would be highly unlikely.
- 4.5 The location of the site access and the existing parking situation on Royal Hill Road is not a concern, as the situation occurs and disperses within a 30 minute period in the morning and afternoon. The vehicle flow on Royal Hill Road is extremely low due to the dead end and thus the parked cars do not cause a problematic obstruction. The situation is existing and would not be made worse by the development. It is likely that the inclusion of the access junction would actually reduce the number of vehicles parking on Royal Hill Road and hence provide betterment.

Pedestrian and Cyclist Access

- 4.6 Pedestrians will gain access to the site via the footways proposed on both sides of vehicular access. Footway links will be provided throughout the site to encourage active travel by residents. The pedestrian footways within the site will meet the existing pedestrian provisions on Royal Hill Road to the south of the junction. Whilst to the north the footway will terminate at the kerb radii, at this point a drop kerb crossing will be provided to enable pedestrians to cross on to the eastern side of Royal Hill Road to continue their journey. Connecting to the existing off-site infrastructure will allow pedestrians and cyclists to travel to off-site destinations.
- 4.7 The site also benefits from a wealth of PRow provisions routing through the open fields which surround the site both to the west and north. The development proposals allow access for pedestrians/cyclists onto the public footpath network via links at both the northern and southern extents of the site.

Parking Provision

- 4.8 The parking standards for Spondon are contained within the Derby City Local Plan – Part 1 - Core Strategy document (January 2017). They can be found within Appendix C. However, the document states that for Use Class C3 (residential) developments, 'Residential parking will be negotiated site by site on the basis of the size of the proposed dwellings, availability of public transport and consideration of existing on street parking issues.'
- 4.9 Typically, for new developments, one parking space is provided for 1-2 bed properties, whilst two spaces may be provided for 2-3 bed houses and three spaces may be provided for 4+bedroom properties. Visitor parking bays will also need to be considered and generally will be on-street or within visitor specific parking bays. This will be examined in further detail at the detailed planning application stage.

Servicing

- 4.10 In relation to refuse collection vehicles, the internal roads will be designed to ensure that all dwellings are located within 30 metres of bin storage facilities and that refuse vehicles are able to reach within 25 metres of a bin store. This is to meet the maximum bin carrying distances for both residents and refuse collection workers. Drawing Number **RHR-BWB-GEN-XX-DR-TR-110 S2-P1** shows a large refuse vehicle entering and egressing the site using the proposed access arrangement.

5. TRIP GENERATION, DISTRIBUTION AND ASSIGNMENT

Introduction

- 5.1 This section presents the forecast trip rates and resultant person trip generation associated with the development proposals, which would be considered as new trips as the existing site is an open field. The following section considers 90 dwellings as the planning application is now considering the reduced number versus that considered in the pre-application discussions.

Trip Generation

- 5.2 Vehicle trip rates for the proposed residential development presented in the original Scoping Note were obtained from the TRICs database and refined based on the following parameters:
- Land Use: Residential – Houses Privately Owned
 - Region: All England (Excluding Greater London)
 - Days of the Week: Monday – Friday
 - Number of Houses: 75 to 200 dwellings
 - Location: Edge of Town only.
- 5.3 As agreed during the scoping discussion, 85th percentile morning and evening peak hour trip rates have been used to calculate the likely trip generation of the development in line with DCC's adopted guidance, Delivering Streets and Places Design Guide. A copy of the TRICs output is attached in **Appendix 10**.
- 5.4 A summary of the 85th percentile vehicle trip rates and forecast trip generation for the proposed development is given in **Table 7**.

Table 7. Proposed Site Vehicle Trip Generation (90 Dwellings)

Time Period	Trip Rates			Trip Generation		
	Arrive	Depart	Two-Way	Arrive	Depart	Two-Way
08:00 – 09:00	0.127	0.473	0.600	11	43	54
17:00 – 18:00	0.400	0.170	0.570	36	15	51

- 5.5 **Table 7** shows that the development has the potential to generate 54 two-way vehicle trips in the morning peak hour and 51 two-way vehicle trips in the evening peak. The vehicle trips are above the theoretical threshold for requiring more detailed assessment.

Modal Split

- 5.6 To provide a more accurate representation of the existing and forecast modal split anticipated at the development site, the Census Journey to Work data has been analysed. The site is located within the 010 Derby Middle Super Output Area.
- 5.7 The method of travel data to work for the 2011 Census has been examined and modal splits calculated, the results are summarised below in **Table 8**. The extracted modal split data can be found within **Appendix 11**.

Table 8. Modal Split

Method of Travel to Work	Modal Split
Car Driver	73.7%
Bus	8.5%
On Foot	7.2%
Passenger	5.4%
Bicycle	3.1%
Motorcycle	1.0%
Train	0.8%
Taxi	0.4%
Total	100.00%

Source: Nomis – Office for National Statistics

- 5.8 **Table 8** indicates that the proposed development is forecast to generate 82 and 78 person trips in the morning and evening peak hours respectively. Of these 8.5% would be undertaken using public transport, 7.2% would be undertaken on foot and 3.1% on bicycle. Therefore, in total 18.8% of trips at the development are likely to be undertaken via sustainable modes whilst 81.2% will be undertaken via single occupancy vehicle trips.

Person Trip Generation

- 5.9 The modal splits outlined in **Table 8** have been combined with the vehicle trip generation in **Table 7** to calculate the two-way person trips associated with the proposed development, shown in **Table 9**.

Table 9. Multi-Modal Trip Generation

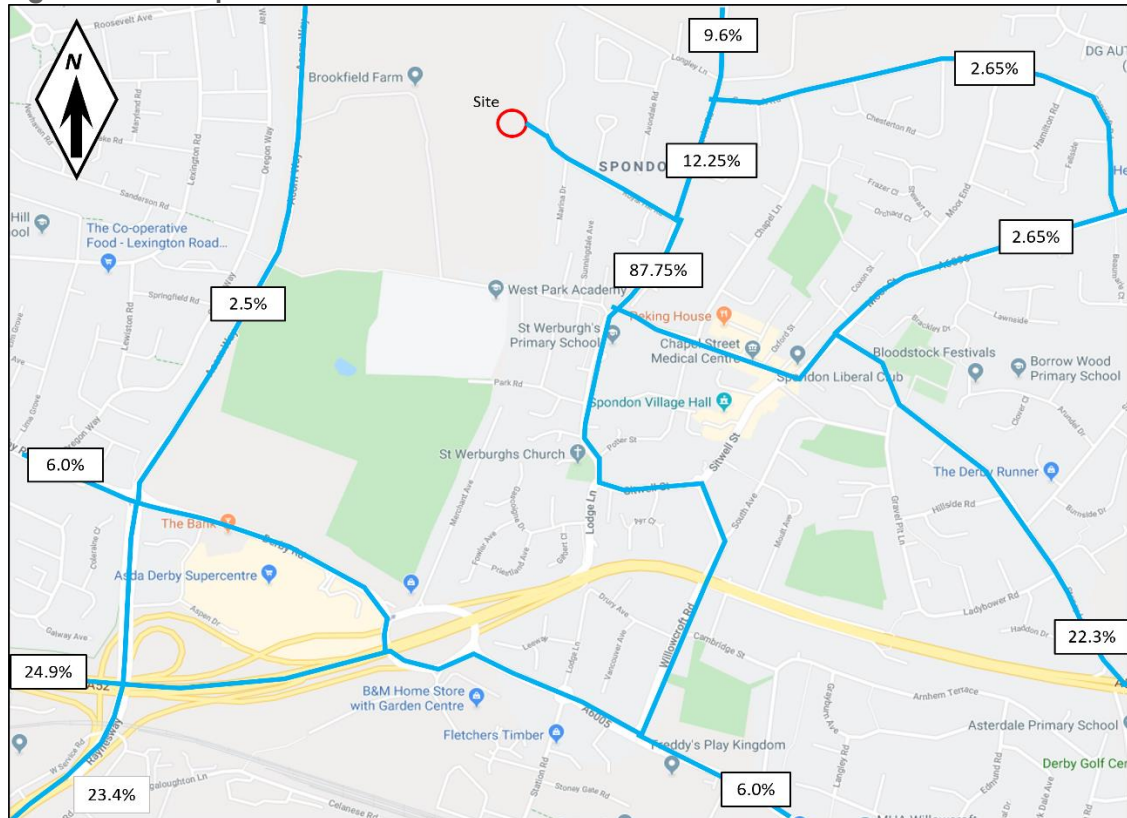
Mode	AM Peak 08:00 – 09:00			PM Peak 17:00 – 18:00		
	Arrive	Depart	Two-Way	Arrive	Depart	Two-Way
Car Driver	11	43	54	36	15	51
Bus	1	5	6	4	2	6
On Foot	1	4	5	4	1	5
Passenger	1	3	4	3	1	4
Bicycle	0	2	2	2	0	2
Motorcycle	0	1	1	1	0	1
Train	0	1	1	1	0	1
Taxi	0	0	0	0	0	0
Total	14	59	73	51	19	70

- 5.10 **Table 9** shows that the proposed development of 90 dwellings has the potential to generate 73 total person trips during the morning peak hour. Of these 19 would likely be undertaken via sustainable modes. In the evening peak hour, a total of 70 person trips could be generated and of these 19 are likely to be undertaken via sustainable modes.

Trip Distribution

- 5.11 As agreed, as part of the scoping exercise, the proposed development traffic distribution has been based on the 2011 census 'Location of usual residence and place of work by method of travel to work' data MSOA Derby 010. The origins of all trips to the area were separated from the data and a percentage demand was derived for all the destinations for vehicle driver trips using the most appropriate route to/from each area. The extracted census data can be found at **Appendix 12**.
- 5.12 The indicative distribution of the development traffic is shown in **Figure 7**.

Figure 7. Development Traffic Distribution



5.13 The resulting assignment of development traffic is shown in **Figure 8**.

[illegible]

Study Area

- Site Access on Royal Hill Road
- Royal Hill Road / Locko Road T-junction
- Locko Road / Chapel Street / Church Street / West Road Staggered Crossroads
- Sitwell Street / Willowcroft Road Mini-roundabout
- Willowcroft Road / Nottingham Road Signal Junction

6. ASSESSMENT PARAMETERS

Introduction

- 6.1 This section of the TA describes the key assessment parameters and evidence-based assumption used in this TA. These feed into the formation of the traffic flow diagrams and thus the traffic impact assessment.

Assessment Years

- 6.2 The following assessment years have been selected as agreed within the scoping discussions:

- Base Year (2023) and
- Future Year (2028)

- 6.3 The assessments of the above years include the weekday peak hours of the local highway network as determined from the traffic surveys, these are 08:00 – 09:00 and 17:00 – 18:00.

Traffic Growth Factors

- 6.4 Traffic growth factors have been applied to the surveyed peak hour traffic flows for the aforementioned assessment years as was agreed during the scoping discussions.
- 6.5 TEMPro version 7.2b has been used to determine local traffic growth factors by interrogating National Transport Model (NTM) datasets on traffic along with consideration of local assumptions regarding housing and employment growth. This is the standardised approach to estimating traffic flows in the future.
- 6.6 The Middle-layer Super Output Area (MSOA) of Derby 010 was chosen as the geographic area of interest as the application site is located within this.
- 6.7 For the interrogation of the TEMPRO database the growth rates for 'car drivers only' were selected with the trip end type being defined as 'origin/destination'. Trip rates were obtained for the weekday morning and evening peaks (0700-0959 & 1600-1859).
- 6.8 A full summary of the TEMPRO growth factors used is shown in **Table 10** and the TEMPro output can be found at **Appendix 13**.

Table 10. TEMPRO Growth Factors

Period	AM Peak (08:00 – 09:00)	PM Peak (17:00 – 18:00)
2022-2023	1.0076	1.0074
2022-2028	1.0464	1.0527

- 6.9 The above key assumptions and assessment parameters have been applied to the recorded traffic survey flows to predict the future year traffic flows which are shown in **Traffic Flow Diagrams 10** and **11**. The traffic flow diagrams have been used to inform the

junction modelling assessments presented in the following section of this report and can be viewed in **Appendix 5**.

Future Year Assessments

- 6.10 The committed development flows have been added to the future year flows to provide a future year '2028 base plus committed' scenario as shown in **Traffic Flow Diagrams 12** and **13** within **Appendix 5**. The development traffic has then been added to provide a future year '2028 base plus committed plus development' scenario as shown in **Traffic Flow Diagrams 14** and **15** within **Appendix 5**.

7. HIGHWAY IMPACT

Introduction

- 7.1 This section examines the potential highway impact of the development proposals. The traffic impact of the proposals has been assessed using TRL industry-standard modelling software JUNCTIONS 10 for priority junctions and LinSig for signalised junctions.

Modelling Software and Interpretation

Junctions 10

- 7.2 The traffic impact of the proposals has been assessed using TRL industry-standard modelling software JUNCTIONS 10 (PICADY) for priority junctions.
- 7.3 PICADY models return results in Ratio to Flow Capacity (RFC) and queueing in each 15-minute time segment, measured in the number of passenger car units (PCUs).
- 7.4 RFC values between 0.00 and 0.85 indicate satisfactory operating conditions, values of between 0.85 and 1.00 represent variable operation (i.e. queues building at the junction resulting in increased vehicle delay moving through the junction). RFC values in excess of 1.00 represent overloaded conditions.

LinSig

- 7.5 The traffic impact of the proposals has been assessed using JCT industry-standard modelling software LinSig for signal controlled junctions.
- 7.6 The results from LinSig models are expressed in Practical Reserve Capacity (PRC), which is calculated based on a maximum Degree of Saturation (DoS) on each signalised approach and is a measure of how much additional traffic could pass through a junction whilst maintaining a maximum DoS of 90% on all links/streams. Therefore, if the worst link's DoS is 90% the PRC then would be 0%. Negative numbers indicate that the junction would experience longer delays and overloading.
- 7.7 The DoS is a function of Demand vs Capacity and the results are interpreted using the following bands:
- 0%-90% - The junction operates within capacity, traffic clears the junction every cycle of the signals.
 - 90%-100% - Traffic will experience some delay it is unlikely as to whether every queued vehicle at the start of the green phase will clear the junction within the same cycle, an arm experiencing a DoS above 90% is considered to be failing.
 - 100%+ - The arm is significantly over capacity, queues may exponentially increase as traffic struggles to clear the junction.

- 7.8 LinSig also illustrates the queuing results as Mean Maximum Queuing (MMQ), which is the estimated mean number of vehicles (or PCUs) which have added onto the back of the queue up to the time when the queue finally clears at the junction stop line.

Scenarios

- 7.9 The following scenarios have been modelled for the junction assessments undertaken in support of the proposed development:

- 2023 Base (Morning and Evening Peaks)
- 2028 Base (Morning and Evening Peaks)
- 2028 Base plus Committed (Morning and Evening Peaks)
- 2028 Base plus Committed plus Development (Morning and Evening Peaks)

- 7.10 The results of the junction assessments can be found below.

Junction 1 - Site Access / Royal Hill Road

- 7.11 **Table 11** summarises the operation of the proposed site access junction. The full model outputs are contained within **Appendix 14**. The naming convention in **Table 11** is as follows; A- Royal Hill Road S, B- Site Access and C- Royal Hill Road N.

Table 11. Site Access/Royal Hill Road J10 Capacity Assessment

Arm / Movement	AM Peak (08:00 – 09:00)			PM Peak (16:30 – 17:30)		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2023 BASE						
Stream B-AC	0.1	8.10	0.10	0.0	7.53	0.03
Stream C-AB	0.0	0.00	0.00	0.0	0.00	0.00

- 7.12 **Table 11** shows that the proposed site access junction operates well within capacity with a maximum RFC of 0.10 in the morning peak for vehicles entering the junction from the site access, with a queue of 0.1 and a delay of 8.10 seconds.

Junction 2 – Royal Hill Road / Locko Road

- 7.13 **Table 12** summarises the operation of the Royal Hill Road / Locko Road priority-controlled T-junction including the committed and proposed development. The full model outputs are contained within **Appendix 15**. The naming convention in **Table 12** is as follows; A- Locko Road S, B- Royal Hill Road and C- Locko Road N.

Table 12. Royal Hill Road/Locko Road J10 Capacity Assessment

Arm / Movement	AM Peak (08:00 – 09:00)			PM Peak (16:30 – 17:30)		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2023 BASE						
Stream B-AC	0.2	8.82	0.17	0.1	8.40	0.09
Stream C-AB	0.2	5.25	0.09	0.0	5.81	0.03
2028 BASE						
Stream B-AC	0.2	9.01	0.18	0.1	8.52	0.09
Stream C-AB	0.2	5.24	0.10	0.0	5.82	0.03
2028 BASE+COM						
Stream B-AC	0.2	9.24	0.19	0.1	8.62	0.09
Stream C-AB	0.2	5.20	0.10	0.0	5.83	0.03
2028 BASE+COM+DEV						
Stream B-AC	0.4	11.23	0.30	0.2	9.35	0.14
Stream C-AB	0.2	5.22	0.10	0.1	5.97	0.04

- 7.14 **Table 12** shows that the Royal Hill Road / Locko Road T-Junction operates well within capacity for all scenarios examined. A maximum RFC of 0.30 was determined for the '2028 BASE + COM + DEV' scenario in the morning peak for vehicles entering the junction from Royal Hill Road. A maximum queue of 0.4 vehicles and a delay of 11.23 seconds was summarised for this movement.

Validation

- 7.15 The above '2023 Base' scenario junction assessment results have been compared with the queue lengths recorded within the surveys undertaken at the junction. The average queue in the J10 assessment has been compared with the average queue length across both the morning and evening peak periods in the survey.
- 7.16 The comparison found the junction assessments were representative of the recorded queue surveys, with no queuing shown on any of the arms. The survey showed an average two vehicle queue on Locko Road southbound and one vehicle on Royal Hill Road in the morning peak hour. In the evening peak there was an average one vehicle queue on both Royal Hill Road and Locko Road. The results above show slightly lower levels of queuing recorded, but they still show that there are no notable queues on any approach at the junction. The length of queues recorded in the survey were of a similar length as in the J10 model and were shown on the right approaches to the junction. Therefore, it is considered that the junction assessment has been validated against queue surveys as was requested by DCC during scoping discussions.

Junction 3 – Locko Road / Chapel Street / Church Street / West Road

- 7.17 **Table 13** summarises the operation of the Locko Road / Chapel Street / Church Street / West Road staggered crossroads junction including the committed and proposed

development. The full model outputs are contained within **Appendix 16**. The naming convention in **Table 13** is as follows; A- Church Street, B- West Road, C- Locko Road and Arm D- Chapel Street.

Table 13. Locko Road/Chapel Street/Church Street/West Road Junctions 10 Capacity Assessment

Arm / Movement	AM Peak (08:00 – 09:00)			PM Peak (16:30 – 17:30)		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2023 BASE						
B-ACD	0.8	12.51	0.45	0.2	9.20	0.18
AB-C D	0.8	8.22	0.39	0.7	6.18	0.33
D-ABC	0.1	9.07	0.06	0.0	7.37	0.05
C-AD	0.3	5.39	0.18	0.1	4.91	0.08
C-B	0.1	5.18	0.22	0.0	4.51	0.10
CD-B	0.3	8.96	0.20	0.1	8.48	0.10
2028 BASE						
B-ACD	0.9	13.07	0.46	0.2	9.43	0.19
AB-C D	0.9	8.40	0.40	0.8	6.29	0.35
D-ABC	0.1	9.27	0.07	0.0	7.44	0.05
C-AD	0.3	5.42	0.18	0.1	4.93	0.08
C-B	0.1	5.22	0.22	0.1	4.53	0.10
CD-B	0.3	9.12	0.21	0.1	8.64	0.10
2028 BASE+COM						
B-ACD	1.0	14.01	0.49	0.2	9.73	0.20
AB-C D	1.0	8.58	0.42	0.9	6.38	0.36
D-ABC	0.1	9.26	0.07	0.0	7.45	0.05
C-AD	0.4	5.45	0.20	0.1	4.92	0.08
C-B	0.1	5.28	0.23	0.1	4.55	0.11
CD-B	0.3	9.18	0.21	0.1	8.77	0.10
2028 BASE+COM+DEV						
B-ACD	1.0	14.23	0.50	0.2	9.89	0.20
AB-C D	1.0	8.75	0.43	0.9	6.38	0.37
D-ABC	0.1	9.75	0.08	0.1	7.92	0.06
C-AD	0.4	5.53	0.22	0.2	4.91	0.09
C-B	0.2	5.41	0.25	0.1	4.59	0.11
CD-B	0.3	9.22	0.21	0.1	8.87	0.10

7.18 **Table 13** shows that that the Locko Road / Chapel Street / Church Street / West Road staggered crossroads operates well within capacity for all scenarios. A maximum RFC of

0.50 was determined for the '2028 BASE + COM + DEV' scenario in the morning peak for vehicles exiting from West Road. A maximum queue of 1.0 vehicles and a delay of 14.23 seconds was summarised for this movement.

Validation

- 7.19 The above '2023 Base' scenario junction assessment results have been compared with the queue lengths recorded within the surveys undertaken at the junction. The average queue in the J10 assessment has been compared with the average queue length across both the morning and evening peak periods in the survey.
- 7.20 The comparison found the junction assessments were representative of the recorded queue surveys, with minimal queues on all arms. The highest level of queuing was recorded on West Road and Church Street, followed by Locko Road, with the lowest level of queuing shown on Chapel Street during the morning peak. In the evening peak hour, the results were very similar with higher levels of queuing on West Road and Church Street and less queuing on Locko Road and Chapel Street. The length of queues recorded in the survey were of a similar length as in the J10 model and were shown on the right approaches to the junction. Therefore, it is considered that the junction assessment has been validated against queue surveys as was requested by DCC during scoping discussions.

Junction 4 – Sitwell Street / A6096 Willowcroft Road

- 7.21 **Table 14** summarises the operation of the Sitwell Street / A6096 Willowcroft Road mini-roundabout including the committed and proposed development. The full model outputs are contained within **Appendix 17**. The naming convention in **Table 14** is as follows; Arm 1- Sitwell Street East, Arm 2- A6096 Willowcroft Road and Arm 3- Sitwell Street West.

Table 14. Sitwell Street/A6096 Willowcroft Road J10 Capacity Assessment

Arm / Movement	AM Peak (08:00 – 09:00)			PM Peak (16.:30– 17:30)		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2023 BASE						
Arm 1	2.2	15.63	0.70	2.4	17.05	0.71
Arm 2	0.3	5.79	0.23	0.2	5.48	0.19
Arm 3	1.3	7.06	0.56	5.2	18.96	0.85
2028 BASE						
Arm 1	2.6	17.87	0.73	2.9	20.10	0.75
Arm 2	0.3	5.88	0.24	0.2	5.53	0.20
Arm 3	1.4	7.49	0.59	7.1	25.35	0.89
2028 BASE+COM						
Arm 1	4.1	26.04	0.81	3.2	21.84	0.77
Arm 2	0.4	6.04	0.27	0.4	6.21	0.29
Arm 3	1.6	8.02	0.61	9.1	32.61	0.92
2028 BASE+COM+DEV						
Arm 1	4.5	28.94	0.83	3.2	22.26	0.77
Arm 2	0.4	6.08	0.27	0.4	6.31	0.30
Arm 3	1.7	8.41	0.63	9.6	33.85	0.92

7.22 **Table 14** shows that the Sitwell Street / A6096 Willowcroft Road mini-roundabout operates within capacity for all scenarios modelled. The junction is approaching capacity in the '2028 Base + Com' scenario for both the morning and evening peak periods. In the morning peak Arm 1 experiences the highest level of RFC with 0.81 and in the evening peak Arm 3 experiences the highest level of RFC with 0.92.

7.23 For the '2028 Base + Com + Dev' scenario the junction operates marginally worse with the RFC on Arm 1 being 0.83 in the morning peak and in the evening peak the RFC on Arm 3 is 0.92. The proposed development therefore has a negligible impact on the operation of the junction.

Validation

7.24 The above '2023 Base' scenario junction assessment results have been compared with the queue lengths recorded within the surveys undertaken at the junction. The average queue in the J10 assessment has been compared with the average queue length across both the morning and evening peak periods in the survey.

7.25 The comparison found the junction assessments were representative of the recorded queue surveys, with some queues on all arms, the highest level of queuing was recorded on Sitwell Road E, closely followed by Sitwell Street W, A6096 Willowcroft Road showed the least amount of queuing in the morning peak. In the evening peak the model showed the highest level of queuing on Sitwell Street W, followed by Sitwell Road E and again A6096 Willowcroft Road showed the lowest level of queuing. The length of queues

recorded in the survey were of a similar length as in the J10 model and were shown on the right approaches to the junction. Therefore, it is considered that the junction assessment has been validated against queue surveys as was requested by DCC during scoping discussions.

Junction 5 – A6096 Willowcroft Road / Nottingham Road

- 7.26 **Table 15** summarises the operation of the A6096 Willowcroft Road / Nottingham Road signal-controlled junction including the committed and proposed development. The full model outputs are contained within **Appendix 18**. The movement convention used in **Table 15** is as follows; Movement 1/1- Nottingham Road W, Movement 2/1- Nottingham Road E, Movement 3/1- A6096 Willowcroft Road and Movement 5/1- Nottingham Road E pedestrian crossing.

Table 15. Willowcroft Road/Nottingham Road LINSIG Capacity Assessment

Arm / Movement	AM (08:00 – 09:00)		PM (16:30 – 17:30)	
	DoS (%)	Mean Max Queue	DoS (%)	Mean Max Queue
2023 BASE				
Movement 1/1	67.6%	7.7	78.3%	12.4
Movement 2/1	84.3%	13.3	73.6%	12.4
Movement 3/1	83.8%	20.8	77.6%	16.4
Movement 5/1	18.5%	0.3	25.8%	0.4
Overall PRC	6.8%		15.0%	
2028 BASE				
Movement 1/1	70.4%	8.2	81.8%	13.7
Movement 2/1	87.2%	14.4	77.3%	13.5
Movement 3/1	87.0	23.5	81.1%	17.9
Movement 5/1	19.2%	0.3	26.9%	0.5
Overall PRC	3.2%		10%	
2028 BASE + COM				
Movement 1/1	73.4%	9.9	92.4%	22.1
Movement 2/1	97.7%	23.7	70.3%	12.9
Movement 3/1	97.2%	35.7	93.5%	25.8
Movement 5/1	20.6%	0.3	32.0%	0.4
Overall PRC	-8.5%		-3.8%	
2028 BASE + COM + DEV				
Movement 1/1	75.5%	10.4	93.5%	23.3
Movement 2/1	99.7%	26.6	71.5%	13.3
Movement 3/1	98.8%	39.3	94.7%	27.0
Movement 5/1	20.7%	0.3	32.1%	0.4
Overall PRC	-10.8%		-5.2%	

- 7.27 **Table 15** shows that the A6096 Willowcroft Road / Nottingham Road signal junction operates within capacity for both the 2023 and 2028 base scenarios. However, when the committed development flows associated with Smartparc are added, the junction operates over capacity in both the morning and evening peak hours. Both movements 2/1 and 3/1 operate over capacity with DoS of 97.7% and 97.2% respectively in the morning peak hour. In the evening peak hour movements 1/1 and 3/1 operate over capacity with a DoS of 92.4% and 93.5% respectively.
- 7.28 Overall, the junction operates with a PRC of -8.5% for the '2028 AM Base + Com' scenario and a PRC of -3.8% for the '2028 PM Base + Com' scenario. With the development traffic added on, the operation of the junction gets marginally worse. For the morning peak hour, Movements 2/1 and 3/1 still operate over capacity with DoS of 99.7% and 98.8% respectively for the '2028 AM Base + Com + Dev' scenario. For the evening peak hour, Movements 1/1 and 3/1 still operate over capacity with DoS of 93.5% and 94.7% respectively for the '2028 PM Base + Com + Dev' scenario. Overall, the junction operates with a PRC of -10.8% for this scenario in the morning peak and -5.2% in the evening peak. Overall, the impact of the proposed development on the junction in the morning peak is -2.3% and in the evening peak it is -1.4%. The junction is already operating over capacity without these flows considered. Hence, there is no material impact associated with the proposals.

Validation

- 7.29 The above junction assessment results have been compared with the queue lengths recorded within the surveys undertaken at the junction. The average queue in the LINSIG assessment has been compared with the average queue length across both the morning and evening peak periods in the survey.
- 7.30 The comparison found the junction assessments were representative of the recorded queue surveys, with queues shown on each arm. The highest level of queuing was recorded on A6096 Willowcroft Road, followed by the A6005 E and then the A6005 west during the morning peak hour. In the evening peak the queues were more even with, similar lengths of queuing on the A6096 Willowcroft Road and the A6005 west, slightly less queuing was shown on the A6005 east. The length of queues recorded in the survey were of a similar length as in the LinSig model and were shown on the right approaches to the junction. Therefore, it is considered that the junction assessment has been validated against queue surveys as was requested by DCC during scoping discussions.

Person Trips

- 7.31 Based on the person trips likely to be generated by the residential development in **Table 9**, the maximum number of trips on foot be 5 as a worst-case.
- 7.32 The existing and proposed pedestrian facilities within and surrounding the site would be able to accommodate such a number, which would equate to an average of one pedestrians every twelve minutes during the peak periods. The proposed internal pedestrian facilities provided within the development include connect to the facilities on Ayston Road, which include both signalised and non-signalised pedestrian crossings.

- 7.33 A low number of cycle and public transport trips are forecast to be generated by the proposed development and these trips could be accommodated by the existing infrastructure beyond the site. A regular public transport service is achievable from the site utilising the free local S2 Spondon Shuttle Bus. As a result, no off-site mitigation is deemed necessary; the introduction of the Travel Plan will help manage the person trips generated by the proposed development.

Summary

- 7.34 In summary, four out of the five junction assessments undertaken operate within capacity for the '2028 Base + Com + Dev' scenario. The only junction which is forecast to operate over capacity is the Willowcroft Road/Nottingham Road signal junction. This junction is already operating over capacity when including for the committed development flows. The impact of the proposed development flows on this junction are negligible with a -2.3% and -1.4% in the morning and evening peak hours respectively. Thus, no further assessment work on junction capacity within the surrounding highway network is required.
- 7.35 During scoping discussions with DCC it was confirmed that the Willowcroft Road/Nottingham Road signal junction has existing capacity issues and has been investigated a number of times. There is limited scope for improvements to be made at this junction within highway land to improve capacity in the peak periods. It has however, been demonstrated that the impact of the development at this junction is negligible.
- 7.36 The existing infrastructure surrounding the development site is adequate to accommodate the person trips associated with the proposed development.

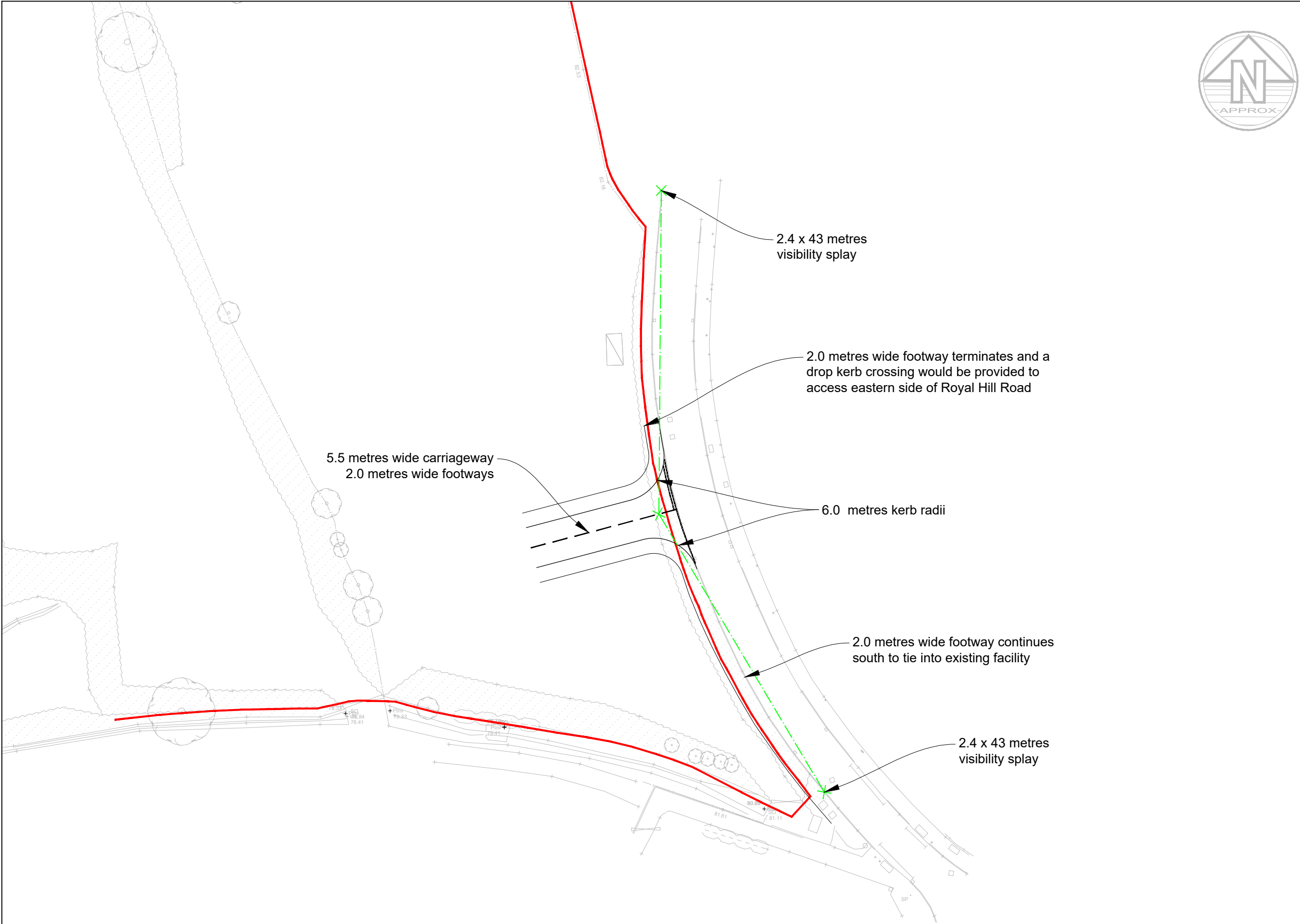
8. SUMMARY AND CONCLUSIONS

- 8.1 BWB Consulting Ltd (BWB) has been instructed by Miller Homes Ltd (the applicant) to provide highways and transport advice and prepare a TA to support an application for a proposed residential development located to the west of Royal Hill Road, Spondon, Derby.
- 8.2 Access to the site will be achieved via a priority-controlled T-junction on Royal Hill Road, the carriageway would measure 5.5 metres wide with 2 metres wide footways on both sides of the access. The kerb radii would measure 6 metres on both sides of the junction and 43 metres visibility is achievable to both the north and the south. Pedestrians will gain access to the site via the footways proposed on both sides of vehicular access. Footway links will be provided throughout the site to encourage active travel by residents. The pedestrian footways within the site will meet the existing pedestrian provisions on Royal hill Road to the south of the junction as well as the extensive network of PRow's surrounding the site.
- 8.3 The development site is accessible by a range of sustainable travel modes and is therefore suitable for residential development. Given the areas contained within acceptable walking distance of the site and the existing infrastructure available, there are good opportunities for pedestrian travel. Similarly, given the areas contained within cycling distance of the site and the nature of the roads surrounding the site, there are good opportunities for cycle travel between the site and the local area. As previously mentioned, there are a number of PRow's which provide traffic free routes to surrounding areas.
- 8.4 The site is also accessible by public transport, utilising the Spondon S2 Shuttle Bus to access the regular Ilkeston Flyer service which routes through Spondon. This provides future residents with some opportunity to travel to and from the site via public transport. The closest bus stops for the S2 Shuttle Bus are located within 500 metres of the development site.
- 8.5 A summary of the personal injury collision (PIC) data obtained from Derbyshire Police Constabulary showed that there were no distinctive patterns attributable to the existing conditions within the local highway network.
- 8.6 A review of parking standards found that for residential developments parking will be negotiated site by site on the basis of the size of the proposed dwellings, availability of public transport and consideration of existing on street parking issues. This will be considered further at the detailed planning application stage.
- 8.7 As part of this TA, five junctions have been assessed, four of which were shown to operate within capacity for the most onerous scenario assessed (2028 Design Year Base plus Committed plus Development). The results of the junction modelling have been supported by the queue survey data obtained.
- 8.8 The Willowcroft Road/Nottingham Road signal junction is shown to operate over capacity in the morning peak period for the '2028 base + Com' and '2028 Base + Com + Dev' scenarios. However, there are existing capacity issues at this junction during the peak periods, as was confirmed by DCC. The proposed development impact on the

operation of this junction is also negligible. Therefore, in accordance with Paragraph 111 of the NPPF, it is considered that the proposed development would not have a “severe residual cumulative impact” and hence no mitigating improvements should be necessary.

- 8.9 It has been demonstrated that the infrastructure surrounding the development site is adequate to accommodate the proposed person trips associated with the development including, pedestrians, cycles and public transport users.
- 8.10 Consequently, under the guidelines set out in the National Planning Policy Framework, the proposals represent sustainable development and should be acceptable to DCC in highways terms.

DRAWINGS



- Notes**
1. Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.
 2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
 3. All dimensions in millimetres unless noted otherwise. All levels in metres unless noted otherwise.
 4. Any discrepancies noted on site are to be reported to the engineer immediately.

Key Plan

Legend

P2	13.09.22	TOPO SURVEY RECEIVED	SF	ST	
P1	15.01.20	PRELIMINARY ISSUE	SF	ST	
Rev	Date	Details of issue / revision	Drw	Rev	

Issues & Revisions

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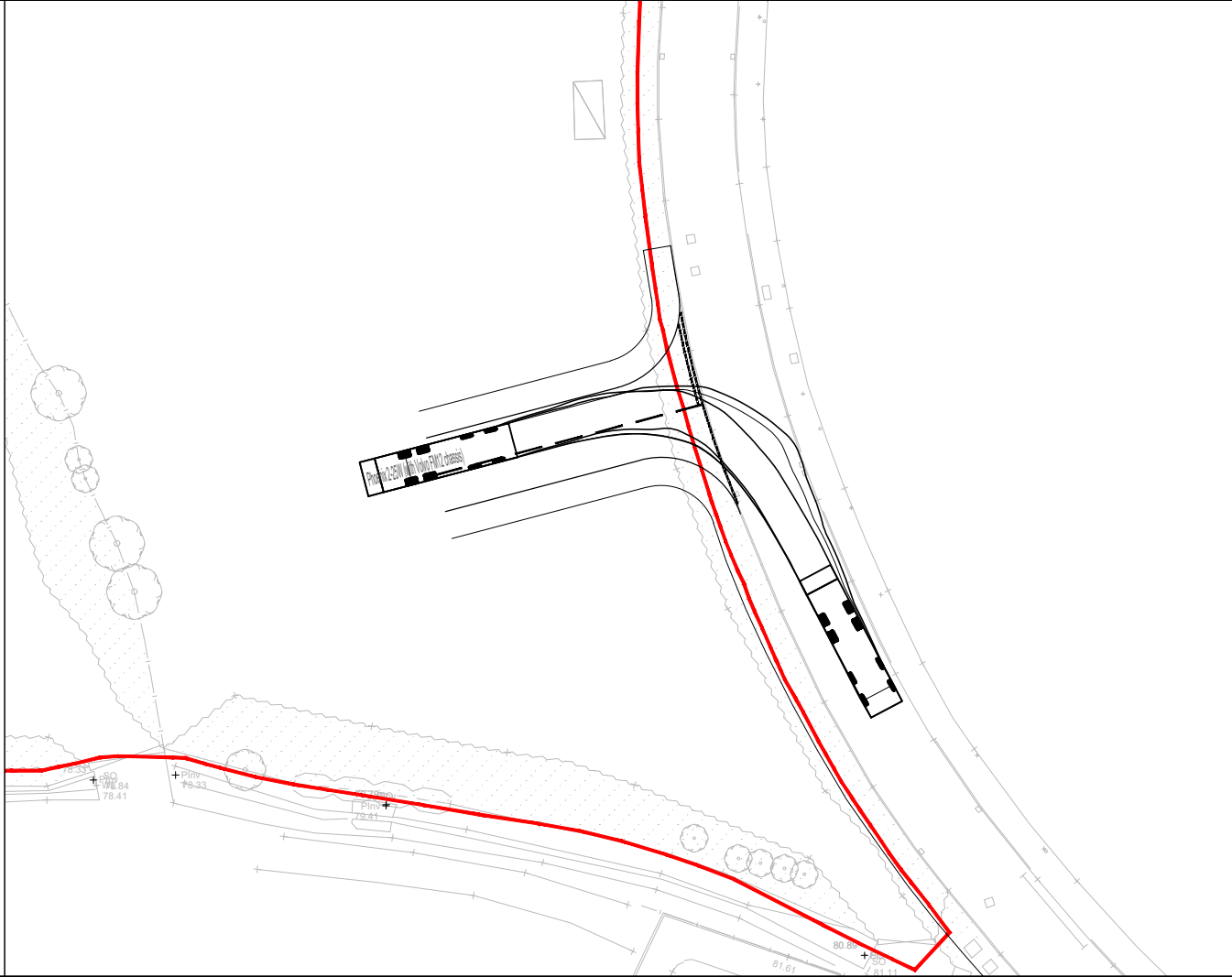
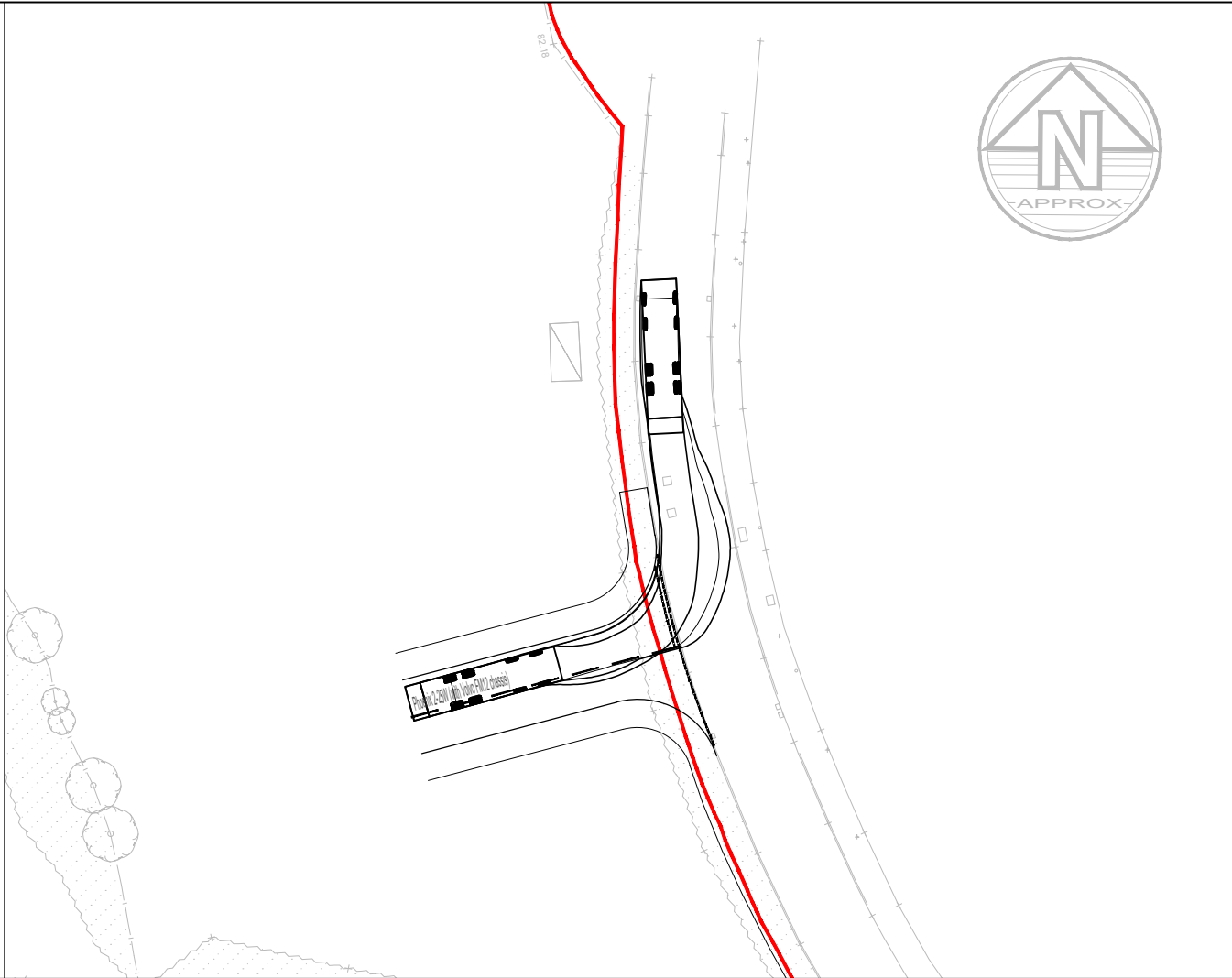
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Client
MILLER HOMES

Project Title
**ROYAL HILL ROAD,
SPONDON**

Drawing Title
**PROPOSED ACCESS
ARRANGEMENT**

Drawn:	S. Franklin	Reviewed:	S. Terrey		
BWB Ref:	BMW3087	Date:	15.01.20	Scale@A3:	1:XXXX
Drawing Status					
PRELIMINARY					
Project - Originator - Zone - Level - Type - Role - Number				Status	Rev
RHR-BWB-GEN-XX-DR-TR-101				S2	P2



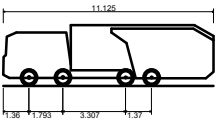
Notes

1. Do not scale this drawing. All dimensions must be checked/ verified on site. If in doubt ask.
2. This drawing is to be read in conjunction with all relevant architects, engineers and specialists drawings and specifications.
3. All dimensions in millimetres unless noted otherwise. All levels in metres unless noted otherwise.
4. Any discrepancies noted on site are to be reported to the engineer immediately.

Key Plan



Legend



Phoenix 2-25W (with Volvo FM12 chassis)	11.125m
Overall Length	2.530m
Overall Width	3.205m
Overall Body Height	0.410m
Min Body Ground Clearance	2.500m
Track Width	4.00s
Lock to lock time	9.250m
Kerb to Kerb Turning Radius	

P1	11.11.22	PRELIMINARY ISSUE	SF	ST	
Rev	Date	Details of issue / revision	Dwn	Rev	

Issues & Revisions



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Client
MILLER HOMES

Project Title
**ROYAL HILL ROAD,
SPONDON**

Drawing Title
**VEHICLE TRACKING -
LARGE 4-AXLE REFUSE
VEHICLE**

Drawn:	S. Franklin	Reviewed:	S. Terrey			
BWB Ref:	BMW3087	Date:	11.11.22	Scale@A3:	1:500	
Drawing Status						
PRELIMINARY						
Project - Originator - Zone - Level - Type - Role - Number					Status	Rev
RHR-BWB-GEN-XX-DR-TR-110					S2	P1

APPENDICES

APPENDIX 1: Indicative Site Layout



Key

Site Boundary
4.51Ha

Residential Development Area
2.19Ha - Circa 90 dwellings
(Dependent on housing mix)

Illustrative Built Form

Equipped Play Space
LEAP

Development

Residential Development Area
2.19Ha - Circa 90 dwellings
(Dependent on housing mix)

Illustrative Built Form

Equipped Play Space
LEAP

Movement

Site Access
Vehicle and Pedestrian

Streets

Lanes

Shared Private Drives

Public Rights of Way

Footpaths &/or Cycleways
Infrastructure to connect to the wider existing network of routes and PRoWs to adjacent schools

Pedestrian Connections at Site Boundary

Landscape

Retained Trees & Hedgerows
With associated RfWs

Structural Landscaping
Planting buffer along eastern boundary

Illustrative Landscape Strategy
Includes opportunities for a landscaped area, orchard and grasslands to be agreed as part of detailed applications

Drainage Basin

Illustrative Location of Pumping Station

Flood Zones



APPENDIX 2: Pre-application Discussions

Derby City Council Natural Environment Planning Application Consultation

Pre-Application Consultation

Pre-App Ref: 22/00026/PREAPP

Location: Land Adjacent To Royal Hill Farm Royal Hill Road Derby DE21 7AG

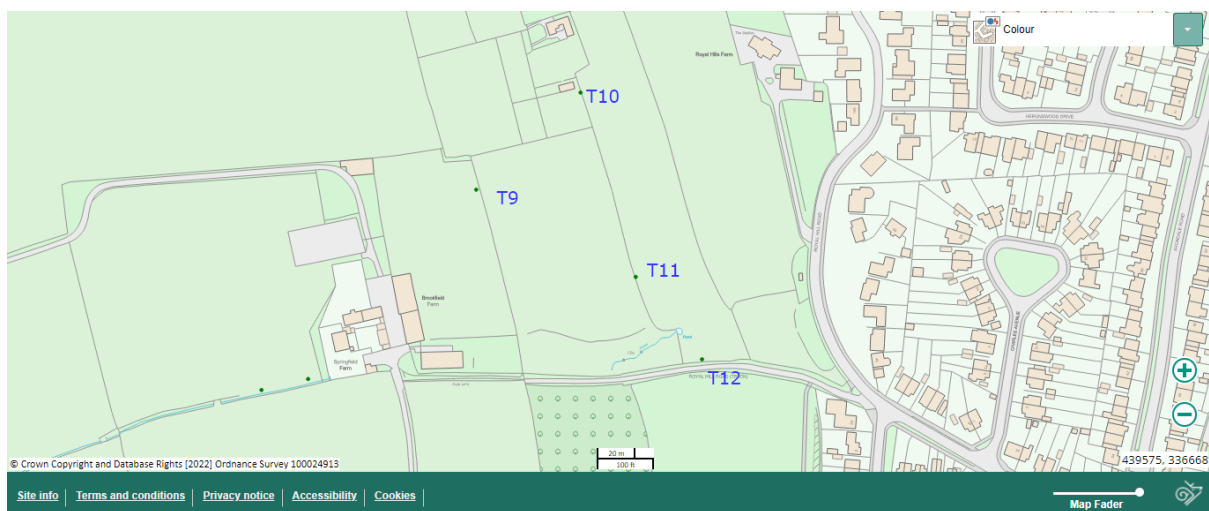
Proposal: Residential development (90+ dwellings)

Case Officer: Sara Hodgkinson

Natural environment Case Officer: Andy Shervill

Comments:

Four trees on the site or on the site boundary are protected by TP No179. The TPO was made in 1998. The below screen shot of our interactive map shows the TPO tree locations.



T9: Oak

T10: Oak

T11: Oak

T12: Ash

Other trees appear to be on the site as well as several hedges located on the field boundaries.

In principle there is space for development however the impact on the existing trees and hedges cannot be assessed without the supply of a BS5837:2012 tree survey and supporting documents. (Schedule of trees, TCP and AIA).

In order to fully assess the impact of the proposed development I do require the submission of a BS5837 tree survey and supporting documents as detailed below:

Tree survey as recommended in BS5837: 2012

- a) sequential reference number (to be recorded on the tree survey plan)
- b) species listed by common name, with a key provided to scientific names
- c) height
- d) stem diameter (measured in accordance with Annex C of the standard)
- e) branch spread, taken as a minimum at the four cardinal points (to be plotted on the survey plan)
- f) existing height above ground level of:
 - 1. First significant branch and direction of growth (e.g. 2.4-N)
 - 2. Canopy
- g) life stage (e.g. young, semi-mature, early mature, over-mature, veteran, ancient)
- h) general observations, structural and /or physiological condition and or preliminary management recommendations
- i) estimated remaining contribution, in years (<10, 10+, 20+, 40+)
- j) category U or A to C grading (including sub categories for A, B and C of 1 - Mainly arboricultural qualities, 2 - Mainly landscape qualities and 3 - Mainly cultural values, including conservation).

Tree Constraints: The Root Protection Area (RPA) and other relevant constraints should be plotted around each of the category A, B and C trees on relevant drawings including proposed site layout plans. The BS 5837:2012 tree constraints plan (TCP) must be supplied detailing:

- The current and ultimate height and spread of the tree
- The shade cast by the tree must be indicated on the TCP by plotting a segment, with a radius from the centre of the stem equal to the height of the tree, drawn from due north-west to due east thus indicating the shadow pattern through the main part of the day.
- Species characteristics, including evergreen or deciduous, density of foliage and factors such as susceptibility to honeydew drip, branch drop, fruit fall etc.

Arboricultural Impact Assessment: An Arboricultural Impact Assessment (AIA) is required to evaluate the direct and indirect effects of the proposed design and where necessary recommend mitigation. Scaled cross-sections and drawings may be required to demonstrate the feasibility of the scheme.

The AIA should include:

- The tree survey.
- Trees selected for retention, clearly identified and marked on a plan with a continuous line.
- Trees to be removed, clearly identified and marked on a plan with a dashed outline.

- Trees to be pruned, including access facilitation pruning, identified and listed.
- Areas designated for landscaping that need to be protected during construction to prevent the soil structure being damaged.
- Evaluation of impact of proposed tree losses.
- Evaluation of tree constraints and draft tree protection plan.
- Issues to be addressed by an Arboricultural Method Statement.

Tree Protection: A Tree Protection Plan (TPP) as recommended in BS5837:2012 5.5

The TPP should be superimposed on a layout plan based on the topographical survey and show all hard surfacing and other structures within the RPA.

The TPP should clearly indicate the precise location of protective barriers to be erected to form a Construction Exclusion Zone (CEZ) around retained trees.

The CEZ must be aligned at the extent of the RPA (it may need to be extended to protect the canopy of the tree where it extends beyond the RPA). The RPA may also need to be modified to take into account existing site constraints and subsequent likely rooting area. Modifications to the shape of the RPA should reflect a soundly based arboricultural assessment of likely root distribution.

Where construction cannot be fully or permanently excluded within the RPA the TPP should also show the extent and type of ground protection and any other physical measures that will need to be installed.

Where the CEZ needs to be modified to accommodate permitted temporary access the set back of the protective fencing should be clearly identified along with temporary ground protection measures to be adopted for the duration of works within the RPA.

The type of protective fencing and its method of securing must be supplied.

The position of protective measures (both fencing and ground protection) should be shown on the TPP as a polygon representing the actual alignment of the protection.

Distances from fencing to fixed reference points must be annotated on the TPP to inform those installing the protection of the correct fencing alignment.

The TPP should be incorporated into relevant subsequent plans, method statements used for design purposes and construction drawings.

The TPP and subsequent drawings should identify and where necessary supply mitigation and or method statements for:

- Site construction Access.
- The intensity and nature of the construction activity.
- Contractors' car parking.

- Phasing of construction works.
- The space required for foundation excavations and construction works.
- The location and space required for all temporary and permanent apparatus and service runs.
- Working space for cranes, plant, scaffolding and access during works
- Space for construction site huts such as welfare huts/toilets. Provision should be made for their drainage/service runs.
- The type and extent of landscape works which will be needed within the protected areas and the effects these will have on root systems.
- Space for storing materials, spoil and fuel and the mixing of cement and concrete.
- The effects of slope on the movement of potentially harmful liquid spillages towards or into protected trees.

A final AMS is usually supplied at the discharge of conditions stage but is useful to be supplied at the full application stage to demonstrate the feasibility of the proposal.

Arboricultural Method Statement: An Arboricultural Method Statement (AMS) is required and should be appropriate to the proposals. The AMS could address some or all of the following:

- Removal of existing structures and hard surfaces.
- Installation of temporary ground protection.
- Excavations and the requirement for specialized trenchless techniques.
- Installation of new hard surfacing – materials, design constraints and implications for levels.
- Specialist foundations – installation techniques and effect on finished floor levels and overall height.
- Installation of non-dig paths and surfacing including edging and treatment to original ground levels.
- Retaining structures to facilitate changes in ground levels.
- Preparatory works for new landscaping.
- Auditable system of Arboricultural site monitoring, including specific site events requiring input or supervision
- The AMS should also include a list of contact details for the relevant parties.

The relevant Core Policies with regards to trees and hedges are: CP2 (Responding to Climate Change), CP16 (Green Infrastructure) and CP19 (Biodiversity). Any development would need to be compliant with those policies.

Glossary:

- AIA: Arboricultural Impact Assessment

- AMS: Arboricultural Method Statement
- CEZ: Construction Exclusion Zone
- RPA: Root Protection Area
- TCP: Tree Constraints Plan
- TPP: Tree Protection Plan

Shannon Franklin

From: Sara Terrey
Sent: 09 December 2022 18:09
To: Shannon Franklin
Subject: FW: Pre-application for land at Royal Hill Farm, Spondon 22/00026/PREAPP

Dear

Kind regards

Sara Terrey BA (Hons) MCIHT
Associate | Transport & Infrastructure Planning | BWB Consulting Limited

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Please note my working hours are Monday to Friday 0830 to 1430 hours



From: Alan Siviter <Alan.Siviter@pegasusgroup.co.uk>
Sent: 28 July 2022 09:05
To: Sara Terrey <Sara.Terrey@bwbconsulting.com>
Subject: FW: Pre-application for land at Royal Hill Farm, Spondon 22/00026/PREAPP

This email originated from outside of our organisation. Please exercise caution with content, links and attachments.

Good morning Sara,

Apologies, I hadn't forwarded the further highways comment received following our pre-app response. Please see below.

Kind regards

Alan

Alan Siviter
Senior Planner

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From: Sara Hodgkinson <Sara.Hodgkinson@derby.gov.uk>
Sent: 13 June 2022 10:33
To: Alan Siviter <Alan.Siviter@pegasusgroup.co.uk>
Cc: Isabel Bancroft <Isabel.Bancroft@derby.gov.uk>
Subject: RE: Pre-application for land at Royal Hill Farm, Spondon 22/00026/PREAPP

Hi Alan,
Apologies for the omission. My Highways colleague Andrew Gibbard has looked at the transport information and provided the following response:

"Sorry I missed this document, normally they are titled Transport Assessment Scope, rather than the QA number. The scope of the assessment is pretty comprehensive. Although I note that the trip generation is based on 150 dwellings, rather than as the application title suggests 90 dwellings. Following the Delivering, Streets and places guidance, 85th percentile trip rates should be used, not average rates.

I note the inclusion of a footway to the north, and Chris has already provide comments on the southern link. However, drop kerbs need to be provided to link the footways so that anyone with a mobility impairment can cross.

I note the inclusion of the visibility splay drawing in the TA Scope. Visibility looks like it can be achieved, however, as Chris states drawings on design need to be submitted at 1:500 and on-site checks carried out to ensure there are no physical barriers obscuring the visibility.

A travel plan is required according to the guidance given in Delivering Streets and Places, however, for a development of this size we are particularly interested in any physical measures through the development that improve links to the sustainable transport network. Further, a welcome package that provides homeowners with key information on sustainable travel to the site and incentives to use non-car modes such as trial bus tickets.

I hope that this covers the missing information and if the transport consultant wants to clarify anything then we are happy for them to contact us."

I hope this assists.
Regards

Sara

Sara Hodgkinson MA MRTPI (*previously Sara Claxton*) | **Development Control Team Leader** |
Communities & Place | Derby City Council | The Council House, Corporation Street, Derby, DE1 2FS
Telephone 01332 641643 (Mobile) 07812 300014 | Minicom 01332 640666 | www.derby.gov.uk

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From: Alan Siviter <Alan.Siviter@pegasusgroup.co.uk>
Sent: 09 June 2022 10:27

To: Sara Hodgkinson <Sara.Hodgkinson@derby.gov.uk>
Cc: Isabel Bancroft <Isabel.Bancroft@derby.gov.uk>
Subject: RE: Pre-application for land at Royal Hill Farm, Spondon 22/00026/PREAPP

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Hi Sara,

Thank you for sending the comments through. In relation to the Highways comments it seems that they have on looked at the concept plan. As part of the submission we also submitted the attached transport note, which included details regarding capacity and the potential access into the site. Would you be able to ask whether they considered the attached document when making their comments?

Kind regards

Alan

Alan Siviter
Senior Planner

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From: Sara Hodgkinson <Sara.Hodgkinson@derby.gov.uk>
Sent: 07 June 2022 14:01
To: Alan Siviter <Alan.Siviter@pegasusgroup.co.uk>
Cc: Isabel Bancroft <Isabel.Bancroft@derby.gov.uk>
Subject: Pre-application for land at Royal Hill Farm, Spondon 22/00026/PREAPP

Hi Alan,

Following our meeting yesterday, I attach the written comments for the proposed housing scheme which includes the consultee responses, including those from our Highways team. There is reference to our independent design review panel, which your client seemed interested in using to obtain urban design comments on the proposals.

Please confirm if Millers wish to pursue this and we can set up a meeting of the panel for the proposals to be considered.

Regards

Sara

Sara Hodgkinson MA MRTPI (*previously Sara Claxton*) | **Development Control Team Leader** |
Communities & Place | Derby City Council | The Council House, Corporation Street, Derby, DE1 2FS
Telephone 01332 641643 (Mobile) 07812 300014 | Minicom 01332 640666 | www.derby.gov.uk

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Pre-application response for land at Royal Hill Farm, Spondon, Derby

22/00026/PREAPP

This proposal relates to the land at Royal Hill Farm, off Royal Hill Road, Spondon, which is currently agricultural land subdivided into four fields. It has a number of trees and hedgerows, which includes four TPO trees. The site lies within the Green Wedge. A reservoir lies to the north of the site and the farm buildings are to the west, with other fields and open land to the north, south and west. The residential area of Spondon lies immediately to the east.

Outline permission is sought, with all matters reserved, for residential development of up to 90 dwellings. A concept plan shows a vehicular access off Royal Hill Road and pedestrian linkages to existing public footpaths to the north and south of the site. The indicative proposal also includes open space and two attenuation basins. Some trees and hedgerows are also shown for retention, with additional landscape planting.

Policy Context

CITY OF DERBY LOCAL PLAN REVIEW (Adopted 2006) SAVED POLICIES

GD5 Amenity

H13 Residential Development – General Criteria

E21 Archaeology

E24 Community Safety

L4(9) New or Extended Public Open Space

T10 Access for Disabled People

DERBY CITY LOCAL PLAN – PART 1: CORE STRATEGY

CP1(a) Presumption in Favour of Sustainable Development

CP2 Responding to Climate Change

CP3 Placemaking Principles

CP4 Character and Context

CP7 Affordable and Specialist Housing

CP23 Delivering a Sustainable Transport Network

CP16 Green Infrastructure

CP17 Public Green Space

CP18 Green Wedges

CP19 Biodiversity

MH1 Making it Happen

LOCAL PLAN STATUS

Derby's adopted Local Plan covers the period 2011 to 2028 and was adopted on 25 January 2017. The policies of the local plan have been reviewed in line with Regulation 10a of the Town and Country Planning (Local Planning) (England) Regulations 2017 and paragraph 33 of the NPPF, the provisions of which require Local Plan policies to be reviewed at least every 5 years. The review was endorsed by the Council's Cabinet on 8 December 2021.

The review found that, apart from the housing target elements of policy CP6 (Housing Delivery), the policies of the Local Plan remain consistent with national policies, including the latest updates to the NPPF and can be given weight in decision making.

Policy CP6 sets a housing requirement of 11,000 new homes over the 17-year Plan period (647 dwellings annually). However, in December 2020, Government amended its 'Standard Method' for calculating Housing Need to include a 35% uplift in the top 20 largest urban areas in England, which includes Derby City. The standard method housing need calculation for Derby City now stands at 1,255 dwellings a year and this is significantly higher than the CP6 requirement in the local plan. Therefore, the housing requirement in Policy CP6 is out of date.

A further consequence of the significant increase in housing requirement, brought about by the change to the standard method, is that the Council can no longer demonstrate a 5-year supply of housing land as required by the NPPF (NPPF paragraph 74). The Council established a supply of 3.9 years of deliverable housing sites in 2021 but this was set against a different/previous standard method calculation of housing need. At time of writing this response the housing need has increased and a new baseline for 5 year supply will be established set at 1 April 2022. However, until analysis housing supply at 31 March 2022 has been finalised, a new 5 year supply cannot be established. It is unlikely that the Council will be able to demonstrate a 5 year supply at 1 April 2022 and so this response is based on no 5 year supply being in place.

For the purposes of decision making, the lack of a demonstrable 5-year housing land supply means that the presumption in favour of development and the "tilted balance" set out in the NPPF is invoked (paragraph 11 footnote 8 of the NPPF).

Paragraph 11d of the NPPF requires that where there is no 5-year supply this means granting planning permission unless –

- i. the application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed; or
- ii. any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole

As this proposal involves the provision of housing, any future application must be considered in terms of its accordance with NPPF paragraph 11d and other material considerations. This does not mean that the relevant policies of the Local Plan (main relevant policies listed above) would be ignored, but that their requirements would be considered, and given weight, where they accord with the policies of the NPPF.

Other material considerations to weigh in the planning balance are that the Council's housing needs have increased significantly and as such the benefits of delivering housing carry greater weight. Also, the degree to which the Council is unable to demonstrate a 5-year supply will be material and, as indicated above, that is currently undetermined. Even beyond the matter of 5 year supply, the

significant increase in housing need compared to recent delivery and to the requirement in the local plan means that significant weight should be applied in favour of applications that can contribute to increasing this supply.

The tilted balance requires consideration of the benefits and the adverse impacts. The exact benefits are unknown because the exact number of dwellings is unclear at this pre-application stage. However, it is reasonable to conclude, given the housing supply issues identified above, that a major housing development of circa 90 dwellings would bring very significant benefits.

NATIONAL PLANNING POLICY FRAMEWORK

It is relevant that this proposal involves the provision of housing (90+ dwellings) which could contribute toward meeting the significant housing needs of the city and towards a 5 year housing supply.

The 2012 NPPF was revised and a new version published in July 2018. The Government then carried out further consultation and published a revised version in February 2019. The main changes to the policy from the previous 2012 version related to ensuring that housing needs are being met by setting out a new system of calculating housing needs and ensuring homes are delivered through the establishment of a Housing Delivery Test. The changes to the NPPF also put an emphasis on making efficient and effective use of land.

The NPPF was updated again on 20 July 2021, with this update in particular emphasising further the importance of good quality design, the use of design codes and the need to build beautiful homes and places.

National policy is still based on the three separate, but mutually important strands of sustainable development - social, environmental and economic, and each of these strands is crucial to deliver appropriate and acceptable development.

POLICY CONTEXT

The proposal is for the erection of somewhere around 90+ new homes on land west of Spondon, accessed from Royal Hill Road. The site is greenfield and slopes downhill from north to south. It is within the green wedge between Spondon and Chaddesden. The land appears to be mainly agricultural in use and contains a range of hedgerows and trees. The proposed development area includes fields which are adjacent to the built area of Spondon and an arm of land which extends north to the west of a covered reservoir. The covered reservoir is visible and has a built form and the land within this northern arm is proposed to provide an area of open space which would be consistent with the green wedge policy.

The main issue here is the fact that the land is green wedge and provides an important strategic function in forming a generally open and undeveloped area between Spondon and Chaddesden. Green wedges define the urban structure of distinct neighbourhoods within the city and allow the open countryside around the city to penetrate into the urban area. They are a long-established feature of the city and green wedge land has been protected from unacceptable built development for many years. There are certain built uses which can be included in green wedges which are identified in Policy CP18 but general housing such as is proposed is not one of the uses. Some built features are set within green wedges as a matter of historical fact as they were in situ before the wedges were defined.

The proposals for a major new housing estate would therefore be contrary to Policy CP18 of the local plan and this would be the most important consideration.

Proposals for development requiring planning permission should be determined in accordance with the development plan unless material considerations indicate otherwise. The question here is whether any material considerations would override the green wedge policy to the degree that the development should be allowed.

The local plan is more than 5 years old and although most policies remain consistent with national policy, the housing requirement set in policy CP6 is considered to be out of date. The requirement in the local plan was that 11,000 net new homes should be delivered over the 17 year plan period (2011 to 2028). This averages at 647 dwellings a year. However, in December 2020, the Government introduced an amended 'Standard Method' for calculating housing supply which added a 35% uplift onto the housing needs of the top 20 urban areas in the country of which Derby is one. This has seen the standard method housing need for the city increase significantly and more recent changes to affordability ratios, which feature in the standard method calculation, have seen further increases such that Derby's housing need (and therefore requirement) is now 1,255 dwellings a year.

The housing requirement in the city is now nearly double that of the requirement in the local plan which was established to cover the period to 2028. The Council has begun to prepare a new local plan which will need to address these significant housing needs, but preparation of this plan is in very early stages and it will be some time before a fully evidenced new strategy and plan are available to inform decision making.

Derby's 5 year housing supply position is also highly material here. The 5 year supply should be measured against the housing requirement which is now set using the standard method and, as explained above, is now 1,255 dwellings a year. A 5% buffer will also need to be applied to the 5 year supply calculation. The Council will need to update the housing supply position at 1 April 2022 and has very recently conducted annual housing land surveys. However, the analysis of the housing delivery position on sites across the city and updating of forward delivery trajectory will take some time and this needs to be done to establish a new 5 year supply. It is extremely unlikely that the council will be able to demonstrate a 5 year supply and the tilted balance will therefore still apply. But the exact extent to which a supply is absent is not currently known and this will also be a material factor in determining a planning application. I would suggest that the Council is unlikely to be able to demonstrate a five year supply of deliverable sites by some considerable margin and this will be materially relevant in the weight afforded to the benefits of proposals for new housing.

As set out above, in the absence of a 5 year housing supply, the Council is required to apply the tilted balance set out in Paragraph 11d of the Framework and this requires consideration of the benefits of the proposal and the adverse impacts. In this case, the tilted balance requires that in determining applications where there is no 5 year supply, that applications for planning permission involving the provision of housing should be granted unless any adverse impacts of doing so would significantly and demonstrably outweigh the benefits when assessed against the policies of the Framework taken as a whole. The 'tilted balance' would be a material consideration in dealing with a planning application and so the process of determining an application would be to identify the benefits and the adverse impacts, apply relevant 'weight' to each and then apply the tilted balance.

Clearly, there are a number of matters which would need to be considered and which would affect the benefits and adverse impacts in the overall weighting. Although the adverse impacts of built

development in the green wedge is the main matter, there are a range of other policy considerations including the following :

Climate Change

Policy CP2 (Responding to Climate Change) requires that development is in sustainable locations and is designed and constructed in a sustainable manner. This raises further concerns about the development of a greenfield site and the impacts on climate change of the loss of greenfield land.

The proposal is on the edge of Spondon and so local facilities are within a reasonable distance and the site would offer an opportunity for people to choose to walk and cycle. However, it is likely that many would use cars and this would be another consideration in terms of climate change impacts.

We would also need to consider the climate impacts of the loss of any trees or other plant life which can assist in adaptation to the impacts of climate change. I note that some open space is set out to the north as part of the proposal and there is potential for this area to be planted to at least provide some mitigation for any tree loss. Although this land is already greenfield it does provide an opportunity for enhancement in terms of climate change benefits which could be delivered as a part of the proposals.

It is relevant that the Council has declared a 'Climate Emergency' and so the requirements of policy CP2 are particularly important.

CP2 also seeks that sustainable forms of construction are used and that opportunities to provide energy efficient developments are taken. This can relate to matters such as the orientation of buildings and the use of materials as well as insulation and energy efficiency matters. These will be matters which will need to be considered in the detail of any submitted scheme.

Policy CP2 also requires that major development such as this should implement Sustainable Drainage Systems. Land drainage colleagues should advise on the matters relating to flooding and drainage. The land appears to be in the lowest area of flood risk (FZ 1) on the Government's flood mapping for planning.

Design, Character and Context and Placemaking

Policies CP3 (Placemaking Principles) and CP4 (Character and Context) both seek to achieve high quality, well designed places and these include considering optimising density, providing good standards of privacy and security, providing well connected spaces and delivering well integrated vehicle and cycle parking. Clearly some of these matters will be for consideration at the detailed stage but the development should fit into the wider environment and not cause unacceptable adverse impacts.

In terms of design and placemaking, it is highly relevant that Government revised the NPPF on 20 July 2021. The changes further emphasise the importance of good design and the Framework also introduces a requirement to provide beautiful homes and places. This is a clear message from Government that new developments and particularly homes, need to be 'beautiful' and well designed.

I draw attention to the recently revised paragraph 126 which states that "The creation of high quality, beautiful and sustainable buildings and places is fundamental to what the planning and development process should achieve".

Given the green wedge location, it may be helpful for proposals to through an independent design panel review process. Policy CP3 seeks that proposals make efficient use of land, are well integrated into their setting and provide security, safety and security.

It is noted that this is a greenfield site and if the principle of built development is deemed acceptable, would lend itself to suburban layouts and densities. However, there is still a need to optimise dwelling densities such that the use of land is efficient, especially where green field land is being lost.

Biodiversity

Policy CP19 (Biodiversity) is relevant in that biodiversity matters relating to the natural environment are intrinsically linked with other issues like climate change, place making, creating beautiful places and protecting and enhancing biodiversity.

The site is greenfield and features a wealth of biodiversity. It will be challenging to protect/replace biodiversity through the development of this site, but opportunities arise to consider this issue as part of the proposed open space. . The Government will be introducing a mandatory requirement for net biodiversity gain which could be in place before this site would be developed if it were to gain a planning consent. Any enhancements in biodiversity provided could also contribute to the aspirations of Cp2 in responding to Climate Change matters.

Highways and Access

Highways colleagues should advise on the matters of highway access and safety. They will need to advise on whether a safe and acceptable access can be formed for the quantum of dwellings proposed. At a detailed level they would also advise on the internal road layout and parking. The indicative layout gives some scope for this, but it is only indicative at present.

Infrastructure and Planning Obligations

Policy MH1 (Making it Happen) sets out requirements for appropriate supporting infrastructure to be provided with new development. The Implementation Team should advise on these matters. The proposal would be a major development and so certain mitigation/infrastructure contributions may be required. The number of homes would trigger the requirement for affordable housing (CP7) and the number, type and tenure of affordable housing should be discussed with the Councils Planning Implementation and Housing Teams. It is notable that the Council has a significant need for affordable homes and so the provision of affordable or any other specialist types of housing would also weigh as positives in the planning (tilted) balance.

Policy Summary and Conclusions

All of the policies of the local plan remain relevant even though the DCLP1 is now over 5 years old, apart from the housing requirement in Policy CP6 which is deemed out of date due to the increased need in the standard method.

The tilted balance set in Paragraph 11dii of the Framework must be applied because the proposal includes the provision of housing and the Council cannot demonstrate a 5 year housing supply. The Framework therefore requires that an application should be granted unless the adverse impact of doing so would significantly and demonstrably outweigh the benefits.

This requires the applying weight to the various benefits and adverse impacts and then considering them in the context of the tilted balance.

At this pre-application stage we can only really deal with principles as many of the details are unknown.

The main benefits would be a significant number of new homes and potentially a quantum of affordable homes which would be provided in the context of very significant housing needs resulting from the increased dwelling numbers required in the standard method. There would be temporary economic benefits through job creation for the construction of homes and infrastructure and marketing of the site.

The adverse impacts include large scale, built development on Green Wedge land and development of a greenfield site which may have climate change, wildlife and biodiversity impacts in the context of a Climate Change emergency and a need to protect biodiversity. The green wedge policy is still valid and green wedges are an important part of the city. However, it is relevant that the actual defined boundaries of wedges were established in the context of a much lower housing requirement and the wedges are a restricting factor on the availability of land to meet housing needs.

Clearly, should a detailed application be submitted there may be further matters which would weigh in the balance, including design, place making and living environment matters and other on-site uses, such as open space. There may also be other matters which weigh in this balance including highway and access and land drainage matters.

It is for the decision maker to weigh these benefits and adverse impacts and apply the tilted balance to determine an application.

Section 106 Matters

This development would trigger contributions to be secured through a Section 106 Agreement. At this stage we can flag up that a full range of contributions would be sought and are subject to viability appraisal. They are as follows:

- Affordable housing
- Transport/ highways
- Primary & Secondary Education
- Amenity Green Space (on-site) and Major Open Space (off-site contribution but with potential for some of it to be off-set as they are providing a good amount on-site by the look of it – I'd need to look at the figures)
- Community Facilities
- Sports Facilities
- Health
- Plus any specific on-site requirements we flag as the app progresses.

Highways Implications

The Highways Officer has provided the following observations:

These observations do not preclude; and should be read in conjunction with those made by my colleague in Transport Planning are primarily focussed on being able to achieve “safe and suitable access” onto the highway network and some general design considerations and advice.

- Any submission should be accompanied by a full Transport Assessment and Travel Plan.
- There is generally insufficient firm detail shown on the concept plan for more formal advice to be given; it is however assumed that the development is likely to be offered (in due course) for adoption under the relevant section of the Highways act 1980.

The ‘applicant should ensure that sufficient detail is provided at application stage in order that a satisfactory design can be determined at planning application stage. Any design should meet with the requirements of Delivering Streets and Places. It is recommended that plans to a minimum scale of 1:500 be provided, showing general directions of fall and gradients.

The applicant may wish to provide such details to the Highway Authority for informal comment prior to the submission of the formal planning application.

- As a general note also, highway trees will incur a commuted sum per tree, and will be required to be of a species acceptable to the Highway Authority with appropriate root protection measures.
- Trees in private frontages but adjacent to the highway boundary will also be required to have suitable root protection barriers.
- Due to the nature of the application; the highway authority considers that it may be appropriate to assess the adjacent highway in respect of the potential for a claim for compensation made under Section 59 of the Highways Act 1980.

The applicant/developer would be (prior to commencement of works) expected to arrange for the joint ‘dilapidation survey’ of the highway in the vicinity of the site; to be carried out with the representative of the Highway Authority.

- The connecting footways from the site access to the south is supported; and should be delivered through the relevant section of the Highways act 1980, although this may be awkward to deliver adjacent to the utilities cabinet.
- The Local Planning Authority is advised to consult also with the Rights of Way Officer in respect of the nearby public footpaths, and the proposals to link through the site into them.

Derby City Council follows the Delivering Streets and Places Design Guide, which provides details on geometric and safety requirements for adopted highways and the transport assessment of development. Further, I note that there are no footways on the western side of the Royal Hill Road and the developer should consider how they are going to tie safe access into the development for pedestrians.

Flood Risk & Drainage:

The Councils Land Drainage Officer has provided the following observations:

The Lead Local Flood Authority (LLFA) is responsible for identifying areas at risk of flooding. This is aided by the Strategic Flood Risk Assessment prepared for Derby City, the Environment Agency's flood risk maps and historical information about flooding. This information will inform the preparation of flood risk assessments and determine the degree of flood sustainability required for the proposed development.

In this instance there is some flooding associated with a minor watercourse along the southern boundary of the site and any development must be kept away from this area. This would appear, from the concept plan submitted, to be the intention of the development.

In addition, the LLFA has responsibility for Sustainable Drainage throughout the area and expectation is still placed on developers by the National Planning Policy Framework to include SuDS in all major development and any minor development in areas of increased flood risk.

There are outline SuDS included in the illustrative drainage plan.

It is also an expectation for developers to make suitable arrangements for the maintenance of SuDS for the lifetime of a development. This could be through adoption by a public or private body

Trees and Ecology

The Tree Officer's comments are attached separately.

The site is agricultural land with trees and hedgerows and an ecological appraisal will be required to assess the biodiversity and habitat value. Biodiversity Net Gain is not yet mandatory for new development, until the Environment Act becomes law at the end of 2023. However, for this development we would be seeking no net loss of biodiversity to be delivered.

Design and Heritage

It is noted that a Heritage Note has been submitted with the submission. The site does not have any designated heritage assets on or adjacent to the site. It is also noted that there are no HER records on or adjacent to the site. The proposals are not therefore likely to result in any harm to heritage features in the local area and accordingly there is no requirement for a heritage assessment to be submitted with an application.

High quality urban design will be sought for the proposals, as required by the NPPF. The key constraints in my view are the site's location on the edge of the urban area and connectivity with existing public routes around the site. The housing should therefore relate to Royal Hill Road and the neighbouring residential area and landscape features used to soften the edge with the Green Wedge. Pedestrian and cycle linkages with existing PROW and Royal Hill Road are also important to promote sustainable travel.

The Council does not currently have an urban designer, but there is opportunity for the concept proposals to be considered by a design review panel of local independent professionals, who give urban design advice on major developments.

APPENDIX 3: Scoping Discussions

Shannon Franklin

From: Andrew Gibbard <Andrew.Gibbard@derby.gov.uk>
Sent: 31 October 2022 10:34
To: Shannon Franklin
Subject: RE: Application for land at Royal Hill Farm, Spondon 22/00026/PREAPP

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Shannon,

Your proposal seems like a reasonable approach.

Regards

Andy

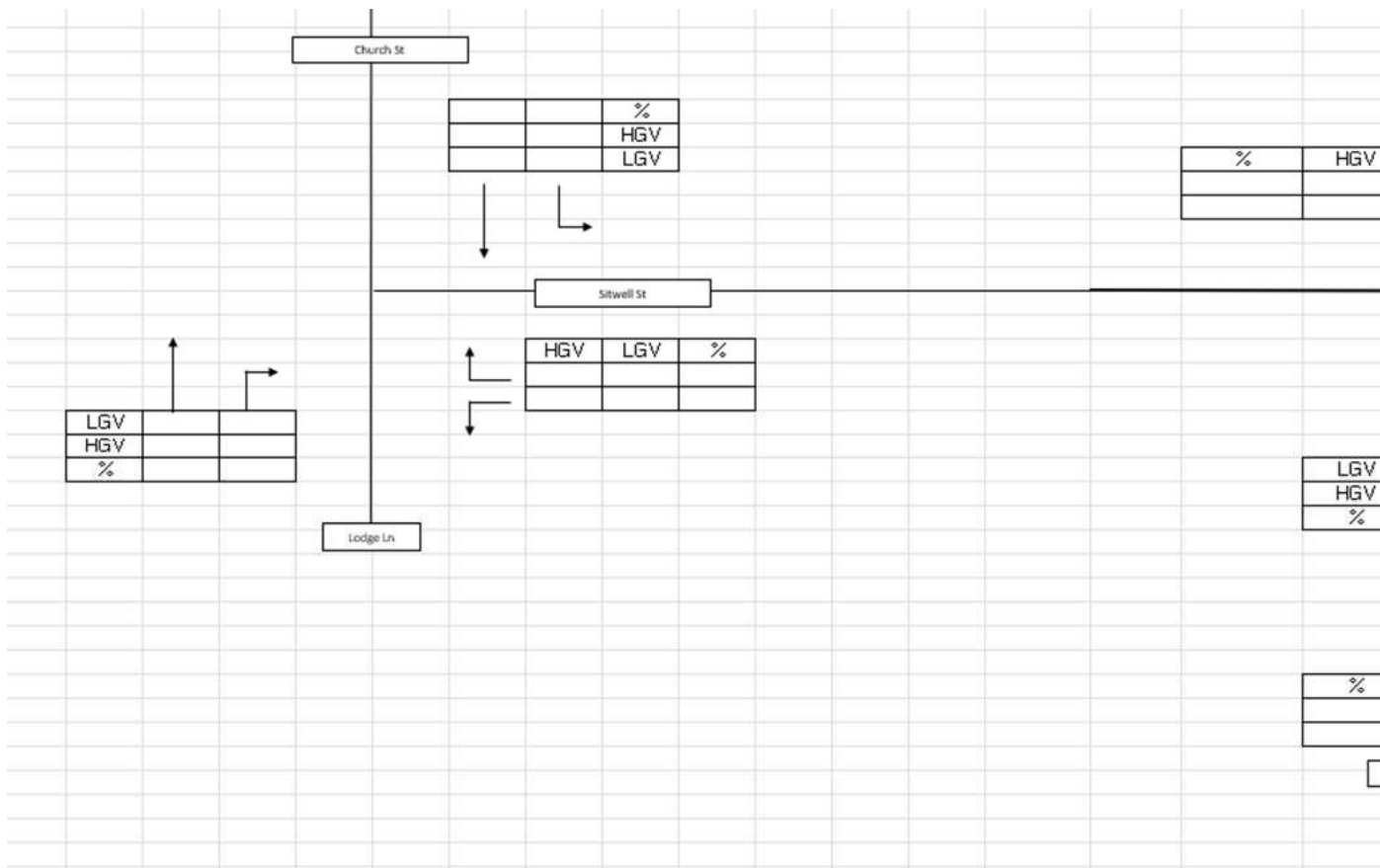
From: Shannon Franklin <Shannon.Franklin@bwbconsulting.com>
Sent: 24 October 2022 14:48
To: Andrew Gibbard <Andrew.Gibbard@derby.gov.uk>
Cc: Sara Terrey <Sara.Terrey@bwbconsulting.com>
Subject: FW: Application for land at Royal Hill Farm, Spondon 22/00026/PREAPP

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Hello Andrew,

My colleague Sara Terrey recently contacted you regarding scope for a residential development at Royal Hill Road, Spondon (as shown in the email chain below).

Having taken a look at the Smart Parc TA, we have managed to find the committed development flows for the Willowcroft Road / A6005 Nottingham Road signal T-junction. Below shows a sample of the evening peak committed dev flows and how these flows link with our study area to the north.



The trips associated with Smart Parc do not distribute any further north than the aforementioned junction and we recognise that the committed development trips would route through a number of the junctions we are assessing. We are intending to distribute the trips pro rata to the turning proportions summarised from the survey data. Could you please confirm if this method is adequate for including the committed development trips within our junction assessments.

Kind regards,

Shannon Franklin BSc(Hons) MCIHT
Engineer | Transport & Infrastructure Planning | BWB Consulting Limited

5th Floor, Waterfront House, 35 Station Street, Nottingham, NG2 3DQ

Please note my working hours are Monday to Thursday 0900 to 1730 hours

From: Andrew Gibbard <Andrew.Gibbard@derby.gov.uk>

Sent: 28 September 2022 16:00

To: Sara Terrey <Sara.Terrey@bwbconsulting.com>

Cc: Kathryn Young <Kathryn.Young@miller.co.uk>; Alan Siviter <Alan.Siviter@pegasusgroup.co.uk>; Shannon Franklin <Shannon.Franklin@bwbconsulting.com>; Maisie Marsh <Maisie.Marsh@miller.co.uk>

Subject: RE: Application for land at Royal Hill Farm, Spondon 22/00026/PREAPP

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Hi Sara,

See comments below in green. Also referring to your other e-mail I also have the following comments.

Committed Development – Smartparc is a major industrial site, which has impacts on Nottingham Road. I think that the Willowcroft Road Junction needs assessing, the reasons are given below in the green comments, and it needs to include Smartparc.

Forecast Years – Generally we only ask for the base survey year (for model validation) and year of opening unless it is a strategic site (generally over 400 dwellings), or there is a major development or piece of major infrastructure that would impact on traffic patterns.

Traffic surveys – please include queue length surveys to validate any models. Any junction counts will need to be validated against either pre-covid historical ATC's or turning counts to determine their robustness. The counts will need to be factored and adjusted if they are significantly different.

Trip Distribution – okay.

Sustainable Travel & Travel Plan – For a site of this size I would concentrate on a welcome pack and physical measures in terms of the design of the development to either promote sustainable travel, or link the site to the outside network. For example, are there opportunities to link to the existing cycle network or key destinations such as the school to the south? Without a bus service you're going to have to do something to answer any criticism that the site isn't served by public transport, therefore it's less sustainable.

Regards

Andy

From: Sara Terrey <Sara.Terrey@bwbconsulting.com>

Sent: 27 September 2022 13:54

To: Andrew Gibbard <Andrew.Gibbard@derby.gov.uk>

Cc: Kathryn Young <Kathryn.Young@miller.co.uk>; Alan Siviter <Alan.Siviter@pegasusgroup.co.uk>; Shannon Franklin <Shannon.Franklin@bwbconsulting.com>; Maisie Marsh <Maisie.Marsh@miller.co.uk>

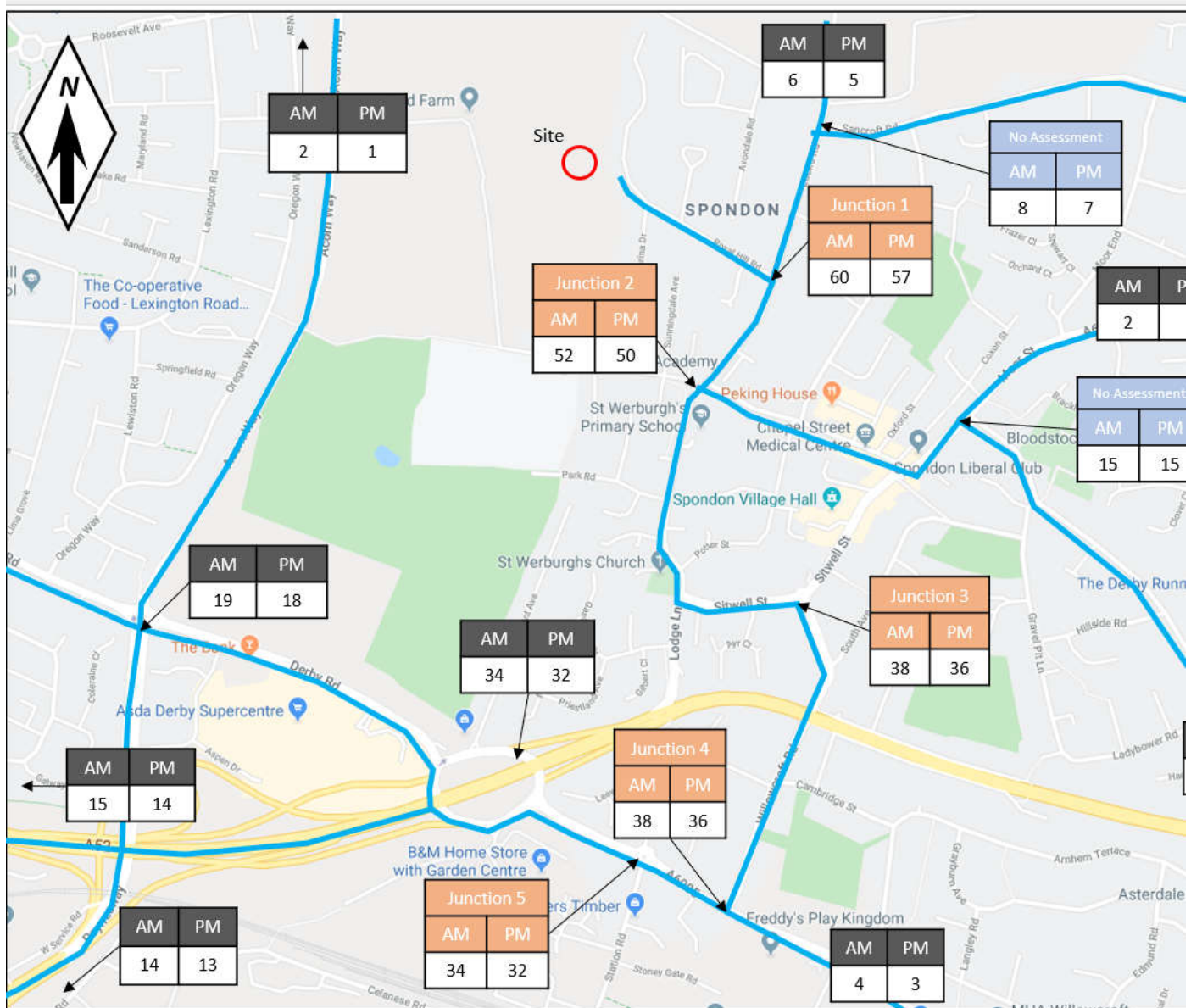
Subject: FW: Application for land at Royal Hill Farm, Spondon 22/00026/PREAPP

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Andy

Thank you for your prompt response and your position regarding setting a precedent of accepting average trip rates is noted and understood. As a result we have revisited TRICS and 85th percentile trip rates and these are attached and presented in the figure below, with section 8 updated accordingly.



8. Impact Assessment

It has been demonstrated that the proposals would result in an increase of 60 and 57 two-way movements during the morning and evening peak hours respectively. Based on the two-way trips shown in Figure 2, the following details indicate the expected number of two-way traffic movements during the evening peak period as a worst-case that would occur at key junctions within the surrounding highway network, based on the proposed development traffic assignment shown above:

1. Site Access (AM: 60, PM: 57)
2. Locko Road / Royal Hill priority-controlled T-junction (AM:60, PM 57)
3. Locko Road/ Chapel Street/ Church Street priority-controlled T-junction (AM: 52, PM 50)
4. Sitwell Street West/ Sitwell Street (North)/ Willowcroft Road mini-roundabout (AM: 38, PM: 36)
5. Willowcroft Road/ A6005 priority-controlled T-junction (AM: 38, PM 36)
6. A6005/ Lodge Lane/ Station Road (AM: 34, PM 32)

Current policy guidance suggests that the approach taken in any assessment should take a rounded view on impact that considers traffic increases in the context of existing conditions at particular junctions and links, such as whether there are any current capacity or highway safety

issues. This all-encompassing approach to assessment helps to address the specific question of whether or not an impact could be defined as severe.

It is generally accepted that a threshold of 30 peak hour vehicle movements is used as a starting point for determining where a significant impact could occur, however, as previously stated, it should be noted that the starting threshold of 30 peak hour movements is relatively low, particularly for more strategic locations, and so this assessment uses a threshold of 45 to 60 movements (i.e. up to one per minute) as an initial starting point instead. Such an increase would not materially effect the operation of off-site junctions. This threshold does get used a lot, although it was originally used in the DfT's Transport Assessment Guidance and relates to the total two-way trip generation of developments in the peak hours. Not necessarily individual junctions. However, we normally take a pragmatic view of the impacts based on our knowledge of the network. This development is potentially going to be sensitive because of the withdrawal of the Spondon Flyer and proposals for sites that are currently being put forward by Erewash in their next local plan, have put housing on the radar. Plus the Leader is a Spondon Councillor. Residents and Members starting point will be 100 houses equals 200 cars on the network.

As such, the TA needs to clearly explain the impacts and show analysis that doesn't leave any room for criticism. For this reason I would like Junction 3 and Junction 4 testing. You should be aware that Junction 4 is stuffed in the peak periods and we have looked at it a number of times. Indeed, the Smartparc development assessed this junction and came up with a scheme to incorporate the pedestrian stage into the traffic stages by constructing a split ped crossing. However, the scheme was undermined by a lack of pedestrians using the crossing! As such, there is very little that can be physically achieved here. However, for you development it is about showing the impacts on the Junctions 3 and 4, or how small they are. The Smartpark development includes an assessment and agreed model for the junction, so I would suggest using that. A survey of the junction might be useful to update the analysis. I don't have any survey information on Junction 3.

As such it is suggested that in addition to the site access junction only the following junctions (as numbered above) should be looked at in more detail in any detailed assessment.

2. Locko Road / Royal Hill priority-controlled T-junction (AM:60, PM 57)
3. Locko Road/ Chapel Street/ Church Street priority-controlled T-junction (AM: 52, PM 50)

In addition, to the detailed capacity assessment of the above junctions, it is suggested that accident records are obtained for the wider study area to determine whether there are any inherent safety concerns.

As suggested, a copy of this email will be forwarded on to the planners for their information.

I would be appreciate it if you could confirm the above study area is acceptable, and also advise on committed developments and assessment years as set out below.

Kind regards

Sara

Sara Terrey BA (Hons) MCIHT

Associate | Transport & Infrastructure Planning | BWB Consulting Limited

5th Floor, Waterfront House, Station Street, Nottingham, NG2 3DQ

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Please note my working hours are Monday to Friday 0830 to 1430 hours



From: Andrew Gibbard <Andrew.Gibbard@derby.gov.uk>

Sent: 22 September 2022 15:24

To: Sara Terrey <Sara.Terrey@bwbconsulting.com>

Cc: Alan Siviter <Alan.Siviter@pegasusgroup.co.uk>; Kathryn Young <Kathryn.Young@miller.co.uk>; Shannon Franklin <Shannon.Franklin@bwbconsulting.com>

Subject: RE: Application for land at Royal Hill Farm, Spondon 22/00026/PREAPP

This email originated from outside of our organisation. Please exercise caution with content, links and attachments.

Sara,

Thanks for this. The documents need to go through our planning team, so that they are clear of your client's intentions.

In terms of 85th percentile trip rates, we have to consider the longer term impact of development on the network. Covid has had an unprecedented impact on travel patterns, however, basing an assessment on research as the UK was coming out of the pandemic really doesn't provide any basis to determine the future. It's too soon to say. Further, applying a National Survey with a relatively low sample to a local area like Derby really doesn't provide any conclusive evidence, particularly when Derby's biggest employers are all in manufacturing. At best the research is a snap-shot in time.

Turning to TRICs, the Guidance Note on Changes to Travel Behaviour (August 2019), it does not specifically suggest that 85th percentile rates should not be used because they enforce the predict and provide approach. Indeed, the 6C's suggests that this is a starting point, and that perhaps these may be reduced depending on the level of non-car mitigation proposed. However, experience of edge of City development suggests that trip rates are high and we tested this assumption with the Boulton Moor urban extension to the south of the city by surveying existing residential development. Perhaps if this development is closer to the centre and was proposing low parking levels then we would accept average rates. As such, we still need to be mindful of maintaining the efficiency and safety of the network to be able to sustain development. That is not to say that we don't expect good sustainable travel links to be taken into consideration, however, considering the Spondon Flyer has recently been withdrawn then for a development of this size, I would say the travel options have been significantly reduced. Finally, TRICS recommends a sample size of 20 or more surveys when considering 85th percentiles, but goes on to say that it doesn't endorse the use of samples of less than 6.

From your client's perspective, using 85th percentile trip rates on 100 dwellings really isn't going to change the outcome of the impacts of this development. But from my perspective I'm not willing to set the precedent of accepting average rates. Particularly for housing developments where the sample rates in TRICS post date any argument over travel to work trends between 1988 and 2014, and the sample ranges in this user class are extensive. In other words, the trend should already be accounted for in the data.

Regards

Andy

Andrew Gibbard | Group Manager | Traffic and Transportation | Communities and Place Directorate |
The Council House, Corporation Street, Derby DE1 2FS. | Telephone 01332 641756 | Minicom 01332
640666 | www.derby.gov.uk

From: Sara Terrey <Sara.Terrey@bwbconsulting.com>

Sent: 22 September 2022 11:52

To: Andrew Gibbard <Andrew.Gibbard@derby.gov.uk>

Cc: Alan Siviter <Alan.Siviter@pegasusgroup.co.uk>; Kathryn Young <Kathryn.Young@miller.co.uk>; Shannon Franklin <Shannon.Franklin@bwbconsulting.com>

Subject: Application for land at Royal Hill Farm, Spondon 22/00026/PREAPP

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Morning Andrew

I refer you to the pre-application advice provided for the above project. As you may recall, a Technical Note for up to 150 dwellings was produced In January 2020 (BWB reference RHR-BWB-GEN-XX-RP-TR-0001-TN) to inform pre-application discussions with the Local Highway Authority (LHA) Derby City Council (DCC) in relation to the proposed development.

The proposed number of dwellings has been reduced by a third to up to 100 dwellings and the intention is to submit an outline planning application on this basis.

In summary it was subsequently advised in the pre-app response that a Transport Assessment and Travel Plan would be required to support an outline planning application. It was confirmed that visibility at the site access appeared achievable and footway connections to the north and south need to be designed to ensure the mobility impaired can cross. DCC advised that the following points be taken into considerations:

- In line with Delivering, Streets and Places guidance, 85th percentile trip rates should be used, not average rates.
- Consideration to any physical measures through the development that improve links to the sustainable transport network should be given.
- A Travel Plan welcome package that provides homeowners with key information on sustainable travel to the site and incentives to use non-car modes such as trial bus tickets, should be considered.

As set out above the Client now intends to submit an outline planning application and have asked that the Transport Assessment considers the impact of up to 100 dwellings. Whilst DCCs comments regarding the use of 85th percentile trip rates are noted current research suggests that car travel in England has reduced and is still below pre-pandemic levels, we therefore seek to suggest that average trip rates are more representative of future car use. This is quantified in further detail below.

In accordance with the latest Planning Practice Guidance (PPG) this email therefore outlines the tasks that we consider are required to ensure an accurate Transport Assessment is produced, to

provide DCC with sufficient evidence to make an informed decision on the future outline planning application for up to 100 dwellings.

The key parameters of the Transport Assessment are outlined below:

1. Sustainable Travel

A detailed audit of the local cycle and pedestrian network in proximity to the site will be undertaken, as will an examination of the local public transport provision.

2. Highway Safety Review

Personal Injury Collision (PIC) data will be obtained from Derbyshire Constabulary for the latest five year period. The data will be reviewed to determine whether there are any inherent safety concerns on the neighbouring highway network for an agreed study area (see Section 8 below for further detail).

3. Access Arrangements

Access to the site would be provided solely from a new priority controlled junction at Royal Hill Road. This will be set out in further detail in the Transport Assessment and in line with comments provided by DCC drawings submitted will be 1:500 and on-site checks will be carried out to ensure there are no physical barriers obscuring the visibility.

4. Trip Generation

To quantify the impact of the proposed development on the local transport system, the number of vehicle trips for all modes of transport that are likely to be generated by the development should be calculated. It is anticipated that the site's peak traffic generation would occur across the weekday morning and evening periods.

DCC have suggested that in line with their adopted guidance, Delivering Streets and Places Design Guide that 85th percentile trip rates should be used. Appendix C of this guidance which suggested that 85th percentile trip rates should be used was published in 2017.

The Department for Transport's review of travel to work trends in 2017 revealed that there has been a substantial decrease in commuting trips between 1988/92 and 2013/14, from 7.1 journeys per worker per week down to 5.7 journeys. The average distance to work has increased by 10% and the number of people in work had never been higher. The net effect of this, despite the previous economic growth and population growth, is a decline in annual commuting trips from 8.5 billion to 7.9 billion (4.3.1). Even prior to Covid-19, work patterns were changing, for example, working from home has been growing on both an occasional and usual basis and there has been a growth in the number of workers who don't have a fixed usual place of work. The Covid-19 pandemic has further accelerated and normalised working from home.

The DfT has published initial evidence of the impacts of Covid-19 on travel behaviour and on-going research shows that the frequency and number of people travelling to work five days a week has decreased and November 2021, was still below the pre-covid levels. Table 5 below has been extracted from the latest DfT's research.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1080053/all-change-travel-tracker-wave-6-report.pdf with numbers presented as percentages.

Table 5: Frequency of travelling to a workplace in the previous 4 weeks among those in employment – January-March 2020, May/June 2021 and November 2021

	January-March 2020*	May/June 2021	November 2021
5 days a week or more	47	28	32
3-4 days a week	20	19	19
2 days a week	8	9	11
About once a week	6	7	8
About twice	2	4	4
About once	2	5	5
(Less often)	2	n/a	n/a
Never	11	27	20
Don't know	2	2	2

Source: Ipsos MORI/DfT; Base: 2,427 UK adults in employment (Wave 6), 4-29 November 2021, 2,582 (Wave 5), 17 May-8 June 2021

* Asked at Wave 6; Q63aNEW (Wave 6) How often, if at all, did you typically do each of the following during the period immediately before the first UK-wide 'lockdown', that is the period between 1st January 2020 and 23rd March 2020?

Travel to a place of work

Q63bNEW. (Wave 5 and Wave 6) How often, if at all, did you typically do each of the following during the last 4 weeks?

In addition to the above the TRICS Guidance Note on the practical implementation of the decide and provide approach, sets out the risks of continuing with the current Predict & Provide Approach "... it is inevitable that transport planning will continue to seek to provide infrastructure that meets previously predicted needs, rather than meeting, and indeed shaping, the transport needs of the future. It is important to recognise society's needs and changes in society, to avoid the over-provision of highway infrastructure and the perpetuation of car borne development. The possible consequences, unintended or otherwise, include:

- The potential over-provision of highway capacity which, in turn, can induce motorised traffic (exacerbating efforts to reduce direct CO2 emissions from the transport sector);
- The potential under-provision of walking and cycling infrastructure or public transport services; and
- The risk of planning and developing underutilised or stranded assets"

The latest version of the TRICS Good Practice Guide also highlights the risk of using the 85th and 15th percentile trip rates where there are less than 20 surveys selected, as this can result in relatively high trip rates which may wrongly inflate potential parking and highway capacity provision which, in turn, does not support sustainable development.

With the above in mind, the trip rates for the residential element of the proposed development have been extracted from the TRICS database using the category 'Houses Privately Owned'. TRICS results were initially refined using the following search parameters:

- Land Use: Houses – Privately Owned
- Region: All England (excluding greater London)
- Days of the Week: Monday-Friday
- Number of Houses: 75 to 200
- Location: Edge of Town

This resulted in a total of 14 sites of which the average trip rates was calculated. The average trip rate for both the morning and evening peak hour was then used to calculate the forecast traffic generation for the proposed development. Using the average trip rate rather than the 85% trip rate is considered appropriate as there were less than 20 comparable sites resulting from the search. Also, using the lower trip rates is more representable of the increased level of home working which has resulted from the Covid-19 pandemic.

The trip rates are contained within the attached document and summarised within the table below:

Table 1: Trip Rates and Generation (100 Dwellings)

	Trip Rate			Trip Gen		
	Arrivals	Departures	Two-way	Arrivals	Departures	Two-way
08:00 – 09:00	0.134	0.341	0.475	14	34	48
17:00 – 18:00	0.302	0.151	0.453	30	15	45

The trip generation shown in Table 1 shows that the proposed development has the potential to generate 48 two-way vehicle trips in the morning peak hour and 45 two-way trips in the evening peak.

5. Trip Distribution

As set out in the previous Technical Note, in order to determine the likely distribution of vehicular trips associated with the proposed residential development, a study was carried out using the NOMIS website. Data set WU03EW – Method of Journey to Work' data was obtained for MSOA Derby 010 (details attached), which is based on the 2011 census data. The resultant percentage distribution is shown **Figure 1**, with the assigned development flows for both the morning and evening peak being shown in **Figure 2**.

Figure 1 – Percentage Distribution

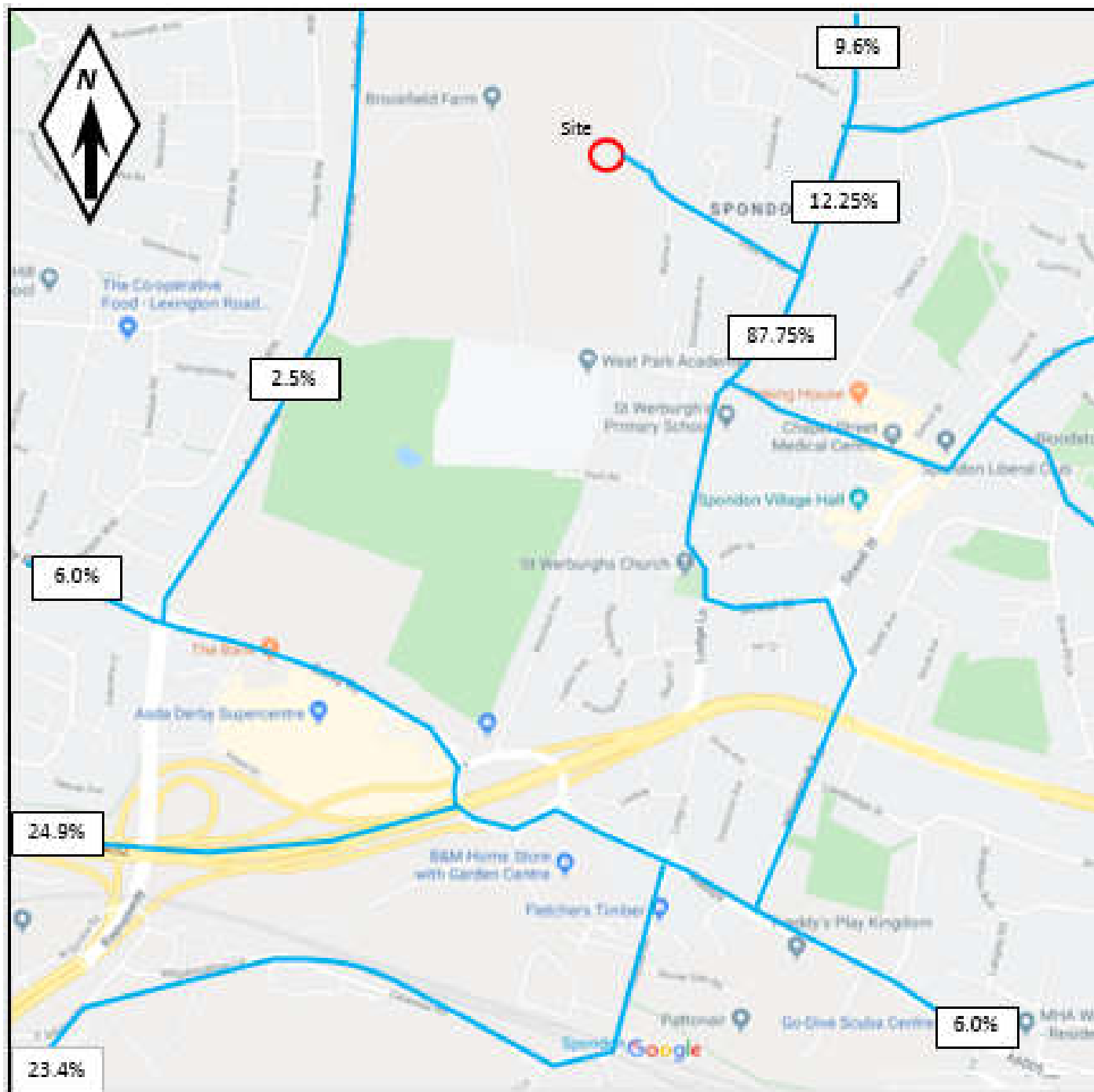
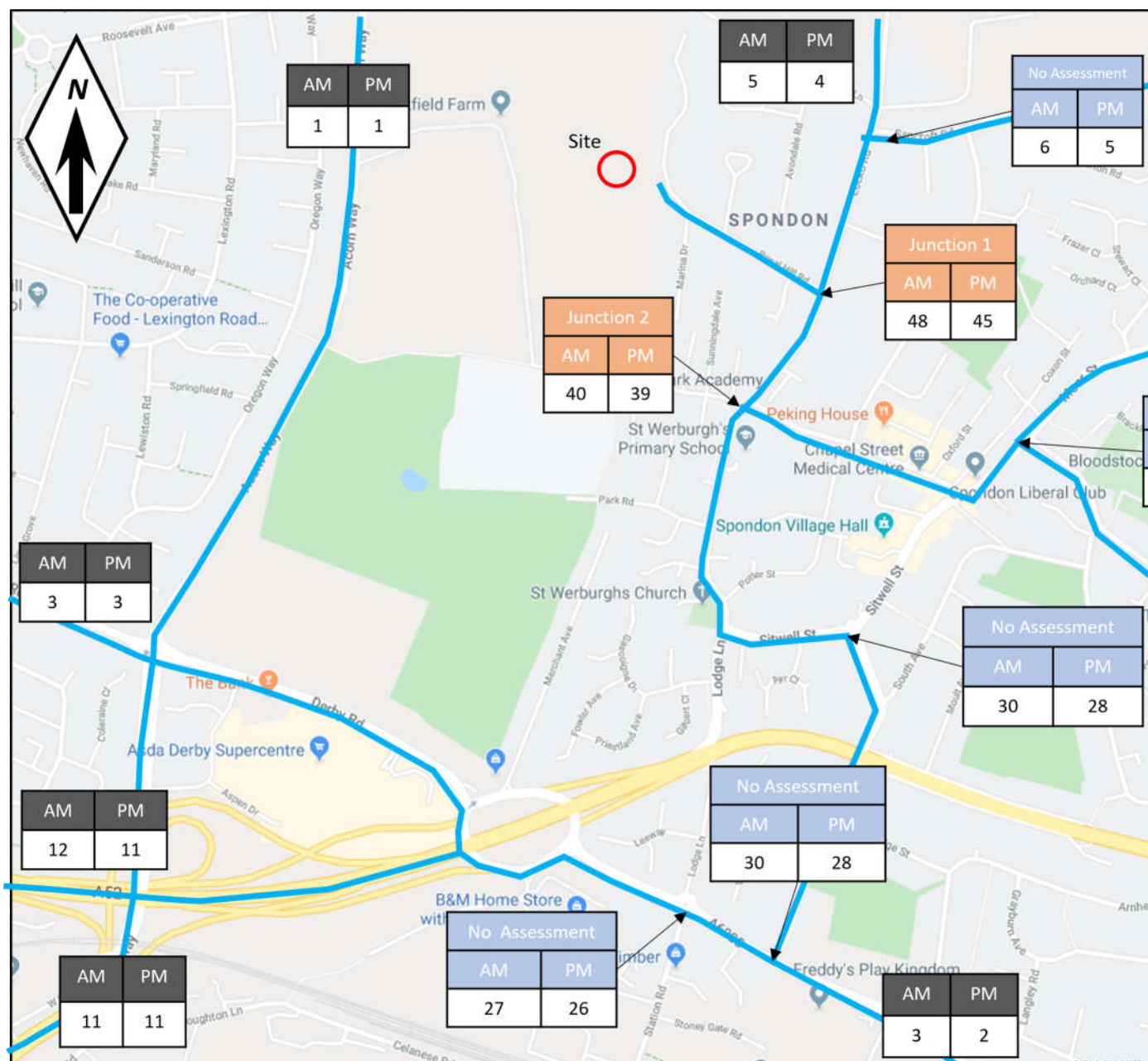


Figure 1 shows that at the junction with Locko Road, approximately 12.25% of vehicles would travel to / from the north of site, with the remaining 87.75% travelling to/from the south.

Figure 2 Proposed Two-Way Trips



6. Committed Developments

Inspection of the DCC online planning database shows no other significant committed development in the immediate vicinity of the site that would generate a significant amount of traffic on the surrounding highway network, beyond the expected level of growth. Hence, no further specific consideration of additional committed development traffic flows should be required within subsequent capacity assessments, unless DCC suggest differently.

7. Assessment Years

It is proposed that assessments are undertaken for the following years:

- 2022 Base Year (date of registration of planning application)
- 2027 Future Assessment Year (plus 5 years).

Suitable growth factors have been obtained from the TEMPRO Database as summarised below:

Year	Morning Peak	Evening Peak
2022 - 2027	1.038036761	1.037485094

8. Impact Assessment

It has been demonstrated that the proposals would result in an increase of 48 and 45 two-way movements during the morning and evening peak hours respectively. Based on the two-way trips shown in **Figure 2**, the following details indicate the expected number of two-way traffic movements during the evening peak period as a worst-case that would occur at key junctions within the surrounding highway network, based on the proposed development traffic assignment shown above:

1. Site Access (AM: 48, PM: 45)
2. Locko Road / Royal Hill priority-controlled T-junction (AM:48, PM 45)
3. Locko Road/ Chapel Street/ Church Street priority-controlled T-junction (AM: 40, PM 39)
4. Sitwell Street West/ Sitwell Street (North)/ Willowcroft Road mini-roundabout (AM: 30, PM: 28)
5. Willowcroft Road/ A6005 priority-controlled T-junction (AM: 30, PM 28)
6. A6005/ Lodge Lane/ Station Road (AM: 27, PM 26)

Current policy guidance suggests that the approach taken in any assessment should take a rounded view on impact that considers traffic increases in the context of existing conditions at particular junctions and links, such as whether there are any current capacity or highway safety issues. This all-encompassing approach to assessment helps to address the specific question of whether or not an impact could be defined as severe.

It is generally accepted that a threshold of 30 peak hour vehicle movements is used as a starting point for determining where a significant impact could occur, however , it should be noted that the starting threshold of 30 peak hour movements is relatively low, particularly for more strategic locations, and so this assessment uses a threshold of 45 to 60 movements (i.e. up to one per minute) as an initial starting point instead. Such an increase would not materially effect the operation of off-site junctions

As such it is suggested that in addition to the site access junction only the following junction (as numbered above) should be looked at in more detail in any detailed assessment.

2. Locko Road / Royal Hill priority-controlled T-junction (AM:48, PM 45)
3. Locko Road/ Chapel Street/ Church Street priority-controlled T-junction (AM: 40, PM 39)

Increases of less than one vehicle every 2 minutes would occur at all other off-site junctions and as such they should not require detailed assessment as the modelled impact would be minimal.

I would be grateful if you could review the attached and look forward to receiving confirmation that its conclusions are acceptable to DCC to inform the subsequent Transport Assessment, which would accompany the planning application alongside a Travel Plan. In the meantime, please feel free to get in touch should you have any queries regarding the proposals.

Kind regards

Sara

Sara Terrey BA (Hons) MCIHT
Associate | Transport & Infrastructure Planning | BWB Consulting Limited

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APPENDIX 4: Traffic Survey Results and Queue Surveys

Spondon ATC, Royal Hill Road

Produced by Road Data Services Ltd.

Channel 1 - Northbound

07/10/2022	Vehicle Classes													TOTAL
Hr Ending	1	2	3	4	5	6	7	8	9	10	11	12	13	
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	1	0	0	0	0	0	0	0	0	0	0	1
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	4	0	0	0	0	0	0	0	0	0	0	0	0	4
9	20	1	0	0	0	0	0	0	0	0	0	0	0	21
10	5	1	0	0	0	0	0	0	0	0	0	0	0	6
11	8	0	0	0	0	0	0	0	0	0	0	0	0	8
12	5	3	0	0	0	0	0	0	0	0	0	0	0	8
13	10	1	0	0	0	0	0	0	0	0	0	0	0	11
14	7	1	0	0	0	0	0	0	0	0	0	0	0	8
15	16	2	0	0	0	0	0	0	0	0	0	0	0	18
16	22	1	0	0	0	0	0	0	0	0	0	0	0	23
17	10	1	0	0	0	0	0	0	0	0	0	0	0	11
18	4	0	0	0	0	0	0	0	0	0	0	0	0	4
19	3	0	0	0	0	0	0	0	0	0	0	0	0	3
20	3	0	0	0	0	0	0	0	0	0	0	0	0	3
21	3	0	0	0	0	0	0	0	0	0	0	0	0	3
22	2	0	0	0	0	0	0	0	0	0	0	0	0	2
23	1	0	0	0	0	0	0	0	0	0	0	0	0	1
24	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7-19	114	11	0	0	0	0	0	0	0	0	0	0	0	125
6-22	122	11	0	0	0	0	0	0	0	0	0	0	0	133
6-24	124	11	0	0	0	0	0	0	0	0	0	0	0	135
0-24	124	11	1	0	0	0	0	0	0	0	0	0	0	136

Channel 2 - Southbound

07/10/2022	Vehicle Classes													TOTAL
Hr Ending	1	2	3	4	5	6	7	8	9	10	11	12	13	
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	1	0	0	0	0	0	0	0	0	0	0	0	1
6	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7	4	0	0	0	0	0	0	0	0	0	0	0	0	4
8	4	0	0	0	0	0	0	0	0	0	0	0	0	4
9	19	0	0	0	0	0	0	0	0	0	0	0	0	19
10	10	0	0	0	0	0	0	0	0	0	0	0	0	10
11	10	1	0	0	0	0	0	0	0	0	0	0	0	11
12	6	2	0	0	0	0	0	0	0	0	0	0	0	8
13	7	1	0	0	0	0	0	0	0	0	0	0	0	8
14	8	1	0	0	0	0	0	0	0	0	0	0	0	9
15	12	1	0	0	1	0	0	0	0	0	0	0	0	14
16	21	0	0	0	0	0	0	0	0	0	0	0	0	21
17	7	1	0	0	0	0	0	0	0	0	0	0	0	8
18	3	0	0	0	0	0	0	0	0	0	0	0	0	3
19	5	0	0	0	0	0	0	0	0	0	0	0	0	5
20	1	0	0	0	0	0	0	0	0	0	0	0	0	1
21	5	0	0	0	0	0	0	0	0	0	0	0	0	5
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	1	0	0	0	0	0	0	0	0	0	0	0	0	1
24	2	0	0	0	0	0	0	0	0	0	0	0	0	2
7-19	112	7	0	0	1	0	0	0	0	0	0	0	0	120
6-22	122	7	0	0	1	0	0	0	0	0	0	0	0	130
6-24	125	7	0	0	1	0	0	0	0	0	0	0	0	133
0-24	126	8	0	0	1	0	0	0	0	0	0	0	0	135

Channel 1 - Northbound

Spondon ATC, Royal Hill Road

Produced by Road Data Services Ltd.

Channel 1 - Northbound

07/10/2022	Vehicle Speeds (MPH)													
Hr Ending	0-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60+	TOTAL	
1	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	0	0	0	0	0	0	0	0	0	0	0	0	0	
4	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	0	0	0	0	1	0	0	0	0	0	0	0	1	
6	0	0	0	0	0	0	0	0	0	0	0	0	0	
7	0	0	0	0	0	0	0	0	0	0	0	0	0	
8	3	0	0	0	1	0	0	0	0	0	0	0	4	
9	1	7	3	9	1	0	0	0	0	0	0	0	21	
10	0	0	5	1	0	0	0	0	0	0	0	0	6	
11	0	4	2	1	1	0	0	0	0	0	0	0	8	
12	0	1	2	3	1	1	0	0	0	0	0	0	8	
13	0	0	3	4	3	1	0	0	0	0	0	0	11	
14	0	0	5	1	1	1	0	0	0	0	0	0	8	
15	2	3	4	8	1	0	0	0	0	0	0	0	18	
16	1	8	7	5	1	1	0	0	0	0	0	0	23	
17	0	0	1	7	2	1	0	0	0	0	0	0	11	
18	0	1	0	1	2	0	0	0	0	0	0	0	4	
19	0	0	0	2	1	0	0	0	0	0	0	0	3	
20	0	1	0	0	1	1	0	0	0	0	0	0	3	
21	0	0	0	3	0	0	0	0	0	0	0	0	3	
22	0	0	1	0	1	0	0	0	0	0	0	0	2	
23	0	0	0	0	1	0	0	0	0	0	0	0	1	
24	0	0	1	0	0	0	0	0	0	0	0	0	1	

7-19	7	24	32	43	14	5	0	0	0	0	0	0	125
6-22	7	25	33	46	16	6	0	0	0	0	0	0	133
6-24	7	25	34	46	17	6	0	0	0	0	0	0	135
0-24	7	25	34	47	17	6	0	0	0	0	0	0	136

Channel 2 - Southbound

07/10/2022	Vehicle Speeds (MPH)													
Hr Ending	0-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60+	TOTAL	
1	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	0	0	0	0	0	0	0	0	0	0	0	0	0	
4	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	0	0	0	1	0	0	0	0	0	0	0	0	1	
6	0	0	1	0	0	0	0	0	0	0	0	0	1	
7	0	0	2	2	0	0	0	0	0	0	0	0	4	
8	0	1	2	0	1	0	0	0	0	0	0	0	4	
9	6	8	5	0	0	0	0	0	0	0	0	0	19	
10	0	2	4	4	0	0	0	0	0	0	0	0	10	
11	0	2	7	2	0	0	0	0	0	0	0	0	11	
12	1	1	3	1	2	0	0	0	0	0	0	0	8	
13	0	0	3	3	2	0	0	0	0	0	0	0	8	
14	0	1	2	4	2	0	0	0	0	0	0	0	9	
15	5	1	6	2	0	0	0	0	0	0	0	0	14	
16	4	4	8	4	1	0	0	0	0	0	0	0	21	
17	0	1	5	2	0	0	0	0	0	0	0	0	8	
18	1	1	0	1	0	0	0	0	0	0	0	0	3	
19	0	0	0	4	1	0	0	0	0	0	0	0	5	
20	0	0	0	0	1	0	0	0	0	0	0	0	1	
21	0	0	1	2	2	0	0	0	0	0	0	0	5	
22	0	0	0	0	0	0	0	0	0	0	0	0	0	
23	0	0	1	0	0	0	0	0	0	0	0	0	1	
24	0	1	1	0	0	0	0	0	0	0	0	0	2	

7-19	17	22	45	27	9	0	0	0	0	0	0	0	120
6-22	17	22	48	31	12	0	0	0	0	0	0	0	130
6-24	17	23	50	31	12	0	0	0	0	0	0	0	133
0-24	17	23	51	32	12	0	0	0	0	0	0	0	135

Channel 1 - Northbound

Spondon ATC, Royal Hill Road

Produced by Road Data Services Ltd.

08/10/2022	Vehicle Classes													
Hr Ending	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	2	0	0	0	0	0	0	0	0	0	0	0	0	2
9	2	0	0	0	0	0	0	0	0	0	0	0	0	2
10	3	1	0	0	0	0	0	0	0	0	0	0	0	4
11	5	0	0	0	0	0	0	0	0	0	0	0	0	5
12	8	1	0	0	0	0	0	0	0	0	0	0	0	9
13	8	0	0	0	0	0	0	0	0	0	0	0	0	8
14	8	0	0	0	0	0	0	0	0	0	0	0	0	8
15	10	1	0	0	0	0	0	0	0	0	0	0	0	11
16	8	0	0	0	0	0	0	0	0	0	0	0	0	8
17	9	1	0	0	0	0	0	0	0	0	0	0	0	10
18	9	1	0	0	0	0	0	0	0	0	0	0	0	10
19	6	0	0	0	0	0	0	0	0	0	0	0	0	6
20	3	0	0	0	0	0	0	0	0	0	0	0	0	3
21	1	0	0	0	0	0	0	0	0	0	0	0	0	1
22	2	0	0	0	0	0	0	0	0	0	0	0	0	2
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	2	0	0	0	0	0	0	0	0	0	0	0	0	2

7-19	78	5	0	0	0	0	0	0	0	0	0	0	0	83
6-22	84	5	0	0	0	0	0	0	0	0	0	0	0	89
6-24	86	5	0	0	0	0	0	0	0	0	0	0	0	91
0-24	87	5	0	0	0	0	0	0	0	0	0	0	0	92

Channel 2 - Southbound

08/10/2022	Vehicle Classes													
Hr Ending	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	1	0	0	0	0	0	0	0	0	0	0	0	0	1
9	4	0	0	0	0	0	0	0	0	0	0	0	0	4
10	9	1	0	0	0	0	0	0	0	0	0	0	0	10
11	5	0	0	0	0	0	0	0	0	0	0	0	0	5
12	7	0	0	0	0	0	0	0	0	0	0	0	0	7
13	4	0	0	0	0	0	0	0	0	0	0	0	0	4
14	14	0	0	0	0	0	0	0	0	0	0	0	0	14
15	9	2	0	0	0	0	0	0	0	0	0	0	0	11
16	6	0	0	0	0	0	0	0	0	0	0	0	0	6
17	4	1	0	0	0	0	0	0	0	0	0	0	0	5
18	6	1	0	0	0	0	0	0	0	0	0	0	0	7
19	5	0	0	0	0	0	0	0	0	0	0	0	0	5
20	6	0	0	0	0	0	0	0	0	0	0	0	0	6
21	4	0	0	0	0	0	0	0	0	0	0	0	0	4
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	1	0	0	0	0	0	0	0	0	0	0	0	0	1

7-19	74	5	0	0	0	0	0	0	0	0	0	0	0	79
6-22	84	5	0	0	0	0	0	0	0	0	0	0	0	89
6-24	85	5	0	0	0	0	0	0	0	0	0	0	0	90
0-24	86	5	0	0	0	0	0	0	0	0	0	0	0	91

Channel 1 - Northbound

Spondon ATC, Royal Hill Road

Produced by Road Data Services Ltd.

08/10/2022	Vehicle Speeds (MPH)												
Hr Ending	0-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60+	TOTAL
1	0	0	1	0	0	0	0	0	0	0	0	0	1
2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	1	1	0	0	0	0	0	0	0	0	0	2
9	0	0	1	0	0	1	0	0	0	0	0	0	2
10	0	0	1	1	1	1	0	0	0	0	0	0	4
11	0	0	1	2	2	0	0	0	0	0	0	0	5
12	0	3	2	3	1	0	0	0	0	0	0	0	9
13	0	1	2	5	0	0	0	0	0	0	0	0	8
14	0	1	4	2	1	0	0	0	0	0	0	0	8
15	0	1	1	3	5	1	0	0	0	0	0	0	11
16	0	0	1	2	5	0	0	0	0	0	0	0	8
17	0	0	6	2	2	0	0	0	0	0	0	0	10
18	0	0	3	3	3	1	0	0	0	0	0	0	10
19	0	0	1	3	2	0	0	0	0	0	0	0	6
20	0	0	1	1	1	0	0	0	0	0	0	0	3
21	0	0	1	0	0	0	0	0	0	0	0	0	1
22	0	0	0	2	0	0	0	0	0	0	0	0	2
23	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	2	0	0	0	0	0	0	0	2

7-19	0	7	24	26	22	4	0	0	0	0	0	0	83
6-22	0	7	26	29	23	4	0	0	0	0	0	0	89
6-24	0	7	26	29	25	4	0	0	0	0	0	0	91
0-24	0	7	27	29	25	4	0	0	0	0	0	0	92

Channel 2 - Southbound

08/10/2022	Vehicle Speeds (MPH)												
Hr Ending	0-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60+	TOTAL
1	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	1	0	0	0	0	0	0	0	0	0	1
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	1	0	0	0	0	0	0	0	0	0	1
9	0	0	1	2	1	0	0	0	0	0	0	0	4
10	0	0	2	5	3	0	0	0	0	0	0	0	10
11	0	0	3	1	1	0	0	0	0	0	0	0	5
12	0	2	4	1	0	0	0	0	0	0	0	0	7
13	0	1	3	0	0	0	0	0	0	0	0	0	4
14	1	1	5	6	1	0	0	0	0	0	0	0	14
15	0	1	6	3	0	1	0	0	0	0	0	0	11
16	0	1	1	3	1	0	0	0	0	0	0	0	6
17	0	1	3	1	0	0	0	0	0	0	0	0	5
18	0	0	1	4	2	0	0	0	0	0	0	0	7
19	0	0	2	3	0	0	0	0	0	0	0	0	5
20	0	0	3	3	0	0	0	0	0	0	0	0	6
21	0	0	1	3	0	0	0	0	0	0	0	0	4
22	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	1	0	0	0	0	0	0	0	0	0	1

7-19	1	7	32	29	9	1	0	0	0	0	0	0	79
6-22	1	7	36	35	9	1	0	0	0	0	0	0	89
6-24	1	7	37	35	9	1	0	0	0	0	0	0	90
0-24	1	7	38	35	9	1	0	0	0	0	0	0	91

Channel 1 - Northbound

Spondon ATC, Royal Hill Road

Produced by Road Data Services Ltd.

09/10/2022	Vehicle Classes													TOTAL
Hr Ending	1	2	3	4	5	6	7	8	9	10	11	12	13	
1	4	0	0	0	0	0	0	0	0	0	0	0	0	4
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	1	0	0	0	0	0	0	0	0	0	0	0	0	1
9	1	1	0	0	0	0	0	0	0	0	0	0	0	2
10	1	0	0	0	0	0	0	0	0	0	0	0	0	1
11	2	0	0	0	0	0	0	0	0	0	0	0	0	2
12	6	1	0	0	0	0	0	0	0	0	0	0	0	7
13	8	0	0	0	0	0	0	0	0	0	0	0	0	8
14	10	0	0	0	0	0	0	0	0	0	0	0	0	10
15	8	0	0	0	0	0	0	0	0	0	0	0	0	8
16	3	0	0	0	0	0	0	0	0	0	0	0	0	3
17	4	0	0	0	0	0	0	0	0	0	0	0	0	4
18	5	0	0	0	0	0	0	0	0	0	0	0	0	5
19	7	0	0	0	0	0	0	0	0	0	0	0	0	7
20	1	0	0	0	0	0	0	0	0	0	0	0	0	1
21	1	0	0	0	0	0	0	0	0	0	0	0	0	1
22	2	0	0	0	0	0	0	0	0	0	0	0	0	2
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	1	0	0	0	0	0	0	0	0	0	0	0	0	1

7-19	56	2	0	0	0	0	0	0	0	0	0	0	0	58
6-22	60	2	0	0	0	0	0	0	0	0	0	0	0	62
6-24	61	2	0	0	0	0	0	0	0	0	0	0	0	63
0-24	65	2	0	0	0	0	0	0	0	0	0	0	0	67

Channel 2 - Southbound

09/10/2022	Vehicle Classes													TOTAL
Hr Ending	1	2	3	4	5	6	7	8	9	10	11	12	13	
1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	1	0	0	0	0	0	0	0	0	0	0	0	0	1
9	1	0	0	0	0	0	0	0	0	0	0	0	0	1
10	7	0	0	0	0	0	0	0	0	0	0	0	0	7
11	2	0	0	0	0	0	0	0	0	0	0	0	0	2
12	10	0	0	0	0	0	0	0	0	0	0	0	0	10
13	4	0	0	0	0	0	0	0	0	0	0	0	0	4
14	6	0	0	0	0	0	0	0	0	0	0	0	0	6
15	4	0	0	0	0	0	0	0	0	0	0	0	0	4
16	6	0	0	0	0	0	0	0	0	0	0	0	0	6
17	3	0	0	0	0	0	0	0	0	0	0	0	0	3
18	9	0	0	0	0	0	0	0	0	0	0	0	0	9
19	5	0	0	0	0	0	0	0	0	0	0	0	0	5
20	1	0	0	0	0	0	0	0	0	0	0	0	0	1
21	1	0	0	0	0	0	0	0	0	0	0	0	0	1
22	3	0	0	0	0	0	0	0	0	0	0	0	0	3
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	1	0	0	0	0	0	0	0	0	0	0	0	1

7-19	58	0	0	0	0	0	0	0	0	0	0	0	0	58
6-22	63	0	0	0	0	0	0	0	0	0	0	0	0	63
6-24	63	1	0	0	0	0	0	0	0	0	0	0	0	64
0-24	66	1	0	0	0	0	0	0	0	0	0	0	0	67

Channel 1 - Northbound

10/10/2022	Vehicle Classes													TOTAL
Hr Ending	1	2	3	4	5	6	7	8	9	10	11	12	13	

Spondon ATC, Royal Hill Road

Produced by Road Data Services Ltd.

09/10/2022	Vehicle Speeds (MPH)												
Hr Ending	0-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60+	TOTAL
1	0	0	1	3	0	0	0	0	0	0	0	0	4
2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	1	0	0	0	0	0	0	0	0	1
9	0	0	1	0	0	1	0	0	0	0	0	0	2
10	0	0	0	0	1	0	0	0	0	0	0	0	1
11	0	2	0	0	0	0	0	0	0	0	0	0	2
12	0	1	2	2	2	0	0	0	0	0	0	0	7
13	0	0	1	4	2	0	1	0	0	0	0	0	8
14	0	0	2	6	1	1	0	0	0	0	0	0	10
15	0	0	2	5	1	0	0	0	0	0	0	0	8
16	0	0	1	2	0	0	0	0	0	0	0	0	3
17	0	0	3	0	1	0	0	0	0	0	0	0	4
18	0	0	2	3	0	0	0	0	0	0	0	0	5
19	0	0	2	3	1	1	0	0	0	0	0	0	7
20	0	0	0	0	1	0	0	0	0	0	0	0	1
21	0	0	0	1	0	0	0	0	0	0	0	0	1
22	0	0	0	0	2	0	0	0	0	0	0	0	2
23	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	1	0	0	0	0	0	0	0	0	1

7-19	0	3	16	26	9	3	1	0	0	0	0	0	58
6-22	0	3	16	27	12	3	1	0	0	0	0	0	62
6-24	0	3	16	28	12	3	1	0	0	0	0	0	63
0-24	0	3	17	31	12	3	1	0	0	0	0	0	67

Channel 2 - Southbound

09/10/2022	Vehicle Speeds (MPH)													TOTAL
Hr Ending	0-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60+		
1	0	0	1	1	0	0	0	0	0	0	0	0	2	
2	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	0	0	0	0	0	0	0	0	0	0	0	0	0	
4	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	0	0	0	0	0	0	0	0	0	0	0	0	0	
6	0	0	1	0	0	0	0	0	0	0	0	0	1	
7	0	0	0	0	0	0	0	0	0	0	0	0	0	
8	0	0	0	0	1	0	0	0	0	0	0	0	1	
9	0	0	0	0	1	0	0	0	0	0	0	0	1	
10	0	0	1	5	1	0	0	0	0	0	0	0	7	
11	0	0	1	1	0	0	0	0	0	0	0	0	2	
12	0	0	1	8	1	0	0	0	0	0	0	0	10	
13	0	0	1	2	0	1	0	0	0	0	0	0	4	
14	1	0	1	3	1	0	0	0	0	0	0	0	6	
15	0	1	1	2	0	0	0	0	0	0	0	0	4	
16	0	0	1	5	0	0	0	0	0	0	0	0	6	
17	0	1	1	1	0	0	0	0	0	0	0	0	3	
18	0	1	3	4	1	0	0	0	0	0	0	0	9	
19	0	2	1	1	1	0	0	0	0	0	0	0	5	
20	0	0	0	1	0	0	0	0	0	0	0	0	1	
21	0	0	0	1	0	0	0	0	0	0	0	0	1	
22	0	0	0	3	0	0	0	0	0	0	0	0	3	
23	0	0	0	0	0	0	0	0	0	0	0	0	0	
24	0	0	0	0	1	0	0	0	0	0	0	0	1	

7-19	1	5	12	32	7	1	0	0	0	0	0	0	58
6-22	1	5	12	37	7	1	0	0	0	0	0	0	62
6-24	1	5	12	37	8	1	0	0	0	0	0	0	64
0-24	1	5	14	38	8	1	0	0	0	0	0	0	67

Channel 1 - Northbound

10/10/2022	Vehicle Speeds (MPH)		
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Produced by Road Data Services Ltd.

[illegible][illegible]

Channel 2 - Southbound

[illegible][illegible]

Channel 1 - Northbound

[illegible]

Produced by Road Data Services Ltd.

[illegible]

7-19	2	13	38	36	18	2	1	0	0	0	0	0	110
6-22	2	13	39	37	22	2	1	0	0	0	0	0	116
6-24	2	13	40	37	22	2	1	0	0	0	0	0	117
0-24	2	13	40	39	22	2	1	0	0	0	0	0	119

Channel 2 - Southbound

[illegible]

7-19	2	23	48	31	8	0	0	0	0	0	0	112
6-22	2	23	49	35	8	0	0	0	0	0	0	117
6-24	2	23	49	35	8	0	0	0	0	0	0	117
0-24	2	24	49	36	8	0	0	0	0	0	0	119

Channel 1 - Northbound

[illegible]

Spondon ATC, Royal Hill Road

Produced by Road Data Services Ltd.

3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
9	18	1	0	0	0	0	0	0	0	0	0	0	0	0	19
10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
12	6	2	0	0	0	0	0	0	0	0	0	0	0	0	8
13	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
14	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
15	20	3	0	0	0	0	0	0	0	0	0	0	0	0	23
16	25	1	0	0	0	0	0	0	0	0	0	0	0	0	26
17	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
18	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
19	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
20	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
21	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
22	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
23	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

7-19	97	9	0	0	0	0	0	0	0	0	0	0	0	0	106
6-22	101	9	0	0	0	0	0	0	0	0	0	0	0	0	110
6-24	102	9	0	0	0	0	0	0	0	0	0	0	0	0	111
0-24	102	9	0	0	0	0	0	0	0	0	0	0	0	0	111

Channel 2 - Southbound

11/10/2022	Vehicle Classes														
Hr Ending	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL	
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6	1	0	0	0	0	0	0	0	0	0	0	0	0	1	
7	3	0	0	0	0	0	0	0	0	0	0	0	0	3	
8	8	0	0	0	0	0	0	0	0	0	0	0	0	8	
9	18	0	0	0	0	0	0	0	0	0	0	0	0	18	
10	5	0	0	0	0	0	0	0	0	0	0	0	0	5	
11	4	2	0	0	0	0	0	0	0	0	0	0	0	6	
12	8	1	0	0	0	0	0	0	0	0	0	0	0	9	
13	3	0	0	0	0	0	0	0	0	0	0	0	0	3	
14	4	1	0	0	0	0	0	0	0	0	0	0	0	5	
15	20	1	0	0	0	0	0	0	0	0	0	0	0	21	
16	18	0	0	0	0	0	0	0	0	0	0	0	0	18	
17	5	0	0	0	0	0	0	0	0	0	0	0	0	5	
18	6	0	0	0	0	0	0	0	0	0	0	0	0	6	
19	4	0	0	0	0	0	0	0	0	0	0	0	0	4	
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
21	1	0	0	0	0	0	0	0	0	0	0	0	0	1	
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
23	1	0	0	0	0	0	0	0	0	0	0	0	0	1	
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

7-19	103	5	0	0	0	0	0	0	0	0	0	0	0	0	108
6-22	107	5	0	0	0	0	0	0	0	0	0	0	0	0	112
6-24	108	5	0	0	0	0	0	0	0	0	0	0	0	0	113
0-24	109	5	0	0	0	0	0	0	0	0	0	0	0	0	114

Channel 1 - Northbound

12/10/2022	Vehicle Classes														
Hr Ending	1	2	3	4	5	6	7	8	9	10	11	12	13	TOTAL	
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4	2	0	0	0	0	0	0	0	0	0	0	0	0	2	

Spondon ATC, Royal Hill Road

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3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
9	2	3	9	4	1	0	0	0	0	0	0	0	0	0	19
10	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
11	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
12	0	1	1	4	2	0	0	0	0	0	0	0	0	0	8
13	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
14	0	2	0	1	3	0	0	0	0	0	0	0	0	0	6
15	0	7	8	6	2	0	0	0	0	0	0	0	0	0	23
16	0	11	14	0	1	0	0	0	0	0	0	0	0	0	26
17	0	0	3	3	0	0	0	0	0	0	0	0	0	0	6
18	0	0	1	4	2	0	0	0	0	0	0	0	0	0	7
19	0	0	1	2	2	0	0	0	0	0	0	0	0	0	5
20	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
21	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
22	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
23	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

7-19	2	24	40	25	15	0	0	0	0	0	0	0	0	0	106
6-22	2	24	40	27	17	0	0	0	0	0	0	0	0	0	110
6-24	2	24	40	28	17	0	0	0	0	0	0	0	0	0	111
0-24	2	24	40	28	17	0	0	0	0	0	0	0	0	0	111

Channel 2 - Southbound

11/10/2022	Vehicle Speeds (MPH)														TOTAL
Hr Ending	0-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60+			
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
7	0	1	0	2	0	0	0	0	0	0	0	0	0	3	
8	0	1	4	3	0	0	0	0	0	0	0	0	0	8	
9	0	11	4	3	0	0	0	0	0	0	0	0	0	18	
10	0	0	2	3	0	0	0	0	0	0	0	0	0	5	
11	0	0	2	3	1	0	0	0	0	0	0	0	0	6	
12	0	1	2	4	2	0	0	0	0	0	0	0	0	9	
13	0	1	1	0	1	0	0	0	0	0	0	0	0	3	
14	0	2	0	2	1	0	0	0	0	0	0	0	0	5	
15	3	5	6	7	0	0	0	0	0	0	0	0	0	21	
16	2	10	3	3	0	0	0	0	0	0	0	0	0	18	
17	0	2	2	1	0	0	0	0	0	0	0	0	0	5	
18	0	1	2	2	1	0	0	0	0	0	0	0	0	6	
19	0	0	1	2	1	0	0	0	0	0	0	0	0	4	
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
21	0	0	0	1	0	0	0	0	0	0	0	0	0	1	
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
23	0	0	0	0	1	0	0	0	0	0	0	0	0	1	
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

7-19	5</
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5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
9	16	1	0	0	0	0	0	0	0	0	0	0	0	0	17
10	5	4	0	0	0	0	0	0	0	0	0	0	0	0	9
11	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
12	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
13	6	4	0	0	0	0	0	0	0	0	0	0	0	0	10
14	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
15	14	2	0	0	0	0	0	0	0	0	0	0	0	0	16
16	15	1	0	0	0	0	0	0	0	0	0	0	0	0	16
17	10	1	0	0	0	0	0	0	0	0	0	0	0	0	11
18	9	1	0	0	0	0	0	0	0	0	0	0	0	0	10
19	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
20	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
21	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
22	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
23	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
24	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2

7-19	99	16	0	0	0	0	0	0	0	0	0	0	0	0	115
8-22	106	16	0	0	0	0	0	0	0	0	0	0	0	0	122
8-24	112	18	0	0	0	0	0	0	0	0	0	0	0	0	128
0-24	114	16	0	0	0	0	0	0	0	0	0	0	0	0	130

Channel 2 - Southbound

12/10/2022	Vehicle Classes													TOTAL
Hr Ending	1	2	3	4	5	6	7	8	9	10	11	12	13	
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	1	0	0	0	0	0	0	0	0	0	0	0	1
5	1	0	0	0	0	0	0	0	0	0	0	0	0	1
6	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7	3	0	0	0	0	0	0	0	0	0	0	0	0	3
8	6	0	0	0	0	0	0	0	0	0	0	0	0	6
9	14	0	0	0	0	0	0	0	0	0	0	0	0	14
10	11	3	0	0	0	0	0	0	0	0	0	0	0	14
11	12	1	0	0	0	0	0	0	0	0	0	0	0	13
12	4	0	0	0	0	0	0	0	0	0	0	0	0	4
13	9	3	0	0	0	0	0	0	0	0	0	0	0	12
14	2	0	0	0	0	0	0	0	0	0	0	0	0	2
15	14	1	0	0	0	0	0	0	0	0	0	0	0	15
16	14	0	0	0	0	0	0	0	0	0	0	0	0	14
17	4	1	0	0	0	0	0	0	0	0	0	0	0	5
18	7	0	0	0	0	0	0	0	0	0	0	0	0	7
19	6	0	0	0	0	0	0	0	0	0	0	0	0	6
20	4	0	0	0	0	0	0	0	0	0	0	0	0	4
21	3	0	0	0	0	0	0	0	0	0	0	0	0	3
22	2	0	0	0	0	0	0	0	0	0	0	0	0	2
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0

7-19	103	9	0	0	0	0	0	0	0	0	0	0	0	0	112
8-22	115	9	0	0	0	0	0	0	0	0	0	0	0	0	124
8-24	115	9	0	0	0	0	0	0	0	0	0	0	0	0	124
0-24	117	10	0	0	0	0	0	0	0	0	0	0	0	0	127

Channel 1 - Northbound

13/10/2022	Vehicle Classes													TOTAL
Hr Ending	1	2	3	4	5	6	7	8	9	10	11	12	13	
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
9	2	6	4	4	1	0	0	0	0	0	0	0	0	0	17
10	0	2	5	2	0	0	0	0	0	0	0	0	0	0	9
11	0	1	1	4	0	0	0	0	0	0	0	0	0	0	6
12	0	1	5	1	0	0	0	0	0	0	0	0	0	0	7
13	0	1	0	6	2	1	0	0	0	0	0	0	0	0	10
14	0	1	3	3	0	0	0	0	0	0	0	0	0	0	7
15	0	2	6	6	2	0	0	0	0	0	0	0	0	0	16
16	1	3	6	5	1	0	0	0	0	0	0	0	0	0	16
17	0	0	5	4	1	1	0	0	0	0	0	0	0	0	11
18	0	1	3	2	2	2	0	0	0	0	0	0	0	0	10
19	0	0	3	1	0	0	0	0	0	0	0	0	0	0	4
20	0	0	1	0	1	1	0	0	0	0	0	0	0	0	3
21	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2
22	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
23	0	0	0	1	3	0	0	0	0	0	0	0	0	0	4
24	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2

7-19	3	18	42	38	10	4	0	0	0	0	0	0	0	0	115
8-22	3	18	43	40	11	7	0	0	0	0	0	0	0	0	122
8-24	3	18	43	41	15	7	0	0	0	0	0	0	0	0	128
0-24	3	18	44	43	15	7	0	0	0	0	0	0	0	0	130

Channel 2 - Southbound

12/10/2022	Vehicle Speeds (MPH)												
Hr Ending	0-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60+	TOTAL
1	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	1	0	0	0	0	0	0	0	0	1
5	0	0	0	1	0	0	0	0	0	0	0	0	1
6	0	0	0	1	0	0	0	0	0	0	0	0	1
7	0	0	0	3	0	0	0	0	0	0	0	0	3
8	0	2	0	4	0	0	0	0	0	0	0	0	6
9	3	6	2	3	0	0	0	0	0	0	0	0	14
10	0	6	7	1	0	0	0	0	0	0	0	0	14
11	0	1	8	4	0	0	0	0	0	0	0	0	13
12	0	1	2	1	0	0	0	0	0	0	0	0	4
13	0	4	3	3	2	0	0	0	0	0	0	0	12
14	0	1	1	0	0	0	0	0	0	0	0	0	2
15	0	5	9	1	0	0	0	0	0	0	0	0	15
16	0	8	6	0	0	0	0	0	0	0	0	0	14
17	0	0	0	3	2	0	0	0	0	0	0	0	5
18	0	0	4	1	2	0	0	0	0	0	0	0	7
19	0	0	3	0	3	0	0	0	0	0	0	0	6
20	0	0	1	2	1	0	0	0	0	0	0	0	4
21	0	0	0	2	1	0	0	0	0	0	0	0	3
22	0	0	1	1	0	0	0	0	0	0	0	0	2
23	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0

7-19	3	34	45	21	9	0	0	0	0	0	0	0	0	0	112
8-22	3	34	47	29	11	0	0	0	0	0	0	0	0	0	124
8-24	3	34	47	29	11	0	0	0	0	0	0	0	0	0	124
0-24	3	34	47	32	11	0	0	0	0	0	0	0	0	0	127

Channel 1 - Northbound

13/10/2022	Vehicle Speeds (MPH)												TOTAL
Hr Ending	0-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60+	
1	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	1	0	0	0	0	0	0	0	0	0	1
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0

Produced by Road Data Services Ltd.

[illegible][illegible]

Channel 2 - Southbound

[illegible][illegible]

Produced by Road Data Services Ltd.

7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	0	1	0	1	0	0	0	0	0	0	0	0	0	2
9	2	5	10	4	0	0	0	0	0	0	0	0	0	21
10	0	0	2	3	0	0	0	0	0	0	0	0	0	5
11	0	0	2	3	0	0	0	0	0	0	0	0	0	5
12	0	4	2	1	0	0	0	0	0	0	0	0	0	7
13	0	0	2	1	0	0	0	0	0	0	0	0	0	3
14	0	3	8	1	1	0	0	0	0	0	0	0	0	13
15	1	2	4	3	0	0	0	0	0	0	0	0	0	10
16	1	4	4	4	2	0	0	0	0	0	0	0	0	15
17	0	0	0	5	2	0	0	0	0	0	0	0	0	7
18	0	0	4	2	2	0	0	0	0	0	0	0	0	8
19	0	0	0	1	2	0	0	0	0	0	0	0	0	3
20	0	0	2	1	1	0	0	0	0	0	0	0	0	4
21	0	0	1	3	2	0	0	0	0	0	0	0	0	6
22	0	0	0	0	1	0	0	0	0	0	0	0	0	1
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	2	0	0	0	0	0	0	0	0	2

7-19	4	19	38	29	9	0	0	0	0	0	0	0	99
6-22	4	19	41	33	13	0	0	0	0	0	0	0	110
8-24	4	19	41	33	15	0	0	0	0	0	0	0	112
0-24	4	19	42	33	15	0	0	0	0	0	0	0	113

Channel 2 - Southbound

13/10/2022	Vehicle Speeds (MPH)												TOTAL
Hr Ending	0-10	10-15	15-20	20-25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60+	
1	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	1	0	0	0	0	0	0	0	0	0	1
3	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	1	0	0	0	0	0	0	0	0	1
7	0	0	0	2	0	0	0	0	0	0	0	0	2
8	0	1	1	2	0	0	0	0	0	0	0	0	4
9	0	8	9	1	1	0	0	0	0	0	0	0	19
10	0	0	13	0	0	0	0	0	0	0	0	0	13
11	0	1	4	1	0	0	0	0	0	0	0	0	6
12	0	3	2	0	1	0	0	0	0	0	0	0	6
13	0	0	3	3	1	0	0	0	0	0	0	0	7
14	1	4	1	1	0	0	0	0	0	0	0	0	7
15	0	1	4	2	0	0	0	0	0	0	0	0	7
16	1	6	5	2	1	0	0	0	0	0	0	0	15
17	0	1	3	4	0	0	0	0	0	0	0	0	8
18	0	1	2	3	1	0	0	0	0	0	0	0	7
19	0	1	0	4	1	0	0	0	0	0	0	0	6
20	0	0	1	1	0	0	0	0	0	0	0	0	2
21	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	1	0	0	0	0	0	0	0	1
23	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	1	0	0	0	0	0	0	0	1

7-19	2	27	47	23	6	0	0	0	0	0	0	0	105
6-22	2	27	48	26	7	0	0	0	0	0	0	0	110
8-24	2	27	48	26	8	0	0	0	0	0	0	0	111
0-24	2	27	49	27	8	0	0	0	0	0	0	0	113

Spondon

Thursday 13th October 2022

Junction: 1

Approach: Locko Road North

TIME	To Locko Road (S)									To Royal Hill Road								
	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS
00:00 - 00:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
00:15 - 00:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
00:30 - 00:45	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
00:45 - 01:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
01:00 - 01:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
01:15 - 01:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
01:30 - 01:45	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
01:45 - 02:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
02:00 - 02:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
02:15 - 02:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
02:30 - 02:45	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
02:45 - 03:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
03:00 - 03:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
03:15 - 03:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
03:30 - 03:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
03:45 - 04:00	0	0	2	0	0	0	0	2	2.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	2	0	0	0	0	2	2.0	0	0	0	0	0	0	0	0	0.0
04:00 - 04:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
04:15 - 04:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
04:30 - 04:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
04:45 - 05:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
05:00 - 05:15	0	1	0	0	0	0	0	1	0.4	0	0	0	0	0	0	0	0	0.0
05:15 - 05:30	0	0	2	0	0	0	0	2	2.0	0	0	0	0	0	0	0	0	0.0
05:30 - 05:45	0	0	7	0	0	0	0	7	7.0	0	0	0	0	0	0	0	0	0.0
05:45 - 06:00	0	0	6	2	0	0	0	8	8.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	1	15	2	0	0	0	18	17.4	0	0	0	0	0	0	0	0	0.0
06:00 - 06:15	0	0	5	1	0	0	0	6	6.0	0	0	0	0	0	0	0	0	0.0
06:15 - 06:30	0	0	6	0	0	0	0	6	6.0	0	0	0	0	0	0	0	0	0.0
06:30 - 06:45	0	0	5	0	0	0	0	5	5.0	0	0	0	0	0	0	0	0	0.0
06:45 - 07:00	0	1	8	0	0	0	0	9	8.4	0	0	0	1	0	0	0	1	1.0
Hourly Total	0	1	24	1	0	0	0	26	25.4	0	0	0	1	0	0	0	1	1.0
07:00 - 07:15	1	0	8	1	0	0	0	10	9.2	0	0	1	0	0	0	0	1	1.0
07:15 - 07:30	2	0	26	0	0	0	0	28	26.4	0	0	1	1	0	0	0	2	2.0
07:30 - 07:45	0	0	42	1	0	0	0	43	43.0	0	0	3	1	0	0	0	4	4.0
07:45 - 08:00	1	0	56	3	1	1	0	62	63.0	0	0	4	0	0	0	0	4	4.0
Hourly Total	4	0	132	5	1	1	0	143	141.6	0	0	9	2	0	0	0	11	11.0
08:00 - 08:15	2	0	61	1	0	0	0	64	62.4	1	0	1	1	0	0	0	3	2.2
08:15 - 08:30	2	1	95	5	0	0	1	104	102.8	0	0	6	1	0	0	0	7	7.0
08:30 - 08:45	1	0	59	5	0	0	0	65	64.2	0	0	23	2	0	0	0	25	25.0
08:45 - 09:00	0	0	32	2	0	0	0	34	34.0	0	0	5	0	0	0	0	5	5.0
Hourly Total	5	1	247	13	0	0	1	267	263.4	1	0	35	4	0	0	0	40	39.2
09:00 - 09:15	0	0	20	2	0	0	0	22	22.0	0	0	1	0	1	0	0	2	2.5
09:15 - 09:30	0	0	21	3	0	0	0	24	24.0	0	0	1	0	0	0	0	1	1.0
09:30 - 09:45	0	0	22	1	0	0	0	23	23.0	0	0	0	0	0	0	0	0	0.0
09:45 - 10:00	0	0	21	4	1	0	0	26	26.5	1	0	1	0	0	0	0	2	1.2
Hourly Total	0	0	84	10	1	0	0	95	95.5	1	0	3	0	1	0	0	5	4.7
10:00 - 10:15	0	0	9	4	1	0	0	14	14.5	0	0	1	0	1	0	0	2	2.5
10:15 - 10:30	0	0	16	3	0	0	0	19	19.0	0	0	1	1	0	0	0	2	2.0
10:30 - 10:45	1	0	24	2	0	0	0	27	26.2	0	0	1	1	0	0	0	2	2.0
10:45 - 11:00	0	0	14	3	0	0	0	17	17.0	0	0	0	1	0	0	0	1	1.0
Hourly Total	1	0	63	12	1	0	0	77	76.7	0	0	3	3	1	0	0	7	7.5
11:00 - 11:15	0	0	20	4	0	0	0	24	24.0	0	0	1	0	0	0	0	1	1.0
11:15 - 11:30	0	0	19	6	0	0	0	25	25.0	0	0	0	0	0	0	0	0	0.0
11:30 - 11:45	0	0	17	3	1	0	0	21	21.5	0	0	0	0	0	0	0	0	0.0
11:45 - 12:00	0	0	15	2	0	0	0	17	17.0	0	0	2	0	0	0	0	2	2.0
Hourly Total	0	0	71	15	1	0	0	87	87.5	0	0	3	0	0	0	0	3	3.0
12:00 - 12:15	0	0	13	3	0	0	0	16	16.0	0	0	2	1	0	0	0	3	3.0
12:15 - 12:30	0	1	9	7	0	0	0	17	16.4	0	0	2	0	0	0	0	2	2.0
12:30 - 12:45	0	0	22	2	0	1	0	25	26.3	0	0	1	1	0	0	0	2	2.0
12:45 - 13:00	1	0	16	2	1	0	0	20	19.7	0	0	1	2	0	0	0	3	3.0
Hourly Total	1	1	60	14	1	1	0	78	78.4	0	0	6	4	0	0	0	10	10.0
13:00 - 13:15	0	1	17	3	0	0	0	21	20.4	0	0	2	0	0	0	0	2	2.0
13:15 - 13:30	1	0	16	4	1	0	0	22	21.7	0	0	2	1	0	0	0	3	3.0
13:30 - 13:45	0	0	14	2	0	0	0	16	16.0	1	0	2	1	0	0	0	4	4.0
13:45 - 14:00	0	0	10	1	0	0	0	11	11.0	0	0	3	1	0	0	0	4	4.0
Hourly Total	1	1	57	10	1	0	0	70	69.1	1	0	9	3	1	0	0	14	13.7
14:00 - 14:15	7	0	11	2	1	0	0	21	15.9	0	0	2	0	1	0	0	3	3.5
14:15 - 14:30	0	0	19	0	0	0	0	19	19.0	0	0	1	1	0	0	0	2	2.0
14:30 - 14:45	0	0	28	1	0	0	0	29	29.0	0	0	5	0	1	0	0	6	6.5
14:45 - 15:00	0	0	24	0	0	0	0	24	24.0	0	0	11	0	0	0	0	11	11.0
Hourly Total	7	0	82	3	1	0	0	93	87.9	0	0	19	1	2	0	0	22	23.0
15:00 - 15:15	0	0	43	1	0	0	0	44	44.0	0	0	20	0	0	0	0	20	20.0
15:15 - 15:30	0	0	30	4	1	0	0	35	35.5	0	0	3	0	0	0	0	3	3.0
15:30 - 15:45	0	0	25	4	1	0	0	30	30.5	0	0	5	2	1	0	0	8	8.5
15:45 - 16:00	0	0	22	3	0	0	0	25	25									

Spondon
Thursday 13th October 2022
Junction: 1
Approach: Locko Road South

TIME	To Royal Hill Road								To Locko Road (N)									
	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS
00:00 - 00:15	0	0	0	0	0	0	0	0	0.0	0	0	2	1	0	0	0	3	3.0
00:15 - 00:30	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0
00:30 - 00:45	0	0	0	1	0	0	0	1	1.0	0	0	1	0	0	0	0	1	1.0
00:45 - 01:00	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	1	1	0	0	0	2	2.0	0	0	4	1	0	0	0	5	5.0
01:00 - 01:15	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0
01:15 - 01:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
01:30 - 01:45	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0
01:45 - 02:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0
02:00 - 02:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
02:15 - 02:30	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0
02:30 - 02:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
02:45 - 03:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0
03:00 - 03:15	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0
03:15 - 03:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
03:30 - 03:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
03:45 - 04:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0
04:00 - 04:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
04:15 - 04:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
04:30 - 04:45	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0
04:45 - 05:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0
05:00 - 05:15	0	0	0	0	0	0	0	0	0.0	0	0	4	1	0	0	0	5	5.0
05:15 - 05:30	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0
05:30 - 05:45	0	0	0	0	0	0	0	0	0.0	0	0	5	1	0	0	0	6	6.0
05:45 - 06:00	0	0	0	0	0	0	0	0	0.0	0	0	3	0	0	1	0	4	5.3
Hourly Total	0	0	0	0	0	0	0	0	0.0	0	0	14	2	0	1	0	17	18.3
06:00 - 06:15	0	0	0	0	0	0	0	0	0.0	0	0	2	0	1	0	0	3	3.5
06:15 - 06:30	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0
06:30 - 06:45	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0
06:45 - 07:00	0	0	0	0	0	0	0	0	0.0	0	0	9	3	0	0	0	12	12.0
Hourly Total	0	0	0	0	0	0	0	0	0.0	0	0	15	3	1	0	0	19	19.5
07:00 - 07:15	0	0	1	0	0	0	0	1	1.0	0	0	13	0	0	0	0	13	13.0
07:15 - 07:30	0	0	2	0	0	0	0	2	2.0	0	0	14	7	1	1	0	23	24.8
07:30 - 07:45	0	0	3	0	0	0	0	3	3.0	0	1	14	4	0	0	0	19	18.4
07:45 - 08:00	0	0	2	0	0	0	0	2	2.0	0	2	24	7	1	0	0	34	33.3
Hourly Total	0	0	8	0	0	0	0	8	8.0	0	3	65	18	2	1	0	89	89.5
08:00 - 08:15	0	0	6	1	0	0	0	7	7.0	0	0	25	9	4	0	0	38	40.0
08:15 - 08:30	0	0	7	0	0	0	0	7	7.0	0	0	65	7	0	0	0	72	72.0
08:30 - 08:45	0	0	5	2	0	0	0	7	7.0	0	0	35	5	0	0	0	40	40.0
08:45 - 09:00	0	0	2	0	0	0	0	2	2.0	0	0	55	7	5	0	0	67	69.5
Hourly Total	0	0	20	3	0	0	0	23	23.0	0	0	180	28	9	0	0	217	221.5
09:00 - 09:15	0	0	1	2	0	0	0	3	3.0	0	0	26	8	2	1	0	37	39.3
09:15 - 09:30	0	0	0	0	0	0	0	0	0.0	0	0	16	6	0	0	0	22	22.0
09:30 - 09:45	0	0	5	1	1	0	0	7	7.5	0	0	19	6	0	0	0	25	25.0
09:45 - 10:00	0	0	6	2	0	0	0	8	8.0	0	0	13	6	0	0	0	19	19.0
Hourly Total	0	0	12	5	1	0	0	18	18.5	0	0	74	26	2	1	0	103	105.3
10:00 - 10:15	0	0	3	1	0	0	0	4	4.0	0	0	18	2	0	0	0	20	20.0
10:15 - 10:30	0	0	2	0	0	0	0	2	2.0	0	0	17	4	1	0	0	22	22.5
10:30 - 10:45	0	0	3	0	0	0	0	3	3.0	0	0	20	2	0	0	0	22	22.0
10:45 - 11:00	0	0	4	0	0	0	0	4	4.0	0	0	18	3	0	0	0	21	21.0
Hourly Total	0	0	12	1	0	0	0	13	13.0	0	0	73	11	1	0	0	85	85.5
11:00 - 11:15	0	0	2	0	0	0	0	2	2.0	0	1	19	5	0	0	0	25	24.4
11:15 - 11:30	0	0	3	1	1	0	0	5	5.5	0	1	13	3	0	0	0	17	16.4
11:30 - 11:45	0	0	7	0	1	0	0	8	8.5	0	0	18	1	0	0	0	19	19.0
11:45 - 12:00	0	0	3	0	0	0	0	3	3.0	0	0	29	7	1	0	0	37	37.5
Hourly Total	0	0	15	1	2	0	0	18	19.0	0	2	79	16	1	0	0	98	97.3
12:00 - 12:15	0	1	3	1	0	0	0	5	4.4	0	0	21	5	1	0	0	27	27.5
12:15 - 12:30	0	0	2	1	1	0	0	4	4.5	0	0	19	5	0	0	0	24	24.0
12:30 - 12:45	0	0	4	2	0	0	0	6	6.0	0	0	35	6	0	0	0	41	41.0
12:45 - 13:00	0	0	4	0	0	1	0	5	6.3	0	0	15	3	0	1	0	19	20.3
Hourly Total	0	1	13	4	1	1	0	20	21.2	0	0	90	19	1	1	0	111	112.8
13:00 - 13:15	0	0	3	0	0	0	0	3	3.0	0	0	21	7	0	0	0	28	28.0
13:15 - 13:30	0	0	4	1	0	1	0	6	7.3	0	0	29	9	0	0	0	38	38.0
13:30 - 13:45	0	0	3	0	0	0	0	3	3.0	0	0	24	2	1	0	0	27	27.5
13:45 - 14:00	0	0	5	0	0	0	0	5	5.0	0	0	18	3	0	0	1	22	23.0
Hourly Total	0	0	15	1	0	1	0	17	18.3	0	0	92	21	1	0	1	115	115.5
14:00 - 14:15	0	0	8	2	0	0	0	10	10.0	0	0	26	4	0	0	0	30	30.0
14:15 - 14:30	0	0	6	0	0	0	0	6	6.0	0	0	29	2	0	0	0	31	31.0
14:30 - 14:45	0	0	10	1	0	0	0	11	11.0	1	1	29	4	1	0	0	36	35.1
14:45 - 15:00	0	0	9	0	0	0	0	9	9.0	0	0	40	4	0	0	0	44	44.0
Hourly Total	0	0	33	3	0	0	0	36	36.0	1	1	124	14	1	0	0	141	140.1
15:00 - 15:15	0	0	8	1	0	0	0	9	9.0	2	0	56	4	0	0	0	62	60.4
15:15 - 15:30	0	1	3	1	0	0	0	5	4.4	0	0	56	4	2	0	1	63	65.0
15:30 - 15:45	0	0	6	2	0	0	0	8	8.0	0	0	49	6	0	0	0	55	55.0
15:45 - 16:00	0	0	8	2	0	0	0	10	10.0	1	0	30	4	0	0	0	35	34.2
Hourly Total	0	1	25	6	0	0	0	32	31.4	3	0	191	18	2	0	1	215	214.6
16:00 - 16:15	0	0	8	2	0	0	0	10	10.0	0	1	56	4	0	0	0	61	60.4
16:15 - 16:30	0	0	4	1	0	0	0	5	5.0	1	0	54	10	1	0	0	68	65.7
16:30 - 16:45	0	0	10	0	0	0	0	10	10.0	0	0	74	7	0	0	0	81	81.0
16:45 - 17:00	0	0	10	1	0	0	0	11	11.0	0	0	60	5	0	0	0	65	65.0
Hourly Total	0	0	32	4	0	0	0	36	36.0	1	1	244	26	1	0	0	273	272.1
17:00 - 17:15	0	0	11	2	1	0	0	14	14.5	1	0	65	5	0	0	0	71	70.2
17:15 - 17:30	0	0	8	3	0	0	0	11	11.0	1	0	90	6	1	0	0	98	97.7
17:30 - 17:45	0	0	10	0	0	0	0	10	10.0	1	1	46	7	0	0	0	55	53.6
17:45 - 18:00	0	0	10	1	0													

Spondon
Thursday 13th October 2022
Junction: 1
Approach: Royal Hill Road

TIME	To Locko Road (N)									To Locko Road (S)								
	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS
00:00 - 00:15	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
00:15 - 00:30	0	0	1	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
00:30 - 00:45	0	0	0	1	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
00:45 - 01:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	1	1	0	0	0	2	2.0	0	0	0	0	0	0	0	0	0.0
01:00 - 01:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
01:15 - 01:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
01:30 - 01:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
01:45 - 02:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
02:00 - 02:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
02:15 - 02:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
02:30 - 02:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
02:45 - 03:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
03:00 - 03:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
03:15 - 03:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
03:30 - 03:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
03:45 - 04:00	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0
Hourly Total	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0
04:00 - 04:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
04:15 - 04:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
04:30 - 04:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
04:45 - 05:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
05:00 - 05:15	0	0	1	0	0	0	0	1	1.0	0	0	2	0	0	0	0	2	2.0
05:15 - 05:30	0	0	0	0	0	0	0	0	0.0	0	0	1	1	0	0	0	2	2.0
05:30 - 05:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
05:45 - 06:00	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0
Hourly Total	0	0	1	0	0	0	0	1	1.0	0	0	5	1	0	0	0	6	6.0
06:00 - 06:15	0	0	0	0	0	0	0	0	0.0	0	0	1	1	0	0	0	2	2.0
06:15 - 06:30	0	0	0	1	0	0	0	1	1.0	0	0	1	0	0	0	0	1	1.0
06:30 - 06:45	0	0	0	1	0	0	0	1	1.0	0	0	6	0	1	0	0	7	7.5
06:45 - 07:00	0	0	1	0	0	0	0	1	1.0	0	0	6	0	0	0	0	6	6.0
Hourly Total	0	0	1	2	0	0	0	3	3.0	0	0	14	1	1	0	0	16	16.5
07:00 - 07:15	0	0	0	1	0	0	0	1	1.0	0	0	4	2	0	0	0	6	6.0
07:15 - 07:30	0	0	3	0	0	0	0	3	3.0	0	0	10	2	0	0	0	12	12.0
07:30 - 07:45	0	0	4	0	1	0	0	5	5.5	0	0	11	1	0	0	0	12	12.0
07:45 - 08:00	0	0	4	0	0	0	0	4	4.0	0	0	7	0	0	0	0	7	7.0
Hourly Total	0	0	11	1	1	0	0	13	13.5	0	0	32	5	0	0	0	37	37.0
08:00 - 08:15	0	0	3	0	0	0	0	3	3.0	0	0	14	0	0	0	0	14	14.0
08:15 - 08:30	0	0	6	0	0	0	0	6	6.0	1	0	2	2	0	0	0	5	4.2
08:30 - 08:45	0	0	8	0	0	0	0	8	8.0	0	0	5	0	0	0	0	5	5.0
08:45 - 09:00	0	0	19	1	0	0	0	20	20.0	0	0	16	1	0	0	0	17	17.0
Hourly Total	0	0	36	1	0	0	0	37	37.0	1	0	37	3	0	0	0	41	40.2
09:00 - 09:15	0	0	4	0	0	0	0	4	4.0	0	0	8	1	0	0	0	9	9.0
09:15 - 09:30	0	0	1	0	0	0	0	1	1.0	0	0	6	1	0	0	0	7	7.0
09:30 - 09:45	0	0	2	0	0	0	0	2	2.0	0	0	6	0	0	0	0	6	6.0
09:45 - 10:00	0	0	3	0	0	0	0	3	3.0	0	0	8	0	0	0	0	8	8.0
Hourly Total	0	0	10	0	0	0	0	10	10.0	0	0	28	2	0	0	0	30	30.0
10:00 - 10:15	0	0	2	0	0	0	0	2	2.0	0	0	6	1	0	0	0	7	7.0
10:15 - 10:30	0	0	0	0	1	0	0	1	1.5	0	0	4	2	1	0	0	7	7.5
10:30 - 10:45	0	0	0	0	0	0	0	0	0.0	0	0	4	0	0	0	0	4	4.0
10:45 - 11:00	0	0	1	1	0	0	0	2	2.0	0	0	2	0	1	0	0	3	3.5
Hourly Total	0	0	3	1	1	0	0	5	5.5	0	0	16	3	2	0	0	21	22.0
11:00 - 11:15	0	0	2	0	0	0	0	2	2.0	0	0	6	0	0	0	0	6	6.0
11:15 - 11:30	0	0	2	0	0	0	0	2	2.0	0	0	3	1	0	0	0	4	4.0
11:30 - 11:45	0	0	0	0	0	0	0	0	0.0	0	0	3	3	0	0	0	6	6.0
11:45 - 12:00	0	0	4	0	0	0	0	4	4.0	0	0	2	0	0	0	0	2	2.0
Hourly Total	0	0	8	0	0	0	0	8	8.0	0	0	14	4	0	0	0	18	18.0
12:00 - 12:15	1	0	0	0	0	0	0	1	0.2	0	0	3	0	0	0	0	3	3.0
12:15 - 12:30	0	0	1	1	0	0	0	2	2.0	0	0	1	3	0	0	0	7	6.4
12:30 - 12:45	0	0	0	1	1	0	0	2	2.5	0	0	2	0	0	0	0	2	2.0
12:45 - 13:00	0	0	0	0	0	0	0	0	0.0	0	0	5	1	0	0	0	6	6.0
Hourly Total	1	0	1	2	1	0	0	5	4.7	0	1	13	4	0	0	0	18	17.4
13:00 - 13:15	0	0	1	0	0	0	0	1	1.0	0	0	3	0	0	0	0	3	3.0
13:15 - 13:30	0	0	1	0	0	0	0	1	1.0	0	0	5	2	0	1	0	8	9.3
13:30 - 13:45	0	0	3	0	0	0	0	3	3.0	0	0	1	1	0	1	0	3	4.3
13:45 - 14:00	0	0	1	0	0	0	0	1	1.0	0	0	1	1	0	0	0	2	2.0
Hourly Total	0	0	6	0	0	0	0	6	6.0	0	0	10	4	0	2	0	16	16.6
14:00 - 14:15	0	0	0	1	0	0	0	1	1.0	0	0	4	1	0	0	0	5	5.0
14:15 - 14:30	0	0	3	0	0	0	0	3	3.0	0	0	6	0	0	0	0	6	6.0
14:30 - 14:45	0	0	5	1	0	0	0	6	6.0	0	0	3	1	0	0	0	4	4.0
14:45 - 15:00	0	0	2	0	1	0	0	3	3.5	0	0	3	1	0	0	0	4	4.0
Hourly Total	0	0	10	2	1	0	0	13	13.5	0	0	16	3	0	0	0	19	19.0
15:00 - 15:15	0	0	8	1	0	0	0	9	9.0	0	0	4	0	0	0	0	4	4.0
15:15 - 15:30	0	0	17	0	0	0	0	17	17.0	0	1	6	0	0	0	0	7	6.4
15:30 - 15:45	0	0	12	2	0	0	0	14	14.0	0	0	15	0	0	0	0	15	15.0
15:45 - 16:00	0	0	7	1	0	0	0	8	8.0	0	0	7	1	0	0	0	8	8.0
Hourly Total	0	0	44	4	0	0	0	48	48.0	0	1	32	1	0	0	0	34	33.4
16:00 - 16:15	0	0	3	1	0	0	0	4	4.0	0	0	6	1	0	0	0	7	7.0
16:15 - 16:30	0	0	3	0	0	0	0	3	3.0	0	0	3	3	0	0	0	6	6.0
16:30 - 16:45	0	0	4	0	0	0	0	4	4.0	0	0	4	0	0	0	0	4	4.0
16:45 - 17:00	0	0	4	1	0	0	0	5	5.0	0	0	2	0	0	0	0	2	2.0
Hourly Total	0	0	16	2	0	0	0	18	18.0	0	0	15	4	0	0	0	19	19.0
17:00 - 17:15	0	0	3	0	0	0	0	3	3.0	0	0	7	1	0	0	0	8	8.0
17:15 - 17:30	0	0	1	0	0	0	0	1	1.0	0	0	7	3	0	0	0	10	10.0
17:30 - 17:45	0	0	3	0	0	0	0	3	3.0	0	0	7	0	0	0	0	7	7.0
17:45 - 18:00	0	0	0	1	0	0	0	1	1.0	0	0	3	0	0	0	0	3	3.0
Hourly Total	0	0	7	1	0	0	0	8	8.0									

Spondon

Thursday 13th October 2022

Junction: 2

Approach: Locko Road North

TIME	To Chapel Street										To Locko Road (S)										To West Road									
	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs		CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs		CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	
00:00 - 00:15	0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0	
00:15 - 00:30	0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0	
00:30 - 00:45	0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0	
00:45 - 01:00	0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0	
Hourly Total	0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0	
01:00 - 01:15	0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0	
01:15 - 01:30	0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0	
01:30 - 01:45	0	0	0	0	0	0	0	0	0.0		0	0	1	0	0	0	0	1	1.0		0	0	0	0	0	0	0	0	0.0	
01:45 - 02:00	0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0	
Hourly Total	0	0	0	0	0	0	0	0	0.0		0	0	1	0	0	0	0	1	1.0		0	0	0	0	0	0	0	0	0.0	
02:00 - 02:15	0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0	
02:15 - 02:30	0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0	
02:30 - 02:45	0	0	0	0	0	0	0	0	0.0		0	0	1	0	0	0	0	1	1.0		0	0	0	0	0	0	0	0	0.0	
02:45 - 03:00	0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0	
Hourly Total	0	0	0	0	0	0	0	0	0.0		0	0	1	0	0	0	0	1	1.0		0	0	0	0	0	0	0	0	0.0	
03:00 - 03:15	0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0	
03:15 - 03:30	0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0	
03:30 - 03:45	0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0	
03:45 - 04:00	0	0	0	0	0	0	0	0	0.0		0	0	2	0	0	0	0	2	2.0		0	0	0	0	0	0	0	0	0.0	
Hourly Total	0	0	0	0	0	0	0	0	0.0		0	0	2	0	0	0	0	2	2.0		0	0	0	0	0	0	0	0	0.0	
04:00 - 04:15	0	0	0	0	0	0	0	0	0.0		0	0	1	0	0	0	0	1	1.0		0	0	0	0	0	0	0	0	0.0	
04:15 - 04:30	0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0	
04:30 - 04:45	0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0	
04:45 - 05:00	0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0		0	0	0	0	0	0	0	0	0.0	
Hourly Total	0	0	0	0	0	0	0	0	0.0		0	0	1	0	0	0	0	1	1.0		0	0	0	0	0	0	0	0	0.0	
05:00 - 05:15	0	0	0	0	0	0	0	0	0.0		0	0	2	0	0	0	0	2	2.0		0	1	0	0	0	0	0	1	0.4	
05:15 - 05:30	0	0	0	0	0	0	0	0	0.0		0	0	3	1	0	0	0	4	4.0		0	0	0	0	0	0	0	0	0.0	
05:30 - 05:45	0	0	0	0	0	0	0	0	0.0		0	0	5	1	0	0	0	6	6.0		0	0	0	0	0	0	0	0	0.0	
05:45 - 06:00	0	0	0	0	0	0	0	0	0.0		0	0	6	2	0	0	0	8	8.0		0	0	1	2	0	0	0	3	3.0	
Hourly Total	0	0	0	0	0	0	0	0	0.0		0	0	16	4	0	0	0	20	20.0		0	1	1	2	0	0	0	4	3.4	
06:00 - 06:15	0	0	0	2	0	0	0	2	2.0		0	0	5	1	0	0	0	6	6.0		0	0	0	0	0	0	0	0	0.0	
06:15 - 06:30	0	0	3	0	0	0	0	3	3.0		0	0	4	0	0	0	0	4	4.0		0	0	0	0	0	0	0	0	0.0	
06:30 - 06:45	0	0	3	0	0	0	0	3	3.0		0	0	9	2	0	0	0	11	11.0		0	0	0	0	0	0	0	0	0.0	
06:45 - 07:00	0	0	2	0	1	0	0	3	3.5		0	0	10	1	0	0	0	11	11.0		1	0	3	0	0	0	0	4	3.2	
Hourly Total	0	0	8	2	1	0	0	11	11.5		0	0	28	4	0	0	0	32	32.0		1	0	3	0	0	0	0	4	3.2	
07:00 - 07:15	0	0	3	1	0	0	0	4	4.0		0	0	8	1	0	0	0	9	9.0		0	0	3	0	0	0	0	3	3.0	
07:15 - 07:30	0	0	9	2	0	0	0	11	11.0		0	0	24	2	0	0	0	26	26.0		2	0	3	0	0	0	0	5	3.4	
07:30 - 07:45	0	0	9	0	0	0	0	9	9.0		0	0	30	1	0	0	0	31	31.0		0	0	14	0	0	0	0	14	14.0	
07:45 - 08:00	0	0	9	0	1	0	0	10	10.5		0	0	33	3	0	1	0	37	38.3		1	0	24	0	0	0	0	25	24.2	
Hourly Total	0	0	30	3	1	0	0	34	34.5		0	0	95	7	0	1	0	103	104.3		3	0	44	0	0	0	0	47	44.6	
08:00 - 08:15	0	0	22	0	0	0	0	22	22.0		2	0	36	0	0	0	0	38	36.4		0	0	15	0	0	0	0	15	15.0	
08:15 - 08:30	0	0	17	3	0	0	0	20	20.0		0	1	30	6	0	0	1	38	38.4		3	0	39	1	0	0	0	43	40.6	
08:30 - 08:45	0	0	18	0	0	0	0	18	18.0		0	0	20	2	0	0	0	22	22.0		1	0	22	0	0	0	0	23	22.2	
08:45 - 09:00	0	0	24	1	0	0	0	25	25.0		0	0	27	2	0	0	0	29	29.0		0	0	10	0	0	0	0	10	10.0	
Hourly Total	0	0	81	4	0	0	0	85	85.0		2	1	113	10	0	0	1	127	125.8		4	0	86	1	0	0	0	91	87.8	
09:00 - 09:15	0	0	16	0	0	0	0	16	16.0		0	0	20	4	0	0	0	24	24.0		1	0	1	1	0	0	0	3	2.2	
09:15 - 09:30	0	0	9	2	0	0	0	11	11.0		0	0	15	4	0	0	0	19	19.0		0	0	2	0	0	0	0	2	2.0	
09:30 - 09:45	0	0	7	1	0	0	0	8	8.0		0	0	22	0	0	0	0	22	22.0		0	0	1	1	0	0	0	2	2.0	
09:45 - 10:00	0	0	7	2	0	0	0	9	9.0		0	0	19	2	1	0	0	22	22.5		0	0	4	0	0	0	0	4	4.0	
Hourly Total	0	0	39	5	0	0	0	44	44.0		0	0	76	10	1	0	0	87	87.5		1	0	8	2	0	0	0	11	10.2	
10:00 - 10:15	0	0	9	2	0	0	0	11	11.0		0	0	5	2	1	0	0	8	8.5		2	0	1	1	0	0	0	4	2.4	
10:15 - 10:30	0	0	7	1	0	0	0	8	8.0		0	0	13	5	0	0	0	18	18.0		0	0	1	0	0	0	0	1	1.0	
10:30 - 10:45	0	0	11	1	0	0	0	12	12.0		0	0	13	1	1	0	0	15	15.5		1	0	3	0	0	0	0	4	3.2	
10:45 - 11:00	0	0	4	1	0	0	0	5	5.0		0	1	10	3	1	0	0	15	14.9		0	0	2	0	0	0	0	2	2.0	
Hourly Total	0	0	31	5	0	0	0	36	36.0		0	1	41	11	3	0	0	56	56.9		3	0	7	1	0	0	0	11	8.6	
11:00 - 11:15	0	0	9	0	0	0	0	9	9.0		0	0	15	3	0	0	0	18	18.0		0	0	1	0	0	0	0	1	1.0	
11:15 - 11:30	0	0	9	3	0	0	0	12	12.0		0	0	14	3	0	0	0	17	17.0		0	0	0	0	0	0	0	0	0.0	
11:30 - 11:45	0	0	7	2	1	0	0	10	10.5		0	0	11	3	0	0	0	14	14.0		0	0	2	0	0	0	0	2	2.0	
11:45 - 12:00	0	0	7	0	0	0	0	7	7.0		0	0	9	2																

12:00 - 12:15	0	0	7	0	0	0	0	7	7.0	0	0	9	3	0	0	0	12	12.0	0	0	1	1	0	0	0	2	2.0
12:15 - 12:30	0	0	3	2	0	0	0	5	5.0	0	1	12	7	0	0	0	20	19.4	0	0	1	0	0	0	0	1	1.0
12:30 - 12:45	0	0	8	1	0	0	0	9	9.0	0	0	11	1	0	1	0	13	14.3	0	0	3	0	0	0	0	3	3.0
12:45 - 13:00	0	0	7	2	1	0	0	10	10.5	1	0	10	1	0	0	0	12	11.2	0	0	1	0	0	0	0	1	1.0
Hourly Total	0	0	25	5	1	0	0	31	31.5	1	1	42	12	0	1	0	57	56.9	0	0	6	1	0	0	0	7	7.0
13:00 - 13:15	0	0	9	2	0	0	0	11	11.0	0	1	10	1	0	0	0	12	11.4	0	0	2	0	0	0	0	2	2.0
13:15 - 13:30	0	0	8	3	0	0	0	11	11.0	0	0	13	2	1	1	0	17	18.8	1	0	1	1	0	0	0	3	2.2
13:30 - 13:45	0	0	7	0	0	0	0	7	7.0	0	0	8	3	0	0	0	11	11.0	0	0	0	0	0	0	0	0	0.0
13:45 - 14:00	0	0	3	1	0	1	0	5	6.3	0	0	7	2	0	0	0	9	9.0	0	0	2	0	0	0	0	2	2.0
Hourly Total	0	0	27	6	0	1	0	34	35.3	0	1	38	8	1	1	0	49	50.2	1	0	5	1	0	0	0	7	6.2
14:00 - 14:15	0	0	8	1	1	0	0	10	10.5	0	0	6	2	0	0	0	8	8.0	7	0	1	0	0	0	0	8	2.4
14:15 - 14:30	0	0	11	0	0	0	0	11	11.0	0	0	14	0	0	0	0	14	14.0	0	0	0	0	0	0	0	0	0.0
14:30 - 14:45	0	0	5	1	0	0	0	6	6.0	0	0	16	0	0	0	0	16	16.0	0	0	8	1	0	0	0	9	9.0
14:45 - 15:00	0	0	11	0	0	0	0	11	11.0	0	0	10	0	0	0	0	10	10.0	0	0	3	1	0	0	0	4	4.0
Hourly Total	0	0	35	2	1	0	0	38	38.5	0	0	46	2	0	0	0	48	48.0	7	0	12	2	0	0	0	21	15.4
15:00 - 15:15	0	0	16	0	0	0	0	16	16.0	0	0	16	1	0	0	0	17	17.0	0	0	9	0	0	0	0	9	9.0
15:15 - 15:30	0	0	19	4	0	0	0	23	23.0	0	1	17	0	1	0	0	19	18.9	0	0	6	0	0	0	0	6	6.0
15:30 - 15:45	0	0	12	2	0	0	0	14	14.0	0	0	21	2	1	0	0	24	24.5	0	0	4	0	0	0	0	4	4.0
15:45 - 16:00	0	0	6	1	0	0	0	7	7.0	0	0	19	2	0	0	0	21	21.0	1	0	4	1	0	0	0	6	5.2
Hourly Total	0	0	53	7	0	0	0	60	60.0	0	1	73	5	2	0	0	81	81.4	1	0	23	1	0	0	0	25	24.2
16:00 - 16:15	0	0	10	3	0	0	0	13	13.0	0	0	15	7	0	0	1	23	24.0	0	0	5	0	0	0	0	5	5.0
16:15 - 16:30	0	0	9	1	0	0	0	10	10.0	1	0	21	2	0	0	0	24	23.2	0	0	5	0	0	0	0	5	5.0
16:30 - 16:45	0	0	4	4	1	0	0	9	9.5	0	0	11	3	0	0	0	14	14.0	0	0	5	0	0	0	0	5	5.0
16:45 - 17:00	0	0	9	1	0	0	0	10	10.0	0	1	7	2	0	0	0	10	9.4	0	0	8	0	0	0	0	8	8.0
Hourly Total	0	0	32	9	1	0	0	42	42.5	1	1	54	14	0	0	1	71	70.6	0	0	23	0	0	0	0	23	23.0
17:00 - 17:15	0	0	11	1	0	0	0	12	12.0	0	0	10	2	0	0	0	12	12.0	0	0	7	0	0	0	0	7	7.0
17:15 - 17:30	0	0	8	1	0	0	0	9	9.0	0	0	16	3	0	0	0	19	19.0	0	0	15	1	0	0	0	16	16.0
17:30 - 17:45	0	0	13	3	0	0	0	16	16.0	0	0	10	1	0	0	0	11	11.0	0	0	13	0	0	0	0	13	13.0
17:45 - 18:00	0	0	7	1	2	0	0	10	11.0	0	0	10	0	0	0	0	10	10.0	0	0	8	1	0	0	0	9	9.0
Hourly Total	0	0	39	6	2	0	0	47	48.0	0	0	46	6	0	0	0	52	52.0	0	0	43	2	0	0	0	45	45.0
18:00 - 18:15	0	0	11	1	0	0	0	12	12.0	0	0	14	0	1	0	0	15	15.5	0	0	4	0	0	0	0	4	4.0
18:15 - 18:30	0	0	15	1	0	0	0	16	16.0	0	0	10	0	0	0	0	10	10.0	0	0	3	0	0	0	0	3	3.0
18:30 - 18:45	0	0	8	0	0	0	0	8	8.0	0	0	16	1	0	0	0	17	17.0	0	0	0	0	0	0	0	0	0.0
18:45 - 19:00	0	0	7	0	1	0	0	8	8.5	0	0	9	0	0	0	0	9	9.0	0	0	1	0	0	0	0	1	1.0
Hourly Total	0	0	41	2	1	0	0	44	44.5	0	0	49	1	1	0	0	51	51.5	0	0	8	0	0	0	0	8	8.0
19:00 - 19:15	0	0	7	0	0	0	0	7	7.0	0	0	15	0	0	0	0	15	15.0	0	0	2	0	0	0	0	2	2.0
19:15 - 19:30	0	0	4	0	0	0	0	4	4.0	0	0	9	0	0	0	0	9	9.0	0	0	3	0	0	0	0	3	3.0
19:30 - 19:45	0	0	6	0	0	0	0	6	6.0	0	0	9	0	0	0	0	9	9.0	0	0	2	0	0	0	0	2	2.0
19:45 - 20:00	0	0	7	0	0	0	0	7	7.0	0	0	7	3	0	0	0	10	10.0	0	0	3	0	0	0	0	3	3.0
Hourly Total	0	0	24	0	0	0	0	24	24.0	0	0	40	3	0	0	0	43	43.0	0	0	10	0	0	0	0	10	10.0
20:00 - 20:15	0	0	3	0	0	0	0	3	3.0	0	0	7	0	0	0	0	7	7.0	0	0	2	0	0	0	0	2	2.0
20:15 - 20:30	0	0	2	1	0	0	0	3	3.0	0	0	8	0	0	0	0	8	8.0	0	0	0	0	0	0	0	0	0.0
20:30 - 20:45	0	0	2	1	0	0	0	3	3.0	0	0	5	1	0	0	0	6	6.0	0	0	0	0	0	0	0	0	0.0
20:45 - 21:00	0	0	0	0	0	0	0	0	0.0	0	0	3	0	0	0	0	3	3.0	0	0	1	0	0	0	0	1	1.0
Hourly Total	0	0	7	2	0	0	0	9	9.0	0	0	23	1	0	0	0	24	24.0	0	0	3	0	0	0	0	3	3.0
21:00 - 21:15	0	0	3	0	0	0	0	3	3.0	0	0	4	0	0	0	0	4	4.0	0	0	0	0	0	0	0	0	0.0
21:15 - 21:30	0	0	1	0	0	0	0	1	1.0	0	0	5	0	0	0	0	5	5.0	0	0	1	0	0	0	0	1	1.0
21:30 - 21:45	0	0	2	0	0	0	0	2	2.0	0	0	3	1	0	0	0	4	4.0	1	0	0	0	0	0	0	1	0.2
21:45 - 22:00	0	0	1	0	0	0	0	1	1.0	0	0	7	0	0	0	0	7	7.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	7	0	0	0	0	7	7.0	0	0	19	1	0	0	0	20	20.0	1	0	1	0	0	0	0	2	1.2
22:00 - 22:15	0	0	1	0	0	0	0	1	1.0	0	0	4	0	0	0	0	4	4.0	0	0	0	0	0	0	0	0	0.0
22:15 - 22:30	0	0	1	0	0	0	0	1	1.0	0	0	5	0	0	0	0	5	5.0	0	0	0	0	0	0	0	0	0.0
22:30 - 22:45	0	0	2	0	0	0	0	2	2.0	0	0	2	0	0	0	0	2	2.0	0	0	1	0	0	0	0	1	1.0
22:45 - 23:00	0	0	2	0	0	0	0	2	2.0	0	0	8	0	0	0	0	8	8.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	6	0	0	0	0	6	6.0	0	0	19	0	0	0	0	19	19.0	0	0	1	0	0	0	0	1	1.0
23:00 - 23:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
23:15 - 23:30	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0	0	0	0	0	0	0	0	0	0.0
23:30 - 23:45	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
23:45 - 00:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	1	0	0	0	0	1	1.0	0	0	2	0	0	0	0	2	2.0	0	0	0	0	0	0	0	0	0.0
TOTAL	0	0	518	63	9	1	0	591	596.8	4	6	874	110	8	3	2	1007	1010.1	22	1	288	13	0	0	0	324	305.8

Spondon

Thursday 13th October 2022

Junction: 2

Approach: Chapel Street

TIME	To Locko Road (S)									To West Road									To Locko Road (N)									
	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	
00:00 - 00:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
00:15 - 00:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
00:30 - 00:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
00:45 - 01:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
01:00 - 01:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
01:15 - 01:30	1	0	0	0	0	0	0	1	0.2	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
01:30 - 01:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
01:45 - 02:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
Hourly Total	1	0	0	0	0	0	0	1	0.2	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
02:00 - 02:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
02:15 - 02:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
02:30 - 02:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
02:45 - 03:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
03:00 - 03:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
03:15 - 03:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
03:30 - 03:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
03:45 - 04:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
04:00 - 04:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
04:15 - 04:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
04:30 - 04:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
04:45 - 05:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
05:00 - 05:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
05:15 - 05:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
05:30 - 05:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
05:45 - 06:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
06:00 - 06:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
06:15 - 06:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
06:30 - 06:45	0	0	0	0	0	0	0	0	0.0	3	0	0	0	0	0	0	3	0.6	0	0	0	0	0	0	0	0	0	0.0
06:45 - 07:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	0	0	0	0	0	0	0.0	3	0	0	0	0	0	0	3	0.6	0	0	0	0	0	0	0	0	0	0.0
07:00 - 07:15	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0
07:15 - 07:30	0	0	1	0	0	0	0	1	1.0	0	0	2	0	0	0	0	2	2.0	0	0	2	1	0	0	0	3	3.0	
07:30 - 07:45	0	0	0	0	0	0	0	0	0.0	1	0	0	0	0	0	0	1	0.2	0	1	2	0	0	0	0	3	2.4	
07:45 - 08:00	0	0	0	0	0	0	0	0	0.0	1	0	2	0	0	0	0	3	2.2	0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	2	0	0	0	0	2	2.0	2	0	4	0	0	0	0	6	4.4	0	1	4	1	0	0	0	6	5.4	
08:00 - 08:15	0	0	0	0	0	0	0	0	0.0	2	0	1	0	0	0	0	3	1.4	0	0	1	0	0	0	0	1	1.0	
08:15 - 08:30	0	0	1	0	0	0	0	1	1.0	1	0	0	0	0	0	0	1	0.2	0	0	4	0	0	0	0	4	4.0	
08:30 - 08:45	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	3	0	0	0	0	3	3.0	
08:45 - 09:00	0	0	4	0	0	0	0	4	4.0	0	0	1	1	0	0	0	2	2.0	0	0	8	0	0	0	0	8	8.0	
Hourly Total	0	0	5	0	0	0	0	5	5.0	3	0	3	1	0	0	0	7	4.6	0	0	16	0	0	0	0	16	16.0	
09:00 - 09:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0	
09:15 - 09:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0	
09:30 - 09:45	0	0	1	0	0	0	0	1	1.0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0	0.0
09:45 - 10:00	0	0	0	1	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	
Hourly Total	0	0	1	1	0	0	0	2	2.0	0	0	1	0	0	0	0	1	1.0	0	0	5	0	0	0	0	5	5.0	
10:00 - 10:15	0	0	2	0	0	0	0	2	2.0	1	0	0	0	0	0	0	1	0.2	0	0	2	1	0	0	0	3	3.0	
10:15 - 10:30	0	0	2	0	0	0	0	2	2.0	1	0	0	1	0	0	0	2	1.2	0	0	1	0	0	0	0	1	1.0	
10:30 - 10:45	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0	
10:45 - 11:00	0	0	0	1	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	4	0	0	0	0	4	4.0	
Hourly Total	0	0	5</																									

TOTAL	1	0	47	2	1	0	0	51	50.7	24	0	29	4	0	0	0	57	37.8	1	3	119	11	0	0	0	134	131.4
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Spondon

Thursday 13th October 2022

Junction: 2

Approach: Locko Road South

TIME	To West Road										To Loko Road (N)										To Chapel Street									
	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs			
00:00 - 00:15	0	0	0	0	0	0	0	0	0.0	0	0	2	1	0	0	0	3	3.0	0	0	0	0	0	0	0	0	0	0.0		
00:15 - 00:30	0	0	1	1	0	0	0	2	2.0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0	0.0		
00:30 - 00:45	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0	0.0		
00:45 - 01:00	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0	0.0		
Hourly Total	0	0	1	1	0	0	0	2	2.0	0	0	5	1	0	0	0	6	6.0	0	0	0	0	0	0	0	0	0	0.0		
01:00 - 01:15	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0	0	0	0	0	0	0	0	0	0	0.0		
01:15 - 01:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0		
01:30 - 01:45	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	1	0	0	0	0	0	1	1.0		
01:45 - 02:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0		
Hourly Total	0	0	0	0	0	0	0	0	0.0	0	0	3	0	0	0	0	3	3.0	0	0	1	0	0	0	0	0	1	1.0		
02:00 - 02:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0		
02:15 - 02:30	0	0	0	0	1	0	0	1	1.5	0	0	1	0	0	0	0	1	1.0	0	0	1	0	0	0	0	0	1	1.0		
02:30 - 02:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0		
02:45 - 03:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0		
Hourly Total	0	0	0	0	1	0	0	1	1.5	0	0	1	0	0	0	0	1	1.0	0	0	1	0	0	0	0	0	1	1.0		
03:00 - 03:15	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0	0.0		
03:15 - 03:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0		
03:30 - 03:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	0	1	1.0		
03:45 - 04:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0		
Hourly Total	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	1	0	0	0	0	0	1	1.0		
04:00 - 04:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	0	1	1.0		
04:15 - 04:30	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0		
04:30 - 04:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0		
04:45 - 05:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0		
Hourly Total	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	0	1	1.0		
05:00 - 05:15	0	0	0	0	0	0	0	0	0.0	0	0	5	0	0	0	0	5	5.0	0	0	1	0	0	0	0	0	1	1.0		
05:15 - 05:30	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	1	0	0	0	0	0	1	1.0		
05:30 - 05:45	0	0	1	0	0	0	0	1	1.0	0	0	3	1	0	0	0	4	4.0	0	0	1	1	0	0	0	0	2	2.0		
05:45 - 06:00	0	0	1	0	0	0	0	1	1.0	0	0	2	0	0	1	0	3	4.3	0	0	1	1	0	0	0	0	2	2.0		
Hourly Total	0	0	2	0	0	0	0	2	2.0	0	0	11	1	0	1	0	13	14.3	0	0	4	2	0	0	0	0	6	6.0		
06:00 - 06:15	0	0	2	0	0	0	0	2	2.0	0	0	2	0	1	0	0	3	3.5	0	0	1	0	1	0	0	0	2	2.5		
06:15 - 06:30	0	0	2	0	0	0	0	2	2.0	0	0	2	0	0	0	0	2	2.0	0	0	2	0	0	0	0	0	2	2.0		
06:30 - 06:45	0	0	2	0	0	0	0	2	2.0	0	0	0	1	0	0	0	1	1.0	0	0	3	0	0	0	0	0	3	3.0		
06:45 - 07:00	0	0	1	0	0	0	0	1	1.0	0	0	10	2	0	0	0	12	12.0	1	0	0	2	0	0	0	0	3	2.2		
Hourly Total	0	0	7	0	0	0	0	7	7.0	0	0	14	3	1	0	0	18	18.5	1	0	6	2	1	0	0	0	10	9.7		
07:00 - 07:15	0	0	4	0	0	0	0	4	4.0	0	0	13	0	0	0	0	13	13.0	0	0	6	1	2	0	0	0	9	10.0		
07:15 - 07:30	0	0	11	0	0	0	0	11	11.0	0	0	12	7	1	1	0	21	22.8	0	0	4	0	0	0	0	0	4	4.0		
07:30 - 07:45	0	0	18	0	1	0	0	19	19.5	0	0	13	3	0	0	0	16	16.0	0	0	9	0	1	0	0	0	10	10.5		
07:45 - 08:00	0	0	21	0	0	0	0	21	21.0	0	2	19	7	1	0	0	29	28.3	0	0	5	3	1	0	0	0	9	9.5		
Hourly Total	0	0	54	0	1	0	0	55	55.5	0	2	57	17	2	1	0	79	80.1	0	0	24	4	4	0	0	0	32	34.0		
08:00 - 08:15	0	0	31	1	0	0	0	32	32.0	0	0	22	9	4	0	0	35	37.0	0	0	11	1	0	0	0	0	12	12.0		
08:15 - 08:30	0	0	45	1	0	0	0	46	46.0	0	0	44	6	0	0	0	50	50.0	0	0	24	3	1	0	0	0	28	28.5		
08:30 - 08:45	0	0	39	4	0	0	0	43	43.0	0	0	22	5	0	0	0	27	27.0	0	0	14	1	0	0	0	0	15	15.0		
08:45 - 09:00	0	0	21	2	0	0	0	23	23.0	0	0	26	5	5	0	0	36	38.5	0	1	31	3	0	0	0	0	35	34.4		
Hourly Total	0	0	136	8	0	0	0	144	144.0	0	0	114	25	9	0	0	148	152.5	0	1	80	8	1	0	0	0	90	89.9		
09:00 - 09:15	0	0	5	2	0	0	0	7	7.0	0	0	22	10	2	1	0	35	37.3	0	0	21	1	0	0	0	0	22	22.0		
09:15 - 09:30	0	0	4	1	0	0	0	5	5.0	0	0	13	4	0	0	0	17	17.0	0	0	13	2	0	0	0	0	15	15.0		
09:30 - 09:45	0	0	4	0	0	0	0	4	4.0	0	0	22	4	1	0	0	27	27.5	0	0	14	5	0	0	0	0	19	19.0		
09:45 - 10:00	0	1	5	1	0	0	0	7	6.4	0	0	15	8	0	0	0	23	23.0	0	0	18	2	0	0	0	0	20	20.0		
Hourly Total	0	1	18	4	0	0	0	23	22.4	0	0	72	26	3	1	0	102	104.8	0	0	66	10	0	0	0	0	76	76.0		
10:00 - 10:15	0	0	2	0	0	0	0	2	2.0	0	0	16	2	1	0	0	19	19.5	0	0	10	0	0	0	0	0	10	10.0		
10:15 - 10:30	0	0	6	1	0	0	0	7	7.0	0	0	21	5	0	0	0	26	26.0	0	0	15	6	0	0	0	0	21	21.0		
10:30 - 10:45	0	0	7	0	0	0	0	7	7.0	0	0	20	2	0	0	0	22	22.0	0	1	17	2	0	0	0					

12:00 - 12:15	0	0	2	0	0	0	0	2	2.0	0	1	25	5	1	0	0	32	31.9	0	0	10	0	1	0	0	11	11.5
12:15 - 12:30	0	0	2	0	0	0	0	2	2.0	0	0	19	10	0	0	0	29	29.0	0	0	15	0	0	0	0	15	15.0
12:30 - 12:45	0	1	6	4	0	0	0	11	10.4	0	0	36	5	1	0	0	42	42.5	0	0	11	1	0	0	0	12	12.0
12:45 - 13:00	0	0	6	1	0	0	0	7	7.0	0	0	18	2	0	2	0	22	24.6	0	0	19	1	0	0	0	20	20.0
Hourly Total	0	1	16	5	0	0	0	22	21.4	0	1	98	22	2	2	0	125	128.0	0	0	55	2	1	0	0	58	58.5
13:00 - 13:15	0	0	8	1	0	0	0	9	9.0	0	0	22	6	0	0	0	28	28.0	0	1	17	1	0	0	0	19	18.4
13:15 - 13:30	0	0	5	2	0	0	0	7	7.0	0	0	29	8	1	1	0	39	40.8	0	0	7	5	0	0	0	12	12.0
13:30 - 13:45	0	0	3	1	0	0	0	4	4.0	0	0	20	4	0	0	0	24	24.0	0	0	13	1	0	0	0	14	14.0
13:45 - 14:00	0	0	10	0	0	0	0	10	10.0	0	0	25	2	0	0	1	28	29.0	0	0	16	6	1	0	0	23	23.5
Hourly Total	0	0	26	4	0	0	0	30	30.0	0	0	96	20	1	1	1	119	121.8	0	1	53	13	1	0	0	68	67.9
14:00 - 14:15	0	0	5	1	0	0	0	6	6.0	0	0	30	4	0	0	0	34	34.0	0	1	16	0	0	0	0	17	16.4
14:15 - 14:30	0	0	20	1	0	0	0	21	21.0	0	0	31	1	0	0	0	32	32.0	0	0	11	1	0	0	0	12	12.0
14:30 - 14:45	0	0	17	2	0	0	0	19	19.0	1	1	39	4	1	0	0	46	45.1	0	0	24	2	0	0	0	26	26.0
14:45 - 15:00	0	0	17	1	0	0	0	18	18.0	0	0	46	2	0	0	0	48	48.0	0	1	18	2	0	0	0	21	20.4
Hourly Total	0	0	59	5	0	0	0	64	64.0	1	1	146	11	1	0	0	160	159.1	0	2	69	5	0	0	0	76	74.8
15:00 - 15:15	0	0	34	3	0	0	0	37	37.0	0	0	51	7	0	0	0	58	58.0	4	0	28	1	0	0	0	33	29.8
15:15 - 15:30	0	0	10	2	0	0	0	12	12.0	0	1	43	3	2	0	1	50	51.4	0	0	22	4	0	0	0	26	26.0
15:30 - 15:45	0	0	7	0	0	0	0	7	7.0	0	0	37	8	0	0	0	45	45.0	1	0	14	2	0	0	0	17	16.2
15:45 - 16:00	0	0	14	1	0	0	0	15	15.0	0	0	33	5	0	0	0	38	38.0	0	1	24	1	0	0	0	26	25.4
Hourly Total	0	0	65	6	0	0	0	71	71.0	0	1	164	23	2	0	1	191	192.4	5	1	88	8	0	0	0	102	97.4
16:00 - 16:15	0	0	10	1	0	0	0	11	11.0	0	1	55	5	0	0	0	61	60.4	1	0	14	1	0	0	0	16	15.2
16:15 - 16:30	1	0	10	1	0	0	0	12	11.2	1	0	43	8	1	0	0	53	52.7	0	0	16	3	0	0	0	19	19.0
16:30 - 16:45	0	0	17	1	0	0	0	18	18.0	0	0	76	8	0	0	0	84	84.0	0	0	31	0	0	0	0	31	31.0
16:45 - 17:00	0	0	11	1	0	0	0	12	12.0	0	0	66	7	0	0	0	73	73.0	0	0	28	2	0	0	0	30	30.0
Hourly Total	1	0	48	4	0	0	0	53	52.2	1	1	240	28	1	0	0	271	270.1	1	0	89	6	0	0	0	96	95.2
17:00 - 17:15	0	0	17	1	0	0	0	18	18.0	0	0	78	9	1	0	0	88	88.5	0	1	23	6	0	0	0	30	29.4
17:15 - 17:30	0	0	35	0	0	0	0	35	35.0	0	0	84	11	1	0	0	96	96.5	0	0	17	0	0	0	0	17	17.0
17:30 - 17:45	0	0	28	2	0	0	0	30	30.0	0	1	50	8	0	0	0	59	58.4	0	0	17	0	0	0	0	17	17.0
17:45 - 18:00	0	0	20	2	0	0	0	22	22.0	0	0	51	5	0	0	0	56	56.0	1	0	25	1	0	0	0	27	26.2
Hourly Total	0	0	100	5	0	0	0	105	105.0	0	1	263	33	2	0	0	299	299.4	1	1	82	7	0	0	0	91	89.6
18:00 - 18:15	0	0	10	0	0	0	0	10	10.0	0	0	35	8	0	0	0	43	43.0	0	0	13	1	0	0	0	14	14.0
18:15 - 18:30	0	1	5	0	0	0	0	6	5.4	0	0	32	6	0	0	0	38	38.0	0	0	14	0	0	0	0	14	14.0
18:30 - 18:45	0	0	2	0	0	0	0	2	2.0	0	0	26	2	0	0	0	28	28.0	0	2	13	0	0	0	0	15	13.8
18:45 - 19:00	0	0	2	0	0	0	0	2	2.0	0	0	26	4	1	0	0	31	31.5	0	0	12	0	0	0	0	12	12.0
Hourly Total	0	1	19	0	0	0	0	20	19.4	0	0	119	20	1	0	0	140	140.5	0	2	52	1	0	0	0	55	53.8
19:00 - 19:15	0	0	3	0	0	0	0	3	3.0	0	0	26	1	0	0	0	27	27.0	0	0	11	1	0	0	0	12	12.0
19:15 - 19:30	0	0	4	0	0	0	0	4	4.0	0	0	17	1	0	0	0	18	18.0	0	0	7	1	0	0	0	8	8.0
19:30 - 19:45	0	0	5	0	0	0	0	5	5.0	0	0	27	2	0	0	0	29	29.0	0	1	8	0	0	0	0	9	8.4
19:45 - 20:00	0	0	0	0	0	0	0	0	0.0	0	0	24	1	0	0	0	25	25.0	0	0	9	0	0	0	0	9	9.0
Hourly Total	0	0	12	0	0	0	0	12	12.0	0	0	94	5	0	0	0	99	99.0	0	1	35	2	0	0	0	38	37.4
20:00 - 20:15	0	0	0	0	0	0	0	0	0.0	0	0	18	1	0	0	0	19	19.0	0	0	11	1	0	0	0	12	12.0
20:15 - 20:30	0	0	1	0	0	0	0	1	1.0	0	0	13	1	0	0	0	14	14.0	0	0	10	0	0	0	0	10	10.0
20:30 - 20:45	0	0	3	0	1	0	0	4	4.5	1	0	18	3	0	0	0	22	21.2	0	0	7	1	0	0	0	8	8.0
20:45 - 21:00	0	0	3	0	0	0	0	3	3.0	0	0	13	1	0	0	0	14	14.0	0	0	5	1	0	0	0	6	6.0
Hourly Total	0	0	7	0	1	0	0	8	8.5	1	0	62	6	0	0	0	69	68.2	0	0	33	3	0	0	0	36	36.0
21:00 - 21:15	0	0	2	0	0	0	0	2	2.0	0	0	9	1	1	0	0	11	11.5	0	0	7	0	0	0	0	7	7.0
21:15 - 21:30	0	0	0	1	0	0	0	1	1.0	1	0	8	1	0	0	0	10	9.2	0	0	6	0	0	0	0	6	6.0
21:30 - 21:45	0	0	3	0	0	0	0	3	3.0	0	0	13	3	0	0	0	16	16.0	0	0	2	1	0	0	0	3	3.0
21:45 - 22:00	0	0	7	0	0	0	0	7	7.0	0	0	8	0	0	0	0	8	8.0	0	0	3	0	0	0	0	3	3.0
Hourly Total	0	0	12	1	0	0	0	13	13.0	1	0	38	5	1	0	0	45	44.7	0	0	18	1	0	0	0	19	19.0
22:00 - 22:15	0	0	0	0	0	0	0	0	0.0	0	0	13	0	0	0	0	13	13.0	0	0	5	0	0	0	0	5	5.0
22:15 - 22:30	0	0	1	0	0	0	0	1	1.0	0	0	8	0	0	0	0	8	8.0	1	1	4	0	0	0	0	6	4.6
22:30 - 22:45	0	0	1	0	0	0	0	1	1.0	0	0	9	0	0	0	0	9	9.0	0	0	3	0	0	0	0	3	3.0
22:45 - 23:00	0	0	1	0	0	0	0	1	1.0	0	0	4	0	0	0	0	4	4.0	0	0	1	0	0	0	0	1	1.0
Hourly Total	0	0	3	0	0	0	0	3	3.0	0	0	34	0	0	0	0	34	34.0	1	1	13	0	0	0	0	15	13.6
23:00 - 23:15	0	0	2	0	0	0	0	2	2.0	0	0	2	1	0	0	0	3	3.0	0	0	1	0	0	0	0	1	1.0
23:15 - 23:30	0	0	1	0	0	0	0	1	1.0	0	0	3	0	0	0	0	3	3.0	0	0	0	0	0	0	0	0	0.0
23:30 - 23:45	0	0	1	0	0	0	0	1	1.0	0	0	3	0	0	0	0	3	3.0	0	0	2	0	0	0	0	2	2.0
23:45 - 00:00	0	0	0	0	0	0	0	0	0.0	0	0	5	0	0	0	0	5	5.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	4	0	0	0	0	4	4.0	0	0	13	1	0	0	0	14	14.0	0	0	3	0	0	0	0	3	3.0
TOTAL	1	3	626	47	3	0	0	680	678.9	4	9	1796	280	30	6	2	2127	2143.2	9	11	876	91	10	0	0	997	988.2

Spondon

Thursday 13th October 2022

Junction: 2

Approach: West Road

	To Locko Road (N)										To Chapel Street										To Locko Road (S)									
TIME	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs			
00:00 - 00:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0		
00:15 - 00:30	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0	0.0		
00:30 - 00:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0		
00:45 - 01:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0		
Hourly Total	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0	0.0		
01:00 - 01:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0		
01:15 - 01:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0		
01:30 - 01:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0		
01:45 - 02:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0		
Hourly Total	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0		
02:00 - 02:15	0	0	0	0	0	0	0	0	0.0	1	0	0	0	0	0	0	1	0.2	0	0	0	0	0	0	0	0	0	0.0		
02:15 - 02:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	1	0	0	0	1	1.5		
02:30 - 02:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0		
02:45 - 03:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0		
Hourly Total	0	0	0	0	0	0	0	0	0.0	1	0	0	0	0	0	0	1	0.2	0	0	0	0	1	0	0	0	1	1.5		
03:00 - 03:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0		
03:15 - 03:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0		
03:30 - 03:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0		
03:45 - 04:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0		
Hourly Total	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0		
04:00 - 04:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0		
04:15 - 04:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	0	1	1.0		
04:30 - 04:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0		
04:45 - 05:00	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0	0.0		
Hourly Total	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	1	0	0	0	0	0	1	1.0		
05:00 - 05:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0		
05:15 - 05:30	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	1	0	0	0	0	0	1	1.0		
05:30 - 05:45	0	0	1	0	0	0	0	1	1.0	0	0	2	0	0	0	0	2	2.0	0	0	2	1	0	0	0	0	3	3.0		
05:45 - 06:00	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0	0.0		
Hourly Total	0	0	1	0	0	0	0	1	1.0	0	0	4	0	0	0	0	4	4.0	0	0	3	1	0	0	0	0	4	4.0		
06:00 - 06:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0	0.0		
06:15 - 06:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	0	2	2.0		
06:30 - 06:45	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	1	0	0	0	0	0	1	1.0		
06:45 - 07:00	0	0	2	0	0	0	0	2	2.0	0	0	3	0	0	0	0	3	3.0	0	0	2	0	0	0	0	0	2	2.0		
Hourly Total	0	0	2	0	0	0	0	2	2.0	0	0	4	0	0	0	0	4	4.0	0	0	5	0	0	0	0	0	5	5.0		
07:00 - 07:15	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0	0	0	3	0	0	0	0	0	3	3.0		
07:15 - 07:30	0	0	1	0	0	0	0	1	1.0	0	0	2	0	0	0	0	2	2.0	0	0	4	0	0	0	0	0	4	4.0		
07:30 - 07:45	0	0	2	0	0	0	0	2	2.0	0	0	2	0	0	0	0	2	2.0	0	0	6	0	0	0	0	0	6	6.0		
07:45 - 08:00	0	0	6	0	0	0	0	6	6.0	0	0	5	0	0	0	0	5	5.0	0	0	11	0	1	0	0	0	12	12.5		
Hourly Total	0	0	9	0	0	0	0	9	9.0	0	0	10	0	0	0	0	10	10.0	0	0	24	0	1	0	0	0	25	25.5		
08:00 - 08:15	0	0	8	2	0	0	0	10	10.0	0	0	12	0	0	0	0	12	12.0	0	1	5	1	0	0	0	0	7	6.4		
08:15 - 08:30	0	0	24	1	0	0	0	25	25.0	0	0	29	0	0	0	0	29	29.0	0	0	15	0	0	0	0	0	15	15.0		
08:30 - 08:45	0	0	18	1	0	0	0	19	19.0	1	0	13	0	0	0	0	14	13.2	0	0	15	1	0	0	0	0	16	16.0		
08:45 - 09:00	0	0	19	0	0	0	0	19	19.0	1	0	18	3	0	0	0	22	21.2	0	0	21	1	0	0	0	0	22	22.0		
Hourly Total	0	0	69	4	0	0	0	73	73.0	2	0	72	3	0	0	0	77	75.4	0	1	56	3	0	0	0	0	60	59.4		
09:00 - 09:15	0	0	3	1	0	0	0	4	4.0	0	0	8	0	0	0	0	8	8.0	0	0	9	0	0	0	0	0	9	9.0		
09:15 - 09:30	0	0	4	1	0	0	0	5	5.0	1	0	1	0	0	0	0	2	1.2	1	0	5	0	0	0	0	0	6	5.2		
09:30 - 09:45	0	0	1	1	0	0	0	2	2.0	0	0	1	1	1	0	0	3	3.5	0	0	3	0	0	0	0	0	3	3.0		
09:45 - 10:00	0	0	3	1	0	0	0	4	4.0	0	0	2	0	0	0	0	2	2.0	0	0	7	0	0	0	0	0	7	7.0		
Hourly Total	0	0	11	4	0	0	0	15	15.0	1	0	12	1	1	0	0	15	14.7	1	0	24	0	0	0	0	0	25	24.2		
10:00 - 10:15	0	0	2	0	0	0	0	2	2.0	0	0	1	0	0	0	0	1	1.0	0	0	5	1	0	0	0	0	6	6.0		
10:15 - 10:30	0	0	0	1	0	0	0	1	1.0	0	0	2	0	0	0	0	2	2.0	1	0	3	2	0	0	0	0	6	5.2		
10:30 - 10:45	0	0	1	0	0	0	0	1	1.0	0	0	3	0	0	0	0	3	3.0	0	0	2	0	0	0	0	0	2	2.0		
10:45 - 11:00	0	0	1	0	0	0	0																							

12:00 - 12:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	4	0	0	0	0	4	4.0
12:15 - 12:30	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0	0	0	4	1	0	0	0	5	5.0
12:30 - 12:45	0	0	3	1	0	0	0	4	4.0	0	0	1	0	0	0	0	1	1.0	0	0	3	0	0	0	0	3	3.0
12:45 - 13:00	0	0	0	1	0	0	0	1	1.0	0	0	1	0	0	0	0	1	1.0	0	0	4	0	0	0	0	4	4.0
Hourly Total	0	0	3	2	0	0	0	5	5.0	0	0	4	0	0	0	0	4	4.0	0	0	15	1	0	0	0	16	16.0
13:00 - 13:15	0	0	2	0	0	0	0	2	2.0	0	0	5	0	0	0	0	5	5.0	0	0	2	0	0	0	0	2	2.0
13:15 - 13:30	0	0	1	2	0	0	0	3	3.0	0	0	1	2	0	0	0	3	3.0	0	0	6	0	0	0	0	6	6.0
13:30 - 13:45	0	0	4	0	0	0	0	4	4.0	0	0	1	2	0	0	0	3	3.0	0	0	9	0	0	0	0	9	9.0
13:45 - 14:00	0	0	0	1	0	0	0	1	1.0	0	0	2	0	0	0	0	2	2.0	0	0	2	0	0	0	0	2	2.0
Hourly Total	0	0	7	3	0	0	0	10	10.0	0	0	9	4	0	0	0	13	13.0	0	0	19	0	0	0	0	19	19.0
14:00 - 14:15	0	0	2	0	0	0	0	2	2.0	0	0	4	0	0	0	0	4	4.0	0	0	3	0	0	0	0	3	3.0
14:15 - 14:30	0	0	0	2	0	0	0	2	2.0	1	0	2	0	0	0	0	3	2.2	0	0	4	0	0	0	0	4	4.0
14:30 - 14:45	0	0	2	2	0	0	0	4	4.0	1	0	3	1	0	0	0	5	4.2	0	0	4	0	0	0	0	4	4.0
14:45 - 15:00	0	0	5	0	0	0	0	5	5.0	0	0	2	0	0	0	0	2	2.0	0	0	3	0	0	0	0	3	3.0
Hourly Total	0	0	9	4	0	0	0	13	13.0	2	0	11	1	0	0	0	14	12.4	0	0	14	0	0	0	0	14	14.0
15:00 - 15:15	1	0	10	0	0	0	0	11	10.2	4	0	15	0	0	0	0	19	15.8	0	0	10	0	0	0	0	10	10.0
15:15 - 15:30	0	0	12	0	0	0	0	12	12.0	1	0	17	1	0	0	0	19	18.2	0	0	25	0	0	0	0	25	25.0
15:30 - 15:45	0	0	8	1	0	0	0	9	9.0	1	0	10	1	0	0	0	12	11.2	1	0	9	1	0	0	0	11	10.2
15:45 - 16:00	1	0	2	0	0	0	0	3	2.2	0	0	2	1	0	0	0	3	3.0	0	0	3	1	0	0	0	4	4.0
Hourly Total	2	0	32	1	0	0	0	35	33.4	6	0	44	3	0	0	0	53	48.2	1	0	47	2	0	0	0	50	49.2
16:00 - 16:15	0	0	11	1	0	0	0	12	12.0	3	0	17	1	0	0	0	21	18.6	0	0	14	0	0	0	0	14	14.0
16:15 - 16:30	0	0	12	2	0	0	0	14	14.0	1	0	7	0	0	0	0	8	7.2	0	0	10	2	0	0	0	12	12.0
16:30 - 16:45	0	0	6	0	0	0	0	6	6.0	1	0	8	0	0	0	0	9	8.2	0	0	8	0	0	0	0	8	8.0
16:45 - 17:00	0	0	4	0	0	0	0	4	4.0	0	0	9	0	0	0	0	9	9.0	0	0	4	0	0	0	0	4	4.0
Hourly Total	0	0	33	3	0	0	0	36	36.0	5	0	41	1	0	0	0	47	43.0	0	0	36	2	0	0	0	38	38.0
17:00 - 17:15	1	0	8	0	0	0	0	9	8.2	0	0	4	0	0	0	0	4	4.0	0	0	7	0	0	0	0	7	7.0
17:15 - 17:30	1	0	6	0	0	0	0	7	6.2	0	1	5	0	0	0	0	6	5.4	0	0	7	0	0	0	0	7	7.0
17:30 - 17:45	1	0	6	0	0	0	0	7	6.2	0	0	6	0	0	0	0	6	6.0	0	0	11	2	0	0	0	13	13.0
17:45 - 18:00	1	0	6	0	0	0	0	7	6.2	1	0	15	0	0	0	0	16	15.2	1	0	9	0	0	0	0	10	9.2
Hourly Total	4	0	26	0	0	0	0	30	26.8	1	1	30	0	0	0	0	32	30.6	1	0	34	2	0	0	0	37	36.2
18:00 - 18:15	0	0	10	0	0	0	0	10	10.0	1	0	9	0	0	0	0	10	9.2	0	0	11	1	0	0	0	12	12.0
18:15 - 18:30	0	0	5	0	0	0	0	5	5.0	2	0	5	0	0	0	0	7	5.4	0	0	10	0	0	0	0	10	10.0
18:30 - 18:45	1	0	7	0	0	0	0	8	7.2	1	0	6	0	0	0	0	7	6.2	0	0	8	0	0	0	0	8	8.0
18:45 - 19:00	0	0	2	0	0	0	0	2	2.0	0	0	6	0	0	0	0	6	6.0	0	0	7	0	0	0	0	7	7.0
Hourly Total	1	0	24	0	0	0	0	25	24.2	4	0	26	0	0	0	0	30	26.8	0	0	36	1	0	0	0	37	37.0
19:00 - 19:15	0	0	5	0	0	0	0	5	5.0	0	0	3	0	0	0	0	3	3.0	0	0	4	0	0	0	0	4	4.0
19:15 - 19:30	0	0	5	0	0	0	0	5	5.0	1	0	3	0	0	0	0	4	3.2	0	0	14	0	0	0	0	14	14.0
19:30 - 19:45	0	0	8	0	0	0	0	8	8.0	0	0	7	0	0	0	0	7	7.0	0	0	6	0	0	0	0	6	6.0
19:45 - 20:00	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	4	0	0	0	0	4	4.0
Hourly Total	0	0	19	0	0	0	0	19	19.0	1	0	13	0	0	0	0	14	13.2	0	0	28	0	0	0	0	28	28.0
20:00 - 20:15	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0	0	0	3	0	0	0	0	3	3.0
20:15 - 20:30	0	0	2	0	0	0	0	2	2.0	0	0	1	0	0	0	0	1	1.0	0	0	2	0	0	0	0	2	2.0
20:30 - 20:45	0	0	0	0	0	0	0	0	0.0	1	0	0	0	0	0	0	1	0.2	0	0	1	0	0	0	0	1	1.0
20:45 - 21:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	1	0	1	0	0	2	2.5
Hourly Total	0	0	3	0	0	0	0	3	3.0	1	0	1	0	0	0	0	2	1.2	0	0	7	0	1	0	0	8	8.5
21:00 - 21:15	0	0	1	0	0	0	0	1	1.0	0	0	4	0	0	0	0	4	4.0	0	0	6	0	0	0	0	6	6.0
21:15 - 21:30	1	0	0	0	0	0	0	1	0.2	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
21:30 - 21:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	1	1	0	0	0	2	2.0
21:45 - 22:00	0	0	0	0	0	0	0	0	0.0	1	0	0	0	0	0	0	1	0.2	0	0	2	0	0	0	0	2	2.0
Hourly Total	1	0	1	0	0	0	0	2	1.2	1	0	5	0	0	0	0	6	5.2	0	0	9	1	0	0	0	10	10.0
22:00 - 22:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
22:15 - 22:30	0	0	0	0	0	0	0	0	0.0	1	0	1	0	0	0	0	2	1.2	0	0	0	0	0	0	0	0	0.0
22:30 - 22:45	1	0	0	0	0	0	0	1	0.2	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
22:45 - 23:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	1	0	0	0	0	0	0	1	0.2	1	0	2	0	0	0	0	3	2.2	0	0	0	0	0	0	0	0	0.0
23:00 - 23:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
23:15 - 23:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
23:30 - 23:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0
23:45 - 00:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0

TOTAL	9	0	258	24	0	0	0	291	283.8	27	1	303	16	1	0	0	348	326.3	4	1	385	18	3	0	0	411	408.7
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Spondon

Thursday 13th October 2022

Junction: 3

Approach: Sitwell Street East

TIME	To Willowcroft Road								To Sitwell Street (W)									
	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS
00:00 - 00:15	0	0	6	0	0	0	0	6	6.0	0	0	1	0	0	0	0	1	1.0
00:15 - 00:30	0	0	3	0	0	0	0	3	3.0	0	0	1	0	0	0	0	1	1.0
00:30 - 00:45	0	0	6	1	0	0	0	7	7.0	0	0	0	0	0	0	0	0	0.0
00:45 - 01:00	0	0	1	0	0	1	0	2	3.3	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	16	1	0	1	0	18	19.3	0	0	2	0	0	0	0	2	2.0
01:00 - 01:15	0	0	1	1	0	0	0	2	2.0	0	0	0	0	0	0	0	0	0.0
01:15 - 01:30	0	0	2	1	0	0	0	3	3.0	0	0	0	0	0	0	0	0	0.0
01:30 - 01:45	0	0	5	0	0	0	0	5	5.0	0	0	0	0	0	0	0	0	0.0
01:45 - 02:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	8	2	0	0	0	10	10.0	0	0	0	0	0	0	0	0	0.0
02:00 - 02:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
02:15 - 02:30	0	0	2	1	0	0	0	3	3.0	0	0	0	0	1	0	0	1	1.5
02:30 - 02:45	0	0	1	0	0	1	0	2	3.3	0	0	0	0	0	0	0	0	0.0
02:45 - 03:00	0	0	6	0	0	0	0	6	6.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	9	1	0	1	0	11	12.3	0	0	0	0	1	0	0	1	1.5
03:00 - 03:15	0	0	1	0	1	0	0	2	2.5	0	0	0	0	0	0	0	0	0.0
03:15 - 03:30	0	0	2	0	1	0	0	3	3.5	0	0	0	0	0	0	0	0	0.0
03:30 - 03:45	0	0	5	0	0	0	0	5	5.0	0	0	0	0	0	0	0	0	0.0
03:45 - 04:00	0	0	5	0	0	0	0	5	5.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	13	0	2	0	0	15	16.0	0	0	0	0	0	0	0	0	0.0
04:00 - 04:15	0	0	0	2	0	0	0	2	2.0	0	0	0	0	0	0	0	0	0.0
04:15 - 04:30	0	0	6	2	1	2	0	11	14.1	0	0	0	0	0	0	0	0	0.0
04:30 - 04:45	0	0	3	1	1	0	0	5	6.5	0	0	0	0	0	0	0	0	0.0
04:45 - 05:00	0	0	5	0	1	0	1	7	8.5	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	14	5	3	2	1	25	30.1	0	0	0	0	0	0	0	0	0.0
05:00 - 05:15	0	1	22	5	1	0	0	29	28.9	0	1	4	0	0	0	0	5	4.4
05:15 - 05:30	0	1	33	3	0	1	0	38	38.7	0	0	0	0	0	0	0	0	0.0
05:30 - 05:45	0	2	48	3	2	0	0	55	54.8	0	0	1	0	0	0	0	1	1.0
05:45 - 06:00	0	0	38	6	0	0	0	44	44.0	0	0	1	0	0	0	0	1	1.0
Hourly Total	0	4	141	17	3	1	0	166	166.4	0	1	6	0	0	0	0	7	6.4
06:00 - 06:15	0	0	27	7	1	1	1	37	39.8	0	0	1	0	0	0	0	1	1.0
06:15 - 06:30	1	0	49	6	2	1	0	59	60.5	0	0	0	0	0	0	0	0	0.0
06:30 - 06:45	2	0	70	12	4	2	1	91	95.0	0	0	3	0	0	0	0	3	3.0
06:45 - 07:00	0	0	74	10	7	1	1	93	98.8	0	0	2	1	0	0	0	3	3.0
Hourly Total	3	0	220	35	14	5	3	280	294.1	0	0	6	1	0	0	0	7	7.0
07:00 - 07:15	1	0	78	16	6	1	1	103	107.5	0	0	2	1	0	0	0	3	3.0
07:15 - 07:30	0	0	96	23	7	1	2	129	135.8	2	0	2	0	0	0	0	4	2.4
07:30 - 07:45	0	3	133	23	1	0	1	161	160.7	0	0	1	0	0	0	0	1	1.0
07:45 - 08:00	0	1	86	15	2	5	1	110	117.9	1	0	2	0	0	0	0	3	2.2
Hourly Total	1	4	393	77	16	7	5	503	521.9	3	0	7	1	0	0	0	11	8.6
08:00 - 08:15	0	4	79	15	3	0	2	103	104.1	1	0	7	0	1	0	0	9	8.7
08:15 - 08:30	1	1	95	18	5	0	2	122	125.1	1	0	8	0	0	0	0	9	8.2
08:30 - 08:45	0	1	74	15	2	1	1	94	96.7	0	0	10	0	0	0	0	10	10.0
08:45 - 09:00	0	0	110	12	2	3	1	128	133.9	0	0	2	0	1	0	0	3	3.5
Hourly Total	1	6	358	60	12	4	6	447	459.8	2	0	27	0	2	0	0	31	30.4
09:00 - 09:15	0	0	98	15	4	1	0	118	121.3	0	0	2	0	0	1	0	3	4.3
09:15 - 09:30	0	2	76	13	4	1	2	98	102.1	1	0	9	2	0	0	0	12	11.2
09:30 - 09:45	0	1	73	21	6	2	0	103	108.0	0	0	4	1	0	0	0	5	5.0
09:45 - 10:00	0	2	75	6	1	2	2	88	91.9	0	0	2	0	0	0	0	2	2.0
Hourly Total	0	5	322	55	15	6	4	407	423.3	1	0	17	3	0	0	0	22	22.5
10:00 - 10:15	0	0	79	12	3	2	1	97	102.1	0	0	6	1	0	0	0	7	7.0
10:15 - 10:30	0	0	72	12	3	2	0	89	93.1	0	0	2	0	0	0	0	2	2.0
10:30 - 10:45	0	0	75	16	10	3	3	107	118.9	0	0	5	1	0	0	0	6	6.0
10:45 - 11:00	0	1	82	6	5	1	0	95	98.2	0	0	5	0	0	0	0	5	5.0
Hourly Total	0	1	308	46	21	8	4	388	412.3	0	0	18	2	0	0	0	20	20.0
11:00 - 11:15	0	1	82	10	3	1	2	99	103.2	0	0	8	1	0	0	0	9	9.0
11:15 - 11:30	0	0	75	8	5	1	1	90	94.8	0	0	8	3	1	0	0	12	12.5
11:30 - 11:45	1	0	70	10	3	1	1	86	89.0	0	0	4	0	0	0	0	4	4.0
11:45 - 12:00	0	0	70	13	3	0	1	87	89.5	0	0	6	2	0	0	0	8	8.0
Hourly Total	1	1	297	41	14	3	5	362	376.5	0	0	26	6	1	0	0	33	33.5
12:00 - 12:15	0	0	69	13	5	0	1	88	91.5	0	0	2	0	0	0	0	2	2.0
12:15 - 12:30	0	1	77	6	5	2	1	92	97.5	0	0	4	0	0	0	0	4	4.0
12:30 - 12:45	0	0	76	4	1	1	2	84	87.8	0	0	8	0	0	0	0	8	8.0
12:45 - 13:00	0	1	71	7	7	0	1	87	90.9	0	0	8	1	0	0	0	9	9.0
Hourly Total	0	2	293	30	18	3	5	351	367.7	0	0	22	1	0	0	0	23	23.0
13:00 - 13:15	0	1	78	14	7	0	1	101	104.9	0	0	4	1	0	0	0	5	5.0
13:15 - 13:30	1	2	74	7	4	3	0	91	94.9	0	0	5	3	1	0	0	9	9.5
13:30 - 13:45	0	1	72	13	4	2	1	93	98.0	0	0	4	0	0	0	0	4	4.0
13:45 - 14:00	0	0	65	13	4	2	1	85	90.6	0	0	5	1	0	0	0	6	6.0
Hourly Total	1	4	289	47	19	7	3	370	388.4	0	0	18	5	1	0	0	24	24.5
14:00 - 14:15	0	0	55	14	5	5	1	80	90.0	0	0	3	2	0	0	0	5	5.0
14:15 - 14:30	0	1	80	11	3	0	1	96	97.9	0	0	3	0	0	0	0	3	3.0
14:30 - 14:45	0	2	92	12	2	1	1	110	112.1	0	0	7	1	0	0	0	8	8.0
14:45 - 15:00	0	0	61	9	0	1	3	74	78.3	0	1	12	0	0	0	0	13	12.4
Hourly Total	0	3	288	46	10	7	6	360	378.3	0	1	25	3	0	0	0	29	28.4
15:00 - 15:15	0	0	78	13	4	0	1	96	99.0	0	0	13	2	1	0	0	16	16.5
15:15 - 15:30	1	0	84	20	7	3	1	115	123.4	1	0	1	2	2	0	0	6	6.2
15:30 - 15:45	0	5	78	16	2	0	0	101	99.0	0	0	3	2	0	0	0	5	5.0
15:45 - 16:00	0	0	70	9	4	1	2	96	91.3	0	0	13	1	0	0	0	14	14.0
Hourly Total	0	5	310	58	17	4	4	398	412.7	1	0	30	7	3	0	0	41	41.7
16:00 - 16:15	0	0	77	11	1	1	1	91	93.8	0	0	7	2	0	0	0	9	9.0
16:15 - 16:30	0	0	62	12	4	1	0	79	82.3	0	0	5	3	0	0	0	8	8.0
16:30 - 16:45	0	0	62	3	3	0	1	69	71.5	0	0	5	1	0	0	0	6	6.0
16:45 - 17:00	1	0	70	11	0	2	3	87	91.8	0	0	8	2	0	0	0	10	10.0
Hourly Total	1	0	271	37	8	4	5	326	339.4	0	0	25	8	0	0	0	33	33.0
17:00 - 17:15	0	1	84	8	1	2	0	96	98.5	0	0	9	1	0	0	0	10	10.0
17:15 - 17:30	0	0	72	6	0	1	1	80	82.3	0	0	9	1	0	0	0		

Spondon
Thursday 13th October 2022
Junction: 3
Approach: Willowcroft Road

TIME	To Sitwell Street (W)									To Sitwell Street (E)								
	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS
00:00 - 00:15	0	0	1	0	0	0	0	1	1.0	0	0	1	0	0	0	0	1	1.0
00:15 - 00:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
00:30 - 00:45	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
00:45 - 01:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	2	0	0	0	0	2	2.0	0	0	1	0	0	0	0	1	1.0
01:00 - 01:15	0	0	0	0	0	0	0	0	0.0	0	0	0	1	0	0	0	1	1.0
01:15 - 01:30	0	0	0	0	0	0	0	0	0.0	0	0	2	1	0	0	0	3	3.0
01:30 - 01:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
01:45 - 02:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	0	0	0	0	0	0	0.0	0	0	2	2	0	0	0	4	4.0
02:00 - 02:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
02:15 - 02:30	0	0	0	0	0	0	0	0	0.0	0	0	0	1	0	0	0	1	1.0
02:30 - 02:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
02:45 - 03:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0
03:00 - 03:15	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0
03:15 - 03:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
03:30 - 03:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
03:45 - 04:00	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0
04:00 - 04:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
04:15 - 04:30	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	2	2.0
04:30 - 04:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
04:45 - 05:00	0	0	0	0	0	0	0	0	0.0	0	0	1	1	0	0	0	2	2.0
Hourly Total	0	0	0	0	0	0	0	0	0.0	0	0	2	1	1	0	0	4	4.0
05:00 - 05:15	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0
05:15 - 05:30	0	0	0	0	0	0	0	0	0.0	0	0	0	1	0	0	0	1	1.0
05:30 - 05:45	0	0	0	0	0	0	0	0	0.0	0	0	1	1	0	0	0	2	2.0
05:45 - 06:00	0	0	3	0	0	1	0	4	5.3	0	0	1	0	1	0	0	2	2.5
Hourly Total	0	0	3	0	0	1	0	4	5.3	0	0	4	2	1	0	0	7	7.5
06:00 - 06:15	0	0	0	0	0	0	0	0	0.0	0	0	5	0	0	0	0	5	5.0
06:15 - 06:30	0	0	1	0	0	0	0	2	2.5	0	0	0	0	1	0	0	1	1.5
06:30 - 06:45	0	0	0	0	0	0	0	0	0.0	0	0	2	0	2	1	0	5	7.3
06:45 - 07:00	0	0	1	0	0	0	0	1	1.0	0	0	2	0	1	0	0	3	3.5
Hourly Total	0	0	2	0	1	0	0	3	3.5	0	0	10	0	4	1	0	15	18.3
07:00 - 07:15	0	0	2	0	0	0	0	2	2.0	0	0	4	2	1	0	0	7	7.5
07:15 - 07:30	0	0	3	0	0	0	0	3	3.0	0	0	11	1	1	0	0	13	13.5
07:30 - 07:45	0	0	12	0	0	0	0	12	12.0	1	0	12	1	0	1	0	15	15.5
07:45 - 08:00	1	2	12	2	1	0	0	18	16.5	0	0	9	3	0	0	0	12	12.0
Hourly Total	1	2	29	2	1	0	0	35	33.5	1	0	36	7	2	1	0	47	48.5
08:00 - 08:15	0	0	20	1	0	0	0	21	21.0	0	1	3	2	1	0	0	7	6.9
08:15 - 08:30	0	0	40	4	0	0	0	44	44.0	0	0	15	4	1	0	0	20	20.5
08:30 - 08:45	0	0	24	4	0	0	0	28	28.0	0	0	15	1	2	0	0	18	19.0
08:45 - 09:00	0	0	16	2	0	0	0	18	18.0	0	0	14	1	0	0	0	15	15.0
Hourly Total	0	0	100	11	0	0	0	111	111.0	0	1	47	8	4	0	0	60	61.4
09:00 - 09:15	0	0	5	3	0	0	0	8	8.0	0	0	7	0	0	0	0	7	7.0
09:15 - 09:30	0	0	10	1	0	0	0	11	11.0	0	1	5	2	0	0	1	9	9.4
09:30 - 09:45	0	0	3	0	0	0	0	3	3.0	0	0	7	2	0	0	0	9	9.0
09:45 - 10:00	0	0	5	3	0	0	0	8	8.0	0	0	9	2	0	1	0	12	13.3
Hourly Total	0	0	23	7	0	0	0	30	30.0	0	1	28	6	0	1	1	37	38.7
10:00 - 10:15	0	0	4	1	1	0	0	6	6.5	0	0	12	2	0	0	1	15	16.3
10:15 - 10:30	0	0	1	2	0	0	0	3	3.0	0	0	12	1	0	1	0	14	15.3
10:30 - 10:45	0	1	5	0	0	0	0	6	5.4	0	0	7	2	3	0	0	12	13.5
10:45 - 11:00	0	0	7	2	0	0	0	9	9.0	0	0	8	3	0	1	0	12	13.3
Hourly Total	0	1	17	5	1	0	0	24	23.9	0	0	39	8	3	3	0	53	58.4
11:00 - 11:15	0	1	4	0	0	0	0	5	4.4	0	0	14	1	1	0	0	16	16.5
11:15 - 11:30	0	1	6	0	0	0	0	7	6.4	0	0	8	3	1	0	1	13	14.5
11:30 - 11:45	0	0	7	0	0	0	0	7	7.0	0	0	16	0	1	0	0	17	17.5
11:45 - 12:00	0	0	7	1	0	0	0	8	8.0	0	0	12	2	0	0	0	14	14.0
Hourly Total	0	2	24	1	0	0	0	27	25.8	0	0	50	6	3	0	1	60	62.5
12:00 - 12:15	0	0	3	0	0	0	0	3	3.0	0	1	13	1	0	0	0	15	14.4
12:15 - 12:30	0	0	4	0	1	0	0	5	5.5	0	0	9	0	0	0	1	10	11.3
12:30 - 12:45	0	0	10	2	0	0	0	12	12.0	0	0	11	1	0	1	0	13	14.3
12:45 - 13:00	0	0	8	1	0	0	0	9	9.0	0	0	13	1	0	1	0	15	16.3
Hourly Total	0	0	25	3	1	0	0	29	29.5	0	1	46	3	0	3	0	53	56.3
13:00 - 13:15	0	0	8	1	0	0	0	9	9.0	0	0	8	1	1	1	0	11	12.8
13:15 - 13:30	0	0	4	0	0	0	0	4	4.0	0	0	12	0	2	1	1	16	19.3
13:30 - 13:45	0	0	4	0	0	0	0	4	4.0	0	0	9	4	0	2	0	15	17.6
13:45 - 14:00	0	0	7	0	0	0	0	7	7.0	0	0	12	0	0	0	0	13	13.5
Hourly Total	0	0	23	1	0	0	0	24	24.0	0	0	41	5	4	4	1	55	63.2
14:00 - 14:15	0	0	9	0	0	0	0	9	9.0	0	0	11	2	1	0	0	14	14.5
14:15 - 14:30	0	0	10	1	0	0	0	11	11.0	1	0	5	1	1	0	0	8	7.7
14:30 - 14:45	0	1	10	4	0	0	0	15	14.4	0	1	12	1	1	0	0	15	14.9
14:45 - 15:00	0	0	13	0	0	0	0	13	13.0	0	0	11	3	0	0	0	14	14.0
Hourly Total	0	1	42	5	0	0	0	48	47.4	1	1	39	7	3	0	0	51	51.1
15:00 - 15:15	0	0	23	3	0	0	0	26	26.0	0	0	14	1	0	0	0	15	15.0
15:15 - 15:30	0	0	8	1	0	0	0	9	9.0	0	1	14	2	0	0	1	18	18.4
15:30 - 15:45	0	0	7	2	0	0	0	9	9.0	0	0	15	1	0	0	0	16	16.0
15:45 - 16:00	0	1	14	0	0	0	0	15	14.4	0	1	15	3	1	1	0	21	22.2
Hourly Total	0	1	52	6	0	0	0	59	58.4	0	2	58	7	1	1	1	70	71.6
16:00 - 16:15	0	0	13	2	0	0	0	15	15.0	0	0	15	1	0	0	0	16	16.0
16:15 - 16:30	0	0	8	1	0	0	0	9	9.0	0	0	16	3	1	0	0	20	20.5
16:30 - 16:45	0	0	15	2	0	0	0	17	17.0	0	0	18	1	1	0	0	20	20.5
16:45 - 17:00	0	0	7	0	0	0	0	7	7.0	1	0	15	2	0	0	0	18	17.2
Hourly Total	0	0	43	5	0	0	0	48	48.0	1	0	64	7	2	0	0	74	74.2
17:00 - 17:15	0	0	14	0	1	0	0	15	15.5	0	0	19	1	0	0	0	20	20.0
17:15 - 17:30	0	0	12	2	0	0	0	14	14.0	1	0	23	3	0	0	1	28	28.2
17:30 - 17:45	0	0	11	0	1	0	0	12	12.5	2	0	23	4	1	0	0	30	28.9
17:45 - 18:00	0	0	11	2	0	0</												

Spondon

Thursday 13th October 2022

Junction: 3

Approach: Sitwell Street West

TIME	To Sitwell Street (E)								To Willowcroft Road									
	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUS
00:00 - 00:15	0	0	3	0	0	0	0	3	3.0	0	0	1	0	0	0	0	1	1.0
00:15 - 00:30	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
00:30 - 00:45	0	0	2	0	1	0	0	3	3.5	0	0	0	1	0	0	0	1	1.0
00:45 - 01:00	0	0	4	1	0	0	0	5	5.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	15	1	1	0	0	17	17.5	0	0	1	1	0	0	0	2	2.0
01:00 - 01:15	0	0	4	0	0	0	0	4	4.0	0	0	0	0	0	0	0	0	0.0
01:15 - 01:30	0	0	4	0	0	0	0	4	4.0	0	0	0	2	0	0	0	2	2.0
01:30 - 01:45	0	0	4	0	0	0	0	4	4.0	0	0	3	0	0	0	0	3	3.0
01:45 - 02:00	0	0	1	1	2	0	0	4	5.0	0	0	1	0	0	0	0	1	1.0
Hourly Total	0	0	13	1	2	0	0	16	17.0	0	0	4	2	0	0	0	6	6.0
02:00 - 02:15	0	0	2	0	0	0	0	2	2.0	0	0	1	0	0	0	0	1	1.0
02:15 - 02:30	0	0	1	0	0	0	0	1	1.0	0	0	1	0	0	0	0	2	2.0
02:30 - 02:45	0	0	1	0	1	0	0	2	2.5	0	0	2	0	1	0	0	3	3.5
02:45 - 03:00	0	0	1	1	0	0	0	2	2.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	5	1	1	0	0	7	7.5	0	0	4	1	1	0	0	6	6.5
03:00 - 03:15	0	0	2	0	0	1	0	3	4.3	0	0	2	0	0	0	0	2	2.0
03:15 - 03:30	0	0	2	1	0	0	0	3	3.0	0	0	1	0	0	0	0	1	1.0
03:30 - 03:45	0	0	4	0	0	0	0	4	4.0	0	0	0	0	0	0	0	0	0.0
03:45 - 04:00	0	0	1	0	1	0	0	2	2.5	0	0	2	0	0	0	0	2	2.0
Hourly Total	0	0	9	1	1	1	0	12	13.8	0	0	5	0	0	0	0	5	5.0
04:00 - 04:15	0	0	3	0	0	0	0	3	3.0	0	0	2	0	0	0	0	2	2.0
04:15 - 04:30	0	0	5	1	1	0	0	7	7.5	0	0	1	0	0	0	0	1	1.0
04:30 - 04:45	0	0	8	4	1	0	0	13	13.5	0	0	0	1	0	0	0	1	1.0
04:45 - 05:00	0	0	14	1	0	0	0	15	15.0	0	0	1	0	0	0	0	1	1.0
Hourly Total	0	0	30	6	2	0	0	38	39.0	0	0	4	1	0	0	0	5	5.0
05:00 - 05:15	0	0	3	0	0	0	0	3	3.0	0	0	4	0	0	0	0	4	4.0
05:15 - 05:30	0	0	7	1	0	1	0	9	10.3	0	0	7	2	0	0	0	9	9.0
05:30 - 05:45	0	0	18	2	4	1	0	25	28.3	0	0	13	0	0	0	0	13	13.0
05:45 - 06:00	0	0	19	3	0	2	0	24	26.6	0	0	14	3	0	1	1	19	21.3
Hourly Total	0	0	47	6	4	4	0	61	65.2	0	0	38	5	0	1	1	45	47.3
06:00 - 06:15	0	0	24	2	0	3	0	29	32.9	0	0	10	1	1	0	0	12	12.5
06:15 - 06:30	0	0	34	1	1	2	0	38	41.1	0	0	12	2	0	0	0	14	14.0
06:30 - 06:45	0	0	19	4	3	1	1	28	31.8	0	0	18	1	0	0	0	19	19.0
06:45 - 07:00	0	0	22	7	2	0	1	32	34.0	0	0	20	8	0	0	0	28	28.0
Hourly Total	0	0	99	14	6	6	2	127	139.8	0	0	60	12	1	0	0	73	73.5
07:00 - 07:15	0	0	29	10	2	3	0	44	48.9	0	0	25	1	3	1	0	30	32.8
07:15 - 07:30	0	1	43	12	3	2	1	62	66.5	0	1	27	5	1	2	0	36	38.5
07:30 - 07:45	0	0	53	9	7	1	1	71	76.8	0	0	47	3	1	0	0	51	51.5
07:45 - 08:00	0	0	53	15	1	1	2	72	75.8	0	0	50	9	1	2	0	62	65.1
Hourly Total	0	1	178	46	13	7	4	249	268.0	0	1	149	18	6	5	0	179	187.9
08:00 - 08:15	0	1	41	11	9	2	1	65	72.5	0	1	50	8	2	0	0	61	61.4
08:15 - 08:30	0	0	53	2	5	1	3	64	70.8	0	2	70	11	1	2	0	86	87.9
08:30 - 08:45	0	0	66	9	4	4	2	85	94.2	0	0	54	4	0	0	0	58	58.0
08:45 - 09:00	0	0	65	10	2	2	1	80	84.6	0	0	85	8	0	0	0	93	93.0
Hourly Total	0	1	225	32	20	9	7	294	322.1	0	3	259	31	3	2	0	298	300.3
09:00 - 09:15	0	0	52	7	3	5	1	68	77.0	0	0	49	4	1	0	0	54	54.5
09:15 - 09:30	0	0	67	12	2	6	1	88	97.8	0	1	43	10	2	1	0	57	58.7
09:30 - 09:45	0	0	51	10	3	3	1	68	74.4	0	0	35	4	0	0	0	39	39.0
09:45 - 10:00	0	1	47	16	3	3	1	71	76.8	0	0	40	5	3	0	0	48	49.5
Hourly Total	0	1	217	45	11	17	4	295	326.0	0	1	167	23	6	1	0	198	201.7
10:00 - 10:15	0	0	51	11	6	0	1	69	73.0	0	0	34	8	2	0	0	44	45.0
10:15 - 10:30	1	0	60	15	3	1	1	81	84.0	0	0	35	6	2	0	0	43	44.0
10:30 - 10:45	0	0	60	17	5	1	1	84	88.8	0	0	32	3	3	0	0	38	39.5
10:45 - 11:00	0	0	53	8	4	6	1	72	82.8	0	1	31	6	4	0	1	43	45.4
Hourly Total	1	0	224	51	18	8	4	306	328.6	0	1	132	23	11	0	1	168	173.9
11:00 - 11:15	0	0	46	11	1	0	1	59	60.5	0	0	33	7	1	0	0	41	41.5
11:15 - 11:30	0	0	65	13	4	0	1	83	86.0	0	0	34	4	2	0	0	40	41.0
11:30 - 11:45	0	0	63	8	7	2	1	81	88.1	0	0	24	1	2	0	0	27	28.0
11:45 - 12:00	0	1	66	12	3	6	1	89	96.7	0	0	30	5	0	0	0	35	35.0
Hourly Total	0	1	240	44	15	8	4	312	333.3	0	0	121	17	5	0	0	143	145.5
12:00 - 12:15	0	0	64	10	3	0	1	78	80.5	0	0	28	6	1	0	0	35	35.5
12:15 - 12:30	1	0	72	16	3	2	1	95	99.3	0	1	27	11	1	1	0	41	42.2
12:30 - 12:45	1	0	60	16	6	4	1	88	96.4	0	0	23	4	1	1	1	30	32.8
12:45 - 13:00	0	1	62	11	3	2	2	81	86.5	1	0	28	6	2	0	0	37	37.2
Hourly Total	2	1	258	53	15	8	5	342	362.7	1	1	106	27	5	2	1	143	147.7
13:00 - 13:15	0	0	72	9	5	0	1	87	90.5	0	1	37	2	0	0	0	40	39.4
13:15 - 13:30	0	0	57	11	3	1	1	73	76.8	0	0	29	5	1	1	0	36	37.8
13:30 - 13:45	0	0	55	12	2	1	1	71	74.3	0	0	31	11	0	0	0	42	42.0
13:45 - 14:00	0	0	70	11	5	2	1	89	95.1	0	0	30	2	1	0	0	33	33.5
Hourly Total	0	0	254	43	15	4	4	320	336.7	0	1	127	20	2	1	0	151	153.7
14:00 - 14:15	1	0	55	8	2	0	1	67	68.2	0	0	34	7	1	0	0	42	42.5
14:15 - 14:30	0	2	76	18	5	2	1	104	108.9	0	1	32	4	2	0	0	39	39.4
14:30 - 14:45	0	1	82	12	3	1	1	100	103.2	0	0	33	3	0	1	0	37	38.3
14:45 - 15:00	0	1	80	9	4	1	1	96	99.7	0	0	31	1	0	0	0	32	32.0
Hourly Total	1	4	293	47	14	4	4	367	380.0	0	1	130	15	3	1	0	150	152.2
15:00 - 15:15	0	4	86	18	7	2	1	118	122.7	0	0	55	7	0	0	0	62	62.0
15:15 - 15:30	0	2	97	20	5	0	1	125	127.3	0	0	66	1	1	0	0	68	68.5
15:30 - 15:45	0	1	74	12	10	4	1	102	112.6	0	1	57	5	3	0	0	66	66.9
15:45 - 16:00	0	0	95	15	2	2	1	115	117.6	0	0	43	3	0	1	0	47	48.3
Hourly Total	0	7	360	65	24	8	4	458	480.2	0	1	224	16	4	1	0	243	245.7
16:00 - 16:15	1	0	101	20	4	1	1	128	131.5	1	0	51	8	2	0	1	63	64.2
16:15 - 16:30	2	2	112	16	3	2	2	139	142.3	0	0	58	5	2	0	0	65	66.0
16:30 - 16:45	0	4	113	19	1	0	1	138	137.1	0	0	108	12	2	0	0	122	123.0
16:45 - 17:00	0	1	119	17	3	1	0	141	143.2	0	1	43	6	0	0	0	50	49.4
Hourly Total	3	7	445	72	11	4	4	546	554.1	1	1	260	31	6	0	1	300	302.6
17:00 - 17:15	1	0	128	18	3	0	3	153	156.7	0	1	45</						

Spondon

Thursday 13th October 2022

Junction: 4

Approach: A6096

TIME	To A6005 (E)									To A6005 (W)								
	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
00:00 - 00:15	0	0	1	0	0	0	0	1	1.0	0	0	6	0	0	0	0	6	6.0
00:15 - 00:30	0	0	1	0	0	0	0	0	0.0	0	0	8	0	0	0	0	8	8.0
00:30 - 00:45	0	0	0	0	0	0	0	0	0.0	0	0	5	1	0	0	0	6	6.0
00:45 - 01:00	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	1	0	2	3.3
Hourly Total	0	0	1	0	0	0	0	1	1.0	0	0	20	1	0	1	0	22	23.3
01:00 - 01:15	0	0	0	0	0	0	0	0	0.0	0	0	3	0	0	0	0	3	3.0
01:15 - 01:30	0	0	0	0	0	0	0	0	0.0	0	0	2	1	1	0	0	4	4.5
01:30 - 01:45	0	0	1	0	0	0	0	1	1.0	0	0	8	0	0	0	0	8	8.0
01:45 - 02:00	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0
Hourly Total	0	0	1	0	0	0	0	1	1.0	0	0	15	1	1	0	0	17	17.5
02:00 - 02:15	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
02:15 - 02:30	0	0	0	0	0	0	0	0	0.0	0	0	3	2	0	0	0	5	5.0
02:30 - 02:45	0	0	0	0	0	0	0	0	0.0	0	0	3	0	0	1	0	4	5.3
02:45 - 03:00	0	0	0	0	0	0	0	0	0.0	0	0	6	0	0	0	0	6	6.0
Hourly Total	0	0	1	0	0	0	0	1	1.0	0	0	12	2	0	1	0	15	16.3
03:00 - 03:15	0	0	0	0	0	0	0	0	0.0	0	0	2	0	1	0	0	3	3.5
03:15 - 03:30	0	0	0	0	0	0	0	0	0.0	0	0	2	0	1	0	0	3	3.5
03:30 - 03:45	0	0	0	0	0	0	0	0	0.0	0	0	6	0	0	0	0	6	6.0
03:45 - 04:00	0	0	3	0	0	0	0	3	3.0	0	0	8	1	0	0	0	9	9.0
Hourly Total	0	0	3	0	0	0	0	3	3.0	0	0	18	1	2	0	0	21	22.0
04:00 - 04:15	0	0	1	0	0	0	0	0	0.0	0	0	1	2	1	1	1	6	4.5
04:15 - 04:30	0	0	0	0	0	0	0	0	0.0	0	0	10	2	1	2	0	15	18.1
04:30 - 04:45	0	0	1	0	0	0	0	1	1.0	0	0	4	3	1	0	0	8	8.5
04:45 - 05:00	0	0	0	0	0	0	0	0	0.0	0	0	7	0	1	0	1	9	10.5
Hourly Total	0	0	1	0	0	0	0	1	1.0	0	0	22	7	4	2	1	36	41.6
05:00 - 05:15	0	0	1	0	0	0	0	1	1.0	0	2	37	5	1	0	0	45	44.3
05:15 - 05:30	0	0	0	1	0	0	0	1	1.0	0	1	47	2	0	1	0	51	51.7
05:30 - 05:45	0	1	0	1	0	0	0	2	1.4	0	2	68	8	2	0	0	80	79.8
05:45 - 06:00	0	0	4	1	0	0	0	5	5.0	0	1	67	7	0	0	1	76	76.4
Hourly Total	0	1	5	3	0	0	0	9	8.4	0	6	219	22	3	1	1	252	252.2
06:00 - 06:15	0	0	1	0	0	0	0	1	1.0	1	0	51	10	2	1	1	66	68.5
06:15 - 06:30	0	0	3	1	0	0	0	4	4.0	1	0	68	6	2	1	0	78	79.5
06:30 - 06:45	0	0	3	0	0	0	0	3	3.0	2	0	94	24	4	1	1	126	128.7
06:45 - 07:00	0	0	2	0	0	0	0	2	2.0	0	0	125	17	7	2	2	153	161.1
Hourly Total	0	0	9	1	0	0	0	10	10.0	4	0	338	57	15	5	4	423	437.8
07:00 - 07:15	1	0	11	2	0	0	1	15	15.2	0	0	123	20	9	2	2	156	165.1
07:15 - 07:30	0	0	7	2	0	0	0	9	9.0	2	1	136	24	6	3	3	175	182.7
07:30 - 07:45	0	0	6	1	1	0	0	8	8.5	0	4	203	28	5	0	1	241	242.1
07:45 - 08:00	0	0	4	2	3	0	0	9	10.5	0	1	160	28	2	6	2	199	209.2
Hourly Total	1	0	28	7	4	0	1	41	43.2	2	6	622	100	22	11	8	771	799.1
08:00 - 08:15	0	0	14	3	2	0	0	19	20.0	0	4	162	19	5	0	3	193	196.1
08:15 - 08:30	0	0	13	1	0	0	0	14	14.0	0	6	174	24	3	2	1	210	211.5
08:30 - 08:45	0	1	16	3	0	0	0	20	19.4	1	2	146	18	5	1	3	176	180.8
08:45 - 09:00	0	0	21	4	0	0	0	25	25.0	0	0	186	9	6	3	1	205	212.9
Hourly Total	0	1	64	11	2	0	0	78	78.4	1	12	668	70	19	6	8	784	801.3
09:00 - 09:15	0	0	13	2	1	0	0	16	16.5	0	0	164	20	3	0	1	188	190.5
09:15 - 09:30	1	0	13	4	1	0	0	19	18.7	1	1	122	14	7	2	3	150	157.7
09:30 - 09:45	0	0	11	5	0	0	0	16	16.0	0	2	132	23	8	3	1	169	176.7
09:45 - 10:00	0	1	11	0	0	0	0	12	11.4	0	2	114	14	3	1	4	138	143.6
Hourly Total	1	1	48	11	2	0	0	63	62.6	1	5	632	71	21	6	9	645	663.5
10:00 - 10:15	0	0	11	3	0	0	0	14	14.0	1	0	111	17	6	3	0	138	144.1
10:15 - 10:30	0	0	11	0	1	0	0	12	12.5	0	0	105	15	5	2	2	129	136.1
10:30 - 10:45	0	0	13	1	0	0	0	14	14.0	0	2	101	14	11	2	4	134	144.9
10:45 - 11:00	0	0	9	2	0	0	0	11	11.0	0	0	93	17	8	1	2	121	128.3
Hourly Total	0	0	44	6	1	0	0	51	51.5	1	2	410	63	30	8	8	522	553.4
11:00 - 11:15	0	0	13	1	0	0	0	14	14.0	0	1	109	17	5	0	2	134	137.9
11:15 - 11:30	0	0	8	3	0	0	0	11	11.0	0	0	117	14	6	1	2	140	146.3
11:30 - 11:45	0	0	4	2	2	0	0	8	9.0	0	2	107	11	6	2	2	130	136.4
11:45 - 12:00	0	0	13	1	1	0	0	15	15.5	0	0	88	18	4	0	2	112	116.0
Hourly Total	0	0	38	7	3	0	0	48	48.5	0	3	421	66	21	3	8	516	536.6
12:00 - 12:15	0	1	13	2	1	0	0	17	16.9	0	0	105	21	2	0	1	129	131.0
12:15 - 12:30	0	0	5	0	1	1	0	7	8.8	0	3	101	19	4	2	3	132	137.8
12:30 - 12:45	0	0	10	0	0	0	0	10	10.0	0	1	107	8	8	2	3	129	138.0
12:45 - 13:00	1	0	10	0	0	0	0	11	10.2	0	0	91	8	9	0	4	112	120.5
Hourly Total	1	1	38	2	2	1	0	45	45.9	0	4	404	56	23	4	11	502	527.3
13:00 - 13:15	0	0	15	1	0	0	0	16	16.0	0	1	123	20	8	0	1	153	157.4
13:15 - 13:30	0	1	8	3	1	0	0	13	12.9	0	2	105	12	4	3	1	127	132.7
13:30 - 13:45	0	0	7	5	0	0	0	12	12.0	1	1	109	14	5	2	4	136	143.7
13:45 - 14:00	0	0	9	5	0	0	0	14	14.0	0	1	100	13	4	3	2	123	130.3
Hourly Total	0	1	38	14	1	0	0	56	54.9	1	5	437	59	21	6	8	539	564.1
14:00 - 14:15	0	0	7	2	0	0	0	9	9.0	0	0	69	23	8	3	1	104	112.9
14:15 - 14:30	0	0	13	3	1	0	0	17	17.5	0	3	109	11	3	1	2	129	132.0
14:30 - 14:45	0	0	7	4	0	1	0	12	13.3	1	1	123	14	2	0	2	143	144.6
14:45 - 15:00	0	0	15	3	0	0	0	18	18.0	0	0	97	9	0	1	3	110	114.3
Hourly Total	0	0	42	12	1	1	0	56	57.8	1	4	398	57	13	5	8	486	503.8
15:00 - 15:15	0	0	8	2	0	0	0	10	10.0	0	0	117	15	4	0	2	138	142.0
15:15 - 15:30	1	0	15	3	1	0	0	20	19.7	0	1	111	18	6	3	1	140	147.3
15:30 - 15:45	0	3	14	1	0	0	0	18	16.2	0	3	126	12	6	0	2	149	152.2
15:45 - 16:00	0	0	11	4	0	0	0	15	15.0	0	0	116	10	6	2	3	137	145.6
Hourly Total	1	3	48	10	1	0	0	63	60.9	0	4	479	56	22	6	8	584	587.1
16:00 - 16:15	0	0	16	1	0	0	0	17	17.0	0	0	116	13	2	1	2	134	138.3
16:15 - 16:30	0	0	14	1	0	0	0	15	15.0	0	2	109	24	5	0	1	141	143.3
16:30 - 16:45	0	0	10	2	0	0	0	12	12.0	0	0	102	7	2	1	1	113	116.3
16:45 - 17:00	1	1	11	1	0	0	0	14	12.6	1	0	102	12	1	3	4	123	130.6
Hourly Total	1	1	51	5	0	0	0	58	56.6	1	2	429	56	10	5	8	511	528.5
17:00 - 17:15	0	1	16	4	1													

Spondon

Thursday 13th October 2022

Junction: 4

Approach: A6005 East

TIME	To A6005 (W)								To A6096									
	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
00:00 - 00:15	0	0	3	0	1	0	0	4	5.8	0	0	2	0	0	0	0	2	2.0
00:15 - 00:30	2	0	0	0	1	0	0	1	3.9	0	0	0	0	0	0	0	0	0.0
00:30 - 00:45	0	0	5	0	0	0	1	6	7.0	0	0	0	0	0	0	0	0	0.0
00:45 - 01:00	0	0	1	1	0	0	0	2	2.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	2	0	11	1	1	0	2	17	17.9	0	0	2	0	0	0	0	2	2.0
01:00 - 01:15	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
01:15 - 01:30	0	0	3	0	0	0	0	3	3.0	0	0	2	1	0	0	0	3	3.0
01:30 - 01:45	0	0	2	1	1	0	0	4	4.5	0	0	0	0	0	0	0	0	0.0
01:45 - 02:00	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	7	1	1	0	0	9	9.5	0	0	2	1	0	0	0	3	3.0
02:00 - 02:15	0	0	1	0	1	0	0	2	2.5	0	0	0	0	0	0	0	0	0.0
02:15 - 02:30	0	0	0	0	1	0	0	1	1.5	0	0	1	0	0	0	0	1	1.0
02:30 - 02:45	0	0	4	0	0	0	0	4	4.0	0	0	0	0	0	0	0	0	0.0
02:45 - 03:00	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	6	0	2	0	0	8	9.0	0	0	1	0	0	0	0	1	1.0
03:00 - 03:15	0	0	2	1	0	0	0	3	3.0	0	0	0	0	0	0	0	0	0.0
03:15 - 03:30	0	0	1	1	0	0	0	2	2.0	0	0	0	0	0	0	0	0	0.0
03:30 - 03:45	0	0	2	0	0	0	0	2	2.0	0	0	0	0	0	0	0	0	0.0
03:45 - 04:00	0	0	3	0	0	0	0	3	3.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	8	2	0	0	0	10	10.0	0	0	0	0	0	0	0	0	0.0
04:00 - 04:15	0	0	3	0	0	0	0	3	3.0	0	0	0	0	0	0	0	0	0.0
04:15 - 04:30	0	0	2	0	1	0	0	3	3.5	0	0	0	0	0	0	0	0	0.0
04:30 - 04:45	0	0	4	1	0	0	0	5	5.0	0	0	0	0	0	0	0	0	0.0
04:45 - 05:00	0	0	4	0	0	0	0	4	4.0	0	0	0	0	0	0	0	0	0.0
Hourly Total	0	0	13	1	1	0	0	15	15.5	0	0	0	0	0	0	0	0	0.0
05:00 - 05:15	1	0	8	0	0	0	0	10	9.7	0	0	0	0	0	0	0	0	0.0
05:15 - 05:30	0	0	9	0	2	0	0	11	12.0	0	0	0	1	0	0	0	1	1.0
05:30 - 05:45	0	0	15	2	1	0	0	18	18.5	0	0	1	1	0	0	0	2	2.0
05:45 - 06:00	0	0	8	0	0	1	0	9	10.3	0	0	0	0	0	0	0	0	0.0
Hourly Total	1	0	40	2	4	1	0	48	50.5	0	0	1	2	0	0	0	3	3.0
06:00 - 06:15	0	1	17	2	0	2	1	23	26.0	0	0	0	0	0	1	0	0	1.5
06:15 - 06:30	2	0	22	2	0	1	0	27	26.7	0	0	0	0	0	0	0	0	0.0
06:30 - 06:45	0	0	35	5	4	0	0	44	46.0	0	0	0	0	0	0	0	0	0.0
06:45 - 07:00	1	0	37	5	7	0	1	51	54.7	0	0	2	0	0	0	0	2	2.0
Hourly Total	3	1	111	14	11	3	2	145	153.4	0	0	2	0	1	0	0	3	3.5
07:00 - 07:15	1	2	37	11	4	0	1	56	57.0	0	0	4	2	0	0	0	6	6.0
07:15 - 07:30	0	2	55	12	2	0	1	72	72.8	0	0	6	1	0	0	0	7	7.0
07:30 - 07:45	3	2	44	17	5	0	1	72	71.9	1	0	10	1	0	0	0	12	11.2
07:45 - 08:00	3	0	83	15	4	1	1	107	108.9	0	1	10	4	1	0	0	16	15.9
Hourly Total	7	6	219	55	15	1	4	307	310.6	1	1	30	8	1	0	0	41	40.1
08:00 - 08:15	2	0	86	10	3	0	0	101	100.9	1	1	10	2	1	0	0	15	14.1
08:15 - 08:30	5	0	65	14	2	1	1	88	87.3	0	0	11	7	0	0	0	18	18.0
08:30 - 08:45	0	0	88	12	2	0	0	102	103.0	0	0	11	4	1	0	0	16	16.5
08:45 - 09:00	0	1	66	11	1	0	2	81	82.9	0	0	15	2	1	0	0	18	18.5
Hourly Total	7	1	305	47	8	1	3	372	374.1	1	1	47	15	3	0	0	67	67.1
09:00 - 09:15	2	0	71	12	3	0	1	89	89.9	0	0	6	3	0	0	0	9	9.0
09:15 - 09:30	1	0	65	12	5	0	1	84	86.7	0	1	6	0	0	0	0	7	6.4
09:30 - 09:45	1	1	69	7	1	1	0	80	80.4	0	0	5	2	0	0	0	7	7.0
09:45 - 10:00	2	0	69	6	3	0	1	81	81.9	0	0	9	4	0	2	0	15	17.6
Hourly Total	6	1	274	37	12	1	3	334	338.9	0	1	26	9	0	2	0	38	40.0
10:00 - 10:15	0	0	36	11	1	2	1	51	55.1	0	0	6	2	0	0	0	1	9
10:15 - 10:30	0	0	51	11	2	0	1	65	67.0	0	0	8	1	1	1	1	12	14.8
10:30 - 10:45	0	2	57	13	3	2	1	78	81.9	0	0	3	1	1	0	1	6	7.5
10:45 - 11:00	1	1	48	9	1	0	0	60	59.1	0	0	8	0	2	1	1	12	15.3
Hourly Total	1	3	192	44	7	4	3	254	263.1	0	0	25	4	4	2	4	39	47.6
11:00 - 11:15	0	2	60	9	2	2	1	76	79.4	0	0	8	0	1	0	0	9	9.5
11:15 - 11:30	0	0	58	9	0	1	1	69	71.3	0	0	5	3	0	0	2	10	12.0
11:30 - 11:45	1	1	55	9	1	0	1	68	68.1	0	0	7	1	1	0	1	10	11.5
11:45 - 12:00	0	1	56	14	1	0	0	72	71.9	0	0	8	4	0	0	1	13	14.0
Hourly Total	1	4	229	45	4	3	3	285	290.7	0	0	28	8	2	4	4	42	47.0
12:00 - 12:15	1	0	55	13	1	2	1	73	76.3	0	1	9	0	0	0	1	11	11.7
12:15 - 12:30	0	0	65	8	2	0	1	76	78.0	0	0	5	0	1	0	2	8	10.5
12:30 - 12:45	0	0	63	12	3	0	0	78	79.5	0	0	10	1	0	1	1	13	15.3
12:45 - 13:00	0	2	66	8	3	0	1	80	81.3	1	0	8	0	0	2	1	12	14.8
Hourly Total	1	2	249	41	9	2	3	307	315.1	1	1	32	1	1	4	4	44	52.3
13:00 - 13:15	2	0	43	4	4	0	0	53	53.4	0	0	7	0	0	0	0	7	7.0
13:15 - 13:30	1	1	61	7	4	0	2	76	78.6	0	0	6	0	1	1	2	10	13.8
13:30 - 13:45	0	0	53	11	1	1	0	66	67.8	0	0	10	1	0	2	1	14	17.6
13:45 - 14:00	0	1	54	12	1	0	1	69	69.9	0	0	7	4	0	0	1	12	13.5
Hourly Total	3	2	211	34	10	1	3	254	259.7	0	0	30	5	1	3	4	43	51.4
14:00 - 14:15	0	1	65	14	3	2	1	86	90.5	0	0	7	1	1	0	1	10	11.0
14:15 - 14:30	0	0	68	11	1	0	1	81	82.5	0	0	6	2	0	0	1	9	10.0
14:30 - 14:45	0	0	72	14	2	2	0	90	93.6	0	0	12	0	0	0	1	13	14.0
14:45 - 15:00	0	0	59	12	2	0	1	74	76.0	0	0	9	0	0	0	1	10	11.0
Hourly Total	0	1	264	51	8	4	3	331	342.6	0	0	34	3	1	0	4	42	46.5
15:00 - 15:15	4	0	53	15	1	0	1	74	72.3	0	0	10	2	0	0	0	12	12.0
15:15 - 15:30	0	0	83	16	0	0	1	100	101.0	0	0	11	1	0	0	2	14	16.0
15:30 - 15:45	1	0	67	9	3	0	0	80	80.7	1	0	7	3	0	0	1	12	12.2
15:45 - 16:00	1	1	88	9	0	1	1	101	101.9	0	0	10	0	1	1	1	13	15.8
Hourly Total	6	1	291	49	4	1	3	358	359.9	1	0	38	6	1	4	4	51	56.0
16:00 - 16:15	0	1	76	13	1	0	1	92	92.9	0	0	6	1	1	0	0	8	8.5
16:15 - 16:30	0	1	96	12	2	0	0	111	111.2	0	0	17	2	1	0	2	22	24.5
16:30 - 16:45	1	2	95	17	1	0	1	117	116.5	0	1	14	0	2	0	1	18	19.4
16:45 - 17:00	0	1	96	7	0	0	1	105	105.4	0	0	13	2	0	0	1	16	17.0
Hourly Total	2	4	363	49	4	0	3	425	426.0	0	1	50	5	4	0	4	64	69.4
17:00 - 17:15	2	3	72	6	1	0	2	86	85.1	0	0	17	1	0	0	0	18	18.0
17:15 - 17:30	2	0	88	5	0	1	2	98	99.7	1	0	20	6					

Spondon

Thursday 13th October 2022

Junction: 4

Approach: A6005 West

TIME	To A6096								To A6005 (E)									
	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs	CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	PCUs
00:00 - 00:15	0	0	0	0	0	0	0	0	0.0	1	0	3	0	0	0	0	4	3.2
00:15 - 00:30	0	0	0	0	0	0	0	0	0.0	0	0	7	0	0	0	0	7	7.0
00:30 - 00:45	0	0	1	0	0	0	0	1	1.0	0	0	0	0	0	0	0	0	0.0
00:45 - 01:00	0	0	1	0	0	0	0	1	1.0	0	0	4	0	1	0	0	5	5.6
Hourly Total	0	0	2	0	0	0	0	2	2.0	1	0	14	0	1	0	0	16	15.7
01:00 - 01:15	0	0	0	1	0	0	0	1	1.0	0	0	3	0	2	0	0	5	6.0
01:15 - 01:30	0	0	0	0	0	0	0	0	0.0	0	0	3	0	0	0	0	3	3.0
01:30 - 01:45	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0
01:45 - 02:00	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0
Hourly Total	0	0	0	1	0	0	0	1	1.0	0	0	9	0	2	0	0	11	12.0
02:00 - 02:15	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	0.0
02:15 - 02:30	0	0	0	0	0	0	0	0	0.0	0	0	1	0	0	0	0	1	1.0
02:30 - 02:45	0	0	0	1	0	0	0	1	1.0	0	0	2	0	1	0	0	3	3.5
02:45 - 03:00	0	0	0	0	0	0	0	0	0.0	0	0	3	0	1	0	0	4	4.5
Hourly Total	0	0	0	1	0	0	0	1	1.0	0	0	6	0	2	2	0	10	13.6
03:00 - 03:15	0	0	0	0	0	0	0	0	0.0	1	0	0	1	0	0	0	2	1.2
03:15 - 03:30	0	0	1	0	0	0	0	1	1.0	0	0	1	0	0	0	0	1	1.0
03:30 - 03:45	0	0	0	0	0	0	0	0	0.0	0	0	0	0	0	1	0	1	2.3
03:45 - 04:00	0	0	0	0	0	0	0	0	0.0	0	0	2	0	0	0	0	2	2.0
Hourly Total	0	0	1	0	0	0	0	1	1.0	1	0	3	1	0	1	0	6	6.5
04:00 - 04:15	0	0	1	0	0	0	0	1	1.0	0	0	2	0	0	0	0	2	2.0
04:15 - 04:30	0	0	1	0	0	0	0	2	2.0	0	0	2	0	0	0	0	2	2.0
04:30 - 04:45	0	0	0	0	0	0	0	0	0.0	0	0	2	1	0	0	0	3	3.0
04:45 - 05:00	0	0	1	1	0	0	0	2	2.0	0	0	3	0	0	1	0	4	5.3
Hourly Total	0	0	2	2	0	0	0	4	4.0	0	0	9	1	0	1	0	11	12.3
05:00 - 05:15	0	0	0	0	0	0	0	0	0.0	0	0	3	0	0	0	0	3	3.0
05:15 - 05:30	0	0	0	0	0	0	0	0	0.0	0	0	6	1	1	0	0	8	8.5
05:30 - 05:45	0	0	0	0	0	0	0	0	0.0	1	0	7	0	0	2	0	10	11.8
05:45 - 06:00	0	0	1	0	1	0	0	2	2.5	0	1	13	1	0	0	1	16	16.4
Hourly Total	0	0	1	0	1	0	0	2	2.5	1	1	29	2	1	2	1	37	39.7
06:00 - 06:15	0	0	1	0	0	0	1	2	3.0	2	0	8	2	1	0	0	13	11.9
06:15 - 06:30	0	0	1	0	0	0	0	1	1.0	3	0	10	2	2	0	1	18	17.6
06:30 - 06:45	0	0	2	0	1	1	1	5	7.8	1	0	19	0	2	0	1	23	24.2
06:45 - 07:00	0	0	2	1	3	0	1	7	9.5	0	1	28	4	3	1	0	37	39.2
Hourly Total	0	0	6	1	4	1	3	15	21.3	6	1	65	8	8	1	2	91	92.9
07:00 - 07:15	0	0	2	0	0	0	0	2	2.0	0	0	28	5	1	1	1	36	38.8
07:15 - 07:30	0	0	5	3	0	1	1	10	12.3	0	0	24	5	1	0	1	31	32.5
07:30 - 07:45	0	0	1	3	1	0	0	5	5.5	0	1	27	8	4	0	0	40	41.4
07:45 - 08:00	0	0	4	0	0	0	2	6	8.0	1	1	59	12	2	0	3	78	80.6
Hourly Total	0	0	12	6	1	1	3	23	27.8	1	2	138	30	8	1	5	155	153.3
08:00 - 08:15	1	0	4	1	0	0	1	7	7.2	0	1	50	11	2	0	0	64	64.4
08:15 - 08:30	0	0	11	1	0	0	0	12	12.0	1	2	49	7	1	0	1	61	60.5
08:30 - 08:45	1	0	4	1	0	0	1	7	7.2	0	0	50	6	1	1	1	59	61.8
08:45 - 09:00	0	0	6	1	0	0	1	8	9.0	0	2	51	9	2	1	0	65	66.1
Hourly Total	2	0	25	4	0	0	3	34	35.4	1	5	200	33	6	2	2	249	252.8
09:00 - 09:15	0	0	8	1	0	0	0	9	9.0	2	0	58	11	7	0	1	79	81.9
09:15 - 09:30	1	0	4	0	0	0	3	8	10.2	0	0	68	6	4	0	1	79	82.0
09:30 - 09:45	0	0	3	0	0	0	1	4	5.0	0	1	38	5	3	0	1	48	49.9
09:45 - 10:00	0	0	6	0	0	0	1	7	8.0	0	57	10	3	0	0	0	70	71.5
Hourly Total	1	0	24	1	0	0	5	28	32.2	2	1	221	32	17	0	3	276	285.3
10:00 - 10:15	0	0	5	0	0	0	0	5	5.0	0	0	54	10	3	2	1	70	75.1
10:15 - 10:30	0	0	10	3	0	0	0	13	13.0	0	0	53	9	3	0	1	66	68.5
10:30 - 10:45	0	0	4	0	1	0	0	5	5.5	0	1	56	16	4	1	0	78	80.7
10:45 - 11:00	0	0	8	3	0	0	0	11	11.0	0	0	45	14	5	1	1	66	70.8
Hourly Total	0	0	27	6	1	0	0	34	34.5	0	1	208	49	15	4	3	280	295.1
11:00 - 11:15	0	1	12	0	0	0	0	13	12.4	0	1	54	21	1	2	1	80	83.5
11:15 - 11:30	0	0	4	1	0	0	0	5	5.0	0	0	62	5	3	1	1	72	75.8
11:30 - 11:45	0	0	17	1	0	0	0	18	18.0	0	2	53	11	2	1	1	70	72.1
11:45 - 12:00	0	0	8	4	0	0	0	12	12.0	0	1	62	7	1	1	0	72	73.2
Hourly Total	0	1	41	6	0	0	0	48	47.4	0	4	231	44	7	5	3	294	304.6
12:00 - 12:15	0	0	8	3	0	0	0	11	11.0	2	1	54	9	1	0	1	68	67.3
12:15 - 12:30	0	0	8	1	0	0	0	9	9.0	0	3	45	16	2	0	0	66	65.2
12:30 - 12:45	0	0	11	0	0	0	0	11	11.0	0	0	63	10	5	1	2	81	86.8
12:45 - 13:00	0	0	10	2	0	0	0	12	12.0	0	1	51	11	0	1	0	64	64.7
Hourly Total	0	0	37	6	0	0	0	43	43.0	2	5	213	46	8	2	3	279	284.0
13:00 - 13:15	0	0	13	2	1	0	0	16	16.5	2	1	65	13	2	0	1	84	83.8
13:15 - 13:30	0	0	5	0	2	0	0	7	8.0	0	1	67	7	2	0	1	78	79.4
13:30 - 13:45	0	0	6	3	0	0	0	9	9.0	0	0	78	14	1	1	1	95	97.8
13:45 - 14:00	0	0	8	1	0	0	0	9	9.0	0	1	51	22	3	0	0	77	77.9
Hourly Total	0	0	32	6	3	0	0	41	42.5	2	3	261	56	8	1	3	334	338.9
14:00 - 14:15	0	0	11	2	0	0	0	13	13.0	0	1	58	3	6	0	1	69	72.4
14:15 - 14:30	1	0	8	3	1	0	0	13	12.7	0	2	67	9	0	1	1	80	81.1
14:30 - 14:45	0	0	12	3	1	0	0	16	16.5	0	0	69	16	2	1	0	88	90.3
14:45 - 15:00	0	0	9	4	0	0	0	13	13.0	0	0	55	6	2	2	1	66	70.6
Hourly Total	1	0	40	12	2	0	0	55	55.2	0	3	249	34	10	4	3	303	314.4
15:00 - 15:15	0	0	16	3	0	0	0	19	19.0	0	1	77	10	2	0	1	91	92.4
15:15 - 15:30	0	1	10	3	0	0	0	14	13.4	0	1	59	17	0	1	2	80	82.7
15:30 - 15:45	0	0	13	1	0	0	0	14	14.0	2	0	69	9	3	0	0	83	82.9
15:45 - 16:00	0	1	17	1	0	0	0	19	19.4	1	0	60	17	3	1	1	83	86.0
Hourly Total	0	2	56	8	0	0	0	66	64.8	3	2	205	53	8	2	4	337	344.0
16:00 - 16:15	0	0	17	2	0	0	0	19	19.0	1	0	74	14	3	1	1	94	97.0
16:15 - 16:30	0	0	14	3	0	0	0	17	17.0	1	3	53	22	1	0	0	80	77.9
16:30 - 16:45	0	0	20	4	0	0	0	24	24.0	0	2	70	15	0	0	1	88	87.8
16:45 - 17:00	0	0	12	2	0	0	0	14	14.0	1	0	62	17	1	0	0	81	80.7
Hourly Total	0	0	63	11	0	0	0	74	74.0	3	5	259	68	5	1	2	343	343.4
17:00 - 17:15	0	0	8	1	1	0	0	10	10.5	3	0	99	8	0	0	1	111	109.6
17:15 - 17:30	0	0	10	1	0	0	1	12	13.0	1	0	116	7	0	0	1	125	

Spondon Queue Survey, Thursday 13th October 2022

Produced by Road Data Services Ltd.

		Locko Road (N)	Royal Hill Road
Time		Right Turn	Lane 1
0:00 - 0:05		0	0
0:05 - 0:10		0	0
0:10 - 0:15		0	0
0:15 - 0:20		0	0
0:20 - 0:25		0	0
0:25 - 0:30		0	0
0:30 - 0:35		0	0
0:35 - 0:40		0	0
0:40 - 0:45		0	0
0:45 - 0:50		0	0
0:50 - 0:55		0	0
0:55 - 1:00		0	0
1:00 - 1:05		0	0
1:05 - 1:10		0	0
1:10 - 1:15		0	0
1:15 - 1:20		0	0
1:20 - 1:25		0	0
1:25 - 1:30		0	0
1:30 - 1:35		0	0
1:35 - 1:40		0	0
1:40 - 1:45		0	0
1:45 - 1:50		0	0
1:50 - 1:55		0	0
1:55 - 2:00		0	0
2:00 - 2:05		0	0
2:05 - 2:10		0	0
2:10 - 2:15		0	0
2:15 - 2:20		0	0
2:20 - 2:25		0	0
2:25 - 2:30		0	0
2:30 - 2:35		0	0
2:35 - 2:40		0	0
2:40 - 2:45		0	0
2:45 - 2:50		0	0
2:50 - 2:55		0	0
2:55 - 3:00		0	0
3:00 - 3:05		0	0
3:05 - 3:10		0	0
3:10 - 3:15		0	0
3:15 - 3:20		0	0
3:20 - 3:25		0	0
3:25 - 3:30		0	0
3:30 - 3:35		0	0
3:35 - 3:40		0	0
3:40 - 3:45		0	0
3:45 - 3:50		0	0
3:50 - 3:55		0	0
3:55 - 4:00		0	0
4:00 - 4:05		0	0
4:05 - 4:10		0	0
4:10 - 4:15		0	0
4:15 - 4:20		0	0
4:20 - 4:25		0	0
4:25 - 4:30		0	0
4:30 - 4:35		0	0
4:35 - 4:40		0	0
4:40 - 4:45		0	0
4:45 - 4:50		0	0
4:50 - 4:55		0	0
4:55 - 5:00		0	0
5:00 - 5:05		0	0
5:05 - 5:10		0	0
5:10 - 5:15		0	0
5:15 - 5:20		0	0
5:20 - 5:25		0	0
5:25 - 5:30		0	0
5:30 - 5:35		0	0

		Locko Road (N)	Royal Hill Road
Time		Right Turn	Lane 1
12:00 - 12:05		0	1
12:05 - 12:10		0	1
12:10 - 12:15		0	0
12:15 - 12:20		0	1
12:20 - 12:25		0	0
12:25 - 12:30		0	1
12:30 - 12:35		0	1
12:35 - 12:40		0	0
12:40 - 12:45		0	0
12:45 - 12:50		1	0
12:50 - 12:55		0	2
12:55 - 13:00		0	2
13:00 - 13:05		0	1
13:05 - 13:10		0	0
13:10 - 13:15		0	1
13:15 - 13:20		0	1
13:20 - 13:25		0	2
13:25 - 13:30		0	2
13:30 - 13:35		1	1
13:35 - 13:40		0	0
13:40 - 13:45		0	0
13:45 - 13:50		0	0
13:50 - 13:55		0	1
13:55 - 14:00		0	0
14:00 - 14:05		0	1
14:05 - 14:10		0	0
14:10 - 14:15		0	1
14:15 - 14:20		0	1
14:20 - 14:25		0	1
14:25 - 14:30		0	1
14:30 - 14:35		0	0
14:35 - 14:40		1	1
14:40 - 14:45		1	1
14:45 - 14:50		0	1
14:50 - 14:55		0	0
14:55 - 15:00		0	1
15:00 - 15:05		1	1
15:05 - 15:10		3	1
15:10 - 15:15		1	2
15:15 - 15:20		1	0
15:20 - 15:25		0	1
15:25 - 15:30		0	3
15:30 - 15:35		0	2
15:35 - 15:40		0	2
15:40 - 15:45		1	1
15:45 - 15:50		0	1
15:50 - 15:55		0	1
15:55 - 16:00		1	1
16:00 - 16:05		0	1
16:05 - 16:10		0	1
16:10 - 16:15		0	0
16:15 - 16:20		2	1
16:20 - 16:25		0	0
16:25 - 16:30		0	1
16:30 - 16:35		0	0
16:35 - 16:40		0	1
16:40 - 16:45		0	1
16:45 - 16:50		0	1
16:50 - 16:55		0	0
16:55 - 17:00		1	0
17:00 - 17:05		1	1
17:05 - 17:10		1	1
17:10 - 17:15		1	1
17:15 - 17:20		0	1
17:20 - 17:25		1	1
17:25 - 17:30		1	1
17:30 - 17:35		0	1

5:35	-	5:40	0	0
5:40	-	5:45	0	0
5:45	-	5:50	0	0
5:50	-	5:55	0	0
5:55	-	6:00	0	0
6:00	-	6:05	0	0
6:05	-	6:10	0	0
6:10	-	6:15	0	0
6:15	-	6:20	0	0
6:20	-	6:25	0	0
6:25	-	6:30	0	0
6:30	-	6:35	0	0
6:35	-	6:40	0	1
6:40	-	6:45	0	0
6:45	-	6:50	0	1
6:50	-	6:55	0	0
6:55	-	7:00	0	0
7:00	-	7:05	0	0
7:05	-	7:10	0	0
7:10	-	7:15	0	1
7:15	-	7:20	0	1
7:20	-	7:25	0	1
7:25	-	7:30	0	1
7:30	-	7:35	0	1
7:35	-	7:40	0	1
7:40	-	7:45	0	1
7:45	-	7:50	0	0
7:50	-	7:55	0	1
7:55	-	8:00	0	1
8:00	-	8:05	2	1
8:05	-	8:10	2	1
8:10	-	8:15	0	1
8:15	-	8:20	3	1
8:20	-	8:25	0	1
8:25	-	8:30	2	1
8:30	-	8:35	4	1
8:35	-	8:40	5	1
8:40	-	8:45	0	1
8:45	-	8:50	0	3
8:50	-	8:55	1	2
8:55	-	9:00	1	1
9:00	-	9:05	0	2
9:05	-	9:10	0	1
9:10	-	9:15	0	1
9:15	-	9:20	0	1
9:20	-	9:25	0	0
9:25	-	9:30	0	1
9:30	-	9:35	0	1
9:35	-	9:40	0	1
9:40	-	9:45	0	1
9:45	-	9:50	0	0
9:50	-	9:55	0	1
9:55	-	10:00	0	1
10:00	-	10:05	0	0
10:05	-	10:10	0	1
10:10	-	10:15	0	1
10:15	-	10:20	0	0
10:20	-	10:25	0	1
10:25	-	10:30	0	0
10:30	-	10:35	0	0
10:35	-	10:40	1	0
10:40	-	10:45	0	1
10:45	-	10:50	0	1
10:50	-	10:55	0	1
10:55	-	11:00	0	0
11:00	-	11:05	0	1
11:05	-	11:10	0	1
11:10	-	11:15	0	1
11:15	-	11:20	0	1
11:20	-	11:25	0	0
11:25	-	11:30	0	1
11:30	-	11:35	0	0
11:35	-	11:40	0	1
11:40	-	11:45	0	0
11:45	-	11:50	0	0
11:50	-	11:55	0	1
11:55	-	12:00	0	0

17:35	-	17:40	3	1
17:40	-	17:45	1	1
17:45	-	17:50	0	0
17:50	-	17:55	0	1
17:55	-	18:00	0	1
18:00	-	18:05	0	1
18:05	-	18:10	0	1
18:10	-	18:15	0	0
18:15	-	18:20	0	1
18:20	-	18:25	0	2
18:25	-	18:30	0	0
18:30	-	18:35	0	0
18:35	-	18:40	0	0
18:40	-	18:45	0	1
18:45	-	18:50	0	1
18:50	-	18:55	0	1
18:55	-	19:00	0	1
19:00	-	19:05	0	1
19:05	-	19:10	0	1
19:10	-	19:15	0	1
19:15	-	19:20	0	0
19:20	-	19:25	0	1
19:25	-	19:30	0	1
19:30	-	19:35	0	0
19:35	-	19:40	0	0
19:40	-	19:45	0	0
19:45	-	19:50	0	0
19:50	-	19:55	0	1
19:55	-	20:00	0	0
20:00	-	20:05	0	0
20:05	-	20:10	0	0
20:10	-	20:15	0	0
20:15	-	20:20	0	0
20:20	-	20:25	0	0
20:25	-	20:30	0	0
20:30	-	20:35	0	0
20:35	-	20:40	0	0
20:40	-	20:45	0	0
20:45	-	20:50	0	0
20:50	-	20:55	0	0
20:55	-	21:00	0	0
21:00	-	21:05	0	0
21:05	-	21:10	0	0
21:10	-	21:15	0	1
21:15	-	21:20	0	0
21:20	-	21:25	0	0
21:25	-	21:30	0	0
21:30	-	21:35	0	0
21:35	-	21:40	0	0
21:40	-	21:45	0	0
21:45	-	21:50	0	0
21:50	-	21:55	0	0
21:55	-	22:00	0	0
22:00	-	22:05	0	0
22:05	-	22:10	0	0
22:10	-	22:15	0	0
22:15	-	22:20	0	0
22:20	-	22:25	0	0
22:25	-	22:30	0	0
22:30	-	22:35	0	0
22:35	-	22:40	0	0
22:40	-	22:45	0	0
22:45	-	22:50	0	1
22:50	-	22:55	0	0
22:55	-	23:00	0	0
23:00	-	23:05	0	0
23:05	-	23:10	0	0
23:10	-	23:15	0	0
23:15	-	23:20	0	0
23:20	-	23:25	0	0
23:25	-	23:30	0	0
23:30	-	23:35	0	0
23:35	-	23:40	0	0
23:40	-	23:45	0	0
23:45	-	23:50	0	0
23:50	-	23:55	0	0
23:55	-	0:00	0	0

Queues are maximum queues each 5 minute period

Spondon Queue Survey, Thursday 13th October 2022

Produced by Road Data Services Ltd.

		Locko Road (N)	Chapel Street	Locko Road (S)	West Road
Time		Right Turn	Lane 1	Right Turn	Lane 1
0:00 - 0:05		0	0	0	0
0:05 - 0:10		0	0	0	0
0:10 - 0:15		0	0	0	0
0:15 - 0:20		0	0	0	0
0:20 - 0:25		0	0	0	0
0:25 - 0:30		0	0	0	0
0:30 - 0:35		0	0	0	0
0:35 - 0:40		0	0	0	0
0:40 - 0:45		0	0	0	0
0:45 - 0:50		0	0	0	0
0:50 - 0:55		0	0	0	0
0:55 - 1:00		0	0	0	0
1:00 - 1:05		0	0	0	0
1:05 - 1:10		0	0	0	0
1:10 - 1:15		0	0	0	0
1:15 - 1:20		0	0	0	0
1:20 - 1:25		0	0	0	0
1:25 - 1:30		0	0	0	0
1:30 - 1:35		0	0	0	0
1:35 - 1:40		0	0	0	0
1:40 - 1:45		0	0	0	0
1:45 - 1:50		0	0	0	0
1:50 - 1:55		0	0	0	0
1:55 - 2:00		0	0	0	0
2:00 - 2:05		0	0	0	0
2:05 - 2:10		0	0	0	0
2:10 - 2:15		0	0	0	0
2:15 - 2:20		0	0	0	0
2:20 - 2:25		0	0	0	0
2:25 - 2:30		0	0	0	0
2:30 - 2:35		0	0	0	0
2:35 - 2:40		0	0	0	0
2:40 - 2:45		0	0	0	0
2:45 - 2:50		0	0	0	0
2:50 - 2:55		0	0	0	0
2:55 - 3:00		0	0	0	0
3:00 - 3:05		0	0	0	0
3:05 - 3:10		0	0	0	0
3:10 - 3:15		0	0	0	0
3:15 - 3:20		0	0	0	0
3:20 - 3:25		0	0	0	0
3:25 - 3:30		0	0	0	0
3:30 - 3:35		0	0	0	0
3:35 - 3:40		0	0	0	0
3:40 - 3:45		0	0	0	0
3:45 - 3:50		0	0	0	0
3:50 - 3:55		0	0	0	0
3:55 - 4:00		0	0	0	0
4:00 - 4:05		0	0	0	0
4:05 - 4:10		0	0	0	0
4:10 - 4:15		0	0	0	0
4:15 - 4:20		0	0	0	0
4:20 - 4:25		0	0	0	0
4:25 - 4:30		0	0	0	0
4:30 - 4:35		0	0	0	0
4:35 - 4:40		0	0	0	0
4:40 - 4:45		0	0	0	0
4:45 - 4:50		0	0	0	0
4:50 - 4:55		0	0	0	0
4:55 - 5:00		0	0	0	0
5:00 - 5:05		0	0	0	0
5:05 - 5:10		0	0	0	0
5:10 - 5:15		0	0	0	0
5:15 - 5:20		0	0	0	0
5:20 - 5:25		0	0	0	0
5:25 - 5:30		0	0	0	0
5:30 - 5:35		0	0	0	0
5:35 - 5:40		0	0	0	0
5:40 - 5:45		0	0	0	0
5:45 - 5:50		0	0	0	0
5:50 - 5:55		0	0	0	0
5:55 - 6:00		0	0	0	0
6:00 - 6:05		0	0	0	0
6:05 - 6:10		0	0	0	0
6:10 - 6:15		0	0	0	0
6:15 - 6:20		0	0	0	0
6:20 - 6:25		0	0	0	0
6:25 - 6:30		0	0	0	0
6:30 - 6:35		0	0	0	0
6:35 - 6:40		0	0	0	0
6:40 - 6:45		0	0	0	1
6:45 - 6:50		0	0	0	0
6:50 - 6:55		0	0	1	0
6:55 - 7:00		1	0	0	0
7:00 - 7:05		0	0	0	1
7:05 - 7:10		0	0	0	0
7:10 - 7:15		0	0	0	0
7:15 - 7:20		0	1	0	0
7:20 - 7:25		0	1	0	0
7:25 - 7:30		0	1	0	0
7:30 - 7:35		0	0	0	2
7:35 - 7:40		1	0	0	2

		Locko Road (N)	Chapel Street	Locko Road (S)	West Road
Time		Right Turn	Lane 1	Right Turn	Lane 1
12:00 - 12:05		0	0	0	0
12:05 - 12:10		1	0	0	1
12:10 - 12:15		1	0	0	0
12:15 - 12:20		0	0	2	2
12:20 - 12:25		0	0	0	1
12:25 - 12:30		0	0	1	0
12:30 - 12:35		0	0	0	0
12:35 - 12:40		0	0	1	1
12:40 - 12:45		1	1	0	1
12:45 - 12:50		0	0	1	1
12:50 - 12:55		0	1	0	1
12:55 - 13:00		0	1	0	0
13:00 - 13:05		0	0	1	1
13:05 - 13:10		0	1	0	0
13:10 - 13:15		2	1	0	1
13:15 - 13:20		0	1	0	2
13:20 - 13:25		0	1	0	0
13:25 - 13:30		0	1	1	1
13:30 - 13:35		0	1	0	1
13:35 - 13:40		0	1	0	1
13:40 - 13:45		0	1	0	2
13:45 - 13:50		0	0	1	1
13:50 - 13:55		1	0	0	1
13:55 - 14:00		0	1	0	1
14:00 - 14:05		0	1	0	1
14:05 - 14:10		0	0	1	1
14:10 - 14:15		0	1	1	1
14:15 - 14:20		0	0	0	0
14:20 - 14:25		0	1	0	0
14:25 - 14:30		0	1	0	1
14:30 - 14:35		2	1	0	0
14:35 - 14:40		1	1	0	2
14:40 - 14:45		2	0	2	2
14:45 - 14:50		0	0	1	1
14:50 - 14:55		0	1	0	1
14:55 - 15:00		0	1	2	2
15:00 - 15:05		0	1	1	1
15:05 - 15:10		1	1	4	3
15:10 - 15:15		3	1	2	3
15:15 - 15:20		2	1	3	2
15:20 - 15:25		0	0	0	4
15:25 - 15:30		0	1	5	7
15:30 - 15:35		0	1	1	2
15:35 - 15:40		1	0	1	1
15:40 - 15:45		2	1	1	1
15:45 - 15:50		0	0	0	1
15:50 - 15:55		1	2	0	1
15:55 - 16:00		0	1	1	1
16:00 - 16:05		1	1	1	1
16:05 - 16:10		0	1	0	2
16:10 - 16:15		1	1	1	2
16:15 - 16:20		1	1	1	1
16:20 - 16:25		1	1	1	3
16:25 - 16:30		0	1	0	1
16:30 - 16:35		0	1	0	2
16:35 - 16:40		1	1	1	1
16:40 - 16:45		0	1	2	2
16:45 - 16:50		0	1	0	5
16:50 - 16:55		1	0	4	0
16:55 - 17:00		2	0	2	1
17:00 - 17:05		0	1	3	2
17:05 - 17:10		2	1	0	1
17:10 - 17:15		3	1	1	2
17:15 - 17:20		1	0	2	1
17:20 - 17:25		0	1	0	3
17:25 - 17:30		3	1	2	2
17:30 - 17:35		0	1	0	2
17:35 - 17:40		1	1	1	2
17:40 - 17:45		2	0	1	1
17:45 - 17:50		1	1	3	1
17:50 - 17:55		0	1	1	1
17:55 - 18:00		1	0	2	2
18:00 - 18:05		0	0	0	3
18:05 - 18:10		0	0	0	1
18:10 - 18:15		1	2	0	2
18:15 - 18:20		0	1	0	1
18:20 - 18:25		0	0	2	1
18:25 - 18:30		0	1	1	1
18:30 - 18:35		0	1	0	1
18:35 - 18:40		0	0	0	2
18:40 - 18:45		0	1	1	2
18:45 - 18:50		0	1	1	1
18:50 - 18:55		0	0	0	0
18:55 - 19:00		0	1	0	1
19:00 - 19:05		0	0	0	1
19:05 - 19:10		1	1	3	1
19:10 - 19:15		0	1	0	1
19:15 - 19:20		0	0	0	2
19:20 - 19:25		0	0	0	1
19:25 - 19:30		1	1	0	2
19:30 - 19:35		0	0	0	1
19:35 - 19:40		0	1	0	1

7:40	-	7:45	2	1	0	1
7:45	-	7:50	3	1	0	2
7:50	-	7:55	0	0	3	2
7:55	-	8:00	1	1	1	1
8:00	-	8:05	3	0	1	2
8:05	-	8:10	1	1	0	1
8:10	-	8:15	0	1	4	1
8:15	-	8:20	2	1	1	5
8:20	-	8:25	3	1	3	4
8:25	-	8:30	3	0	3	3
8:30	-	8:35	1	1	3	5
8:35	-	8:40	1	1	1	2
8:40	-	8:45	0	1	1	2
8:45	-	8:50	2	1	3	3
8:50	-	8:55	1	1	1	4
8:55	-	9:00	0	1	3	4
9:00	-	9:05	1	1	1	2
9:05	-	9:10	0	0	1	1
9:10	-	9:15	0	1	0	2
9:15	-	9:20	0	0	1	1
9:20	-	9:25	0	1	1	0
9:25	-	9:30	0	0	2	1
9:30	-	9:35	0	0	1	1
9:35	-	9:40	0	1	1	1
9:40	-	9:45	0	0	1	1
9:45	-	9:50	0	0	0	1
9:50	-	9:55	0	0	1	1
9:55	-	10:00	0	0	1	2
10:00	-	10:05	0	0	0	1
10:05	-	10:10	0	1	0	1
10:10	-	10:15	0	1	0	1
10:15	-	10:20	0	1	2	1
10:20	-	10:25	0	0	0	1
10:25	-	10:30	1	1	0	1
10:30	-	10:35	0	1	1	1
10:35	-	10:40	0	0	0	1
10:40	-	10:45	0	0	1	1
10:45	-	10:50	1	1	0	1
10:50	-	10:55	0	1	1	1
10:55	-	11:00	0	1	3	2
11:00	-	11:05	0	0	0	1
11:05	-	11:10	0	0	0	1
11:10	-	11:15	0	1	0	1
11:15	-	11:20	0	1	2	1
11:20	-	11:25	0	1	1	0
11:25	-	11:30	0	1	1	0
11:30	-	11:35	0	0	0	0
11:35	-	11:40	0	0	1	1
11:40	-	11:45	1	0	0	0
11:45	-	11:50	0	1	0	1
11:50	-	11:55	0	1	0	2
11:55	-	12:00	0	1	0	0

19:40	-	19:45	0	0	0	1
19:45	-	19:50	2	0	0	1
19:50	-	19:55	2	0	0	1
19:55	-	20:00	0	1	0	2
20:00	-	20:05	0	1	0	0
20:05	-	20:10	0	1	0	0
20:10	-	20:15	1	0	0	1
20:15	-	20:20	0	0	0	1
20:20	-	20:25	0	0	0	1
20:25	-	20:30	0	0	0	0
20:30	-	20:35	0	0	0	1
20:35	-	20:40	0	0	1	0
20:40	-	20:45	0	0	1	1
20:45	-	20:50	0	0	0	0
20:50	-	20:55	1	0	0	1
20:55	-	21:00	0	1	1	0
21:00	-	21:05	0	0	0	1
21:05	-	21:10	0	0	0	1
21:10	-	21:15	0	1	0	1
21:15	-	21:20	0	0	0	0
21:20	-	21:25	0	0	0	0
21:25	-	21:30	1	1	0	0
21:30	-	21:35	0	0	0	1
21:35	-	21:40	0	0	0	0
21:40	-	21:45	0	0	0	0
21:45	-	21:50	0	0	0	2
21:50	-	21:55	0	0	0	0
21:55	-	22:00	0	0	0	0
22:00	-	22:05	0	0	2	0
22:05	-	22:10	0	0	0	0
22:10	-	22:15	0	1	0	0
22:15	-	22:20	0	0	0	0
22:20	-	22:25	0	0	0	0
22:25	-	22:30	0	0	0	0
22:30	-	22:35	0	0	0	0
22:35	-	22:40	0	0	0	0
22:40	-	22:45	0	0	0	0
22:45	-	22:50	0	0	0	0
22:50	-	22:55	0	0	0	0
22:55	-	23:00	0	3	0	0
23:00	-	23:05	0	0	0	0
23:05	-	23:10	0	0	0	0
23:10	-	23:15	0	0	0	0
23:15	-	23:20	0	0	0	0
23:20	-	23:25	0	0	0	0
23:25	-	23:30	0	0	0	0
23:30	-	23:35	0	0	0	0
23:35	-	23:40	0	0	0	0
23:40	-	23:45	0	0	0	0
23:45	-	23:50	0	0	0	0
23:50	-	23:55	0	0	0	0
23:55	-	0:00	0	0	0	0

Queues are maximum queues each 5 minute period

Spondon Queue Survey, Thursday 13th October 2022

Produced by Road Data Services Ltd.

		Sitwell Street (E)	Willowcroft Road	Sitwell Street (E)
Time		Lane 1	Lane 1	Lane 1
0:00 - 0:05		0	0	0
0:05 - 0:10		0	0	0
0:10 - 0:15		0	0	0
0:15 - 0:20		0	0	0
0:20 - 0:25		0	0	0
0:25 - 0:30		0	0	0
0:30 - 0:35		0	0	0
0:35 - 0:40		0	0	0
0:40 - 0:45		0	0	0
0:45 - 0:50		0	0	0
0:50 - 0:55		0	0	0
0:55 - 1:00		0	0	0
1:00 - 1:05		0	0	0
1:05 - 1:10		0	0	0
1:10 - 1:15		0	0	0
1:15 - 1:20		0	0	0
1:20 - 1:25		0	0	0
1:25 - 1:30		0	0	0
1:30 - 1:35		0	0	0
1:35 - 1:40		0	0	0
1:40 - 1:45		0	0	0
1:45 - 1:50		0	0	0
1:50 - 1:55		0	0	0
1:55 - 2:00		0	0	0
2:00 - 2:05		0	0	0
2:05 - 2:10		0	0	0
2:10 - 2:15		0	0	0
2:15 - 2:20		0	0	0
2:20 - 2:25		0	0	0
2:25 - 2:30		0	0	0
2:30 - 2:35		0	0	0
2:35 - 2:40		0	0	0
2:40 - 2:45		0	0	0
2:45 - 2:50		0	0	0
2:50 - 2:55		0	0	0
2:55 - 3:00		0	0	0
3:00 - 3:05		0	0	0
3:05 - 3:10		0	0	0
3:10 - 3:15		0	0	0
3:15 - 3:20		0	0	0
3:20 - 3:25		0	0	0
3:25 - 3:30		0	0	0
3:30 - 3:35		0	0	0
3:35 - 3:40		0	0	0
3:40 - 3:45		0	0	0
3:45 - 3:50		0	0	0
3:50 - 3:55		0	0	0
3:55 - 4:00		0	0	0
4:00 - 4:05		0	0	0
4:05 - 4:10		0	0	0
4:10 - 4:15		0	0	0
4:15 - 4:20		0	0	0
4:20 - 4:25		0	0	0
4:25 - 4:30		0	0	0
4:30 - 4:35		0	0	0
4:35 - 4:40		0	0	0
4:40 - 4:45		0	0	0
4:45 - 4:50		0	0	0
4:50 - 4:55		0	0	0
4:55 - 5:00		0	0	0
5:00 - 5:05		0	0	0
5:05 - 5:10		0	0	0
5:10 - 5:15		0	0	0
5:15 - 5:20		0	0	0
5:20 - 5:25		0	0	0
5:25 - 5:30		0	0	0
5:30 - 5:35		1	0	0
5:35 - 5:40		0	0	0
5:40 - 5:45		2	0	0
5:45 - 5:50		2	0	0

		Sitwell Street (E)	Willowcroft Road	Sitwell Street (E)
Time		Lane 1	Lane 1	Lane 1
12:00 - 12:05		3	0	0
12:05 - 12:10		1	0	0
12:10 - 12:15		0	2	1
12:15 - 12:20		5	0	6
12:20 - 12:25		2	0	1
12:25 - 12:30		5	0	0
12:30 - 12:35		6	2	0
12:35 - 12:40		1	0	1
12:40 - 12:45		5	0	10
12:45 - 12:50		2	0	3
12:50 - 12:55		0	0	0
12:55 - 13:00		8	0	4
13:00 - 13:05		5	1	3
13:05 - 13:10		0	0	0
13:10 - 13:15		0	0	6
13:15 - 13:20		1	0	5
13:20 - 13:25		6	0	0
13:25 - 13:30		4	0	3
13:30 - 13:35		3	0	6
13:35 - 13:40		6	0	5
13:40 - 13:45		2	0	1
13:45 - 13:50		2	0	6
13:50 - 13:55		2	0	5
13:55 - 14:00		2	2	5
14:00 - 14:05		2	0	3
14:05 - 14:10		1	0	8
14:10 - 14:15		1	0	0
14:15 - 14:20		4	0	4
14:20 - 14:25		1	0	5
14:25 - 14:30		0	1	4
14:30 - 14:35		3	0	5
14:35 - 14:40		3	0	4
14:40 - 14:45		1	0	3
14:45 - 14:50		0	0	3
14:50 - 14:55		2	1	0
14:55 - 15:00		1	0	1
15:00 - 15:05		5	1	3
15:05 - 15:10		5	1	7
15:10 - 15:15		7	0	7
15:15 - 15:20		8	0	11
15:20 - 15:25		1	0	6
15:25 - 15:30		7	0	4
15:30 - 15:35		13	0	25
15:35 - 15:40		7	2	8
15:40 - 15:45		2	0	7
15:45 - 15:50		3	2	6
15:50 - 15:55		5	1	16
15:55 - 16:00		4	0	6
16:00 - 16:05		4	1	4
16:05 - 16:10		3	0	13
16:10 - 16:15		3	1	3
16:15 - 16:20		2	0	7
16:20 - 16:25		1	2	9
16:25 - 16:30		2	1	5
16:30 - 16:35		2	2	15
16:35 - 16:40		3	0	5
16:40 - 16:45		2	0	4
16:45 - 16:50		4	2	7
16:50 - 16:55		4	0	9
16:55 - 17:00		1	0	5
17:00 - 17:05		2	0	5
17:05 - 17:10		0	0	6
17:10 - 17:15		8	2	8
17:15 - 17:20		6	2	3
17:20 - 17:25		1	0	14
17:25 - 17:30		3	0	0
17:30 - 17:35		4	0	7
17:35 - 17:40		2	0	15
17:40 - 17:45		1	0	14
17:45 - 17:50		3	0	3

5:50	-	5:55	0	3	0
5:55	-	6:00	1	0	0
6:00	-	6:05	0	0	0
6:05	-	6:10	0	0	0
6:10	-	6:15	0	0	0
6:15	-	6:20	1	0	1
6:20	-	6:25	1	0	0
6:25	-	6:30	0	0	0
6:30	-	6:35	0	0	0
6:35	-	6:40	0	0	0
6:40	-	6:45	4	0	0
6:45	-	6:50	2	1	0
6:50	-	6:55	1	0	0
6:55	-	7:00	2	0	0
7:00	-	7:05	2	0	0
7:05	-	7:10	1	0	0
7:10	-	7:15	0	0	0
7:15	-	7:20	3	0	0
7:20	-	7:25	1	0	0
7:25	-	7:30	3	0	0
7:30	-	7:35	1	1	1
7:35	-	7:40	3	0	8
7:40	-	7:45	3	1	4
7:45	-	7:50	4	0	0
7:50	-	7:55	2	0	0
7:55	-	8:00	6	0	0
8:00	-	8:05	2	0	0
8:05	-	8:10	8	0	0
8:10	-	8:15	5	0	1
8:15	-	8:20	8	0	3
8:20	-	8:25	6	3	6
8:25	-	8:30	0	1	2
8:30	-	8:35	1	0	0
8:35	-	8:40	3	0	1
8:40	-	8:45	1	1	0
8:45	-	8:50	3	1	0
8:50	-	8:55	6	2	12
8:55	-	9:00	6	0	6
9:00	-	9:05	10	1	0
9:05	-	9:10	3	1	0
9:10	-	9:15	4	0	7
9:15	-	9:20	1	1	2
9:20	-	9:25	0	1	2
9:25	-	9:30	2	0	0
9:30	-	9:35	1	0	0
9:35	-	9:40	1	0	0
9:40	-	9:45	4	1	1
9:45	-	9:50	4	0	4
9:50	-	9:55	3	0	1
9:55	-	10:00	3	0	0
10:00	-	10:05	3	0	4
10:05	-	10:10	1	0	3
10:10	-	10:15	3	0	1
10:15	-	10:20	4	0	3
10:20	-	10:25	2	0	1
10:25	-	10:30	1	0	3
10:30	-	10:35	4	0	0
10:35	-	10:40	1	0	0
10:40	-	10:45	3	3	10
10:45	-	10:50	3	0	3
10:50	-	10:55	1	0	1
10:55	-	11:00	6	1	4
11:00	-	11:05	0	1	2
11:05	-	11:10	2	0	1
11:10	-	11:15	4	0	1
11:15	-	11:20	0	0	0
11:20	-	11:25	0	1	3
11:25	-	11:30	3	0	1
11:30	-	11:35	5	0	0
11:35	-	11:40	0	0	1
11:40	-	11:45	3	0	1
11:45	-	11:50	1	0	0
11:50	-	11:55	2	0	3
11:55	-	12:00	6	1	0

17:50	-	17:55	2	0	6
17:55	-	18:00	3	0	4
18:00	-	18:05	4	0	5
18:05	-	18:10	2	0	6
18:10	-	18:15	4	1	4
18:15	-	18:20	2	0	5
18:20	-	18:25	2	0	1
18:25	-	18:30	2	0	4
18:30	-	18:35	7	0	4
18:35	-	18:40	2	0	7
18:40	-	18:45	2	0	0
18:45	-	18:50	3	0	1
18:50	-	18:55	4	0	0
18:55	-	19:00	4	0	0
19:00	-	19:05	2	0	2
19:05	-	19:10	1	0	0
19:10	-	19:15	1	0	1
19:15	-	19:20	3	0	4
19:20	-	19:25	0	0	3
19:25	-	19:30	2	0	0
19:30	-	19:35	0	1	3
19:35	-	19:40	2	0	5
19:40	-	19:45	3	0	0
19:45	-	19:50	1	0	1
19:50	-	19:55	0	0	1
19:55	-	20:00	3	0	0
20:00	-	20:05	0	0	0
20:05	-	20:10	0	0	0
20:10	-	20:15	0	0	3
20:15	-	20:20	0	0	0
20:20	-	20:25	1	1	0
20:25	-	20:30	0	0	4
20:30	-	20:35	1	0	0
20:35	-	20:40	0	0	0
20:40	-	20:45	1	1	0
20:45	-	20:50	0	0	0
20:50	-	20:55	0	0	0
20:55	-	21:00	0	0	0
21:00	-	21:05	0	0	0
21:05	-	21:10	0	0	0
21:10	-	21:15	1	0	0
21:15	-	21:20	0	0	0
21:20	-	21:25	0	0	0
21:25	-	21:30	0	0	0
21:30	-	21:35	0	0	0
21:35	-	21:40	1	1	0
21:40	-	21:45	0	0	0
21:45	-	21:50	0	0	0
21:50	-	21:55	0	0	0
21:55	-	22:00	0	0	1
22:00	-	22:05	1	0	0
22:05	-	22:10	0	0	0
22:10	-	22:15	0	0	0
22:15	-	22:20	1	0	0
22:20	-	22:25	0	0	0
22:25	-	22:30	0	0	0
22:30	-	22:35	0	0	0
22:35	-	22:40	0	0	0
22:40	-	22:45	0	0	0
22:45	-	22:50	0	0	0
22:50	-	22:55	0	0	0
22:55	-	23:00	0	0	0
23:00	-	23:05	0	0	0
23:05	-	23:10	0	0	0
23:10	-	23:15	0	0	0
23:15	-	23:20	0	0	0
23:20	-	23:25	0	0	0
23:25	-	23:30	0	0	0
23:30	-	23:35	0	0	0
23:35	-	23:40	0	0	0
23:40	-	23:45	0	0	0
23:45	-	23:50	0	0	0
23:50	-	23:55	0	0	0
23:55	-	0:00	0	0	0

Queues are maximum queues each 5 minute period

Spondon Queue Survey, Thursday 13th October 2022

Produced by Road Data Services Ltd.

		A6096	A6005 (E)	A6005 (W)
Time		Lane 1	Lane 1	Lane 1
0:00 - 0:05		0	0	0
0:05 - 0:10		0	1	0
0:10 - 0:15		0	0	0
0:15 - 0:20		0	0	0
0:20 - 0:25		0	1	1
0:25 - 0:30		0	1	0
0:30 - 0:35		0	0	1
0:35 - 0:40		0	0	0
0:40 - 0:45		1	2	0
0:45 - 0:50		0	0	0
0:50 - 0:55		0	0	1
0:55 - 1:00		0	0	0
1:00 - 1:05		0	1	1
1:05 - 1:10		0	0	0
1:10 - 1:15		0	0	0
1:15 - 1:20		0	1	1
1:20 - 1:25		0	1	0
1:25 - 1:30		0	1	0
1:30 - 1:35		0	0	0
1:35 - 1:40		0	1	0
1:40 - 1:45		0	0	0
1:45 - 1:50		0	0	0
1:50 - 1:55		0	0	0
1:55 - 2:00		0	0	0
2:00 - 2:05		0	0	0
2:05 - 2:10		0	0	0
2:10 - 2:15		0	0	0
2:15 - 2:20		0	0	0
2:20 - 2:25		0	0	0
2:25 - 2:30		0	0	0
2:30 - 2:35		0	0	0
2:35 - 2:40		1	0	2
2:40 - 2:45		0	0	0
2:45 - 2:50		0	0	0
2:50 - 2:55		0	0	0
2:55 - 3:00		0	0	0
3:00 - 3:05		0	0	0
3:05 - 3:10		0	0	0
3:10 - 3:15		0	0	0
3:15 - 3:20		0	0	0
3:20 - 3:25		0	0	1
3:25 - 3:30		0	0	0
3:30 - 3:35		0	0	0
3:35 - 3:40		0	0	0
3:40 - 3:45		0	0	0
3:45 - 3:50		0	0	0
3:50 - 3:55		0	0	0
3:55 - 4:00		0	0	0
4:00 - 4:05		0	0	0
4:05 - 4:10		0	0	0
4:10 - 4:15		0	0	0
4:15 - 4:20		1	0	0
4:20 - 4:25		0	0	0
4:25 - 4:30		3	0	0
4:30 - 4:35		0	0	0
4:35 - 4:40		1	0	0
4:40 - 4:45		0	0	1
4:45 - 4:50		0	1	0
4:50 - 4:55		0	0	2
4:55 - 5:00		1	0	0
5:00 - 5:05		1	0	0
5:05 - 5:10		2	0	0
5:10 - 5:15		3	0	0
5:15 - 5:20		1	1	0
5:20 - 5:25		5	0	1
5:25 - 5:30		4	2	1
5:30 - 5:35		2	2	6
5:35 - 5:40		5	1	1
5:40 - 5:45		5	1	3
5:45 - 5:50		6	1	3

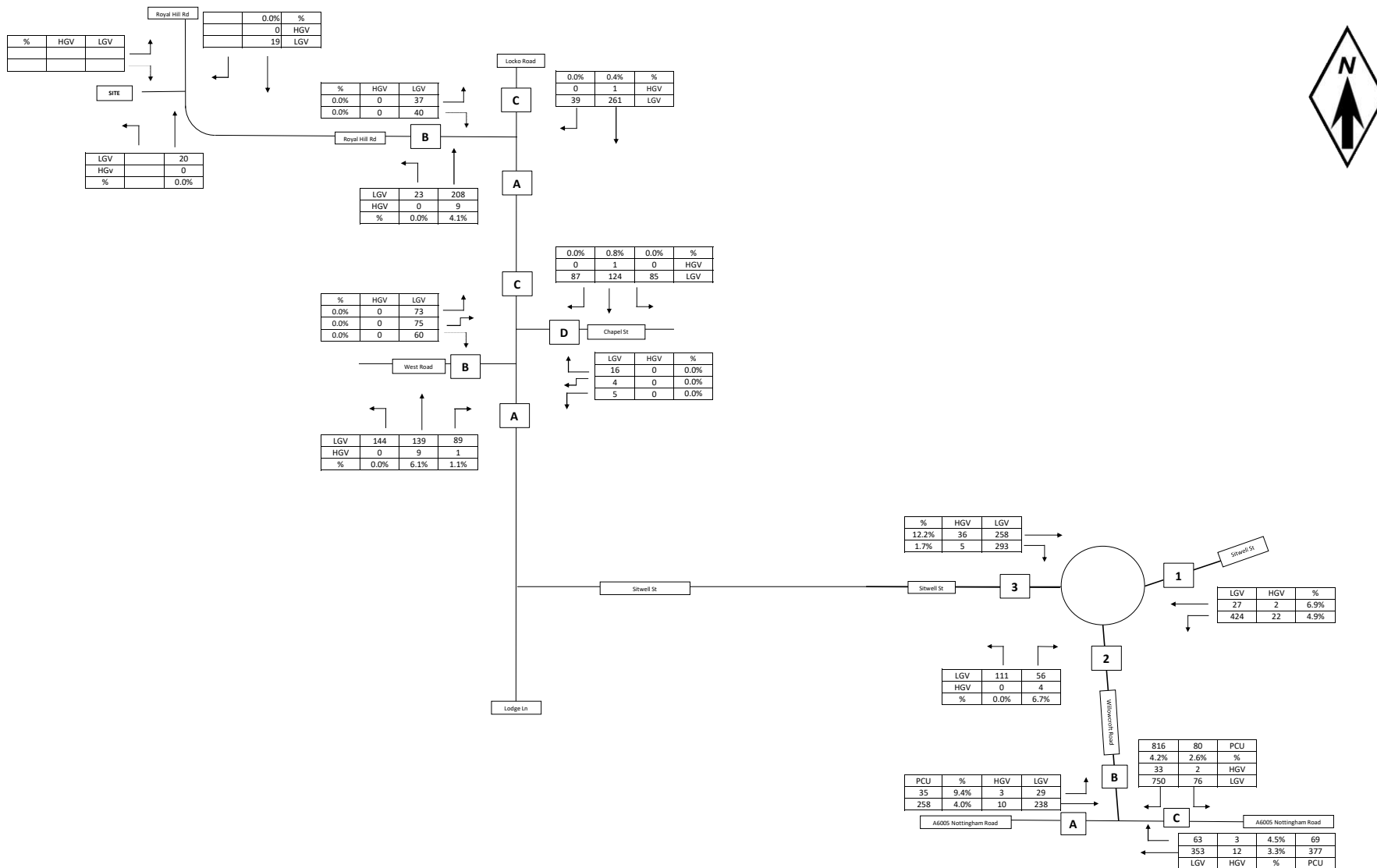
		A6096	A6005 (E)	A6005 (W)
Time		Lane 1	Lane 1	Lane 1
12:00 - 12:05		20	4	9
12:05 - 12:10		25	8	8
12:10 - 12:15		8	5	6
12:15 - 12:20		10	5	9
12:20 - 12:25		5	7	5
12:25 - 12:30		12	3	6
12:30 - 12:35		9	7	9
12:35 - 12:40		9	6	6
12:40 - 12:45		8	8	7
12:45 - 12:50		8	6	9
12:50 - 12:55		11	8	9
12:55 - 13:00		10	4	8
13:00 - 13:05		15	7	6
13:05 - 13:10		19	8	9
13:10 - 13:15		12	7	4
13:15 - 13:20		9	7	12
13:20 - 13:25		8	8	9
13:25 - 13:30		15	6	11
13:30 - 13:35		15	10	11
13:35 - 13:40		15	9	10
13:40 - 13:45		10	6	11
13:45 - 13:50		12	7	5
13:50 - 13:55		10	5	5
13:55 - 14:00		9	7	9
14:00 - 14:05		6	6	6
14:05 - 14:10		10	8	9
14:10 - 14:15		8	7	11
14:15 - 14:20		15	5	8
14:20 - 14:25		9	9	8
14:25 - 14:30		6	9	11
14:30 - 14:35		16	9	19
14:35 - 14:40		10	1	7
14:40 - 14:45		11	7	7
14:45 - 14:50		7	8	8
14:50 - 14:55		6	5	5
14:55 - 15:00		10	7	8
15:00 - 15:05		12	12	7
15:05 - 15:10		12	13	5
15:10 - 15:15		18	7	9
15:15 - 15:20		20	5	11
15:20 - 15:25		57	7	10
15:25 - 15:30		69	7	16
15:30 - 15:35		95	5	8
15:35 - 15:40		95	7	7
15:40 - 15:45		95	11	7
15:45 - 15:50		95	8	17
15:50 - 15:55		95	12	10
15:55 - 16:00		75	7	12
16:00 - 16:05		18	10	8
16:05 - 16:10		22	8	9
16:10 - 16:15		19	8	18
16:15 - 16:20		18	6	19
16:20 - 16:25		16	10	23
16:25 - 16:30		14	6	14
16:30 - 16:35		10	8	24
16:35 - 16:40		7	7	18
16:40 - 16:45		9	12	17
16:45 - 16:50		10	8	10
16:50 - 16:55		11	5	11
16:55 - 17:00		7	10	10
17:00 - 17:05		6	4	13
17:05 - 17:10		15	10	12
17:10 - 17:15		17	9	10
17:15 - 17:20		18	8	16
17:20 - 17:25		8	13	13
17:25 - 17:30		12	6	11
17:30 - 17:35		10	7	14
17:35 - 17:40		14	9	9
17:40 - 17:45		16	13	15
17:45 - 17:50		12	5	7

5:50	-	5:55	8	0	2
5:55	-	6:00	3	0	2
6:00	-	6:05	3	3	1
6:05	-	6:10	4	1	2
6:10	-	6:15	9	7	2
6:15	-	6:20	2	3	3
6:20	-	6:25	3	3	2
6:25	-	6:30	4	2	3
6:30	-	6:35	12	4	3
6:35	-	6:40	6	4	3
6:40	-	6:45	10	5	4
6:45	-	6:50	12	4	6
6:50	-	6:55	8	5	6
6:55	-	7:00	6	3	7
7:00	-	7:05	10	5	7
7:05	-	7:10	8	3	3
7:10	-	7:15	15	6	4
7:15	-	7:20	8	5	3
7:20	-	7:25	12	9	7
7:25	-	7:30	16	5	9
7:30	-	7:35	22	9	4
7:35	-	7:40	25	7	12
7:40	-	7:45	22	25	6
7:45	-	7:50	29	32	13
7:50	-	7:55	31	29	11
7:55	-	8:00	30	10	9
8:00	-	8:05	25	9	7
8:05	-	8:10	28	14	10
8:10	-	8:15	20	13	8
8:15	-	8:20	22	21	7
8:20	-	8:25	30	20	11
8:25	-	8:30	28	21	10
8:30	-	8:35	22	30	9
8:35	-	8:40	15	34	9
8:40	-	8:45	25	21	15
8:45	-	8:50	27	15	16
8:50	-	8:55	39	20	13
8:55	-	9:00	45	15	17
9:00	-	9:05	36	8	21
9:05	-	9:10	32	16	12
9:10	-	9:15	30	12	10
9:15	-	9:20	25	17	10
9:20	-	9:25	12	9	12
9:25	-	9:30	18	16	12
9:30	-	9:35	18	14	8
9:35	-	9:40	15	10	7
9:40	-	9:45	12	11	8
9:45	-	9:50	14	9	11
9:50	-	9:55	14	9	10
9:55	-	10:00	11	12	11
10:00	-	10:05	16	15	7
10:05	-	10:10	10	10	8
10:10	-	10:15	8	11	11
10:15	-	10:20	15	12	10
10:20	-	10:25	8	7	8
10:25	-	10:30	10	5	6
10:30	-	10:35	14	8	5
10:35	-	10:40	20	6	6
10:40	-	10:45	18	9	13
10:45	-	10:50	25	9	6
10:50	-	10:55	12	8	9
10:55	-	11:00	12	13	6
11:00	-	11:05	10	14	8
11:05	-	11:10	18	6	12
11:10	-	11:15	18	5	4
11:15	-	11:20	22	10	7
11:20	-	11:25	26	5	8
11:25	-	11:30	8	5	6
11:30	-	11:35	18	5	7
11:35	-	11:40	12	7	8
11:40	-	11:45	12	12	9
11:45	-	11:50	10	6	9
11:50	-	11:55	8	6	8
11:55	-	12:00	12	8	6

17:50	-	17:55	6	6	11
17:55	-	18:00	8	8	8
18:00	-	18:05	8	6	4
18:05	-	18:10	6	6	13
18:10	-	18:15	8	9	7
18:15	-	18:20	12	8	5
18:20	-	18:25	9	11	9
18:25	-	18:30	6	6	7
18:30	-	18:35	8	9	5
18:35	-	18:40	11	10	8
18:40	-	18:45	7	5	6
18:45	-	18:50	7	5	5
18:50	-	18:55	8	6	11
18:55	-	19:00	11	5	5
19:00	-	19:05	16	5	10
19:05	-	19:10	6	7	6
19:10	-	19:15	5	4	5
19:15	-	19:20	8	5	5
19:20	-	19:25	6	6	5
19:25	-	19:30	3	2	6
19:30	-	19:35	6	6	4
19:35	-	19:40	6	6	4
19:40	-	19:45	4	4	3
19:45	-	19:50	5	3	3
19:50	-	19:55	3	3	6
19:55	-	20:00	5	4	5
20:00	-	20:05	2	5	6
20:05	-	20:10	1	6	5
20:10	-	20:15	4	3	7
20:15	-	20:20	1	5	10
20:20	-	20:25	5	6	5
20:25	-	20:30	3	4	3
20:30	-	20:35	4	4	4
20:35	-	20:40	5	3	2
20:40	-	20:45	3	3	5
20:45	-	20:50	3	3	4
20:50	-	20:55	1	1	4
20:55	-	21:00	4	2	5
21:00	-	21:05	5	3	2
21:05	-	21:10	3	2	5
21:10	-	21:15	3	4	4
21:15	-	21:20	3	6	5
21:20	-	21:25	3	2	2
21:25	-	21:30	2	3	3
21:30	-	21:35	3	2	3
21:35	-	21:40	1	2	1
21:40	-	21:45	1	4	2
21:45	-	21:50	3	1	3
21:50	-	21:55	2	0	1
21:55	-	22:00	2	3	3
22:00	-	22:05	0	1	2
22:05	-	22:10	1	2	2
22:10	-	22:15	1	2	2
22:15	-	22:20	5	1	2
22:20	-	22:25	3	1	1
22:25	-	22:30	3	1	1
22:30	-	22:35	1	2	2
22:35	-	22:40	1	1	3
22:40	-	22:45	2	1	1
22:45	-	22:50	1	3	1
22:50	-	22:55	0	3	1
22:55	-	23:00	1	1	1
23:00	-	23:05	0	0	0
23:05	-	23:10	0	1	0
23:10	-	23:15	0	2	1
23:15	-	23:20	1	1	1
23:20	-	23:25	0	2	1
23:25	-	23:30	0	1	1
23:30	-	23:35	0	0	0
23:35	-	23:40	0	1	0
23:40	-	23:45	1	0	1
23:45	-	23:50	0	0	0
23:50	-	23:55	0	0	0
23:55	-	0:00	0	0	2

Queues are maximum queues each 5 minute period

APPENDIX 5: Traffic Flow Diagrams



BWB Consulting Ltd
Fifth Floor
Waterfront House
35 Station Street
Nottingham
NG2 3DQ

Tel: 0115 924 1100
FAX: 0115 950 3966

Royal Hill, Spondon

Drawn

AS

Date

11.07.23

Checked

SF

Approved

SF

Title

2022 BASE AM

Project No.

BMW3087

Scale

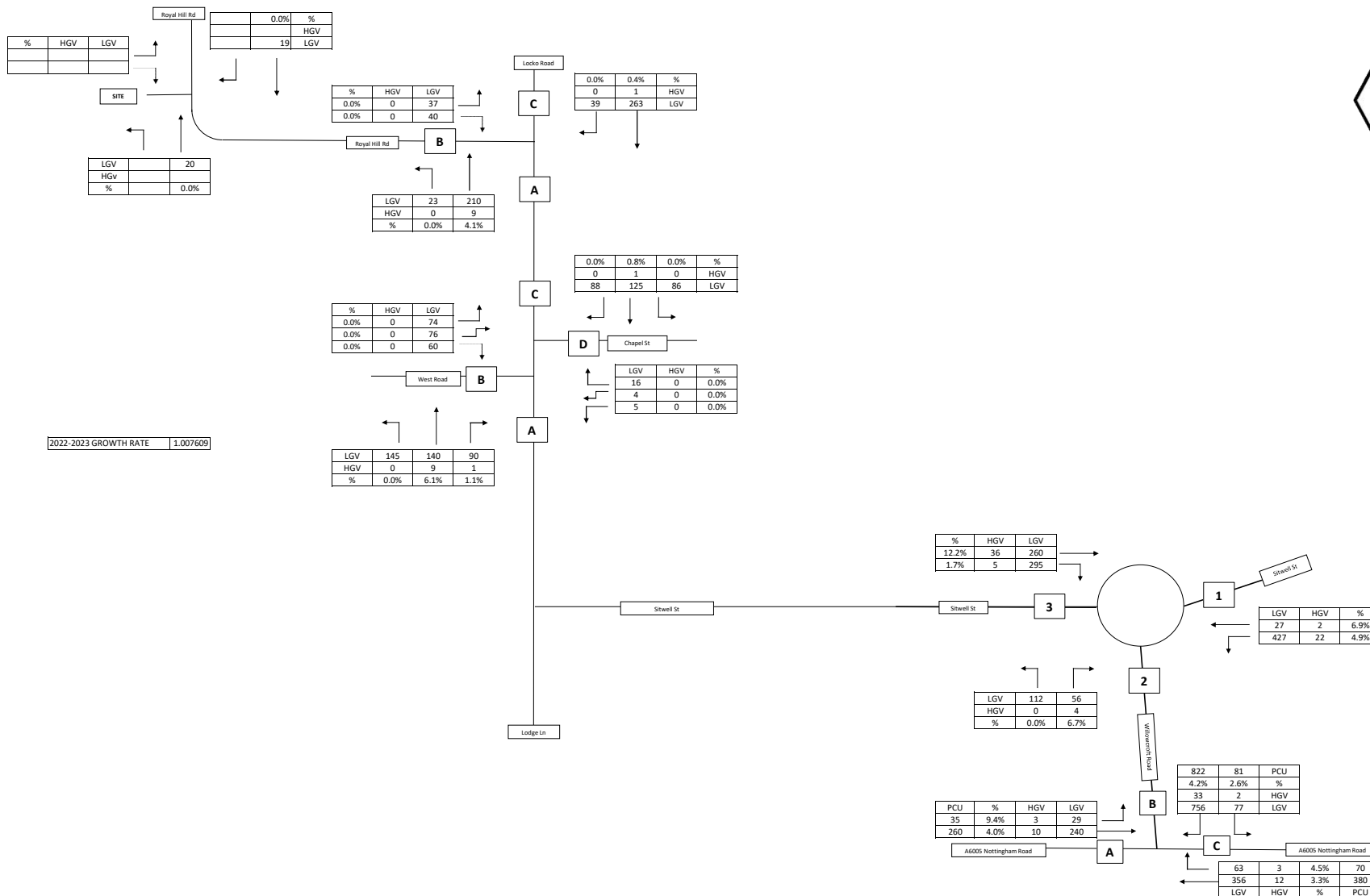
NTS

Drg. No.

Flow Diagram 1

Rev.

1



BWB Consulting Ltd
Fifth Floor
Waterfront House
35 Station Street
Nottingham
NG2 3DQ

Tel: 0115 924 1100
FAX: 0115 950 3966

Royal Hill, Spondon

Drawn

AS

Date

11.07.23

Checked

SF

Approved

SF

Title

2022 BASE AM

Project No.

BMW3087

Scale

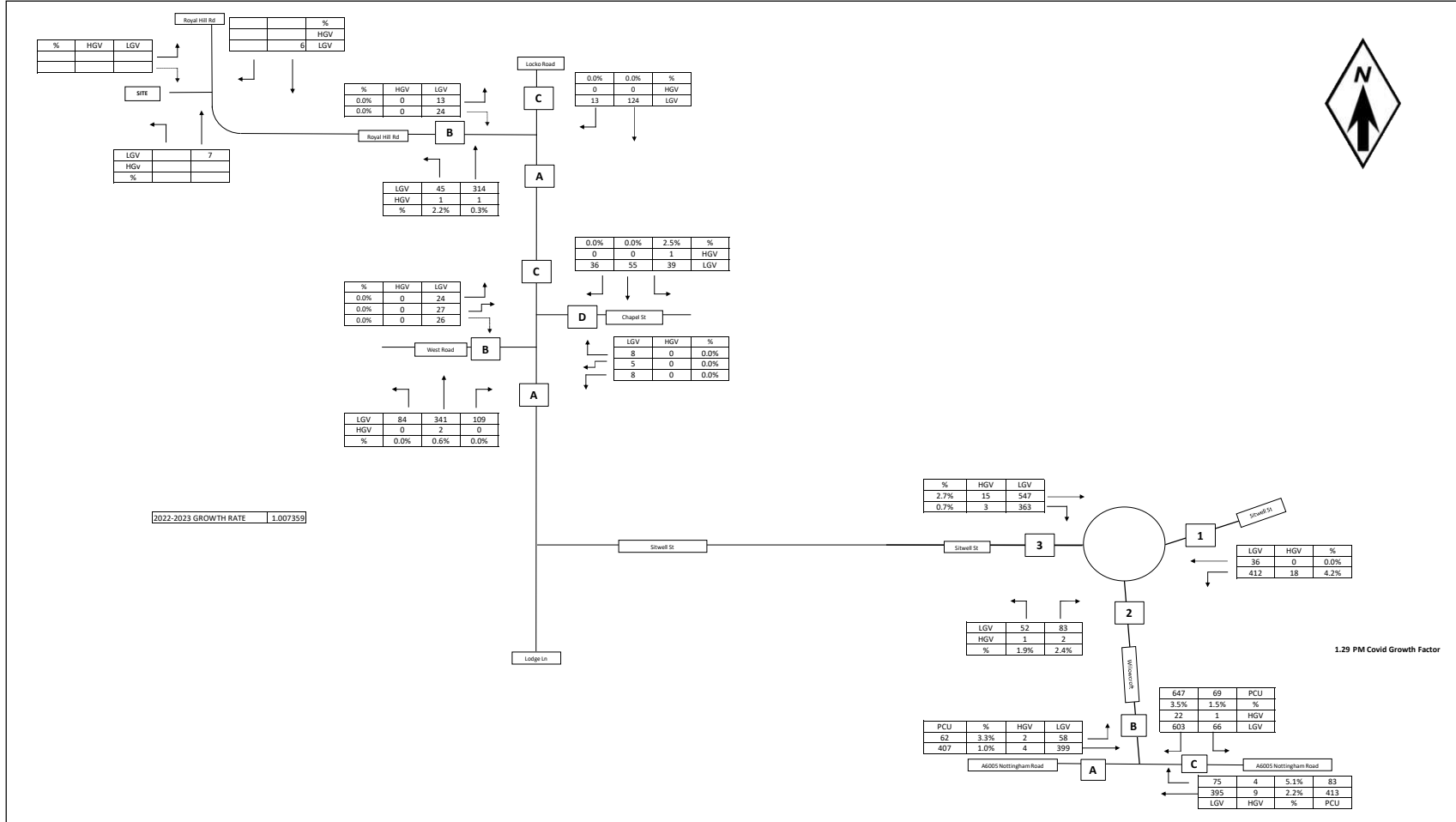
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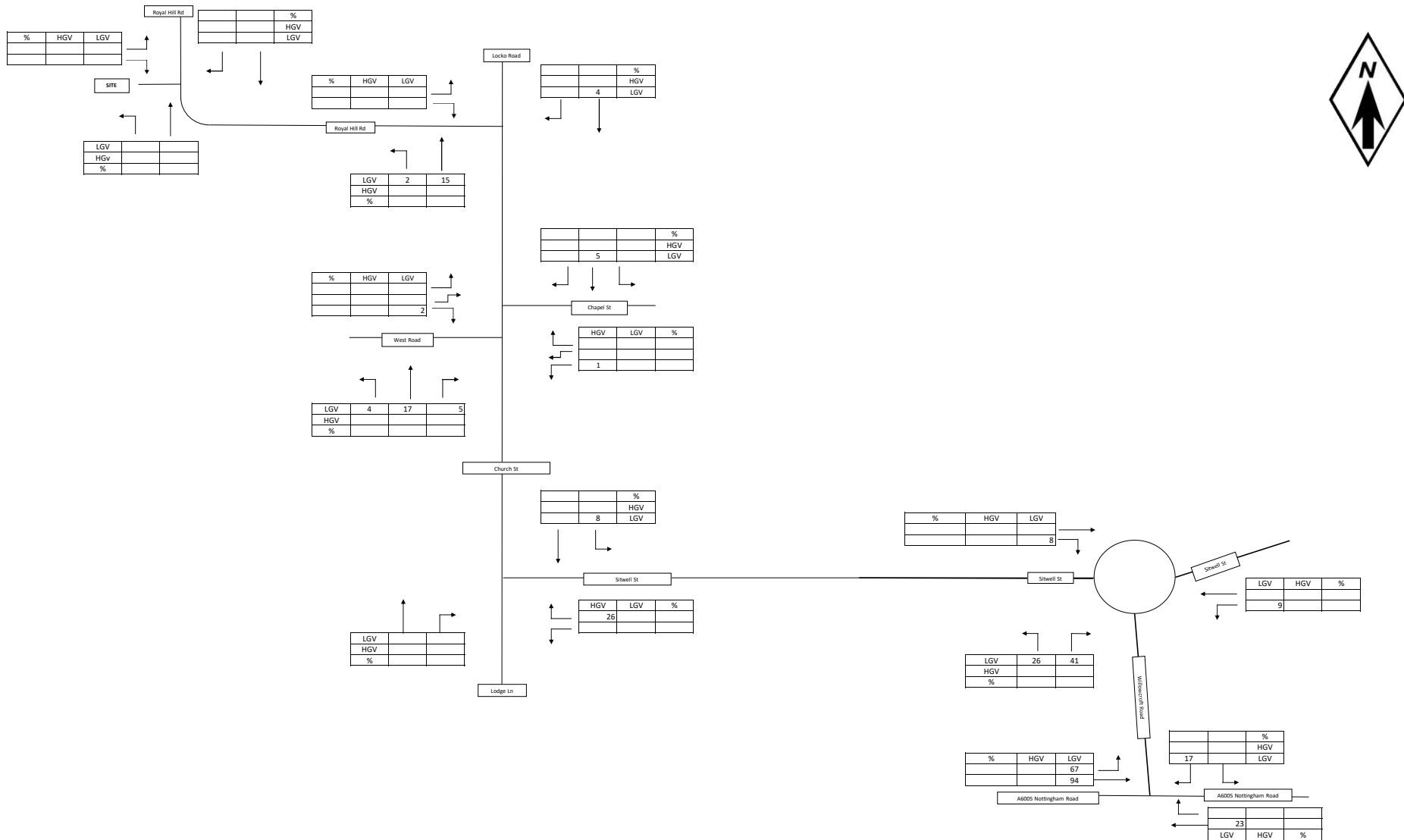
Flow Diagram 3

Rev.

1



 <p>BWB Consulting Ltd Fifth Floor Waterfront House 35 Station Street Nottingham NG2 3DQ Tel: 0115 924 1100 FAX: 0115 950 3966</p>	Royal Hill, Spondon				Title 2022 BASE PM		
	Drawn	AS	Date	11.07.23	Project No. BMW3087		
	Checked	SF	Approved	SF	Scale NTS	Drg. No. Flow Diagram 4	Rev. 1



BWB Consulting Ltd
Fifth Floor
Waterfront House
35 Station Street
Nottingham
NG2 3DQ

Tel: 0115 924 1100
FAX: 0115 950 3966

Royal Hill, Spondon

Drawn

AS

Date

11.07.23

Checked

SF

Approved

SF

Title

Committed Development Trips PM

Project No.

BMW3087

Scale

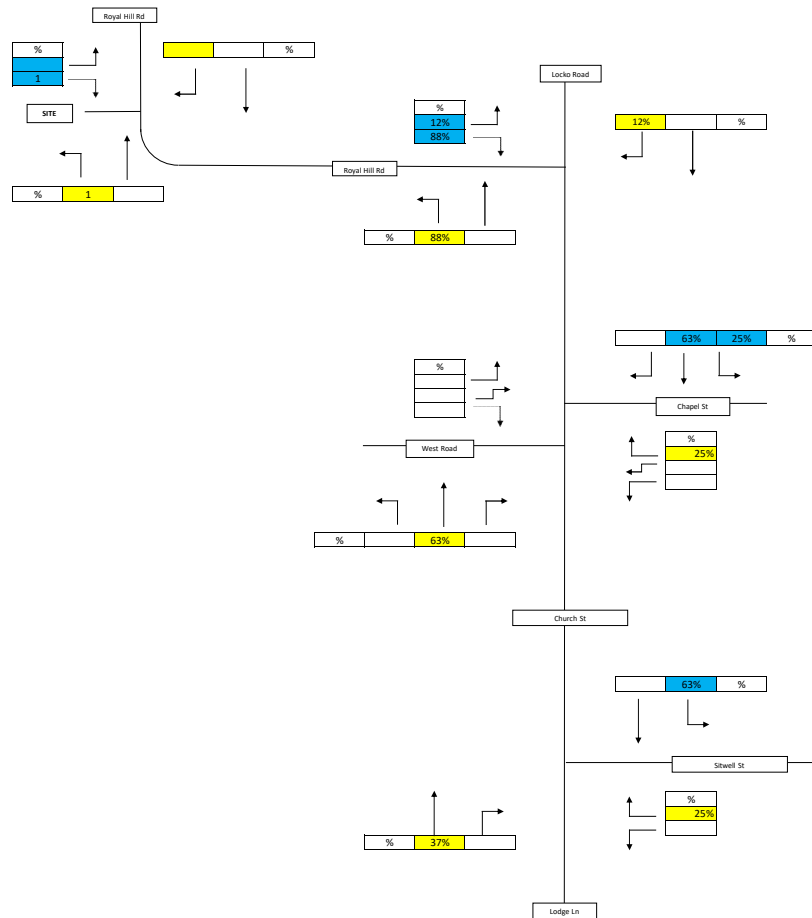
NTS

Drg. No.

Flow Diagram 6

Rev.

1



	Arrivals	Departures	Two-Way
0800-0900	#REF!	#REF!	#REF!



BWB Consulting Ltd
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Waterfront House
35 Station Street
Nottingham
NG2 3DQ
Tel: 0115 924 1100
FAX: 0115 950 3966

Royal Hill, Spondon

Title

Trip Distribution

Drawn

AS

Date

11.07.23

Project No.

BMW3087

Checked

SF

Approved

SF

Scale

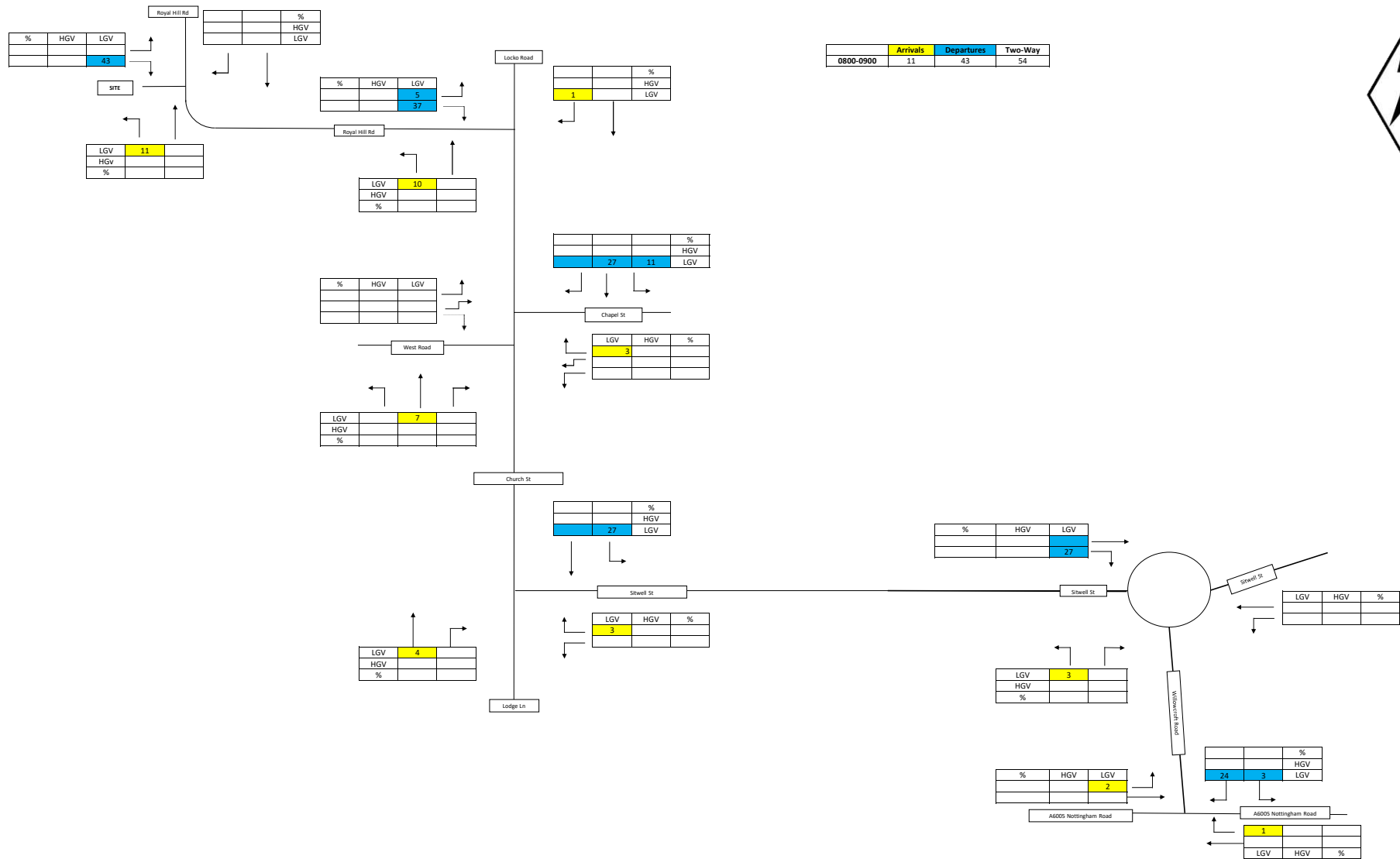
NTS

Drg. No.

Flow Diagram 7

Rev.

1



BWB Consulting Ltd
Fifth Floor
Waterfront House
35 Station Street
Nottingham
NG2 3DQ

Tel: 0115 924 1100
FAX: 0115 950 3966

Royal Hill, Spondon

Drawn

AS

Date

11.07.23

Checked

SF

Approved

SF

Title

Trip Generation AM

Project No.

BMW3087

Scale

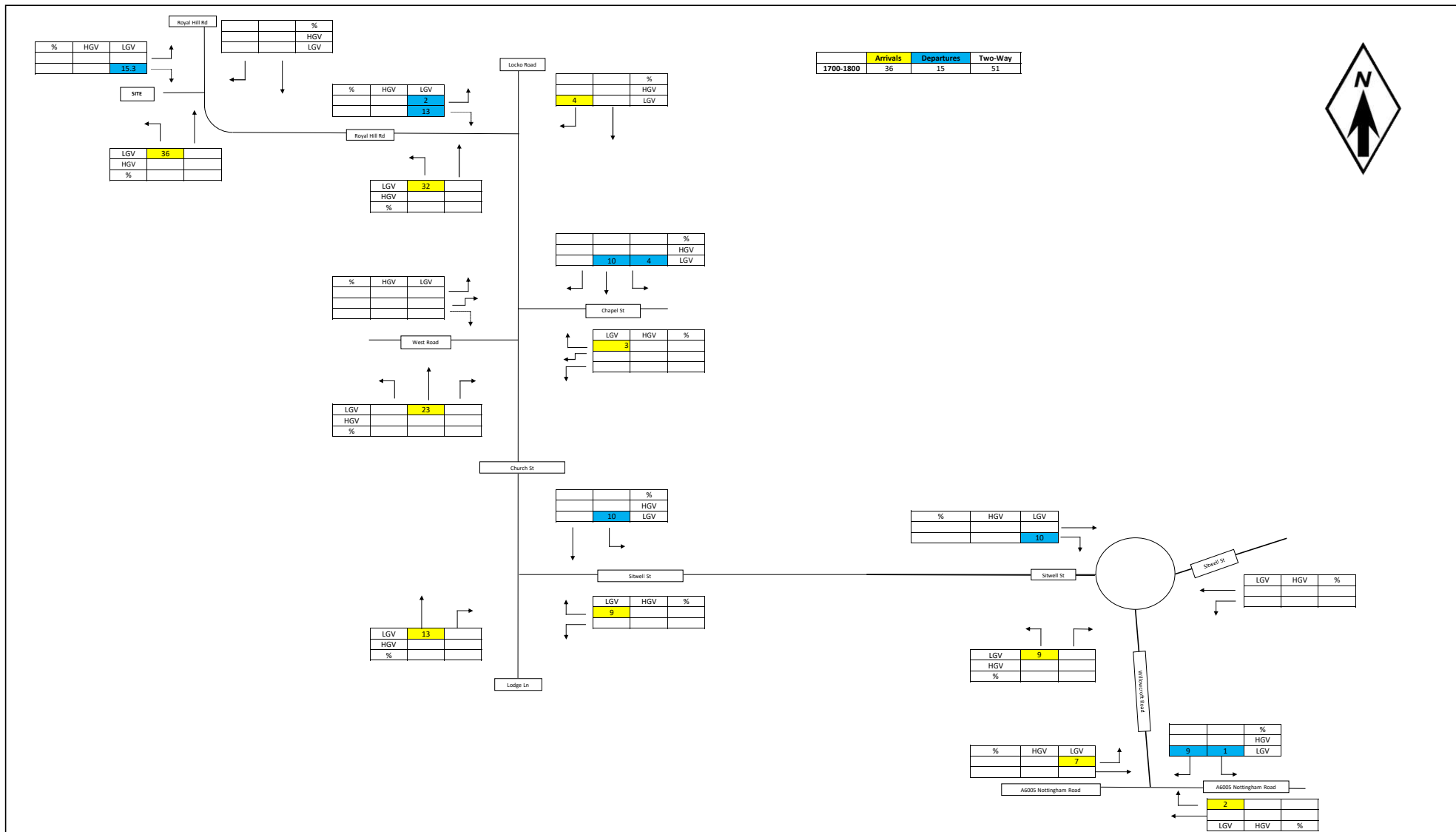
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Drg. No.

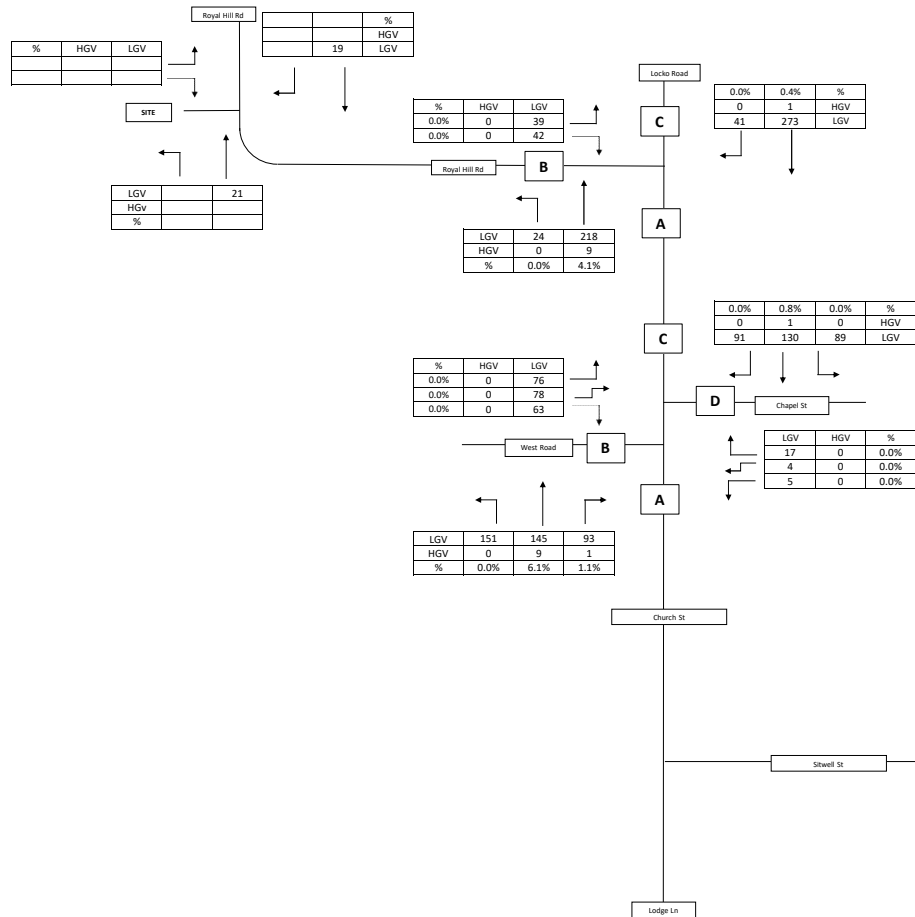
Flow Diagram 8

Rev.

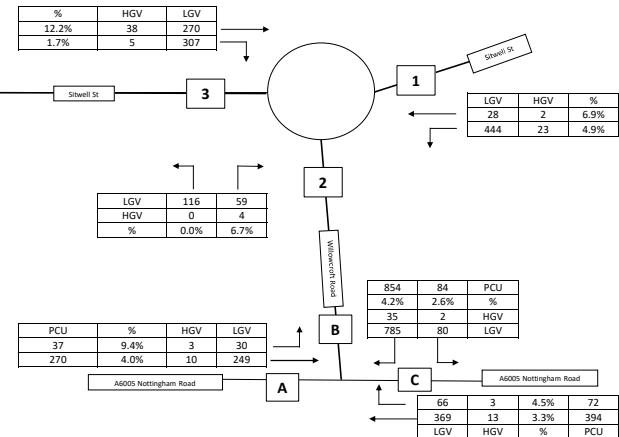
1



 <p>BWB Consulting Ltd Fifth Floor Waterfront House 35 Station Street Nottingham NG2 3DQ</p> <p>Tel: 0115 924 1100 FAX: 0115 950 3966</p>	Royal Hill, Spondon				Title Trip Generation PM		
	Drawn	AS	Date	11.07.23	Project No. BMW3087		
	Checked	SF	Approved	SF	Scale NTS	Drg. No. Flow Diagram 9	Rev. 1



AM Growth Rate 1.046403929



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Fifth Floor
Waterfront House
35 Station Street
Nottingham
NG2 3DQ
Tel: 0115 924 1100
FAX: 0115 950 3966

Royal Hill, Spondon

Drawn

AS

Date

11.07.23

Checked

SF

Approved

SF

Title

2028 BASE AM

Project No.

BMW3087

Scale

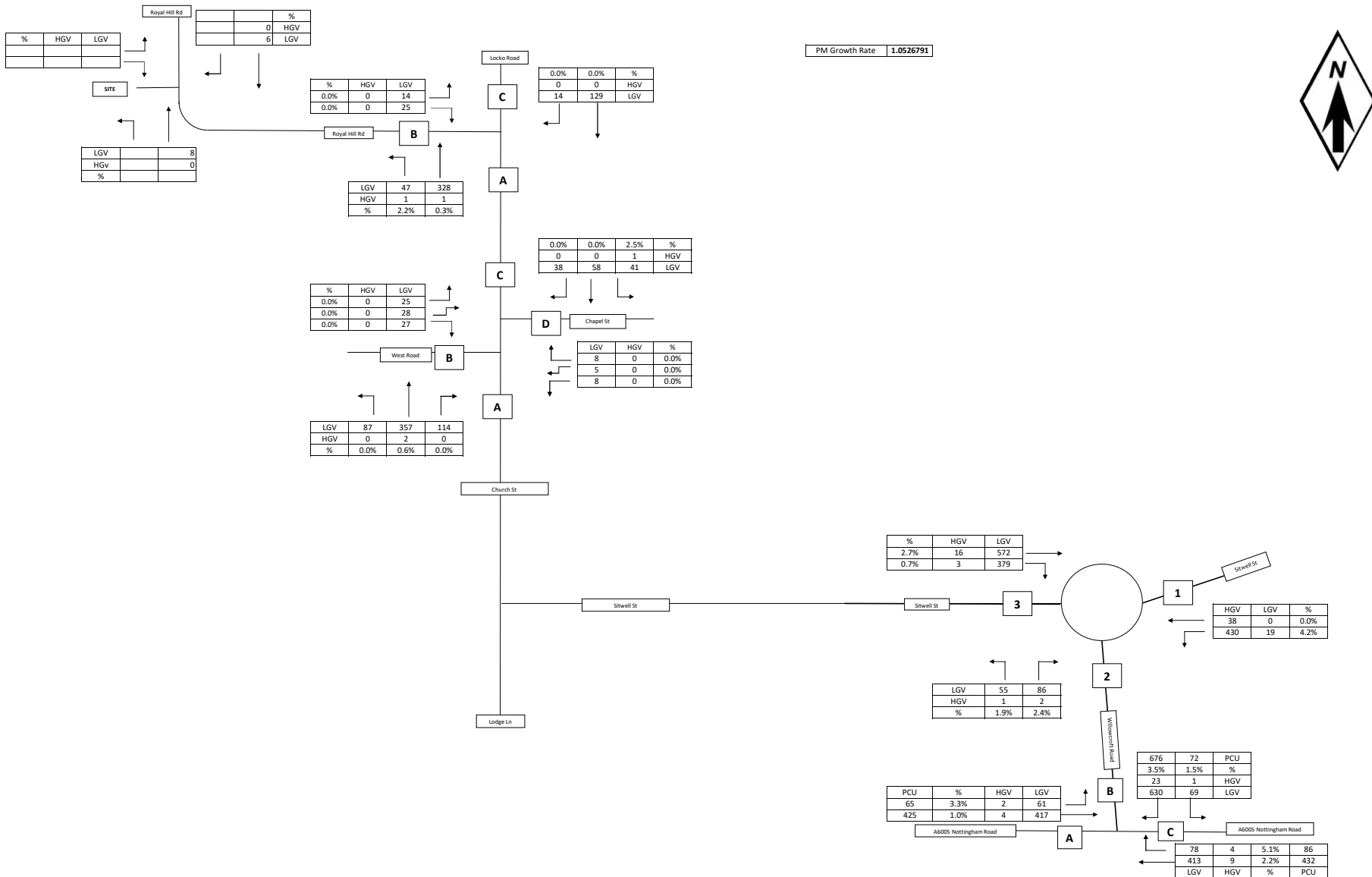
NTS

Drg. No.

Flow Diagram 10

Rev.

1



BWB Consulting Ltd
Fifth Floor
Waterfront House
35 Station Street
Nottingham
NG2 3DQ

Tel: 0115 924 1100
FAX: 0115 950 3966

Royal Hill, Spondon

Title

2028 BASE PM

Drawn

AS

Date

11.07.23

Project No.

BMW3087

Checked

SF

Approved

SF

Scale

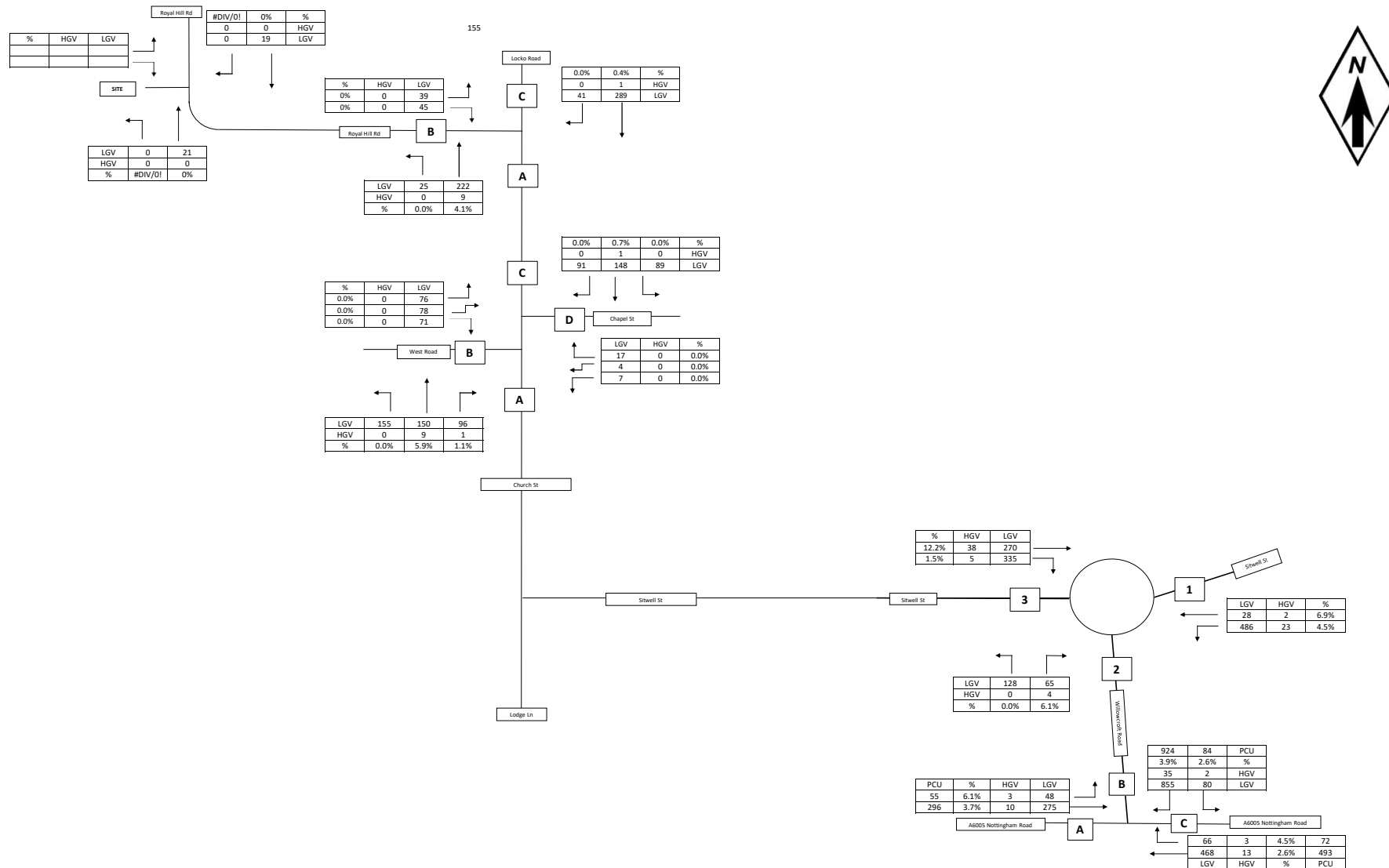
NTS

Drg. No.

Flow Diagram 11

Rev.

1



BWB Consulting Ltd
Fifth Floor
Waterfront House
35 Station Street
Nottingham
NG2 3DQ

Tel: 0115 924 1100
FAX: 0115 950 3966

Royal Hill, Spondon

Drawn

AS

Date

11.07.23

Checked

SF

Approved

SF

Title

2028 BASE + COM AM

Project No.

BMW3087

Scale

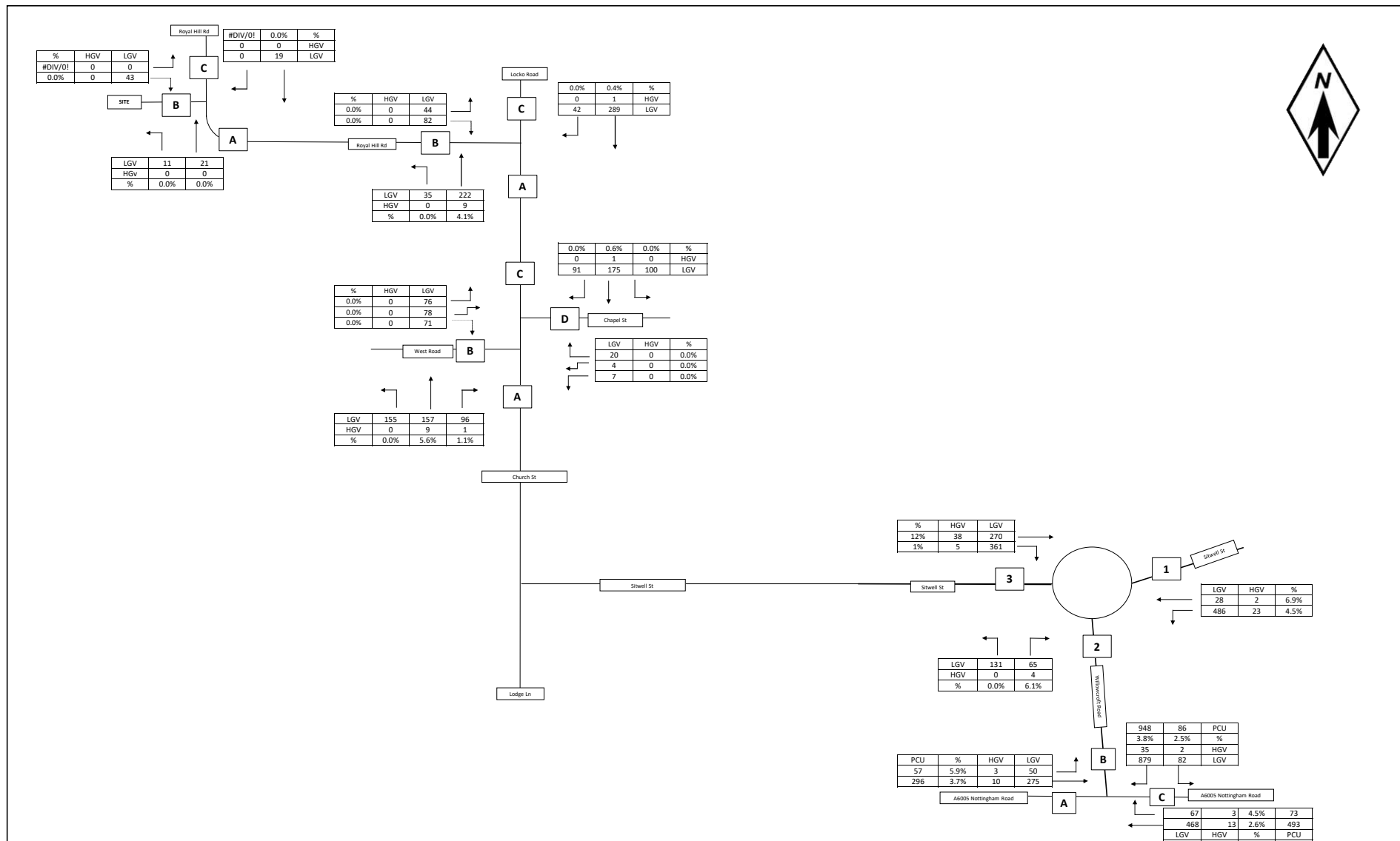
NTS

Drg. No.

Flow Diagram 12

Rev.

1



 <p>BWB Consulting Ltd Fifth Floor Waterfront House 35 Station Street Nottingham NG2 3DQ</p> <p>Tel: 0115 924 1100 FAX: 0115 950 3966</p>	Royal Hill, Spondon				Title 2028 BASE + COM + DEV AM		
	Drawn	AS	Date	11.07.23	Project No. BMW3087		
	Checked	SF	Approved	SF	Scale NTS	Drg. No. Flow Diagram 14	Rev. 1

APPENDIX 6: Smartparc Extracted Flows

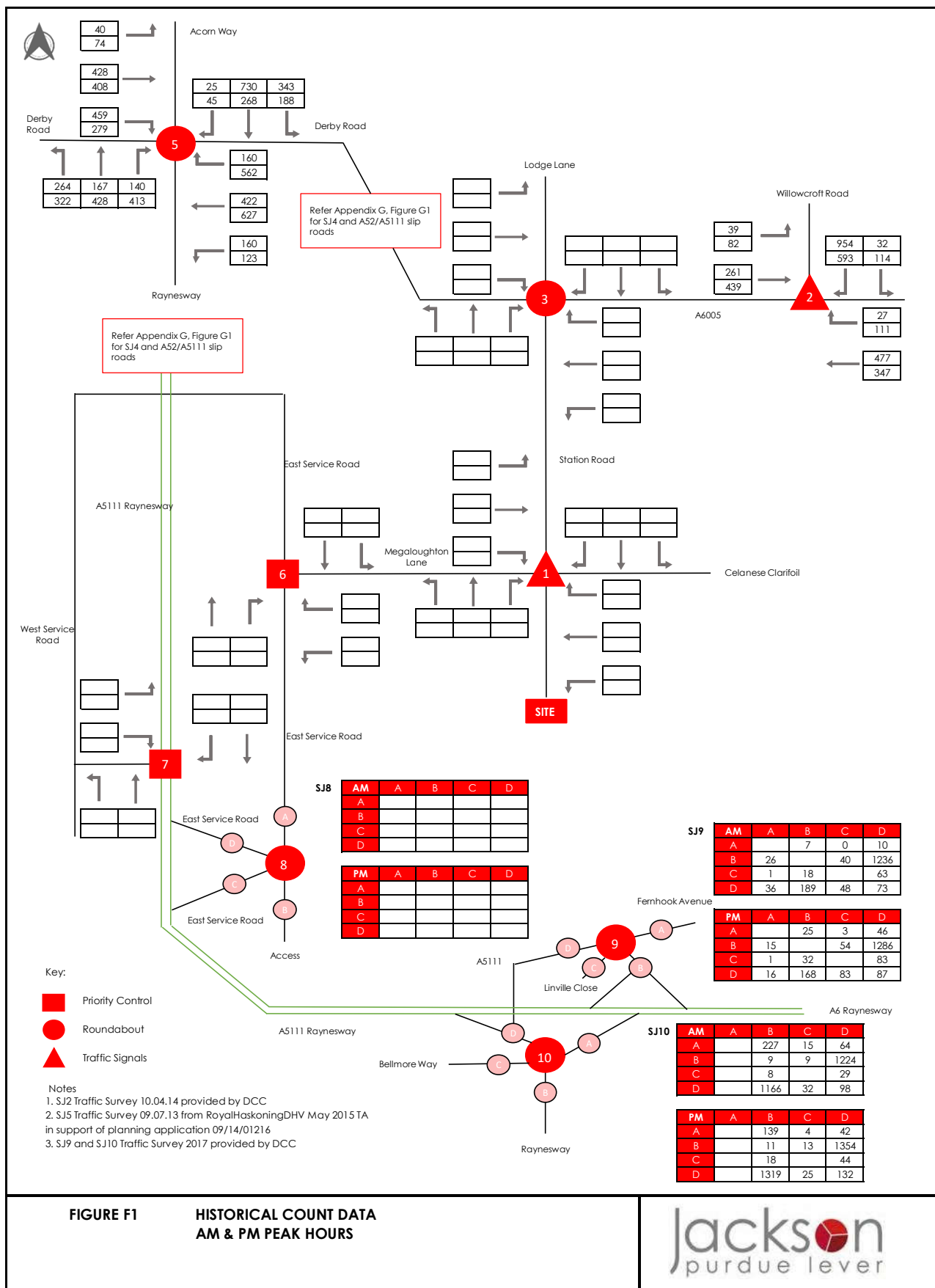
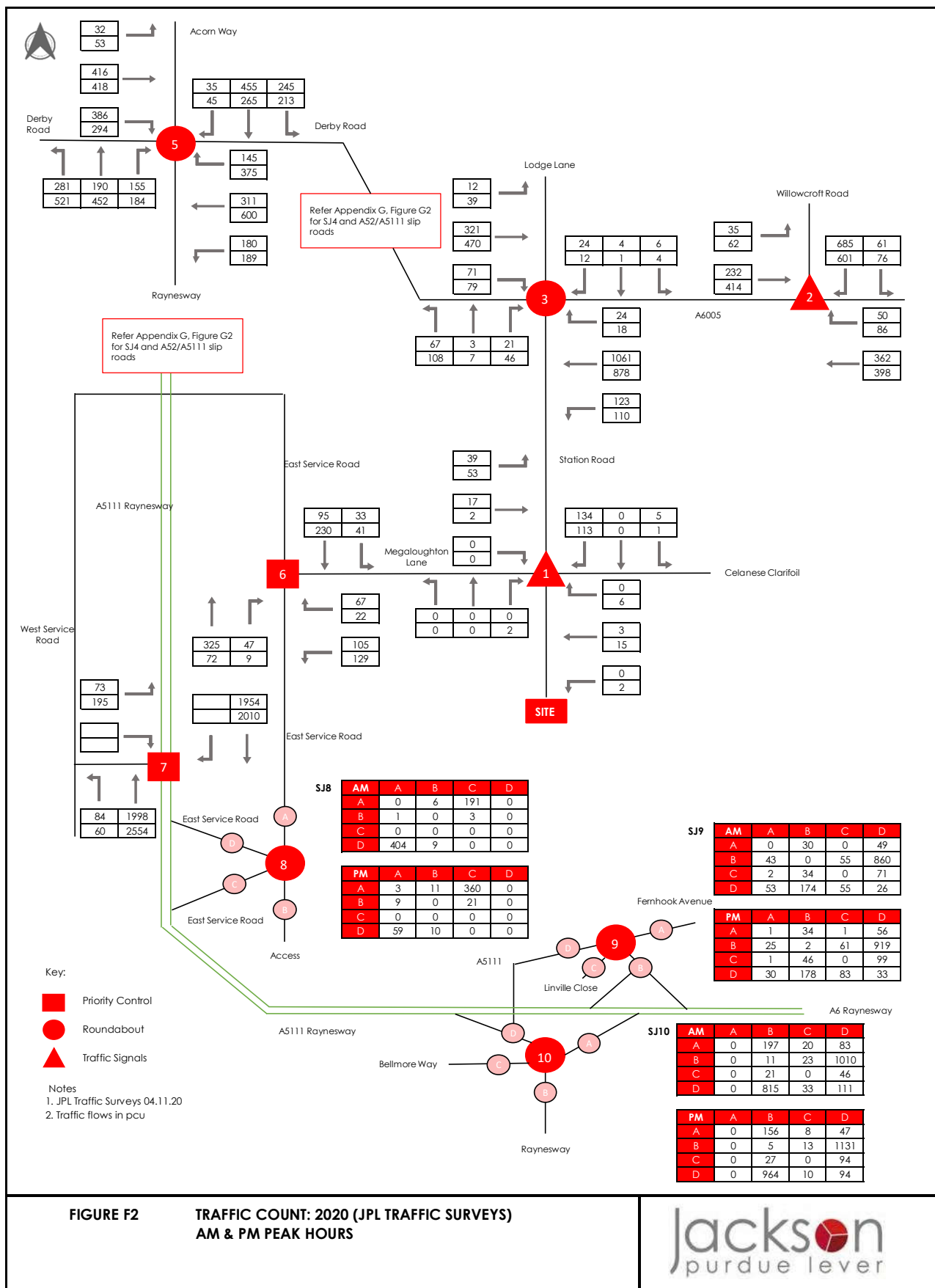


FIGURE F1

HISTORICAL COUNT DATA AM & PM PEAK HOURS



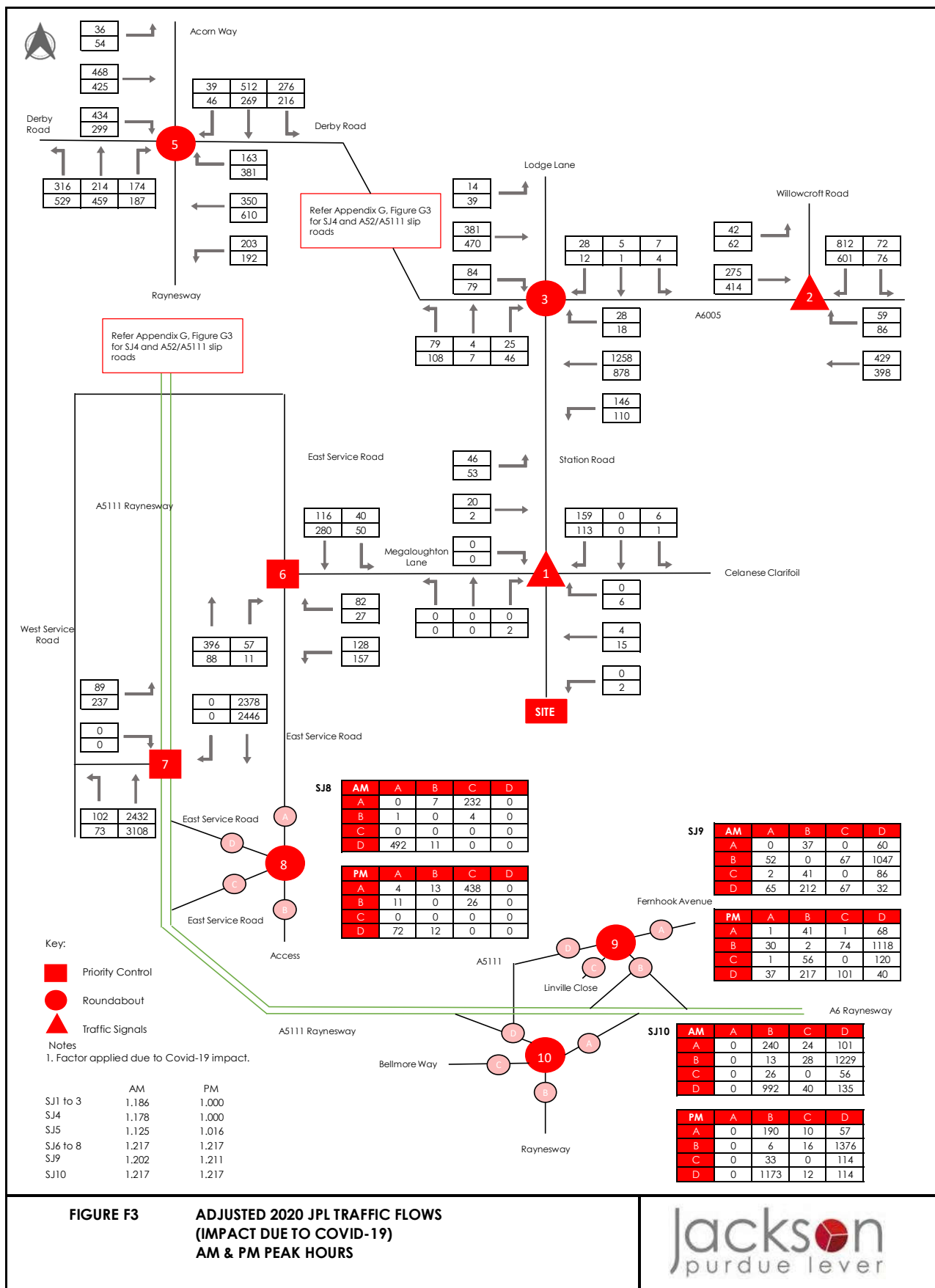


FIGURE F3

ADJUSTED 2020 JPL TRAFFIC FLOWS
(IMPACT DUE TO COVID-19)
AM & PM PEAK HOURS

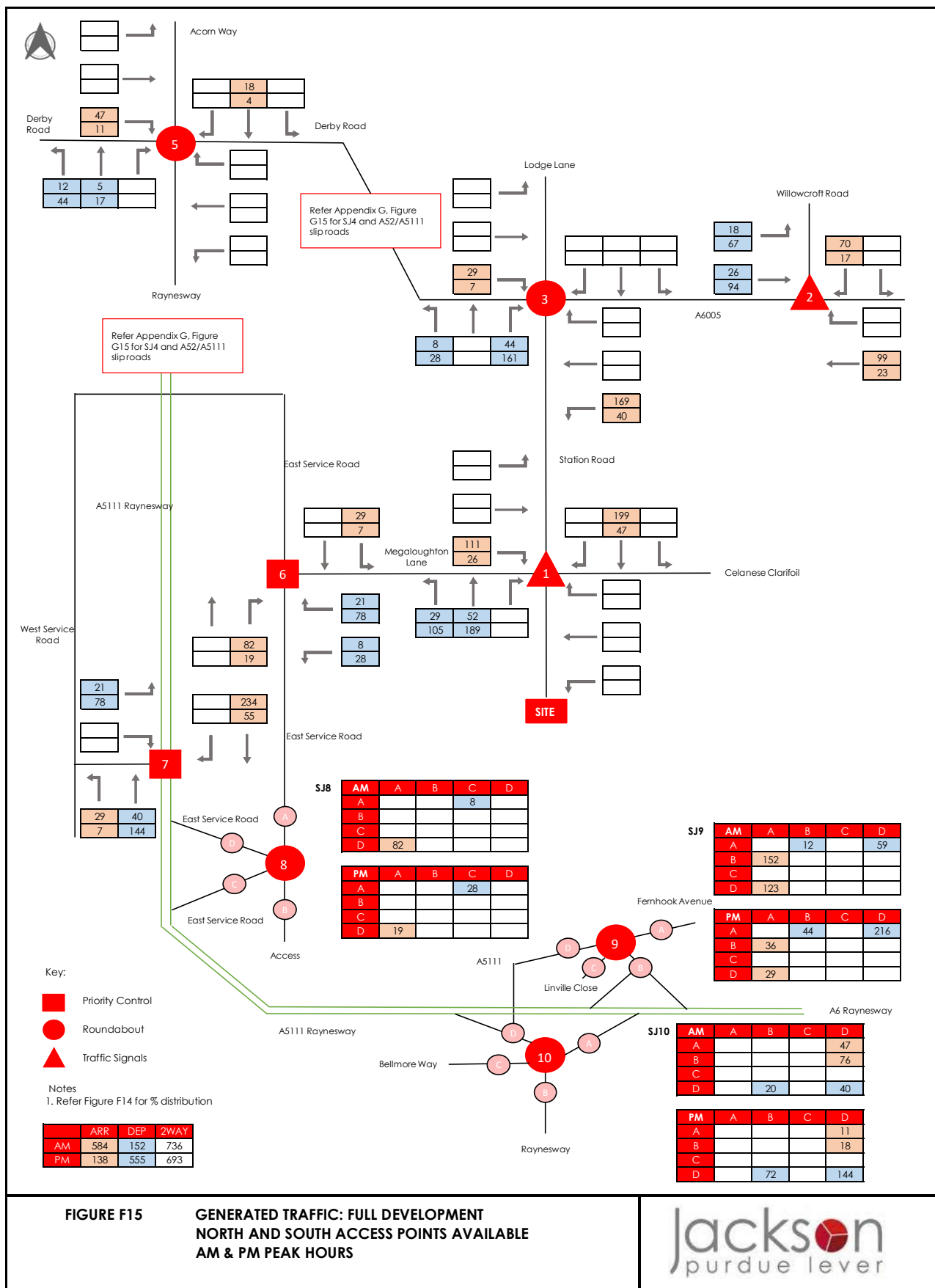


FIGURE F15

GENERATED TRAFFIC: FULL DEVELOPMENT
NORTH AND SOUTH ACCESS POINTS AVAILABLE
AM & PM PEAK HOURS

APPENDIX 7: S1/S2 Shuttle Bus Information

New Spondon Small Bus Service launches

Published: 26 March 2023

A new trial bus service for Spondon launches on Monday 27th March with the aim of reconnecting local residents to the businesses and amenities in Spondon village centre.

The new Spondon Small Bus Service will have two routes called SP1 & SP2 which will serve both the top end of Spondon and the bottom end of Spondon. Each service will run Monday to Friday (excluding bank holidays) from mid-morning to mid-afternoon.

See below for route maps and timetables.

The service will initially be for a 3-month trial period and will initially be a free service, although a fare may be introduced at a later stage.

The services will stop at existing bus stops along the designated routes, as well as operating a hail and ride service in parts of the route where there are no existing bus stops.

Details of the new service were announced last week by Spondon Councillors on their Facebook page (<https://www.facebook.com/SpondonCouncillors/>).



Spondon Councillors

about 4 months ago



Spondon Small Bus Service PLEASE SHARE

We are pleased to announce a new Spondon Small Bus Service that will be starting on Monday 27th March 2023.

In November last year the Conservative administration took a paper forward to allocate £20,000 to trial a small bus service in Spondon after the Spondon Flyer service was ceased by TrentBarton. ... [See more](#)

Spondon Shuttle Timetable

**Service
SP1**

Starting from Monday 27 March 2023

Running Monday - Friday (excluding bank holidays)

Chapel Street	09:45	10:15	10:45	11:15	11:45	12:45	13:15	13:45
Sandringham Drive - Arundel Drive	09:48	10:18	10:48	11:18	11:48	12:48	13:18	13:48
Pheasant Field - Deincourt Close	09:51	10:21	10:51	11:21	11:51	12:51	13:21	13:51
Huntley Avenue - Windsor Drive	09:54	10:24	10:54	11:24	11:54	12:54	13:24	13:54
Sandcroft Road - Coniston Avenue	09:57	10:27	10:57	11:27	11:57	12:57	13:27	13:57
Chapel Street	09:59	10:29	10:59	11:29	11:59	12:59	13:29	13:59

Chapel Street - Moor Street - Stoney Lane - Sandringham Drive - Dale Road - Huntley Avenue - Dale Road - Sandcroft Road - Locko Road - Chapel Street

For more information, please contact Derbyshire Community Transport by emailing contact@derbyshirect.org or phoning 01773 746652.

Derby City Council

Department for Transport

DERBYSHIRE
COMMUNITY
TRANSPORT

Spondon Shuttle Timetable

**Service
SP2**

Starting from Monday 27 March 2023

Running Monday - Friday (excluding bank holidays)

Chapel Street	10:05	10:35	11:05	11:35	12:05	12:35	13:05	13:35
Cambridge Street	10:08	10:38	11:08	11:38	12:08	12:38	13:08	13:38
Arundel Avenue - Windsor Drive	10:10	10:40	11:10	11:40	12:10	12:40	13:10	13:40
Arundel Road	10:15	10:45	11:15	11:45	12:15	12:45	13:15	13:45
Stoneyfield Road - Dale Road - Arundel Avenue	10:20	10:50	11:20	11:50	12:20	12:50	13:20	13:50
Cambridge Street	10:25	10:55	11:25	11:55	12:25	12:55	13:25	13:55
Church Street	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00
Chapel Street	10:35	11:05	11:35	12:05	12:35	13:05	13:35	14:05

Funding for the service is being provided specifically to provide residents who rely on public transport with a way of accessing amenities within their local communities. As a result, it is hoped that the service will bring more local residents back into Spondon village centre to support the local businesses and other amenities available locally.

The new services will therefore not go directly to Derby city centre, although will drop passengers off at bus stops served by the Ilkeston Flyer service, so enabling easy transfer to that service if required.

(Photo credit: Spondon Councillors (<https://www.facebook.com/SpondonCouncillors/>))

Timetables and Routes

SP1 (North Spondon)

Spondon Shuttle Timetable

Service
SP1

Starting from Monday 27 March 2023

Running Monday - Friday (excluding bank holidays)

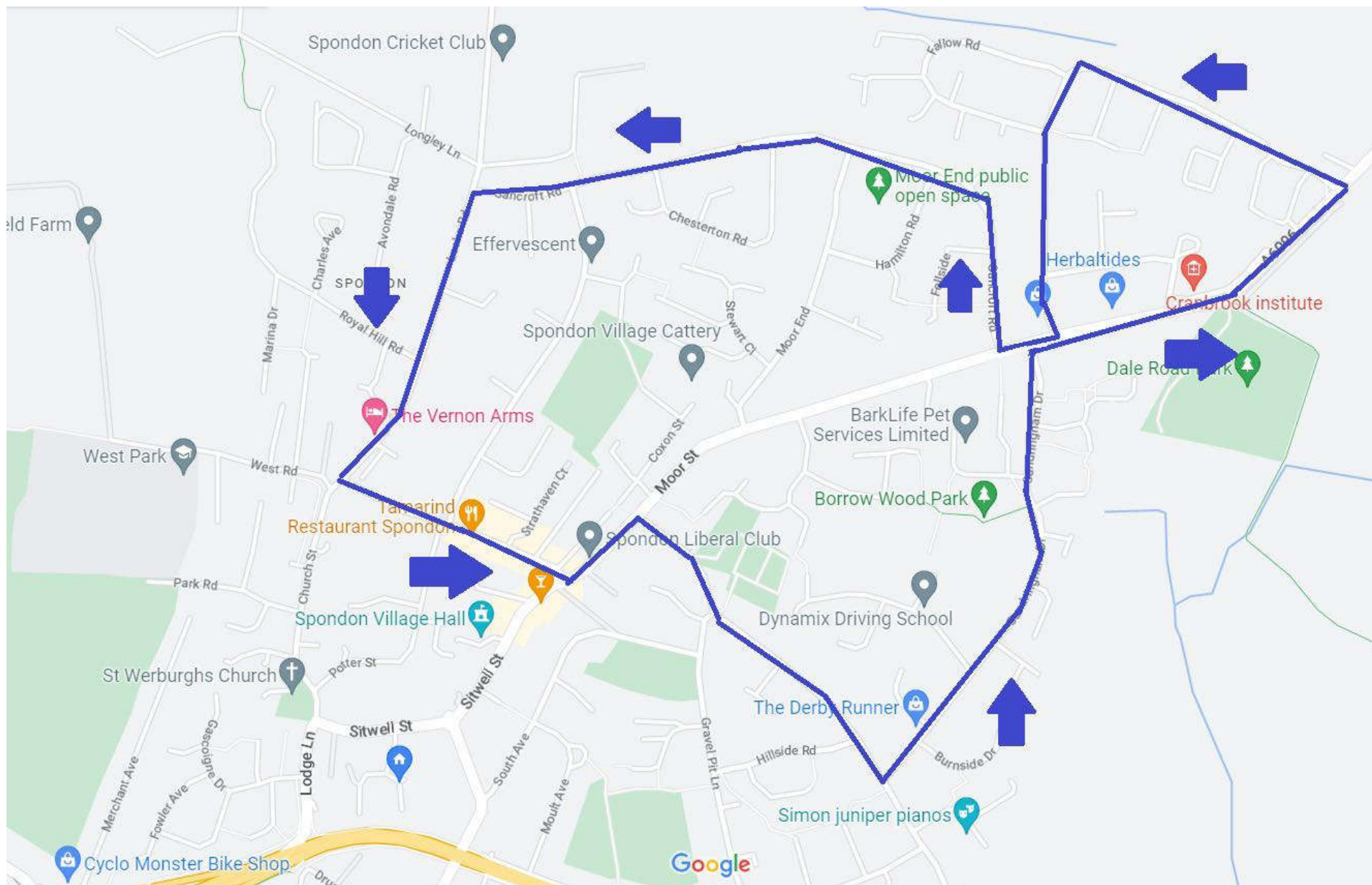
Chapel Street	09:45	10:15	10:45	11:15	11:45	12:45	13:15	13:45
Sandringham Drive - Arundel Drive	09:48	10:18	10:48	11:18	11:48	12:48	13:18	13:48
Pheasant Field - Deincourt Close	09:51	10:21	10:51	11:21	11:51	12:51	13:21	13:51
Huntley Avenue - Windsor Drive	09:54	10:24	10:54	11:24	11:54	12:54	13:24	13:54
Sandcroft Road - Coniston Avenue	09:57	10:27	10:57	11:27	11:57	12:57	13:27	13:57

Chapel Street	09:59	10:29	10:59	11:29	11:59	12:59	13:29	13:59

Chapel Street - Moor Street - Stoney Lane - Sandringham Drive -
Dale Road - Huntley Avenue - Dale Road - Sandcroft Road -
Locko Road - Chapel Street

For more information, please contact Derbyshire Community Transport by emailing **contact@derbyshirect.org** or phoning **01773 746652**.





SP2 (South Spondon)

Spondon Shuttle Timetable

Service
SP2

Starting from Monday 27 March 2023

Running Monday - Friday (excluding bank holidays)

Chapel Street	10:00	10:30	11:00	11:30	12:00	13:00	13:30	14:00
Cambridge Street	10:03	10:33	11:03	11:33	12:03	13:03	13:33	14:03
Arnhem Terrace Wensley Drive	10:05	10:35	11:05	11:35	12:05	13:05	13:35	14:05
Milldale Road	10:06	10:36	11:06	11:36	12:06	13:06	13:36	14:06
Borrowfield Road Opp Vincent Avenue	10:07	10:37	11:07	11:37	12:07	13:07	13:37	14:07
Cambridge Street	10:08	10:38	11:08	11:38	12:08	13:08	13:38	14:08

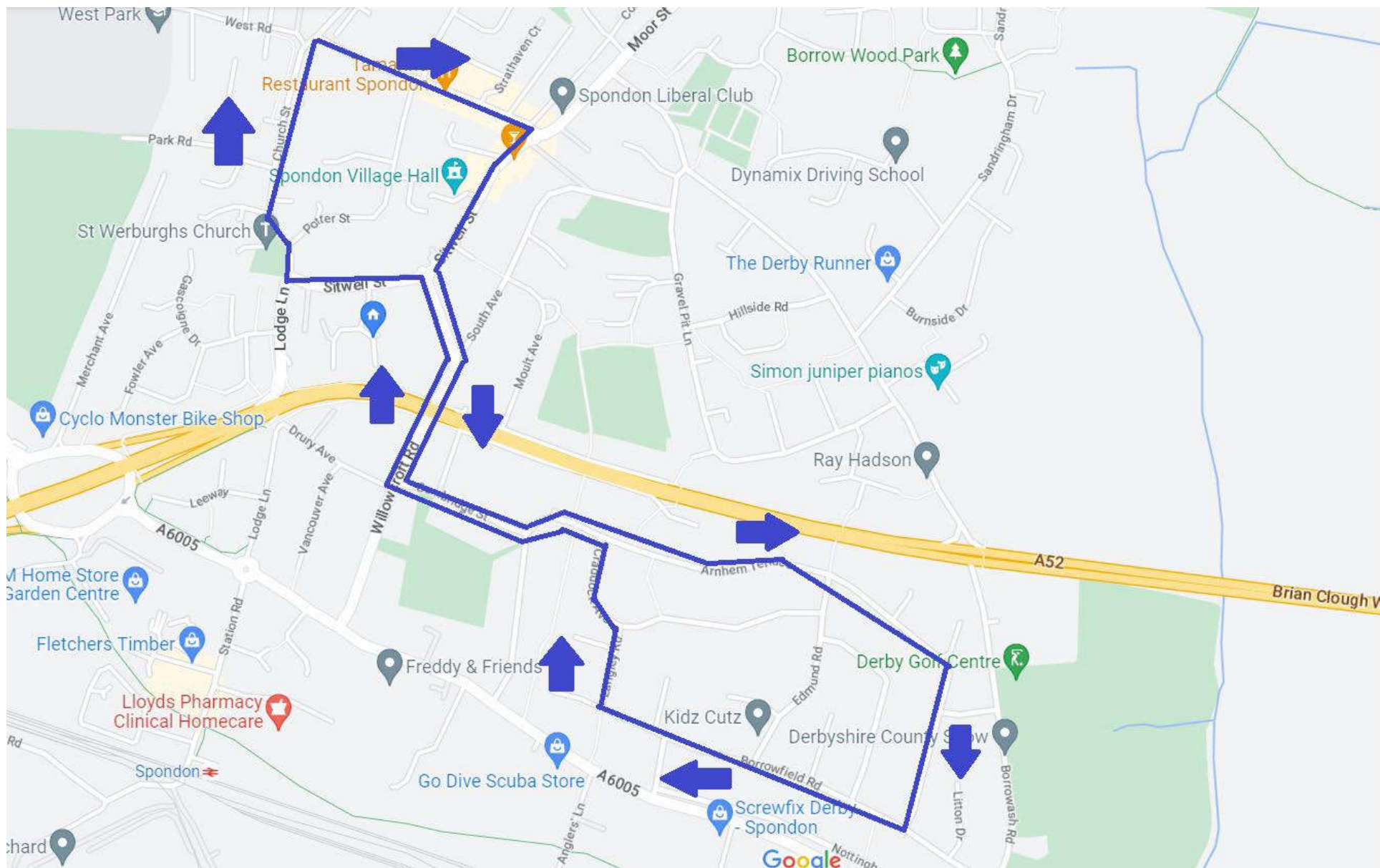


10:10	10:40	11:10	11:40	12:10	13:40	13:10	14:40
10:12	10:42	11:12	11:42	12:12	13:42	13:12	14:42

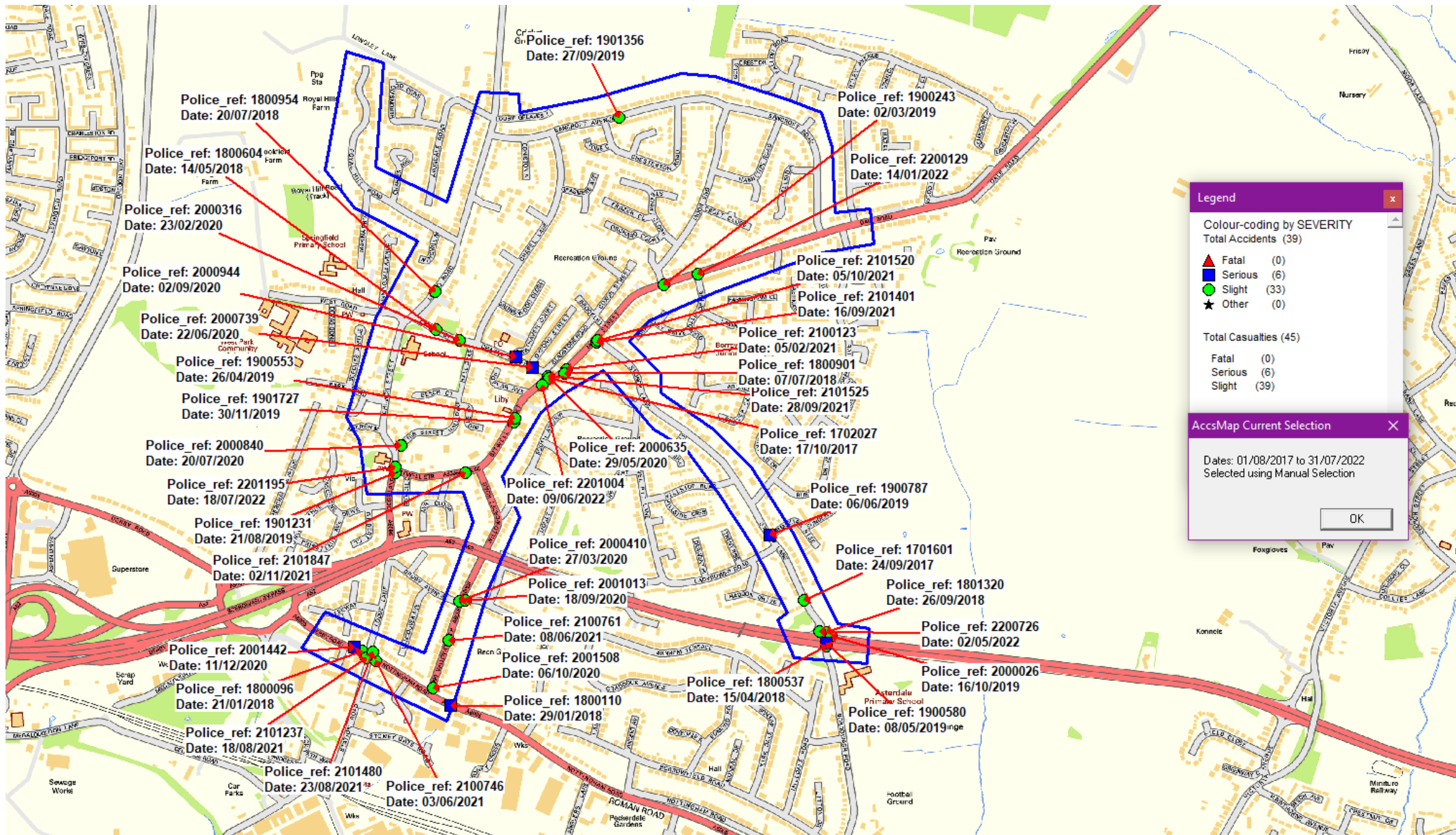
Sitwell Street - Willowcroft Road - Cambridge Street -
 Dale Road - Borrowfield Road - Langley Road -
 e - Cambridge Street - Willowcroft Road -
 Sitwell Street - Church Street - Chapel Street

For more information, please contact Derbyshire Community
 Transport by emailing **contact@derbyshirect.org** or phoning
01773 746652.





APPENDIX 8: PIC Data



Legend

Colour-coding by SEVERITY
Total Accidents (39)

- Fatal (0)
- Serious (6)
- Slight (33)
- Other (0)

Total Casualties (45)

- Fatal (0)
- Serious (6)
- Slight (39)

AccsMap Current Selection

Dates: 01/08/2017 to 31/07/2022
Selected using Manual Selection

OK

Details of Personal Injury Accidents for Period - 01/08/2017 to 31/07/2022 (60) months

Selection: Notes:
Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles				Casualties	
			Veh No	Type	Manv	Dir	Class	Sev
Road No.	Date							
2nd Road No.	Time							
Grid Ref.	D/L							
	R.S.C							
	Weather							
	Speed							
	Account of Accident							

1701601 Sunday Spondon - Stoney Lane (IPQA) Veh 1 Car Going ahead NW^{to} SE FSP Slight
24/09/2017 Veh 2 Goods < 3.5t Parked 0 to 0
R1: C 1100hrs
Daylight:street lights present
E 440,823 Wet/Damp
N 335,569 Fine without high winds
30 mph

V001 HAS COLLIDED WITH V002 WHICH WAS PARKED ON THE SIDE OF THE ROAD (IPQA)

1702027 Tuesday Spondon - Sitwell St J/W Chapel St Veh 1 Car Turning right SW^{to} NE Dri Slight
17/10/2017 (IPQA) Veh 2 M/C > 125 cc Turning right NE^{to} NW Dri Slight
R1: A 6096 1420hrs
R2: C Daylight:street lights present
E 440,210 Dry
N 336,105 Fine without high winds
30 mph

BOTH VEHICLES HAVE APPROACHED THREE WAY ROUNDABOUT FROM OPPOSITE DIRECTIONS BUT BOTH DRIVERS HAVE NOT LOOKED PROPERLY OR FAILED TO JUDGE SPEED AND AFTER GIVING WAY HAVE COLLIDED ON THE RBT

1800096 Sunday DERBY - A6005 DERBY ROAD J/W Veh 1 Car Going ahead NW^{to} SE
21/01/2018 A6005 T/I - IPQA Veh 2 Car Wait go ahead held NW^{to} SE Dri Slight
R1: A 6005 1045hrs Veh 2 Car Wait go ahead held NW^{to} SE RSP Slight
R2: A 6005 Daylight:street lights present
E 439,761 Snow
N 335,449 Snowing without high winds
30 mph

V2 WAS STATIONARY AT THE ROUNDABOUT WHEN THE OFFENDING VEHICLE HIT THIS STATIONARY VEHICLE, IT WAS SNOWING AND THE ROADS WERE SLIPPERY.

Details of Personal Injury Accidents for Period - 01/08/2017 to 31/07/2022 (60) months

Selection: Notes:
Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles				Casualties	
			Veh No	Type	Manv	Dir	Class	Sev
Road No.	Date							
2nd Road No.	Time							
Grid Ref.	D/L							
	R.S.C							
	Weather							
	Speed							
	Account of Accident							

1800110 Monday SPONDON A6005 NOTTINGHAM RD Veh 1 Car Turning right SW to SE
 29/01/2018 J/W MCCLUSKEYS (SPONDON SNOOKER CLUB) - (IPQA-5144) Veh 2 M/C < 125 cc O/take s/veh o/side SE to NW Dri Serious
 0740hrs Veh 3 Car Wait go ahead held SE to NW
 R1: A 6005 Daylight:street lights present
 R2: U Dry
 E 439,973 Fine without high winds
 N 335,318 30 mph

V1 PULLED OUT OF MCCLUSKEYS AS V2 OVERTOOK STATIONARY TRAFFIC ON THE OFFSIDE

1800537 Sunday SPONDON A52(W) J/W BORROWASH Veh 1 Car Turning left S to W
 15/04/2018 RD (IPQA-5144) Veh 2 Car Going ahead E to W Dri Slight
 1535hrs
 R1: A 52 Daylight:street lights present
 R2: U Dry
 E 440,879 Unknown
 N 335,460 30 mph

V1 PULLS OUT OF JUNCTION AND HITS V2 WHICH THEN SPINS AND HITS THE CENTRAL RESERVATION

1800604 Monday SPONDON - CHAPEL STREET - Veh 1 Car O/take m/veh o/side SE to NW
 14/05/2018 OUTSIDE BRIDGE CENTRE - IPQA Veh 2 M/C < 50 cc Going ahead SE to NW Dri Slight
 1225hrs
 R1: U Daylight:street lights present
 E 439,938 Dry
 N 336,221 Fine without high winds
 40 mph

VEHICLE 02 TRAVELLING ALONG CHAPEL STREET. VEHICLE 01 HAS APPROACHED AT SPEED FROM REAR AND HIT THE REAR WHEEL OF VEHICLE 02 CAUSING VEHICLE 02 TO FALL OVER AND RIDER 02 TO FALL OFF CAUSING INJURY AND DAMAGE TO VEHICLE 02

Details of Personal Injury Accidents for Period - 01/08/2017 to 31/07/2022 (60) months

Selection: Notes:

Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles				Casualties	
			Veh No	Type	Manv	Dir	Class	Sev
Road No.	Date							
2nd Road No.	Time							
Grid Ref.	D/L							
	R.S.C							
	Weather							
	Speed							
	Account of Accident							

1800901 Saturday SPONDON A6096 MOOR ST J/W
07/07/2018 COURTYARD PLACE (IPQA-5144)
R1: A 6096 1324hrs
R2: U Daylight:street lights present
E 440,247 Dry
N 336,115 Fine without high winds
30 mph

Veh 1 Car Turning right SW to SE
Veh 2 M/C < 125 cc Going ahead NE to SW Dri Slight

VEHICLE 1 TURNS ACROSS ROAD INTO ENTRANCE IN THE PATH OF VEHICLE 2 CAUSING COLLISION.

1800954 Friday SPONDON (C9) LOCKO RD O/S THE
20/07/2018 VERNON ARMS (IPQA-5144)
R1: C 1400hrs
E 439,936 Daylight:street lights present
N 336,313 Dry
Fine without high winds
30 mph

Veh 1 Bus/coach Going ahead NE to SW Dri Slight
Veh 2 Car Going ahead SW to NE
Veh 3 Goods < 3.5t Parked 0 to 0
Veh 4 Goods < 3.5t Parked 0 to 0

V1 HAS BEEN TRAVELLING IN THE DIRECTION OF THE A52 WHEN DRIVER HAS FELT THE STEERING LOSE ITS PULL AND DIRECTION AND HAS COLLIDED WITH V2 TRAVELLING OPP DIRECTION. THEN HIT V3 & V4.

1801320 Wednesday SPONDON STONEY LANE J/W A52(E)
26/09/2018 BRIAN CLOUGH WAY (IPQA-5144)
R1: U 0750hrs
R2: A 52 Daylight:street lights present
E 440,879 Dry
N 335,492 Fine without high winds
60 mph

Veh 1 Car Going ahead LH bend NW to E
Veh 2 Car Wait to turn left NW to E Dri Slight
Veh 3 Car Wait to turn left NW to E

V3 HAS COME TO A STOP ON THE S/RD DUE TO BUSY TRAFFIC. V2 HAS ALSO COME TO A STOP BEHIND V3. V1 HAS NOT STOPPED, COLLIDING WITH THE REAR OF V2 WHICH HAS BEEN PUSHED INTO THE REAR OF V3.

Details of Personal Injury Accidents for Period - 01/08/2017 to 31/07/2022 (60) months

Selection: Notes:

Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles					Casualties	
			Veh No	Type	Manv	Dir	Class	Sev	
Road No.	Date								
2nd Road No.	Time								
Grid Ref.	D/L								
	R.S.C								
	Weather								
	Speed								
	Account of Accident								

1900243 Saturday SPONDON A6096 DALE ROAD J/W MOOR END (IPQA-5144) Veh 1 Car Stopping N to S Dri Slight
R1: A 6096 02/03/2019 2120hrs Veh 1 Car Stopping N to S FSP Slight
R2: U Darkness: street lights present a
E 440,487 Wet/Damp
N 336,329 Fine without high winds
 30 mph

V1 HIT ACCELERATOR INSTEAD OF BRAKE CAUSING V1 TO GAIN SPEED ACROSS THE MAIN ROAD C/WAY, ACROSS THE PAVEMENT COLLIDING WITH A SMALL WALL OF A DWELLING

1900553 Friday Spondon - Sitwell St O/S coop funeral Veh 1 Car Turning right W to SW Dri Slight
R1: A 6096 26/04/2019 (IPQA) Veh 2 Car Going ahead SW to NE Dri Slight
R2: U 2150hrs Darkness: street lights present a
E 440,128 Dry
N 336,008 Fine without high winds
 30 mph

V1 WAITING TO TURN RIGHT OUT CAR PARK OF VILLAGE HALL, FLASHED BY TAXI TO EXIT BUT EXITS AS V2 APPROACHING AND THEY COLLIDE

1900580 Wednesday Spondon - A52 J/W Borrowwash Road Veh 1 Car Turning left S to W Dri Serious
R1: A 52 08/05/2019 [IPQA] 0955hrs
R2: U Daylight:street lights present
E 440,877 Wet/Damp
N 335,467 Fine without high winds
 60 mph

DRIVER WAS OVER DRINK DRIVE LIMIT AND HAS FAILED TO SLOW DOWN FOR THE JUNCTION

Details of Personal Injury Accidents for Period - 01/08/2017 to 31/07/2022 (60) months

Selection: Notes:
Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles					Casualties	
			Veh No	Type	Manv	Dir	Class	Sev	
Road No.	Date								
2nd Road No.	Time								
Grid Ref.	D/L								
	R.S.C								
	Weather								
	Speed								
	Account of Accident								

1900787 Thursday Spondon - Jct Stoney Lane/Ormskirk Rise Veh 1 Car Going ahead SE to NW Ped Serious
06/06/2019 (IPQA)
R1: C 1650hrs
R2: U Daylight:street lights present
E 440,743 Dry
N 335,728 Fine without high winds
30 mph

V1 TRAVELLING ON STONEY LANE WHEN PED STEPS OUT INTO ROAD. V1 TRIES TO SWERVE BUT CLIPS PEDESTRIAN

1901231 Wednesday Derby - Lodge Lane jct (IPQA) Veh 1 Car Going ahead RH bend S to N Dri Slight
21/08/2019 Veh 2 Car Turning left E to S
R1: A 6096 2330hrs
R2: A 6096 Darkness: street lights present a
E 439,840 Dry
N 335,876 Fine without high winds
30 mph

V1 DRIVING UP LODGE LANE, V2 COMING DOWN SITWELL STREET TOWARDS JUNCTION INTERSECTION WITH LODGE LANE. ONCE CLEARING THE JUNCTION BOTH CARS COLLIDE.

1901356 Friday Derby - Sancroft Rd (IPQA) Veh 1 Car Starting W to E
27/09/2019 Veh 2 Car O/take s/veh o/side W to E FSP Slight
R1: U 1815hrs
Daylight:street lights present
E 440,379 Dry
N 336,732 Fine without high winds
30 mph

V1 PULLS OUT FROM SIDE OF ROAD INTO V2 AS GOING TO PASS CAUSING COLLISION

Details of Personal Injury Accidents for Period - 01/08/2017 to 31/07/2022 (60) months

Selection: Notes:
Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles				Casualties	
			Veh No	Type	Manv	Dir	Class	Sev
Road No.	Date							
2nd Road No.	Time							
Grid Ref.	D/L							
	R.S.C							
	Weather							
	Speed							
	Account of Accident							

2000026 Wednesday DERBY - SPONSON - A52 AT J/W
16/10/2019 STONEY LANE - (IPQA).
R1: U 0715hrs
R2: A 52 Daylight:street lights present
E 440,890 Wet/Damp
N 335,484 Raining without high winds
30 mph

Veh 1 Car Change lane to right NWto E
Veh 2 Car Wait go ahead held NWto E Dri Slight

V2 EMERGING ONTO SLIP RD AND V1 COLLIDES WITH REAR OF V1

1901727 Saturday Spondon - Sitwell St (IPQA)
30/11/2019
R1: A 6096 2045hrs
E 440,126 Darkness: street lights present a
N 335,999 Wet/Damp
Fog or mist
30 mph

Veh 1 Goods < 3.5t Parked 0 to 0 Ped Slight
Veh 2 Car Going ahead NE to SW

V1 PARKED WITH REAR SLIGHTLY HANGING OVER THE CURB INTO THE ROAD. PASSENGER GETS OUT AS V2 APPROACHES AND HIT OFFSIDE AND KNOCKS PEDESTRIAN

2000316 Sunday SPONDON-CHAPEL ST (5894)
23/02/2020
R1: U 1200hrs
E 439,995 Daylight:street lights present
N 336,195 Dry
Unknown
30 mph

Veh 1 Car Going ahead E to W Ped Slight

PED. WAS WALKING ON PAVEMENT AND AS V1 DROVE PAST THE N/S WING MIRROR CAUGHT THE PEDS. ELBOW

Details of Personal Injury Accidents for Period - 01/08/2017 to 31/07/2022 (60) months

Selection: Notes:

Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles					Casualties	
			Veh No	Type	Manv	Dir	Class	Sev	
Road No.	Date								
2nd Road No.	Time								
Grid Ref.	D/L								
	R.S.C								
	Weather								
	Speed								
	Account of Accident								

2000410 Friday DERBY-A6096 WILLOWCROFT RD Veh 1 Car Turning left NW^{to} SE Dri Slight
27/03/2020 J/W DRURY AVE (5894) Veh 2 Pedal cycle Going ahead NE^{to} SW Dri Slight
R1: A 6096 0958hrs
R2: U Daylight:street lights present
E 439,995 Dry
N 335,568 Fine without high winds
30 mph

V2, P/CYCLE WAS CYCLING ALONG PAVEMENT AT SPEED, OVERTAKES A PEDESTRIAN ON THE PAVEMENT BY ENTERING THE C/WAY INTO ONCOMING TRAFFIC. V1 PULLING OUT OF JCT COLLIDES WITH V2, P/CYCLE

2000635 Friday SPONDON - R/B Chapel Street/Sitwell St Veh 1 Car Turning right E to SW Dri Slight
29/05/2020 (2022) Veh 2 Car Turning right W to E
R1: A 6096 1859hrs
R2: U Daylight:street lights present
E 440,210 Dry
N 336,104 Other
30 mph

V1 FROM CHAPEL STREET, DOING RECIPRICAL OF R/B BACK TO CHAPEL ST. V2 FROM SITWELL ST COLLIDES INTO R/O/S OF V1 AS IT TRAVELS AROUND THE R/B, MINOR INJURIES TO V1 DVR

2000739 Monday SPONDON-CHAPEL ST NEAR PRINCE Veh 1 Goods < 3.5t Reversing SE to NW Ped Serious
22/06/2020 OF WALES PH (5660)
R1: U 1159hrs
Daylight:street lights present
E 440,171 Dry
N 336,130 Fine without high winds
30 mph

V1 STARTED TO REVERSE ALONG CHAPEL ST IN THE DIRECTION OF LOCKO RD. PED WALKED INTO C/WAY TO GET TO OPP SIDE. V1 RAN OVER PED FOOT. OPPOSITE THE T JCT OF OXFORD ST

Details of Personal Injury Accidents for Period - 01/08/2017 to 31/07/2022 (60) months

Selection: Notes:
Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles				Casualties	
			Veh No	Type	Manv	Dir	Class	Sev
Road No.	Date							
2nd Road No.	Time							
Grid Ref.	D/L							
	R.S.C							
	Weather							
	Speed							
	Account of Accident							

2000840 Monday DERBY-POTTER ST O/S NO. 33 (5894) Veh 1 Car Parked 0 to 0
20/07/2020 Veh 2 Goods < 3.5t Going ahead SW to E Dri Slight
R1: U 1450hrs
Daylight:street lights present
E 439,855 Dry
N 335,942 Unknown
30 mph

V2 COLLIDED WITH REAR OF V1 WHICH WAS PARKED ON RD

2000944 Wednesday SPONDON - Chapel St J/W Strathaven Ct Veh 1 Goods < 3.5t Turning right SE to NE Ped Serious
02/09/2020 (2022)
1050hrs
R1: C Daylight:street lights present
R2: C Dry
E 440,131 Fine without high winds
N 336,156 30 mph

V1 TRAVELLING 'UP' CHAPEL ST TO TURN R INTO STRATHAVEN CT. PED WALKING 'DOWN' CHAPEL ST TO CROSS OVER MOUTH OF SAME JNCT. V1 TURNING INTO JNCT AT SLOW SPEED AS PED STEPS INTO C'WAY

2001013 Friday SPONDON-CAMBRIDGE ST J/W Veh 1 Car Wait to turn right E to NE
18/09/2020 WILLOWCROFT RD A6096-(17706) Veh 2 Car Wait to turn right E to NE Dri Slight
1711hrs Veh 3 Goods < 3.5t Wait to turn right E to NE
R1: U Daylight:street lights present
R2: A 6096 Dry
E 440,008 Fine without high winds
N 335,569 30 mph

V 3(VAN) WAITING TO TURN ONTO WILLOWCROFT ROAD, V 2 (CAR) BEHIND WAITING ALSO TO TURN RIGHT. V1 (CAR) COLLIDES WITH V2 AND SHUNTS V2 INTO V3. V3 LEAVES THE SCENE AFTER ALTERCATION, V1 AND V2 EXCHANGE BASIC DETAILS WHICH ARE NOT VALID

Details of Personal Injury Accidents for Period - 01/08/2017 to 31/07/2022 (60) months

Selection: Notes:

Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles					Casualties	
			Veh No	Type	Manv	Dir	Class	Sev	
Road No.	Date								
2nd Road No.	Time								
Grid Ref.	D/L								
	R.S.C								
	Weather								
	Speed								
	Account of Accident								

2001508 Tuesday DERBY-WILLOWCROFT RD A6096 Veh 1 Car Stopping N to S
R1: A 6096 06/10/2020 J/W NOTTINGHAM RD A6005-(17706) Veh 2 Goods < 3.5t Wait go ahead held N to S Dri Slight
 1149hrs
 Daylight:street lights present
E 439,931 Dry
N 335,360 Fine without high winds
 30 mph

V2 (VAN) APPROACHED TRAFFIC LIGHT WHICH CHANGE TO AMBER SO V 2 STOPS. V1 (CAR) TRAVELIING BEHIND HITS REAR OF V2 CAUSING DAMAGE.

2001442 Friday SPONDON-A6005 DERBY RD ON Veh 1 Car Going ahead NWto SE Ped Serious
R1: A 6005 11/12/2020 ZEBRA CROSSING OPP. TEL.
 1630hrs EXCHANGE (5894)
 Darkness: street lights present a
E 439,741 Wet/Damp
N 335,457 Raining without high winds
 30 mph

V1 TRAVELLING SE ALONG A6005 COLLIDED WITH PED. ON ZEBRA CROSSING

2100123 Friday DERBY-A6096 MOOR ST NR. Veh 1 Goods 3.5 - 7.5t Going ahead SW to NE Ped Slight
R1: A 6096 05/02/2021 LIBERAL CLUB (5894)
 1420hrs
 Darkness: street lights present a
E 440,252 Wet/Damp
N 336,125 Fine without high winds
 30 mph

V1 TRAVELLING TOO CLOSE TO PAVEMENT STRIKES PED ON RIGHT ELBOW. V1 FAILS TO STOP

Details of Personal Injury Accidents for Period - 01/08/2017 to 31/07/2022 (60) months

Selection: Notes:

Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles				Casualties	
			Veh No	Type	Manv	Dir	Class	Sev
Road No.	Date							
2nd Road No.	Time							
Grid Ref.	D/L							
	R.S.C							
	Weather							
	Speed							
	Account of Accident							

2100746 Thursday DERBY-DERBY ROAD (17706) Veh 1 Goods < 3.5t Going ahead SE to NW
03/06/2021 Veh 2 M/C < 50 cc Going ahead SE to NW Dri Slight
1230hrs
R1: A 6005 Daylight:street lights present
R2: A 6005 Dry
E 439,793 Fine without high winds
N 335,424 30 mph

V1 A BULDERS LORRY, CLIPPED V 2 CAUSING THE RIDER TO FALL AND SUSTAIN INJURIES; V1 FLED THE SCENE.

2100761 Tuesday SPONDON-WILLOWCROFT RD (OS Veh 1 Car Going ahead NE to SW Ped Slight
08/06/2021 No32) (2022)
R1: A 6096 1615hrs
Daylight:street lights present
E 439,970 Dry
N 335,475 Fine without high winds
30 mph

V1 T/TOWARDS NOTTINGHAM RD, 2 PEDESTRIANS TO NEARSIDE - PED 1&2 BUSY TALKING WITH BACK TO TRAFFIC, V1 PASSING PED 1&2 WHEN PED 1 STEPS INTO C/WAY AND V1 N/S WINGMIRROR/DOOR

2101237 Wednesday SPONDON-ROUNDAABOUT ON Veh 1 Car Going ahead SE to NE
18/08/2021 STATION RD (5660) Veh 2 Pedal cycle Going ahead SE to NE Dri Slight
1310hrs
R1: A 6005 Daylight:street lights present
R2: U Dry
E 439,770 Fine without high winds
N 335,431 30 mph

V2 (P/CYCLE) WAS TRAVELLING AROUND AN ISLAND ON STATION RD & CLIPPED BY V1 ON REAR WHEEL, THIS HAS CAUSED RIDER TO FALL OFF ONTO THE RD.

Details of Personal Injury Accidents for Period - 01/08/2017 to 31/07/2022 (60) months

Selection: Notes:

Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles					Casualties	
			Veh No	Type	Manv	Dir	Class	Sev	
Road No.	Date								
2nd Road No.	Time								
Grid Ref.	D/L								
	R.S.C								
	Weather								
	Speed								
	Account of Accident								

2101480 Monday DERBY-SPONDON-A6005 R/BOUT Veh 1 Car Turning right NW^{to} SE
23/08/2021 J/W LODGE LANE.(5660) Veh 2 Car Wait go ahead held NW^{to} SE Dri Slight
2135hrs
R1: A 6005 Darkness: street lighting unkno
R2: U Dry
E 439,786 Unknown
N 335,447 30 mph

V1 TRAVELLING IN R/H LN TURNING RIGHT AT R/BOUT COLLIDES WITH V2 IN STATIONARY TRAFFIC IN L/H LN.

2101401 Thursday SPONDON-A6096. STONEY LN J/W Veh 1 Car Turning left SE to SW Ped Slight
16/09/2021 MOOR STREET (2022)
1515hrs
R1: A 6096 Daylight:street lights present
R2: U Dry
E 440,326 Fine without high winds
N 336,191 30 mph

PED (CHILD) ON PAVEMENT AT JUNCTION MOUTH, V1 TURNING LEFT OUT OF JNC DRIVES OVER PEDESTRIANS FOOT WHEN ENTERING MAIN CARRIAGEWAY.

2101525 Tuesday SPONDON-CHAPEL ST J/W Veh 1 Car Going ahead NW^{to} SE Ped Slight
28/09/2021 GLADSTONE RD (17706)
1426hrs
R1: U Daylight:street lights present
R2: U Dry
E 440,208 Fine without high winds
N 336,110 30 mph

V1 WAS TRAVELLING FROM NW TO SE TWRDS R/ABOUT; PED CROSSED THE ROAD TWRDS THE WHITE SWAN PUB WITHOUT LOOKING AND COLLIDED WITH V1

Details of Personal Injury Accidents for Period - 01/08/2017 to 31/07/2022 (60) months

Selection:

Selected using Manual Selection

Notes:

Police Ref.	Day	Location Description	Vehicles				Casualties	
			Veh No	Type	Manv	Dir	Class	Sev
Road No.	Date							
2nd Road No.	Time							
Grid Ref.	D/L							
	R.S.C							
	Weather							
	Speed							
	Account of Accident							

2101520 Tuesday SPONDON-A6096 MOOR ST J/W
05/10/2021 STONEY LANE (17706) Veh 1 Car Turning right SE to NE
1000hrs Veh 2 Goods < 3.5t Going ahead NE to SW Dri Slight
R1: A 6096
R2: U Daylight:street lights present
E 440,327 Wet/Damp
N 336,196 Other
30 mph

V1 PULLED OUT FROM A JCT INTO THE SIDE OF V2

2101847 Tuesday DERBY-SITWELL STREET A6096
02/11/2021 (17706) Veh 1 Bus/coach Going ahead NE to SW Ped Slight
R1: A 6095
1755hrs
Darkness: street lights present a
E 440,008 Dry
N 335,876 Unknown
30 mph

PED. WAS WALKING ON THE PAVEMENT WHEN IP FELT AN IMPACT TO THEIR SIDE WHICH KNOCKED IP TO THE FLOOR. V1 HAD MOUNTED THE KERB AND COLLIDED WITH THE IP. DRIVER DID SAY THEY HAD TO SWERVE TO AVOID ANOTHER VEH

2200129 Friday DERBY-A6096 DALE RD J/W
14/01/2022 GLENDALE DRIVE (17706) Veh 1 Car Wait to turn right SW to SE Dri Slight
1605hrs Veh 2 Goods < 3.5t Wait go ahead held SW to NE
R1: A 6096
R2: U Darkness: street lights present a
E 440,568 Wet/Damp
N 336,354 Raining without high winds
30 mph

V1 AT JCT WAITING TO EXIT JCT AND TURN RIGHT; V2 APPROACHED JCT FROM THE REAR OF V1 AND COLLIDED WITH THE REAR OF V1 CAUSING SLIGHT DAMAGE AND INJURY

Details of Personal Injury Accidents for Period - 01/08/2017 to 31/07/2022 (60) months

Selection: Notes:
Selected using Manual Selection

Police Ref.	Day	Location Description	Vehicles				Casualties	
			Veh No	Type	Manv	Dir	Class	Sev
Road No.	Date							
2nd Road No.	Time							
Grid Ref.	D/L							
	R.S.C							
	Weather							
	Speed							
	Account of Accident							
2200726	Monday	DERBY-STONEY LANE OFF A52	Veh 1	Car		Going ahead LH bend	SW to NE	
	02/05/2022	(17706)	Veh 2	Car		Going ahead LH bend	NW to SE	Slight
R1: U	1015hrs		Veh 2	Car		Going ahead LH bend	NW to SE	Slight
	Daylight:street lights present							
E 440,861	Dry							
N 335,495	Fine without high winds							
	30 mph							

V1 ON SLIP RD FROM A52 ONTO STONEY LANE; V2 TRAVELLING OPP. DIRECTION ABOUT TO JOIN ENTRY ONTO A52 EASTBOUND.V1 FAILS TO NEGOTIATE OFF SLIP BEND AND COLLIDES WITH CENTRAL ISLAND THEN COLLIDING WITH V2

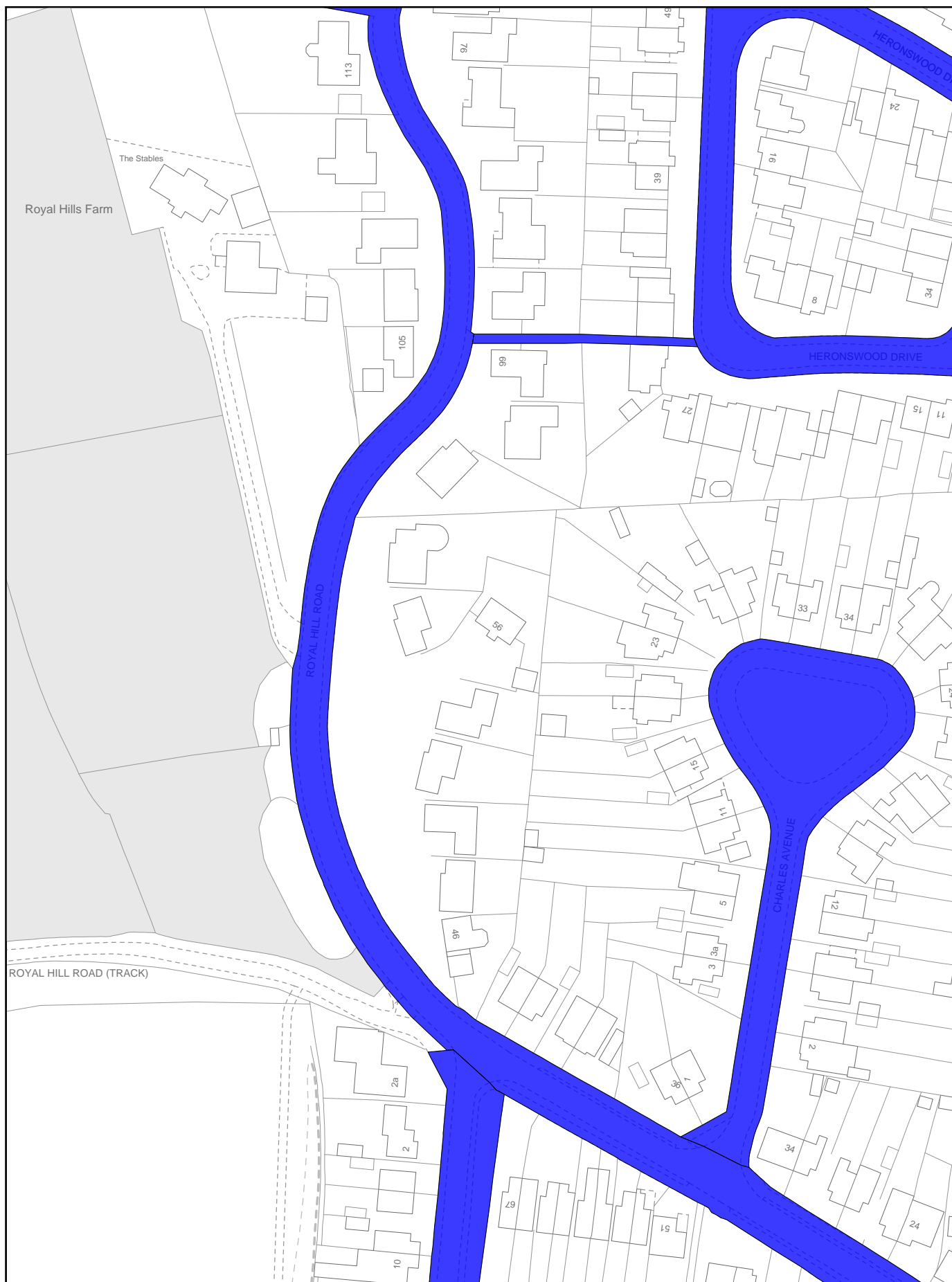
2201004	Thursday	SPONDON-A6096 SITWELL ST J/W	Veh 1	Car		Going ahead	NE to SW	Ped	Slight
	09/06/2022	CHAPEL ST (17706)							
R1: A 6096	1530hrs								
R2: U	Daylight:street lights present								
E 440,195	Dry								
N 336,087	Unknown								
	30 mph								

PED. ON PUSH SCOOTER WAS CROSSING THE RD AT PED. CROSSING WITH ADULT; CROSSING LIGHTS WERE ON RED FOR TRAFFIC BUT GREEN FOR PED; V1 FAILED TO STOP, COLLIDED WITH FRONT OF SCOOTER CAUSING RIDER SLIGHT INJURY

2201195	Monday	DERBY-LODGE LANE J/W SITWELL	Veh 1	Car		Turning right	SE to NW	Ped	Slight
	18/07/2022	ST A6096(17706)							
R1: U	0847hrs								
R2: A 6096	Daylight:street lights present								
E 439,840	Dry								
N 335,891	Fine without high winds								
	30 mph								

PED. CROSSING ROAD NR TO JCT, NEARLY ACROSS TO OTHER SIDE WHEN V1 EXITED FROM JCT AND CLIPPED IP CAUSING SLIGHT INJURIES

APPENDIX 9: Highway Boundary Information



Derby City Council

Royal Hill Road



Drawing No: 10018257

Date: 19/10/2022

Map Scale: 1:1250

Contact:
Department:
Highways

Telephone Number: (01332) 640666



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Ordnance Survey
2022.

Licence Number: 100024913

APPENDIX 10: TRICS Output

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : A - HOUSES PRIVATELY OWNED

TOTAL VEHICLESSelected regions and areas:

02 SOUTH EAST	
ES EAST SUSSEX	3 days
EX ESSEX	2 days
HC HAMPSHIRE	1 days
HF HERTFORDSHIRE	1 days
KC KENT	1 days
WS WEST SUSSEX	3 days
04 EAST ANGLIA	
NF NORFOLK	4 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
 Actual Range: 91 to 180 (units:)
 Range Selected by User: 75 to 200 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 08/11/21

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

Selected survey days:

Monday	4 days
Tuesday	1 days
Wednesday	5 days
Thursday	3 days
Friday	2 days

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

Selected survey types:

Manual count	11 days
Directional ATC Count	4 days

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

Selected Locations:

Edge of Town	15
--------------	----

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

Selected Location Sub Categories:

Residential Zone	15
------------------	----

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

Secondary Filtering selection:Use Class:

C3 15 days

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

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	3 days
5,001 to 10,000	3 days
10,001 to 15,000	3 days
15,001 to 20,000	3 days
20,001 to 25,000	2 days

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

Population within 5 miles:

5,001 to 25,000	4 days
25,001 to 50,000	2 days
50,001 to 75,000	1 days
75,001 to 100,000	2 days
125,001 to 250,000	4 days
250,001 to 500,000	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	11 days
1.6 to 2.0	1 days

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

Travel Plan:

Yes	10 days
No	5 days

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

PTAL Rating:

No PTAL Present	14 days
2 Poor	1 days

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

LIST OF SITES relevant to selection parameters

1	ES-03-A-04	MIXED HOUSES & FLATS	EAST SUSSEX
	NEW LYDD ROAD CAMBER		
	Edge of Town Residential Zone Total No of Dwellings:	134	
	Survey date: FRIDAY	15/07/16	Survey Type: MANUAL
2	ES-03-A-05	MIXED HOUSES & FLATS	EAST SUSSEX
	RATTLE ROAD NEAR EASTBOURNE STONE CROSS		
	Edge of Town Residential Zone Total No of Dwellings:	99	
	Survey date: WEDNESDAY	05/06/19	Survey Type: MANUAL
3	ES-03-A-07	MIXED HOUSES & FLATS	EAST SUSSEX
	NEW ROAD HAILSHAM HELLINGLY		
	Edge of Town Residential Zone Total No of Dwellings:	91	
	Survey date: THURSDAY	07/11/19	Survey Type: MANUAL
4	EX-03-A-02	DETACHED & SEMI-DETACHED	ESSEX
	MANOR ROAD CHIGWELL GRANGE HILL		
	Edge of Town Residential Zone Total No of Dwellings:	97	
	Survey date: MONDAY	27/11/17	Survey Type: MANUAL
5	EX-03-A-03	MIXED HOUSES	ESSEX
	KESTREL GROVE RAYLEIGH		
	Edge of Town Residential Zone Total No of Dwellings:	123	
	Survey date: MONDAY	27/09/21	Survey Type: MANUAL
6	HC-03-A-28	MIXED HOUSES & FLATS	HAMPSHIRE
	EAGLE AVENUE WATERLOOVILLE LOVEDEAN		
	Edge of Town Residential Zone Total No of Dwellings:	125	
	Survey date: MONDAY	08/11/21	Survey Type: MANUAL
7	HF-03-A-03	MIXED HOUSES	HERTFORDSHIRE
	HARE STREET ROAD BUNTINGFORD		
	Edge of Town Residential Zone Total No of Dwellings:	160	
	Survey date: MONDAY	08/07/19	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8	KC-03-A-04	SEMI-DETACHED & TERRACED	KENT
	KILN BARN ROAD		
	AYLESFORD		
	DITTON		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	110	
	Survey date: FRIDAY	22/09/17	Survey Type: MANUAL
9	NF-03-A-16	MIXED HOUSES & FLATS	NORFOLK
	NORWICH COMMON		
	WYMONDHAM		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	138	
	Survey date: TUESDAY	20/10/15	Survey Type: DIRECTIONAL ATC COUNT
10	NF-03-A-24	MIXED HOUSES & FLATS	NORFOLK
	HUNSTANTON ROAD		
	HUNSTANTON		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	127	
	Survey date: WEDNESDAY	22/09/21	Survey Type: DIRECTIONAL ATC COUNT
11	NF-03-A-26	MIXED HOUSES	NORFOLK
	HEATH DRIVE		
	HOLT		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	91	
	Survey date: WEDNESDAY	22/09/21	Survey Type: DIRECTIONAL ATC COUNT
12	NF-03-A-28	MIXED HOUSES	NORFOLK
	NORTH WALSHAM ROAD		
	NORTH WALSHAM		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	100	
	Survey date: WEDNESDAY	22/09/21	Survey Type: DIRECTIONAL ATC COUNT
13	WS-03-A-04	MIXED HOUSES	WEST SUSSEX
	HILLS FARM LANE		
	HORSHAM		
	BROADBRIDGE HEATH		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	151	
	Survey date: THURSDAY	11/12/14	Survey Type: MANUAL
14	WS-03-A-08	MIXED HOUSES	WEST SUSSEX
	ROUNDSTONE LANE		
	ANGMERING		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	180	
	Survey date: THURSDAY	19/04/18	Survey Type: MANUAL
15	WS-03-A-14	MIXED HOUSES	WEST SUSSEX
	TODDINGTON LANE		
	LITTLEHAMPTON		
	WICK		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	117	
	Survey date: WEDNESDAY	20/10/21	Survey Type: MANUAL

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

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
SF-03-A-10	Covid-19 Survey
WS-03-A-12	Covid-19 Survey
WS-03-A-13	Covid-19 Survey

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
TOTAL VEHICLES

Ranking Type: **TOTALS**Time Range: 08:00-09:00
WARNING: Using 85th and 15th percentile highlighted trip rates in data sets of under 20 surveys is not recommended by TRICS and may be misleading.
15th Percentile = No. **13**EX-03-A-03Tot: 0.309
85th Percentile = No. **3**KC-03-A-04Tot: 0.600

Median Values		Mean Values	
Arrivals:	0.137	Arrivals:	0.127
Departures:	0.333	Departures:	0.330
Totals:	0.470	Totals:	0.457

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	NF-03-A-16	MIXED HOUSES &	WYMONDHAM	NORFOLK	138	Tue	20/10/15	0.210	0.449	0.659	2.01
2	ES-03-A-05	MIXED HOUSES &	NEAR EASTBOURNE	EAST SUSSEX	99	Wed	05/06/19	0.131	0.495	0.626	1.99
3	KC-03-A-04	SEMI-DETACHED	AYLESFORD	KENT	110	Fri	22/09/17	0.127	0.473	0.600	1.77
4	NF-03-A-26	MIXED HOUSES	HOLT	NORFOLK	91	Wed	22/09/21	0.220	0.352	0.572	2.55
5	ES-03-A-07	MIXED HOUSES &	HAILSHAM	EAST SUSSEX	91	Thu	07/11/19	0.121	0.407	0.528	2.70
6	NF-03-A-28	MIXED HOUSES	NORTH WALSHAM	NORFOLK	100	Wed	22/09/21	0.120	0.380	0.500	2.33
7	WS-03-A-08	MIXED HOUSES	ANGMERING	WEST SUSSEX	180	Thu	19/04/18	0.106	0.367	0.473	2.93
8	WS-03-A-14	MIXED HOUSES	LITTLEHAMPTON	WEST SUSSEX	117	Wed	20/10/21	0.137	0.333	0.470	2.43
9	HF-03-A-03	MIXED HOUSES	BUNTINGFORD	HERTFORDSHIRE	160	Mon	08/07/19	0.119	0.319	0.438	3.95
10	HC-03-A-28	MIXED HOUSES &	WATERLOOVILLE	HAMPSHIRE	125	Mon	08/11/21	0.128	0.304	0.432	2.58
11	WS-03-A-04	MIXED HOUSES	HORSHAM	WEST SUSSEX	151	Thu	11/12/14	0.139	0.278	0.417	2.28
12	NF-03-A-24	MIXED HOUSES &	HUNSTANTON	NORFOLK	127	Wed	22/09/21	0.126	0.260	0.386	2.37
13	EX-03-A-03	MIXED HOUSES	RAYLEIGH	ESSEX	123	Mon	27/09/21	0.065	0.244	0.309	2.41
14	EX-03-A-02	DETACHED & SEM	CHIGWELL	ESSEX	97	Mon	27/11/17	0.103	0.155	0.258	0.87
15	ES-03-A-04	MIXED HOUSES &	CAMBER	EAST SUSSEX	134	Fri	15/07/16	0.052	0.134	0.186	1.91

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceeding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL

Category : A - HOUSES PRIVATELY OWNED

TOTAL VEHICLESSelected regions and areas:**02 SOUTH EAST**

ES	EAST SUSSEX	3 days
EX	ESSEX	2 days
HC	HAMPSHIRE	1 days
HF	HERTFORDSHIRE	1 days
KC	KENT	1 days
WS	WEST SUSSEX	3 days

04 EAST ANGLIA

NF	NORFOLK	4 days
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This section displays the number of survey days per TRICS® sub-region in the selected set

Primary Filtering selection:

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

Parameter: No of Dwellings
 Actual Range: 91 to 180 (units:)
 Range Selected by User: 75 to 200 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 08/11/21

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

Selected survey days:

Monday	4 days
Tuesday	1 days
Wednesday	5 days
Thursday	3 days
Friday	2 days

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

Selected survey types:

Manual count	11 days
Directional ATC Count	4 days

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

Selected Locations:

Edge of Town	15
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This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	15
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This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Secondary Filtering selection:Use Class:

C3 15 days

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

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	3 days
5,001 to 10,000	3 days
10,001 to 15,000	3 days
15,001 to 20,000	3 days
20,001 to 25,000	2 days

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

Population within 5 miles:

5,001 to 25,000	4 days
25,001 to 50,000	2 days
50,001 to 75,000	1 days
75,001 to 100,000	2 days
125,001 to 250,000	4 days
250,001 to 500,000	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	11 days
1.6 to 2.0	1 days

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

Travel Plan:

Yes	10 days
No	5 days

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

PTAL Rating:

No PTAL Present	14 days
2 Poor	1 days

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

LIST OF SITES relevant to selection parameters

1	ES-03-A-04	MIXED HOUSES & FLATS	EAST SUSSEX
	NEW LYDD ROAD CAMBER		
	Edge of Town Residential Zone		
	Total No of Dwellings:	134	
	Survey date: FRIDAY	15/07/16	Survey Type: MANUAL
2	ES-03-A-05	MIXED HOUSES & FLATS	EAST SUSSEX
	RATTLE ROAD NEAR EASTBOURNE STONE CROSS		
	Edge of Town Residential Zone		
	Total No of Dwellings:	99	
	Survey date: WEDNESDAY	05/06/19	Survey Type: MANUAL
3	ES-03-A-07	MIXED HOUSES & FLATS	EAST SUSSEX
	NEW ROAD HAILSHAM HELLINGLY		
	Edge of Town Residential Zone		
	Total No of Dwellings:	91	
	Survey date: THURSDAY	07/11/19	Survey Type: MANUAL
4	EX-03-A-02	DETACHED & SEMI-DETACHED	ESSEX
	MANOR ROAD CHIGWELL GRANGE HILL		
	Edge of Town Residential Zone		
	Total No of Dwellings:	97	
	Survey date: MONDAY	27/11/17	Survey Type: MANUAL
5	EX-03-A-03	MIXED HOUSES	ESSEX
	KESTREL GROVE RAYLEIGH		
	Edge of Town Residential Zone		
	Total No of Dwellings:	123	
	Survey date: MONDAY	27/09/21	Survey Type: MANUAL
6	HC-03-A-28	MIXED HOUSES & FLATS	HAMPSHIRE
	EAGLE AVENUE WATERLOOVILLE LOVEDEAN		
	Edge of Town Residential Zone		
	Total No of Dwellings:	125	
	Survey date: MONDAY	08/11/21	Survey Type: MANUAL
7	HF-03-A-03	MIXED HOUSES	HERTFORDSHIRE
	HARE STREET ROAD BUNTINGFORD		
	Edge of Town Residential Zone		
	Total No of Dwellings:	160	
	Survey date: MONDAY	08/07/19	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8	KC-03-A-04	SEMI-DETACHED & TERRACED	KENT
	KILN BARN ROAD		
	AYLESFORD		
	DITTON		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	110	
	Survey date: FRIDAY	22/09/17	Survey Type: MANUAL
9	NF-03-A-16	MIXED HOUSES & FLATS	NORFOLK
	NORWICH COMMON		
	WYMONDHAM		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	138	
	Survey date: TUESDAY	20/10/15	Survey Type: DIRECTIONAL ATC COUNT
10	NF-03-A-24	MIXED HOUSES & FLATS	NORFOLK
	HUNSTANTON ROAD		
	HUNSTANTON		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	127	
	Survey date: WEDNESDAY	22/09/21	Survey Type: DIRECTIONAL ATC COUNT
11	NF-03-A-26	MIXED HOUSES	NORFOLK
	HEATH DRIVE		
	HOLT		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	91	
	Survey date: WEDNESDAY	22/09/21	Survey Type: DIRECTIONAL ATC COUNT
12	NF-03-A-28	MIXED HOUSES	NORFOLK
	NORTH WALSHAM ROAD		
	NORTH WALSHAM		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	100	
	Survey date: WEDNESDAY	22/09/21	Survey Type: DIRECTIONAL ATC COUNT
13	WS-03-A-04	MIXED HOUSES	WEST SUSSEX
	HILLS FARM LANE		
	HORSHAM		
	BROADBRIDGE HEATH		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	151	
	Survey date: THURSDAY	11/12/14	Survey Type: MANUAL
14	WS-03-A-08	MIXED HOUSES	WEST SUSSEX
	ROUNDSTONE LANE		
	ANGMERING		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	180	
	Survey date: THURSDAY	19/04/18	Survey Type: MANUAL
15	WS-03-A-14	MIXED HOUSES	WEST SUSSEX
	TODDINGTON LANE		
	LITTLEHAMPTON		
	WICK		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	117	
	Survey date: WEDNESDAY	20/10/21	Survey Type: MANUAL

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

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
SF-03-A-10	Covid-19 Survey
WS-03-A-12	Covid-19 Survey
WS-03-A-13	Covid-19 Survey

RANK ORDER for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

TOTAL VEHICLESRanking Type: **TOTALS**

Time Range: 17:00-18:00

WARNING: Using 85th and 15th percentile highlighted trip rates in data sets of under 20 surveys is not recommended by TRICS and may be misleading.

15th Percentile = No. **13** EX-03-A-03 Tot: 0.31785th Percentile = No. **3** NF-03-A-28 Tot: 0.570Median Values

Arrivals: 0.341

Departures: 0.110

Totals: 0.451

Mean Values

Arrivals: 0.295

Departures: 0.141

Totals: 0.436

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Park Spaces Per Dwelling
								Arrivals	Departures	Totals	
1	NF-03-A-16	MIXED HOUSES &	WYMONDHAM	NORFOLK	138	Tue	20/10/15	0.435	0.275	0.710	2.01
2	NF-03-A-24	MIXED HOUSES &	HUNSTANTON	NORFOLK	127	Wed	22/09/21	0.331	0.244	0.575	2.37
3	NF-03-A-28	MIXED HOUSES	NORTH WALSHAM	NORFOLK	100	Wed	22/09/21	0.400	0.170	0.570	2.33
4	WS-03-A-14	MIXED HOUSES	LITTLEHAMPTON	WEST SUSSEX	117	Wed	20/10/21	0.402	0.137	0.539	2.43
5	ES-03-A-05	MIXED HOUSES &	NEAR EASTBOURNE	EAST SUSSEX	99	Wed	05/06/19	0.384	0.131	0.515	1.99
6	WS-03-A-08	MIXED HOUSES	ANGMERING	WEST SUSSEX	180	Thu	19/04/18	0.278	0.206	0.484	2.93
7	HF-03-A-03	MIXED HOUSES	BUNTINGFORD	HERTFORDSHIRE	160	Mon	08/07/19	0.287	0.169	0.456	3.95
8	ES-03-A-07	MIXED HOUSES &	HAILSHAM	EAST SUSSEX	91	Thu	07/11/19	0.341	0.110	0.451	2.70
9	HC-03-A-28	MIXED HOUSES &	WATERLOOVILLE	HAMPSHIRE	125	Mon	08/11/21	0.304	0.112	0.416	2.58
10	WS-03-A-04	MIXED HOUSES	HORSHAM	WEST SUSSEX	151	Thu	11/12/14	0.252	0.119	0.371	2.28
11	NF-03-A-26	MIXED HOUSES	HOLT	NORFOLK	91	Wed	22/09/21	0.253	0.110	0.363	2.55
12	KC-03-A-04	SEMI-DETACHED	AYLESFORD	KENT	110	Fri	22/09/17	0.273	0.064	0.337	1.77
13	EX-03-A-03	MIXED HOUSES	RAYLEIGH	ESSEX	123	Mon	27/09/21	0.228	0.089	0.317	2.41
14	ES-03-A-04	MIXED HOUSES &	CAMBER	EAST SUSSEX	134	Fri	15/07/16	0.157	0.112	0.269	1.91
15	EX-03-A-02	DETACHED & SEM	CHIGWELL	ESSEX	97	Mon	27/11/17	0.103	0.062	0.165	0.87

This section displays actual (not average) trip rates for each of the survey days in the selected set, and ranks them in order of relative trip rate intensity, for a given time period (or peak period irrespective of time) selected by the user. The count type and direction are both displayed just above the table, along with the rows within the table representing the 85th and 15th percentile trip rate figures (highlighted in bold within the table itself).

The table itself displays details of each individual survey, alongside arrivals, departures and totals trip rates, sorted by whichever of the three directional options has been chosen by the user. As with the preceeding trip rate calculation results table, the trip rates shown are per the calculation factor (e.g. per 100m2 GFA, per employee, per hectare, etc). Note that if the peak period option has been selected (as opposed to a specific chosen time period), the peak period for each individual survey day in the table is also displayed.

APPENDIX 11: Modal Split

QS701EW - Method of travel to work

[Edit query](#)
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[Change format](#)

QS701EW - Method of travel to work [i](#)

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Population All usual residents aged 16 to 74
 Units Persons
 Area Type 2011 super output areas - middle layer
 Area Name E02002805 : Derby 010
 Rural Urban [i](#) Total

Method of Travel to Work [i](#)

2011

All categories: Method of travel to work	4,266
Work mainly at or from home	91
Underground, metro, light rail, tram	2
Train	19
Bus, minibus or coach	223
Taxi	10
Motorcycle, scooter or moped	27
Driving a car or van	1,935
Passenger in a car or van	141
Bicycle	81
On foot	189
Other method of travel to work	10
Not in employment	1,538

Warnings and notes:

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

APPENDIX 12: Extracted Census Data

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

ONS Crown Copyright Reserved [from Nomis on 10 January 2020]

population All usual residents aged 16 and over in employment the week before the census
units Persons
date 2011
usual residence E02002805 : Derby 010 (2011 super output area - middle layer)

place of work : 2011 super output area - middle layer

All categories:
Method of travel
to work (2001
specification)

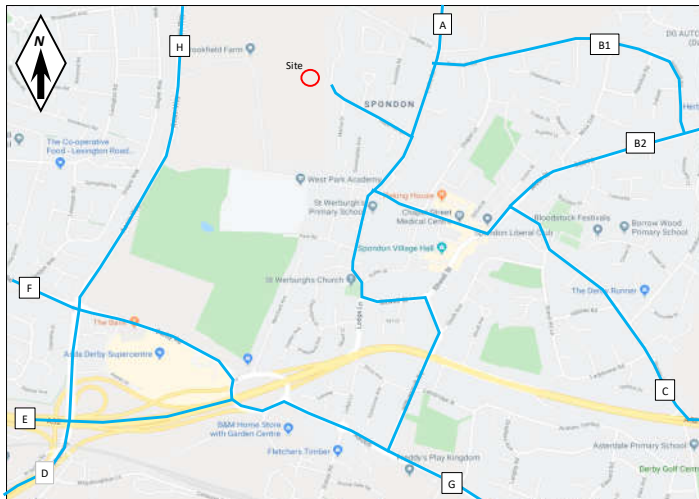
Driving a car or
van

Route

No

%

Amber Valley 001	5	5 A	5.0
Amber Valley 003	9	7 A	7.0
Amber Valley 004	2	2 A	2.0
Amber Valley 005	11	7 A	7.0
Amber Valley 006	12	12 A	12.0
Amber Valley 007	5	4 A	4.0
Amber Valley 008	5	4 A	4.0
Amber Valley 009	4	4 A	4.0
Amber Valley 010	17	14 A	14.0
Amber Valley 011	4	3 A	3.0
Amber Valley 012	4	3 A	3.0
Amber Valley 013	6	5 A	5.0
Amber Valley 015	10	10 A	10.0
Amber Valley 016	9	7 A	7.0
Amber Valley 017	4	4 A	4.0
Ashfield 003	3	2 A/C	1.0
Ashfield 004	2	2 A/C	1.0
Ashfield 005	3	3 A/C	1.5
Ashfield 006	1	1 A/C	0.5
Ashfield 007	4	3 A/C	1.5
Ashfield 008	1	1 A/C	0.5
Ashfield 010	6	5 C	5.0
Ashfield 014	1	1 B/C	0.5
Ashfield 016	2	2 B/C	1.0
Bassettlaw 005	1	1 A/C	0.5
Bassettlaw 013	1	1 A/C	0.5
Birmingham 002	1	1 D/E	0.5
Birmingham 009	1	1 D/E	0.5
Birmingham 037	2	2 D/E	1.0
Birmingham 081	1	1 D/E	0.5
Birmingham 138	1	1 D/E	0.5
Blaby 005	3	3 C	3.0
Blaby 006	1	1 C	1.0
Blaby 013	1	1 C	1.0
Bolsover 001	1	1 A/C	0.5
Bolsover 009	1	1 A/C	0.5
Bolsover 010	7	4 A/C	2.0
Boston 009	1	1 C	1.0
Bradford 004	1	1 C	1.0
Bradford 030	1	1 C	1.0
Bristol 032	1	1 C	1.0
Broxtowe 001	1	1 B/C	0.5
Broxtowe 002	1	1 B/C	0.5
Broxtowe 003	2	2 B/C	1.0
Broxtowe 004	3	3 B/C	1.5
Broxtowe 008	2	2 C	2.0
Broxtowe 010	14	10 C	10.0
Broxtowe 011	3	3 C	3.0
Broxtowe 012	2	2 C	2.0
Broxtowe 014	5	3 C	3.0
Broxtowe 015	6	5 C	5.0
Broxtowe 016	3	3 C	3.0
Cannock Chase 002	5	4 D	4.0
Cardiff 006	1	1 C	1.0
Charnwood 006	2	2 C	2.0
Charnwood 007	4	4 C	4.0
Charnwood 009	2	2 C	2.0
Charnwood 010	1	1 C	1.0
Charnwood 017	1	1 C	1.0
Charnwood 021	6	2 C	2.0
Cheshire East 030	1	1 D/E	0.5
Cheshire East 038	2	2 D/E	1.0
Chesterfield 003	1	1 A/C	0.5
Chesterfield 009	1	1 A/C	0.5
Chesterfield 010	5	5 A/C	2.5
Chesterfield 012	1	1 A/C	0.5
Cornwall 070	1	1 C	1.0
Coventry 031	8	5 C	5.0
Coventry 036	1	1 C	1.0
Coventry 038	1	1 C	1.0
Dawentry 007	1	1 C	1.0
Derby 001	4	4 E	4.0
Derby 002	11	11 E	11.0
Derby 003	9	5 F/H	2.5
Derby 004	32	27 F/H	13.5
Derby 005	21	19 E	19.0
Derby 006	22	19 F/H	9.5
Derby 007	71	58 F	58.0
Derby 008	90	68 E	68.0
Derby 009	5	4 E	4.0
Derby 010	131	49 A/B/C	16.3
Derby 011	17	11 E	11.0
Derby 012	50	34 F/H	17.0
Derby 013	233	114 E	114.0
Derby 014	230	129 D/G	64.5
Derby 016	27	15 E	15.0
Derby 017	98	68 E	68.0
Derby 018	97	70 E	70.0
Derby 019	4	3 E	3.0
Derby 020	3	3 D	3.0
Derby 021	9	6 D/E	3.0
Derby 022	4	4 D/E	2.0
Derby 023	2	2 D/E	1.0
Derby 024	185	144 D	144.0
Derby 025	21	17 D	17.0
Derby 026	46	35 D	35.0
Derby 028	4	3 D	3.0
Derby 029	79	64 D	64.0
Derby 030	4	3 D	3.0
Derby 031	1	1 D	1.0
Derbyshire Dales 005	4	4 A	4.0
Derbyshire Dales 006	6	4 A	4.0
Derbyshire Dales 007	3	2 A	2.0
Derbyshire Dales 008	4	4 A/E	2.0
Derbyshire Dales 009	2	2 A/E	1.0
Derbyshire Dales 010	4	4 A/E	2.0
Doncaster 027	1	1 A/C	0.5
Dudley 035	1	1 C	1.0
East Dorset 009	1	1 C	1.0
East Lindsey 016	2	1 C	1.0
East Staffordshire 001	1	1 D/E	0.5
East Staffordshire 003	1	1 D/E	0.5
East Staffordshire 004	1	1 D/E	0.5
East Staffordshire 006	6	5 D/E	2.5
East Staffordshire 009	4	4 D/E	2.0
East Staffordshire 011	12	11 D/E	5.5
East Staffordshire 013	3	2 D/E	1.0
East Staffordshire 015	3	3 D/E	1.5
Eastleigh 009	1	1 C	1.0
Erewash 001	5	5 B	5.0
Erewash 003	24	19 B	19.0
Erewash 004	20	19 A	19.0
Erewash 005	4	4 A	4.0
Erewash 006	15	13 B	13.0
Erewash 008	24	22 B/C/G	7.3
Erewash 009	56	47 B/C/G	15.7



Erewash 010	3	2 C/G	1.0
Erewash 011	2	2 C/G	1.0
Erewash 012	12	8 C/G	4.0
Erewash 013	11	7 C	7.0
Erewash 014	4	2 C/G	1.0
Erewash 015	5	5 C/G	2.5
Erewash 016	10	8 B	8.0
Gedling 001	1	1 C	1.0
Gedling 012	1	1 C	1.0
Gedling 016	1	1 C	1.0
Gloucester 007	2	2 C	2.0
Guildford 007	1	1 C	1.0
Hackney 027	1	1 C	1.0
Harborough 010	1	1 C	1.0
Harlow 004	1	1 C	1.0
Hart 011	1	1 C	1.0
Hillingdon 002	4	4 C	4.0
Hillingdon 025	1	1 C	1.0
Hinckley and Bosworth 001	2	1 C/D	0.5
Hinckley and Bosworth 012	2	2 C/D	1.0
King's Lynn and West Norfolk 007	1	1 C	1.0
Leeds 005	2	1 C	1.0
Leeds 067	1	1 C	1.0
Leicester 004	1	1 D/E	0.5
Leicester 016	1	1 C	1.0
Leicester 017	1	1 C	1.0
Leicester 021	1	1 C	1.0
Leicester 023	1	1 C	1.0
Leicester 028	1	1 C	1.0
Leicester 041	3	2 C	2.0
Luton 021	1	1 C	1.0
Manchester 055	1	1 D	1.0
Mansfield 007	1	1 C	1.0
Mansfield 008	2	2 C	2.0
Mansfield 013	1	1 C	1.0
Melton 004	1	1 C	1.0
Melton 005	1	1 C	1.0
Melton 006	1	1 C	1.0
Mid Sussex 012	2	1 C	1.0
Newark and Sherwood 005	1	1 C	1.0
Newark and Sherwood 008	1	1 C	1.0
Newark and Sherwood 013	1	1 C	1.0
Newcastle-under-Lyme 010	1	1 C	1.0
Newham 033	1	1 C	1.0
North Kesteven 014	1	1 C	1.0
North Warwickshire 003	1	1 C	1.0
North West Leicestershire 001	30	26 C	26.0
North West Leicestershire 002	12	8 C	8.0
North West Leicestershire 003	6	6 C	6.0
North West Leicestershire 008	1	1 C	1.0
North West Leicestershire 010	3	3 C	3.0
North West Leicestershire 011	1	1 C	1.0
North West Leicestershire 012	1	1 C	1.0
North West Leicestershire 013	3	3 C	3.0
Northampton 028	1	1 C	1.0
Nottingham 001	1	1 C	1.0
Nottingham 002	2	2 C	2.0
Nottingham 004	1	1 C	1.0
Nottingham 007	4	4 C	4.0
Nottingham 008	1	1 C	1.0
Nottingham 009	4	3 C	3.0
Nottingham 010	2	1 C	1.0
Nottingham 011	1	1 C	1.0
Nottingham 012	2	1 C	1.0
Nottingham 014	2	2 C	2.0
Nottingham 017	2	2 C	2.0
Nottingham 018	2	2 C	2.0
Nottingham 021	2	2 C	2.0
Nottingham 022	8	5 C	5.0
Nottingham 023	6	5 C	5.0
Nottingham 025	2	2 C	2.0
Nottingham 026	1	1 C	1.0
Nottingham 028	5	4 C	4.0
Nottingham 031	18	16 C	16.0
Nottingham 032	6	5 C	5.0
Nottingham 034	1	1 C	1.0
Nottingham 039	13	9 C	9.0
Nottingham 040	12	12 C	12.0
Peterborough 007	2	1 C	1.0
Peterborough 012	1	1 C	1.0
Reigate and Banstead 013	1	1 C	1.0
Richmondshire 004	1	1 C	1.0
Rochdale 015	1	1 C	1.0
Rotherham 025	1	1 A/C	0.5
Rugby 001	1	1 A/E	0.5
Rugby 003	1	1 A/E	0.5
Rugby 005	1	1 A/E	0.5
Rushcliffe 005	4	4 C	4.0
Rushcliffe 007	1	1 C	1.0
Rushcliffe 008	1	1 C	1.0
Rushcliffe 011	6	6 C	6.0
Rushcliffe 014	8	8 C	8.0
Rutland 005	1	1 C	1.0
Sandwell 023	1	1 C/D	0.5
Sevenside 014	1	1 C	1.0
Sheffield 073	1	1 C	1.0
Sheffield 074	1	1 C	1.0
South Derbyshire 001	14	12 D	12.0
South Derbyshire 002	5	5 C	5.0
South Derbyshire 003	2	2 D/E	1.0
South Derbyshire 004	11	10 D/G	5.0
South Derbyshire 005	4	4 D	4.0
South Derbyshire 006	4	3 C/D	1.5
South Derbyshire 009	4	4 C/D	2.0
South Derbyshire 011	2	2 C	2.0
South Derbyshire 012	1	1 C/D	0.5
South Kesteven 002	1	1 C	1.0
South Northamptonshire 004	1	1 C	1.0
South Staffordshire 012	1	1 D	1.0
Southwark 020	2	2 C	2.0
Stafford 006	1	1 D	1.0
Stafford 014	1	1 D	1.0
Staffordshire Moorlands 006	1	1 E	1.0
Staffordshire Moorlands 007	1	1 E	1.0
Stoke-on-Trent 011	1	1 D	1.0
Stoke-on-Trent 015	1	1 D	1.0
Tamworth 002	1	1 C	1.0
Telford and Wrekin 008	1	1 C/D	0.5
Telford and Wrekin 013	1	1 C/D	0.5
Telford and Wrekin 014	2	2 C/D	1.0
Tewkesbury 002	1	1 C	1.0
Vale of White Horse 011	1	1 C	1.0
Walsall 002	1	1 D	1.0
Warrington 004	1	1 D	1.0
Warwick 013	1	1 C	1.0
Westminster 018	2	1 C	1.0
Westminster 020	2	1 C	1.0
Winchester 007	3	2 C	2.0
Wolverhampton 032	2	2 C/D	1.0
Wycombe 016	1	1 C	1.0

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

APPENDIX 13: TEMPro Output

Dataset Version: 72
Result Type: Trip ends by time period
Base Year: 2022
Future Year: 2023
Trip Purpose Group: All purposes
Time Period: Weekday AM peak period (0700 - 0959)
Trip End Type: Origin/Destination
Alternative Assumption: No

Growth Factor

Area Description		All purposes	
Level	Name	Origin	Destination
E02002805	Derby 010	1.0071	1.0066

Future Year - Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
E02002805	Derby 010	10	5

Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
E02002805	Derby 010	1,435	720

Future Year

Area Description		All purposes	
Level	Name	Origin	Destination
E02002805	Derby 010	1,445	724

Level	Area	Local Growth Figure
E02002805	Derby 010	1.007609

Dataset Version: 72
Result Type: Trip ends by time period
Base Year: 2022
Future Year: 2023
Trip Purpose Group: All purposes
Time Period: Weekday PM peak period (1600 - 1859)
Trip End Type: Origin/Destination
Alternative Assumption: No

Growth Factor

Area Description		All purposes	
Level	Name	Origin	Destination
E02002805	Derby 010	1.0064	1.0068

Future Year - Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
E02002805	Derby 010	6	10

Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
E02002805	Derby 010	921	1,416

Future Year

Area Description		All purposes	
Level	Name	Origin	Destination
E02002805	Derby 010	927	1,426

Level	Area	Local Growth Figure
E02002805	Derby 010	1.007359

Dataset Version: 72
Result Type: Trip ends by time period
Base Year: 2022
Future Year: 2028
Trip Purpose Group: All purposes
Time Period: Weekday AM peak period (0700 - 0959)
Trip End Type: Origin/Destination
Alternative Assumption No

Growth Factor

Area Description		All purposes	
Level	Name	Origin	Destination
E02002805	Derby 010	1.0447	1.0405

Future Year - Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
E02002805	Derby 010	64	29

Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
E02002805	Derby 010	1,435	720

Future Year

Area Description		All purposes	
Level	Name	Origin	Destination
E02002805	Derby 010	1,499	749

Level Area Local Growth Figure
 E02002805 Derby 010 **1.046404**

Dataset Version: 72
Result Type: Trip ends by time period
Base Year: 2022
Future Year: 2028
Trip Purpose Group: All purposes
Time Period: Weekday PM peak period (1600 - 1859)
Trip End Type: Origin/Destination
Alternative Assumpt No

Growth Factor

Area Description		All purposes	
Level	Name	Origin	Destination
E02002805	Derby 010	1.0409	1.0436

Future Year - Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
E02002805	Derby 010	38	62

Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
E02002805	Derby 010	921	1,416

Future Year

Area Description		All purposes	
Level	Name	Origin	Destination
E02002805	Derby 010	958	1,478

Level Area Local Growth Figure
 E02002805 Derby 010 **1.052679**

APPENDIX 14: Site Access / Royal Hill Road J10 Output

Junctions 10																	
PICADY 10 - Priority Intersection Module																	
Version: 10.0.4.1693																	
© Copyright TRL Software Limited, 2021																	
For sales and distribution information, program advice and maintenance, contact TRL Software:																	
+44 (0)1344 379777 software@trl.co.uk trlsoftware.com																	
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution																	

Filename: Site Access_Royal Hill Road (Checked) 90 dwells.j10

Path: X:\BMW\BMW3087_Royal Hill Road, Spondon\02. Project Delivery\01. WIP\Models\Junction Models\J10

Report generation date: 12/07/2023 17:54:04

»Site Access_Royal Hill Road - 2028 BASE + COM + DEV, AM

»Site Access_Royal Hill Road - 2028 BASE + COM + DEV, PM

Summary of junction performance

	AM									PM								
	Set ID	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Set ID	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
Site Access_Royal Hill Road - 2028 BASE + COM + DEV																		
Stream B-AC	D1	0.1	0.5	8.10	0.10	A	3.70	A	609 % [Stream B-AC]	D2	0.0	0.5	7.53	0.03	A	1.74	A	900 % []
Stream C-AB		0.0	~1	0.00	0.00	A					0.0	~1	0.00	0.00	A			

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	Site Access_ Royal Hill Rd
Location	Spondon
Site number	
Date	02/11/2022
Version	
Status	(new file)
Identifier	
Client	Miller homes
Jobnumber	BMW3087
Enumerator	BWB\Shannon.Franklin
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
✓	✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2028 BASE + COM + DEV	AM	ONE HOUR	07:45	09:15	15
D2	2028 BASE + COM + DEV	PM	ONE HOUR	16:15	17:45	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Site Access_Royal Hill Road	100.000

Site Access_Royal Hill Road - 2028 BASE + COM + DEV, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Site Access_Royal Hill Road	T-Junction	Two-way	Two-way	Two-way		3.70	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	609	Stream B-AC	3.70	A

Arms

Arms

Arm	Name	Description	Arm type
A	Royal Hill Road S		Major
B	Site Access		Minor
C	Royal Hill Road N		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	5.63			63.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.20	19	16

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	501	0.093	0.235	0.148	0.336
B-C	647	0.101	0.254	-	-
C-B	610	0.240	0.240	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2028 BASE + COM + DEV	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	32	100.000
B		✓	43	100.000
C		✓	19	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		A	B	C
	A	0	11	21
	B	43	0	0
	C	19	0	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		A	B	C
	A	0	0	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.10	8.10	0.1	0.5	A
C-AB	0.00	0.00	0.0	~1	A
C-A					
A-B					
A-C					

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	32	495	0.065	32	0.1	7.773	A
C-AB	0	605	0.000	0	0.0	0.000	A
C-A	14			14			
A-B	8			8			
A-C	16			16			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	494	0.078	39	0.1	7.911	A
C-AB	0	604	0.000	0	0.0	0.000	A
C-A	17			17			
A-B	10			10			
A-C	19			19			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	492	0.096	47	0.1	8.094	A
C-AB	0	602	0.000	0	0.0	0.000	A
C-A	21			21			
A-B	12			12			
A-C	23			23			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	492	0.096	47	0.1	8.098	A
C-AB	0	602	0.000	0	0.0	0.000	A
C-A	21			21			
A-B	12			12			
A-C	23			23			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	39	494	0.078	39	0.1	7.915	A
C-AB	0	604	0.000	0	0.0	0.000	A
C-A	17			17			
A-B	10			10			
A-C	19			19			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	32	495	0.065	32	0.1	7.786	A
C-AB	0	605	0.000	0	0.0	0.000	A
C-A	14			14			
A-B	8			8			
A-C	16			16			

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Site Access_Royal Hill Road - 2028 BASE + COM + DEV, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Site Access_Royal Hill Road	T-Junction	Two-way	Two-way	Two-way		1.74	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	900		1.74	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2028 BASE + COM + DEV	PM	ONE HOUR	16:15	17:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	44	100.000
B		✓	15	100.000
C		✓	6	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	0	36	8	
	15	0	0	
	6	0	0	

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	0
	B	0	0	0
From	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
B-AC	0.03	7.53	0.0	0.5	A
C-AB	0.00	0.00	0.0	~1	A
C-A					
A-B					
A-C					

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	497	0.023	11	0.0	7.412	A
C-AB	0	602	0.000	0	0.0	0.000	A
C-A	5			5			
A-B	27			27			
A-C	6			6			

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	13	496	0.027	13	0.0	7.460	A
C-AB	0	601	0.000	0	0.0	0.000	A
C-A	5			5			
A-B	32			32			
A-C	7			7			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	17	495	0.033	16	0.0	7.526	A
C-AB	0	599	0.000	0	0.0	0.000	A
C-A	7			7			
A-B	40			40			
A-C	9			9			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	17	495	0.033	17	0.0	7.526	A
C-AB	0	599	0.000	0	0.0	0.000	A
C-A	7			7			
A-B	40			40			
A-C	9			9			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	13	496	0.027	14	0.0	7.460	A
C-AB	0	601	0.000	0	0.0	0.000	A
C-A	5			5			
A-B	32			32			
A-C	7			7			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	497	0.023	11	0.0	7.416	A
C-AB	0	602	0.000	0	0.0	0.000	A
C-A	5			5			
A-B	27			27			
A-C	6			6			

Queue Variation Results for each time segment

16:15 - 16:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A



APPENDIX 15: Royal Hill Road / Locko Road J10 Output

Junctions 10		
PICADY 10 - Priority Intersection Module		
Version: 10.0.4.1693		
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Filename: Locko Rd_Chapel St_Church St_West Rd (Checked).j10

Path: X:\BMW\BMW3087_Royal Hill Road, Spondon\02. Project Delivery\01. WIP\Models\Junction Models\J10

Report generation date: 13/07/2023 10:37:31

«Locko Rd_Chapel St_Church St_West Rd - 2028 BASE, AM

- »Junction Network
- »Arms
- »Traffic Demand
- »Origin-Destination Data
- »Vehicle Mix
- »Results

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	Locko Rd_Chapel St_Church St_West Rd - 2023 BASE									
Stream B-ACD	D1	0.8	12.51	0.45	B	D2	0.2	9.20	0.18	A
Stream AB-CD		0.8	8.22	0.39	A		0.7	6.18	0.33	A
Stream D-ABC		0.1	9.07	0.06	A		0.0	7.37	0.05	A
Stream C-AD		0.3	5.39	0.18	A		0.1	4.91	0.08	A
Stream C-B		0.1	5.18	0.22	A		0.0	4.51	0.10	A
Stream CD-B		0.3	8.96	0.20	A		0.1	8.48	0.10	A
	Locko Rd_Chapel St_Church St_West Rd - 2028 BASE									
Stream B-ACD	D3	0.9	13.07	0.46	B	D4	0.2	9.43	0.19	A
Stream AB-CD		0.9	8.40	0.40	A		0.8	6.29	0.35	A
Stream D-ABC		0.1	9.27	0.07	A		0.0	7.44	0.05	A
Stream C-AD		0.3	5.42	0.18	A		0.1	4.93	0.08	A
Stream C-B		0.1	5.22	0.22	A		0.1	4.53	0.10	A
Stream CD-B		0.3	9.12	0.21	A		0.1	8.64	0.10	A
	Locko Rd_Chapel St_Church St_West Rd - 2028 BASE + COM									
Stream B-ACD	D5	1.0	14.01	0.49	B	D6	0.2	9.73	0.20	A
Stream AB-CD		1.0	8.58	0.42	A		0.9	6.38	0.36	A
Stream D-ABC		0.1	9.26	0.07	A		0.0	7.45	0.05	A
Stream C-AD		0.4	5.45	0.20	A		0.1	4.92	0.08	A
Stream C-B		0.1	5.28	0.23	A		0.1	4.55	0.11	A
Stream CD-B		0.3	9.18	0.21	A		0.1	8.77	0.10	A
	Locko Rd_Chapel St_Church St_West Rd - 2028 BASE + COM + DEV									
Stream B-ACD	D7	1.0	14.23	0.50	B	D8	0.2	9.89	0.20	A
Stream AB-CD		1.0	8.75	0.43	A		0.9	6.38	0.37	A
Stream D-ABC		0.1	9.75	0.08	A		0.1	7.92	0.06	A
Stream C-AD		0.4	5.53	0.22	A		0.2	4.91	0.09	A
Stream C-B		0.2	5.41	0.25	A		0.1	4.59	0.11	A
Stream CD-B		0.3	9.22	0.21	A		0.1	8.87	0.10	A

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

File summary

File Description

Title	Locko Road_Chapel Street_Church Street_West Rd
Location	Spondon
Site number	
Date	27/10/2022
Version	
Status	(new file)
Identifier	
Client	Miller Homes
Jobnumber	BMW3087
Enumerator	BWB\Fred.Summerfield
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Locko Rd_Chapel St_Church St_West Rd	100.000

Demand Set Details

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

Locko Rd_Chapel St_Church St_West Rd - 2028 BASE, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Locko Road_Church St Stagger	Left-Right Stagger	Two-way	Two-way	Two-way	Two-way		4.81	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.81	A

Arms

Arms

Arm	Name	Description	Arm type
A	Church Street		Major
B	West Rd		Minor
C	Locko Road		Major
D	Chapel St		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	8.05			95.0	✓	0.00
C	7.90			36.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.42	42	31
D	One lane	3.42	39	16

Pelican/Puffin Crossings

Arm	Space between crossing and junc. entry (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
C	1.00	3.00	2.90	1.00	6.00	6.00	7.00

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
AB-D	629	-	-	-	-	-	0.222	0.222	0.222	-	-
B-A	528	0.088	0.223	0.223	-	-	0.140	0.318	-	0.140	0.318
B-CD	671	0.094	0.238	0.238	-	-	-	-	-	-	-
CD-B	595	0.211	0.211	0.211	-	-	-	-	-	-	-
D-AB	661	-	-	-	-	-	0.233	0.233	0.092	-	-
D-C	519	-	0.137	0.311	0.137	0.311	0.218	0.218	0.086	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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

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

Traffic Demand

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	399	100.000
B		✓	217	100.000
C		✓	311	100.000
D		✓	26	100.000

Demand overview (Pedestrians)

Arm	Average pedestrian flow (Ped/hr)
A	
B	
C	60.00
D	

Origin-Destination Data

Demand (Veh/hr)

	To				
		A	B	C	D
From	A	0	151	154	94
	B	63	0	76	78
	C	131	91	0	89
	D	5	4	17	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		A	B	C	D
From	A	0	0	6	1
	B	0	0	0	0
	C	1	0	0	0
	D	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-ACD	0.46	13.07	0.9	B
A-B				
A-C				
A-D				
AB-CD	0.40	8.40	0.9	A
AB-C				
D-ABC	0.07	9.27	0.1	A
C-AD	0.18	5.42	0.3	A
C-B	0.22	5.22	0.1	A
CD-A				
CD-B	0.21	9.12	0.3	A

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	163		549	0.298	162	0.4	9.254	A
A-B	114				114			
A-C	116				116			
A-D	71				71			
AB-CD	172		689	0.250	170	0.4	6.933	A
AB-C	129				129			
D-ABC	20		465	0.042	19	0.0	8.084	A
C-AD	166	45.17	1375	0.120	165	0.2	4.980	A
C-B	69	45.17	446	0.154	68	0.1	4.649	A
CD-A	102				102			
CD-B	71		530	0.134	71	0.2	7.831	A

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	195		534	0.365	194	0.6	10.569	B
A-B	136				136			
A-C	138				138			
A-D	85				85			
AB-CD	219		703	0.312	218	0.6	7.434	A
AB-C	142				142			
D-ABC	23		445	0.053	23	0.1	8.543	A
C-AD	198	53.94	1349	0.147	198	0.3	5.163	A
C-B	82	53.94	448	0.183	82	0.1	4.884	A
CD-A	122				122			
CD-B	85		517	0.165	85	0.2	8.330	A

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	239		514	0.465	238	0.8	12.968	B
A-B	166				166			
A-C	170				170			
A-D	103				103			
AB-CD	291		722	0.404	290	0.9	8.336	A
AB-C	150				150			
D-ABC	29		417	0.069	29	0.1	9.260	A
C-AD	242	66.06	1313	0.185	242	0.3	5.421	A
C-B	100	66.06	452	0.222	100	0.1	5.222	A
CD-A	150				150			
CD-B	104		500	0.209	104	0.3	9.101	A

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	239		514	0.465	239	0.9	13.071	B
A-B	166				166			
A-C	170				170			
A-D	103				103			
AB-CD	292		722	0.405	292	0.9	8.404	A
AB-C	150				150			
D-ABC	29		417	0.069	29	0.1	9.273	A
C-AD	242	66.06	1313	0.185	242	0.3	5.424	A
C-B	100	66.06	452	0.222	100	0.1	5.223	A
CD-A	150				150			
CD-B	105		500	0.209	105	0.3	9.115	A

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	195		534	0.365	196	0.6	10.681	B
A-B	136				136			
A-C	138				138			
A-D	85				85			
AB-CD	220		703	0.313	222	0.6	7.525	A
AB-C	142				142			
D-ABC	23		444	0.053	23	0.1	8.565	A
C-AD	198	53.94	1348	0.147	198	0.3	5.166	A
C-B	82	53.94	448	0.183	82	0.1	4.890	A
CD-A	122				122			
CD-B	86		517	0.165	86	0.2	8.355	A

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	163		549	0.298	164	0.4	9.371	A
A-B	114				114			
A-C	116				116			
A-D	71				71			
AB-CD	174		689	0.252	174	0.4	7.017	A
AB-C	129				129			
D-ABC	20		464	0.042	20	0.0	8.110	A
C-AD	166	45.17	1375	0.120	166	0.2	4.989	A
C-B	69	45.17	446	0.154	69	0.1	4.658	A
CD-A	103				103			
CD-B	72		530	0.135	72	0.2	7.865	A

APPENDIX 16: Locko Road / Chapel Street / Church Street / West Road J10 Results

Junctions 10				
PICADY 10 - Priority Intersection Module				
Version: 10.0.4.1693				
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Filename: Locko Rd_Royal Hill Rd (Checked).j10

Path: X:\BMW\BMW3087_Royal Hill Road, Spondon\02. Project Delivery\01. WIP\Models\Junction Models\J10

Report generation date: 12/07/2023 18:03:43

- »Locko Road_Royal Hill Road - 2023 BASE, AM
- »Locko Road_Royal Hill Road - 2023 BASE, PM
- »Locko Road_Royal Hill Road - 2028 BASE, AM
- »Locko Road_Royal Hill Road - 2028 BASE, PM
- »Locko Road_Royal Hill Road - 2028 BASE + COM, AM
- »Locko Road_Royal Hill Road - 2027 BASE + COM, PM
- »Locko Road_Royal Hill Road - 2028 BASE + COM + DEV, AM
- »Locko Road_Royal Hill Road - 2028 BASE + COM + DEV, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (Veh)	Delay (s)	RFC	LOS	Set ID	Queue (Veh)	Delay (s)	RFC	LOS
	Locko Road_Royal Hill Road - 2023 BASE									
Stream B-AC	D1	0.2	8.82	0.17	A	D2	0.1	8.40	0.09	A
Stream C-AB		0.2	5.25	0.09	A		0.0	5.81	0.03	A
	Locko Road_Royal Hill Road - 2028 BASE									
Stream B-AC	D3	0.2	9.01	0.18	A	D4	0.1	8.52	0.09	A
Stream C-AB		0.2	5.24	0.10	A		0.0	5.82	0.03	A
	Locko Road_Royal Hill Road - 2028 BASE + COM									
Stream B-AC	D5	0.2	9.24	0.19	A					
Stream C-AB		0.2	5.20	0.10	A					
	Locko Road_Royal Hill Road - 2027 BASE + COM									
Stream B-AC						D6	0.1	8.62	0.09	A
Stream C-AB							0.0	5.83	0.03	A
	Locko Road_Royal Hill Road - 2028 BASE + COM + DEV									
Stream B-AC	D7	0.4	11.23	0.30	B	D8	0.2	9.35	0.14	A
Stream C-AB		0.2	5.22	0.10	A		0.1	5.97	0.04	A

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

File summary

File Description

Title	Locko Road_Royal Hill Road
Location	Spondon
Site number	
Date	27/10/2022
Version	
Status	(new file)
Identifier	
Client	Miller Homes Ltd
Jobnumber	BMW3087
Enumerator	BWB\Fred.Summerfield
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 BASE	AM	ONE HOUR	07:45	09:15	15
D2	2023 BASE	PM	ONE HOUR	16:15	17:45	15
D3	2028 BASE	AM	ONE HOUR	07:45	09:15	15
D4	2028 BASE	PM	ONE HOUR	16:15	17:45	15
D5	2028 BASE + COM	AM	ONE HOUR	07:45	09:15	15
D6	2027 BASE + COM	PM	ONE HOUR	16:15	17:45	15
D7	2028 BASE + COM + DEV	AM	ONE HOUR	07:45	09:15	15
D8	2028 BASE + COM + DEV	PM	ONE HOUR	16:15	17:45	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Locko Road_Royal Hill Road	100.000

Locko Road_Royal Hill Road - 2023 BASE, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.56	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.56	A

Arms

Arms

Arm	Name	Description	Arm type
A	Locko Road S		Major
B	Royal Hill Road		Minor
C	Locko Road N		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.71			112.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.78	27	21

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	535	0.094	0.239	0.150	0.341
B-C	687	0.102	0.258	-	-
C-B	639	0.240	0.240	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 BASE	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	242	100.000
B		✓	77	100.000
C		✓	303	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	23	219
	B	40	0	37
	C	264	39	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	0	4
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.17	8.82	0.2	A
C-AB	0.09	5.25	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	527	0.110	57	0.1	7.658	A
C-AB	40	726	0.056	40	0.1	5.245	A
C-A	188			188			
A-B	17			17			
A-C	165			165			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	69	513	0.135	69	0.2	8.112	A
C-AB	52	745	0.069	51	0.1	5.195	A
C-A	221			221			
A-B	21			21			
A-C	197			197			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	85	493	0.172	85	0.2	8.814	A
C-AB	69	770	0.090	69	0.2	5.133	A
C-A	264			264			
A-B	25			25			
A-C	241			241			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	85	493	0.172	85	0.2	8.824	A
C-AB	69	771	0.090	69	0.2	5.136	A
C-A	264			264			
A-B	25			25			
A-C	241			241			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	69	513	0.135	69	0.2	8.126	A
C-AB	52	745	0.069	52	0.1	5.199	A
C-A	221			221			
A-B	21			21			
A-C	197			197			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	58	527	0.110	58	0.1	7.681	A
C-AB	41	727	0.056	41	0.1	5.253	A
C-A	188			188			
A-B	17			17			
A-C	165			165			

Locko Road_Royal Hill Road - 2023 BASE, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.75	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.75	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2023 BASE	PM	ONE HOUR	16:15	17:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	361	100.000
B		✓	37	100.000
C		✓	137	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	46	315
	B	24	0	13
	C	124	13	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	2	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.09	8.40	0.1	A
C-AB	0.03	5.81	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	28	505	0.055	28	0.1	7.544	A
C-AB	11	637	0.018	11	0.0	5.755	A
C-A	92			92			
A-B	35			35			
A-C	237			237			

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	33	490	0.068	33	0.1	7.884	A
C-AB	14	637	0.022	14	0.0	5.776	A
C-A	109			109			
A-B	41			41			
A-C	283			283			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	41	469	0.087	41	0.1	8.397	A
C-AB	18	638	0.029	18	0.0	5.805	A
C-A	133			133			
A-B	51			51			
A-C	347			347			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	41	469	0.087	41	0.1	8.400	A
C-AB	18	638	0.029	18	0.0	5.805	A
C-A	133			133			
A-B	51			51			
A-C	347			347			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	33	490	0.068	33	0.1	7.890	A
C-AB	14	637	0.022	14	0.0	5.779	A
C-A	109			109			
A-B	41			41			
A-C	283			283			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	28	505	0.055	28	0.1	7.555	A
C-AB	11	637	0.018	12	0.0	5.756	A
C-A	92			92			
A-B	35			35			
A-C	237			237			

Locko Road_Royal Hill Road - 2028 BASE, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.61	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.61	A

Traffic Demand

Demand Set Details

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

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	251	100.000
B		✓	81	100.000
C		✓	315	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	24	227
	B	42	0	39
	C	274	41	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	4
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.18	9.01	0.2	A
C-AB	0.10	5.24	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	524	0.116	60	0.1	7.750	A
C-AB	43	730	0.059	43	0.1	5.237	A
C-A	194			194			
A-B	18			18			
A-C	171			171			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	510	0.143	73	0.2	8.237	A
C-AB	55	749	0.074	55	0.1	5.187	A
C-A	228			228			
A-B	22			22			
A-C	204			204			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	89	489	0.182	89	0.2	8.999	A
C-AB	74	776	0.095	74	0.2	5.129	A
C-A	273			273			
A-B	26			26			
A-C	250			250			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	89	489	0.182	89	0.2	9.009	A
C-AB	74	776	0.096	74	0.2	5.132	A
C-A	273			273			
A-B	26			26			
A-C	250			250			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	509	0.143	73	0.2	8.252	A
C-AB	55	749	0.074	55	0.1	5.193	A
C-A	228			228			
A-B	22			22			
A-C	204			204			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	524	0.116	61	0.1	7.773	A
C-AB	43	730	0.059	43	0.1	5.244	A
C-A	194			194			
A-B	18			18			
A-C	171			171			

Locko Road_Royal Hill Road - 2028 BASE, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.77	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.77	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2028 BASE	PM	ONE HOUR	16:15	17:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	377	100.000
B		✓	39	100.000
C		✓	143	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	48	329
	B	25	0	14
	C	129	14	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	2	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.09	8.52	0.1	A
C-AB	0.03	5.82	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	29	502	0.058	29	0.1	7.605	A
C-AB	12	637	0.020	12	0.0	5.766	A
C-A	95			95			
A-B	36			36			
A-C	248			248			

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	35	487	0.072	35	0.1	7.967	A
C-AB	15	637	0.024	15	0.0	5.789	A
C-A	113			113			
A-B	43			43			
A-C	296			296			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	43	465	0.092	43	0.1	8.518	A
C-AB	20	638	0.031	20	0.0	5.821	A
C-A	138			138			
A-B	53			53			
A-C	362			362			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	43	465	0.092	43	0.1	8.522	A
C-AB	20	638	0.031	20	0.0	5.821	A
C-A	138			138			
A-B	53			53			
A-C	362			362			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	35	487	0.072	35	0.1	7.972	A
C-AB	15	637	0.024	15	0.0	5.792	A
C-A	113			113			
A-B	43			43			
A-C	296			296			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	29	502	0.058	29	0.1	7.613	A
C-AB	12	637	0.020	12	0.0	5.769	A
C-A	95			95			
A-B	36			36			
A-C	248			248			

Locko Road_Royal Hill Road - 2028 BASE + COM, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.63	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.63	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2028 BASE + COM	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	256	100.000
B		✓	84	100.000
C		✓	331	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	25	231
	B	45	0	39
	C	290	41	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	4
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.19	9.24	0.2	A
C-AB	0.10	5.20	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	63	519	0.122	63	0.1	7.878	A
C-AB	44	737	0.059	43	0.1	5.189	A
C-A	205			205			
A-B	19			19			
A-C	174			174			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	76	504	0.150	75	0.2	8.403	A
C-AB	56	758	0.074	56	0.1	5.132	A
C-A	241			241			
A-B	22			22			
A-C	208			208			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	92	482	0.192	92	0.2	9.228	A
C-AB	76	787	0.097	76	0.2	5.068	A
C-A	288			288			
A-B	28			28			
A-C	254			254			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	92	482	0.192	92	0.2	9.240	A
C-AB	76	787	0.097	76	0.2	5.071	A
C-A	288			288			
A-B	28			28			
A-C	254			254			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	76	504	0.150	76	0.2	8.418	A
C-AB	56	758	0.074	57	0.1	5.138	A
C-A	241			241			
A-B	22			22			
A-C	208			208			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	63	519	0.122	63	0.1	7.905	A
C-AB	44	737	0.060	44	0.1	5.198	A
C-A	205			205			
A-B	19			19			
A-C	174			174			

Locko Road_Royal Hill Road - 2027 BASE + COM, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.75	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.75	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2027 BASE + COM	PM	ONE HOUR	16:15	17:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	394	100.000
B		✓	39	100.000
C		✓	147	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		A	B	C
	A	0	50	344
	B	25	0	14
	C	133	14	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		A	B	C
	A	0	2	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.09	8.62	0.1	A
C-AB	0.03	5.83	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	29	499	0.059	29	0.1	7.658	A
C-AB	13	636	0.020	12	0.0	5.774	A
C-A	98			98			
A-B	38			38			
A-C	259			259			

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	35	483	0.073	35	0.1	8.037	A
C-AB	16	636	0.024	15	0.0	5.799	A
C-A	117			117			
A-B	45			45			
A-C	309			309			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	43	460	0.093	43	0.1	8.617	A
C-AB	20	637	0.031	20	0.0	5.832	A
C-A	142			142			
A-B	55			55			
A-C	379			379			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	43	460	0.093	43	0.1	8.621	A
C-AB	20	637	0.031	20	0.0	5.833	A
C-A	142			142			
A-B	55			55			
A-C	379			379			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	35	483	0.073	35	0.1	8.043	A
C-AB	16	636	0.024	16	0.0	5.800	A
C-A	117			117			
A-B	45			45			
A-C	309			309			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	29	499	0.059	29	0.1	7.670	A
C-AB	13	636	0.020	13	0.0	5.775	A
C-A	98			98			
A-B	38			38			
A-C	259			259			

Locko Road_Royal Hill Road - 2028 BASE + COM + DEV, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.39	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.39	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2028 BASE + COM + DEV	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	266	100.000
B		✓	126	100.000
C		✓	332	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	35	231
	B	82	0	44
	C	290	42	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	0	4
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.30	11.23	0.4	B
C-AB	0.10	5.22	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	95	498	0.190	94	0.2	8.885	A
C-AB	45	736	0.061	45	0.1	5.209	A
C-A	205			205			
A-B	26			26			
A-C	174			174			

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	113	482	0.235	113	0.3	9.751	A
C-AB	58	756	0.076	58	0.1	5.158	A
C-A	241			241			
A-B	31			31			
A-C	208			208			

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	139	459	0.302	138	0.4	11.215	B
C-AB	78	785	0.100	78	0.2	5.096	A
C-A	287			287			
A-B	39			39			
A-C	254			254			

08:30 - 08:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	139	459	0.302	139	0.4	11.233	B
C-AB	78	785	0.100	78	0.2	5.101	A
C-A	287			287			
A-B	39			39			
A-C	254			254			

08:45 - 09:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	113	482	0.235	114	0.3	9.795	A
C-AB	58	756	0.077	58	0.1	5.164	A
C-A	241			241			
A-B	31			31			
A-C	208			208			

09:00 - 09:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	95	498	0.190	95	0.2	8.943	A
C-AB	45	736	0.061	45	0.1	5.216	A
C-A	205			205			
A-B	26			26			
A-C	174			174			

Locko Road_Royal Hill Road - 2028 BASE + COM + DEV, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.02	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.02	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2028 BASE + COM + DEV	PM	ONE HOUR	16:15	17:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	426	100.000
B		✓	55	100.000
C		✓	151	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	A	B	C	
From	A	0	82	344
	B	39	0	16
	C	133	18	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	A	B	C	
From	A	0	1	0
	B	0	0	0
	C	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.14	9.35	0.2	A
C-AB	0.04	5.97	0.1	A
C-A				
A-B				
A-C				

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	41	486	0.085	41	0.1	8.086	A
C-AB	16	630	0.026	16	0.0	5.859	A
C-A	98			98			
A-B	62			62			
A-C	259			259			

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	49	469	0.105	49	0.1	8.575	A
C-AB	20	630	0.032	20	0.0	5.903	A
C-A	116			116			
A-B	74			74			
A-C	309			309			

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	446	0.136	60	0.2	9.339	A
C-AB	26	629	0.041	26	0.1	5.963	A
C-A	140			140			
A-B	90			90			
A-C	379			379			

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	446	0.136	61	0.2	9.346	A
C-AB	26	629	0.041	26	0.1	5.967	A
C-A	140			140			
A-B	90			90			
A-C	379			379			

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	49	469	0.105	50	0.1	8.587	A
C-AB	20	630	0.032	20	0.0	5.904	A
C-A	116			116			
A-B	74			74			
A-C	309			309			

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	41	486	0.085	42	0.1	8.104	A
C-AB	16	630	0.026	16	0.0	5.863	A
C-A	98			98			
A-B	62			62			
A-C	259			259			

APPENDIX 17: Sitwell Street / Willowcroft Road J10 Results

Junctions 10																		
ARCADY 10 - Roundabout Module																		
Version: 10.0.4.1693																		
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Filename: Sitwell Street_Willowcroft Road (Checked) corrected.j10

Path: X:\BMW\BMW3087_Royal Hill Road, Spondon\02. Project Delivery\01. WIP\Models\Junction Models\J10

Report generation date: 13/07/2023 14:55:36

- »Sitwell St_Willowcroft Rd - 2023 BASE, AM
- »Sitwell St_Willowcroft Rd - 2023 BASE, PM
- »Sitwell St_Willowcroft Rd - 2028 BASE, AM
- »Sitwell St_Willowcroft Rd - 2028 BASE, PM
- »Sitwell St_Willowcroft Rd - 2028 BASE + COM, AM
- »Sitwell St_Willowcroft Rd - 2028 BASE + COM, PM
- »Sitwell St_Willowcroft Rd - 2028 BASE + COM + DEV, AM
- »Sitwell St_Willowcroft Rd - 2028 BASE + COM + DEV, PM

Summary of junction performance

	AM									PM								
	Set ID	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Set ID	Queue (Veh)	95% Queue (Veh)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	Sitwell St_Willowcroft Rd - 2023 BASE																	
Arm 1	D1	2.2	9.2	15.63	0.70	C	10.16	B	18 % [Arm 1]	D2	2.4	10.4	17.05	0.71	C	17.16	C	9 % [Arm 3]
Arm 2		0.3	1.4	5.79	0.23	A					0.2	1.0	5.48	0.19	A			
Arm 3		1.3	1.4	7.06	0.56	A					5.2	26.7	18.96	0.85	C			
	Sitwell St_Willowcroft Rd - 2028 BASE																	
Arm 1	D3	2.6	12.4	17.87	0.73	C	11.23	B	14 % [Arm 1]	D4	2.9	14.1	20.10	0.75	C	21.97	C	4 % [Arm 3]
Arm 2		0.3	1.4	5.88	0.24	A					0.2	1.1	5.53	0.20	A			
Arm 3		1.4	1.7	7.49	0.59	A					7.1	38.0	25.35	0.89	D			
	Sitwell St_Willowcroft Rd - 2028 BASE + COM																	
Arm 1	D5	4.1	20.7	26.04	0.81	D	14.74	B	5 % [Arm 1]	D6	3.2	15.9	21.84	0.77	C	26.13	D	1 % [Arm 3]
Arm 2		0.4	1.3	6.04	0.27	A					0.4	1.6	6.21	0.29	A			
Arm 3		1.6	1.9	8.02	0.61	A					9.1	50.0	32.61	0.92	D			
	Sitwell St_Willowcroft Rd - 2028 BASE + COM + DEV																	
Arm 1	D7	4.5	23.2	28.94	0.83	D	15.92	C	3 % [Arm 1]	D8	3.2	16.3	22.26	0.77	C	26.90	D	0 % [Arm 3]
Arm 2		0.4	1.4	6.08	0.27	A					0.4	1.8	6.31	0.30	A			
Arm 3		1.7	2.3	8.41	0.63	A					9.6	52.3	33.85	0.92	D			

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	Sitwell St_Willowcroft Rd
Location	Spondon
Site number	
Date	02/11/2022
Version	
Status	(new file)
Identifier	
Client	Miller Homes
Jobnumber	BMW3087
Enumerator	BWB\Shannon.Franklin
Description	Covid factor of 1.29 has been applied to all movements at the junction apart from the ahead movement from Arm 3.

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	mph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Mini-roundabout model	Calculate Queue Percentiles	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
JUNCTIONS 9	✓	✓	Delay	0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 BASE	AM	ONE HOUR	07:45	09:15	15
D2	2023 BASE	PM	ONE HOUR	16:15	17:45	15
D3	2028 BASE	AM	ONE HOUR	07:45	09:15	15
D4	2028 BASE	PM	ONE HOUR	16:15	17:45	15
D5	2028 BASE + COM	AM	ONE HOUR	07:45	09:15	15
D6	2028 BASE + COM	PM	ONE HOUR	16:15	17:45	15
D7	2028 BASE + COM + DEV	AM	ONE HOUR	07:45	09:15	15
D8	2028 BASE + COM + DEV	PM	ONE HOUR	16:15	17:45	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Sitwell St_Willowcroft Rd	100.000

Sitwell St_Willowcroft Rd - 2023 BASE, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 86% of the total flow for the roundabout for one or more time segments]
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Sitwell St_Willowcroft Rd	Mini-roundabout		1, 2, 3	10.16	B

Junction Network

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		18	Arm 1	10.16	B

Arms

Arms

Arm	Name	Description
1	Sitwell St E	
2	Willowcroft Rd	
3	Sitwell St	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.00	2.80	4.00	5.6	13.20	11.50	0.0	
2	3.70	3.60	4.00	1.0	12.80	7.20	0.0	
3	3.00	2.40	3.70	3.2	15.60	15.20	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final slope	Final intercept (PCU/hr)
1	✓	0.614	1000	0.614	1000
2				0.620	851
3	✓	0.616	1290	0.616	1290

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2023 BASE	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	478	100.000
2		✓	172	100.000
3		✓	596	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1	2	3
From	1	0	449	29
	2	60	0	112
	3	296	300	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	5	7
	2	7	0	0
	3	12	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1	0.70	15.63	2.2	9.2	C
2	0.23	5.79	0.3	1.4	A
3	0.56	7.06	1.3	1.4	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	360	225	819	0.440	357	0.8	7.744	A
2	129	22	818	0.158	129	0.2	5.219	A
3	449	45	1179	0.381	446	0.6	4.898	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	430	269	792	0.543	428	1.2	9.848	A
2	155	26	815	0.190	154	0.2	5.448	A
3	536	54	1173	0.457	535	0.8	5.629	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	526	329	756	0.696	522	2.2	15.116	C
2	189	32	811	0.233	189	0.3	5.782	A
3	656	66	1166	0.563	654	1.3	7.013	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	526	330	756	0.696	526	2.2	15.626	C
2	189	32	811	0.233	189	0.3	5.788	A
3	656	66	1166	0.563	656	1.3	7.061	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	430	271	791	0.543	434	1.2	10.178	B
2	155	26	815	0.190	155	0.2	5.459	A
3	536	54	1173	0.457	537	0.8	5.678	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	360	226	818	0.440	362	0.8	7.921	A
2	129	22	818	0.158	130	0.2	5.233	A
3	449	45	1179	0.381	450	0.6	4.945	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.77	0.55	1.00	1.40	1.45			N/A	N/A
2	0.19	0.00	0.00	0.19	0.19			N/A	N/A
3	0.61	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.16	0.09	0.98	1.99	2.75			N/A	N/A
2	0.23	0.00	0.00	0.23	0.23			N/A	N/A
3	0.83	0.11	0.89	1.36	1.36			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	2.17	0.03	0.29	2.17	9.24			N/A	N/A
2	0.30	0.03	0.25	0.46	0.48			N/A	N/A
3	1.27	0.03	0.26	1.27	1.27			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	2.23	0.03	0.28	2.23	6.00			N/A	N/A
2	0.30	0.03	0.31	1.07	1.36			N/A	N/A
3	1.28	0.03	0.27	1.28	1.28			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.22	0.06	0.74	2.69	3.83			N/A	N/A
2	0.24	0.00	0.00	0.24	0.24			N/A	N/A
3	0.85	0.16	0.93	1.06	1.06			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.80	0.04	0.41	1.82	2.88			N/A	N/A
2	0.19	0.00	0.00	0.19	0.19			N/A	N/A
3	0.62	0.06	0.66	1.35	1.44			N/A	N/A

Sitwell St_Willowcroft Rd - 2023 BASE, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 91% of the total flow for the roundabout for one or more time segments]
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Sitwell St_Willowcroft Rd	Mini-roundabout		1, 2, 3	17.16	C

Junction Network

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		9	Arm 3	17.16	C

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2023 BASE	PM	ONE HOUR	16:15	17:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	466	100.000
2		✓	138	100.000
3		✓	928	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	1	2	3	
From	1	0	430	36
	2	85	0	53
	3	562	366	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1	2	3	
From	1	0	4	0
	2	2	0	2
	3	3	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1	0.71	17.05	2.4	10.4	C
2	0.19	5.48	0.2	1.0	A
3	0.85	18.96	5.2	26.7	C

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	351	273	800	0.439	348	0.8	7.909	A
2	104	27	817	0.127	103	0.1	5.042	A
3	699	64	1226	0.570	693	1.3	6.692	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	419	328	768	0.546	417	1.2	10.229	B
2	124	32	813	0.153	124	0.2	5.220	A
3	834	76	1219	0.685	831	2.1	9.211	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	513	399	725	0.707	509	2.3	16.274	C
2	152	39	809	0.188	152	0.2	5.475	A
3	1022	93	1208	0.846	1011	4.9	17.319	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	513	403	723	0.710	513	2.4	17.050	C
2	152	40	809	0.188	152	0.2	5.479	A
3	1022	94	1208	0.846	1021	5.2	18.958	C

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	419	334	764	0.548	423	1.2	10.699	B
2	124	33	813	0.153	124	0.2	5.229	A
3	834	77	1218	0.685	846	2.2	9.949	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	351	277	798	0.440	353	0.8	8.117	A
2	104	27	816	0.127	104	0.1	5.054	A
3	699	64	1226	0.570	702	1.3	6.919	A

Queue Variation Results for each time segment

16:15 - 16:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.77	0.55	1.00	1.40	1.45			N/A	N/A
2	0.14	0.00	0.00	0.14	0.14			N/A	N/A
3	1.30	0.56	1.11	1.46	1.73			N/A	N/A

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.17	0.08	0.98	2.08	2.83			N/A	N/A
2	0.18	0.00	0.00	0.18	0.18			N/A	N/A
3	2.11	0.06	0.80	5.48	8.31			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	2.28	0.03	0.30	2.30	10.37			N/A	N/A
2	0.23	0.03	0.25	0.46	0.48			N/A	N/A
3	4.89	0.04	0.36	11.18	26.69			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	2.36	0.03	0.28	2.36	7.30			N/A	N/A
2	0.23	0.03	0.28	0.50	0.96			N/A	N/A
3	5.15	0.03	0.30	5.15	22.35			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.24	0.06	0.69	2.81	4.05			N/A	N/A
2	0.18	0.00	0.00	0.18	0.18			N/A	N/A
3	2.24	0.05	0.46	6.13	10.22			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.80	0.04	0.39	1.85	2.99			N/A	N/A
2	0.15	0.00	0.00	0.15	0.15			N/A	N/A
3	1.35	0.03	0.35	3.23	6.82			N/A	N/A

Sitwell St_Willowcroft Rd - 2028 BASE, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 86% of the total flow for the roundabout for one or more time segments]
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Sitwell St_Willowcroft Rd	Mini-roundabout		1, 2, 3	11.23	B

Junction Network

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		14	Arm 1	11.23	B

Traffic Demand

Demand Set Details

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

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	497	100.000
2		✓	179	100.000
3		✓	620	100.000

Origin-Destination Data

Demand (Veh/hr)

	To		
	1	2	3
From	1	0	467
	2	63	0
	3	308	312

Vehicle Mix

Heavy Vehicle Percentages

	To		
	1	2	3
From	1	0	5
	2	7	0
	3	12	2

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1	0.73	17.87	2.6	12.4	C
2	0.24	5.88	0.3	1.4	A
3	0.59	7.49	1.4	1.7	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	374	234	813	0.460	371	0.8	8.084	A
2	135	22	816	0.165	134	0.2	5.270	A
3	467	47	1177	0.397	464	0.7	5.033	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	447	280	785	0.569	445	1.3	10.524	B
2	161	27	813	0.198	161	0.2	5.514	A
3	557	57	1171	0.476	556	0.9	5.846	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	547	343	748	0.732	542	2.6	17.076	C
2	197	33	810	0.243	197	0.3	5.871	A
3	683	69	1163	0.587	681	1.4	7.427	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	547	343	747	0.732	547	2.6	17.873	C
2	197	33	809	0.243	197	0.3	5.877	A
3	683	69	1163	0.587	683	1.4	7.486	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	447	281	784	0.570	452	1.4	10.988	B
2	161	27	813	0.198	161	0.2	5.523	A
3	557	57	1171	0.476	559	0.9	5.905	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	374	235	812	0.461	376	0.9	8.301	A
2	135	23	816	0.165	135	0.2	5.285	A
3	467	47	1177	0.397	468	0.7	5.087	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.84	0.55	1.00	1.40	1.45			N/A	N/A
2	0.20	0.00	0.00	0.20	0.20			N/A	N/A
3	0.65	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.29	0.08	1.00	2.55	3.42			N/A	N/A
2	0.24	0.00	0.00	0.24	0.24			N/A	N/A
3	0.90	0.10	0.90	1.27	1.69			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	2.55	0.03	0.31	3.34	12.38			N/A	N/A
2	0.32	0.03	0.25	0.46	0.48			N/A	N/A
3	1.39	0.03	0.26	1.39	1.39			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	2.64	0.03	0.28	2.64	8.62			N/A	N/A
2	0.32	0.03	0.31	1.12	1.42			N/A	N/A
3	1.41	0.03	0.27	1.41	1.41			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.36	0.05	0.60	3.26	4.87			N/A	N/A
2	0.25	0.00	0.00	0.25	0.25			N/A	N/A
3	0.92	0.13	0.95	1.14	1.60			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.87	0.04	0.38	2.05	3.59			N/A	N/A
2	0.20	0.00	0.00	0.20	0.20			N/A	N/A
3	0.66	0.06	0.65	1.40	1.49			N/A	N/A

Sitwell St_Willowcroft Rd - 2028 BASE, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 91% of the total flow for the roundabout for one or more time segments]
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Sitwell St_Willowcroft Rd	Mini-roundabout		1, 2, 3	21.97	C

Junction Network

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		4	Arm 3	21.97	C

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2028 BASE	PM	ONE HOUR	16:15	17:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	487	100.000
2		✓	144	100.000
3		✓	970	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	1	2	3	
From	1	0	449	38
	2	88	0	56
	3	588	382	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1	2	3	
From	1	0	4	0
	2	2	0	2
	3	3	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1	0.75	20.10	2.9	14.1	C
2	0.20	5.53	0.2	1.1	A
3	0.89	25.35	7.1	38.0	D

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	367	285	794	0.462	363	0.8	8.298	A
2	108	28	817	0.133	108	0.2	5.069	A
3	730	66	1222	0.598	724	1.5	7.160	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	438	342	760	0.576	436	1.3	11.040	B
2	129	34	814	0.159	129	0.2	5.256	A
3	872	79	1214	0.719	868	2.5	10.298	B

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	536	414	717	0.748	530	2.8	18.766	C
2	159	41	809	0.196	158	0.2	5.528	A
3	1068	97	1203	0.888	1052	6.5	21.794	C

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	536	420	713	0.752	536	2.9	20.102	C
2	159	42	809	0.196	159	0.2	5.532	A
3	1068	97	1203	0.888	1066	7.1	25.353	D

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	438	350	755	0.580	444	1.4	11.777	B
2	129	35	814	0.159	130	0.2	5.267	A
3	872	79	1213	0.719	890	2.7	11.687	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	367	289	791	0.463	369	0.9	8.564	A
2	108	29	817	0.133	109	0.2	5.083	A
3	730	66	1221	0.598	735	1.5	7.467	A

Queue Variation Results for each time segment

16:15 - 16:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.84	0.55	1.00	1.40	1.45			N/A	N/A
2	0.15	0.00	0.00	0.15	0.15			N/A	N/A
3	1.46	0.59	1.36	1.78	1.90			N/A	N/A

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.32	0.08	0.99	2.67	3.62			N/A	N/A
2	0.19	0.00	0.00	0.19	0.19			N/A	N/A
3	2.46	0.06	0.85	6.54	10.00			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	2.75	0.03	0.32	4.52	14.14			N/A	N/A
2	0.24	0.03	0.25	0.46	0.48			N/A	N/A
3	6.54	0.04	0.44	18.16	34.55			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	2.89	0.03	0.29	2.89	10.96			N/A	N/A
2	0.24	0.03	0.28	0.66	1.09			N/A	N/A
3	7.10	0.03	0.34	13.33	38.01			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.42	0.05	0.53	3.52	5.34			N/A	N/A
2	0.19	0.00	0.00	0.19	0.19			N/A	N/A
3	2.66	0.04	0.43	7.35	12.93			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.88	0.04	0.37	2.10	3.81			N/A	N/A
2	0.15	0.00	0.00	0.15	0.15			N/A	N/A
3	1.52	0.03	0.33	3.23	7.87			N/A	N/A

Sitwell St_Willowcroft Rd - 2028 BASE + COM, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 86% of the total flow for the roundabout for one or more time segments]
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Sitwell St_Willowcroft Rd	Mini-roundabout		1, 2, 3	14.74	B

Junction Network

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		5	Arm 1	14.74	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2028 BASE + COM	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	539	100.000
2		✓	197	100.000
3		✓	648	100.000

Origin-Destination Data

Demand (Veh/hr)

	To		
	1	2	3
From	1	0	509
	2	69	0
	3	308	340

Vehicle Mix

Heavy Vehicle Percentages

	To		
	1	2	3
From	1	0	5
	2	6	0
	3	12	2

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1	0.81	26.04	4.1	20.7	D
2	0.27	6.04	0.4	1.3	A
3	0.61	8.02	1.6	1.9	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	406	254	800	0.507	402	1.0	8.959	A
2	148	22	819	0.181	147	0.2	5.352	A
3	488	52	1177	0.415	485	0.7	5.183	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	485	305	770	0.630	482	1.6	12.406	B
2	177	27	816	0.217	177	0.3	5.628	A
3	583	62	1171	0.498	581	1.0	6.100	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	593	373	729	0.814	585	3.9	23.581	C
2	217	33	813	0.267	217	0.4	6.035	A
3	713	76	1162	0.614	711	1.6	7.944	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	593	374	728	0.815	592	4.1	26.042	D
2	217	33	812	0.267	217	0.4	6.045	A
3	713	76	1162	0.614	713	1.6	8.022	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	485	307	769	0.630	494	1.8	13.518	B
2	177	27	816	0.217	177	0.3	5.642	A
3	583	62	1170	0.498	585	1.0	6.170	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	406	257	799	0.508	409	1.1	9.300	A
2	148	23	819	0.181	149	0.2	5.372	A
3	488	52	1177	0.415	489	0.7	5.244	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.01	0.55	1.00	1.40	1.45			N/A	N/A
2	0.22	0.00	0.00	0.22	0.22			N/A	N/A
3	0.70	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.64	0.07	1.01	3.73	5.25			N/A	N/A
2	0.27	0.00	0.00	0.27	0.27			N/A	N/A
3	0.98	0.09	0.92	1.60	1.93			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	3.85	0.04	0.37	9.45	20.71			N/A	N/A
2	0.36	0.03	0.25	0.46	0.48			N/A	N/A
3	1.56	0.03	0.27	1.56	1.56			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	4.09	0.03	0.31	5.13	19.69			N/A	N/A
2	0.36	0.03	0.31	1.23	1.27			N/A	N/A
3	1.57	0.03	0.27	1.57	1.57			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.77	0.04	0.44	4.73	7.84			N/A	N/A
2	0.28	0.00	0.00	0.28	0.28			N/A	N/A
3	1.00	0.11	0.97	1.56	1.87			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.05	0.03	0.34	2.47	5.20			N/A	N/A
2	0.22	0.00	0.00	0.22	0.22			N/A	N/A
3	0.72	0.06	0.63	1.49	1.54			N/A	N/A

Sitwell St_Willowcroft Rd - 2028 BASE + COM, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 87% of the total flow for the roundabout for one or more time segments]
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Sitwell St_Willowcroft Rd	Mini-roundabout		1, 2, 3	26.13	D

Junction Network

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		1	Arm 3	26.13	D

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2028 BASE + COM	PM	ONE HOUR	16:15	17:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	496	100.000
2		✓	211	100.000
3		✓	978	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	1	2	3	
From	1	0	458	38
	2	129	0	82
	3	588	390	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1	2	3	
From	1	0	4	0
	2	2	0	1
	3	3	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1	0.77	21.84	3.2	15.9	C
2	0.29	6.21	0.4	1.6	A
3	0.92	32.61	9.1	50.0	D

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	373	291	790	0.473	370	0.9	8.495	A
2	159	28	821	0.194	158	0.2	5.425	A
3	736	97	1203	0.612	730	1.5	7.521	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	446	349	756	0.590	444	1.4	11.461	B
2	190	34	817	0.232	189	0.3	5.733	A
3	879	116	1191	0.738	875	2.7	11.211	B

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	546	421	713	0.766	540	3.0	20.083	C
2	232	41	813	0.286	232	0.4	6.196	A
3	1077	142	1175	0.916	1055	8.1	26.242	D

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	546	428	709	0.771	545	3.2	21.841	C
2	232	42	812	0.286	232	0.4	6.206	A
3	1077	142	1175	0.917	1073	9.1	32.606	D

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	446	360	749	0.595	453	1.5	12.408	B
2	190	35	817	0.232	190	0.3	5.750	A
3	879	116	1191	0.738	904	3.0	13.521	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	373	296	787	0.474	376	0.9	8.794	A
2	159	29	820	0.194	159	0.2	5.448	A
3	736	97	1202	0.612	742	1.6	7.902	A

Queue Variation Results for each time segment

16:15 - 16:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.88	0.55	1.00	1.40	1.45			N/A	N/A
2	0.24	0.00	0.00	0.24	0.24			N/A	N/A
3	1.54	0.60	1.49	1.87	1.98			N/A	N/A

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.40	0.07	1.00	2.88	3.95			N/A	N/A
2	0.30	0.00	0.00	0.30	0.30			N/A	N/A
3	2.70	0.06	0.90	7.24	11.11			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	3.00	0.03	0.33	5.75	15.93			N/A	N/A
2	0.40	0.03	0.25	0.46	0.48			N/A	N/A
3	8.10	0.06	1.04	23.58	39.77			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	3.18	0.03	0.30	3.18	13.20			N/A	N/A
2	0.40	0.03	0.31	1.29	1.61			N/A	N/A
3	9.13	0.04	0.41	23.33	50.01			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.52	0.05	0.49	3.85	5.96			N/A	N/A
2	0.31	0.00	0.00	0.31	0.31			N/A	N/A
3	2.96	0.04	0.42	8.16	14.85			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.92	0.04	0.36	2.22	4.16			N/A	N/A
2	0.24	0.00	0.00	0.24	0.24			N/A	N/A
3	1.61	0.03	0.32	3.04	8.40			N/A	N/A

Sitwell St_Willowcroft Rd - 2028 BASE + COM + DEV, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 86% of the total flow for the roundabout for one or more time segments]
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Sitwell St_Willowcroft Rd	Mini-roundabout		1, 2, 3	15.92	C

Junction Network

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		3	Arm 1	15.92	C

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2028 BASE + COM + DEV	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	539	100.000
2		✓	200	100.000
3		✓	674	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
From		1	2	3
	1	0	509	30
	2	69	0	131
	3	308	366	0

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1	2	3
	1	0	5	7
	2	6	0	0
	3	12	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1	0.83	28.94	4.5	23.2	D
2	0.27	6.08	0.4	1.4	A
3	0.63	8.41	1.7	2.3	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	406	274	790	0.514	402	1.0	9.183	A
2	151	22	820	0.184	150	0.2	5.368	A
3	507	52	1185	0.428	504	0.7	5.270	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	485	328	758	0.640	482	1.7	12.924	B
2	180	27	817	0.220	180	0.3	5.650	A
3	606	62	1179	0.514	605	1.0	6.261	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	593	402	714	0.831	583	4.2	25.690	D
2	220	32	813	0.271	220	0.4	6.065	A
3	742	76	1170	0.634	739	1.7	8.311	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	593	403	714	0.832	592	4.5	28.940	D
2	220	33	813	0.271	220	0.4	6.076	A
3	742	76	1170	0.634	742	1.7	8.409	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	485	330	756	0.641	495	1.9	14.302	B
2	180	28	816	0.220	180	0.3	5.663	A
3	606	62	1178	0.514	608	1.1	6.344	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	406	276	788	0.515	409	1.1	9.560	A
2	151	23	819	0.184	151	0.2	5.387	A
3	507	52	1185	0.428	509	0.8	5.335	A

Queue Variation Results for each time segment

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.03	0.55	1.00	1.40	1.45			N/A	N/A
2	0.22	0.00	0.00	0.22	0.22			N/A	N/A
3	0.74	0.55	1.00	1.40	1.45			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.71	0.07	1.01	3.93	5.63			N/A	N/A
2	0.28	0.00	0.00	0.28	0.28			N/A	N/A
3	1.04	0.08	0.92	1.79	2.33			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	4.21	0.04	0.39	11.10	22.54			N/A	N/A
2	0.37	0.03	0.25	0.46	0.48			N/A	N/A
3	1.69	0.03	0.27	1.69	1.87			N/A	N/A

08:30 - 08:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	4.52	0.03	0.32	7.18	23.18			N/A	N/A
2	0.37	0.03	0.31	1.24	1.36			N/A	N/A
3	1.71	0.03	0.27	1.71	1.71			N/A	N/A

08:45 - 09:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.85	0.04	0.43	4.98	8.50			N/A	N/A
2	0.28	0.00	0.00	0.28	0.28			N/A	N/A
3	1.07	0.10	0.98	1.76	2.17			N/A	N/A

09:00 - 09:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.08	0.03	0.33	2.43	5.44			N/A	N/A
2	0.23	0.00	0.00	0.23	0.23			N/A	N/A
3	0.76	0.05	0.61	1.28	1.78			N/A	N/A

Sitwell St_Willowcroft Rd - 2028 BASE + COM + DEV, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 87% of the total flow for the roundabout for one or more time segments]
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Sitwell St_Willowcroft Rd	Mini-roundabout		1, 2, 3	26.90	D

Junction Network

Driving side	Lighting	Road surface	In London	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		0	Arm 3	26.90	D

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2028 BASE + COM + DEV	PM	ONE HOUR	16:15	17:45	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	496	100.000
2		✓	220	100.000
3		✓	987	100.000

Origin-Destination Data

Demand (Veh/hr)

	To		
	1	2	3
From	1	0	458
	2	129	0
	3	588	399

Vehicle Mix

Heavy Vehicle Percentages

From	To			
		1	2	3
	1	0	4	0
	2	2	0	1
	3	3	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
1	0.77	22.26	3.2	16.3	C
2	0.30	6.31	0.4	1.8	A
3	0.92	33.85	9.6	52.3	D

Main Results for each time segment

16:15 - 16:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	373	298	788	0.474	370	0.9	8.540	A
2	166	28	821	0.202	165	0.3	5.479	A
3	743	97	1208	0.615	737	1.6	7.548	A

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	446	357	753	0.592	444	1.4	11.556	B
2	198	34	817	0.242	198	0.3	5.806	A
3	887	116	1196	0.742	883	2.7	11.317	B

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	546	430	710	0.770	540	3.0	20.399	C
2	242	41	813	0.298	242	0.4	6.301	A
3	1087	142	1180	0.921	1064	8.4	26.922	D

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	546	437	705	0.774	545	3.2	22.257	C
2	242	42	813	0.298	242	0.4	6.311	A
3	1087	142	1180	0.921	1082	9.6	33.854	D

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	446	369	746	0.598	453	1.5	12.555	B
2	198	35	817	0.242	198	0.3	5.822	A
3	887	116	1196	0.742	913	3.0	13.817	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
1	373	303	785	0.476	376	0.9	8.846	A
2	166	29	820	0.202	166	0.3	5.503	A
3	743	97	1207	0.615	749	1.6	7.941	A

Queue Variation Results for each time segment

16:15 - 16:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.88	0.55	1.00	1.40	1.45			N/A	N/A
2	0.25	0.00	0.00	0.25	0.25			N/A	N/A
3	1.56	0.60	1.01	1.89	2.00			N/A	N/A

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.41	0.07	1.00	2.92	4.00			N/A	N/A
2	0.32	0.00	0.00	0.32	0.32			N/A	N/A
3	2.75	0.06	0.91	7.40	11.37			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	3.05	0.03	0.33	5.98	16.26			N/A	N/A
2	0.42	0.03	0.25	0.46	0.48			N/A	N/A
3	8.42	0.06	1.22	24.57	40.82			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	3.24	0.03	0.30	3.24	13.69			N/A	N/A
2	0.42	0.03	0.31	1.31	1.77			N/A	N/A
3	9.56	0.04	0.42	25.27	52.32			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	1.53	0.05	0.49	3.90	6.07			N/A	N/A
2	0.32	0.00	0.00	0.32	0.32			N/A	N/A
3	3.02	0.04	0.42	8.34	15.22			N/A	N/A

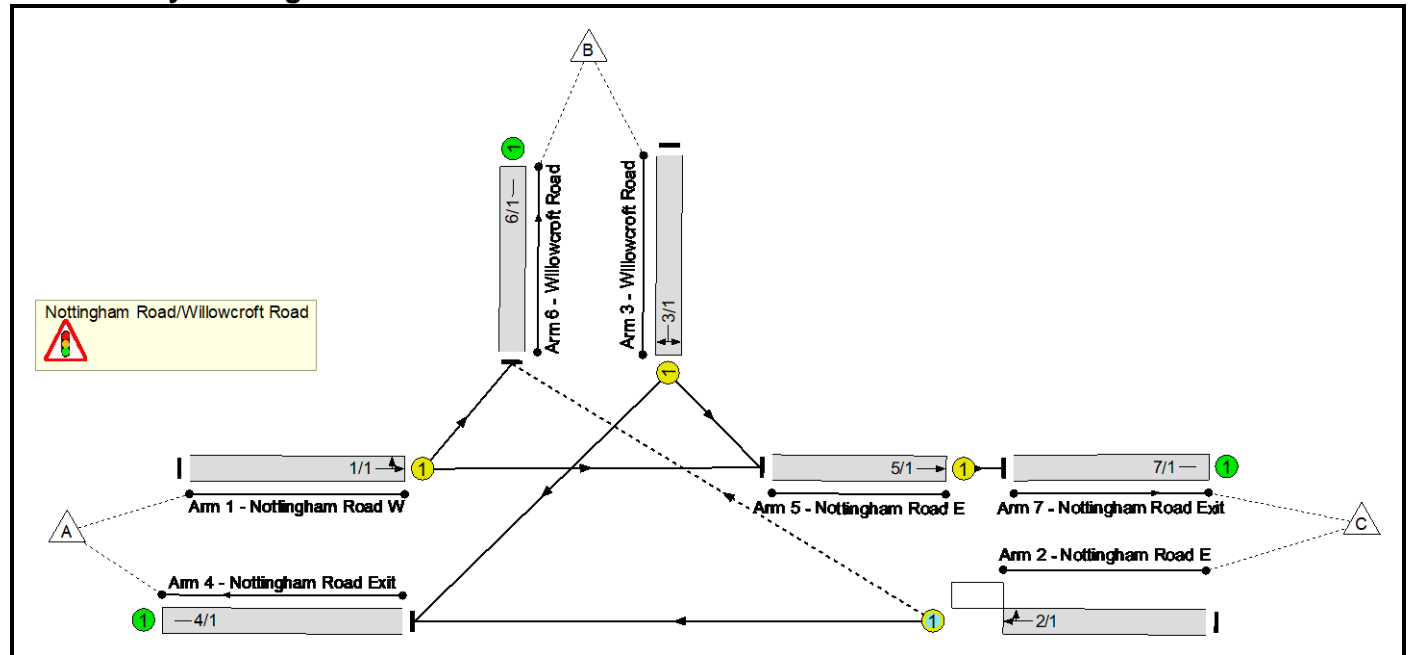
17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1	0.92	0.04	0.35	2.23	4.23			N/A	N/A
2	0.25	0.00	0.00	0.25	0.25			N/A	N/A
3	1.64	0.03	0.32	3.02	8.50			N/A	N/A

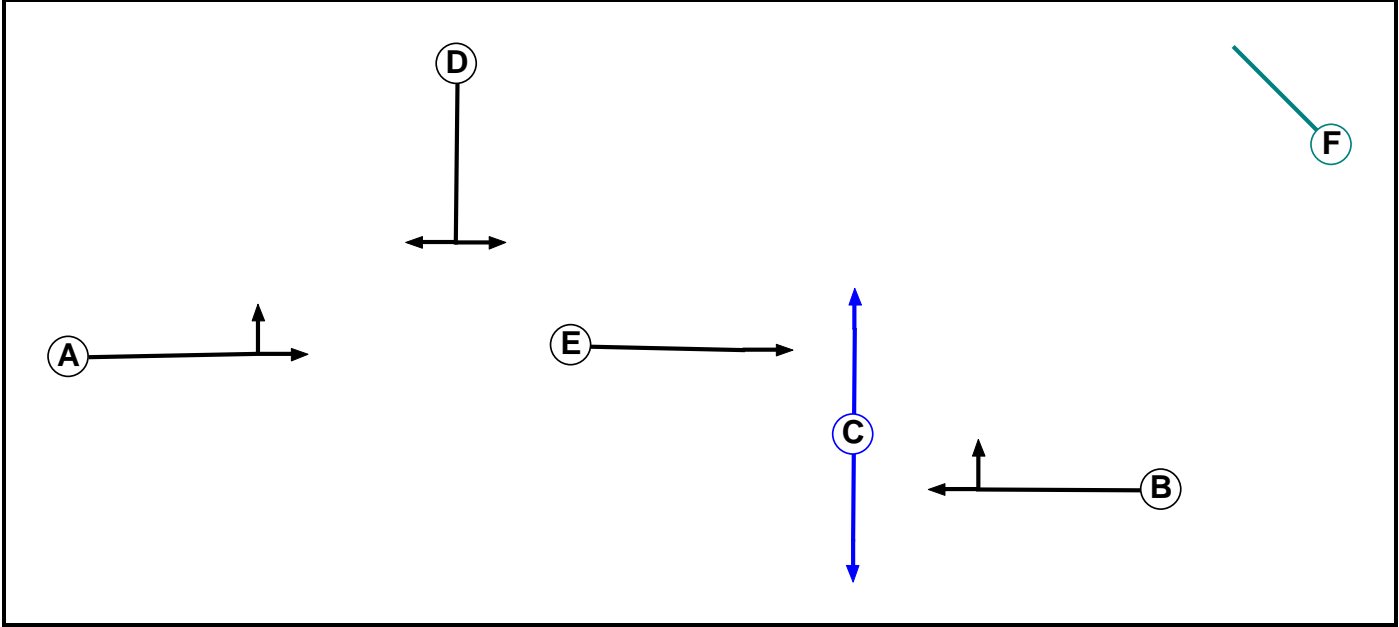
APPENDIX 18: Willowcroft Road / Nottingham Road LINSIG Results

Full Input Data And Results**User and Project Details**

Project:	Royal Hill Road, Spondon
Title:	
Location:	Spondon, Derby
Client:	Miller Homes
Additional detail:	
File name:	Willowcroft Road_Nottingham Road (Checked) 90 dwells.lsg3x
Author:	Shannon Franklin
Company:	BWB Consulting
Address:	

Network Layout Diagram

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	4
C	Pedestrian		5	5
D	Traffic		7	7
E	Traffic		7	1
F	Dummy		3	3

Phase Intergreens Matrix

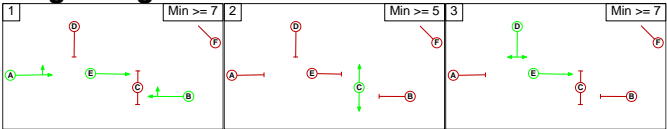
	Starting Phase						
Terminating Phase		A	B	C	D	E	F
	A		-	10	7	-	3
	B	-		5	7	-	3
	C	4	4		4	4	4
	D	5	5	10		-	3
	E	-	-	5	-		3
	F	2	2	2	2	2	

Phases in Stage

Stage No.	Phases in Stage
1	A B E
2	C
3	D E

Full Input Data And Results

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	B	Losing	6	6
1	2	E	Losing	6	6
1	3	B	Losing	3	3
3	2	E	Losing	6	6

Prohibited Stage Change

		To Stage		
From Stage		1	2	3
	1		11	10
	2	4		4
	3	5	11	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Nottingham Road/Willowcroft Road											
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)
2/1 (Nottingham Road E)	6/1 (Right)	1439	0	1/1	1.09	All	3.00	3.00	0.50	3	3.00

Full Input Data And Results

Lane Input Data

Junction: Nottingham Road/Willowcroft Road												
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 (Nottingham Road W)	U	A	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 5 Ahead	Inf
											Arm 6 Left	20.00
2/1 (Nottingham Road E)	O	B	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 4 Ahead	Inf
											Arm 6 Right	25.00
3/1 (Willowcroft Road)	U	D	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 4 Right	25.00
											Arm 5 Left	20.00
4/1 (Nottingham Road Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (Nottingham Road E)	U	E	2	3	60.0	Geom	-	3.75	0.00	Y	Arm 7 Ahead	Inf
6/1 (Willowcroft Road)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (Nottingham Road Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2023 BASE AM'	08:00	09:00	01:00	
2: '2023 BASE PM '	16:30	17:30	01:00	
3: '2028 BASE AM'	08:00	09:00	01:00	
4: '2028 BASE PM '	16:30	17:30	01:00	
5: '2028 BASE + COM AM'	08:00	09:00	01:00	
6: '2028 BASE + COM PM '	16:30	17:30	01:00	
7: '2028 BASE + COM + DEV AM'	08:00	09:00	01:00	
8: '2028 BASE + COM + DEV PM '	16:30	17:30	01:00	

Scenario 1: '2023 BASE AM' (FG1: '2023 BASE AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	35	260	295
	B	822	0	81	903
	C	380	70	0	450
	Tot.	1202	105	341	1648

Traffic Lane Flows

Lane	Scenario 1: 2023 BASE AM
Junction: Nottingham Road/Willowcroft Road	
1/1	295
2/1	450
3/1	903
4/1	1202
5/1	341
6/1	105
7/1	341

Lane Saturation Flows

Junction: Nottingham Road/Willowcroft Road								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Nottingham Road W)	3.65	0.00	Y	Arm 5 Ahead Arm 6 Left	Inf 20.00	88.1 % 11.9 %	1963	1963
2/1 (Nottingham Road E)	3.65	0.00	Y	Arm 4 Ahead Arm 6 Right	Inf 25.00	84.4 % 15.6 %	1962	1962
3/1 (Willowcroft Road)	3.65	0.00	Y	Arm 4 Right Arm 5 Left	25.00 20.00	91.0 % 9.0 %	1866	1866
4/1 (Nottingham Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Nottingham Road E)	3.75	0.00	Y	Arm 7 Ahead	Inf	100.0 %	1990	1990
6/1 (Willowcroft Road Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Nottingham Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: '2023 BASE PM' (FG2: '2023 BASE PM ', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	62	407	469
	B	647	0	69	716
	C	413	83	0	496
	Tot.	1060	145	476	1681

Traffic Lane Flows

Lane	Scenario 2: 2023 BASE PM
Junction: Nottingham Road/Willowcroft Road	
1/1	469
2/1	496
3/1	716
4/1	1060
5/1	476
6/1	145
7/1	476

Lane Saturation Flows

Junction: Nottingham Road/Willowcroft Road								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Nottingham Road W)	3.65	0.00	Y	Arm 5 Ahead	Inf	86.8 %	1961	1961
				Arm 6 Left	20.00	13.2 %		
2/1 (Nottingham Road E)	3.65	0.00	Y	Arm 4 Ahead	Inf	83.3 %	1960	1960
				Arm 6 Right	25.00	16.7 %		
3/1 (Willowcroft Road)	3.65	0.00	Y	Arm 4 Right	25.00	90.4 %	1865	1865
				Arm 5 Left	20.00	9.6 %		
4/1 (Nottingham Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Nottingham Road E)	3.75	0.00	Y	Arm 7 Ahead	Inf	100.0 %	1990	1990
6/1 (Willowcroft Road Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Nottingham Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2028 BASE AM' (FG3: '2028 BASE AM', Plan 1: 'Network Control Plan 1')

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	37	270	307
	B	854	0	84	938
	C	394	72	0	466
	Tot.	1248	109	354	1711

Lane	Scenario 3: 2028 BASE AM
Junction: Nottingham Road/Willowcroft Road	
1/1	307
2/1	466
3/1	938
4/1	1248
5/1	354
6/1	109
7/1	354

Junction: Nottingham Road/Willowcroft Road								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Nottingham Road W)	3.65	0.00	Y	Arm 5 Ahead	Inf	87.9 %	1962	1962
2/1 (Nottingham Road E)	3.65	0.00	Y	Arm 6 Left	20.00	12.1 %	1962	1962
				Arm 4 Ahead	Inf	84.5 %		
				Arm 6 Right	25.00	15.5 %		
3/1 (Willowcroft Road)	3.65	0.00	Y	Arm 4 Right	25.00	91.0 %	1866	1866
				Arm 5 Left	20.00	9.0 %		
4/1 (Nottingham Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Nottingham Road E)	3.75	0.00	Y	Arm 7 Ahead	Inf	100.0 %	1990	1990
6/1 (Willowcroft Road Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Nottingham Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2028 BASE PM' (FG4: '2028 BASE PM ', Plan 1: 'Network Control Plan 1')

Desired Flow :

Traffic Lane Flows

Lane Saturation Flows

Junction: Nottingham Road/Willowcroft Road								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Nottingham Road W)	3.65	0.00	Y	Arm 5 Ahead	Inf	86.7 %	1960	1960
				Arm 6 Left	20.00	13.3 %		
2/1 (Nottingham Road E)	3.65	0.00	Y	Arm 4 Ahead	Inf	83.4 %	1960	1960
				Arm 6 Right	25.00	16.6 %		
3/1 (Willowcroft Road)	3.65	0.00	Y	Arm 4 Right	25.00	90.4 %	1865	1865
				Arm 5 Left	20.00	9.6 %		
4/1 (Nottingham Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Nottingham Road E)	3.75	0.00	Y	Arm 7 Ahead	Inf	100.0 %	1990	1990
6/1 (Willowcroft Road Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Nottingham Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 5: '2028 BASE + COM AM' (FG5: '2028 BASE + COM AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Traffic Lane Flows

Lane Saturation Flows

Junction: Nottingham Road/Willowcroft Road								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Nottingham Road W)	3.65	0.00	Y	Arm 5 Ahead	Inf	84.3 %	1957	1957
				Arm 6 Left	20.00	15.7 %		
2/1 (Nottingham Road E)	3.65	0.00	Y	Arm 4 Ahead	Inf	87.3 %	1965	1965
				Arm 6 Right	25.00	12.7 %		
3/1 (Willowcroft Road)	3.65	0.00	Y	Arm 4 Right	25.00	91.7 %	1866	1866
				Arm 5 Left	20.00	8.3 %		
4/1 (Nottingham Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Nottingham Road E)	3.75	0.00	Y	Arm 7 Ahead	Inf	100.0 %	1990	1990
6/1 (Willowcroft Road Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Nottingham Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Junction: Nottingham Road/Willowcroft Road								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Nottingham Road W)	3.65	0.00	Y	Arm 5 Ahead	Inf	79.7 %	1950	1950
				Arm 6 Left	20.00	20.3 %		
2/1 (Nottingham Road E)	3.65	0.00	Y	Arm 4 Ahead	Inf	84.1 %	1961	1961
				Arm 6 Right	25.00	15.9 %		
3/1 (Willowcroft Road)	3.65	0.00	Y	Arm 4 Right	25.00	90.6 %	1865	1865
				Arm 5 Left	20.00	9.4 %		
4/1 (Nottingham Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Nottingham Road E)	3.75	0.00	Y	Arm 7 Ahead	Inf	100.0 %	1990	1990
6/1 (Willowcroft Road Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (Nottingham Road Exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 7: '2028 BASE + COM + DEV AM' (FG7: '2028 BASE + COM + DEV AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	57	296	353
	B	948	0	86	1034
	C	493	73	0	566
	Tot.	1441	130	382	1953

Traffic Lane Flows

Lane	Scenario 7: 2028 BASE + COM + DEV AM
Junction: Nottingham Road/Willowcroft Road	
1/1	353
2/1	566
3/1	1034
4/1	1441
5/1	382
6/1	130
7/1	382

Lane Saturation Flows

Junction: Nottingham Road/Willowcroft Road								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Nottingham Road W)	3.65	0.00	Y	Arm 5 Ahead	Inf	83.9 %	1956	1956
				Arm 6 Left	20.00	16.1 %		
2/1 (Nottingham Road E)	3.65	0.00	Y	Arm 4 Ahead	Inf	87.1 %	1965	1965
				Arm 6 Right	25.00	12.9 %		
3/1 (Willowcroft Road)	3.65	0.00	Y	Arm 4 Right	25.00	91.7 %	1866	1866
				Arm 5 Left	20.00	8.3 %		
4/1 (Nottingham Road Exit Lane 1)				Infinite Saturation Flow			Inf	Inf
5/1 (Nottingham Road E)	3.75	0.00	Y	Arm 7 Ahead	Inf	100.0 %	1990	1990
6/1 (Willowcroft Road Lane 1)				Infinite Saturation Flow			Inf	Inf
7/1 (Nottingham Road Exit Lane 1)				Infinite Saturation Flow			Inf	Inf

Full Input Data And Results

Scenario 8: '2028 BASE + COM + DEV PM' (FG8: '2028 BASE + COM + DEV PM ', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Destination					
Origin		A	B	C	Tot.
	A	0	139	519	658
	B	702	0	73	775
	C	455	88	0	543
	Tot.	1157	227	592	1976

Traffic Lane Flows

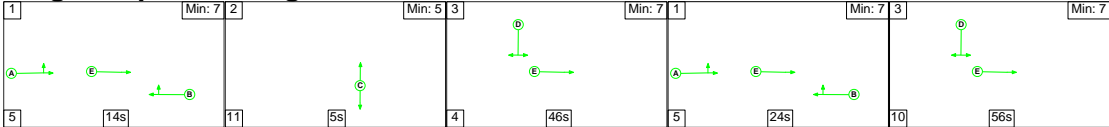
Lane	Scenario 8: 2028 BASE + COM + DEV PM
Junction: Nottingham Road/Willowcroft Road	
1/1	658
2/1	543
3/1	775
4/1	1157
5/1	592
6/1	227
7/1	592

Lane Saturation Flows

Junction: Nottingham Road/Willowcroft Road								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Nottingham Road W)	3.65	0.00	Y	Arm 5 Ahead	Inf	78.9 %	1949	1949
				Arm 6 Left	20.00	21.1 %		
2/1 (Nottingham Road E)	3.65	0.00	Y	Arm 4 Ahead	Inf	83.8 %	1961	1961
				Arm 6 Right	25.00	16.2 %		
3/1 (Willowcroft Road)	3.65	0.00	Y	Arm 4 Right	25.00	90.6 %	1865	1865
				Arm 5 Left	20.00	9.4 %		
4/1 (Nottingham Road Exit Lane 1)				Infinite Saturation Flow			Inf	Inf
5/1 (Nottingham Road E)	3.75	0.00	Y	Arm 7 Ahead	Inf	100.0 %	1990	1990
6/1 (Willowcroft Road Lane 1)				Infinite Saturation Flow			Inf	Inf
7/1 (Nottingham Road Exit Lane 1)				Infinite Saturation Flow			Inf	Inf

Scenario 1: '2023 BASE AM' (FG1: '2023 BASE AM', Plan 1: 'Network Control Plan 1')

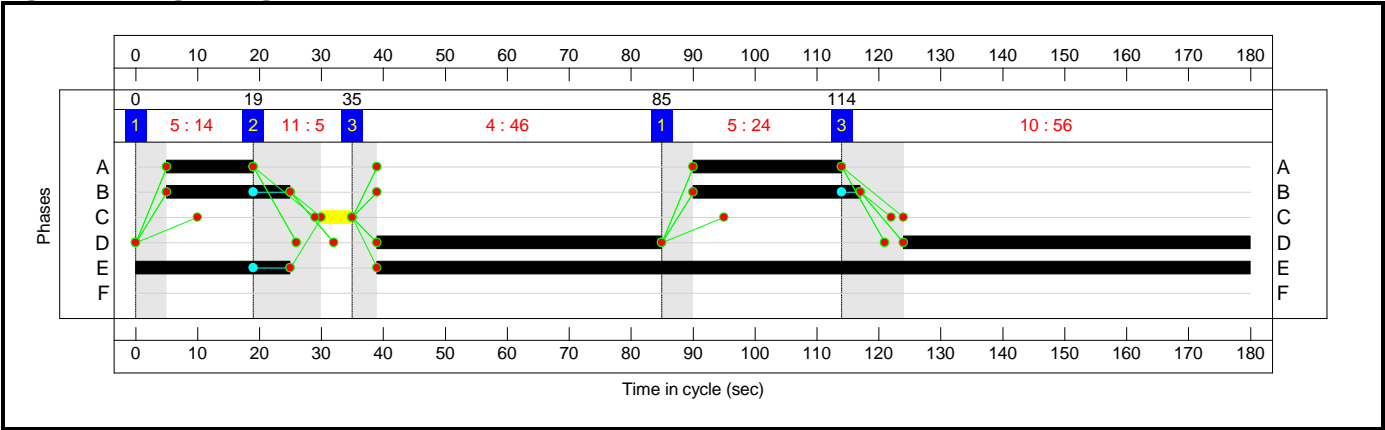
Stage Sequence Diagram



Stage Timings

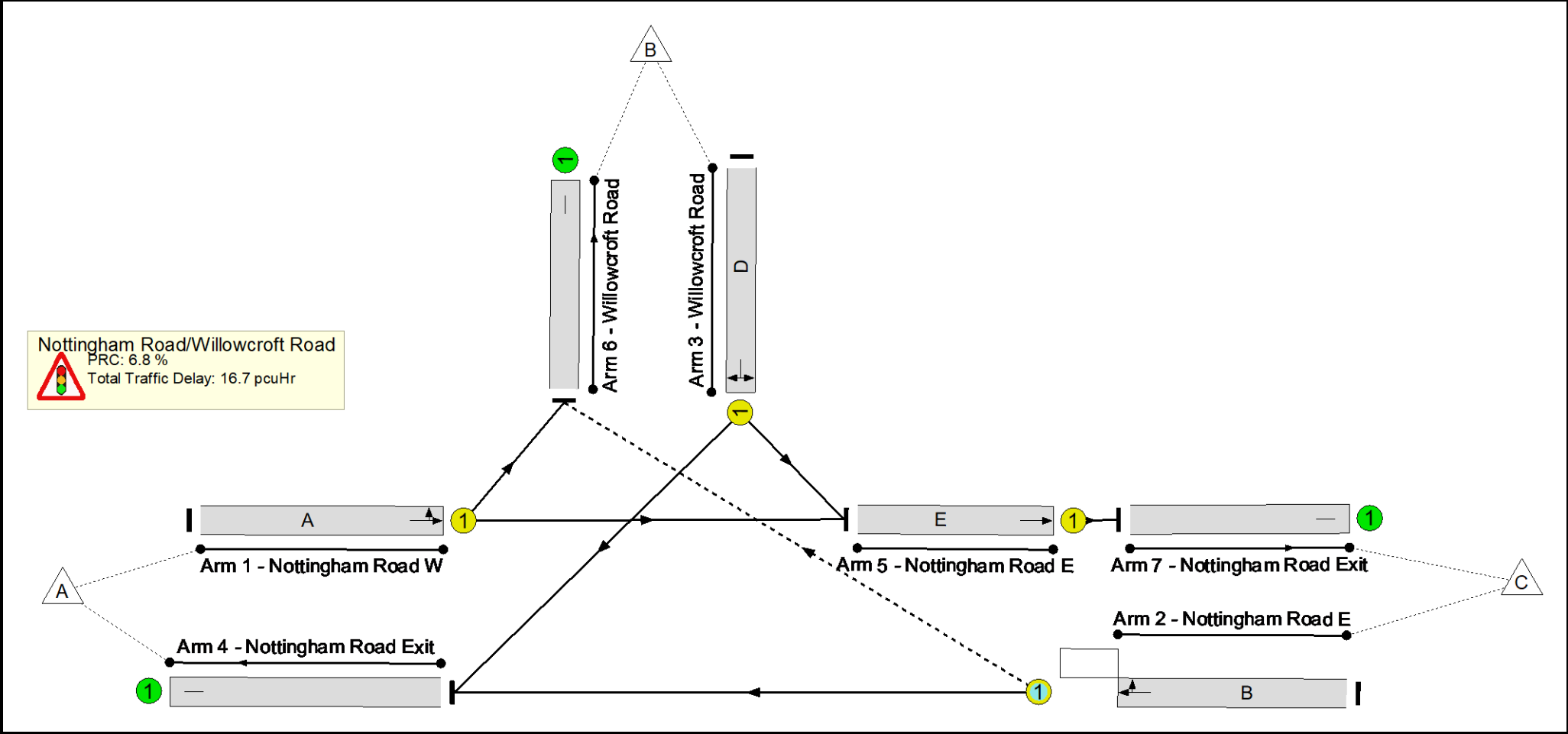
Stage	1	2	3	1	3
Duration	14	5	46	24	56
Change Point	0	19	35	85	114

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	84.3%
Nottingham Road/Willowcroft Road	-	-	N/A	-	-		-	-	-	-	-	-	84.3%
1/1	Nottingham Road W Ahead Left	U	N/A	N/A	A		2	38	-	295	1963	436	67.6%
2/1	Nottingham Road E Ahead Right	O	N/A	N/A	B		2	47	-	450	1962	534	84.3%
3/1	Willowcroft Road Right Left	U	N/A	N/A	D		2	102	-	903	1866	1078	83.8%
4/1	Nottingham Road Exit	U	N/A	N/A	-		-	-	-	1202	Inf	Inf	0.0%
5/1	Nottingham Road E Ahead	U	N/A	N/A	E		1	166	-	341	1990	1846	18.5%
6/1	Willowcroft Road	U	N/A	N/A	-		-	-	-	105	Inf	Inf	0.0%
7/1	Nottingham Road Exit	U	N/A	N/A	-		-	-	-	341	Inf	Inf	0.0%

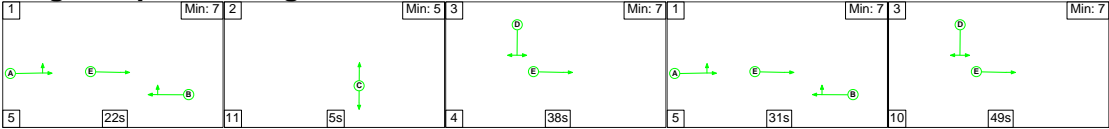
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	49	16	5	10.4	6.2	0.1	16.7	-	-	-	-
Nottingham Road/Willowcroft Road	-	-	49	16	5	10.4	6.2	0.1	16.7	-	-	-	-
1/1	295	295	-	-	-	2.6	1.0	-	3.7	44.6	6.7	1.0	7.7
2/1	450	450	49	16	5	3.9	2.5	0.1	6.5	51.8	10.8	2.5	13.3
3/1	903	903	-	-	-	3.9	2.5	-	6.4	25.5	18.3	2.5	20.8
4/1	1202	1202	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	341	341	-	-	-	0.0	0.1	-	0.1	1.3	0.2	0.1	0.3
6/1	105	105	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	341	341	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 6.8 Total Delay for Signalled Lanes (pcuHr): 16.67 Cycle Time (s): 180 PRC Over All Lanes (%): 6.8 Total Delay Over All Lanes(pcuHr): 16.67													

Full Input Data And Results

Scenario 2: '2023 BASE PM' (FG2: '2023 BASE PM ', Plan 1: 'Network Control Plan 1')

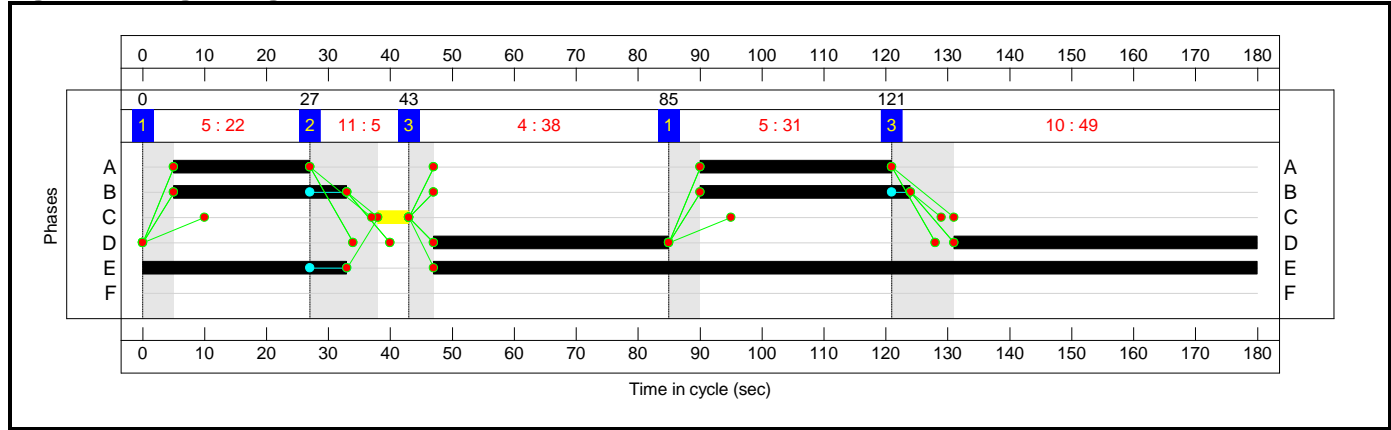
Stage Sequence Diagram



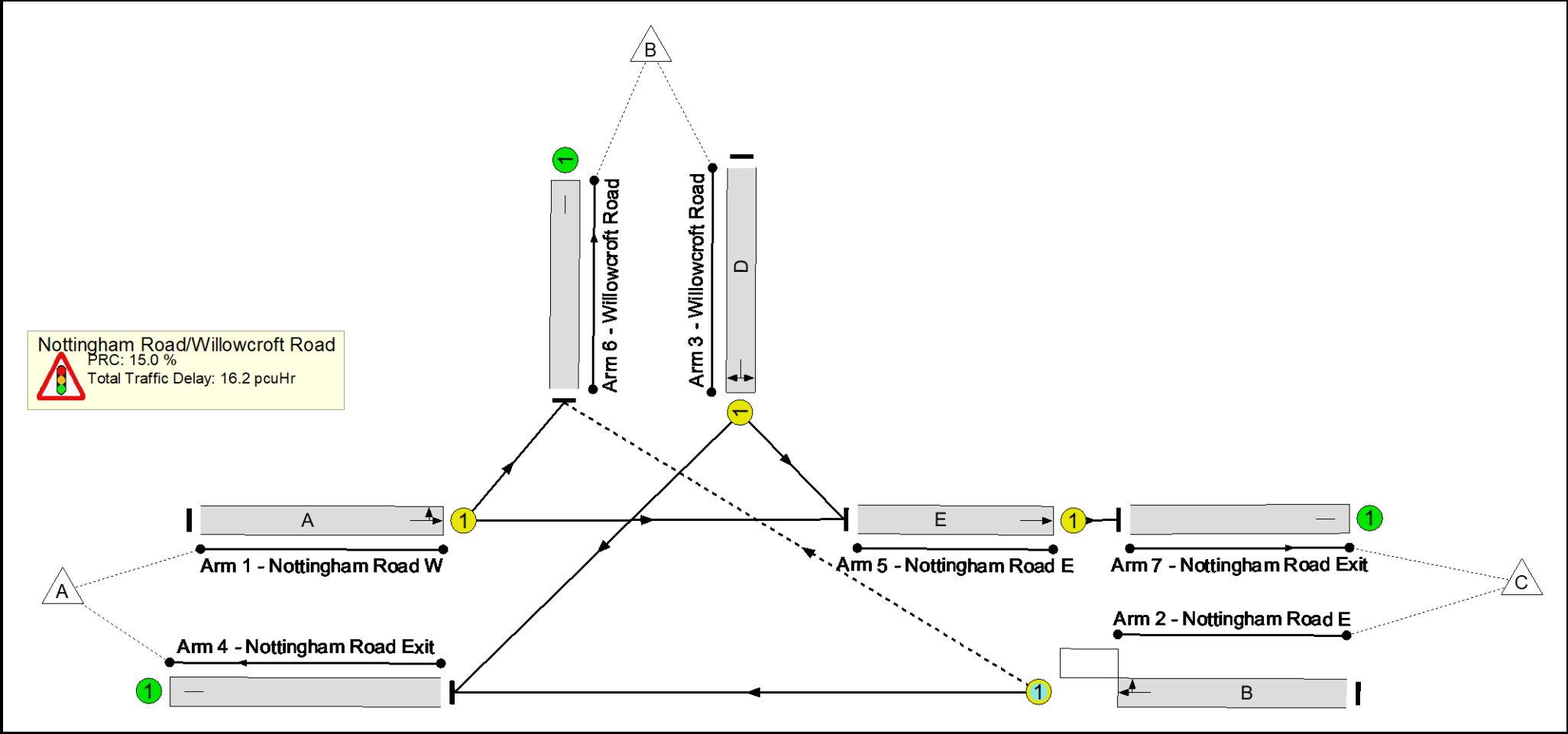
Stage Timings

Stage	1	2	3	1	3
Duration	22	5	38	31	49
Change Point	0	27	43	85	121

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	78.3%
Nottingham Road/Willowcroft Road	-	-	N/A	-	-		-	-	-	-	-	-	78.3%
1/1	Nottingham Road W Ahead Left	U	N/A	N/A	A		2	53	-	469	1961	599	78.3%
2/1	Nottingham Road E Ahead Right	O	N/A	N/A	B		2	62	-	496	1960	674	73.6%
3/1	Willowcroft Road Right Left	U	N/A	N/A	D		2	87	-	716	1865	922	77.6%
4/1	Nottingham Road Exit	U	N/A	N/A	-		-	-	-	1060	Inf	Inf	0.0%
5/1	Nottingham Road E Ahead	U	N/A	N/A	E		1	166	-	476	1990	1846	25.8%
6/1	Willowcroft Road	U	N/A	N/A	-		-	-	-	145	Inf	Inf	0.0%
7/1	Nottingham Road Exit	U	N/A	N/A	-		-	-	-	476	Inf	Inf	0.0%

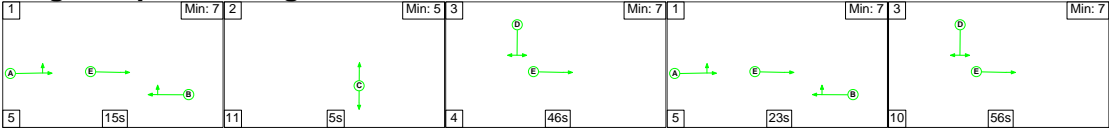
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	56	25	3	10.9	5.0	0.2	16.2	-	-	-	-
Nottingham Road/Willowcroft Road	-	-	56	25	3	10.9	5.0	0.2	16.2	-	-	-	-
1/1	469	469	-	-	-	3.7	1.8	-	5.5	42.0	10.7	1.8	12.4
2/1	496	496	56	25	3	3.5	1.4	0.2	5.1	36.8	11.0	1.4	12.4
3/1	716	716	-	-	-	3.7	1.7	-	5.4	27.3	14.7	1.7	16.4
4/1	1060	1060	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	476	476	-	-	-	0.0	0.2	-	0.2	1.4	0.2	0.2	0.4
6/1	145	145	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	476	476	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 15.0 Total Delay for Signalled Lanes (pcuHr): 16.15 Cycle Time (s): 180 PRC Over All Lanes (%): 15.0 Total Delay Over All Lanes(pcuHr): 16.15													

Full Input Data And Results

Scenario 3: '2028 BASE AM' (FG3: '2028 BASE AM', Plan 1: 'Network Control Plan 1')

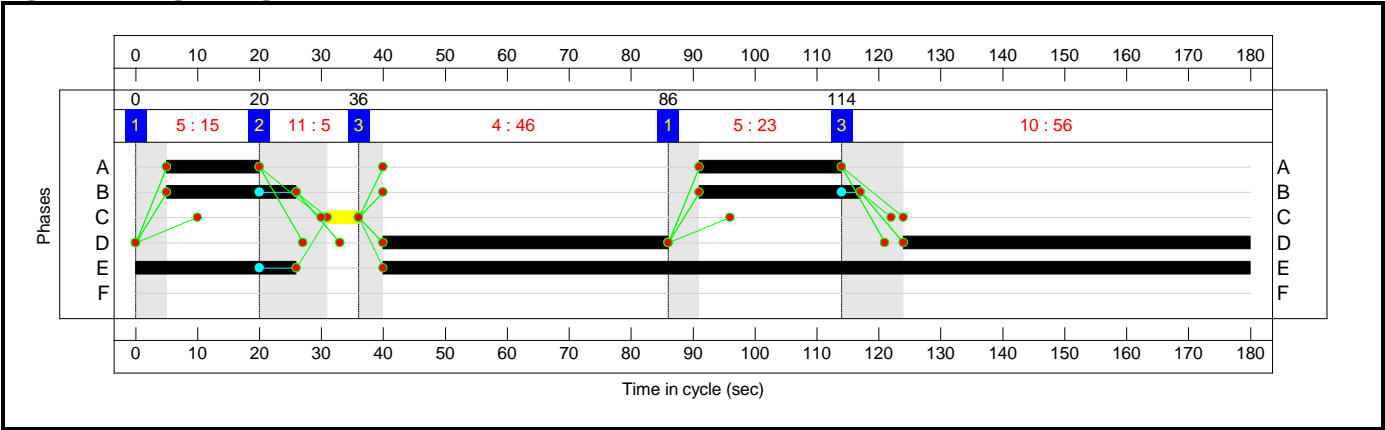
Stage Sequence Diagram



Stage Timings

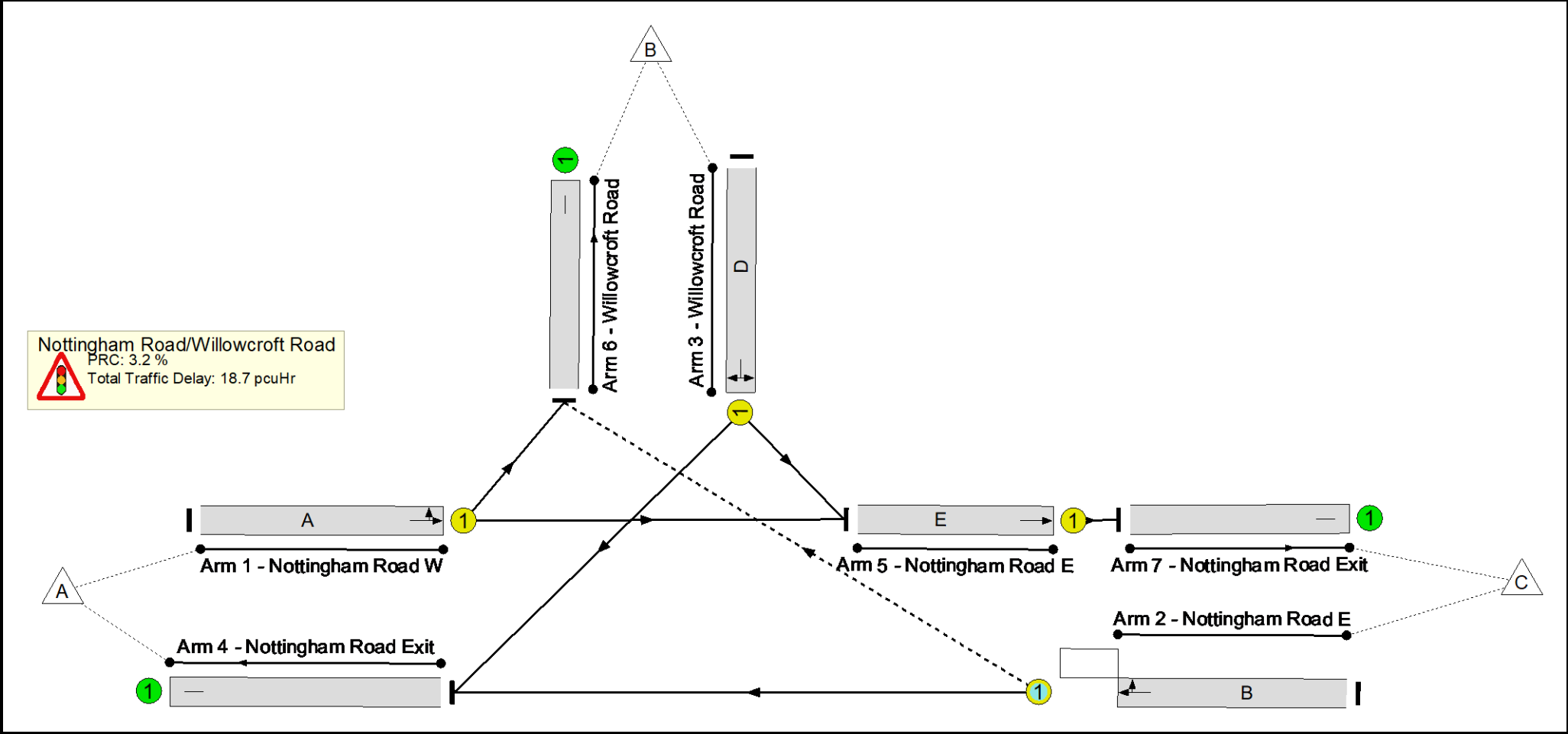
Stage	1	2	3	1	3
Duration	15	5	46	23	56
Change Point	0	20	36	86	114

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	87.2%
Nottingham Road/Willowcroft Road	-	-	N/A	-	-		-	-	-	-	-	-	87.2%
1/1	Nottingham Road W Ahead Left	U	N/A	N/A	A		2	38	-	307	1962	436	70.4%
2/1	Nottingham Road E Ahead Right	O	N/A	N/A	B		2	47	-	466	1962	534	87.2%
3/1	Willowcroft Road Right Left	U	N/A	N/A	D		2	102	-	938	1866	1078	87.0%
4/1	Nottingham Road Exit	U	N/A	N/A	-		-	-	-	1248	Inf	Inf	0.0%
5/1	Nottingham Road E Ahead	U	N/A	N/A	E		1	166	-	354	1990	1846	19.2%
6/1	Willowcroft Road	U	N/A	N/A	-		-	-	-	109	Inf	Inf	0.0%
7/1	Nottingham Road Exit	U	N/A	N/A	-		-	-	-	354	Inf	Inf	0.0%

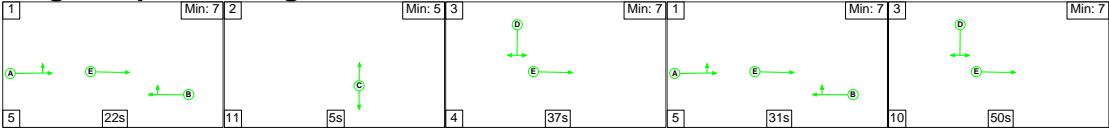
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	53	14	5	11.0	7.6	0.1	18.7	-	-	-	-
Nottingham Road/Willowcroft Road	-	-	53	14	5	11.0	7.6	0.1	18.7	-	-	-	-
1/1	307	307	-	-	-	2.8	1.2	-	3.9	46.0	7.0	1.2	8.2
2/1	466	466	53	14	5	4.0	3.1	0.1	7.3	56.2	11.3	3.1	14.4
3/1	938	938	-	-	-	4.2	3.2	-	7.4	28.4	20.3	3.2	23.5
4/1	1248	1248	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	354	354	-	-	-	0.0	0.1	-	0.1	1.3	0.2	0.1	0.3
6/1	109	109	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	354	354	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 3.2 Total Delay for Signalled Lanes (pcuHr): 18.73 Cycle Time (s): 180 PRC Over All Lanes (%): 3.2 Total Delay Over All Lanes(pcuHr): 18.73													

Full Input Data And Results

Scenario 4: '2028 BASE PM' (FG4: '2028 BASE PM ', Plan 1: 'Network Control Plan 1')

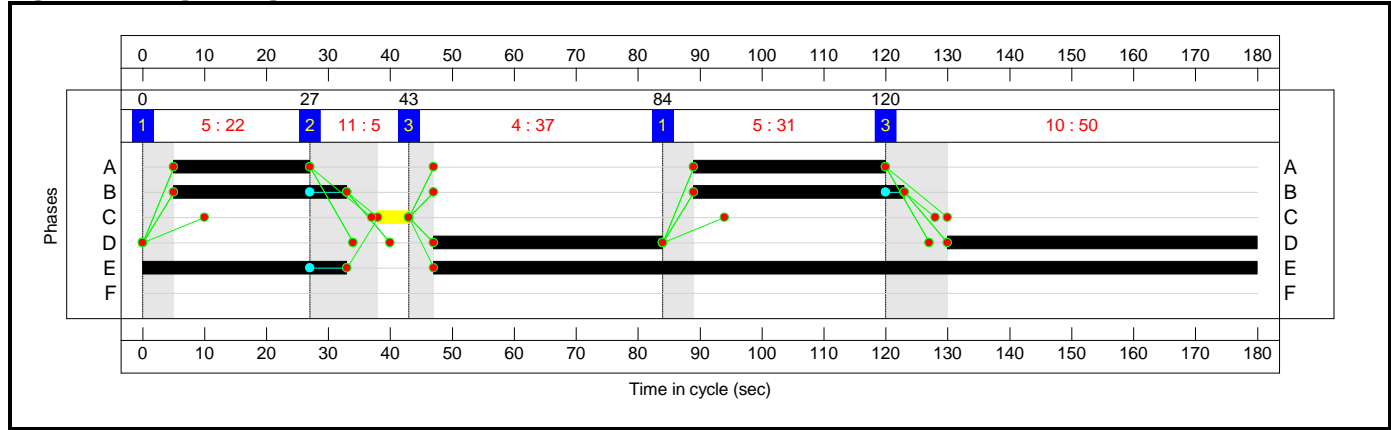
Stage Sequence Diagram



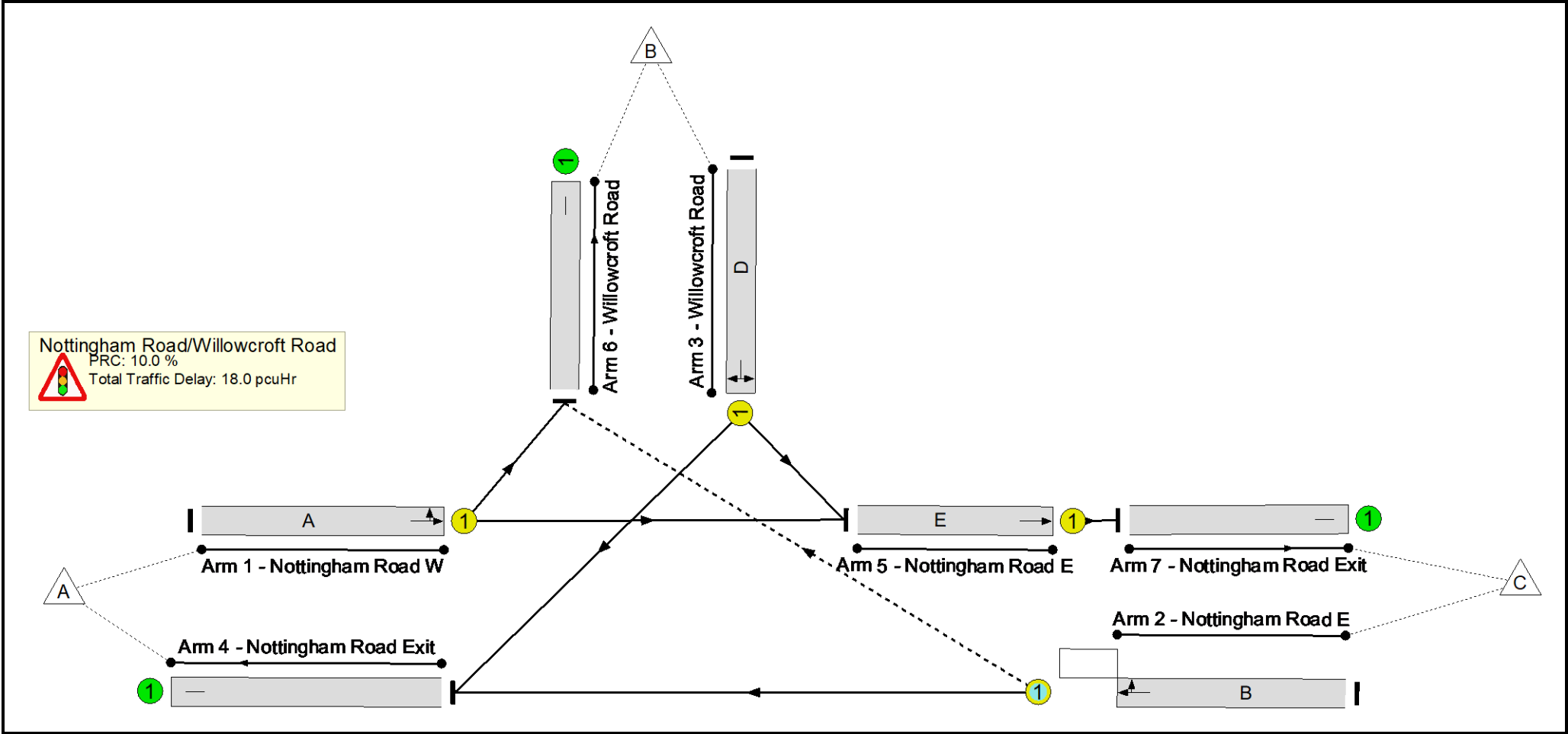
Stage Timings

Stage	1	2	3	1	3
Duration	22	5	37	31	50
Change Point	0	27	43	84	120

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	81.8%
Nottingham Road/Willowcroft Road	-	-	N/A	-	-		-	-	-	-	-	-	81.8%
1/1	Nottingham Road W Ahead Left	U	N/A	N/A	A		2	53	-	490	1960	599	81.8%
2/1	Nottingham Road E Ahead Right	O	N/A	N/A	B		2	62	-	518	1960	670	77.3%
3/1	Willowcroft Road Right Left	U	N/A	N/A	D		2	87	-	748	1865	922	81.1%
4/1	Nottingham Road Exit	U	N/A	N/A	-		-	-	-	1108	Inf	Inf	0.0%
5/1	Nottingham Road E Ahead	U	N/A	N/A	E		1	166	-	497	1990	1846	26.9%
6/1	Willowcroft Road	U	N/A	N/A	-		-	-	-	151	Inf	Inf	0.0%
7/1	Nottingham Road Exit	U	N/A	N/A	-		-	-	-	497	Inf	Inf	0.0%

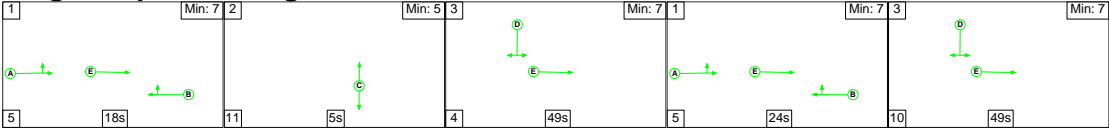
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	48	35	3	11.6	6.1	0.3	18.0	-	-	-	-
Nottingham Road/Willowcroft Road	-	-	48	35	3	11.6	6.1	0.3	18.0	-	-	-	-
1/1	490	490	-	-	-	3.9	2.2	-	6.1	44.9	11.6	2.2	13.7
2/1	518	518	48	35	3	3.7	1.7	0.3	5.6	38.9	11.8	1.7	13.5
3/1	748	748	-	-	-	4.0	2.1	-	6.1	29.3	15.8	2.1	17.9
4/1	1108	1108	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	497	497	-	-	-	0.0	0.2	-	0.2	1.5	0.3	0.2	0.5
6/1	151	151	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	497	497	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 10.0 Total Delay for Signalled Lanes (pcuHr): 18.00 Cycle Time (s): 180 PRC Over All Lanes (%): 10.0 Total Delay Over All Lanes(pcuHr): 18.00													

Full Input Data And Results

Scenario 5: '2028 BASE + COM AM' (FG5: '2028 BASE + COM AM', Plan 1: 'Network Control Plan 1')

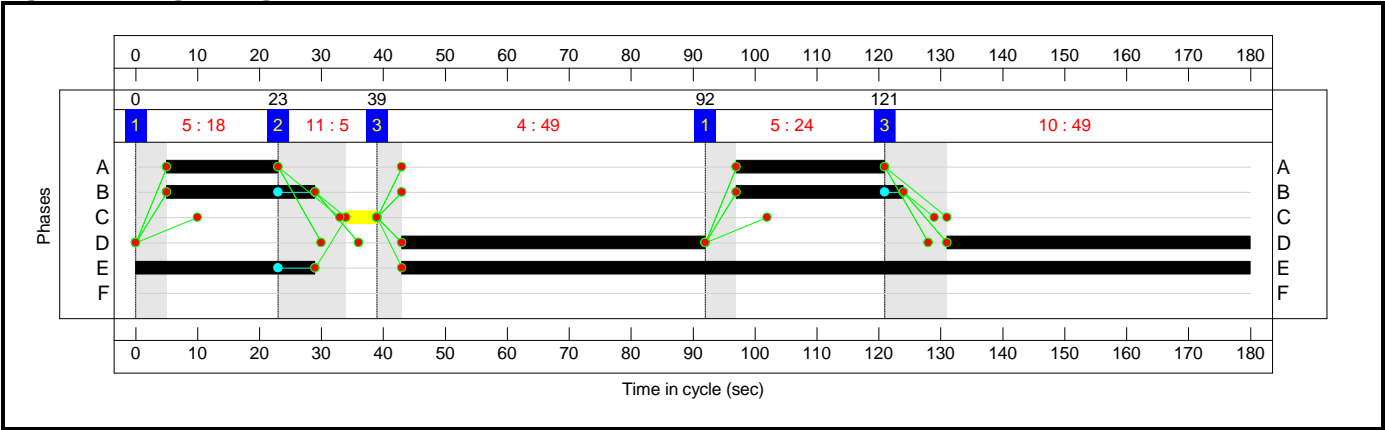
Stage Sequence Diagram



Stage Timings

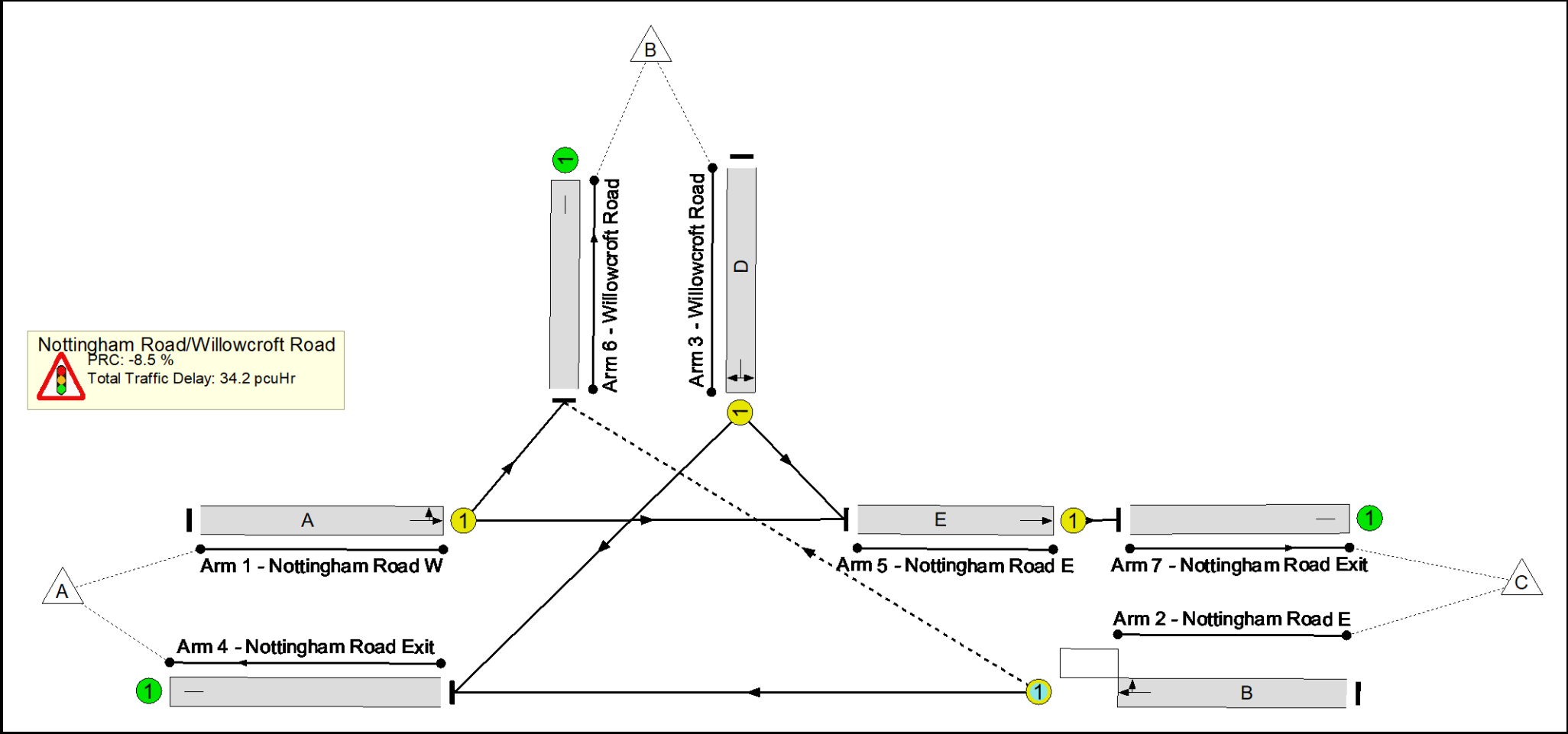
Stage	1	2	3	1	3
Duration	18	5	49	24	49
Change Point	0	23	39	92	121

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	97.7%
Nottingham Road/Willowcroft Road	-	-	N/A	-	-		-	-	-	-	-	-	97.7%
1/1	Nottingham Road W Ahead Left	U	N/A	N/A	A		2	42	-	351	1957	478	73.4%
2/1	Nottingham Road E Ahead Right	O	N/A	N/A	B		2	51	-	565	1965	579	97.7%
3/1	Willowcroft Road Right Left	U	N/A	N/A	D		2	98	-	1008	1866	1037	97.2%
4/1	Nottingham Road Exit	U	N/A	N/A	-		-	-	-	1417	Inf	Inf	0.0%
5/1	Nottingham Road E Ahead	U	N/A	N/A	E		1	166	-	380	1990	1846	20.6%
6/1	Willowcroft Road	U	N/A	N/A	-		-	-	-	127	Inf	Inf	0.0%
7/1	Nottingham Road Exit	U	N/A	N/A	-		-	-	-	380	Inf	Inf	0.0%

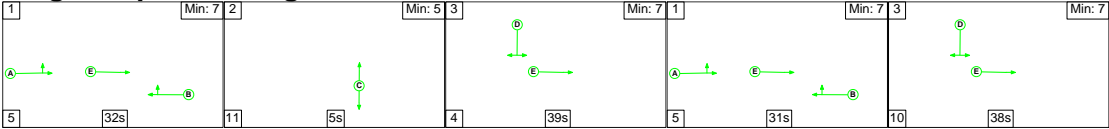
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	58	7	7	13.5	20.7	0.1	34.2	-	-	-	-
Nottingham Road/Willowcroft Road	-	-	58	7	7	13.5	20.7	0.1	34.2	-	-	-	-
1/1	351	351	-	-	-	3.1	1.3	-	4.4	45.3	8.6	1.3	9.9
2/1	565	565	58	7	7	4.9	9.0	0.1	14.0	89.3	14.8	9.0	23.7
3/1	1008	1008	-	-	-	5.4	10.3	-	15.7	56.0	25.5	10.3	35.7
4/1	1417	1417	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	380	380	-	-	-	0.0	0.1	-	0.1	1.3	0.1	0.1	0.3
6/1	127	127	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	380	380	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): -8.5 Total Delay for Signalled Lanes (pcuHr): 34.25 Cycle Time (s): 180 PRC Over All Lanes (%): -8.5 Total Delay Over All Lanes(pcuHr): 34.25													

Full Input Data And Results

Scenario 6: '2028 BASE + COM PM' (FG6: '2028 BASE + COM PM ', Plan 1: 'Network Control Plan 1')

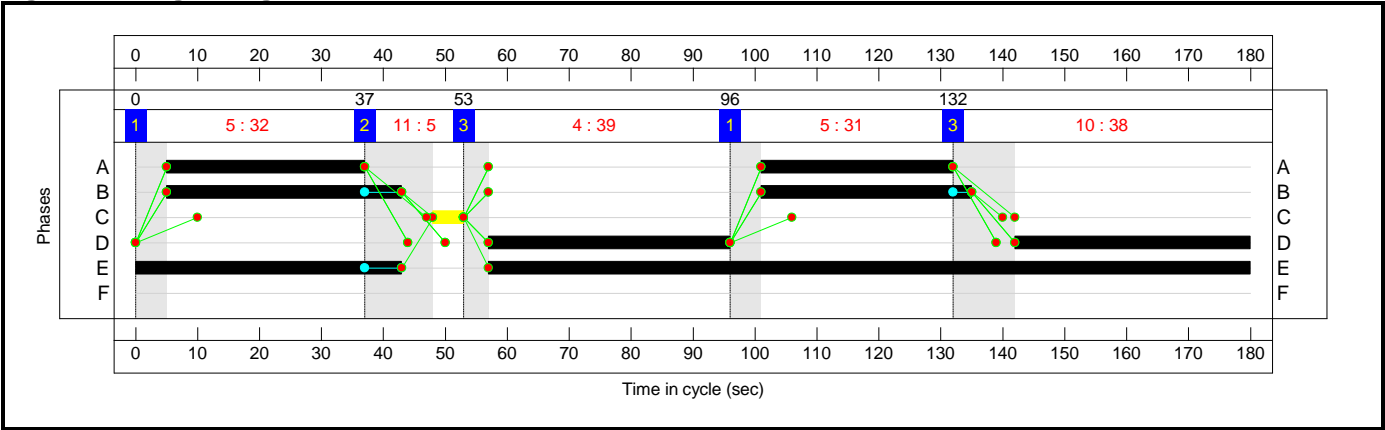
Stage Sequence Diagram



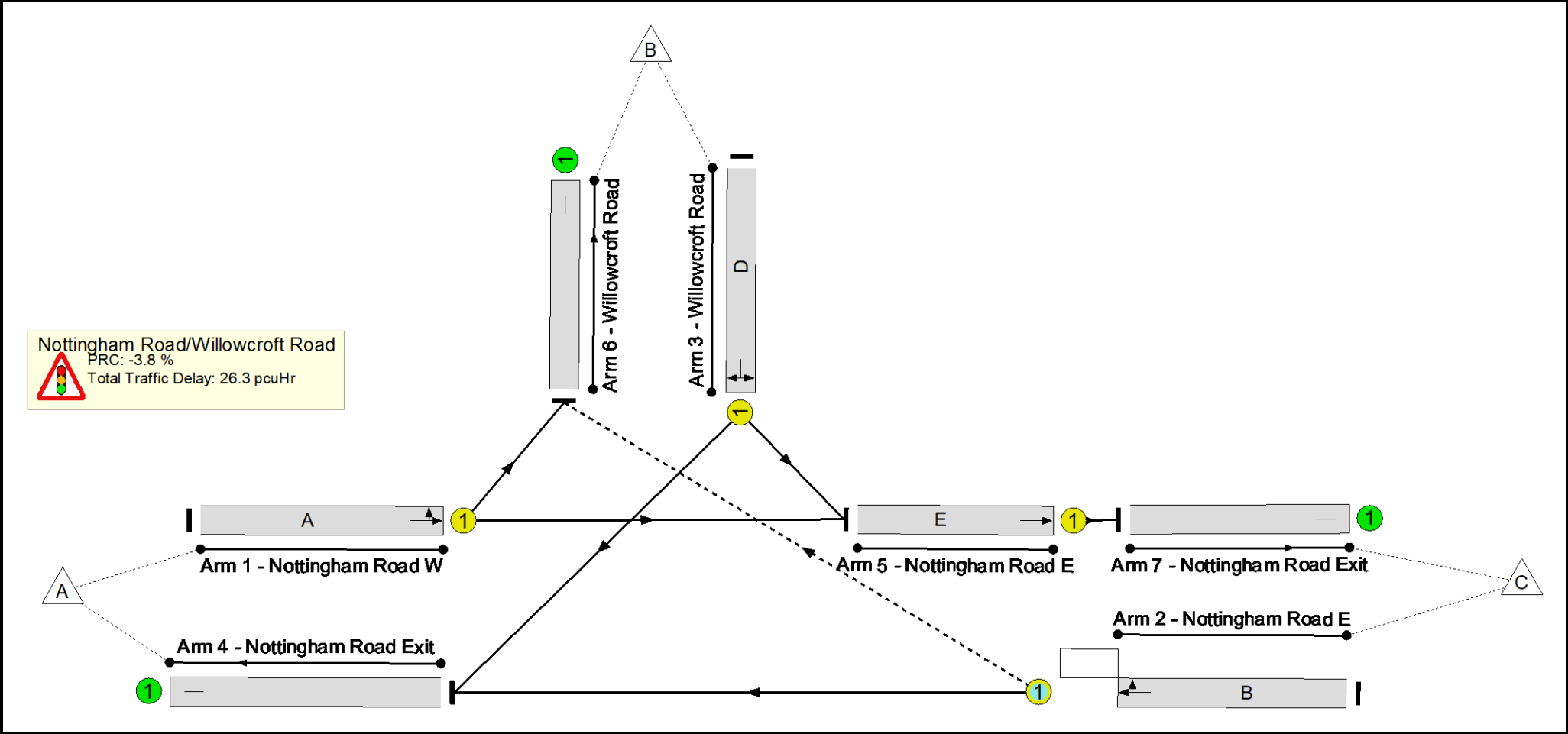
Stage Timings

Stage	1	2	3	1	3
Duration	32	5	39	31	38
Change Point	0	37	53	96	132

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	93.5%
Nottingham Road/Willowcroft Road	-	-	N/A	-	-		-	-	-	-	-	-	93.5%
1/1	Nottingham Road W Ahead Left	U	N/A	N/A	A		2	63	-	651	1950	704	92.4%
2/1	Nottingham Road E Ahead Right	O	N/A	N/A	B		2	72	-	541	1961	770	70.3%
3/1	Willowcroft Road Right Left	U	N/A	N/A	D		2	77	-	765	1865	819	93.5%
4/1	Nottingham Road Exit	U	N/A	N/A	-		-	-	-	1148	Inf	Inf	0.0%
5/1	Nottingham Road E Ahead	U	N/A	N/A	E		1	166	-	591	1990	1846	32.0%
6/1	Willowcroft Road	U	N/A	N/A	-		-	-	-	218	Inf	Inf	0.0%
7/1	Nottingham Road Exit	U	N/A	N/A	-		-	-	-	591	Inf	Inf	0.0%

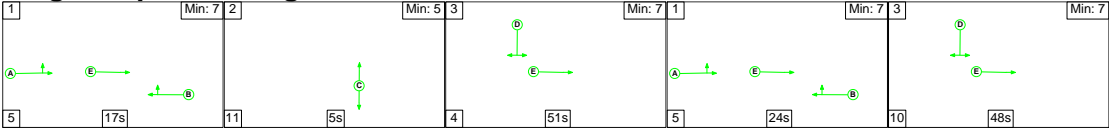
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	28	24	34	13.5	12.4	0.4	26.3	-	-	-	-
Nottingham Road/Willowcroft Road	-	-	28	24	34	13.5	12.4	0.4	26.3	-	-	-	-
1/1	651	651	-	-	-	5.0	5.1	-	10.2	56.2	17.0	5.1	22.1
2/1	541	541	28	24	34	3.3	1.2	0.4	4.9	32.3	11.7	1.2	12.9
3/1	765	765	-	-	-	5.2	5.9	-	11.0	51.9	20.0	5.9	25.8
4/1	1148	1148	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	591	591	-	-	-	0.0	0.2	-	0.2	1.5	0.2	0.2	0.4
6/1	218	218	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	591	591	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): -3.8 Total Delay for Signalled Lanes (pcuHr): 26.29 Cycle Time (s): 180 PRC Over All Lanes (%): -3.8 Total Delay Over All Lanes(pcuHr): 26.29													

Full Input Data And Results

Scenario 7: '2028 BASE + COM + DEV AM' (FG7: '2028 BASE + COM + DEV AM', Plan 1: 'Network Control Plan 1')

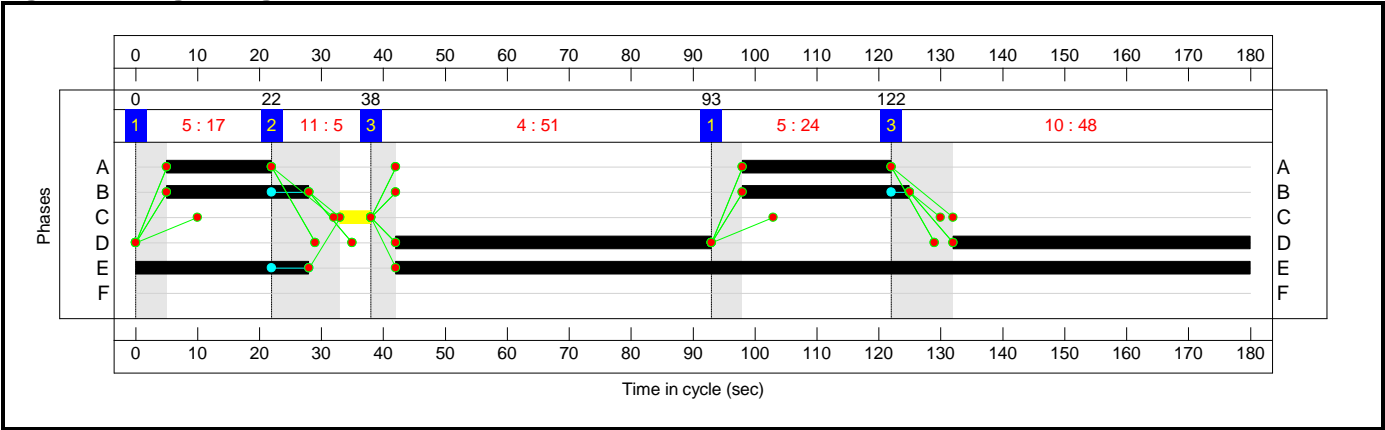
Stage Sequence Diagram



Stage Timings

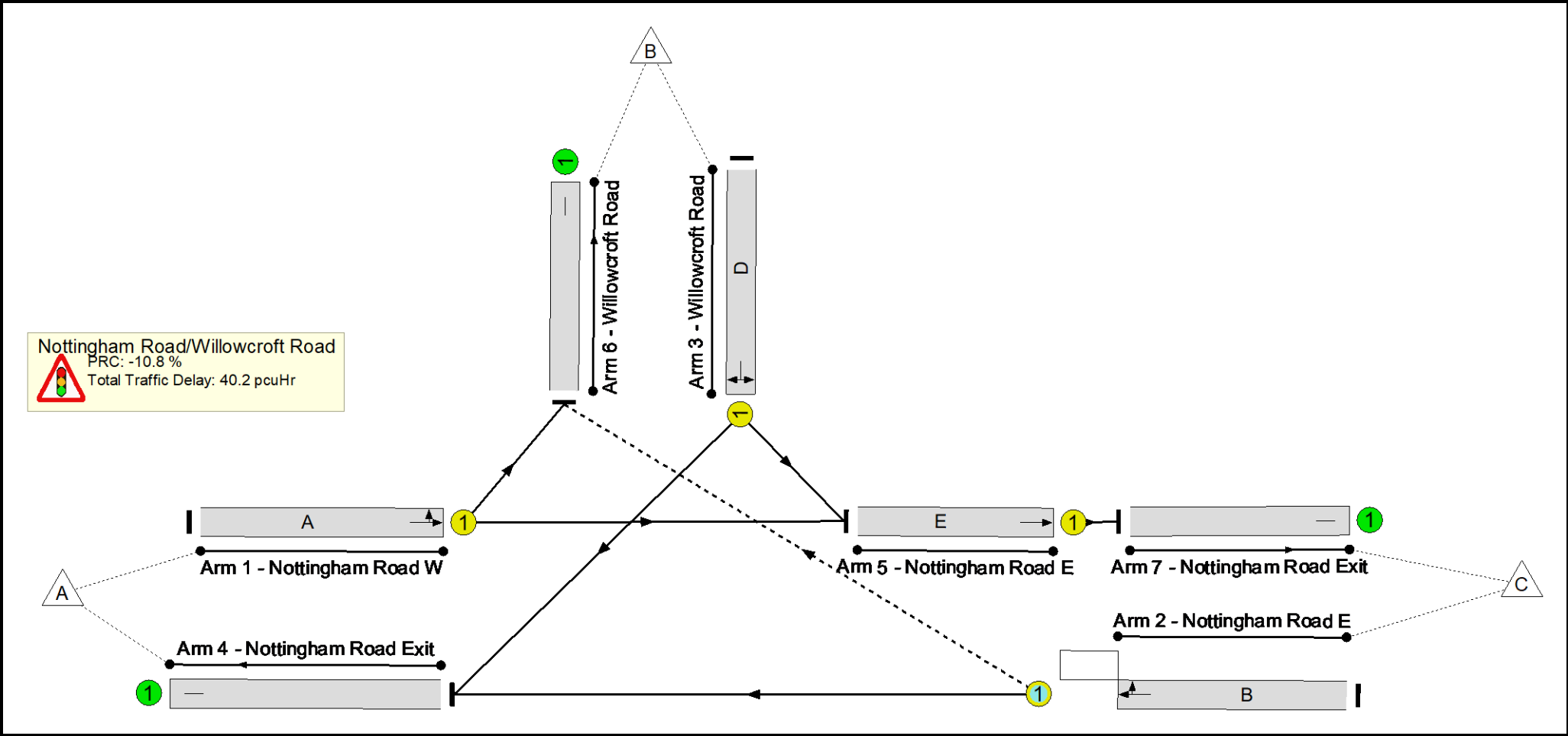
Stage	1	2	3	1	3
Duration	17	5	51	24	48
Change Point	0	22	38	93	122

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	99.7%
Nottingham Road/Willowcroft Road	-	-	N/A	-	-		-	-	-	-	-	-	99.7%
1/1	Nottingham Road W Ahead Left	U	N/A	N/A	A		2	41	-	353	1956	467	75.5%
2/1	Nottingham Road E Ahead Right	O	N/A	N/A	B		2	50	-	566	1965	568	99.7%
3/1	Willowcroft Road Right Left	U	N/A	N/A	D		2	99	-	1034	1866	1047	98.8%
4/1	Nottingham Road Exit	U	N/A	N/A	-		-	-	-	1441	Inf	Inf	0.0%
5/1	Nottingham Road E Ahead	U	N/A	N/A	E		1	166	-	382	1990	1846	20.7%
6/1	Willowcroft Road	U	N/A	N/A	-		-	-	-	130	Inf	Inf	0.0%
7/1	Nottingham Road Exit	U	N/A	N/A	-		-	-	-	382	Inf	Inf	0.0%

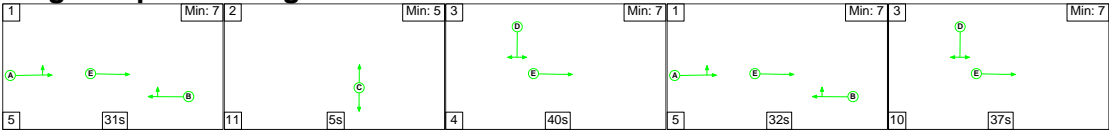
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	57	8	8	13.8	26.3	0.1	40.2	-	-	-	-
Nottingham Road/Willowcroft Road	-	-	57	8	8	13.8	26.3	0.1	40.2	-	-	-	-
1/1	353	353	-	-	-	3.1	1.5	-	4.7	47.4	8.9	1.5	10.4
2/1	566	566	57	8	8	5.1	11.5	0.1	16.7	105.9	15.1	11.5	26.6
3/1	1034	1034	-	-	-	5.6	13.1	-	18.7	65.2	26.1	13.1	39.3
4/1	1441	1441	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	382	382	-	-	-	0.0	0.1	-	0.1	1.3	0.2	0.1	0.3
6/1	130	130	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	382	382	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): -10.8 Total Delay for Signalled Lanes (pcuHr): 40.18 Cycle Time (s): 180 PRC Over All Lanes (%): -10.8 Total Delay Over All Lanes(pcuHr): 40.18													

Full Input Data And Results

Scenario 8: '2028 BASE + COM + DEV PM' (FG8: '2028 BASE + COM + DEV PM ', Plan 1: 'Network Control Plan 1')

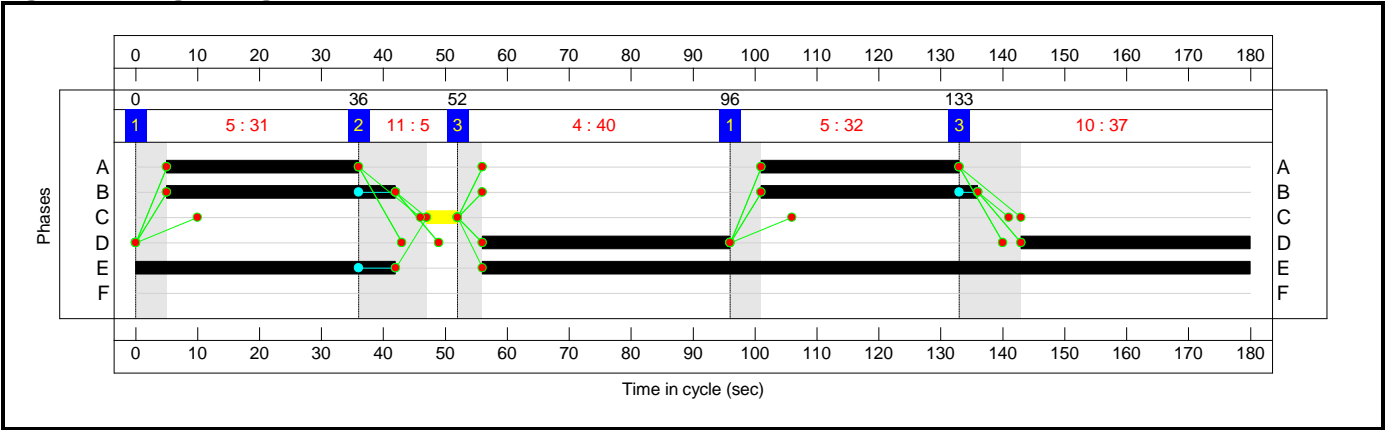
Stage Sequence Diagram



Stage Timings

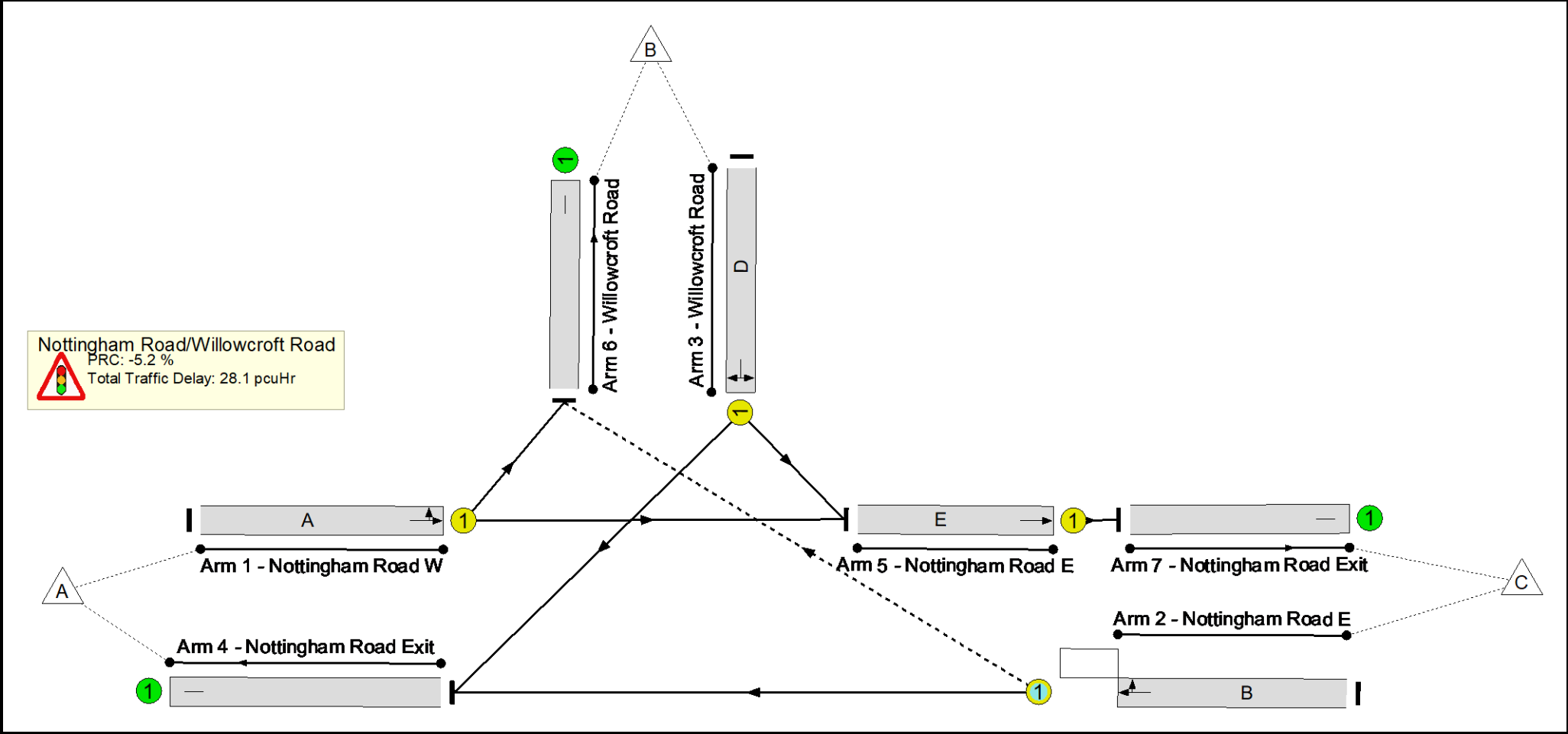
Stage	1	2	3	1	3
Duration	31	5	40	32	37
Change Point	0	36	52	96	133

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	94.7%
Nottingham Road/Willowcroft Road	-	-	N/A	-	-		-	-	-	-	-	-	94.7%
1/1	Nottingham Road W Ahead Left	U	N/A	N/A	A		2	63	-	658	1949	704	93.5%
2/1	Nottingham Road E Ahead Right	O	N/A	N/A	B		2	72	-	543	1961	759	71.5%
3/1	Willowcroft Road Right Left	U	N/A	N/A	D		2	77	-	775	1865	819	94.7%
4/1	Nottingham Road Exit	U	N/A	N/A	-		-	-	-	1157	Inf	Inf	0.0%
5/1	Nottingham Road E Ahead	U	N/A	N/A	E		1	166	-	592	1990	1846	32.1%
6/1	Willowcroft Road	U	N/A	N/A	-		-	-	-	227	Inf	Inf	0.0%
7/1	Nottingham Road Exit	U	N/A	N/A	-		-	-	-	592	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	24	27	37	13.7	14.0	0.5	28.1	-	-	-	-
Nottingham Road/Willowcroft Road	-	-	24	27	37	13.7	14.0	0.5	28.1	-	-	-	-
1/1	658	658	-	-	-	5.1	5.7	-	10.9	59.5	17.5	5.7	23.3
2/1	543	543	24	27	37	3.3	1.2	0.5	5.0	33.0	12.1	1.2	13.3
3/1	775	775	-	-	-	5.3	6.8	-	12.0	56.0	20.2	6.8	27.0
4/1	1157	1157	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	592	592	-	-	-	0.0	0.2	-	0.2	1.5	0.2	0.2	0.4
6/1	227	227	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	592	592	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): -5.2 Total Delay for Signalled Lanes (pcuHr): 28.15 Cycle Time (s): 180 PRC Over All Lanes (%): -5.2 Total Delay Over All Lanes(pcuHr): 28.15													

