

Broad Oak Farm, Linthwaite

Transport Assessment

April 2021

1098C

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1 INTRODUCTION

1.1.1 Paragon Highway Consultants has been appointed to prepare this Transport Assessment relating to the proposed residential development at a site at Broad Oak Farm, Linthwaite in the district of Kirklees. Appendix A shows the site location in relation to the regional and local highway network.

1.1.2 The proposals are to erect a development of circa 125 no dwellings served off either the Church Lane which is located to the south of the application site or Kinder Avenue to the north.

1.1.3 A preapplication enquiry was lodged with Kirklees Council ref: 2017/20171 with a response being made on the 14th August 2020. Highway and Transportation issues were raised within the response which will be dealt with in detail within this report. The scope of the Transport Assessment has also been agreed with Kirklees Council's Highways Officer, providing information on the junctions requiring formal assessment.

1.1.4 Drainage, lighting, drainage, parking provision and highway vertical and horizontal alignment will generally conform to Kirklees Councils Highways Design Guide. Turning areas within the site are proposed to allow all vehicles likely to enter the site, including the Council refuse vehicle, to exit in a forward gear.

1.1.5 This Transport Assessment considers such matters as access, sustainability, car parking , accident data and servicing and presents the proposals in relation to current guidance and data. The traffic impact associated with the development proposals is also presented.

2 EXISTING CONDITIONS

2.1 Site Description

2.1.1 The site is situated within Linthwaite on land between the settlements of Linthwaite and Cowlersley. The site is located between Cowlersley Lane and Church Lane close to the eastern side of Linthwaite. It is located 2.5km east of the town of Slaithwaite and 4.3km west of the Huddersfield Town centre. The site is an undeveloped site totalling some 5.89 Hectares, which mainly contains large grassed areas with dry stone boundary walls.

2.1.2 The site is bounded by Church Lane to the south, properties fronting Cowlersley Lane to the north, Linthwaite (Broad Oak) Cricket ground to the west and Kinder Avenue and open land to the east.

2.1.3 There are existing public rights of way that abut or run adjacent to the site. C0/66/40 runs from Church Lane on its western boundary then along a private drive arrangement onto Cowlersley Lane. A second public footpath, Hudd/235/10 runs along the eastern boundary again from Church Lane onto Kinder Avenue. Both footpaths would be unaffected by the proposals but could be improved as part of any overall development in line with the requirements of the Public Rights of Way Team.



Public right of way from Kinder Avenue to Church Lane (Hudd 235/10)

2 Local Highway Network

2.2.1 The site will have an access onto Church Lane that subsequently links into Cowlersley Lane which is a local distributor road. Cowlersley Lane is the subject of a 30mph speed limit and is lit to an appropriate standard. Cowlersley Lane benefits from traffic calming features in and around the junction with the access points to the High School. The proposals for vehicular access to the site are presented in more detail in section 3.

2.2.2 Church Lane is a two-way single carriageway and along the majority of the site frontage has a 30-mph speed limit which increases to the national speed limit to the north towards the end of the built-up area. It has the benefit of street lighting along the built-up frontage and a far side footway. Visibility for egressing drivers at the junction with Cowlersley Lane is good in both directions.

2.2.3 A speed radar speed survey has been carried out on Church Lane in the vicinity of the proposed site access. The speed survey was carried out on the 20th August 2020 and obtained over 200 readings in each direction. The survey point was taken at the relative decision points on both sides and follows current guidance on speed measurement contained within Design Manual for Roads and Bridges. The speed survey revealed that the 85th percentile wet weather speed to be 30.7mph southwest bound and 30.6mph northeast bound. The survey results can be found at Appendix J.

2.2.4 Ladybower Avenue and Kinder Avenue are residential estate roads which would link the northern part of the site with Cowlersley Lane. They are both two-way single carriageways with footways to both sides and are lit to side road standards with a 30-mph speed limit. Ladybower Avenue is laid out with a 5.5-metre-wide carriageway and 1.8m wide footways and Kinder Avenue has a carriageway of over 8.0 metres in width and wide 2.0 metre footways.



Site Boundary with Kinder Avenue

2.2.5 The site is located within walking distance of the bus services available on the Church Lane and Cowlersley Lane. Further details of the bus services available from the local fare stages are shown in section 2.4 below.

2.3 Road Traffic Accidents

2.3.1 A review of personal injury accidents for the last five-year period up to December 2019 has taken place using www.crashmap.co.uk. The search area is shown on the area highlighted on the drawing taken from the Crahsmap website below:



2.3.2 As can be noted from the above there has been 2no. recorded injury accidents within the search area.

2.3.3 The first accident occurred on Cowlersley Lane in November 2016 during the morning peak with dry road surface conditions and involved two vehicles, a light van and a private car. The incident occurred when the van moved away from the kerb and a vehicle following behind collided with a boundary wall or fence when trying to manoeuvre out of the path of the van. The driver of the car received slight injuries.

2.3.4 The second incident occurred in November 2017 on Church Lane some distance from the application site and occurred during the late evening with wet road surface conditions and involved one vehicle driven by a young driver. The driver was traveling along the highway when they collided with a structure on the nearside resulting in the driver and two passengers receiving slight injuries.

2.3.5 The adjacent highway network and local junctions do not identify any road safety problems or trends of any significance and appear to operate in a safe and practicable manner.

2.3.6 It is anticipated that the road safety record would not warrant any further treatment given the change in the network peak traffic flows as a result of the development proposals.

2.4 Transport Sustainability

2.4.8 The revised National Planning Policy Framework was published in February 2019 and sets out the government's planning policies for England and how these are expected to be applied. It recommends that development should only be prevented or refused on highways grounds if there would be and unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe. Within this context, applications for development, with regard to Transport, should:

Considerations	Proposals
Consider the potential impacts of development on the transport network;	This matter will be dealt with as part of Section 3 – Development Proposals
Provide opportunities to promote cycling, walking and public transport use are identified;	The layout of the site will allow access for all potential users
Patterns of movement, streets, parking and other transport considerations are integral to the design of schemes and contribute to making high quality places;	On-site parking will be provided as part of the development proposals.
Allow for the efficient delivery of goods, and access by service and emergency vehicles;	The site access and internal circulation area will allow for safe access within the site and suitable access and egress onto the major road.
Include within the design for the charging of plug in and ultra-low emission vehicles in safe and convenient locations.	Charging points for plug in vehicles will be provided as part of the overall parking scheme

2.4.2 Paragraph 109 of the NPPF suggests 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.

2.4.3 The national transport policy relating to promoting sustainable development that was formerly set out in PPG 13 'Transport' is now replaced by Section 9 of the NPPF. However, the former guidance within PPG 13 is still useful as a reference.

Pedestrians

2.4.4 PPG13 stated that *'walking is the most important mode of travel at the local level and offers the greatest potential to replace short car trips, particularly under 2km'*. As can been seen form the plan in Appendix C, the catchment includes the whole of Linthwaite and its local services, schools and amenities. The pedestrian catchment also includes parts of Golcar, services on the Manchester Road and Milnsbridge which have number of commercial areas.

2.4.5 A pedestrian link will be provided to The Lodge which will be a suitable route for pedestrians to gain access to the fare stages on Cowlersley Lane. Internal footpaths will also provide a useful connection to Kinder Avenue.

2.4.6 As such it can be seen that the site is well placed in relation to the public footway network. This provides residents with the opportunity to access the various local amenities in the surrounding area on foot and similarly the opportunity for residents' visitors to make their journey to the site on foot.

Cycling

2.4.7 With regards to cycling, PPG 13: Transport stated that *"Cycling also has the potential to substitute for short car trips, particularly those under 5km, and to form part of a longer journey by public transport"*. The plan at Appendix C also shows the 5km cycle catchment area from the site. This plan demonstrates that there are significant levels of commercial and service centre areas, particularly in Milnsbridge and Slaithwaite, within this catchment area, providing existing potential for residents to cycle from their homes to the potentially their place of work. Similarly, there is the potential for visitors to cycle to the site.

Bus Travel

2.4.8 Opportunities to access bus services exist on both Church Lane and Cowlersley Lane (all less than 400m from the potential site). The nearest bus stops on Church Lane benefit from timetable information and a flag and pole. The Huddersfield bound fare stage on Cowlersley Lane close to the junction with Church Lane has the added benefit of a passenger shelter and on carriageway bus stop markings. There are also bus stops close

to the junction of Ladybower Avenue and The Lodges junctions with Cowlersley Lane and again the Huddersfield inbound stops have the benefit of passenger shelters at these locations. The bus services available from the nearest stops are shown in Table 1 below:

Service No.	Stop Location	Route	Frequency Mon – Sat	Frequency Lates & Sun
181	Linthwaite, Cowlersley Lane, Slant Gate	Huddersfield Bus Station, Cowlersley, Linthwaite, Slaithwaite, Wilberlee	60 mins	Last service at 18.50 N/A
183	Linthwaite, Cowlersley Lane, Slant Gate	Huddersfield Bus Station, Cowlersley, Linthwaite, Slaithwaite, Marsden	60 mins	Last service at 23.38 60 mins
186	Linthwaite, Cowlersley, Slant Gate	Marsden, Slaithwaite, Linthwaite, Cowlersley, Huddersfield Bus Station	2 x services at 08.22 and 08.3.5 N/A	N/A N/A
388	Linthwaite, Cowlersley, Slant Gate	Meltham, Helme, Linthwaite, Milnsbridge, Huddersfield Royal Infirmary, Lindley	5 x services per day at 09.41, 11.41, 12.41, 14.41, 16.11	Last service at 16.11 N/A
393	Linthwaite, Church Lane, Cricket Ground	Huddersfield Bus Station, Thornton Lodge, Crosland Hill, Linthwaite, Blackmoorfoot Turning Cycle	60 mins	Last service at 17.21 N/A

Table 1 - Bus Services

2.4.9 As can be identified from Table 1 above there are frequent bus services that provide access to local settlements and to the major town of Huddersfield and the large towns of Marsden, Meltham and Slaithwaite. Therefore, it is considered that these bus services will provide a very good alternative to the private car in line with current Government guidelines.

Train Travel

2.4.10 The site benefits from being situated almost equidistant between Slaithwaite and Lockwood rail stations. Slaithwaite rail station is some 3.3km to the west Lockwood station 3.6 km to the east, both being well within the accepted cycling distance for commuting. Slaithwaite station is on the Huddersfield Line and Lockwood station is on the Penistone Line.

2.4.11 Slaithwaite Railway Station is located approximately 2.58km to the west of the site. Train services run every 30 minutes or less on the Manchester to Stalybridge and Huddersfield line. There is secure bicycle storage on site which is covered by CCTV, therefore providing the opportunity for multi-modal transport.

2.4.12 The railway station at Lockwood is located 2.85km to the east of the application site, running every half an hour or less on the Huddersfield to Sheffield (Penistone Line). Secure cycle storage is available on site, which is covered by CCTV.

2.4.13 As can be identified from the train routes and services summarised above there are excellent train links available with frequent train services to the cities of Leeds, Manchester and Sheffield and the large towns of Huddersfield, Dewsbury and Barnsley.

2.4.14 Both the local rail stations have the benefit of 10 cycle spaces and cctv coverage. There are also 15 car parking spaces at Slaithwaite station and 10 spaces at Lockwood. This provides the opportunity for residents to use multi modal travel.

2.4.15 From the above it is evident that the site benefits from being in proximity to a good frequency of public transport links for travelling around the area with opportunities for multi modal travel.

3 THE DEVELOPMENT PROPOSALS

3.1 Site History

3.1.1 There are only 2 recent planning applications relative to Broad Oak Farm and both were for stable blocks. One application in 2002 which was refused and another in 2003 which was approved.

3.2 Proposed Development

3.2.1 It is intended to construct circa 125no. dwellings on the application site with connections to both Kinder Avenue and Church Lane – providing a through route. The junction layout with Church Lane will have appropriate sight lines that will comply with the current guidance contained within the Kirklees Residential Design Guide and Manual for Streets. The connection with Kinder Avenue will provide a continuation of the street scene. The layout design will ensure that traffic speeds throughout the development will meet the required design speed.

3.2.2 The road layout and internal network will be laid out to generally comply with the current guidance contained within the Kirklees Council Street Design Guide. The road pattern will continue as a traditional estate road throughout the whole site. This will provide excellent connectivity for pedestrians to Church Lane, The Lodge and Kinder Avenue. Safe access for school children will also be enhanced by the provision of a footway along proposed the built-up site frontage to Church Lane, which will be slightly offset from Church Lane providing substantial verge areas separating the footway from the carriageway.

3.2.3 Visibility at the internal junctions will comply with the guidance provided within the Manual for Streets 1 and 2.

3.2.4 Drawings illustrating the internal proposals can be found in Appendix D.

3.3 Vehicular Access

3.3.1 As mentioned above a priority junction will be formed onto the Church Lane. The access will be a simple priority junction with 8 metre kerbed radii, 5.5-metre-wide carriageway and 2.0m footways to both sides. Sight lines of 2.4 x 45 metres will be provided at the new junction onto the major road based upon the speed survey carried out on the 20th August 2020. The results of the speed survey can be found in Appendix J. The internal road layout will be a fully traditional road layout.

3.3.2 The second point of vehicular access will be formed off the Kinder Avenue which will effectively extend the existing highway layout.

3.3.3 The access arrangements are therefore considered to be more than suitable to the serve the proposed development.

3.4 Parking Provision

3.4.1 The parking provision for the new dwellings, plus visitor parking, will generally accord with Kirklees Council's parking guidelines.

3.5 Traffic Impact

Traffic Surveys

3.5.1 To assess the traffic impact of the proposed development traffic surveys were carried out at the Church Lane/ Gillroyd Lane junction, the Gillroyd Lane/ Blackmoorfoot Road junction, the Woodside View/ Cowlersley Lane junction, and the signalised junction at the A62 Manchester Road/ Cowlersley Lane junction. These surveys were taken between 7am and 9:30am and between 4pm and 6:30pm during June 2018 and September 2018. The results of the survey are included in Appendix E.

3.5.2 The traffic survey identified the peak hours during the survey periods, and these have been used to provide peak hour data within the flow diagrams and subsequent capacity calculations for these junctions.

3.5.3 The peak hourly flows are summarised in the flow diagrams at Appendix F.

Traffic Generations

3.5.4 To estimate the predicted traffic generations for up to 125 dwellings the following trip rates for the peak hours have been identified. The resulting traffic generations are shown in Table 2 below. The TRICS data used to derive the trip rates can be found at Appendix G.

	Morning Peak			Evening Peak		
	ARRIVE	**DEPART**	**TOTAL**	**ARRIVE**	**DEPART**	**TOTAL**
Trip Rates	0.086	0.529	0.615	0.445	0.295	0.740
Traffic Generations	11	66	77	56	37	93

Table 2 – Proposed Trip Rates and Generation

3.5.5 Notwithstanding the trip rates identified above, Kirklees Council request that the following trip rates be used for residential development. Table 3 below provides the trip rates and generations based on the 0.7 trip rates.

	Morning Peak			Evening Peak		
	ARRIVE	**DEPART**	**TOTAL**	**ARRIVE**	**DEPART**	**TOTAL**
Trip Rates	0.2	0.5	0.7	0.5	0.2	0.7
Traffic Generations	25	63	88	63	25	88

Table 3 – Proposed Trip Rates and Generation (Amended)

3.5.6 As can be seen the amended trip rates (based on Kirklees Council's 0.7 rate requirement) are considered to be robust and similar to the TRICS output.

3.5.7 To predicted traffic generations shown above have been distributed on the highway network in accordance with the 2011 Census information obtained from the national NOMIS website, using origin/ destination data for the site location.

3.5.8 As the site has two access points (Church Lane and Kinder Avenue) it has also been necessary to determine which junction each of the proposed dwellings would use. To do this the layout has been appraised taking into consideration distance from junction, the overall destination and ease and convenience of movement through the development.

3.5.9 Based on the above all vehicles travelling south along Gillroyd Lane or east along Church Lane would travel through the development to use the Church Lane junction and Cowlersley Lane junction. For vehicles travelling in a northerly direction 51% would use the Church Lane/ Cowersley Lane junction, and 49% would use Kinder Avenue/ South Avenue and Woodside View to access Cowlersley Lane. The latter includes plots 15 to 75. Due to the layout and alignment of Kinder Avenue, South Avenue and Woodside View, and the layout of the site, it is highly unlikely that the occupiers of any other proposed dwelling would utilise this route in preference to using the Church Lane/ Cowlersley Lane junction.

3.5.10 Given the envisaged distribution within the site the number of vehicles using Kinder Avenue and the proposed Church Lane junction can be determined.

3.5.11 Therefore, using the Council's preferred trip rates Table 4 below identifies the peak hour traffic generations at the Kinder Avenue access, and Table 5 below identifies the peak hour traffic generations at the Church Lane access.

	TRAFFIC GENERATIONS	
	ARRIVE	**DEPART**
AM PEAK	9	23
PM PEAK	23	9

Table 4: Traffic Generations at Kinder Avenue

	TRAFFIC GENERATIONS	
	ARRIVE	**DEPART**
AM PEAK	16	40
PM PEAK	40	16

Table 5: Traffic Generations at Church Lane

3.5.12 As can be seen the development would generate 56 vehicle movements at the Church Lane access during the network peak hours, and 32 vehicle movements at the Kinder Avenue access.

3.5.13 The current flows / turning movements at the junctions surveyed along with the proposed traffic flows distributed on the local network are shown at Appendix F.

Traffic Growth

3.5.14 In order to determine the predicted future year traffic growth in the area, the TEMPRO 7.2 program has been used. It is considered appropriate to allow for 3 years planning and build plus 7 years. Using the appropriate area codes within the TEMPRO program (Area Code E02002315 and E02002319) the AM growth factor of 1.0407 and a PM growth factor of 1.0387 has been used to determine traffic growth from the 2018 data to 2021 for the E02002315 area. The AM growth factor of 1.0356 and a PM growth factor of 1.0352 has been used to determine growth to 2021 for the E02002319 area.

3.5.15 For the future year 2031, the AM growth factor of 1.1679 and PM growth factor of 1.1657 has been used for the E02002315 area. The AM growth factor of 1.1571 and PM growth factor of 1.1589 has been used for the E02002319 area.

Traffic Distribution

3.5.16 The proposed traffic distribution at nearby junctions has been derived from the origin/ destination data from the NOMIS website. The traffic flows are shown at Appendix F and include development traffic distribution at the proposed site access and nearby junctions during the 2021 and 2031 scenarios.

3.5.17 Generally, the distribution shows 73.7% of development traffic travelling north to the Cowlersley Lane/ A62 Manchester Road junction and 16.3% travelling south along Gillroyd Lane. The distribution also shows that 10% of traffic would travel east towards Blackmoorfoot Road via Felks Stile Road.

3.5.18 It is acknowledged that the development would provide a through route from Kinder Avenue to Church Lane. Subsequently, 10% of residents along Kinder Avenue are envisaged to use the route through the site to either travel south along Gillroyd Lane or east along Felks Stile Road. These vehicle movements have been considered as part of the junction capacity assessments and distributed on the network accordingly.

Committed Developments

3.5.19 Kirklees Council's Highways Officer has requested that nearby committed developments be considered as part of any junction capacity assessments. The following developments have been requested:

2016/90399 – 42 dwellings Cowlersley Lane

2018/93201 – 200 dwellings St Lukes, Blackmoorfoot Road

2020/92546 – 770 dwellings Blackmoorfoot Road/ Felks Street (Black Cats Site)

2020/93177 – 231 dwellings Royds Avenue/ Slant Gate/ Royds House Lane

3.5.20 As part of the planning applications above, traffic data was provided that can be used for the junction capacity assessments with the exception of 2020/93177. This planning application relates to an updated development of 231 dwellings from the 1973 planning permission. No traffic data has been provided as part of the 2020/93177 or the 1973 approval. Therefore, based on the 2011 Census information the distribution for this site has been determined. The distribution of committed development can be found at Appendix F.

3.5.21 It should be noted that there were no traffic movements associated with 2018/93201 that impacted the nearby junctions to be assessed as part of this Transport Assessment.

Church Lane/ Site Access Junction Assessment

3.5.22 To assess the proposed development's impact at the proposed site access a PICADY assessment has been carried out for the application year (2021) and future year (2031). The scenarios include committed development and proposed development flows. The results of the PICADY assessment are included at Appendix H and summarised below in Table 6.

	AM Peak		PM Peak	
	Max RFC	Max Queue	Max RFC	Max Queue
2021 Proposed Development Flows				
Site Access Left	0.02	0.0	0.01	0.0
Site Access Right	0.07	0.1	0.03	0.0
Church Lane Right	0.01	0.0	0.02	0.0
2031 Proposed Development Flows				
Site Access Left	0.02	0.0	0.01	0.0
Site Access Right	0.08	0.1	0.03	0.0
Church Lane Right	0.01	0.0	0.02	0.0

Table 6: PICADY Results Site Access Church Lane 2021 & 2031 Scenarios

3.5.23 The results indicate that the site access junction should operate well within capacity with maximum queues being less than 1 pcu throughout the peak hour periods. The proposed access is considered to be adequate to serve a development of this size and therefore no further assessments of the proposed junction are required.

Church Lane/ Gillroyd Lane Junction Assessment

3.5.24 A PICADY assessment has been undertaken for the application year (2021) and future year (2031) scenarios for the AM and PM peak periods with and without proposed development traffic and committed development traffic. The table below summarises the capacity analysis which can be found at Appendix H.

	AM Peak		PM Peak	
	Max RFC	Max Queue	Max RFC	Max Queue
2021 No Development Traffic				
Church Lane Left	0.13	0.2	0.17	0.2
Church Lane Right	0.11	0.1	0.14	0.2
Gillroyd Lane Right	0.20	0.4	0.15	0.3
2021 With Committed Development Traffic				
Church Lane Left	0.15	0.2	0.19	0.3
Church Lane Right	0.11	0.1	0.14	0.2
Gillroyd Lane Right	0.21	0.4	0.16	0.3
2021 With Committed Development & Proposed Development Traffic				
Church Lane Left	0.20	0.3	0.20	0.3
Church Lane Right	0.19	0.3	0.17	0.2
Gillroyd Lane Right	0.22	0.5	0.18	0.3
2031 No Development Traffic				
Church Lane Left	0.15	0.2	0.19	0.3
Church Lane Right	0.13	0.2	0.16	0.2
Gillroyd Lane Right	0.23	0.5	0.17	0.3
2031 With Committed Development Traffic				
Church Lane Left	0.17	0.2	0.22	0.3
Church Lane Right	0.14	0.2	0.16	0.2
Gillroyd Lane Right	0.25	0.6	0.18	0.3
2031 With Committed Development & Proposed Development Traffic				
Church Lane Left	0.20	0.3	0.23	0.3
Church Lane Right	0.21	0.3	0.19	0.3
Gillroyd Lane Right	0.26	0.6	0.20	0.4

Table 7: PICADY Results Church Lane/ Gillroyd Lane 2021 & 2031 Scenarios

3.5.25 The results in the table above demonstrate that the junction would operate within the normal requirements for the Ratio of Flow to Capacity (RFC value less than 0.85) in the current and future design year of 2031 with and without proposed development and committed development traffic.

Gillroyd Lane/ Blackmoorfoot Road Junction Assessment

3.5.26 A PICADY assessment has been undertaken for the application year (2021) and future year 2031 scenario for the AM and PM peak periods with and without proposed development and committed development traffic. The table below summarises the capacity analysis which can be found at Appendix H.

	AM Peak		PM Peak	
	Max RFC	Max Queue	Max RFC	Max Queue
2021 No Development Traffic				
Gillroyd Lane Right	0.46	0.9	0.41	0.7
Blackmoorfoot Road Right	0.10	0.2	0.08	0.2
2021 With Committed Development Traffic				
Gillroyd Lane Right	0.51	1.1	0.42	0.8
Blackmoorfoot Road Right	0.10	0.2	0.08	0.2
2021 With Committed Development & Proposed Development Traffic				
Gillroyd Lane Right	0.54	1.2	0.43	0.8
Blackmoorfoot Road Right	0.10	0.2	0.08	0.2
2031 No Development Traffic				
Gillroyd Lane Right	0.53	1.2	0.46	0.9
Blackmoorfoot Road Right	0.12	0.2	0.10	0.2
2031 With Committed Development Traffic				
Gillroyd Lane Right	0.58	1.5	0.48	1.0
Blackmoorfoot Road Right	0.12	0.2	0.10	0.2
2031 With Committed Development & Proposed Development Traffic				
Gillroyd Lane Right	0.61	1.6	0.49	1.1
Blackmoorfoot Road Right	0.12	0.2	0.10	0.2

Table 8: PICADY Results Gillroyd Lane/ Blackmoorfoot Road 2021 & 2031 Scenarios

3.5.27 The results in the table above demonstrate that the junction would operate within the normal requirements for the Ratio of Flow to Capacity (RFC value less than 0.85) in the future design year of 2031 for all scenarios. The proposed development would add between 1 and 2 pcu to the queue on the Gillroyd Lane arm of the junction.

Woodside View/ Cowlersley Lane Junction Assessment

3.5.28 A PICADY assessment has been undertaken for the application year (2021) and future year (2031) scenarios for the AM and PM peak periods with and without the proposed development and committed development traffic to determine the impact. The table below summarises the capacity analysis which can be found at Appendix H.

	AM Peak		PM Peak	
	Max RFC	Max Queue	Max RFC	Max Queue
2021 No Development Traffic				
Woodside View Right	0.12	0.2	0.12	0.1
Cowlersley Lane Right	0.02	0.0	0.01	0.0
2021 With Committed Development Traffic				
Woodside View Right	0.12	0.2	0.12	0.1
Cowlersley Lane Right	0.02	0.0	0.01	0.0
2021 With Committed Development & Proposed Development Traffic				
Woodside View Right	0.19	0.3	0.14	0.2
Cowlersley Lane Right	0.02	0.0	0.01	0.0
2031 No Development Traffic				
Woodside View Right	0.14	0.2	0.14	0.2
Cowlersley Lane Right	0.03	0.1	0.02	0.0
2031 With Committed Development Traffic				
Woodside View Right	0.14	0.2	0.14	0.2
Cowlersley Lane Right	0.03	0.0	0.02	0.0
2031 With Committed Development & Proposed Development Traffic				
Woodside View Right	0.14	0.2	0.14	0.2
Cowlersley Lane Right	0.03	0.0	0.02	0.0

Table 9: PICADY Results Woodside View/ Cowlersley Lane 2021 & 2031 Scenarios

3.5.29 The results in the table above demonstrate that the junction would operate within the normal requirements for the Ratio of Flow to Capacity (RFC value less than 0.85) on all arms of the junction, with a queue length of less than 1 pcu.

A62 Manchester Road/ Cowlersley Lane Junction Assessment

3.5.30 A LinSig assessment of the existing traffic signal controlled junction of A62 Manchester Road/ Cowlerlsey Lane has been undertaken for the 2021 and 2031 AM and PM peak periods, with and without proposed and committed development traffic scenarios to demonstrate the impact that the proposed development will have on the operation of the existing signals.

3.5.31 To assist with the preparation of the model, a copy of the traffic signal controller specification has been obtained from Kirklees Council. The junction is controlled by MOVA, which is the most advanced system for junction control in the UK.

3.5.32 The results of the LinSig modelling is summarised below in Tables 10, 11, 12 and 13, and is included at Appendix I.

Link	2021 AM		2021 AM + COM DEV		2021 AM + COM + PROP DEV	
	%SAT	MMQ	%SAT	MMQ	%SAT	MMQ
A62 Manchester Rd Eastbound	114.1	94.5	124.7	141.8	133.8	166.9
A62 Manchester Rd Westbound	146.7	115.6	146.7	120.6	146.7	121.4
Morley Lane	140.8	92.6	145.8	101.9	144.7	104.0
Cowlersley Lane	139.7	124.8	146.6	144.8	144.8	155.4
	PRC	-63%	PRC	-63%	PRC	-63%

Table 10: LinSig Summary AM (2021 Scenarios)

Link	2021 PM		2021 PM + COM DEV		2021 PM + COM + PROP DEV	
	%SAT	MMQ	%SAT	MMQ	%SAT	MMQ
A62 Manchester Rd Eastbound	74.1	17.5	76.8	18.9	77.6	20.3
A62 Manchester Rd Westbound	153.9	244.3	166.7	291.8	170.8	312.0
Morley Lane	155.2	132.0	168.0	161.4	169.8	172.3
Cowlersley Lane	152.3	117.1	163.4	131.1	169.5	137.3
	PRC	-72.5	PRC	-86.7	PRC	-89.8

Table 11: LinSig Summary PM (2021 Scenarios)

Link	2031 AM		2031 AM + COM DEV		2031 AM + COM + PROP DEV	
	%SAT	MMQ	%SAT	MMQ	%SAT	MMQ
A62 Manchester Rd Eastbound	123.7	141.4	140.0	204.3	148.5	227.3
A62 Manchester Rd Westbound	163.3	152.2	163.3	157.7	163.3	160.8
Morley Lane	162.2	137.5	163.2	143.1	161.6	142.8
Cowlersley Lane	163.0	179.2	160.9	187.5	160.7	201.2
	PRC	-81.5%	PRC	-81.5%	PRC	-81.5%

Table 12: LinSig Summary AM (2031 Scenarios)

Link	2031 PM		2031 PM + COM DEV		2031 PM + COM + PROP DEV	
	%SAT	MMQ	%SAT	MMQ	%SAT	MMQ
A62 Manchester Rd Eastbound	79.1	21.0	81.6	25.3	82.4	23.5
A62 Manchester Rd Westbound	185.4	343.4	197.5	385.7	204.9	410.1
Morley Lane	182.5	186.0	197.6	220.5	203.4	230.3
Cowlersley Lane	185.3	166.3	199.5	180.3	200.9	188.3
	PRC	-106.0	PRC	-121.6	PRC	-127.7

Table 13: LinSig Summary PM (2031 Scenarios)

3.5.33 The junction already struggles to cope with the current level of traffic experienced, and future growth will only make this situation worse along with committed development traffic in the area. The development will have a very minimal impact upon the efficiency of the junction, as the additional flows associated with the proposed development are very small with an overall decrease in practical reserve capacity of 0% during the AM peak scenarios, and up to 6.1% decrease during the PM peak scenarios. The impact the development has on the junction PRC is minimal and would not be noticeable nor considered material from the daily fluctuations in flows at the junction.

3.5.34 The junction operates with the most efficient control for standalone junctions using MOVA and is the most advanced system available in the UK with no scope for improvement.

3.5.35 The development would have little impact on surrounding junctions including the site access points, with all priority junctions operating within normal requirements. The impact on the A62 Manchester Road/ Cowlersley Lane junction would not be considered severe with a marginal decrease in PRC. The traffic impact would not be significant or severe as per the test within the current NPPF.

3.5.36 It is acknowledged that the Highways Officer requested a formal junction capacity assessment at the Felks Stile Road/ Blackmoorfoot Road junction. However, using the distribution from the 2011 Census information the proposed development would generate an additional 9 traffic movements during the AM and PM peak periods. This low increase in traffic falls substantially short of the normally accepted trigger (30 vehicle movements per hour) for carrying out junction capacity assessment. Given the above, and proposed traffic distribution, no further analysis of the traffic impact of the proposals at any other junctions are considered necessary.

3.5.37 In summary the proposed development on Church Lane and Kinder Avenue has little to no residual impact on the local highway network.

4 TRANSPORT POLICY

4.1.1 When considering transport policy compliance for planning applications, the main thrust of local, regional and national policy is that new development should be conveniently accessible by a range of sustainable transport modes, including public transport, cycling and walking. This policy therefore sets out the framework for this Transport Assessment and the project's compliance with the policy objectives. Further details of the relevant policy documents are set out below.

National Planning Policy Framework – Promoting Sustainable Transport

4.1.2 The revised National Planning Policy Framework was published February 2019 and sets out the government's planning policies for England and how these are expected to be applied.

4.1.3 It recommends that development should only be prevented or refused on highways grounds if there would be and unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.

4.1.4 This revised Framework replaces the previous National Planning Policy Framework published in July 2018. In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

- Consideration be given to the potential impacts of development on the transport network;
- Provide opportunities to promote cycling, walking and public transport use are identified;
- Patterns of movement, streets, parking and other transport considerations are integral to the design of schemes and contribute to making high quality places;
- Allow for the efficient delivery of goods, and access by service and emergency vehicles;
- Include within the design for the charging of plug in and ultra-low emission vehicles in safe and convenient locations.

4.1.5 Paragraph 109 of the NPPF suggests 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.

4.1.6 Paragraph 111 of the NPPF goes on to say that "a key tool to facilitate this will be a Travel Plan. All developments which generate significant amounts of movement should be required to provide a Travel Plan."

4.1.7 Section 9 of 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 the transport networks can be addressed;*
- *Opportunities from existing or proposed transport infrastructure and changing technology and usage, are realised;*
- *Opportunities to promote walking, cycling and public transport are identified and pursued;*
- *The environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account;*
- *Patterns of movement, streets, parking and other transport considerations are integral to the design of schemes.*

Local Transport Plan

4.1.8 The current Local Transport Plan is the third West Yorkshire Local Transport Plan (LTP3) which covers the period 2011 to 2026. The key objectives of the LTP3 include:

- *To improve access to jobs, education and other key services for everyone;*
- *To reduce delays to the movement of people and goods;*
- *To improve safety for all highway users;*
- *To limit transport emissions of air pollutants, greenhouse gases and noise;*
- *To improve the condition of the transport infrastructure.*

4.1.9 The LTP sets out the walking and cycling strategy for West Yorkshire to encourage more people to use these modes of travel to help reduce the dependency on private cars. With regards to cycling provision within development proposals, the WYCS seeks to 'ensure that new development proposals are located and designed to be cycle friendly and adopt guidelines for cycle parking standards. With regards to walking, the LTP seeks to improve the local environment to make walking more attractive by enhancing safety, security and environmental quality.

4.1.10 The LTP also sets out a bus strategy West Yorkshire and seeks to increase patronage for all categories of bus passenger and modal shift towards the bus and away from the car.

Kirklees Local Plan

4.1.11 Local transport policy is set out in the Kirklees Council's Local Plan covering the period 2013 to 2031.

4.1.12 Policies relating to Transport are contained within Section 10 of the Local Plan.

4.1.13 Policy LP20 'Sustainable Travel' states: - 'New Development will be located in accordance with the spatial development strategy to ensure the need to travel is reduced and that essential travel needs can be met by forms of sustainable transport other than the private car'.

4.1.14 Policy LP21 'Highways and Access' states: - 'Proposals shall demonstrate that they can accommodate sustainable modes of transport and be accessed effectively and safely by all users'.

4.1.15 Policies LP22, LP24 relate to parking provision and design for new developments.

4.1.16 The location of the development in a sustainable position close to good bus routes, provides a suitable access arrangement, parking provision, and design. Therefore, the proposals generally meet the requirements of the Local and National Policy.

5 CONCLUSIONS

5.1.1 This Transport Assessment considers the planning application for the proposals to provide around 125 new dwellings on land off Church Lane and Kinder Avenue, Linthwaite.

5.1.2 This report has considered the proposed access arrangements, site sustainability, presenting the proposals in relation to current guidance and data.

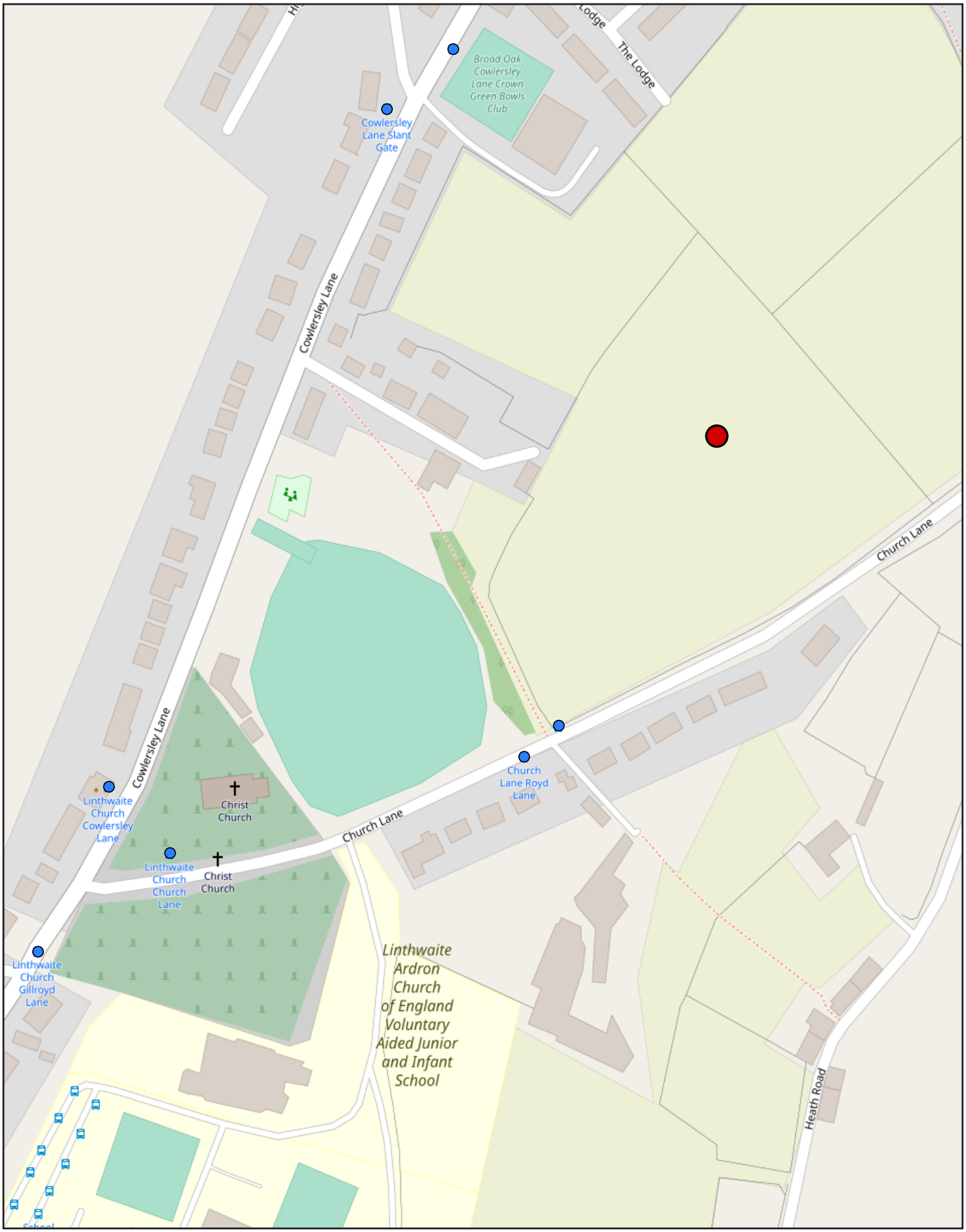
5.1.3 The impact of the development has been considered at several off-site junctions and our analyses have found that the predicted increase will not have a material, significant nor severe impact on any of them, the latter criteria being the test within the current NPPF.

5.1.4 Assessment of the proposed traffic impact of the scheme shows that the level of traffic and associated trips on the local highway network will therefore have no material impact on the safe operation of the local highway and nearby junctions, and will not severely add to any congestion at the peak times on the local network.

5.1.5 It is therefore concluded that the development is considered acceptable, and that there are no highway safety, capacity or efficiency reasons why planning consent for the proposed development should not be granted.

Appendix A

Location plan



Legend:

- Site Location
- Closest Unique Bus Stops

PARAGON HIGHWAYS
Unit 6 The Office Campus
Paragon Business Park
Wakefield Wf1 2uy

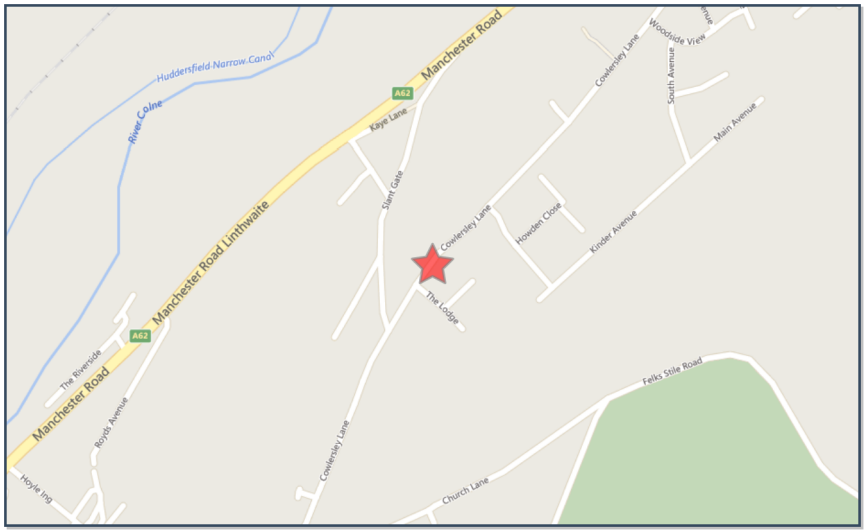
Appendix B

Road Traffic Accidents

crashmap.co.uk

Crash Date:	Friday, November 25, 2016	**Time of Crash:**	8:50:00 AM	**Crash Reference:**	**2016133BP0330**

Highest Injury Severity:	Slight	**Road Number:**	U0	**Number of Casualties:**	1
Highway Authority:	Kirklees			**Number of Vehicles:**	2
Local Authority:	Kirklees			**OS Grid Reference:**	410423 414842
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				



For more information about the data please visit: *www.crashmap.co.uk/home/Faq*
To subscribe to unlimited reports using CrashMap Pro visit *www.crashmap.co.uk/Home/Premium_Services*

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Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
2	Van or goods vehicle 3.5 tonnes mgw and under	1	Male	Unknown	Vehicle is moving off	Did not impact	Other	None	None
1	Car (excluding private hire)	2	Male	36 - 45	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	Wall or fence

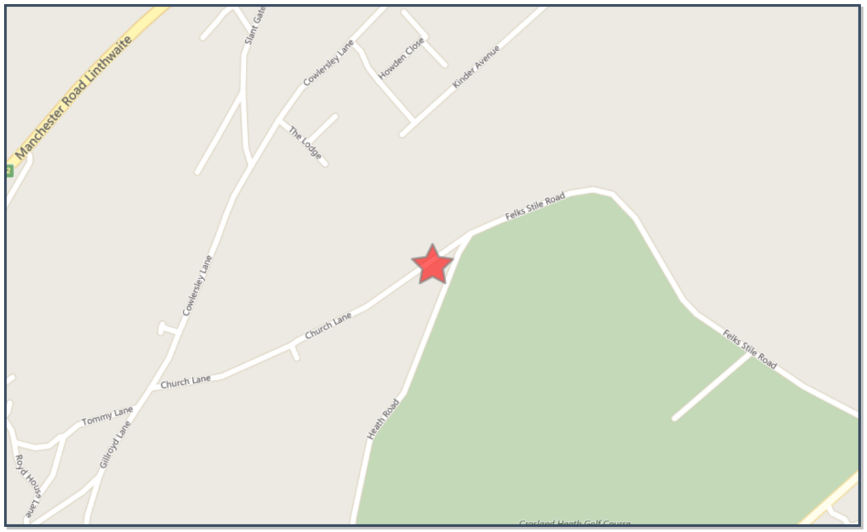
Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	36 - 45	Unknown or other	Unknown or other

crashmap.co.uk

Crash Date:	Thursday, November 02, 2017	**Time of Crash:**	9:32:00 PM	**Crash Reference:**	**2017134B22006**

Highest Injury Severity:	Slight	**Road Number:**	U0	**Number of Casualties:**	3
Highway Authority:	Kirklees			**Number of Vehicles:**	1
Local Authority:	Kirklees			**OS Grid Reference:**	410636 414590
Weather Description:	Fine without high winds				
Road Surface Description:	Wet or Damp				
Speed Limit:	40				
Light Conditions:	Darkness: no street lighting				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				



For more information about the data please visit: *www.crashmap.co.uk/home/Faq*
To subscribe to unlimited reports using CrashMap Pro visit *www.crashmap.co.uk/Home/Premium_Services*

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Vehicles involved

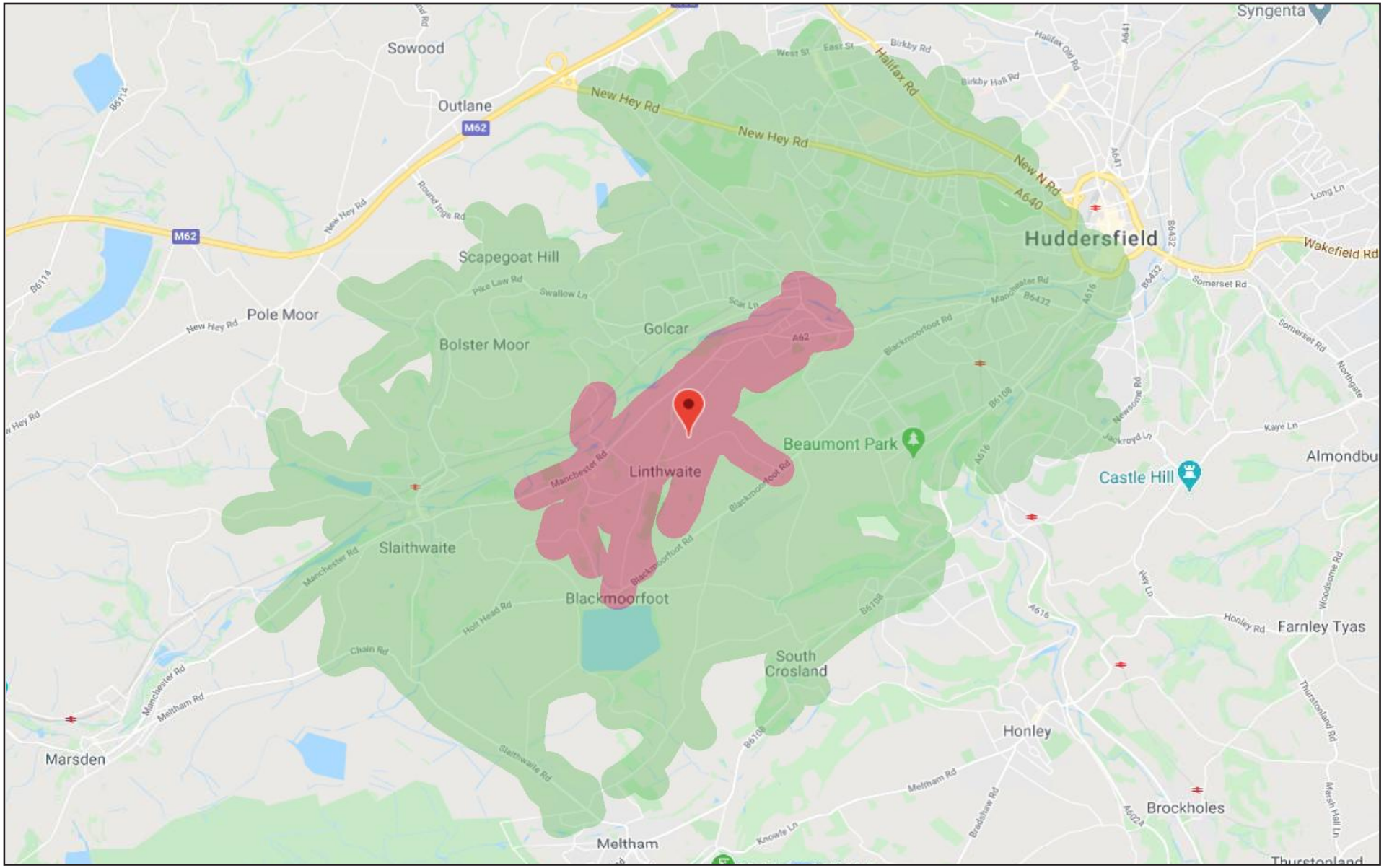
Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	9	Female	16 - 20	Vehicle proceeding normally along the carriageway, not on a bend	Nearside	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Female	16 - 20	Unknown or other	Unknown or other
1	2	Slight	Vehicle or pillion passenger	Female	16 - 20	Unknown or other	Unknown or other
1	3	Slight	Vehicle or pillion passenger	Female	16 - 20	Unknown or other	Unknown or other

Appendix C

Pedestrian & Cycling Catchments



Legend:

- 5km Cycle Catchment
- 2km Walking Catchment
- Site Location

PARAGON HIGHWAYS
Unit 6 The Office Campus
Paragon Business Park
Wakefield Wf1 2uy

Appendix D

Proposed Development

GENERAL NOTES

This drawing shows the provisional design only and is subject to Local Authority approval. This drawing should not be scaled for setting out purposes unless specified.

This drawing is based on a topographical/ordnance survey provided by others.

REV	DATE	DESCRIPTION

PROJECT

BROAD OAK FARM,
LINTHWAITE

TITLE

PROPOSED SITE
VEHICLE TRACKING & VISIBILITY

SCALE

1:500 @ A1

DRAWING

1098-PS01

DATE

15.04.2021

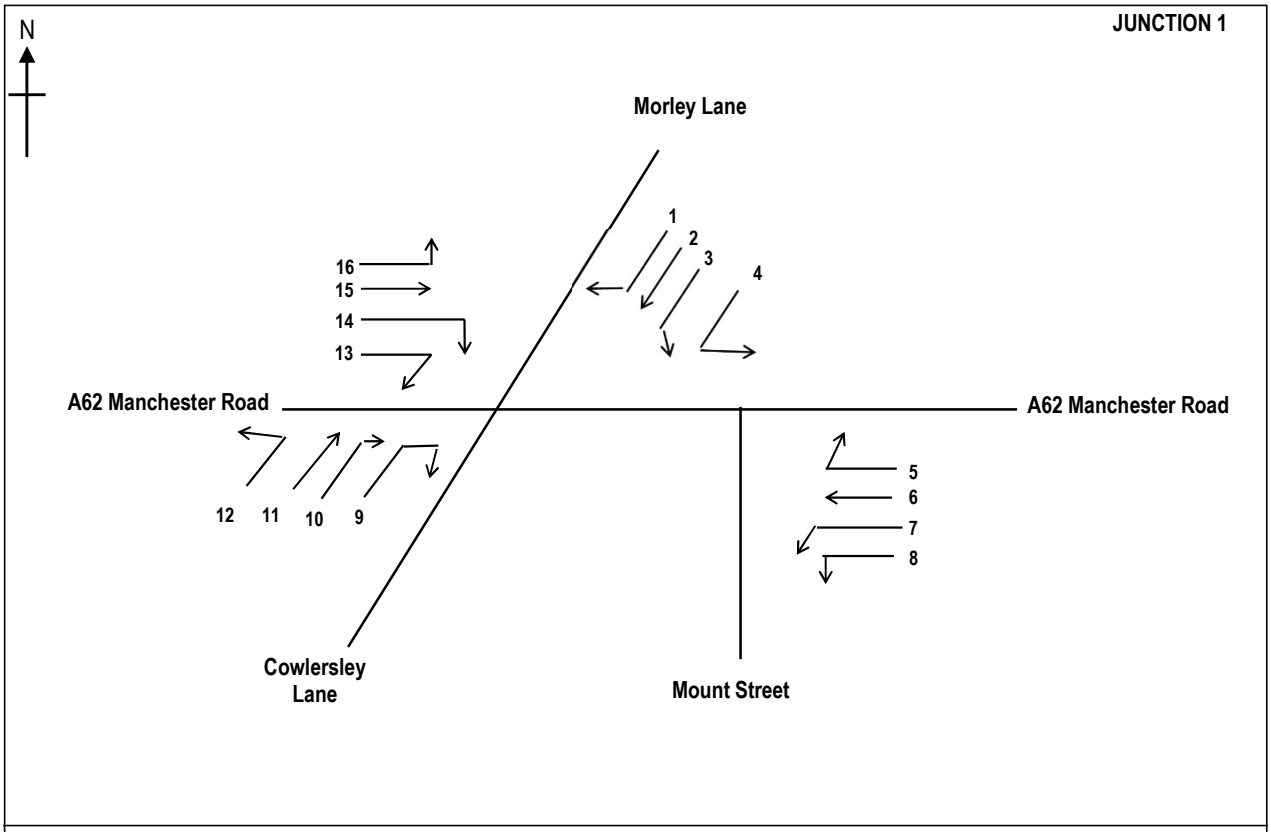
PARAGON HIGHWAYS
UNIT 6, THE OFFICE CAMPUS,
PARAGON BUSINESS PARK, RED HALL COURT,
WAKEFIELD WF1 2UY
01924 291536 /
MAIL@PARAGONHIGHWAYS.COM

Appendix E

Traffic Surveys

SURVEY CONTROL:

Client:	Paragon Highways Ltd
Client Contact:	Paul Howarth
Survey Location:	Linthwaite
Date(s) of Survey:	Wednesday 20 June 2018
Notes:	
On Site Supervisor:	Wayne Tomlinson
Data Checking:	Pedro Dixon
Survey Reference:	2018.946
Status:	Final
Date of Issue:	Friday 22 June 2018



DRAWING TITLE: TRAFFIC MOVEMENT REFERENCE			
JOB TITLE: LINTHWAITE			
DRAWN BY: RKN	DATE: 20/06/2018	SCALE: NTS	REF: FIGURE 1

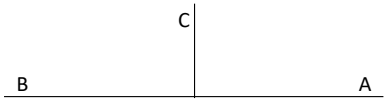


TRAFFIC & TRANSPORT DATA COLLECTION
e: info@pdsurveys.co.uk
t: 44(0) 7880 360 238
a: 53 Ellerker Rise, Willerby, HU10 6EU

Time Beginning	Morley Lane/A62 Manchester Road/Mount Street/Cowersley Lane - Wednesday 20 June 2018																															
	1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16	
	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV
0700	48	2	43	0	0	0	0	0	3	0	65	2	22	0	0	0	0	0	34	2	56	0	0	0	12	0	0	0	68	2	32	0
0715	49	2	53	2	0	0	2	0	7	0	77	3	26	0	1	0	0	0	39	3	61	2	2	0	14	0	0	0	73	3	37	0
0730	46	2	54	2	0	0	2	0	10	0	83	5	31	2	2	0	0	0	53	0	71	0	0	0	12	0	0	0	71	5	39	0
0745	17	2	43	2	0	0	3	0	9	0	66	3	24	0	0	0	0	0	75	0	77	0	2	0	12	0	0	0	99	3	36	0
0800	37	2	32	0	0	0	5	0	9	0	54	2	20	0	0	0	0	0	82	2	80	0	3	0	12	0	0	0	104	5	32	0
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0830	48	2	49	2	0	0	9	0	14	0	61	9	31	2	3	0	0	0	60	2	68	2	5	0	10	2	0	0	117	7	60	0
0845	49	2	46	0	0	0	5	0	7	0	68	5	29	0	2	0	0	0	53	2	56	0	3	0	10	0	0	0	111	10	58	0
0900	37	0	48	2	0	0	2	0	9	0	70	3	32	2	2	0	0	0	51	0	54	0	2	0	9	2	0	0	109	9	56	0
0915	36	2	44	0	0	0	2	0	10	0	58	2	27	0	1	0	0	0	48	0	51	0	0	0	7	0	0	0	102	7	49	0

Time Beginning	Morley Lane/A62 Manchester Road/Mount Street/Cowersley Lane - Wednesday 20 June 2018																															
	1		2		3		4		5		6		7		8		9		10		11		12		13		14		15		16	
	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV
1600	30	0	51	2	0	0	2	0	9	0	74	5	29	0	4	0	0	0	12	0	56	2	27	0	0	0	0	0	63	3	23	0
1615	35	0	54	0	0	0	2	0	15	0	84	6	42	2	3	0	0	0	18	0	57	3	12	0	0	0	0	0	71	5	26	0
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1800	38	0	59	0	1	0	5	0	18	0	122	5	66	0	1	0	0	0	30	0	45	2	11	0	0	0	0	0	87	5	26	0
1815	36	0	56	0	0	0	2	0	17	0	111	5	60	0	0	0	0	0	26	0	36	0	9	0	0	0	0	0	89	2	27	0

ABACUS TRAFFIC SURVEYS
14 CLIFF HILL COURT, HOLMFIRTH, HD9 1JF



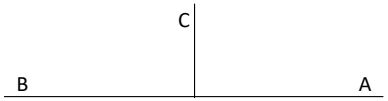
A	From Gilroyd Lane
B	Cowlersley Lane
C	Church Lane

Location	Church Lane Linthwaite
Date	17/09/2018

Time Start	A - B		A - C		B - A		B - C		C - A		C - B	
	Car/LVG	HGV	Car/LVG	HGV	Car/LVG	HGV	Car/LVG	HGV	Car/LVG	HGV	Car/LVG	HGV
7:00 - 7:15	32	1	7	0	27	0	7	0	7	0	6	0
7:15 - 7:30	44	1	12	1	35	1	9	0	10	0	10	0
7:30 - 7:45	51	1	17	0	36	0	9	0	8	0	14	0
7:45 - 8:00	60	1	16	1	43	2	7	0	15	1	12	1
8:00 - 8:15	73	2	23	2	39	1	12	0	17	0	7	0
8:15 - 8:30	66	1	19	1	43	0	15	0	14	0	9	0
8:30 - 8:45	58	2	20	0	45	2	16	0	14	1	8	1
8:45 - 9:00	51	1	19	1	51	2	12	0	19	0	9	0
9:00 - 9:15	53	1	14	0	37	1	9	0	11	0	15	0
9:15 - 9:30	42	1	12	1	29	1	8	0	9	0	10	0
Total	***530***	***12***	***159***	***7***	***385***	***10***	***104***	***0***	***124***	***2***	***100***	***2***

Time Start	A - B		A - C		B - A		B - C		C - A		C - B	
	Car/LGV	HGV	Car/LGV	HGV	Car/LGV	HGV	Car/LGV	HGV	Car/LGV	HGV	Car/LGV	HGV
16:00 - 16:15	36	1	11	0	46	2	11	0	11	0	10	0
16:15 - 16:30	39	1	13	1	56	0	13	0	15	0	11	0
16:30 - 16:45	37	0	10	0	47	2	7	0	16	0	10	0
16:45 - 17:00	35	2	14	0	54	1	8	0	18	0	12	0
17:00- 17:15	32	1	18	0	66	1	8	0	25	0	14	0
17:15- 17:30	31	2	12	1	50	0	5	0	22	1	8	0
17:30 - 17:45	36	1	14	0	53	1	7	0	19	0	8	0
17:45 - 18:00	42	1	22	1	48	0	15	0	18	0	12	0
18:00 - 18:15	33	1	14	0	43	1	12	0	17	0	13	0
18:15 - 18:30	34	1	14	1	37	0	7	0	17	0	9	0
Total	***355***	***11***	***142***	***4***	***500***	***8***	***93***	***0***	***178***	***1***	***107***	***0***

ABACUS TRAFFIC SURVEYS
14 CLIFF HILL COURT, HOLMFIRTH, HD9 1JF



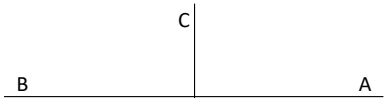
A	From Blackmoorfoo
B	From Holt Head Roa
C	From Gilroyd Lane

Location	Gilroyd Lane / Blackmoorfoot Road
Date	27/06/2018

Time Start	A - B		A - C		B - A		B - C		C - A		C - B	
	Car/LVG	HGV	Car/LVG	HGV	Car/LVG	HGV	Car/LVG	HGV	Car/LVG	HGV	Car/LVG	HGV
7:00 - 7:15	19	1	3	0	27	1	15	1	3	0	19	1
7:15 - 7:30	23	1	3	0	32	1	18	0	5	0	26	0
7:30 - 7:45	26	0	5	0	46	2	27	0	6	0	34	1
7:45 - 8:00	40	3	11	0	39	1	26	0	9	1	37	1
8:00 - 8:15	24	0	8	0	70	0	39	0	8	0	25	0
8:15 - 8:30	33	2	10	1	51	2	33	1	7	0	31	1
8:30 - 8:45	31	1	11	3	35	1	31	0	8	1	46	0
8:45 - 9:00	33	2	8	0	33	4	31	1	6	0	34	1
9:00 - 9:15	31	1	6	1	29	3	26	0	4	1	23	0
9:15 - 9:30	26	2	5	0	29	2	22	1	3	0	21	1
Total	***286***	***13***	***70***	***5***	***391***	***17***	***268***	***4***	***59***	***3***	***296***	***6***

Time Start	A - B		A - C		B - A		B - C		C - A		C - B	
	Car/LGV	HGV	Car/LGV	HGV	Car/LGV	HGV	Car/LGV	HGV	Car/LGV	HGV	Car/LGV	HGV
16:00 - 16:15	23	2	4	0	23	2	15	1	2	0	12	1
16:15 - 16:30	29	2	4	0	25	1	22	1	4	1	15	0
16:30 - 16:45	44	1	6	1	26	2	35	0	4	0	30	2
16:45 - 17:00	37	1	7	0	37	2	33	1	24	0	22	0
17:00- 17:15	64	1	11	2	30	1	33	1	6	2	32	1
17:15- 17:30	52	3	7	1	27	2	35	1	9	2	28	0
17:30 - 17:45	37	4	7	1	32	1	33	1	5	0	27	2
17:45 - 18:00	26	2	8	0	27	2	28	1	6	1	23	0
18:00 - 18:15	34	2	7	1	34	2	24	1	5	0	30	1
18:15 - 18:30	27	1	6	1	17	2	17	0	3	1	24	0
Total	***373***	***19***	***67***	***7***	***278***	***17***	***275***	***8***	***68***	***7***	***243***	***7***

ABACUS TRAFFIC SURVEYS
14 CLIFF HILL COURT, HOLMFIRTH, HD9 1JF



A	From Gilroyd Lane
B	From Manchester R
C	Woodside View

Location	Cowlersley Lane Linthwaite
Date	11/09/2018

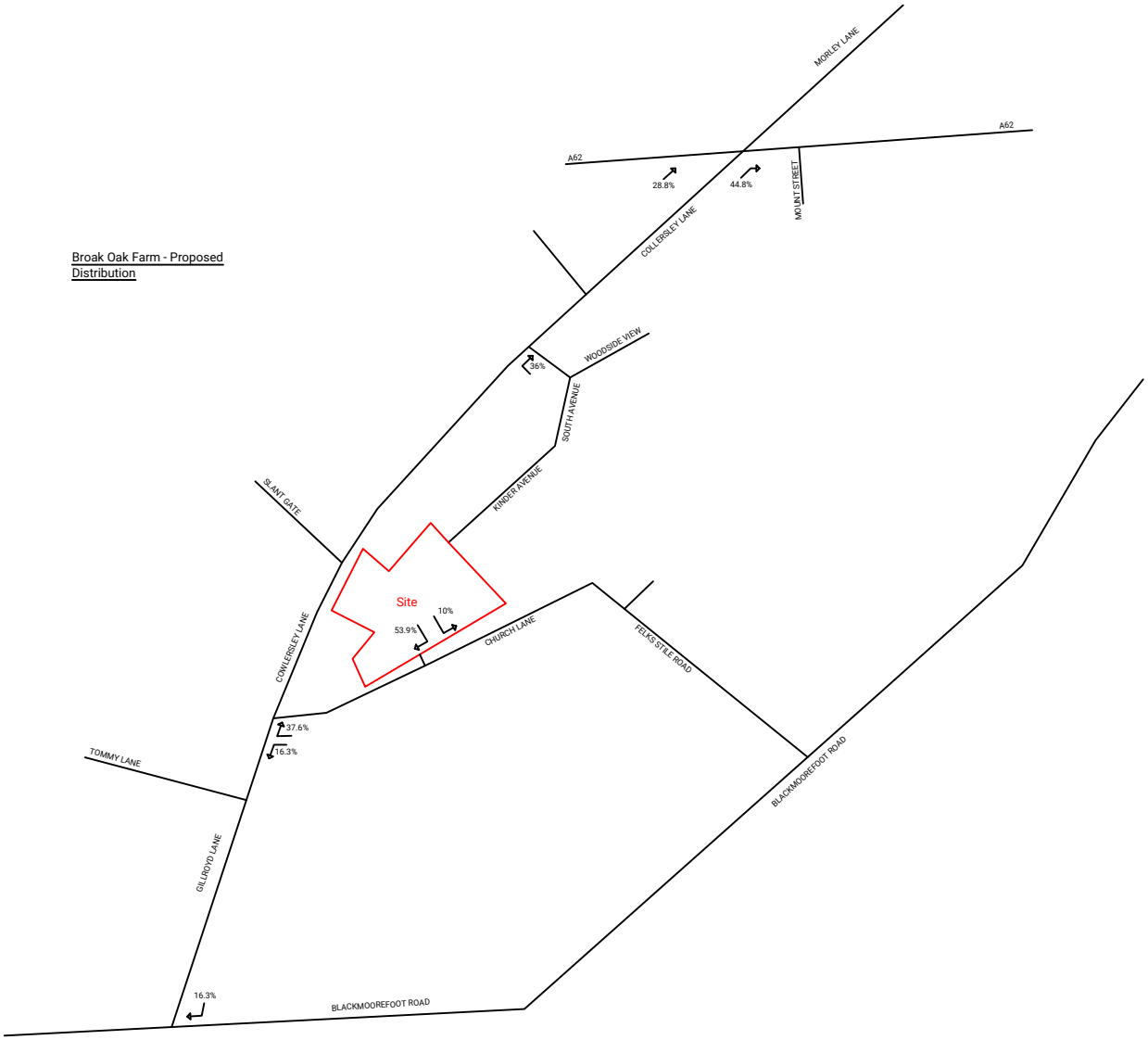
Time Start	A - B		A - C		B - A		B - C		C - A		C - B	
	Car/LVG	HGV	Car/LVG	HGV	Car/LVG	HGV	Car/LVG	HGV	Car/LVG	HGV	Car/LVG	HGV
7:00 - 7:15	40	1	0	0	34	1	2	0	1	0	4	0
7:15 - 7:30	45	1	0	0	42	1	2	0	2	0	5	0
7:30 - 7:45	58	2	2	0	39	1	4	0	3	0	8	0
7:45 - 8:00	67	2	2	0	41	2	3	0	2	0	5	0
8:00 - 8:15	86	3	3	0	43	3	4	0	4	0	10	0
8:15 - 8:30	62	2	2	0	51	3	3	0	4	0	6	0
8:30 - 8:45	65	1	3	0	55	1	4	0	5	0	10	0
8:45 - 9:00	69	1	2	0	53	2	4	0	3	0	5	0
9:00 - 9:15	69	2	1	0	47	2	3	0	2	0	5	0
9:15 - 9:30	70	2	0	0	48	2	2	0	1	0	4	0
Total	***631***	***17***	***15***	***0***	***453***	***18***	***31***	***0***	***27***	***0***	***62***	***0***

Time Start	A - B		A - C		B - A		B - C		C - A		C - B	
	Car/LGV	HGV	Car/LGV	HGV	Car/LGV	HGV	Car/LGV	HGV	Car/LGV	HGV	Car/LGV	HGV
16:00 - 16:15	50	2	3	0	68	1	3	0	2	0	7	0
16:15 - 16:30	52	2	0	0	66	0	4	0	1	0	9	0
16:30 - 16:45	54	0	4	0	75	2	7	0	1	0	14	0
16:45 - 17:00	53	1	1	0	64	1	8	0	5	0	5	0
17:00- 17:15	54	1	1	0	58	2	10	0	3	0	5	0
17:15- 17:30	39	3	0	0	82	0	10	0	3	0	8	0
17:30 - 17:45	39	3	0	0	63	1	5	0	1	0	6	0
17:45 - 18:00	50	1	0	0	55	0	10	0	2	0	5	0
18:00 - 18:15	46	2	1	0	53	1	7	0	2	0	4	0
18:15 - 18:30	43	1	1	0	47	0	6	0	1	0	3	0
Total	***480***	***16***	***11***	***0***	***631***	***8***	***70***	***0***	***21***	***0***	***66***	***0***

Appendix F

Traffic Flows

Broak Oak Farm - Proposed Distribution



REVISIONS

PROJECT

BROAD OAK FARM, LINTHWAITE

TITLE

PROPOSED DISTRIBUTION

SCALE

NTS @ A4

DRAWING

1098 - 10

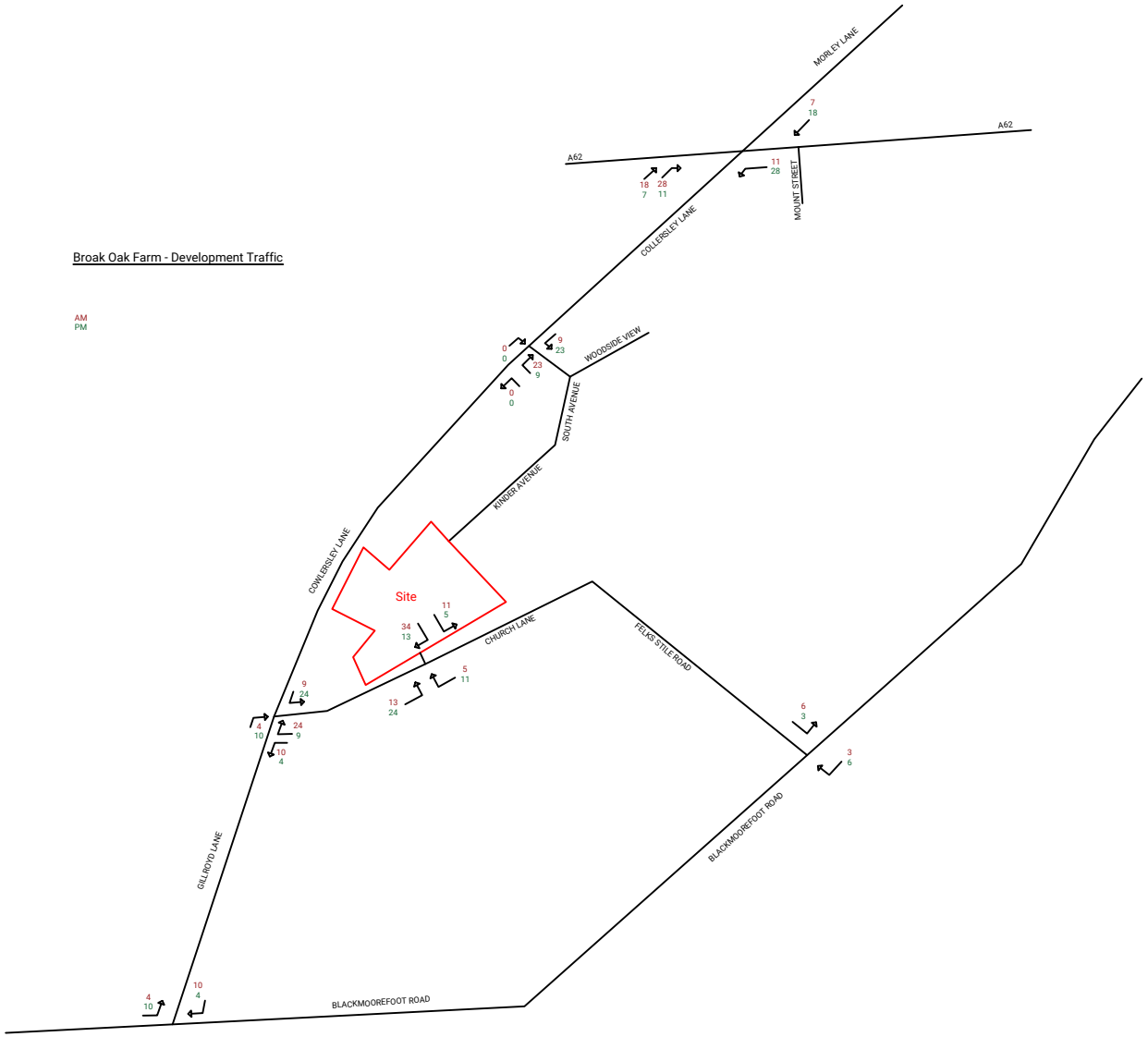
DATE

16.04.2021

PARAGON HIGHWAYS
UNIT 6, THE OFFICE CAMPUS,
PARAGON BUSINESS PARK, RED HALL COURT,
WAKEFIELD WF1 2UY
01924 291536 /
MAIL@PARAGONHIGHWAYS.COM

Broak Oak Farm - Development Traffic

AM
PM



REVISIONS

PROJECT

BROAD OAK FARM, LINTHWAITE

TITLE

DEVELOPMENT TRAFFIC

SCALE

NTS @ A4

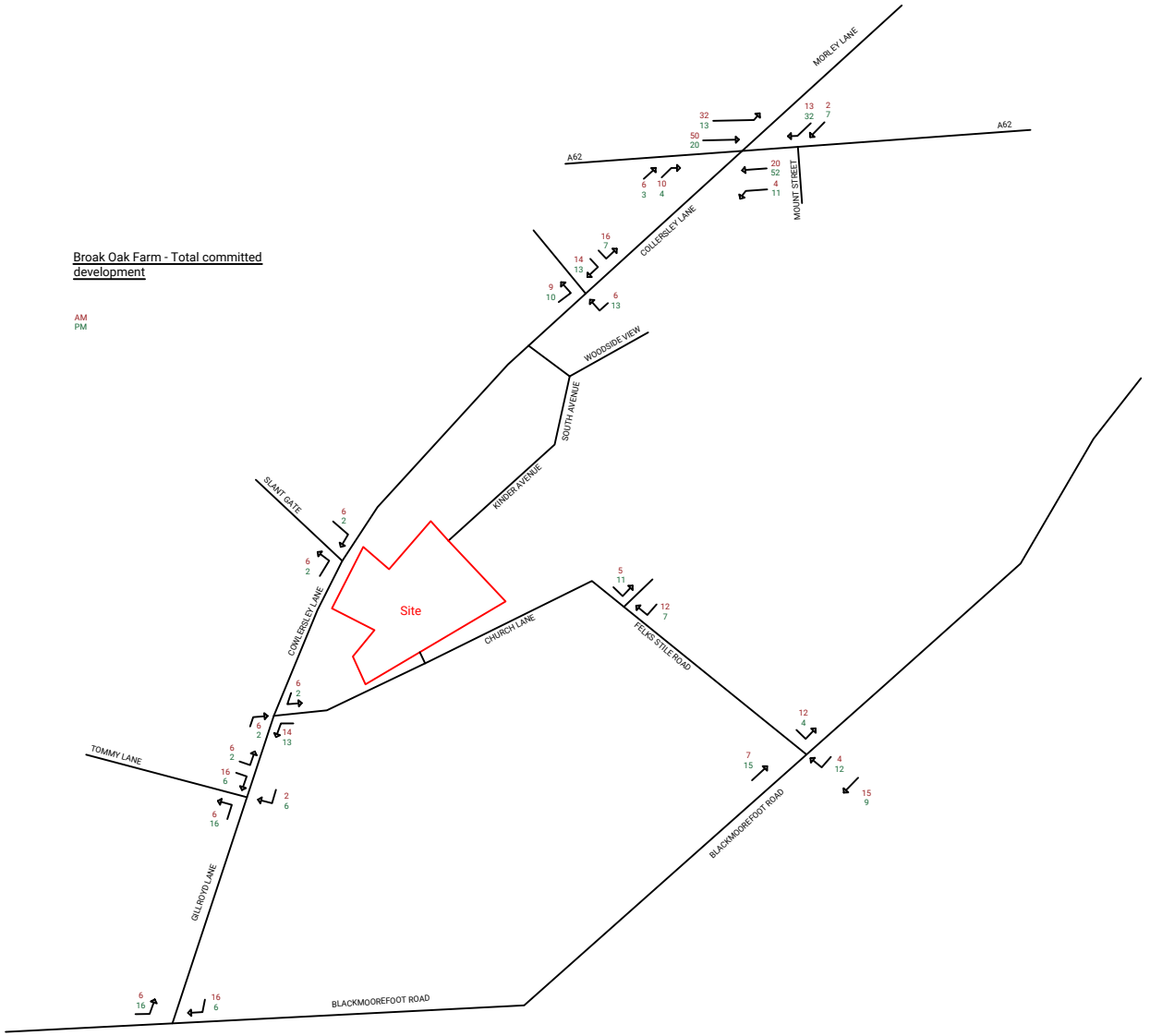
DRAWING

1098 - 2

DATE

16.04.2021

PARAGON HIGHWAYS
UNIT 6, THE OFFICE CAMPUS,
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WAKEFIELD WF1 2UY
01924 291536 /
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REVISIONS

PROJECT

BROAD OAK FARM, LINTHWAITE

TITLE

TOTAL COMMITTED DEVELOPMENT

SCALE

NTS @ A4

DRAWING

1098 - 3

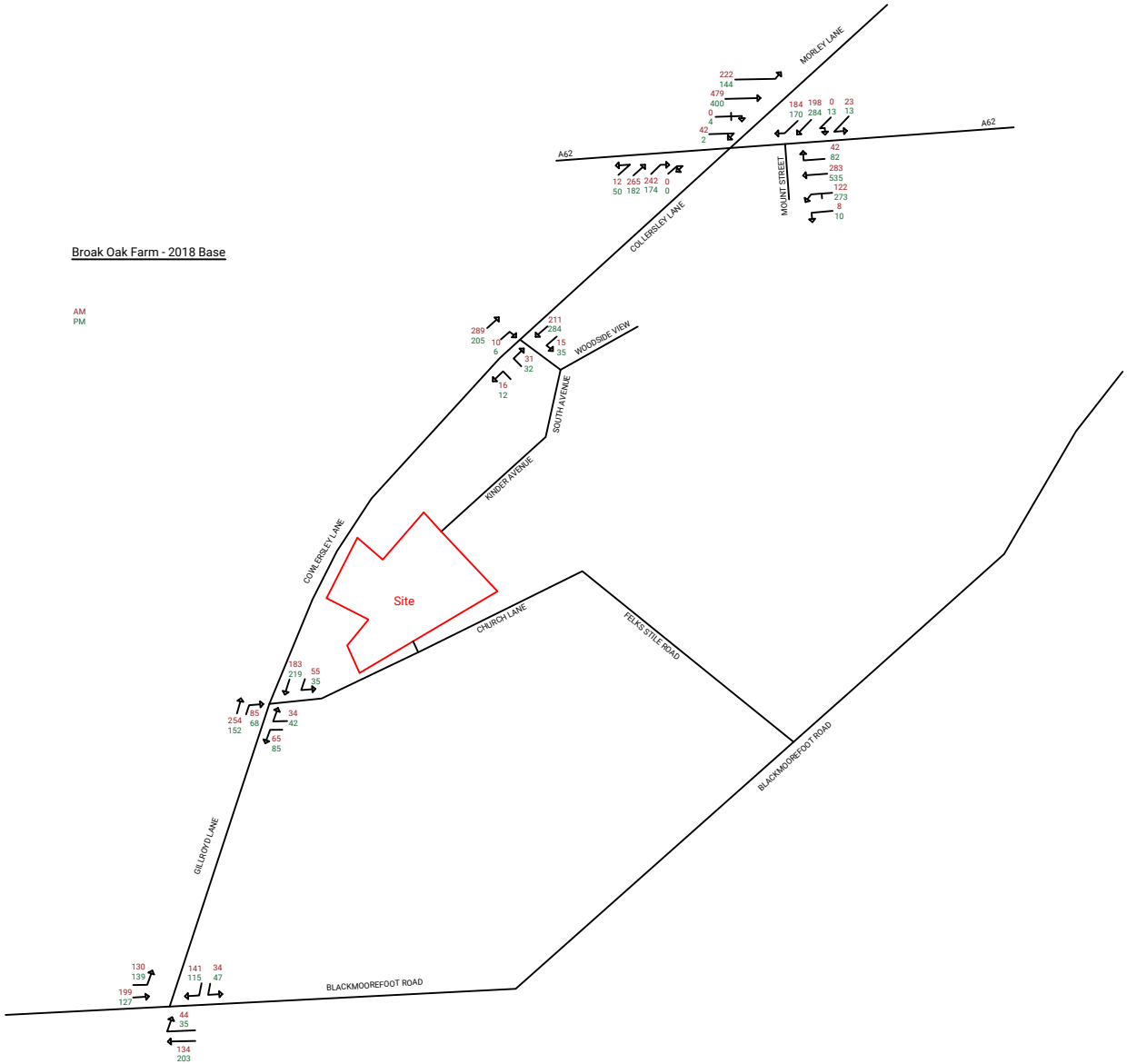
DATE

16.04.2021

PARAGON HIGHWAYS
UNIT 6, THE OFFICE CAMPUS,
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WAKEFIELD WF1 2UY
01924 291536 /
MAIL@PARAGONHIGHWAYS.COM

Broak Oak Farm - 2018 Base

AM
PM



REVISIONS

PROJECT

BROAD OAK FARM, LINTHWAITE

TITLE

2018 BASE

SCALE

NTS @ A4

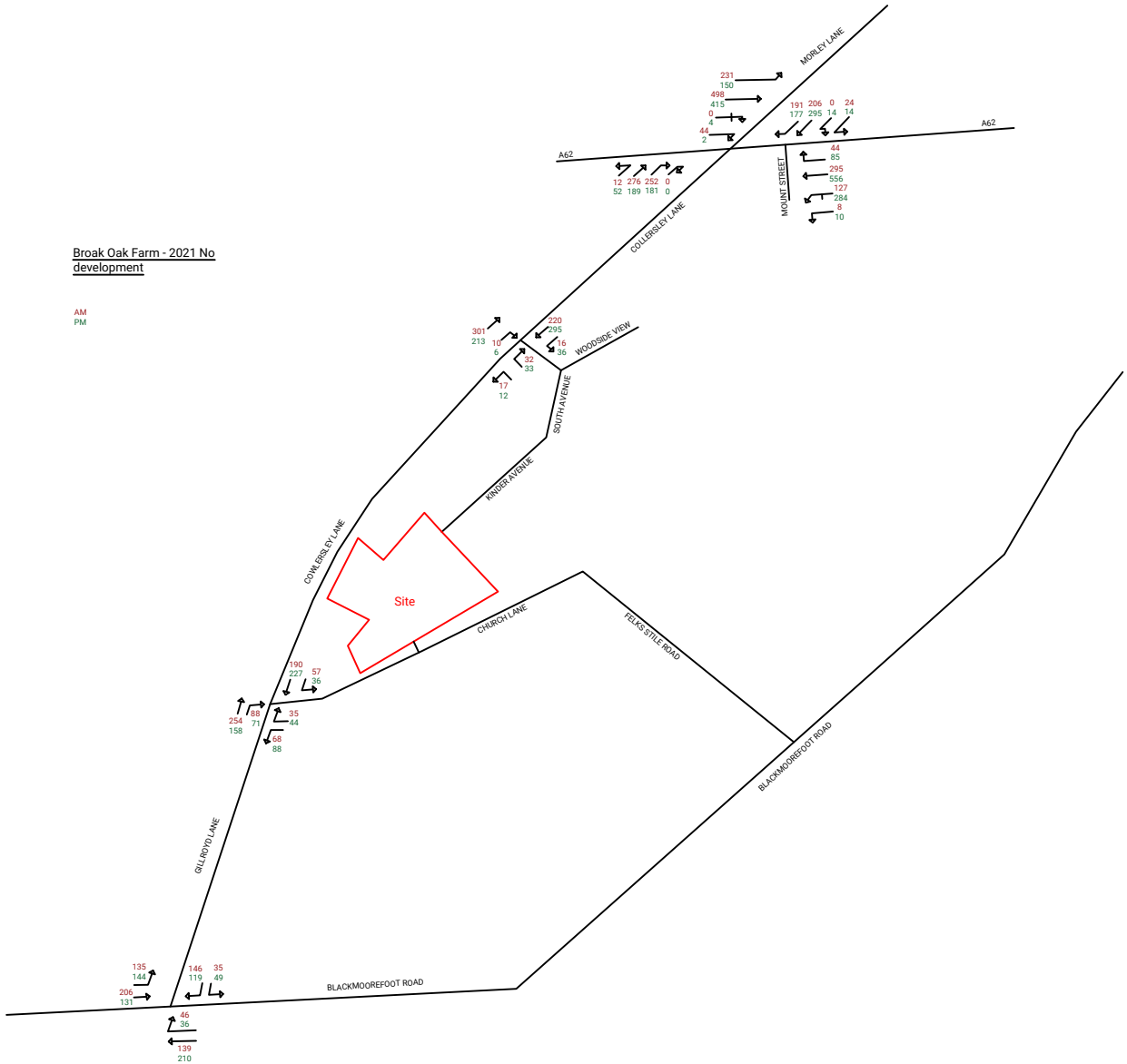
DRAWING

1098 - 1

DATE

16.04.2021

PARAGON HIGHWAYS
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PARAGON BUSINESS PARK, RED HALL COURT,
WAKEFIELD WF1 2UY
01924 291536 /
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REVISIONS

PROJECT

BROAD OAK FARM, LINTHWAITE

TITLE

2021- NO DEVELOPMENT

SCALE

NTS @ A4

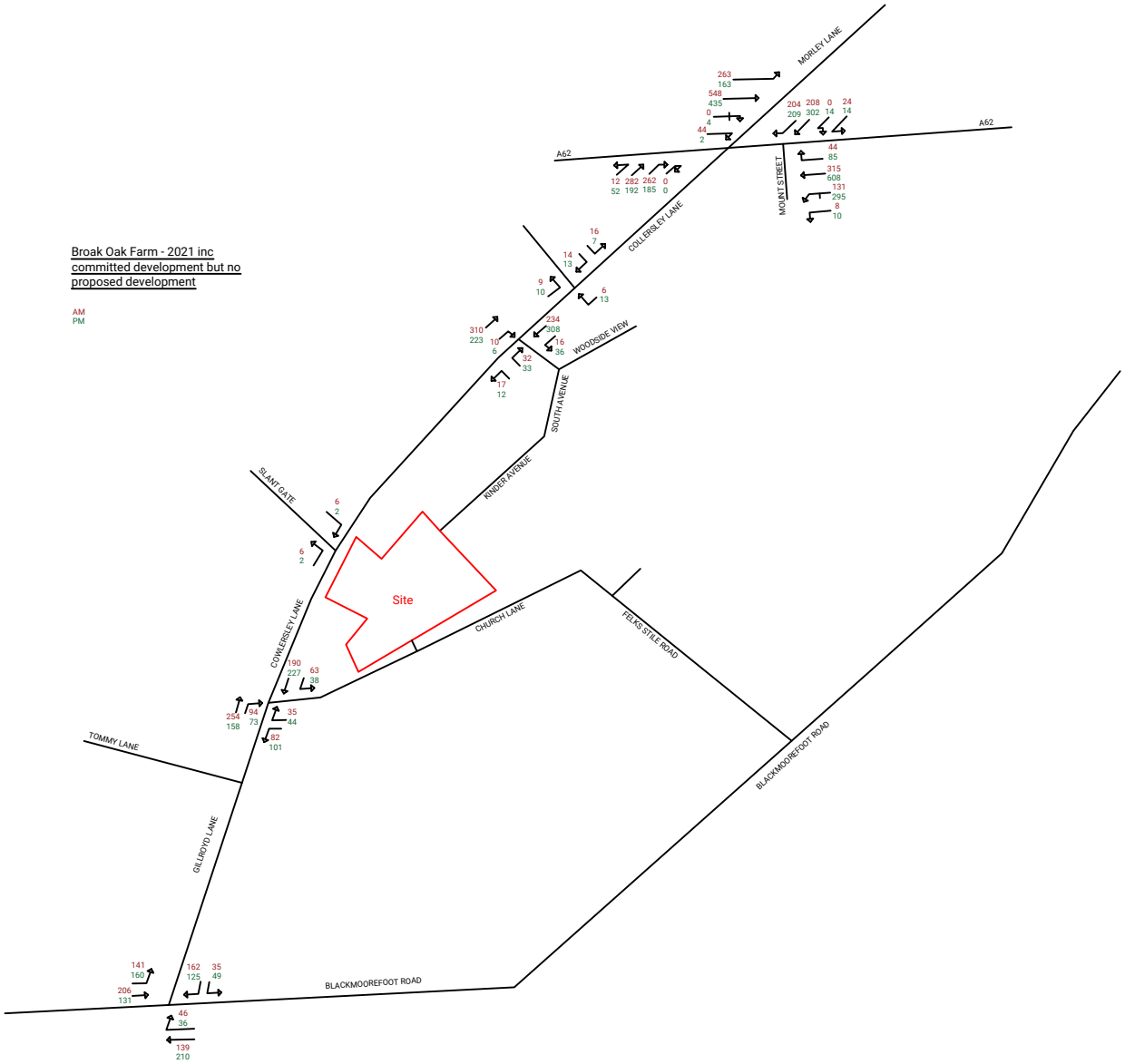
DRAWING

1098 - 4

DATE

16.04.2021

PARAGON HIGHWAYS
UNIT 6, THE OFFICE CAMPUS,
PARAGON BUSINESS PARK, RED HALL COURT,
WAKEFIELD WF1 2UY
01924 291536 /
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REVISIONS

PROJECT

BROAD OAK FARM, LINTHWAITE

TITLE

2021- INC COMMITTED DEVELOPMENT BUT NO PROPOSED DEVELOPMENT

SCALE

NTS @ A4

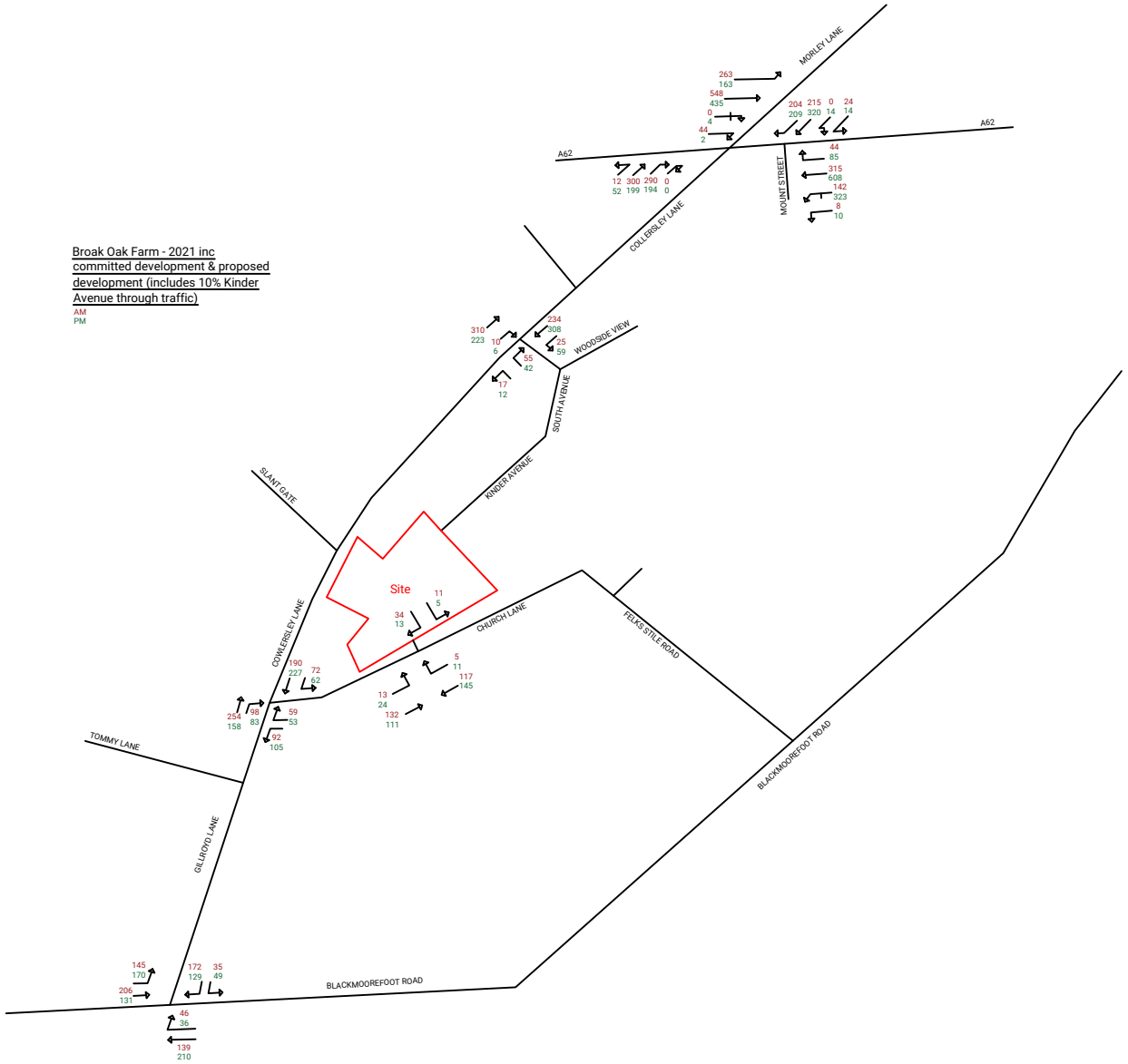
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1098 - 5

DATE

16.04.2021

PARAGON HIGHWAYS
UNIT 6, THE OFFICE CAMPUS,
PARAGON BUSINESS PARK, RED HALL COURT,
WAKEFIELD WF1 2UY
01924 291536 /
MAIL@PARAGONHIGHWAYS.COM



REVISIONS

PROJECT

BROAD OAK FARM, LINTHWAITE

TITLE

2021- INC COMMITTED DEVELOPMENT & PROPOSED DEVELOPMENT

SCALE

NTS @ A4

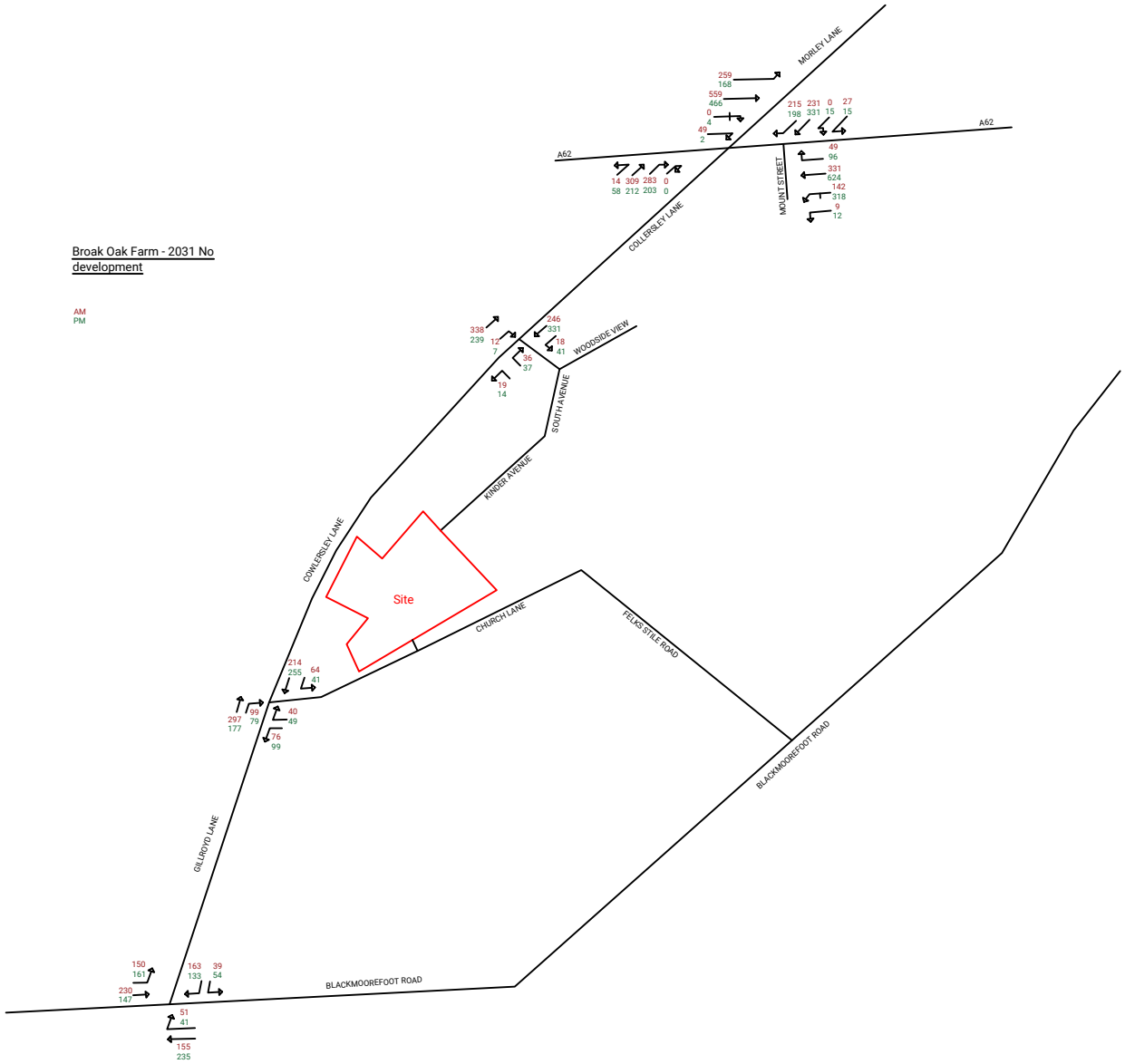
DRAWING

1098 - 6

DATE

16.04.2021

PARAGON HIGHWAYS
UNIT 6, THE OFFICE CAMPUS,
PARAGON BUSINESS PARK, RED HALL COURT,
WAKEFIELD WF1 2UY
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REVISIONS

PROJECT

BROAD OAK FARM, LINTHWAITE

TITLE

2031 - NO DEVELOPMENT

SCALE

NTS @ A4

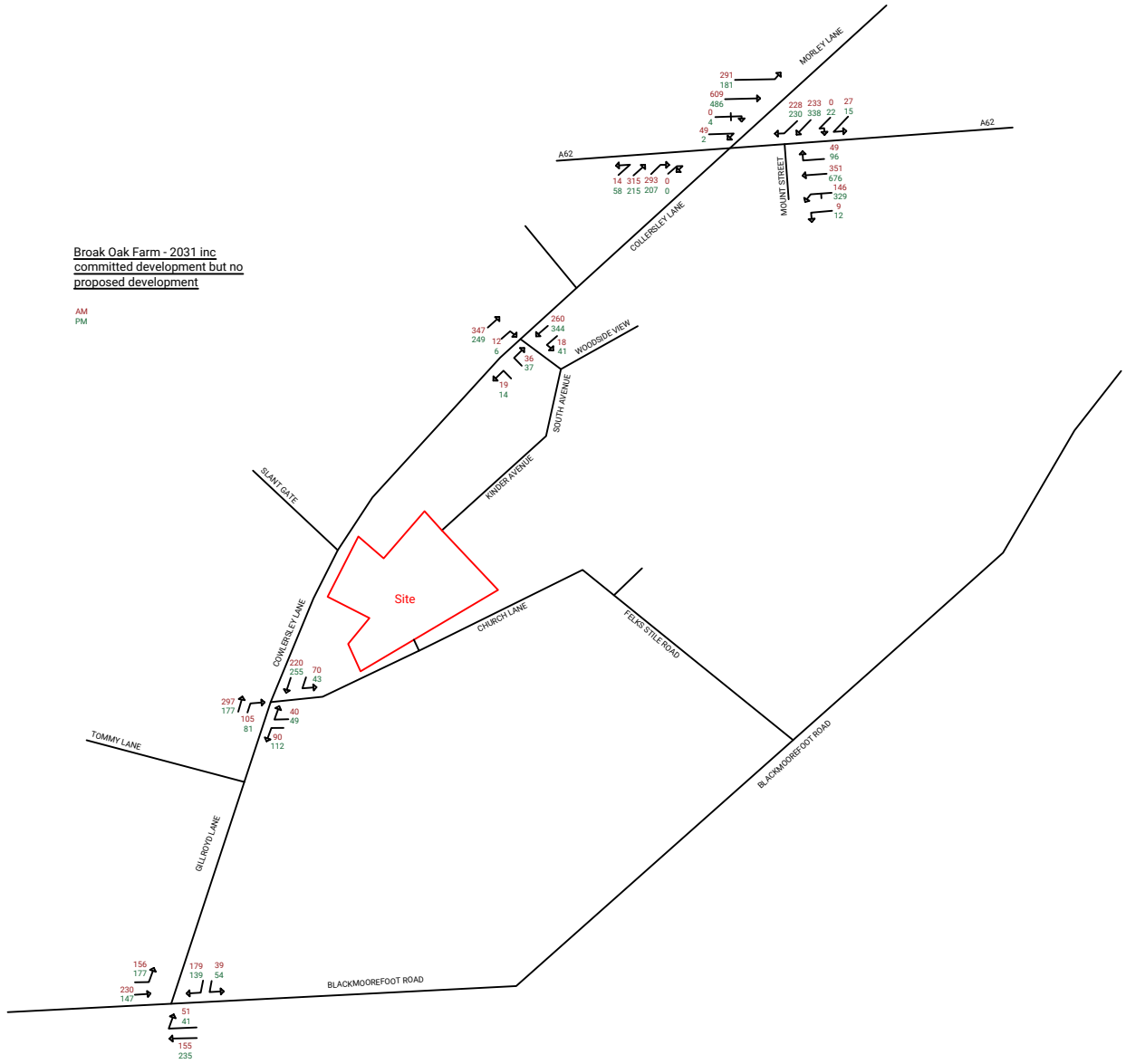
DRAWING

1098 - 7

DATE

16.04.2021

PARAGON HIGHWAYS
UNIT 6, THE OFFICE CAMPUS,
PARAGON BUSINESS PARK, RED HALL COURT,
WAKEFIELD WF1 2UY
01924 291536 /
MAIL@PARAGONHIGHWAYS.COM



REVISIONS

PROJECT

BROAD OAK FARM, LINTHWAITE

TITLE

2031 - INC COMMITTED DEVELOPMENT BUT NO PROPOSED DEVELOPMENT

SCALE

NTS @ A4

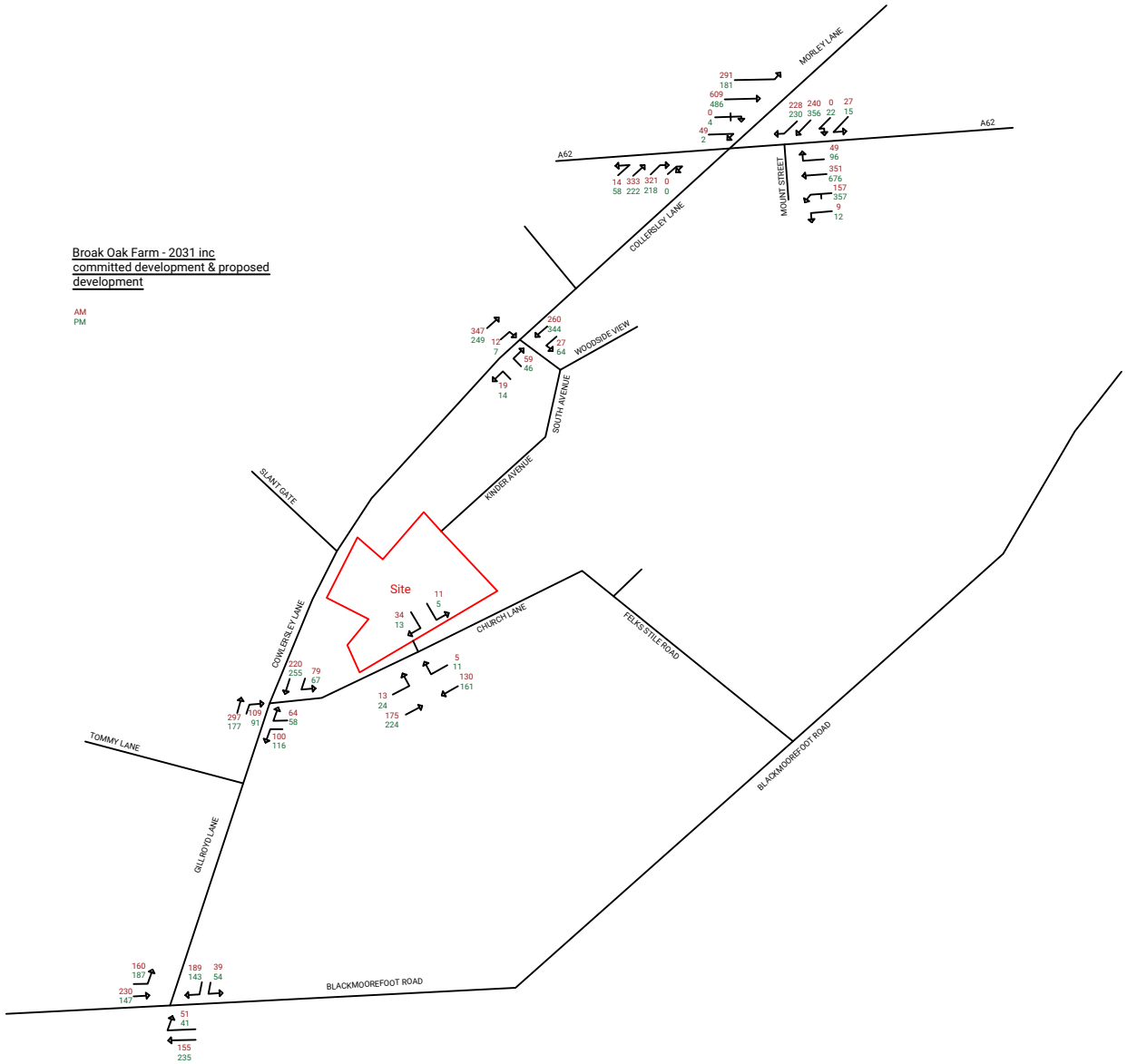
DRAWING

1098 - 8

DATE

16.04.2021

PARAGON HIGHWAYS
UNIT 6, THE OFFICE CAMPUS,
PARAGON BUSINESS PARK, RED HALL COURT,
WAKEFIELD WF1 2UY
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REVISIONS

PROJECT

BROAD OAK FARM, LINTHWAITE

TITLE

2031 - INC COMMITTED DEVELOPMENT & PROPOSED DEVELOPMENT

SCALE

NTS @ A4

DRAWING

1098 - 9

DATE

16.04.2021

PARAGON HIGHWAYS
UNIT 6, THE OFFICE CAMPUS,
PARAGON BUSINESS PARK, RED HALL COURT,
WAKEFIELD WF1 2UY
01924 291536 /
MAIL@PARAGONHIGHWAYS.COM

Appendix G

TRICS Data

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	2 days
	HF	HERTFORDSHIRE	1 days
	KC	KENT	1 days
	SC	SURREY	1 days
	WS	WEST SUSSEX	4 days
03	SOUTH WEST		
	DV	DEVON	2 days
04	EAST ANGLIA		
	NF	NORFOLK	1 days
	SF	SUFFOLK	1 days
06	WEST MIDLANDS		
	ST	STAFFORDSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	2 days
11	SCOTLAND		
	FA	FALKIRK	1 days
12	CONNAUGHT		
	LT	LEITRIM	1 days
	MA	MAYO	1 days
16	ULSTER (REPUBLIC OF IRELAND)		
	CV	CAVAN	1 days
	DN	DONEGAL	2 days
17	ULSTER (NORTHERN IRELAND)		
	AN	ANTRIM	2 days
	DO	DOWN	1 days
	TY	TYRONE	1 days

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

Secondary Filtering selection:

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

Parameter: Number of dwellings
Actual Range: 70 to 248 (units:)
Range Selected by User: 70 to 250 (units:)

Parking Spaces Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/11 to 08/07/19

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

Selected survey days:

Monday	5 days
Tuesday	2 days
Wednesday	6 days
Thursday	6 days
Friday	7 days

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

Selected survey types:

Manual count	26 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	10
Edge of Town	16

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

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	26 days

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

Population within 1 mile:

1,000 or Less	2 days
1,001 to 5,000	4 days
5,001 to 10,000	4 days
10,001 to 15,000	9 days
15,001 to 20,000	3 days
20,001 to 25,000	3 days
25,001 to 50,000	1 days

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

Population within 5 miles:

5,001 to 25,000	11 days
25,001 to 50,000	1 days
75,001 to 100,000	6 days
100,001 to 125,000	2 days
125,001 to 250,000	6 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	20 days
1.6 to 2.0	3 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	6 days
No	20 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	26 days

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

LIST OF SITES relevant to selection parameters

1 AN-03-A-08 HOUSES & FLATS ANTRIM
BALLINDERRY ROAD
LISBURN

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 204
Survey date: TUESDAY *29/10/13* *Survey Type: MANUAL*

2 AN-03-A-09 DETACHED & SEMI-DETACHED ANTRIM
SLOEFIELD DRIVE
CARRICKFERGUS

Edge of Town
No Sub Category
Total Number of dwellings: 151
Survey date: WEDNESDAY *12/10/16* *Survey Type: MANUAL*

3 CV-03-A-02 DETACHED & SEMI DETACHED CAVAN
R212 DUBLIN ROAD
CAVAN
KILLYNEBBER
Edge of Town
No Sub Category
Total Number of dwellings: 80
Survey date: MONDAY *22/05/17* *Survey Type: MANUAL*

4 DN-03-A-04 SEMI-DETACHED DONEGAL
GORTLEE ROAD
LETTERKENNY
GORTLEE
Edge of Town
Residential Zone
Total Number of dwellings: 83
Survey date: FRIDAY *26/09/14* *Survey Type: MANUAL*

5 DN-03-A-05 DETACHED/SEMI-DETACHED DONEGAL
GORTLEE ROAD
LETTERKENNY
GORTLEE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 146
Survey date: WEDNESDAY *03/09/14* *Survey Type: MANUAL*

6 DO-03-A-03 DETACHED/SEMI DETACHED DOWN
OLD MILL HEIGHTS
BELFAST
DUNDONALD
Edge of Town
Residential Zone
Total Number of dwellings: 79
Survey date: WEDNESDAY *23/10/13* *Survey Type: MANUAL*

7 DV-03-A-02 HOUSES & BUNGALOWS DEVON
MILLHEAD ROAD
HONITON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 116
Survey date: FRIDAY *25/09/15* *Survey Type: MANUAL*

8 DV-03-A-03 TERRACED & SEMI DETACHED DEVON
LOWER BRAND LANE
HONITON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 70
Survey date: MONDAY *28/09/15* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

9 ES-03-A-03 MIXED HOUSES & FLATS EAST SUSSEX
SHEPHAM LANE
POLEGATE

Edge of Town
Residential Zone
Total Number of dwellings: 212
Survey date: MONDAY *11/07/16* *Survey Type: MANUAL*

10 ES-03-A-04 MIXED HOUSES & FLATS EAST SUSSEX
NEW LYDD ROAD
CAMBER

Edge of Town
Residential Zone
Total Number of dwellings: 134
Survey date: FRIDAY *15/07/16* *Survey Type: MANUAL*

11 FA-03-A-02 MIXED HOUSES FALKIRK
ROSEBANK AVENUE & SPRINGFIELD DRIVE
FALKIRK

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 161
Survey date: WEDNESDAY *29/05/13* *Survey Type: MANUAL*

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

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

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

14 LT-03-A-01 SEMI-DETACHED & DETACHED LEITRIM
ARD NA SI
CARRICK-ON-SHANNON
ATTIRORY
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 90
Survey date: FRIDAY *24/04/15* *Survey Type: MANUAL*

15 MA-03-A-01 SEMI-DET. & TERRACED MAYO
N26 STATION ROAD
BALLINA

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 74
Survey date: FRIDAY *15/07/11* *Survey Type: MANUAL*

16 NF-03-A-02 HOUSES & FLATS NORFOLK
DEREHAM ROAD
NORWICH

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 98
Survey date: MONDAY *22/10/12* *Survey Type: MANUAL*

17 NY-03-A-06 BUNGALOWS & SEMI DET. NORTH YORKSHIRE
HORSEFAIR
BOROUGHBRIDGE

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 115
Survey date: FRIDAY *14/10/11* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

18 NY-03-A-10 HOUSES AND FLATS NORTH YORKSHIRE
BOROUGHBRIDGE ROAD
RIPON

Edge of Town
No Sub Category
Total Number of dwellings: 71
Survey date: TUESDAY *17/09/13* *Survey Type: MANUAL*

19 SC-03-A-04 DETACHED & TERRACED SURREY
HIGH ROAD
BYFLEET

Edge of Town
Residential Zone
Total Number of dwellings: 71
Survey date: THURSDAY *23/01/14* *Survey Type: MANUAL*

20 SF-03-A-07 MIXED HOUSES SUFFOLK
FOXHALL ROAD
IPSWICH

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 73
Survey date: THURSDAY *09/05/19* *Survey Type: MANUAL*

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

22 TY-03-A-02 SEMI DETACHED & BUNGALOWS TYRONE
SANDHOLES ROAD
COOKSTOWN
DERRYLORAN
Edge of Town
Industrial Zone
Total Number of dwellings: 101
Survey date: THURSDAY *14/03/19* *Survey Type: MANUAL*

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

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

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

25 WS-03-A-09 MIXED HOUSES & FLATS WEST SUSSEX
LITTLEHAMPTON ROAD
WORTHING
WEST DURRINGTON
Edge of Town
Residential Zone
Total Number of dwellings: 197
Survey date: THURSDAY *05/07/18* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

26 WS-03-A-10 MIXED HOUSES WEST SUSSEX
TODDINGTON LANE
LITTLEHAMPTON
WICK
Edge of Town
Residential Zone
Total Number of dwellings: 79
Survey date: WEDNESDAY *07/11/18* *Survey Type: MANUAL*

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

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

Ranking Type: TOTALS Time Range: 08:00-09:00
15th Percentile = No. 22 FA-03-A-02 Tot: 0.342
85th Percentile = No. 5 DV-03-A-03 Tot: 0.615

Median Values		Mean Values	
Arrivals:	0.118	Arrivals:	0.117
Departures:	0.376	Departures:	0.393
Totals:	0.494	Totals:	0.510

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Park Spaces
								Arrivals	Departures	Totals	Per Dwelling
1	TY-03-A-02	SEMI DETACHED	COOKSTOWN	TYRONE	101	Thu	14/03/19	0.208	0.713	0.921	4.19
2	AN-03-A-09	DETACHED & SEM	CARRICKFERGUS	ANTRIM	151	Wed	12/10/16	0.252	0.662	0.914	3.03
3	NY-03-A-10	HOUSES AND FLA	RIPON	NORTH YORKSHIRE	71	Tue	17/09/13	0.183	0.521	0.704	0.83
4	ES-03-A-03	MIXED HOUSES &	POLEGATE	EAST SUSSEX	212	Mon	11/07/16	0.165	0.462	0.627	1.68
5	DV-03-A-03	TERRACED & SEM	HONITON	DEVON	70	Mon	28/09/15	0.086	0.529	0.615	1.66
6	DO-03-A-03	DETACHED/SEMI	BELFAST	DOWN	79	Wed	23/10/13	0.089	0.519	0.608	2.62
7	DN-03-A-05	DETACHED/SEMI-	LETTERKENNY	DONEGAL	146	Wed	03/09/14	0.171	0.432	0.603	2.12
8	KC-03-A-04	SEMI-DETACHED	AYLESFORD	KENT	110	Fri	22/09/17	0.127	0.473	0.600	1.77
9	CV-03-A-02	DETACHED & SEM	CAVAN	CAVAN	80	Mon	22/05/17	0.150	0.438	0.588	3.48
10	DN-03-A-04	SEMI-DETACHED	LETTERKENNY	DONEGAL	83	Fri	26/09/14	0.145	0.422	0.567	2.19
11	SF-03-A-07	MIXED HOUSES	IPSWICH	SUFFOLK	73	Thu	09/05/19	0.082	0.438	0.520	2.32
12	MA-03-A-01	SEMI-DET. & TE	BALLINA	MAYO	74	Fri	15/07/11	0.041	0.459	0.500	3.23
13	NY-03-A-06	BUNGALOWS & SE	BOROUGHBRIDGE	NORTH YORKSHIRE	115	Fri	14/10/11	0.096	0.400	0.496	3.50
14	SC-03-A-04	DETACHED & TER	BYFLEET	SURREY	71	Thu	23/01/14	0.141	0.352	0.493	2.49
15	ST-03-A-07	DETACHED & SEM	STAFFORD	STAFFORDSHIRE	248	Wed	22/11/17	0.105	0.383	0.488	3.55
16	WS-03-A-08	MIXED HOUSES	ANGMERING	WEST SUSSEX	180	Thu	19/04/18	0.106	0.367	0.473	2.93
17	NF-03-A-02	HOUSES & FLATS	NORWICH	NORFOLK	98	Mon	22/10/12	0.122	0.347	0.469	2.24
18	HF-03-A-03	MIXED HOUSES	BUNTINGFORD	HERTFORDSHIRE	160	Mon	08/07/19	0.119	0.319	0.438	3.95
19	WS-03-A-09	MIXED HOUSES &	WORTHING	WEST SUSSEX	197	Thu	05/07/18	0.102	0.325	0.427	1.93
20	WS-03-A-04	MIXED HOUSES	HORSHAM	WEST SUSSEX	151	Thu	11/12/14	0.139	0.278	0.417	2.28
21	DV-03-A-02	HOUSES & BUNGA	HONITON	DEVON	116	Fri	25/09/15	0.103	0.241	0.344	2.25
22	FA-03-A-02	MIXED HOUSES	FALKIRK	FALKIRK	161	Wed	29/05/13	0.062	0.280	0.342	1.66
23	WS-03-A-10	MIXED HOUSES	LITTLEHAMPTON	WEST SUSSEX	79	Wed	07/11/18	0.089	0.241	0.330	2.41
24	LT-03-A-01	SEMI-DETACHED	CARRICK-ON-SHANNON	LEITRIM	90	Fri	24/04/15	0.067	0.256	0.323	2.07
25	AN-03-A-08	HOUSES & FLATS	LISBURN	ANTRIM	204	Tue	29/10/13	0.044	0.221	0.265	2.11
26	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
MULTI-MODAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	2 days
	HF	HERTFORDSHIRE	1 days
	KC	KENT	1 days
	SC	SURREY	1 days
	WS	WEST SUSSEX	4 days
03	SOUTH WEST		
	DV	DEVON	2 days
04	EAST ANGLIA		
	NF	NORFOLK	1 days
	SF	SUFFOLK	1 days
06	WEST MIDLANDS		
	ST	STAFFORDSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	2 days
11	SCOTLAND		
	FA	FALKIRK	1 days
12	CONNAUGHT		
	LT	LEITRIM	1 days
	MA	MAYO	1 days
16	ULSTER (REPUBLIC OF IRELAND)		
	CV	CAVAN	1 days
	DN	DONEGAL	2 days
17	ULSTER (NORTHERN IRELAND)		
	AN	ANTRIM	2 days
	DO	DOWN	1 days
	TY	TYRONE	1 days

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

Secondary Filtering selection:

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

Parameter: Number of dwellings
Actual Range: 70 to 248 (units:)
Range Selected by User: 70 to 250 (units:)

Parking Spaces Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/11 to 08/07/19

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

Selected survey days:

Monday	5 days
Tuesday	2 days
Wednesday	6 days
Thursday	6 days
Friday	7 days

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

Selected survey types:

Manual count	26 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	10
Edge of Town	16

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

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	26 days

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

Population within 1 mile:

1,000 or Less	2 days
1,001 to 5,000	4 days
5,001 to 10,000	4 days
10,001 to 15,000	9 days
15,001 to 20,000	3 days
20,001 to 25,000	3 days
25,001 to 50,000	1 days

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

Population within 5 miles:

5,001 to 25,000	11 days
25,001 to 50,000	1 days
75,001 to 100,000	6 days
100,001 to 125,000	2 days
125,001 to 250,000	6 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	20 days
1.6 to 2.0	3 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	6 days
No	20 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	26 days

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

LIST OF SITES relevant to selection parameters

1 AN-03-A-08 HOUSES & FLATS ANTRIM
BALLINDERRY ROAD
LISBURN

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 204
Survey date: TUESDAY *29/10/13* *Survey Type: MANUAL*

2 AN-03-A-09 DETACHED & SEMI-DETACHED ANTRIM
SLOEFIELD DRIVE
CARRICKFERGUS

Edge of Town
No Sub Category
Total Number of dwellings: 151
Survey date: WEDNESDAY *12/10/16* *Survey Type: MANUAL*

3 CV-03-A-02 DETACHED & SEMI DETACHED CAVAN
R212 DUBLIN ROAD
CAVAN
KILLYNEBBER
Edge of Town
No Sub Category
Total Number of dwellings: 80
Survey date: MONDAY *22/05/17* *Survey Type: MANUAL*

4 DN-03-A-04 SEMI-DETACHED DONEGAL
GORTLEE ROAD
LETTERKENNY
GORTLEE
Edge of Town
Residential Zone
Total Number of dwellings: 83
Survey date: FRIDAY *26/09/14* *Survey Type: MANUAL*

5 DN-03-A-05 DETACHED/SEMI-DETACHED DONEGAL
GORTLEE ROAD
LETTERKENNY
GORTLEE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 146
Survey date: WEDNESDAY *03/09/14* *Survey Type: MANUAL*

6 DO-03-A-03 DETACHED/SEMI DETACHED DOWN
OLD MILL HEIGHTS
BELFAST
DUNDONALD
Edge of Town
Residential Zone
Total Number of dwellings: 79
Survey date: WEDNESDAY *23/10/13* *Survey Type: MANUAL*

7 DV-03-A-02 HOUSES & BUNGALOWS DEVON
MILLHEAD ROAD
HONITON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 116
Survey date: FRIDAY *25/09/15* *Survey Type: MANUAL*

8 DV-03-A-03 TERRACED & SEMI DETACHED DEVON
LOWER BRAND LANE
HONITON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 70
Survey date: MONDAY *28/09/15* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

9 ES-03-A-03 MIXED HOUSES & FLATS EAST SUSSEX
SHEPHAM LANE
POLEGATE

Edge of Town
Residential Zone
Total Number of dwellings: 212
Survey date: MONDAY *11/07/16* *Survey Type: MANUAL*

10 ES-03-A-04 MIXED HOUSES & FLATS EAST SUSSEX
NEW LYDD ROAD
CAMBER

Edge of Town
Residential Zone
Total Number of dwellings: 134
Survey date: FRIDAY *15/07/16* *Survey Type: MANUAL*

11 FA-03-A-02 MIXED HOUSES FALKIRK
ROSEBANK AVENUE & SPRINGFIELD DRIVE
FALKIRK

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 161
Survey date: WEDNESDAY *29/05/13* *Survey Type: MANUAL*

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

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

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

14 LT-03-A-01 SEMI-DETACHED & DETACHED LEITRIM
ARD NA SI
CARRICK-ON-SHANNON
ATTIRORY
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 90
Survey date: FRIDAY *24/04/15* *Survey Type: MANUAL*

15 MA-03-A-01 SEMI-DET. & TERRACED MAYO
N26 STATION ROAD
BALLINA

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 74
Survey date: FRIDAY *15/07/11* *Survey Type: MANUAL*

16 NF-03-A-02 HOUSES & FLATS NORFOLK
DEREHAM ROAD
NORWICH

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 98
Survey date: MONDAY *22/10/12* *Survey Type: MANUAL*

17 NY-03-A-06 BUNGALOWS & SEMI DET. NORTH YORKSHIRE
HORSEFAIR
BOROUGHBRIDGE

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 115
Survey date: FRIDAY *14/10/11* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

18 NY-03-A-10 HOUSES AND FLATS NORTH YORKSHIRE
BOROUGHBRIDGE ROAD
RIPON

Edge of Town
No Sub Category
Total Number of dwellings: 71
Survey date: TUESDAY *17/09/13* *Survey Type: MANUAL*

19 SC-03-A-04 DETACHED & TERRACED SURREY
HIGH ROAD
BYFLEET

Edge of Town
Residential Zone
Total Number of dwellings: 71
Survey date: THURSDAY *23/01/14* *Survey Type: MANUAL*

20 SF-03-A-07 MIXED HOUSES SUFFOLK
FOXHALL ROAD
IPSWICH

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 73
Survey date: THURSDAY *09/05/19* *Survey Type: MANUAL*

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

22 TY-03-A-02 SEMI DETACHED & BUNGALOWS TYRONE
SANDHOLES ROAD
COOKSTOWN
DERRYLORAN
Edge of Town
Industrial Zone
Total Number of dwellings: 101
Survey date: THURSDAY *14/03/19* *Survey Type: MANUAL*

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

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

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

25 WS-03-A-09 MIXED HOUSES & FLATS WEST SUSSEX
LITTLEHAMPTON ROAD
WORTHING
WEST DURRINGTON
Edge of Town
Residential Zone
Total Number of dwellings: 197
Survey date: THURSDAY *05/07/18* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

26 WS-03-A-10 MIXED HOUSES WEST SUSSEX
TODDINGTON LANE
LITTLEHAMPTON
WICK
Edge of Town
Residential Zone
Total Number of dwellings: 79
Survey date: WEDNESDAY *07/11/18* *Survey Type: MANUAL*

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

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

Ranking Type: TOTALS Time Range: 17:00-18:00
15th Percentile = No. 22 WS-03-A-09 Tot: 0.401
85th Percentile = No. 5 DN-03-A-05 Tot: 0.740

Median Values		Mean Values	
Arrivals:	0.289	Arrivals:	0.376
Departures:	0.221	Departures:	0.196
Totals:	0.510	Totals:	0.572

Rank	Site-Ref	Description	Town/City	Area	DWELLS	Day	Date	Trip Rate (Sorted by Totals)			Park Spaces
								Arrivals	Departures	Totals	Per Dwelling
1	TY-03-A-02	SEMI DETACHED	COOKSTOWN	TYRONE	101	Thu	14/03/19	0.871	0.426	1.297	4.19
2	AN-03-A-09	DETACHED & SEM	CARRICKFERGUS	ANTRIM	151	Wed	12/10/16	0.636	0.351	0.987	3.03
3	DO-03-A-03	DETACHED/SEMI	BELFAST	DOWN	79	Wed	23/10/13	0.595	0.266	0.861	2.62
4	AN-03-A-08	HOUSES & FLATS	LISBURN	ANTRIM	204	Tue	29/10/13	0.520	0.225	0.745	2.11
5	DN-03-A-05	DETACHED/SEMI-	LETTERKENNY	DONEGAL	146	Wed	03/09/14	0.445	0.295	0.740	2.12
6	SF-03-A-07	MIXED HOUSES	IPSWICH	SUFFOLK	73	Thu	09/05/19	0.438	0.288	0.726	2.32
7	ES-03-A-03	MIXED HOUSES &	POLEGATE	EAST SUSSEX	212	Mon	11/07/16	0.434	0.217	0.651	1.68
8	MA-03-A-01	SEMI-DET. & TE	BALLINA	MAYO	74	Fri	15/07/11	0.392	0.243	0.635	3.23
9	DV-03-A-02	HOUSES & BUNGA	HONITON	DEVON	116	Fri	25/09/15	0.388	0.233	0.621	2.25
10	LT-03-A-01	SEMI-DETACHED	CARRICK-ON-SHANNON	LEITRIM	90	Fri	24/04/15	0.344	0.244	0.588	2.07
11	NY-03-A-10	HOUSES AND FLA	RIPON	NORTH YORKSHIRE	71	Tue	17/09/13	0.479	0.099	0.578	0.83
12	FA-03-A-02	MIXED HOUSES	FALKIRK	FALKIRK	161	Wed	29/05/13	0.317	0.224	0.541	1.66
13	CV-03-A-02	DETACHED & SEM	CAVAN	CAVAN	80	Mon	22/05/17	0.300	0.237	0.537	3.48
14	WS-03-A-08	MIXED HOUSES	ANGMERING	WEST SUSSEX	180	Thu	19/04/18	0.278	0.206	0.484	2.93
15	DV-03-A-03	TERRACED & SEM	HONITON	DEVON	70	Mon	28/09/15	0.371	0.100	0.471	1.66
16	NY-03-A-06	BUNGALOWS & SE	BOROUGHBRIDGE	NORTH YORKSHIRE	115	Fri	14/10/11	0.296	0.174	0.470	3.50
17	SC-03-A-04	DETACHED & TER	BYFLEET	SURREY	71	Thu	23/01/14	0.366	0.099	0.465	2.49
18	HF-03-A-03	MIXED HOUSES	BUNTINGFORD	HERTFORDSHIRE	160	Mon	08/07/19	0.287	0.169	0.456	3.95
19	ST-03-A-07	DETACHED & SEM	STAFFORD	STAFFORDSHIRE	248	Wed	22/11/17	0.319	0.125	0.444	3.55
20	WS-03-A-10	MIXED HOUSES	LITTLEHAMPTON	WEST SUSSEX	79	Wed	07/11/18	0.266	0.152	0.418	2.41
21	DN-03-A-04	SEMI-DETACHED	LETTERKENNY	DONEGAL	83	Fri	26/09/14	0.217	0.193	0.410	2.19
22	WS-03-A-09	MIXED HOUSES &	WORTHING	WEST SUSSEX	197	Thu	05/07/18	0.305	0.096	0.401	1.93
23	NF-03-A-02	HOUSES & FLATS	NORWICH	NORFOLK	98	Mon	22/10/12	0.235	0.143	0.378	2.24
24	WS-03-A-04	MIXED HOUSES	HORSHAM	WEST SUSSEX	151	Thu	11/12/14	0.252	0.119	0.371	2.28
25	KC-03-A-04	SEMI-DETACHED	AYLESFORD	KENT	110	Fri	22/09/17	0.273	0.064	0.337	1.77
26	ES-03-A-04	MIXED HOUSES &	CAMBER	EAST SUSSEX	134	Fri	15/07/16	0.157	0.112	0.269	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.

Appendix H

PICADY Output

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: Site Access 2021.j9
Path: \\pah-server\Paragon\Projects\Broad Oak Farm, Linthwaite - 1098\PICADY\Site Access Church Lane\2021 TA
Report generation date: 19/04/2021 13:37:50

»2021 with dev, AM
»2021 with dev, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2021 with dev							
Stream B-C	0.0	6.61	0.02	A	0.0	6.36	0.01	A
Stream B-A	0.1	8.41	0.07	A	0.0	8.08	0.03	A
Stream C-AB	0.0	5.88	0.01	A	0.0	5.79	0.02	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	Broad Oak Farm
Location	Site Access/ Church Lane
Site number	1098
Date	08/03/2020
Version	
Status	
Identifier	
Client	
Jobnumber	1098
Enumerator	LO
Description	2021 with development

Units

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

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	2021 with dev	AM	ONE HOUR	08:00	09:30	15
D2	2021 with dev	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2021 with dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	1.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Church Lane	west of access	Major
B	Site Access		Minor
C	Church Lane	east of access	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	9.75			120.0	✓	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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	5.50	3.80	3.65	3.65	✓	1.00	41	32

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	560	0.085	0.216	0.136	0.308
1	B-C	655	0.084	0.212	-	-
1	C-B	643	0.209	0.209	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2021 with dev	AM	ONE HOUR	08:00	09:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	145	100.000
B		✓	45	100.000
C		✓	122	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	13	132
	B	34	0	11
	C	117	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.02	6.61	0.0	A
B-A	0.07	8.41	0.1	A
C-AB	0.01	5.88	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	8	625	0.013	8	0.0	6.415	A
B-A	26	525	0.049	25	0.1	7.930	A
C-AB	4	678	0.006	4	0.0	5.874	A
C-A	88			88			
A-B	10			10			
A-C	99			99			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	10	619	0.016	10	0.0	6.495	A
B-A	31	518	0.059	31	0.1	8.127	A
C-AB	5	685	0.008	5	0.0	5.821	A
C-A	104			104			
A-B	12			12			
A-C	119			119			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	12	611	0.020	12	0.0	6.609	A
B-A	37	508	0.074	37	0.1	8.410	A
C-AB	7	695	0.010	7	0.0	5.750	A
C-A	128			128			
A-B	14			14			
A-C	145			145			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	12	611	0.020	12	0.0	6.609	A
B-A	37	508	0.074	37	0.1	8.412	A
C-AB	7	695	0.010	7	0.0	5.752	A
C-A	128			128			
A-B	14			14			
A-C	145			145			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	10	619	0.016	10	0.0	6.496	A
B-A	31	518	0.059	31	0.1	8.133	A
C-AB	5	685	0.008	5	0.0	5.822	A
C-A	104			104			
A-B	12			12			
A-C	119			119			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	8	625	0.013	8	0.0	6.417	A
B-A	26	525	0.049	26	0.1	7.939	A
C-AB	4	678	0.006	4	0.0	5.876	A
C-A	88			88			
A-B	10			10			
A-C	99			99			

2021 with dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2021 with dev	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	135	100.000
B		✓	18	100.000
C		✓	156	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	24	111
	B	13	0	5
	C	145	11	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.01	6.36	0.0	A
B-A	0.03	8.08	0.0	A
C-AB	0.02	5.79	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	639	0.006	4	0.0	6.236	A
B-A	10	521	0.019	10	0.0	7.740	A
C-AB	10	694	0.014	10	0.0	5.790	A
C-A	108			108			
A-B	18			18			
A-C	84			84			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	634	0.007	4	0.0	6.288	A
B-A	12	514	0.023	12	0.0	7.881	A
C-AB	12	704	0.017	12	0.0	5.725	A
C-A	128			128			
A-B	22			22			
A-C	100			100			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	6	628	0.009	5	0.0	6.360	A
B-A	14	504	0.028	14	0.0	8.082	A
C-AB	16	718	0.022	16	0.0	5.638	A
C-A	156			156			
A-B	26			26			
A-C	122			122			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	6	628	0.009	6	0.0	6.360	A
B-A	14	504	0.028	14	0.0	8.082	A
C-AB	16	718	0.022	16	0.0	5.641	A
C-A	156			156			
A-B	26			26			
A-C	122			122			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	634	0.007	5	0.0	6.291	A
B-A	12	514	0.023	12	0.0	7.883	A
C-AB	12	704	0.017	12	0.0	5.726	A
C-A	128			128			
A-B	22			22			
A-C	100			100			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	639	0.006	4	0.0	6.237	A
B-A	10	521	0.019	10	0.0	7.744	A
C-AB	10	694	0.014	10	0.0	5.790	A
C-A	108			108			
A-B	18			18			
A-C	84			84			

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: Site Access 2031.j9
Path: \\pah-server\Paragon\Projects\Broad Oak Farm, Linthwaite - 1098\PICADY\Site Access Church Lane\2021 TA
Report generation date: 19/04/2021 13:43:52

»2031 with dev, AM
»2031 with dev, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2031 with dev							
Stream B-C	0.0	6.72	0.02	A	0.0	6.65	0.01	A
Stream B-A	0.1	8.63	0.08	A	0.0	8.59	0.03	A
Stream C-AB	0.0	5.88	0.01	A	0.0	5.87	0.02	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	Broad Oak Farm
Location	Site Access/ Church Lane
Site number	1098
Date	19/04/2021
Version	
Status	
Identifier	
Client	
Jobnumber	1098
Enumerator	LO
Description	2031 with development

Units

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

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	2031 with dev	AM	ONE HOUR	08:00	09:30	15
D2	2031 with dev	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 with dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	1.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Church Lane	west of access	Major
B	Site Access		Minor
C	Church Lane	east of access	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	9.75			120.0	✓	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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	5.50	3.80	3.65	3.65	✓	1.00	41	32

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	560	0.085	0.216	0.136	0.308
1	B-C	655	0.084	0.212	-	-
1	C-B	643	0.209	0.209	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 with dev	AM	ONE HOUR	08:00	09:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	188	100.000
B		✓	45	100.000
C		✓	135	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	13	175
	B	34	0	11
	C	130	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.02	6.72	0.0	A
B-A	0.08	8.63	0.1	A
C-AB	0.01	5.88	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	8	619	0.013	8	0.0	6.488	A
B-A	26	516	0.050	25	0.1	8.064	A
C-AB	4	678	0.006	4	0.0	5.874	A
C-A	97			97			
A-B	10			10			
A-C	132			132			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	10	611	0.016	10	0.0	6.585	A
B-A	31	508	0.060	31	0.1	8.296	A
C-AB	5	686	0.008	5	0.0	5.821	A
C-A	116			116			
A-B	12			12			
A-C	157			157			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	12	601	0.020	12	0.0	6.723	A
B-A	37	496	0.075	37	0.1	8.633	A
C-AB	7	696	0.010	7	0.0	5.749	A
C-A	142			142			
A-B	14			14			
A-C	193			193			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	12	601	0.020	12	0.0	6.723	A
B-A	37	496	0.075	37	0.1	8.635	A
C-AB	7	696	0.010	7	0.0	5.751	A
C-A	142			142			
A-B	14			14			
A-C	193			193			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	10	611	0.016	10	0.0	6.588	A
B-A	31	508	0.060	31	0.1	8.302	A
C-AB	5	686	0.008	5	0.0	5.824	A
C-A	116			116			
A-B	12			12			
A-C	157			157			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	8	618	0.013	8	0.0	6.490	A
B-A	26	516	0.050	26	0.1	8.074	A
C-AB	4	678	0.006	4	0.0	5.877	A
C-A	97			97			
A-B	10			10			
A-C	132			132			

2031 with dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2031 with dev	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	248	100.000
B		✓	18	100.000
C		✓	172	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	24	224
	B	13	0	5
	C	161	11	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.01	6.65	0.0	A
B-A	0.03	8.59	0.0	A
C-AB	0.02	5.87	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	620	0.006	4	0.0	6.421	A
B-A	10	501	0.020	10	0.0	8.054	A
C-AB	10	685	0.015	10	0.0	5.866	A
C-A	119			119			
A-B	18			18			
A-C	169			169			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	612	0.007	4	0.0	6.513	A
B-A	12	490	0.024	12	0.0	8.273	A
C-AB	13	694	0.018	12	0.0	5.812	A
C-A	142			142			
A-B	22			22			
A-C	201			201			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	6	601	0.009	5	0.0	6.645	A
B-A	14	475	0.030	14	0.0	8.593	A
C-AB	16	706	0.023	16	0.0	5.740	A
C-A	173			173			
A-B	26			26			
A-C	247			247			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	6	601	0.009	6	0.0	6.645	A
B-A	14	475	0.030	14	0.0	8.593	A
C-AB	16	706	0.023	16	0.0	5.742	A
C-A	173			173			
A-B	26			26			
A-C	247			247			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	612	0.007	5	0.0	6.514	A
B-A	12	490	0.024	12	0.0	8.275	A
C-AB	13	694	0.018	13	0.0	5.813	A
C-A	142			142			
A-B	22			22			
A-C	201			201			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	4	620	0.006	4	0.0	6.425	A
B-A	10	501	0.020	10	0.0	8.056	A
C-AB	10	685	0.015	10	0.0	5.867	A
C-A	119			119			
A-B	18			18			
A-C	169			169			

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 2021 No Dev.j9
Path: \\pah-server\Paragon\Projects\Broad Oak Farm, Linthwaite - 1098\PICADY\Church Lane Gillroyd Junction\2021 TA
Report generation date: 19/04/2021 15:28:52

»2021 No Dev, AM
»2021 No Dev, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2021 No Dev							
Stream B-C	0.2	7.72	0.13	A	0.2	8.22	0.17	A
Stream B-A	0.1	12.99	0.11	B	0.2	12.97	0.14	B
Stream C-AB	0.4	6.45	0.20	A	0.3	6.75	0.15	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	Broad Oak Farm
Location	Church Lane/ Gillroyd Lane Junc
Site number	1098
Date	19/04/2021
Version	
Status	
Identifier	
Client	
Jobnumber	1098
Enumerator	LO
Description	2021 No Dev

Units

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

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	2021 No Dev	AM	ONE HOUR	08:00	09:30	15
D2	2021 No Dev	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2021 No Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	2.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Cowlersley Lane	north of junc	Major
B	Church Lane		Minor
C	Gillroyd Lane	south of junction	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	8.40			110.0	✓	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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	8.50	4.70	4.50	4.50	4.50	✓	3.00	36	15

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	444	0.072	0.183	0.115	0.261
1	B-C	659	0.090	0.229	-	-
1	C-B	638	0.221	0.221	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2021 No Dev	AM	ONE HOUR	08:00	09:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	247	100.000
B		✓	103	100.000
C		✓	342	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	57	190
	B	35	0	68
	C	254	88	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.13	7.72	0.2	A
B-A	0.11	12.99	0.1	B
C-AB	0.20	6.45	0.4	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	51	611	0.084	51	0.1	7.059	A
B-A	26	375	0.070	26	0.1	11.333	B
C-AB	90	724	0.124	89	0.2	6.232	A
C-A	167			167			
A-B	43			43			
A-C	143			143			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	61	602	0.102	61	0.1	7.326	A
B-A	31	362	0.087	31	0.1	11.983	B
C-AB	115	742	0.154	114	0.3	6.310	A
C-A	193			193			
A-B	51			51			
A-C	171			171			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	75	588	0.127	75	0.2	7.713	A
B-A	39	343	0.112	38	0.1	12.983	B
C-AB	153	768	0.199	152	0.4	6.441	A
C-A	224			224			
A-B	63			63			
A-C	209			209			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	75	588	0.127	75	0.2	7.718	A
B-A	39	343	0.112	39	0.1	12.995	B
C-AB	153	768	0.199	153	0.4	6.453	A
C-A	224			224			
A-B	63			63			
A-C	209			209			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	61	601	0.102	61	0.1	7.336	A
B-A	31	362	0.087	32	0.1	11.999	B
C-AB	115	743	0.154	115	0.3	6.321	A
C-A	193			193			
A-B	51			51			
A-C	171			171			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	51	611	0.084	51	0.1	7.076	A
B-A	26	375	0.070	26	0.1	11.359	B
C-AB	90	725	0.125	91	0.2	6.254	A
C-A	167			167			
A-B	43			43			
A-C	143			143			

2021 No Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	3.06	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2021 No Dev	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	263	100.000
B		✓	132	100.000
C		✓	229	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	36	227
	B	44	0	88
	C	158	71	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.17	8.22	0.2	A
B-A	0.14	12.97	0.2	B
C-AB	0.15	6.75	0.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	66	605	0.109	66	0.1	7.329	A
B-A	33	382	0.087	33	0.1	11.334	B
C-AB	65	674	0.096	64	0.1	6.497	A
C-A	107			107			
A-B	27			27			
A-C	171			171			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	79	594	0.133	79	0.2	7.686	A
B-A	40	370	0.107	39	0.1	11.975	B
C-AB	81	681	0.119	81	0.2	6.593	A
C-A	125			125			
A-B	32			32			
A-C	204			204			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	97	579	0.167	97	0.2	8.213	A
B-A	48	354	0.137	48	0.2	12.961	B
C-AB	105	692	0.151	104	0.3	6.738	A
C-A	148			148			
A-B	40			40			
A-C	250			250			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	97	578	0.167	97	0.2	8.222	A
B-A	48	354	0.137	48	0.2	12.974	B
C-AB	105	692	0.151	105	0.3	6.746	A
C-A	147			147			
A-B	40			40			
A-C	250			250			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	79	594	0.133	79	0.2	7.700	A
B-A	40	370	0.107	40	0.1	11.994	B
C-AB	81	681	0.119	81	0.2	6.605	A
C-A	125			125			
A-B	32			32			
A-C	204			204			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	66	605	0.110	66	0.1	7.354	A
B-A	33	382	0.087	33	0.1	11.362	B
C-AB	65	674	0.097	65	0.1	6.511	A
C-A	107			107			
A-B	27			27			
A-C	171			171			

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 2021 Inc Comm Dev No Prop Dev.j9
Path: \\pah-server\Paragon\Projects\Broad Oak Farm, Linthwaite - 1098\PICADY\Church Lane Gillroyd Junction\2021 TA
Report generation date: 19/04/2021 15:35:16

»2021 Plus Comm No Dev, AM
»2021 Plus Comm No Dev, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2021 Plus Comm No Dev							
Stream B-C	0.2	7.84	0.15	A	0.3	8.37	0.19	A
Stream B-A	0.1	13.34	0.11	B	0.2	13.19	0.14	B
Stream C-AB	0.4	6.58	0.21	A	0.3	6.79	0.16	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	Broad Oak Farm
Location	Church Lane/ Gillroyd Lane Junc
Site number	1098
Date	19/04/2021
Version	
Status	
Identifier	
Client	
Jobnumber	1098
Enumerator	LO
Description	2021 Including Committed No Proposed Development

Units

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

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	2021 Plus Comm No Dev	AM	ONE HOUR	08:00	09:30	15
D2	2021 Plus Comm No Dev	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2021 Plus Comm No Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	2.82	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Cowlersley Lane	north of junc	Major
B	Church Lane		Minor
C	Gillroyd Lane	south of junction	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	8.40			110.0	✓	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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	8.50	4.70	4.50	4.50	4.50	✓	3.00	36	15

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	436	0.071	0.180	0.113	0.257
1	B-C	668	0.092	0.232	-	-
1	C-B	638	0.221	0.221	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2021 Plus Comm No Dev	AM	ONE HOUR	08:00	09:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	253	100.000
B		✓	117	100.000
C		✓	348	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	63	190
	B	35	0	82
	C	254	94	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.15	7.84	0.2	A
B-A	0.11	13.34	0.1	B
C-AB	0.21	6.58	0.4	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	62	619	0.100	61	0.1	7.087	A
B-A	26	367	0.072	26	0.1	11.590	B
C-AB	96	723	0.133	95	0.2	6.299	A
C-A	166			166			
A-B	47			47			
A-C	143			143			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	74	609	0.121	74	0.2	7.389	A
B-A	31	354	0.089	31	0.1	12.273	B
C-AB	122	741	0.165	122	0.3	6.400	A
C-A	190			190			
A-B	57			57			
A-C	171			171			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	90	595	0.152	90	0.2	7.834	A
B-A	39	335	0.115	38	0.1	13.328	B
C-AB	163	766	0.213	163	0.4	6.566	A
C-A	220			220			
A-B	69			69			
A-C	209			209			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	90	595	0.152	90	0.2	7.841	A
B-A	39	335	0.115	39	0.1	13.341	B
C-AB	164	767	0.213	164	0.4	6.580	A
C-A	220			220			
A-B	69			69			
A-C	209			209			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	74	609	0.121	74	0.2	7.403	A
B-A	31	354	0.089	32	0.1	12.290	B
C-AB	123	742	0.165	123	0.3	6.416	A
C-A	190			190			
A-B	57			57			
A-C	171			171			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	62	619	0.100	62	0.1	7.110	A
B-A	26	367	0.072	26	0.1	11.617	B
C-AB	97	724	0.133	97	0.2	6.323	A
C-A	165			165			
A-B	47			47			
A-C	143			143			

2021 Plus Comm No Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	3.22	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2021 Plus Comm No Dev	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	265	100.000
B		✓	145	100.000
C		✓	231	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	38	227
	B	44	0	101
	C	158	73	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.19	8.37	0.3	A
B-A	0.14	13.19	0.2	B
C-AB	0.16	6.79	0.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	76	611	0.124	75	0.2	7.381	A
B-A	33	377	0.088	33	0.1	11.499	B
C-AB	67	673	0.099	66	0.1	6.514	A
C-A	107			107			
A-B	29			29			
A-C	171			171			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	91	600	0.151	91	0.2	7.773	A
B-A	40	365	0.108	39	0.1	12.164	B
C-AB	83	681	0.122	83	0.2	6.622	A
C-A	125			125			
A-B	34			34			
A-C	204			204			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	111	584	0.190	111	0.3	8.364	A
B-A	48	349	0.139	48	0.2	13.177	B
C-AB	108	692	0.156	107	0.3	6.777	A
C-A	147			147			
A-B	42			42			
A-C	250			250			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	111	584	0.190	111	0.3	8.375	A
B-A	48	349	0.139	48	0.2	13.194	B
C-AB	108	692	0.156	108	0.3	6.785	A
C-A	147			147			
A-B	42			42			
A-C	250			250			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	91	600	0.151	91	0.2	7.789	A
B-A	40	365	0.108	40	0.1	12.184	B
C-AB	83	681	0.122	83	0.2	6.632	A
C-A	125			125			
A-B	34			34			
A-C	204			204			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	76	611	0.124	76	0.2	7.407	A
B-A	33	377	0.088	33	0.1	11.533	B
C-AB	67	673	0.099	67	0.2	6.535	A
C-A	107			107			
A-B	29			29			
A-C	171			171			

Junctions 9

PICADY 9 - Priority Intersection Module

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Filename: 2021 Inc Comm Dev Plus Prop Dev.j9
Path: \\pah-server\Paragon\Projects\Broad Oak Farm, Linthwaite - 1098\PICADY\Church Lane Gillroyd Junction\2021 TA
Report generation date: 19/04/2021 15:39:04

»2021 Plus Comm Plus Dev, AM
»2021 Plus Comm Plus Dev, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2021 Plus Comm Plus Dev							
Stream B-C	0.3	8.71	0.20	A	0.3	8.70	0.20	A
Stream B-A	0.3	14.30	0.19	B	0.2	13.66	0.17	B
Stream C-AB	0.5	6.68	0.22	A	0.3	7.03	0.18	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	Broad Oak Farm
Location	Church Lane/ Gillroyd Lane Junc
Site number	1098
Date	19/04/2021
Version	
Status	
Identifier	
Client	
Jobnumber	1098
Enumerator	LO
Description	2021 Including Committed Plus Proposed Development

Units

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

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	2021 Plus Comm Plus Dev	AM	ONE HOUR	08:00	09:30	15
D2	2021 Plus Comm Plus Dev	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2021 Plus Comm Plus Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	3.50	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Cowlersley Lane	north of junc	Major
B	Church Lane		Minor
C	Gillroyd Lane	south of junction	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	8.40			110.0	✓	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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	8.50	4.70	4.50	4.50	4.50	✓	3.00	36	15

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	447	0.073	0.184	0.116	0.263
1	B-C	654	0.090	0.227	-	-
1	C-B	638	0.221	0.221	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2021 Plus Comm Plus Dev	AM	ONE HOUR	08:00	09:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	262	100.000
B		✓	164	100.000
C		✓	352	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	72	190
	B	59	0	105
	C	254	98	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.20	8.71	0.3	A
B-A	0.19	14.30	0.3	B
C-AB	0.22	6.68	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	79	599	0.132	78	0.2	7.601	A
B-A	44	375	0.118	44	0.1	11.925	B
C-AB	100	722	0.139	99	0.2	6.355	A
C-A	165			165			
A-B	54			54			
A-C	143			143			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	94	587	0.161	94	0.2	8.035	A
B-A	53	361	0.147	53	0.2	12.833	B
C-AB	128	740	0.173	127	0.3	6.472	A
C-A	189			189			
A-B	65			65			
A-C	171			171			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	116	571	0.203	115	0.3	8.693	A
B-A	65	342	0.190	65	0.3	14.273	B
C-AB	171	765	0.223	170	0.5	6.666	A
C-A	217			217			
A-B	79			79			
A-C	209			209			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	116	570	0.203	116	0.3	8.707	A
B-A	65	342	0.190	65	0.3	14.303	B
C-AB	171	765	0.223	171	0.5	6.678	A
C-A	217			217			
A-B	79			79			
A-C	209			209			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	94	587	0.161	95	0.2	8.056	A
B-A	53	361	0.147	53	0.2	12.871	B
C-AB	128	740	0.173	128	0.3	6.490	A
C-A	188			188			
A-B	65			65			
A-C	171			171			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	79	598	0.132	79	0.2	7.633	A
B-A	44	375	0.118	45	0.1	11.979	B
C-AB	101	722	0.139	101	0.2	6.380	A
C-A	164			164			
A-B	54			54			
A-C	143			143			

2021 Plus Comm Plus Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	3.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2021 Plus Comm Plus Dev	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	289	100.000
B		✓	158	100.000
C		✓	241	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	62	227
	B	53	0	105
	C	158	83	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.20	8.70	0.3	A
B-A	0.17	13.66	0.2	B
C-AB	0.18	7.03	0.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	79	600	0.132	78	0.2	7.578	A
B-A	40	378	0.105	39	0.1	11.664	B
C-AB	76	670	0.114	75	0.2	6.660	A
C-A	105			105			
A-B	47			47			
A-C	171			171			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	94	588	0.161	94	0.2	8.018	A
B-A	48	366	0.130	48	0.2	12.436	B
C-AB	95	677	0.140	94	0.2	6.804	A
C-A	122			122			
A-B	56			56			
A-C	204			204			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	116	571	0.202	115	0.3	8.685	A
B-A	58	348	0.168	58	0.2	13.623	B
C-AB	123	687	0.179	122	0.3	7.021	A
C-A	143			143			
A-B	68			68			
A-C	250			250			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	116	571	0.203	116	0.3	8.698	A
B-A	58	348	0.168	58	0.2	13.655	B
C-AB	123	687	0.179	123	0.3	7.028	A
C-A	143			143			
A-B	68			68			
A-C	250			250			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	94	588	0.161	95	0.2	8.036	A
B-A	48	366	0.130	48	0.2	12.466	B
C-AB	95	677	0.140	95	0.2	6.818	A
C-A	122			122			
A-B	56			56			
A-C	204			204			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	79	600	0.132	79	0.2	7.612	A
B-A	40	378	0.105	40	0.1	11.711	B
C-AB	76	670	0.114	76	0.2	6.679	A
C-A	105			105			
A-B	47			47			
A-C	171			171			

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 2031 No Dev.j9
Path: \\pah-server\Paragon\Projects\Broad Oak Farm, Linthwaite - 1098\PICADY\Church Lane Gillroyd Junction\2021 TA
Report generation date: 19/04/2021 15:43:44

»2031 No Dev, AM
»2031 No Dev, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2031 No Dev							
Stream B-C	0.2	8.03	0.15	A	0.3	8.62	0.19	A
Stream B-A	0.2	13.85	0.13	B	0.2	13.72	0.16	B
Stream C-AB	0.5	6.53	0.23	A	0.3	6.85	0.17	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	Broad Oak Farm
Location	Church Lane/ Gillroyd Lane Junc
Site number	1098
Date	19/04/2021
Version	
Status	
Identifier	
Client	
Jobnumber	1098
Enumerator	LO
Description	2031 No Dev

Units

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

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	2031 No Dev	AM	ONE HOUR	08:00	09:30	15
D2	2031 No Dev	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 No Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	2.77	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Cowlersley Lane	north of junc	Major
B	Church Lane		Minor
C	Gillroyd Lane	south of junction	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	8.40			110.0	✓	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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	8.50	4.70	4.50	4.50	4.50	✓	3.00	36	15

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	445	0.073	0.183	0.115	0.262
1	B-C	658	0.090	0.228	-	-
1	C-B	638	0.221	0.221	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 No Dev	AM	ONE HOUR	08:00	09:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	278	100.000
B		✓	116	100.000
C		✓	396	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	64	214
	B	40	0	76
	C	297	99	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.15	8.03	0.2	A
B-A	0.13	13.85	0.2	B
C-AB	0.23	6.53	0.5	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	57	604	0.095	57	0.1	7.230	A
B-A	30	366	0.082	30	0.1	11.752	B
C-AB	107	741	0.144	106	0.3	6.225	A
C-A	191			191			
A-B	48			48			
A-C	161			161			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	68	593	0.115	68	0.1	7.547	A
B-A	36	351	0.102	36	0.1	12.561	B
C-AB	137	763	0.180	137	0.3	6.330	A
C-A	219			219			
A-B	58			58			
A-C	192			192			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	84	577	0.145	84	0.2	8.018	A
B-A	44	330	0.134	44	0.2	13.835	B
C-AB	186	794	0.234	185	0.5	6.517	A
C-A	250			250			
A-B	70			70			
A-C	236			236			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	84	577	0.145	84	0.2	8.025	A
B-A	44	330	0.134	44	0.2	13.855	B
C-AB	186	794	0.235	186	0.5	6.532	A
C-A	250			250			
A-B	70			70			
A-C	236			236			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	68	592	0.115	68	0.1	7.562	A
B-A	36	351	0.102	36	0.1	12.587	B
C-AB	138	764	0.180	138	0.4	6.346	A
C-A	218			218			
A-B	58			58			
A-C	192			192			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	57	603	0.095	57	0.1	7.251	A
B-A	30	366	0.082	30	0.1	11.791	B
C-AB	107	742	0.144	107	0.3	6.254	A
C-A	191			191			
A-B	48			48			
A-C	161			161			

2031 No Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	3.20	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2031 No Dev	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	296	100.000
B		✓	148	100.000
C		✓	256	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	41	255
	B	49	0	99
	C	177	79	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.19	8.62	0.3	A
B-A	0.16	13.72	0.2	B
C-AB	0.17	6.85	0.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	75	599	0.124	74	0.2	7.536	A
B-A	37	374	0.099	36	0.1	11.708	B
C-AB	74	678	0.109	73	0.2	6.544	A
C-A	119			119			
A-B	31			31			
A-C	192			192			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	89	586	0.152	89	0.2	7.959	A
B-A	44	361	0.122	44	0.2	12.487	B
C-AB	93	687	0.135	92	0.2	6.663	A
C-A	138			138			
A-B	37			37			
A-C	229			229			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	109	569	0.192	109	0.3	8.606	A
B-A	54	343	0.157	54	0.2	13.701	B
C-AB	121	699	0.173	121	0.3	6.844	A
C-A	161			161			
A-B	45			45			
A-C	281			281			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	109	568	0.192	109	0.3	8.618	A
B-A	54	343	0.158	54	0.2	13.721	B
C-AB	121	699	0.173	121	0.3	6.851	A
C-A	161			161			
A-B	45			45			
A-C	281			281			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	89	586	0.152	89	0.2	7.976	A
B-A	44	361	0.122	44	0.2	12.515	B
C-AB	93	687	0.135	93	0.2	6.677	A
C-A	137			137			
A-B	37			37			
A-C	229			229			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	75	598	0.125	75	0.2	7.562	A
B-A	37	374	0.099	37	0.1	11.750	B
C-AB	74	678	0.109	74	0.2	6.565	A
C-A	119			119			
A-B	31			31			
A-C	192			192			

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 2031 Inc Comm Dev No Prop Dev.j9
Path: \\pah-server\Paragon\Projects\Broad Oak Farm, Linthwaite - 1098\PICADY\Church Lane Gillroyd Junction\2021 TA
Report generation date: 19/04/2021 15:57:50

»2031 Inc Comm Dev No Prop Dev, AM
»2031 Inc Comm Dev No Prop Dev, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2031 Inc Comm Dev No Prop Dev							
Stream B-C	0.2	8.20	0.17	A	0.3	8.80	0.22	A
Stream B-A	0.2	14.27	0.14	B	0.2	13.94	0.16	B
Stream C-AB	0.6	6.69	0.25	A	0.3	6.90	0.18	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	Broad Oak Farm
Location	Church Lane/ Gillroyd Lane Junc
Site number	1098
Date	19/04/2021
Version	
Status	
Identifier	
Client	
Jobnumber	1098
Enumerator	LO
Description	2031 Inc Committed Dev No Porposed Dev

Units

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

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	2031 Inc Comm Dev No Prop Dev	AM	ONE HOUR	08:00	09:30	15
D2	2031 Inc Comm Dev No Prop Dev	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Inc Comm Dev No Prop Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	2.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Cowlersley Lane	north of junc	Major
B	Church Lane		Minor
C	Gillroyd Lane	south of junction	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	8.40			110.0	✓	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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	8.50	4.70	4.50	4.50	4.50	✓	3.00	36	15

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	438	0.071	0.181	0.114	0.258
1	B-C	666	0.091	0.231	-	-
1	C-B	638	0.221	0.221	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 Inc Comm Dev No Prop Dev	AM	ONE HOUR	08:00	09:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	290	100.000
B		✓	130	100.000
C		✓	402	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	70	220
	B	40	0	90
	C	297	105	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.17	8.20	0.2	A
B-A	0.14	14.27	0.2	B
C-AB	0.25	6.69	0.6	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	68	610	0.111	67	0.1	7.285	A
B-A	30	358	0.084	30	0.1	12.031	B
C-AB	113	740	0.153	112	0.3	6.305	A
C-A	189			189			
A-B	53			53			
A-C	166			166			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	81	598	0.135	81	0.2	7.648	A
B-A	36	343	0.105	36	0.1	12.892	B
C-AB	146	761	0.192	145	0.4	6.438	A
C-A	216			216			
A-B	63			63			
A-C	198			198			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	99	582	0.170	99	0.2	8.190	A
B-A	44	321	0.137	44	0.2	14.254	B
C-AB	198	791	0.250	197	0.5	6.671	A
C-A	245			245			
A-B	77			77			
A-C	242			242			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	99	582	0.170	99	0.2	8.200	A
B-A	44	321	0.137	44	0.2	14.275	B
C-AB	198	792	0.250	198	0.6	6.688	A
C-A	245			245			
A-B	77			77			
A-C	242			242			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	81	598	0.135	81	0.2	7.665	A
B-A	36	343	0.105	36	0.1	12.920	B
C-AB	146	762	0.192	147	0.4	6.457	A
C-A	215			215			
A-B	63			63			
A-C	198			198			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	68	610	0.111	68	0.1	7.311	A
B-A	30	358	0.084	30	0.1	12.074	B
C-AB	114	740	0.154	114	0.3	6.336	A
C-A	189			189			
A-B	53			53			
A-C	166			166			

2031 Inc Comm Dev No Prop Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	3.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2031 Inc Comm Dev No Prop Dev	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	298	100.000
B		✓	161	100.000
C		✓	258	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	43	255
	B	49	0	112
	C	177	81	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.22	8.80	0.3	A
B-A	0.16	13.94	0.2	B
C-AB	0.18	6.90	0.3	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	84	604	0.140	84	0.2	7.597	A
B-A	37	370	0.100	36	0.1	11.870	B
C-AB	76	678	0.112	75	0.2	6.568	A
C-A	118			118			
A-B	32			32			
A-C	192			192			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	101	591	0.170	100	0.2	8.063	A
B-A	44	356	0.124	44	0.2	12.669	B
C-AB	95	686	0.138	95	0.2	6.693	A
C-A	137			137			
A-B	39			39			
A-C	229			229			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	123	573	0.215	123	0.3	8.787	A
B-A	54	338	0.160	54	0.2	13.920	B
C-AB	124	699	0.177	124	0.3	6.886	A
C-A	160			160			
A-B	47			47			
A-C	281			281			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	123	573	0.215	123	0.3	8.800	A
B-A	54	338	0.160	54	0.2	13.940	B
C-AB	124	699	0.177	124	0.3	6.896	A
C-A	160			160			
A-B	47			47			
A-C	281			281			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	101	591	0.170	101	0.2	8.086	A
B-A	44	356	0.124	44	0.2	12.697	B
C-AB	95	687	0.138	95	0.2	6.708	A
C-A	137			137			
A-B	39			39			
A-C	229			229			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	84	604	0.140	85	0.2	7.629	A
B-A	37	370	0.100	37	0.1	11.913	B
C-AB	76	678	0.112	76	0.2	6.589	A
C-A	118			118			
A-B	32			32			
A-C	192			192			

Junctions 9

PICADY 9 - Priority Intersection Module

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Filename: 2031 Inc Comm Dev Plus Prop Dev.j9
Path: \\pah-server\Paragon\Projects\Broad Oak Farm, Linthwaite - 1098\PICADY\Church Lane Gillroyd Junction\2021 TA
Report generation date: 19/04/2021 16:04:35

»2031 Inc Comm Dev Plus Prop Dev, AM
»2031 Inc Comm Dev Plus Prop Dev, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2031 Inc Comm Dev Plus Prop Dev							
Stream B-C	0.3	8.94	0.20	A	0.3	9.15	0.23	A
Stream B-A	0.3	15.23	0.21	C	0.3	14.49	0.19	B
Stream C-AB	0.6	6.80	0.26	A	0.4	7.16	0.20	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	Broad Oak Farm
Location	Church Lane/ Gillroyd Lane Junc
Site number	1098
Date	19/04/2021
Version	
Status	
Identifier	
Client	
Jobnumber	1098
Enumerator	LO
Description	2031 Inc Committed Dev Plus Proposed Dev

Units

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

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	2031 Inc Comm Dev Plus Prop Dev	AM	ONE HOUR	08:00	09:30	15
D2	2031 Inc Comm Dev Plus Prop Dev	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Inc Comm Dev Plus Prop Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	3.50	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Cowlersley Lane	north of junc	Major
B	Church Lane		Minor
C	Gillroyd Lane	south of junction	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	8.40			110.0	✓	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	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	8.50	4.70	4.50	4.50	4.50	✓	3.00	36	15

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	453	0.074	0.187	0.117	0.267
1	B-C	647	0.089	0.225	-	-
1	C-B	638	0.221	0.221	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 Inc Comm Dev Plus Prop Dev	AM	ONE HOUR	08:00	09:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	299	100.000
B		✓	164	100.000
C		✓	406	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	79	220
	B	64	0	100
	C	297	109	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.20	8.94	0.3	A
B-A	0.21	15.23	0.3	C
C-AB	0.26	6.80	0.6	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	75	585	0.129	75	0.2	7.749	A
B-A	48	369	0.130	48	0.2	12.279	B
C-AB	118	738	0.159	117	0.3	6.363	A
C-A	188			188			
A-B	59			59			
A-C	166			166			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	90	572	0.157	90	0.2	8.213	A
B-A	58	353	0.163	57	0.2	13.384	B
C-AB	152	760	0.200	151	0.4	6.512	A
C-A	213			213			
A-B	71			71			
A-C	198			198			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	110	553	0.199	110	0.3	8.927	A
B-A	70	330	0.213	70	0.3	15.189	C
C-AB	206	790	0.260	205	0.6	6.783	A
C-A	241			241			
A-B	87			87			
A-C	242			242			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	110	553	0.199	110	0.3	8.942	A
B-A	70	330	0.213	70	0.3	15.232	C
C-AB	206	790	0.261	206	0.6	6.800	A
C-A	241			241			
A-B	87			87			
A-C	242			242			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	90	571	0.157	90	0.2	8.236	A
B-A	58	353	0.163	58	0.2	13.432	B
C-AB	152	760	0.200	153	0.4	6.536	A
C-A	213			213			
A-B	71			71			
A-C	198			198			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	75	584	0.129	75	0.2	7.784	A
B-A	48	369	0.130	48	0.2	12.350	B
C-AB	118	739	0.160	119	0.3	6.395	A
C-A	187			187			
A-B	59			59			
A-C	166			166			

2031 Inc Comm Dev Plus Prop Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	3.62	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2031 Inc Comm Dev Plus Prop Dev	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	322	100.000
B		✓	174	100.000
C		✓	268	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	67	255
	B	58	0	116
	C	177	91	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-C	0.23	9.15	0.3	A
B-A	0.19	14.49	0.3	B
C-AB	0.20	7.16	0.4	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	87	594	0.147	87	0.2	7.796	A
B-A	44	371	0.118	43	0.1	12.067	B
C-AB	85	674	0.127	85	0.2	6.713	A
C-A	116			116			
A-B	50			50			
A-C	192			192			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	104	580	0.180	104	0.2	8.318	A
B-A	52	357	0.146	52	0.2	12.989	B
C-AB	107	682	0.157	107	0.3	6.883	A
C-A	134			134			
A-B	60			60			
A-C	229			229			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	128	561	0.228	127	0.3	9.129	A
B-A	64	337	0.189	64	0.3	14.457	B
C-AB	140	694	0.201	139	0.4	7.146	A
C-A	155			155			
A-B	74			74			
A-C	281			281			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	128	561	0.228	128	0.3	9.146	A
B-A	64	337	0.189	64	0.3	14.487	B
C-AB	140	694	0.201	140	0.4	7.157	A
C-A	155			155			
A-B	74			74			
A-C	281			281			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	104	580	0.180	105	0.2	8.341	A
B-A	52	357	0.146	52	0.2	13.028	B
C-AB	107	682	0.157	107	0.3	6.897	A
C-A	134			134			
A-B	60			60			
A-C	229			229			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-C	87	593	0.147	88	0.2	7.834	A
B-A	44	371	0.118	44	0.1	12.123	B
C-AB	86	674	0.127	86	0.2	6.739	A
C-A	116			116			
A-B	50			50			
A-C	192			192			

Junctions 9

PICADY 9 - Priority Intersection Module

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Filename: 2021 No Dev.j9
Path: \\pah-server\Paragon\Projects\Broad Oak Farm, Linthwaite - 1098\PICADY\Gillroyd Lane Blackmoorfoot Road Junct\2021 TA
Report generation date: 19/04/2021 17:02:20

»2021 No Dev, AM
»2021 No Dev, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2021 No Dev							
Stream B-AC	0.9	17.16	0.46	C	0.7	14.60	0.41	B
Stream C-AB	0.2	6.89	0.10	A	0.2	6.14	0.08	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	Broad Oak Farm
Location	Gillroyd Lane/ Blackmoorfoot Road
Site number	1098
Date	19/04/2021
Version	
Status	
Identifier	
Client	
Jobnumber	1098
Enumerator	LO
Description	2021 No Dev

Units

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

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	2021 No Dev	AM	ONE HOUR	08:00	09:30	15
D2	2021 No Dev	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2021 No Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	4.96	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Blackmoorfoot Road	west of junction	Major
B	Gillroyd Lane		Minor
C	Blackmoorfoot Road	east of junction	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.93			80.0	✓	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	3.32	16	15

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	506	0.088	0.223	0.141	0.319
1	B-C	654	0.096	0.243	-	-
1	C-B	620	0.231	0.231	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2021 No Dev	AM	ONE HOUR	08:00	09:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	341	100.000
B		✓	181	100.000
C		✓	185	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	135	206
	B	146	0	35
	C	139	46	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.46	17.16	0.9	C
C-AB	0.10	6.89	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	136	461	0.295	134	0.5	12.045	B
C-AB	41	633	0.066	41	0.1	6.687	A
C-A	98			98			
A-B	102			102			
A-C	155			155			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	163	448	0.363	162	0.6	13.808	B
C-AB	52	636	0.081	51	0.1	6.769	A
C-A	115			115			
A-B	121			121			
A-C	185			185			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	199	430	0.464	198	0.9	16.989	C
C-AB	67	641	0.104	66	0.2	6.888	A
C-A	137			137			
A-B	149			149			
A-C	227			227			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	199	430	0.464	199	0.9	17.160	C
C-AB	67	641	0.104	67	0.2	6.895	A
C-A	137			137			
A-B	149			149			
A-C	227			227			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	163	448	0.363	164	0.6	13.992	B
C-AB	52	637	0.081	52	0.1	6.778	A
C-A	115			115			
A-B	121			121			
A-C	185			185			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	136	461	0.295	137	0.5	12.235	B
C-AB	42	633	0.066	42	0.1	6.699	A
C-A	98			98			
A-B	102			102			
A-C	155			155			

2021 No Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	4.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2021 No Dev	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	275	100.000
B		✓	168	100.000
C		✓	246	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	144	131
	B	119	0	49
	C	210	36	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.41	14.60	0.7	B
C-AB	0.08	6.14	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	126	483	0.262	125	0.4	11.001	B
C-AB	35	680	0.052	35	0.1	6.135	A
C-A	150			150			
A-B	108			108			
A-C	99			99			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	151	472	0.320	151	0.5	12.300	B
C-AB	45	693	0.064	44	0.1	6.109	A
C-A	177			177			
A-B	129			129			
A-C	118			118			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	185	456	0.406	184	0.7	14.511	B
C-AB	59	711	0.083	59	0.2	6.074	A
C-A	212			212			
A-B	159			159			
A-C	144			144			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	185	456	0.406	185	0.7	14.604	B
C-AB	59	711	0.083	59	0.2	6.075	A
C-A	212			212			
A-B	159			159			
A-C	144			144			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	151	472	0.320	152	0.5	12.410	B
C-AB	45	693	0.064	45	0.1	6.114	A
C-A	177			177			
A-B	129			129			
A-C	118			118			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	126	483	0.262	127	0.4	11.131	B
C-AB	35	680	0.052	36	0.1	6.142	A
C-A	150			150			
A-B	108			108			
A-C	99			99			

Junctions 9

PICADY 9 - Priority Intersection Module

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Filename: 2021 Inc Comm No Prop Dev.j9
Path: \\pah-server\Paragon\Projects\Broad Oak Farm, Linthwaite - 1098\PICADY\Gillroyd Lane Blackmoorfoot Road Junct\2021 TA
Report generation date: 19/04/2021 17:08:43

»2021 Inc Comm No Prop Dev, AM
»2021 Inc Comm No Prop Dev, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2021 Inc Comm No Prop Dev							
Stream B-AC	1.1	18.82	0.51	C	0.8	15.15	0.42	C
Stream C-AB	0.2	6.91	0.10	A	0.2	6.17	0.08	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	Broad Oak Farm
Location	Gillroyd Lane/ Blackmoorfoot Road
Site number	1098
Date	19/04/2021
Version	
Status	
Identifier	
Client	
Jobnumber	1098
Enumerator	LO
Description	2021 Inc Comm No Prop Dev

Units

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

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	2021 Inc Comm No Prop Dev	AM	ONE HOUR	08:00	09:30	15
D2	2021 Inc Comm No Prop Dev	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2021 Inc Comm No Prop Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	5.64	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Blackmoorfoot Road	west of junction	Major
B	Gillroyd Lane		Minor
C	Blackmoorfoot Road	east of junction	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.93			80.0	✓	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	3.32	16	15

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	506	0.088	0.223	0.141	0.319
1	B-C	654	0.096	0.243	-	-
1	C-B	620	0.231	0.231	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2021 Inc Comm No Prop Dev	AM	ONE HOUR	08:00	09:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	347	100.000
B		✓	197	100.000
C		✓	185	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	141	206
	B	162	0	35
	C	139	46	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.51	18.82	1.1	C
C-AB	0.10	6.91	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	148	459	0.323	146	0.5	12.586	B
C-AB	42	632	0.066	41	0.1	6.698	A
C-A	98			98			
A-B	106			106			
A-C	155			155			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	177	446	0.398	176	0.7	14.665	B
C-AB	52	635	0.081	51	0.1	6.783	A
C-A	115			115			
A-B	127			127			
A-C	185			185			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	217	427	0.508	215	1.1	18.564	C
C-AB	67	640	0.104	67	0.2	6.905	A
C-A	137			137			
A-B	155			155			
A-C	227			227			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	217	427	0.508	217	1.1	18.818	C
C-AB	67	640	0.104	67	0.2	6.909	A
C-A	137			137			
A-B	155			155			
A-C	227			227			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	177	445	0.398	179	0.7	14.921	B
C-AB	52	635	0.081	52	0.1	6.792	A
C-A	115			115			
A-B	127			127			
A-C	185			185			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	148	459	0.323	149	0.5	12.822	B
C-AB	42	632	0.066	42	0.1	6.711	A
C-A	98			98			
A-B	106			106			
A-C	155			155			

2021 Inc Comm No Prop Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	4.15	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2021 Inc Comm No Prop Dev	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	291	100.000
B		✓	174	100.000
C		✓	246	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	160	131
	B	125	0	49
	C	210	36	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.42	15.15	0.8	C
C-AB	0.08	6.17	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	131	481	0.272	129	0.4	11.216	B
C-AB	35	678	0.052	35	0.1	6.160	A
C-A	150			150			
A-B	120			120			
A-C	99			99			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	156	469	0.333	156	0.5	12.620	B
C-AB	45	690	0.065	45	0.1	6.138	A
C-A	176			176			
A-B	144			144			
A-C	118			118			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	192	453	0.423	191	0.8	15.040	C
C-AB	59	708	0.083	59	0.2	6.106	A
C-A	212			212			
A-B	176			176			
A-C	144			144			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	192	453	0.423	192	0.8	15.149	C
C-AB	59	708	0.084	59	0.2	6.110	A
C-A	212			212			
A-B	176			176			
A-C	144			144			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	156	469	0.334	157	0.6	12.743	B
C-AB	45	690	0.065	45	0.1	6.143	A
C-A	176			176			
A-B	144			144			
A-C	118			118			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	131	481	0.272	132	0.4	11.361	B
C-AB	35	678	0.052	36	0.1	6.169	A
C-A	150			150			
A-B	120			120			
A-C	99			99			

Junctions 9

PICADY 9 - Priority Intersection Module

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Filename: 2021 Inc Comm Plus Prop Dev.j9
Path: \\pah-server\Paragon\Projects\Broad Oak Farm, Linthwaite - 1098\PICADY\Gillroyd Lane Blackmoorfoot Road Junct\2021 TA
Report generation date: 19/04/2021 17:13:24

»2021 Inc Comm Dev Plus Prop Dev, AM
»2021 Inc Comm Dev Plus Prop Dev, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2021 Inc Comm Dev Plus Prop Dev							
Stream B-AC	1.2	20.01	0.54	C	0.8	15.53	0.43	C
Stream C-AB	0.2	6.92	0.10	A	0.2	6.18	0.08	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	Broad Oak Farm
Location	Gillroyd Lane/ Blackmoorfoot Road
Site number	1098
Date	19/04/2021
Version	
Status	
Identifier	
Client	
Jobnumber	1098
Enumerator	LO
Description	2021 Inc Comm Plus Prop Dev

Units

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

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	2021 Inc Comm Dev Plus Prop Dev	AM	ONE HOUR	08:00	09:30	15
D2	2021 Inc Comm Dev Plus Prop Dev	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2021 Inc Comm Dev Plus Prop Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	6.12	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Blackmoorfoot Road	west of junction	Major
B	Gillroyd Lane		Minor
C	Blackmoorfoot Road	east of junction	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.93			80.0	✓	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	3.32	16	15

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	506	0.088	0.223	0.141	0.319
1	B-C	654	0.096	0.243	-	-
1	C-B	620	0.231	0.231	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2021 Inc Comm Dev Plus Prop Dev	AM	ONE HOUR	08:00	09:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	351	100.000
B		✓	207	100.000
C		✓	185	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	145	206
	B	172	0	35
	C	139	46	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.54	20.01	1.2	C
C-AB	0.10	6.92	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	156	458	0.341	154	0.6	12.941	B
C-AB	42	631	0.066	41	0.1	6.706	A
C-A	98			98			
A-B	109			109			
A-C	155			155			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	186	444	0.419	185	0.8	15.246	C
C-AB	52	635	0.081	51	0.1	6.794	A
C-A	115			115			
A-B	130			130			
A-C	185			185			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	228	425	0.536	226	1.2	19.684	C
C-AB	67	639	0.104	67	0.2	6.917	A
C-A	137			137			
A-B	160			160			
A-C	227			227			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	228	425	0.536	228	1.2	20.009	C
C-AB	67	639	0.104	67	0.2	6.921	A
C-A	137			137			
A-B	160			160			
A-C	227			227			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	186	444	0.419	188	0.8	15.561	C
C-AB	52	635	0.081	52	0.1	6.798	A
C-A	115			115			
A-B	130			130			
A-C	185			185			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	156	457	0.341	157	0.6	13.215	B
C-AB	42	632	0.066	42	0.1	6.716	A
C-A	98			98			
A-B	109			109			
A-C	155			155			

2021 Inc Comm Dev Plus Prop Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	4.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2021 Inc Comm Dev Plus Prop Dev	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	301	100.000
B		✓	178	100.000
C		✓	246	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	170	131
	B	129	0	49
	C	210	36	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.43	15.53	0.8	C
C-AB	0.08	6.18	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	134	479	0.280	132	0.4	11.363	B
C-AB	35	676	0.052	35	0.1	6.175	A
C-A	150			150			
A-B	128			128			
A-C	99			99			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	160	467	0.342	159	0.6	12.838	B
C-AB	45	688	0.065	45	0.1	6.156	A
C-A	176			176			
A-B	153			153			
A-C	118			118			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	196	451	0.435	195	0.8	15.408	C
C-AB	59	705	0.084	59	0.2	6.128	A
C-A	212			212			
A-B	187			187			
A-C	144			144			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	196	451	0.435	196	0.8	15.528	C
C-AB	59	705	0.084	59	0.2	6.131	A
C-A	212			212			
A-B	187			187			
A-C	144			144			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	160	467	0.342	161	0.6	12.975	B
C-AB	45	688	0.065	45	0.1	6.161	A
C-A	176			176			
A-B	153			153			
A-C	118			118			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	134	479	0.280	135	0.4	11.514	B
C-AB	35	676	0.052	36	0.1	6.185	A
C-A	150			150			
A-B	128			128			
A-C	99			99			

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 2031 No Dev.j9
Path: \\pah-server\Paragon\Projects\Broad Oak Farm, Linthwaite - 1098\PICADY\Gillroyd Lane Blackmoorfoot Road Junct\2021 TA
Report generation date: 19/04/2021 17:21:24

»2031 No Dev, AM
»2031 No Dev, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2031 No Dev							
Stream B-AC	1.2	20.17	0.53	C	0.9	16.56	0.46	C
Stream C-AB	0.2	6.97	0.12	A	0.2	6.13	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	Broad Oak Farm
Location	Gillroyd Lane/ Blackmoorfoot Road
Site number	1098
Date	19/04/2021
Version	
Status	
Identifier	
Client	
Jobnumber	1098
Enumerator	LO
Description	2031 No Dev

Units

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

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	2031 No Dev	AM	ONE HOUR	08:00	09:30	15
D2	2031 No Dev	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 No Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	5.76	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Blackmoorfoot Road	west of junction	Major
B	Gillroyd Lane		Minor
C	Blackmoorfoot Road	east of junction	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.93			80.0	✓	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	3.32	16	15

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	506	0.088	0.223	0.141	0.319
1	B-C	654	0.096	0.243	-	-
1	C-B	620	0.231	0.231	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 No Dev	AM	ONE HOUR	08:00	09:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	380	100.000
B		✓	202	100.000
C		✓	206	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	150	230
	B	163	0	39
	C	155	51	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.53	20.17	1.2	C
C-AB	0.12	6.97	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	152	454	0.335	150	0.5	12.947	B
C-AB	47	635	0.074	47	0.1	6.725	A
C-A	108			108			
A-B	113			113			
A-C	173			173			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	182	439	0.414	181	0.8	15.291	C
C-AB	59	639	0.092	59	0.1	6.823	A
C-A	126			126			
A-B	135			135			
A-C	207			207			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	222	418	0.532	221	1.2	19.844	C
C-AB	77	645	0.119	76	0.2	6.966	A
C-A	150			150			
A-B	165			165			
A-C	253			253			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	222	418	0.532	222	1.2	20.173	C
C-AB	77	645	0.119	77	0.2	6.971	A
C-A	150			150			
A-B	165			165			
A-C	253			253			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	182	439	0.414	183	0.8	15.603	C
C-AB	59	639	0.092	59	0.2	6.834	A
C-A	126			126			
A-B	135			135			
A-C	207			207			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	152	454	0.335	153	0.6	13.220	B
C-AB	47	635	0.074	47	0.1	6.741	A
C-A	108			108			
A-B	113			113			
A-C	173			173			

2031 No Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	4.49	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2031 No Dev	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	308	100.000
B		✓	187	100.000
C		✓	276	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	161	147
	B	133	0	54
	C	235	41	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.46	16.56	0.9	C
C-AB	0.10	6.13	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	141	476	0.296	139	0.5	11.698	B
C-AB	42	688	0.060	41	0.1	6.120	A
C-A	166			166			
A-B	121			121			
A-C	111			111			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	168	463	0.363	167	0.6	13.378	B
C-AB	53	702	0.075	53	0.1	6.096	A
C-A	195			195			
A-B	145			145			
A-C	132			132			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	206	445	0.463	205	0.9	16.396	C
C-AB	71	723	0.098	70	0.2	6.069	A
C-A	233			233			
A-B	177			177			
A-C	162			162			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	206	445	0.463	206	0.9	16.557	C
C-AB	71	723	0.098	71	0.2	6.075	A
C-A	233			233			
A-B	177			177			
A-C	162			162			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	168	463	0.363	169	0.6	13.548	B
C-AB	53	703	0.075	53	0.1	6.102	A
C-A	195			195			
A-B	145			145			
A-C	132			132			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	141	476	0.296	141	0.5	11.875	B
C-AB	42	688	0.061	42	0.1	6.130	A
C-A	166			166			
A-B	121			121			
A-C	111			111			

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 2031 Inc Comm Dev No Prop Dev.j9
Path: \\pah-server\Paragon\Projects\Broad Oak Farm, Linthwaite - 1098\PICADY\Gillroyd Lane Blackmoorfoot Road Junct\2021 TA
Report generation date: 19/04/2021 17:25:24

»2031 Inc Comm Dev No Prop Dev, AM
»2031 Inc Comm Dev No Prop Dev, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2031 Inc Comm Dev No Prop Dev							
Stream B-AC	1.5	22.47	0.58	C	1.0	17.25	0.48	C
Stream C-AB	0.2	6.99	0.12	A	0.2	6.16	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	Broad Oak Farm
Location	Gillroyd Lane/ Blackmoorfoot Road
Site number	1098
Date	19/04/2021
Version	
Status	
Identifier	
Client	
Jobnumber	1098
Enumerator	LO
Description	2031 Inc Comm Dev No Prop Dev

Units

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

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	2031 Inc Comm Dev No Prop Dev	AM	ONE HOUR	08:00	09:30	15
D2	2031 Inc Comm Dev No Prop Dev	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Inc Comm Dev No Prop Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	6.62	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Blackmoorfoot Road	west of junction	Major
B	Gillroyd Lane		Minor
C	Blackmoorfoot Road	east of junction	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.93			80.0	✓	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	3.32	16	15

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	506	0.088	0.223	0.141	0.319
1	B-C	654	0.096	0.243	-	-
1	C-B	620	0.231	0.231	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 Inc Comm Dev No Prop Dev	AM	ONE HOUR	08:00	09:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	386	100.000
B		✓	218	100.000
C		✓	206	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	156	230
	B	179	0	39
	C	155	51	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.58	22.47	1.5	C
C-AB	0.12	6.99	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	164	451	0.364	162	0.6	13.561	B
C-AB	47	634	0.074	47	0.1	6.736	A
C-A	108			108			
A-B	117			117			
A-C	173			173			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	196	436	0.449	195	0.9	16.330	C
C-AB	59	638	0.092	59	0.1	6.840	A
C-A	126			126			
A-B	140			140			
A-C	207			207			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	240	416	0.577	238	1.4	21.967	C
C-AB	77	644	0.119	76	0.2	6.984	A
C-A	150			150			
A-B	172			172			
A-C	253			253			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	240	416	0.577	240	1.5	22.468	C
C-AB	77	644	0.119	77	0.2	6.992	A
C-A	150			150			
A-B	172			172			
A-C	253			253			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	196	436	0.449	198	0.9	16.774	C
C-AB	59	638	0.092	59	0.2	6.845	A
C-A	126			126			
A-B	140			140			
A-C	207			207			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	164	451	0.364	165	0.6	13.907	B
C-AB	47	634	0.074	47	0.1	6.753	A
C-A	108			108			
A-B	117			117			
A-C	173			173			

2031 Inc Comm Dev No Prop Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	4.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2031 Inc Comm Dev No Prop Dev	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	324	100.000
B		✓	193	100.000
C		✓	276	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	177	147
	B	139	0	54
	C	235	41	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.48	17.25	1.0	C
C-AB	0.10	6.16	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	145	473	0.307	143	0.5	11.937	B
C-AB	42	686	0.061	41	0.1	6.144	A
C-A	166			166			
A-B	133			133			
A-C	111			111			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	174	460	0.377	173	0.7	13.748	B
C-AB	53	700	0.076	53	0.1	6.127	A
C-A	195			195			
A-B	159			159			
A-C	132			132			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	212	442	0.481	211	1.0	17.061	C
C-AB	71	720	0.098	70	0.2	6.106	A
C-A	233			233			
A-B	195			195			
A-C	162			162			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	212	442	0.481	212	1.0	17.250	C
C-AB	71	720	0.098	71	0.2	6.107	A
C-A	233			233			
A-B	195			195			
A-C	162			162			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	174	460	0.377	175	0.7	13.943	B
C-AB	53	700	0.076	53	0.1	6.131	A
C-A	195			195			
A-B	159			159			
A-C	132			132			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	145	473	0.307	146	0.5	12.133	B
C-AB	42	686	0.061	42	0.1	6.157	A
C-A	166			166			
A-B	133			133			
A-C	111			111			

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 2031 Inc Comm Dev Plus Prop Dev.j9
Path: \\pah-server\Paragon\Projects\Broad Oak Farm, Linthwaite - 1098\PICADY\Gillroyd Lane Blackmoorfoot Road Junct\2021 TA
Report generation date: 19/04/2021 17:27:42

»2031 Inc Comm Dev Plus Prop Dev, AM
»2031 Inc Comm Dev Plus Prop Dev, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2031 Inc Comm Dev Plus Prop Dev							
Stream B-AC	1.6	24.16	0.61	C	1.1	17.74	0.49	C
Stream C-AB	0.2	7.00	0.12	A	0.2	6.17	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	Broad Oak Farm
Location	Gillroyd Lane/ Blackmoorfoot Road
Site number	1098
Date	19/04/2021
Version	
Status	
Identifier	
Client	
Jobnumber	1098
Enumerator	LO
Description	2031 Inc Comm Dev Plus Prop Dev

Units

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

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	2031 Inc Comm Dev Plus Prop Dev	AM	ONE HOUR	08:00	09:30	15
D2	2031 Inc Comm Dev Plus Prop Dev	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Inc Comm Dev Plus Prop Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	7.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Blackmoorfoot Road	west of junction	Major
B	Gillroyd Lane		Minor
C	Blackmoorfoot Road	east of junction	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.93			80.0	✓	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	3.32	16	15

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	506	0.088	0.223	0.141	0.319
1	B-C	654	0.096	0.243	-	-
1	C-B	620	0.231	0.231	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 Inc Comm Dev Plus Prop Dev	AM	ONE HOUR	08:00	09:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	390	100.000
B		✓	228	100.000
C		✓	206	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	160	230
	B	189	0	39
	C	155	51	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.61	24.16	1.6	C
C-AB	0.12	7.00	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	172	450	0.381	169	0.7	13.968	B
C-AB	47	633	0.074	47	0.1	6.744	A
C-A	108			108			
A-B	120			120			
A-C	173			173			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	205	435	0.471	204	0.9	17.043	C
C-AB	59	637	0.092	59	0.1	6.849	A
C-A	126			126			
A-B	144			144			
A-C	207			207			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	251	414	0.606	248	1.6	23.503	C
C-AB	77	643	0.119	76	0.2	6.995	A
C-A	150			150			
A-B	176			176			
A-C	253			253			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	251	414	0.606	251	1.6	24.165	C
C-AB	77	643	0.119	77	0.2	7.001	A
C-A	150			150			
A-B	176			176			
A-C	253			253			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	205	435	0.471	207	1.0	17.601	C
C-AB	59	637	0.092	59	0.2	6.857	A
C-A	126			126			
A-B	144			144			
A-C	207			207			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	172	450	0.382	173	0.7	14.366	B
C-AB	47	634	0.074	47	0.1	6.758	A
C-A	108			108			
A-B	120			120			
A-C	173			173			

2031 Inc Comm Dev Plus Prop Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	4.79	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2031 Inc Comm Dev Plus Prop Dev	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	334	100.000
B		✓	197	100.000
C		✓	276	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	187	147
	B	143	0	54
	C	235	41	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.49	17.74	1.1	C
C-AB	0.10	6.17	0.2	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	148	472	0.314	146	0.5	12.097	B
C-AB	42	684	0.061	41	0.1	6.159	A
C-A	166			166			
A-B	141			141			
A-C	111			111			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	177	458	0.386	176	0.7	14.001	B
C-AB	53	698	0.076	53	0.1	6.145	A
C-A	195			195			
A-B	168			168			
A-C	132			132			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	217	440	0.493	215	1.0	17.525	C
C-AB	71	717	0.099	71	0.2	6.125	A
C-A	233			233			
A-B	206			206			
A-C	162			162			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	217	440	0.493	217	1.1	17.737	C
C-AB	71	717	0.099	71	0.2	6.131	A
C-A	233			233			
A-B	206			206			
A-C	162			162			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	177	458	0.386	178	0.7	14.219	B
C-AB	53	698	0.076	53	0.1	6.151	A
C-A	195			195			
A-B	168			168			
A-C	132			132			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	148	472	0.314	149	0.5	12.308	B
C-AB	42	684	0.061	42	0.1	6.172	A
C-A	166			166			
A-B	141			141			
A-C	111			111			

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 2021 No Dev.j9
Path: \\pah-server\Paragon\Projects\Broad Oak Farm, Linthwaite - 1098\PICADY\Woodside View Cowlersley Lane\2021 TA
Report generation date: 20/04/2021 13:58:32

»2021 No Dev, AM
»2021 No Dev, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2021 No Dev							
Stream B-AC	0.2	10.12	0.12	B	0.1	10.52	0.12	B
Stream C-AB	0.0	5.42	0.02	A	0.0	5.85	0.01	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	Broad Oak Farm
Location	Woodside View/ Cowlersley Lane
Site number	1098
Date	19/04/2021
Version	
Status	
Identifier	
Client	
Jobnumber	1098
Enumerator	LO
Description	2021 No Dev

Units

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

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	2021 No Dev	AM	ONE HOUR	08:00	09:30	15
D2	2021 No Dev	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2021 No Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Cowlersley Lane	north of junction	Major
B	Woodside View		Minor
C	Cowlersley Lane	south of junction	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	8.95			90.0	✓	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	2.88	23	22

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	490	0.078	0.197	0.124	0.281
1	B-C	630	0.084	0.213	-	-
1	C-B	626	0.211	0.211	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2021 No Dev	AM	ONE HOUR	08:00	09:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	236	100.000
B		✓	49	100.000
C		✓	311	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	16	220
	B	32	0	17
	C	301	10	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.12	10.12	0.2	B
C-AB	0.02	5.42	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	37	473	0.078	37	0.1	9.075	A
C-AB	11	741	0.015	11	0.0	5.422	A
C-A	223			223			
A-B	12			12			
A-C	166			166			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	44	461	0.096	44	0.1	9.492	A
C-AB	14	764	0.018	14	0.0	5.275	A
C-A	266			266			
A-B	14			14			
A-C	198			198			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	54	445	0.121	54	0.1	10.118	B
C-AB	19	797	0.024	19	0.0	5.086	A
C-A	324			324			
A-B	18			18			
A-C	242			242			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	54	445	0.121	54	0.2	10.124	B
C-AB	19	797	0.024	19	0.0	5.088	A
C-A	324			324			
A-B	18			18			
A-C	242			242			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	44	461	0.096	44	0.1	9.504	A
C-AB	14	764	0.018	14	0.0	5.278	A
C-A	266			266			
A-B	14			14			
A-C	198			198			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	37	473	0.078	37	0.1	9.093	A
C-AB	11	741	0.015	11	0.0	5.425	A
C-A	223			223			
A-B	12			12			
A-C	166			166			

2021 No Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2021 No Dev	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	331	100.000
B		✓	45	100.000
C		✓	219	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	36	295
	B	33	0	12
	C	213	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.12	10.52	0.1	B
C-AB	0.01	5.85	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	34	456	0.074	34	0.1	9.365	A
C-AB	6	683	0.009	6	0.0	5.850	A
C-A	159			159			
A-B	27			27			
A-C	222			222			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	40	443	0.091	40	0.1	9.824	A
C-AB	7	695	0.011	7	0.0	5.761	A
C-A	189			189			
A-B	32			32			
A-C	265			265			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	50	426	0.116	49	0.1	10.517	B
C-AB	10	712	0.014	10	0.0	5.639	A
C-A	231			231			
A-B	40			40			
A-C	325			325			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	50	426	0.116	50	0.1	10.524	B
C-AB	10	712	0.014	10	0.0	5.639	A
C-A	231			231			
A-B	40			40			
A-C	325			325			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	40	443	0.091	41	0.1	9.834	A
C-AB	7	695	0.011	7	0.0	5.761	A
C-A	189			189			
A-B	32			32			
A-C	265			265			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	34	456	0.074	34	0.1	9.386	A
C-AB	6	683	0.009	6	0.0	5.850	A
C-A	159			159			
A-B	27			27			
A-C	222			222			

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 2021 Inc Comm Dev No Prop Dev.j9
Path: \\pah-server\Paragon\Projects\Broad Oak Farm, Linthwaite - 1098\PICADY\Woodside View Cowlersley Lane\2021 TA
Report generation date: 20/04/2021 14:17:39

»2021 Inc Comm No Prop Dev, AM
»2021 Inc Comm No Prop Dev, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2021 Inc Comm No Prop Dev							
Stream B-AC	0.2	10.23	0.12	B	0.1	10.64	0.12	B
Stream C-AB	0.0	5.41	0.02	A	0.0	5.83	0.01	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	Broad Oak Farm
Location	Woodside View/ Cowlersley Lane
Site number	1098
Date	19/04/2021
Version	
Status	
Identifier	
Client	
Jobnumber	1098
Enumerator	LO
Description	2021 Inc Committed Dev No Proposed Dev

Units

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

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	2021 Inc Comm No Prop Dev	AM	ONE HOUR	08:00	09:30	15
D2	2021 Inc Comm No Prop Dev	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2021 Inc Comm No Prop Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Cowlersley Lane	north of junction	Major
B	Woodside View		Minor
C	Cowlersley Lane	south of junction	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	8.95			90.0	✓	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	2.88	23	22

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	490	0.078	0.197	0.124	0.281
1	B-C	630	0.084	0.213	-	-
1	C-B	626	0.211	0.211	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2021 Inc Comm No Prop Dev	AM	ONE HOUR	08:00	09:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	250	100.000
B		✓	49	100.000
C		✓	320	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	16	234
	B	32	0	17
	C	310	10	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.12	10.23	0.2	B
C-AB	0.02	5.41	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	37	470	0.079	37	0.1	9.134	A
C-AB	11	744	0.015	11	0.0	5.404	A
C-A	230			230			
A-B	12			12			
A-C	176			176			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	44	458	0.096	44	0.1	9.570	A
C-AB	14	768	0.018	14	0.0	5.254	A
C-A	274			274			
A-B	14			14			
A-C	210			210			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	54	441	0.122	54	0.2	10.228	B
C-AB	19	802	0.024	19	0.0	5.061	A
C-A	333			333			
A-B	18			18			
A-C	258			258			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	54	441	0.122	54	0.2	10.234	B
C-AB	19	802	0.024	19	0.0	5.063	A
C-A	333			333			
A-B	18			18			
A-C	258			258			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	44	458	0.096	44	0.1	9.580	A
C-AB	14	768	0.018	14	0.0	5.255	A
C-A	274			274			
A-B	14			14			
A-C	210			210			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	37	470	0.079	37	0.1	9.153	A
C-AB	11	744	0.015	11	0.0	5.406	A
C-A	230			230			
A-B	12			12			
A-C	176			176			

2021 Inc Comm No Prop Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2021 Inc Comm No Prop Dev	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	344	100.000
B		✓	45	100.000
C		✓	229	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	36	308
	B	33	0	12
	C	223	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.12	10.64	0.1	B
C-AB	0.01	5.83	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	34	453	0.075	34	0.1	9.427	A
C-AB	6	686	0.009	6	0.0	5.823	A
C-A	166			166			
A-B	27			27			
A-C	232			232			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	40	440	0.092	40	0.1	9.905	A
C-AB	8	699	0.011	8	0.0	5.728	A
C-A	198			198			
A-B	32			32			
A-C	277			277			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	50	422	0.117	49	0.1	10.633	B
C-AB	10	717	0.014	10	0.0	5.600	A
C-A	242			242			
A-B	40			40			
A-C	339			339			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	50	422	0.117	50	0.1	10.639	B
C-AB	10	717	0.014	10	0.0	5.600	A
C-A	242			242			
A-B	40			40			
A-C	339			339			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	40	440	0.092	41	0.1	9.916	A
C-AB	8	699	0.011	8	0.0	5.729	A
C-A	198			198			
A-B	32			32			
A-C	277			277			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	34	453	0.075	34	0.1	9.446	A
C-AB	6	686	0.009	6	0.0	5.825	A
C-A	166			166			
A-B	27			27			
A-C	232			232			

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 2021 Inc Comm Dev Plus Prop Dev.j9
Path: \\pah-server\Paragon\Projects\Broad Oak Farm, Linthwaite - 1098\PICADY\Woodside View Cowlersley Lane\2021 TA
Report generation date: 20/04/2021 14:27:33

»2021 Inc Comm Plus Prop Dev, AM
»2021 Inc Comm Plus Prop Dev, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2021 Inc Comm Plus Prop Dev							
Stream B-AC	0.3	11.51	0.19	B	0.2	11.18	0.14	B
Stream C-AB	0.0	5.41	0.02	A	0.0	5.85	0.01	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	Broad Oak Farm
Location	Woodside View/ Cowlersley Lane
Site number	1098
Date	19/04/2021
Version	
Status	
Identifier	
Client	
Jobnumber	1098
Enumerator	LO
Description	2021 Inc Committed Dev Plus Proposed Dev

Units

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

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	2021 Inc Comm Plus Prop Dev	AM	ONE HOUR	08:00	09:30	15
D2	2021 Inc Comm Plus Prop Dev	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2021 Inc Comm Plus Prop Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	1.41	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Cowlersley Lane	north of junction	Major
B	Woodside View		Minor
C	Cowlersley Lane	south of junction	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	8.95			90.0	✓	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	2.88	23	22

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	490	0.078	0.197	0.124	0.281
1	B-C	630	0.084	0.213	-	-
1	C-B	626	0.211	0.211	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2021 Inc Comm Plus Prop Dev	AM	ONE HOUR	08:00	09:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	259	100.000
B		✓	72	100.000
C		✓	320	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	25	234
	B	55	0	17
	C	310	10	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.19	11.51	0.3	B
C-AB	0.02	5.41	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	54	453	0.120	54	0.1	9.895	A
C-AB	11	742	0.015	11	0.0	5.413	A
C-A	230			230			
A-B	19			19			
A-C	176			176			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	65	441	0.147	65	0.2	10.521	B
C-AB	14	766	0.018	14	0.0	5.264	A
C-A	274			274			
A-B	22			22			
A-C	210			210			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	79	423	0.187	79	0.2	11.490	B
C-AB	19	800	0.024	19	0.0	5.072	A
C-A	333			333			
A-B	28			28			
A-C	258			258			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	79	423	0.187	79	0.3	11.506	B
C-AB	19	800	0.024	19	0.0	5.074	A
C-A	333			333			
A-B	28			28			
A-C	258			258			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	65	441	0.147	65	0.2	10.543	B
C-AB	14	766	0.018	14	0.0	5.267	A
C-A	274			274			
A-B	22			22			
A-C	210			210			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	54	453	0.120	54	0.2	9.932	A
C-AB	11	742	0.015	11	0.0	5.414	A
C-A	230			230			
A-B	19			19			
A-C	176			176			

2021 Inc Comm Plus Prop Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	1.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2021 Inc Comm Plus Prop Dev	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	367	100.000
B		✓	54	100.000
C		✓	229	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	59	308
	B	42	0	12
	C	223	6	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.14	11.18	0.2	B
C-AB	0.01	5.85	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	41	446	0.091	40	0.1	9.749	A
C-AB	6	683	0.009	6	0.0	5.852	A
C-A	166			166			
A-B	44			44			
A-C	232			232			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	49	432	0.112	48	0.1	10.308	B
C-AB	8	695	0.011	8	0.0	5.761	A
C-A	198			198			
A-B	53			53			
A-C	277			277			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	59	414	0.144	59	0.2	11.168	B
C-AB	10	712	0.014	10	0.0	5.637	A
C-A	242			242			
A-B	65			65			
A-C	339			339			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	59	414	0.144	59	0.2	11.179	B
C-AB	10	712	0.014	10	0.0	5.637	A
C-A	242			242			
A-B	65			65			
A-C	339			339			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	49	432	0.112	49	0.1	10.323	B
C-AB	8	695	0.011	8	0.0	5.764	A
C-A	198			198			
A-B	53			53			
A-C	277			277			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	41	446	0.091	41	0.1	9.774	A
C-AB	6	683	0.009	6	0.0	5.852	A
C-A	166			166			
A-B	44			44			
A-C	232			232			

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 2031 No Dev.j9
Path: \\pah-server\Paragon\Projects\Broad Oak Farm, Linthwaite - 1098\PICADY\Woodside View Cowlersley Lane\2021 TA
Report generation date: 20/04/2021 14:33:09

»2031 No Dev, AM
»2031 No Dev, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2031 No Dev							
Stream B-AC	0.2	10.60	0.14	B	0.2	11.03	0.14	B
Stream C-AB	0.0	5.33	0.03	A	0.0	5.80	0.02	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	Broad Oak Farm
Location	Woodside View/ Cowlersley Lane
Site number	1098
Date	19/04/2021
Version	
Status	
Identifier	
Client	
Jobnumber	1098
Enumerator	LO
Description	2031 No Dev

Units

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

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	2031 No Dev	AM	ONE HOUR	08:00	09:30	15
D2	2031 No Dev	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 No Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	1.03	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Cowlersley Lane	north of junction	Major
B	Woodside View		Minor
C	Cowlersley Lane	south of junction	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	8.95			90.0	✓	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	2.88	23	22

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	490	0.078	0.197	0.124	0.281
1	B-C	630	0.084	0.213	-	-
1	C-B	626	0.211	0.211	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 No Dev	AM	ONE HOUR	08:00	09:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	264	100.000
B		✓	55	100.000
C		✓	350	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	18	246
	B	36	0	19
	C	338	12	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.14	10.60	0.2	B
C-AB	0.03	5.33	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	41	465	0.089	41	0.1	9.328	A
C-AB	14	756	0.018	14	0.0	5.333	A
C-A	250			250			
A-B	14			14			
A-C	185			185			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	49	452	0.109	49	0.1	9.830	A
C-AB	18	783	0.023	18	0.0	5.176	A
C-A	297			297			
A-B	16			16			
A-C	221			221			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	61	434	0.140	60	0.2	10.593	B
C-AB	24	820	0.030	24	0.0	4.975	A
C-A	361			361			
A-B	20			20			
A-C	271			271			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	61	434	0.140	61	0.2	10.601	B
C-AB	24	820	0.030	24	0.0	4.977	A
C-A	361			361			
A-B	20			20			
A-C	271			271			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	49	452	0.109	50	0.1	9.842	A
C-AB	18	783	0.023	18	0.0	5.177	A
C-A	297			297			
A-B	16			16			
A-C	221			221			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	41	465	0.089	42	0.1	9.352	A
C-AB	14	756	0.018	14	0.0	5.334	A
C-A	250			250			
A-B	14			14			
A-C	185			185			

2031 No Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.93	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2031 No Dev	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	372	100.000
B		✓	51	100.000
C		✓	246	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	41	331
	B	37	0	14
	C	239	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.14	11.03	0.2	B
C-AB	0.02	5.80	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	38	449	0.086	38	0.1	9.622	A
C-AB	7	690	0.010	7	0.0	5.797	A
C-A	178			178			
A-B	31			31			
A-C	249			249			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	46	435	0.105	46	0.1	10.176	B
C-AB	9	704	0.013	9	0.0	5.698	A
C-A	212			212			
A-B	37			37			
A-C	298			298			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	56	415	0.135	56	0.2	11.024	B
C-AB	12	724	0.017	12	0.0	5.564	A
C-A	259			259			
A-B	45			45			
A-C	364			364			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	56	415	0.135	56	0.2	11.032	B
C-AB	12	724	0.017	12	0.0	5.564	A
C-A	259			259			
A-B	45			45			
A-C	364			364			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	46	435	0.105	46	0.1	10.190	B
C-AB	9	704	0.013	9	0.0	5.700	A
C-A	212			212			
A-B	37			37			
A-C	298			298			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	38	449	0.086	39	0.1	9.650	A
C-AB	7	690	0.010	7	0.0	5.797	A
C-A	178			178			
A-B	31			31			
A-C	249			249			

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 2031 Inc Comm Dev No Prop Dev.j9
Path: \\pah-server\Paragon\Projects\Broad Oak Farm, Linthwaite - 1098\PICADY\Woodside View Cowlersley Lane\2021 TA
Report generation date: 20/04/2021 14:44:47

»2031 Inc Comm No Prop Dev, AM
»2031 Inc Comm No Prop Dev, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2031 Inc Comm No Prop Dev							
Stream B-AC	0.2	10.72	0.14	B	0.2	11.16	0.14	B
Stream C-AB	0.0	5.32	0.03	A	0.0	5.77	0.02	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	Broad Oak Farm
Location	Woodside View/ Cowlersley Lane
Site number	1098
Date	19/04/2021
Version	
Status	
Identifier	
Client	
Jobnumber	1098
Enumerator	LO
Description	2031 Inc Comm Dev No Prop Dev

Units

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

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	2031 Inc Comm No Prop Dev	AM	ONE HOUR	08:00	09:30	15
D2	2031 Inc Comm No Prop Dev	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Inc Comm No Prop Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	1.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Cowlersley Lane	north of junction	Major
B	Woodside View		Minor
C	Cowlersley Lane	south of junction	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	8.95			90.0	✓	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	2.88	23	22

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	490	0.078	0.197	0.124	0.281
1	B-C	630	0.084	0.213	-	-
1	C-B	626	0.211	0.211	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 Inc Comm No Prop Dev	AM	ONE HOUR	08:00	09:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	278	100.000
B		✓	55	100.000
C		✓	359	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	18	260
	B	36	0	19
	C	347	12	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.14	10.72	0.2	B
C-AB	0.03	5.32	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	41	462	0.090	41	0.1	9.391	A
C-AB	14	759	0.018	14	0.0	5.315	A
C-A	256			256			
A-B	14			14			
A-C	196			196			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	49	449	0.110	49	0.1	9.913	A
C-AB	18	786	0.023	18	0.0	5.156	A
C-A	305			305			
A-B	16			16			
A-C	234			234			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	61	430	0.141	60	0.2	10.713	B
C-AB	25	824	0.030	25	0.0	4.951	A
C-A	371			371			
A-B	20			20			
A-C	286			286			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	61	430	0.141	61	0.2	10.721	B
C-AB	25	824	0.030	25	0.0	4.954	A
C-A	371			371			
A-B	20			20			
A-C	286			286			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	49	449	0.110	50	0.1	9.926	A
C-AB	18	786	0.023	18	0.0	5.157	A
C-A	305			305			
A-B	16			16			
A-C	234			234			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	41	462	0.090	42	0.1	9.417	A
C-AB	14	759	0.018	14	0.0	5.316	A
C-A	256			256			
A-B	14			14			
A-C	196			196			

2031 Inc Comm No Prop Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2031 Inc Comm No Prop Dev	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	385	100.000
B		✓	51	100.000
C		✓	256	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	41	344
	B	37	0	14
	C	249	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.14	11.16	0.2	B
C-AB	0.02	5.77	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	38	446	0.086	38	0.1	9.689	A
C-AB	7	693	0.010	7	0.0	5.770	A
C-A	186			186			
A-B	31			31			
A-C	259			259			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	46	431	0.106	46	0.1	10.264	B
C-AB	9	708	0.013	9	0.0	5.666	A
C-A	221			221			
A-B	37			37			
A-C	309			309			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	56	411	0.137	56	0.2	11.149	B
C-AB	12	729	0.017	12	0.0	5.526	A
C-A	269			269			
A-B	45			45			
A-C	379			379			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	56	411	0.137	56	0.2	11.160	B
C-AB	12	729	0.017	12	0.0	5.528	A
C-A	269			269			
A-B	45			45			
A-C	379			379			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	46	431	0.106	46	0.1	10.279	B
C-AB	9	708	0.013	9	0.0	5.669	A
C-A	221			221			
A-B	37			37			
A-C	309			309			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	38	446	0.086	39	0.1	9.715	A
C-AB	7	693	0.010	7	0.0	5.772	A
C-A	185			185			
A-B	31			31			
A-C	259			259			

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.2.5947
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Filename: 2031 Inc Comm Dev Plus Prop Dev.j9
Path: \\pah-server\Paragon\Projects\Broad Oak Farm, Linthwaite - 1098\PICADY\Woodside View Cowlersley Lane\2021 TA
Report generation date: 20/04/2021 14:51:21

»2031 Inc Comm Plus Prop Dev, AM
»2031 Inc Comm Plus Prop Dev, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	2031 Inc Comm Plus Prop Dev							
Stream B-AC	0.2	10.72	0.14	B	0.2	11.16	0.14	B
Stream C-AB	0.0	5.32	0.03	A	0.0	5.77	0.02	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	Broad Oak Farm
Location	Woodside View/ Cowlersley Lane
Site number	1098
Date	19/04/2021
Version	
Status	
Identifier	
Client	
Jobnumber	1098
Enumerator	LO
Description	2031 Inc Comm Dev Plus Prop Dev

Units

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

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	2031 Inc Comm Plus Prop Dev	AM	ONE HOUR	08:00	09:30	15
D2	2031 Inc Comm Plus Prop Dev	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2031 Inc Comm Plus Prop Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	1.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Cowlersley Lane	north of junction	Major
B	Woodside View		Minor
C	Cowlersley Lane	south of junction	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	8.95			90.0	✓	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	2.88	23	22

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	490	0.078	0.197	0.124	0.281
1	B-C	630	0.084	0.213	-	-
1	C-B	626	0.211	0.211	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2031 Inc Comm Plus Prop Dev	AM	ONE HOUR	08:00	09:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	278	100.000
B		✓	55	100.000
C		✓	359	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	18	260
	B	36	0	19
	C	347	12	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.14	10.72	0.2	B
C-AB	0.03	5.32	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	41	462	0.090	41	0.1	9.391	A
C-AB	14	759	0.018	14	0.0	5.315	A
C-A	256			256			
A-B	14			14			
A-C	196			196			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	49	449	0.110	49	0.1	9.913	A
C-AB	18	786	0.023	18	0.0	5.156	A
C-A	305			305			
A-B	16			16			
A-C	234			234			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	61	430	0.141	60	0.2	10.713	B
C-AB	25	824	0.030	25	0.0	4.951	A
C-A	371			371			
A-B	20			20			
A-C	286			286			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	61	430	0.141	61	0.2	10.721	B
C-AB	25	824	0.030	25	0.0	4.954	A
C-A	371			371			
A-B	20			20			
A-C	286			286			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	49	449	0.110	50	0.1	9.926	A
C-AB	18	786	0.023	18	0.0	5.157	A
C-A	305			305			
A-B	16			16			
A-C	234			234			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	41	462	0.090	42	0.1	9.417	A
C-AB	14	759	0.018	14	0.0	5.316	A
C-A	256			256			
A-B	14			14			
A-C	196			196			

2031 Inc Comm Plus Prop Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	0.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2031 Inc Comm Plus Prop Dev	PM	ONE HOUR	17:00	18:30	15

Default vehicle mix	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 (PCU/hr)	Scaling Factor (%)
A		✓	385	100.000
B		✓	51	100.000
C		✓	256	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	41	344
	B	37	0	14
	C	249	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	10	10	10
	B	10	10	10
	C	10	10	10

Results

Results Summary for whole modelled period

Stream	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.14	11.16	0.2	B
C-AB	0.02	5.77	0.0	A
C-A				
A-B				
A-C				

Main Results for each time segment

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	38	446	0.086	38	0.1	9.689	A
C-AB	7	693	0.010	7	0.0	5.770	A
C-A	186			186			
A-B	31			31			
A-C	259			259			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	46	431	0.106	46	0.1	10.264	B
C-AB	9	708	0.013	9	0.0	5.666	A
C-A	221			221			
A-B	37			37			
A-C	309			309			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	56	411	0.137	56	0.2	11.149	B
C-AB	12	729	0.017	12	0.0	5.526	A
C-A	269			269			
A-B	45			45			
A-C	379			379			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	56	411	0.137	56	0.2	11.160	B
C-AB	12	729	0.017	12	0.0	5.528	A
C-A	269			269			
A-B	45			45			
A-C	379			379			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	46	431	0.106	46	0.1	10.279	B
C-AB	9	708	0.013	9	0.0	5.669	A
C-A	221			221			
A-B	37			37			
A-C	309			309			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	LOS
B-AC	38	446	0.086	39	0.1	9.715	A
C-AB	7	693	0.010	7	0.0	5.772	A
C-A	185			185			
A-B	31			31			
A-C	259			259			

Appendix I

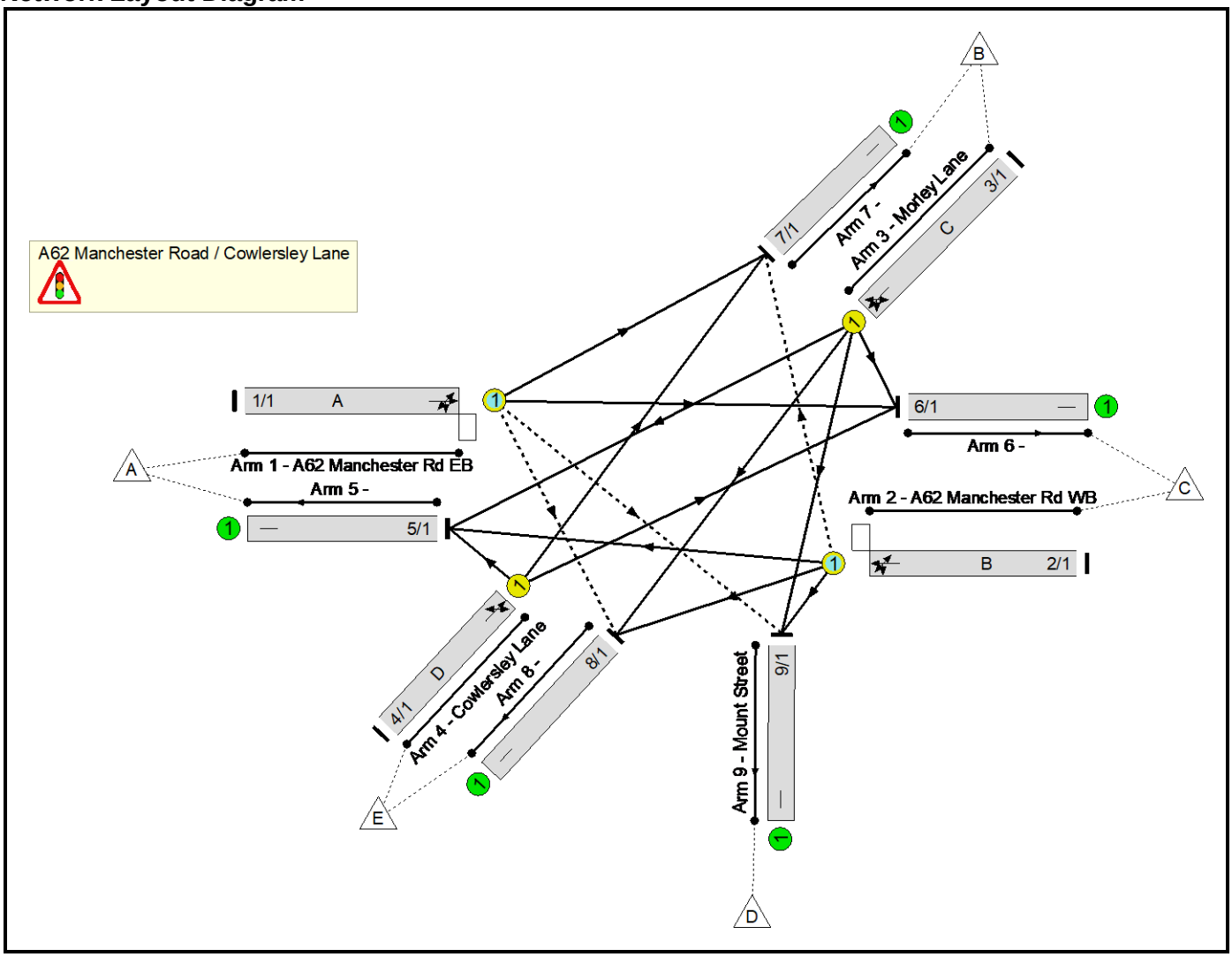
LinSig Output

Full Input Data And Results

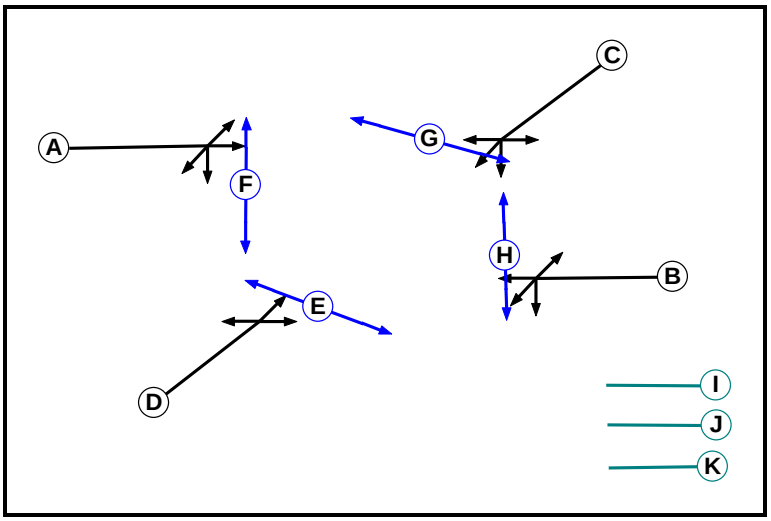
User and Project Details

Project:	**A62 Manchester Road, Linthwaite, Huddersfield**
Title:	**Cowersley Lane junction**
Location:	
Client:	Paragon Highways
Model Assumptions:	Stage 2 is called every other cycle
Author:	Anthony Gent
Company:	
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	7
C	Traffic		7	7
D	Traffic		7	7
E	Pedestrian		8	8
F	Pedestrian		7	7
G	Pedestrian		7	7
H	Pedestrian		7	7
I	Dummy		3	3
J	Dummy		8	8
K	Dummy		7	7

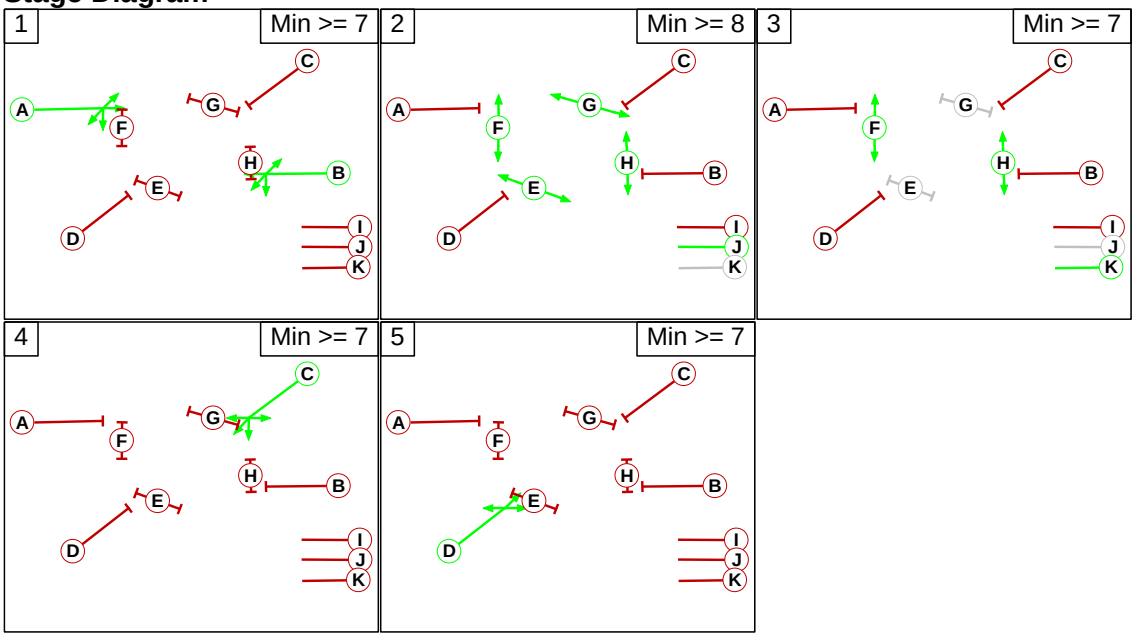
Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J	K
A		-	6	7	8	7	8	9	3	12	9
B	-		7	8	10	9	12	7	3	12	9
C	6	6		7	8	7	6	7	3	8	7
D	6	6	6		5	7	8	7	3	8	7
E	9	9	11	8		-	-	-	3	-	-
F	9	9	8	8	-		-	-	3	-	-
G	11	8	9	12	-	-		-	3	-	-
H	9	9	8	8	-	-	-		3	-	-
I	2	2	2	2	2	2	2	2		2	2
J	11	8	11	12	-	-	-	-	3		-
K	9	9	8	8	-	-	-	-	3	-	

Phases in Stage

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

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
2	1	E	Losing	2	2
2	1	F	Losing	2	2
2	1	H	Losing	2	2
2	4	F	Losing	3	3
2	4	G	Losing	2	2
2	4	H	Losing	3	3
2	5	E	Losing	4	4
2	5	F	Losing	4	4
2	5	H	Losing	4	4

Prohibited Stage Change

		To Stage				
		1	2	3	4	5
From Stage	1		12	9	7	8
	2	11		0	11	12
	3	9	0		8	8
	4	6	8	7		7
	5	6	8	7	6	

Give-Way Lane Input Data

Junction: A62 Manchester Road / Cowlersley Lane

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/1 (A62 Manchester Rd EB)	8/1 (Right)	1439	0	2/1	1.09	To 5/1 (Ahead) To 8/1 (Left)	1.00	1.00	0.50	1	2.00
	9/1 (Right)	1439	0	2/1	1.09	To 5/1 (Ahead) To 8/1 (Left) To 9/1 (Left)					
2/1 (A62 Manchester Rd WB)	7/1 (U-Turn)	1439	0	1/1	1.09	To 6/1 (Ahead) To 7/1 (Ahead)	1.00	1.00	0.50	1	2.00

Lane Input Data

Junction: A62 Manchester Road / Cowlersley Lane												
Lane	**Lane Type**	**Phases**	**Start Disp.**	**End Disp.**	**Physical Length (PCU)**	**Sat Flow Type**	**Def User Saturation Flow (PCU/Hr)**	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Turns**	**Turning Radius (m)**
1/1 (A62 Manchester Rd EB)	O	A	2	3	60.0	User	1850	-	-	-	-	-
2/1 (A62 Manchester Rd WB)	O	B	2	3	60.0	User	1850	-	-	-	-	-
3/1 (Morley Lane)	U	C	2	3	60.0	User	1750	-	-	-	-	-
4/1 (Cowlersley Lane)	U	D	2	3	60.0	User	1750	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2021 AM'	08:00	09:00	01:00	
2: '2021 PM'	17:00	18:00	01:00	
3: '2021 AM+Com'	08:00	09:00	01:00	
4: '2021 PM+Com'	17:00	18:00	01:00	
5: '2021 AM+Com+Prop'	08:00	09:00	01:00	
6: '2021 PM+Com+Prop'	17:00	18:00	01:00	
7: '2031 AM'	08:00	09:00	01:00	
8: '2031 PM'	17:00	18:00	01:00	
9: '2031 AM+Com'	08:00	09:00	01:00	
10: '2031 PM+Com'	17:00	18:00	01:00	
11: '2031 AM+Com+Prop'	08:00	09:00	01:00	
12: '2031 PM+Com+Prop'	17:00	18:00	01:00	

Scenario 1: '2021 Base AM' (FG1: '2021 AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	231	498	0	44	773
	B	191	0	24	0	206	421
	C	295	44	0	8	127	474
	D	0	0	0	0	0	0
	E	12	276	252	0	0	540
	Tot.	498	551	774	8	377	2208

Traffic Lane Flows

Lane	Scenario 1: 2021 Base AM
Junction: A62 Manchester Road / Cowlersley Lane	
1/1	773
2/1	474
3/1	421
4/1	540
5/1	498
6/1	774
7/1	551
8/1	377
9/1	8

Lane Saturation Flows

Junction: A62 Manchester Road / Cowlersley Lane
No data to display

Scenario 2: '2021 Base PM' (FG2: '2021 PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	150	415	4	2	571
	B	177	0	14	14	293	498
	C	556	83	0	10	284	933
	D	0	0	0	0	0	0
	E	52	189	181	0	0	422
	Tot.	785	422	610	28	579	2424

Traffic Lane Flows

Lane	Scenario 2: 2021 Base PM
Junction: A62 Manchester Road / Cowlersley Lane	
1/1	571
2/1	933
3/1	498
4/1	422
5/1	785
6/1	610
7/1	422
8/1	579
9/1	28

Scenario 3: '2021 AM with Committed' (FG3: '2021 AM+Com', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	263	548	0	44	855
	B	204	0	24	0	208	436
	C	315	44	0	8	131	498
	D	0	0	0	0	0	0
	E	12	282	262	0	0	556
	Tot.	531	589	834	8	383	2345

Traffic Lane Flows

Lane	Scenario 3: 2021 AM with Committed
Junction: A62 Manchester Road / Cowlersley Lane	
1/1	855
2/1	498
3/1	436
4/1	556
5/1	531
6/1	834
7/1	589
8/1	383
9/1	8

Scenario 4: '2021 PM with Committed' (FG4: '2021 PM+Com', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	163	435	4	2	604
	B	209	0	14	14	302	539
	C	608	85	0	10	295	998
	D	0	0	0	0	0	0
	E	52	192	185	0	0	429
	Tot.	869	440	634	28	599	2570

Traffic Lane Flows

Lane	Scenario 4: 2021 PM with Committed
Junction: A62 Manchester Road / Cowlersley Lane	
1/1	604
2/1	998
3/1	539
4/1	429
5/1	869
6/1	634
7/1	440
8/1	599
9/1	28

Scenario 5: '2021 AM with Com+Proposed' (FG5: '2021 AM+Com+Prop', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	263	548	0	44	855
	B	204	0	24	0	215	443
	C	315	44	0	8	142	509
	D	0	0	0	0	0	0
	E	12	300	290	0	0	602
	Tot.	531	607	862	8	401	2409

Traffic Lane Flows

Lane	Scenario 5: 2021 AM with Com+Proposed
Junction: A62 Manchester Road / Cowlersley Lane	
1/1	855
2/1	509
3/1	443
4/1	602
5/1	531
6/1	862
7/1	607
8/1	401
9/1	8

Scenario 6: '2021 PM with Com+Proposed' (FG6: '2021 PM+Com+Prop', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	163	435	4	2	604
	B	209	0	14	14	320	557
	C	608	85	0	10	323	1026
	D	0	0	0	0	0	0
	E	52	199	194	0	0	445
	Tot.	869	447	643	28	645	2632

Traffic Lane Flows

Lane	Scenario 6: 2021 PM with Com+Proposed
Junction: A62 Manchester Road / Cowlersley Lane	
1/1	604
2/1	1026
3/1	557
4/1	445
5/1	869
6/1	643
7/1	447
8/1	645
9/1	28

Scenario 7: '2031 Base AM' (FG7: '2031 AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	259	559	0	49	867
	B	215	0	27	0	231	473
	C	331	49	0	9	142	531
	D	0	0	0	0	0	0
	E	14	309	283	0	0	606
	Tot.	560	617	869	9	422	2477

Traffic Lane Flows

Lane	Scenario 7: 2031 Base AM
Junction: A62 Manchester Road / Cowlersley Lane	
1/1	867
2/1	531
3/1	473
4/1	606
5/1	560
6/1	869
7/1	617
8/1	422
9/1	9

Scenario 8: '2031 Base PM' (FG8: '2031 PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	168	466	4	2	640
	B	198	0	15	15	331	559
	C	624	96	0	12	318	1050
	D	0	0	0	0	0	0
	E	58	212	203	0	0	473
	Tot.	880	476	684	31	651	2722

Traffic Lane Flows

Lane	Scenario 8: 2031 Base PM
Junction: A62 Manchester Road / Cowlersley Lane	
1/1	640
2/1	1050
3/1	559
4/1	473
5/1	880
6/1	684
7/1	476
8/1	651
9/1	31

Scenario 9: '2031 AM with Committed' (FG9: '2031 AM+Com', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	291	609	0	49	949
	B	228	0	27	0	233	488
	C	351	49	0	9	146	555
	D	0	0	0	0	0	0
	E	14	315	293	0	0	622
	Tot.	593	655	929	9	428	2614

Traffic Lane Flows

Lane	Scenario 9: 2031 AM with Committed
Junction: A62 Manchester Road / Cowlersley Lane	
1/1	949
2/1	555
3/1	488
4/1	622
5/1	593
6/1	929
7/1	655
8/1	428
9/1	9

Scenario 10: '2031 PM with Committed' (FG10: '2031 PM+Com', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	181	486	4	2	673
	B	230	0	15	22	338	605
	C	676	96	0	12	329	1113
	D	0	0	0	0	0	0
	E	58	215	207	0	0	480
	Tot.	964	492	708	38	669	2871

Traffic Lane Flows

Lane	Scenario 10: 2031 PM with Committed
Junction: A62 Manchester Road / Cowlersley Lane	
1/1	673
2/1	1113
3/1	605
4/1	480
5/1	964
6/1	708
7/1	492
8/1	669
9/1	38

Scenario 11: '2031 AM with Com+Proposed' (FG11: '2031 AM+Com+Prop', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	291	609	0	49	949
	B	228	0	27	0	240	495
	C	351	49	0	9	157	566
	D	0	0	0	0	0	0
	E	14	333	321	0	0	668
	Tot.	593	673	957	9	446	2678

Traffic Lane Flows

Lane	Scenario 11: 2031 AM with Com+Proposed
Junction: A62 Manchester Road / Cowlersley Lane	
1/1	949
2/1	566
3/1	495
4/1	668
5/1	593
6/1	957
7/1	673
8/1	446
9/1	9

Scenario 12: '2031 PM with Com+Proposed' (FG12: '2031 PM+Com+Prop', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

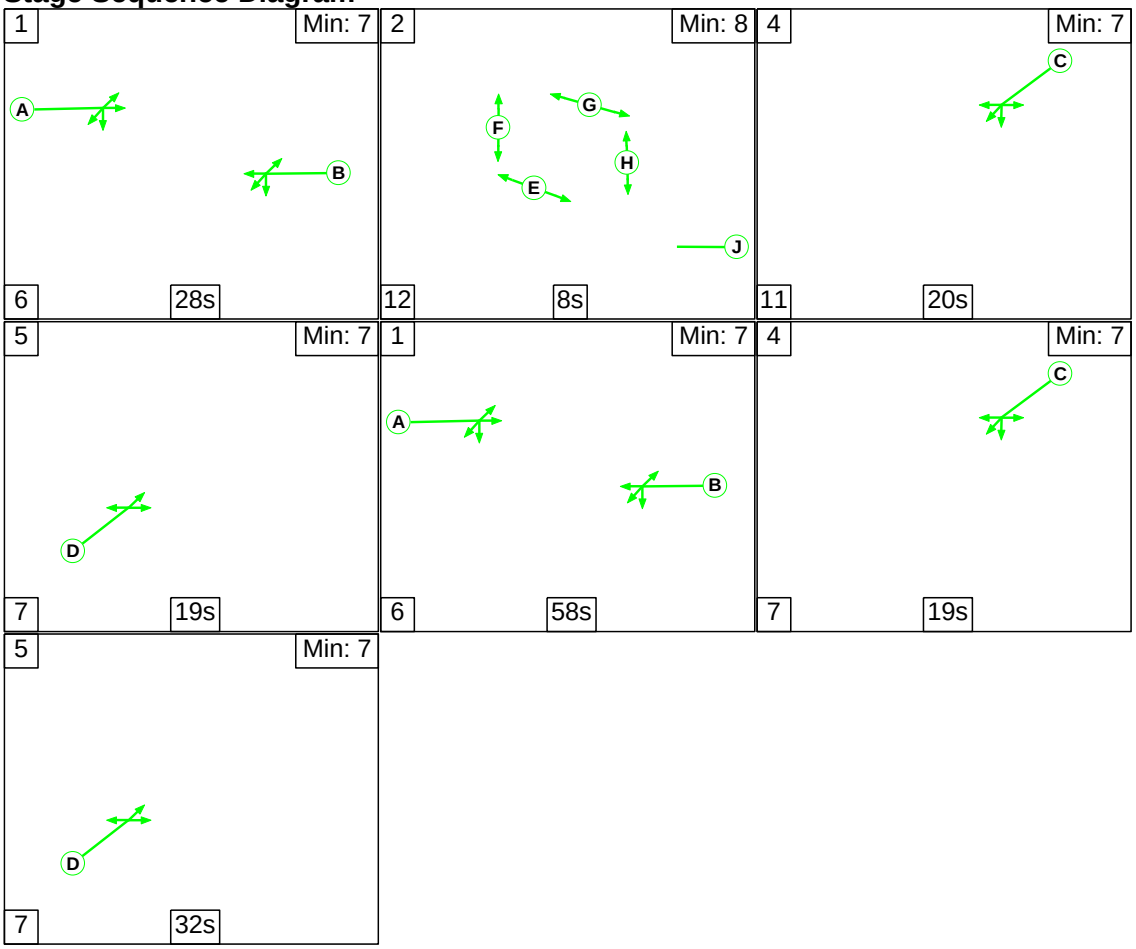
		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	181	486	4	2	673
	B	230	0	15	22	356	623
	C	676	96	0	12	357	1141
	D	0	0	0	0	0	0
	E	58	222	218	0	0	498
	Tot.	964	499	719	38	715	2935

Traffic Lane Flows

Lane	Scenario 12: 2031 PM with Com+Proposed
Junction: A62 Manchester Road / Cowlersley Lane	
1/1	673
2/1	1141
3/1	623
4/1	498
5/1	964
6/1	719
7/1	499
8/1	715
9/1	38

Scenario 1: '2021 Base AM' (FG1: '2021 AM', Plan 1: 'Network Control Plan 1')

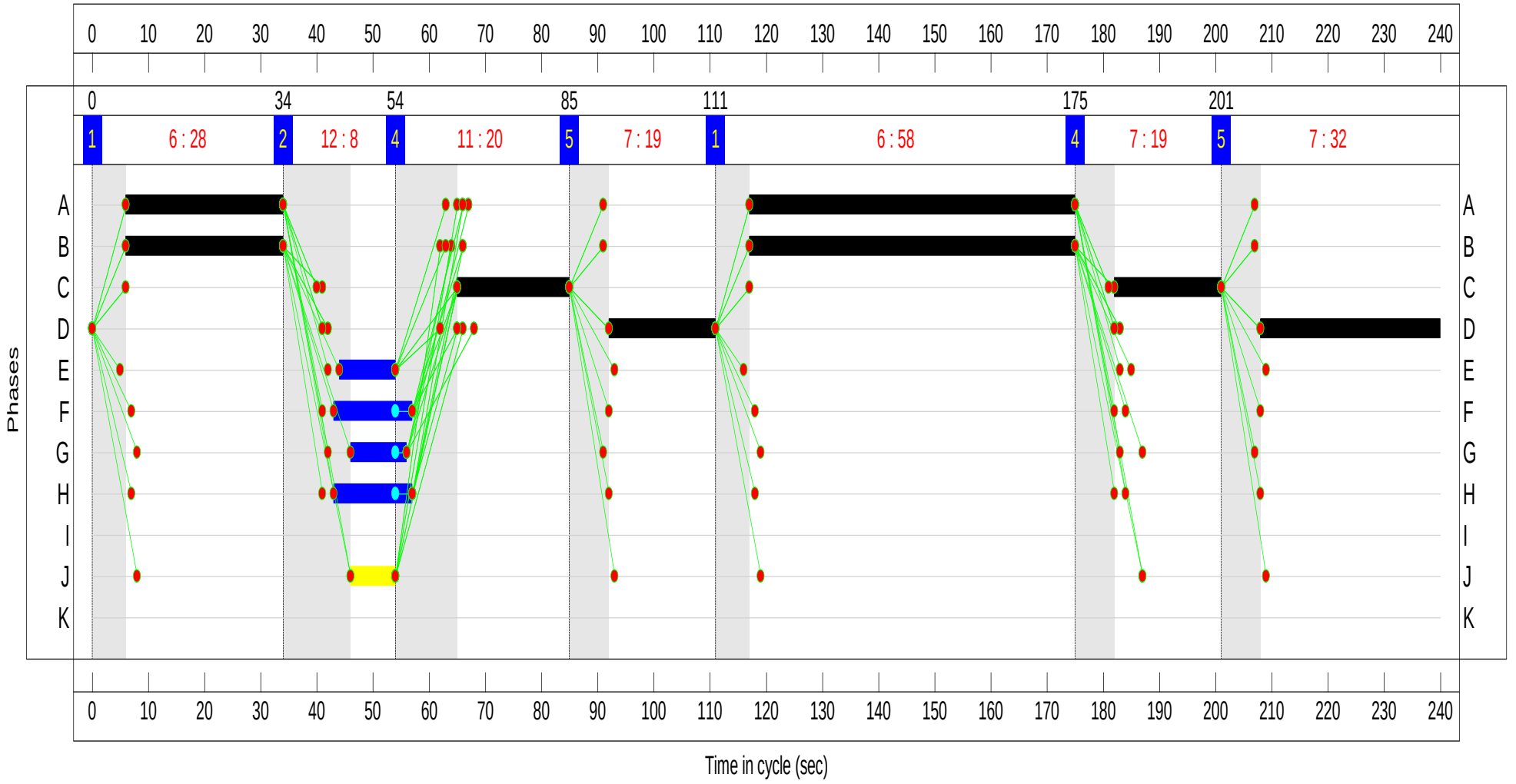
Stage Sequence Diagram



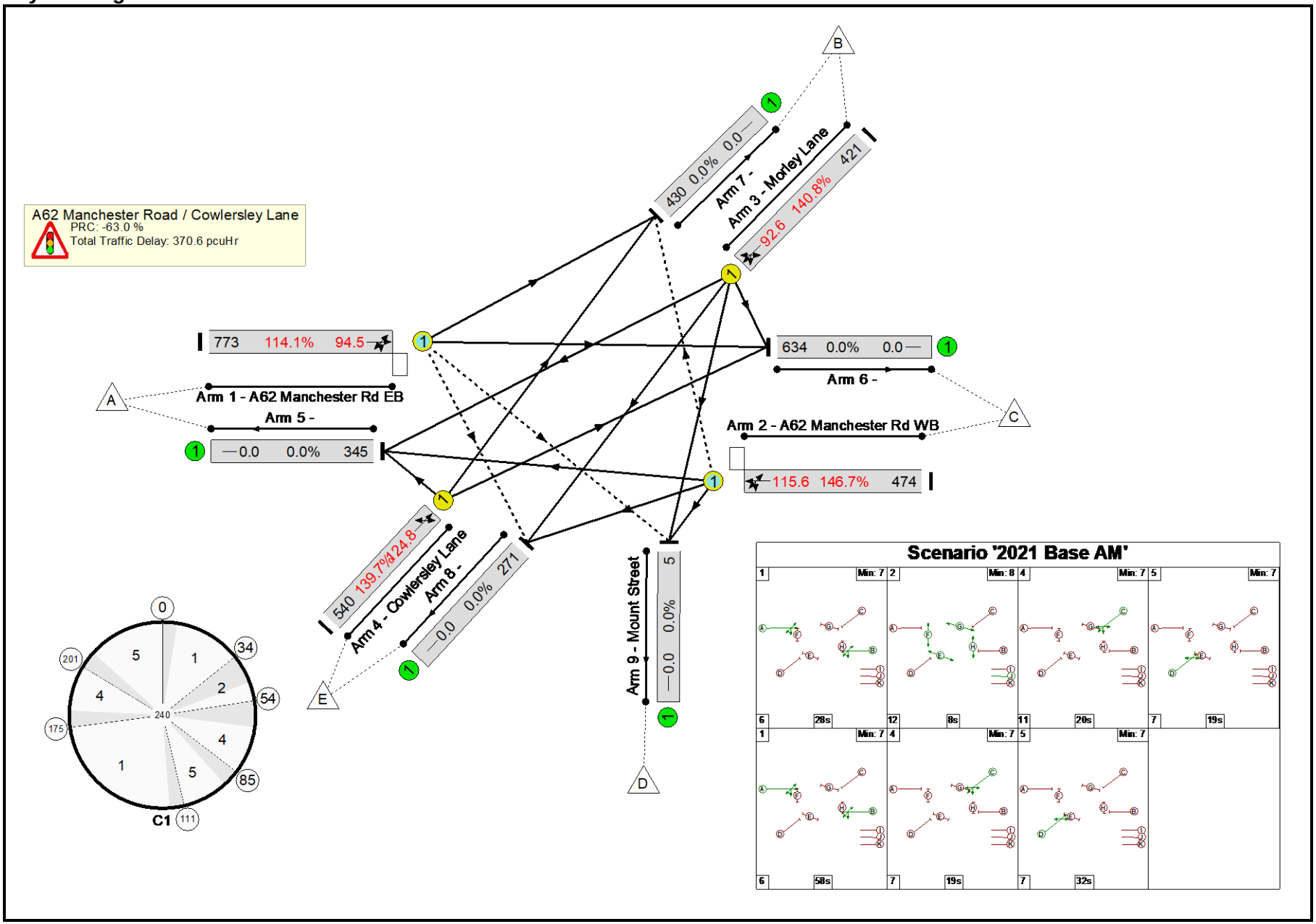
Stage Timings

Stage	1	2	4	5	1	4	5
Duration	28	8	20	19	58	19	32
Change Point	0	34	54	85	111	175	201

Signal Timings Diagram



Network Layout Diagram



Network Results

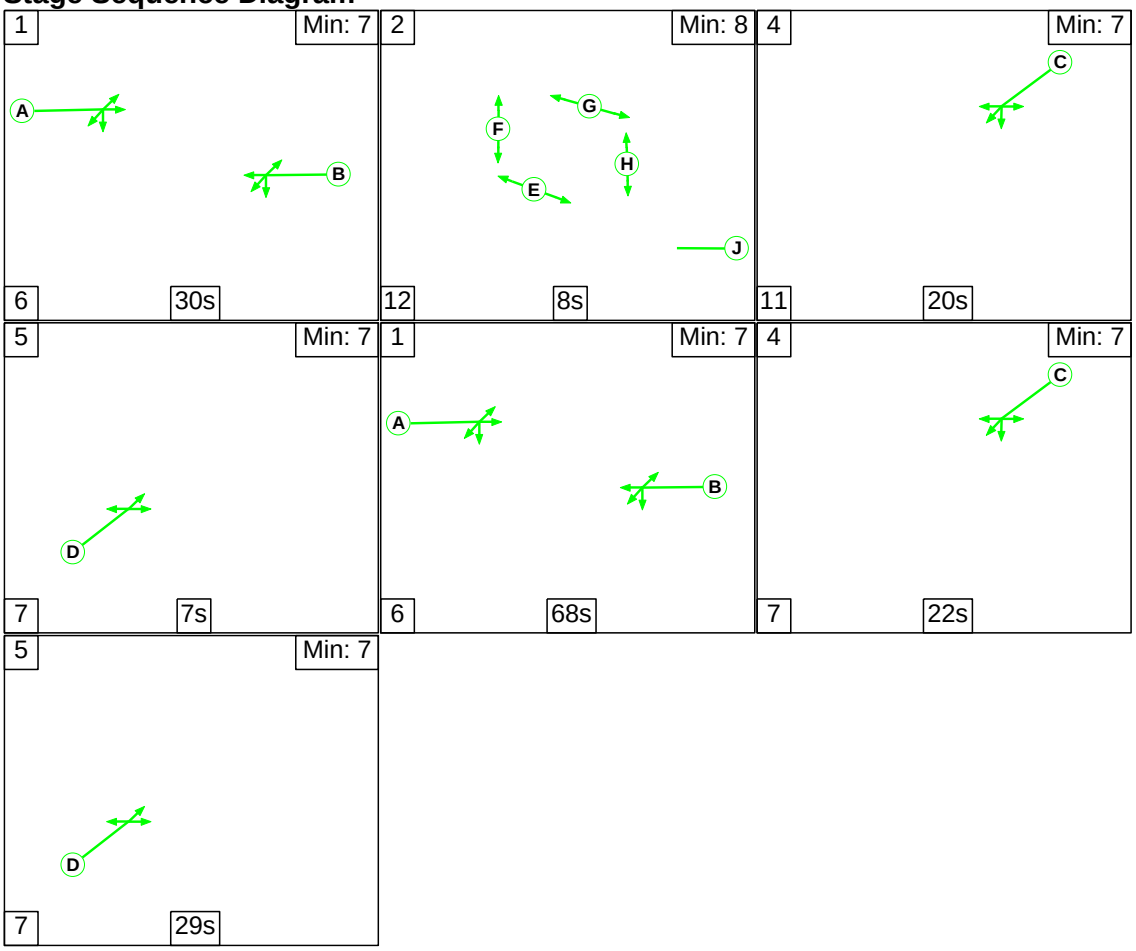
Item	Lane Description	Lane Type	Full Phase	Num Greens	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: Cowersley Lane junction	-	-	-	-	-	-	-	-	**146.7%**	-	-
A62 Manchester Road / Cowlersley Lane	-	-	-	-	-	-	-	-	**146.7%**	-	-
1/1	A62 Manchester Rd EB Ahead Ahead2 Right Right2	O	A	2	86	773	1850	678	114.1%	773	678
2/1	A62 Manchester Rd WB Ahead U-Turn Left Left2	O	B	2	86	474	1850	323	146.7%	474	323
3/1	Morley Lane Right Left Ahead Ahead2	U	C	2	39	421	1750	299	140.8%	421	299
4/1	Cowlersley Lane Left Right Ahead	U	D	2	51	540	1750	386	139.7%	540	386

Item	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: Cowersley Lane junction	**39**	**0**	**30**	**100.6**	**269.6**	**0.4**	**370.6**	-	-	-	-
A62 Manchester Road / Cowlersley Lane	**39**	**0**	**30**	**100.6**	**269.6**	**0.4**	**370.6**	-	-	-	-
1/1	39	0	0	20.4	51.5	0.1	72.0	335.3	43.0	51.5	94.5
2/1	0	0	30	26.9	76.9	0.3	104.2	791.3	38.7	76.9	115.6
3/1	-	-	-	21.5	62.7	-	84.2	720.4	29.9	62.7	92.6
4/1	-	-	-	31.6	78.5	-	110.1	734.2	46.3	78.5	124.8

C1 PRC for Signalled Lanes (%): -63.0 Total Delay for Signalled Lanes (pcuHr): 370.55 Cycle Time (s): 240
PRC Over All Lanes (%): -63.0 Total Delay Over All Lanes(pcuHr): 370.55

Scenario 2: '2021 Base PM' (FG2: '2021 PM', Plan 1: 'Network Control Plan 1')

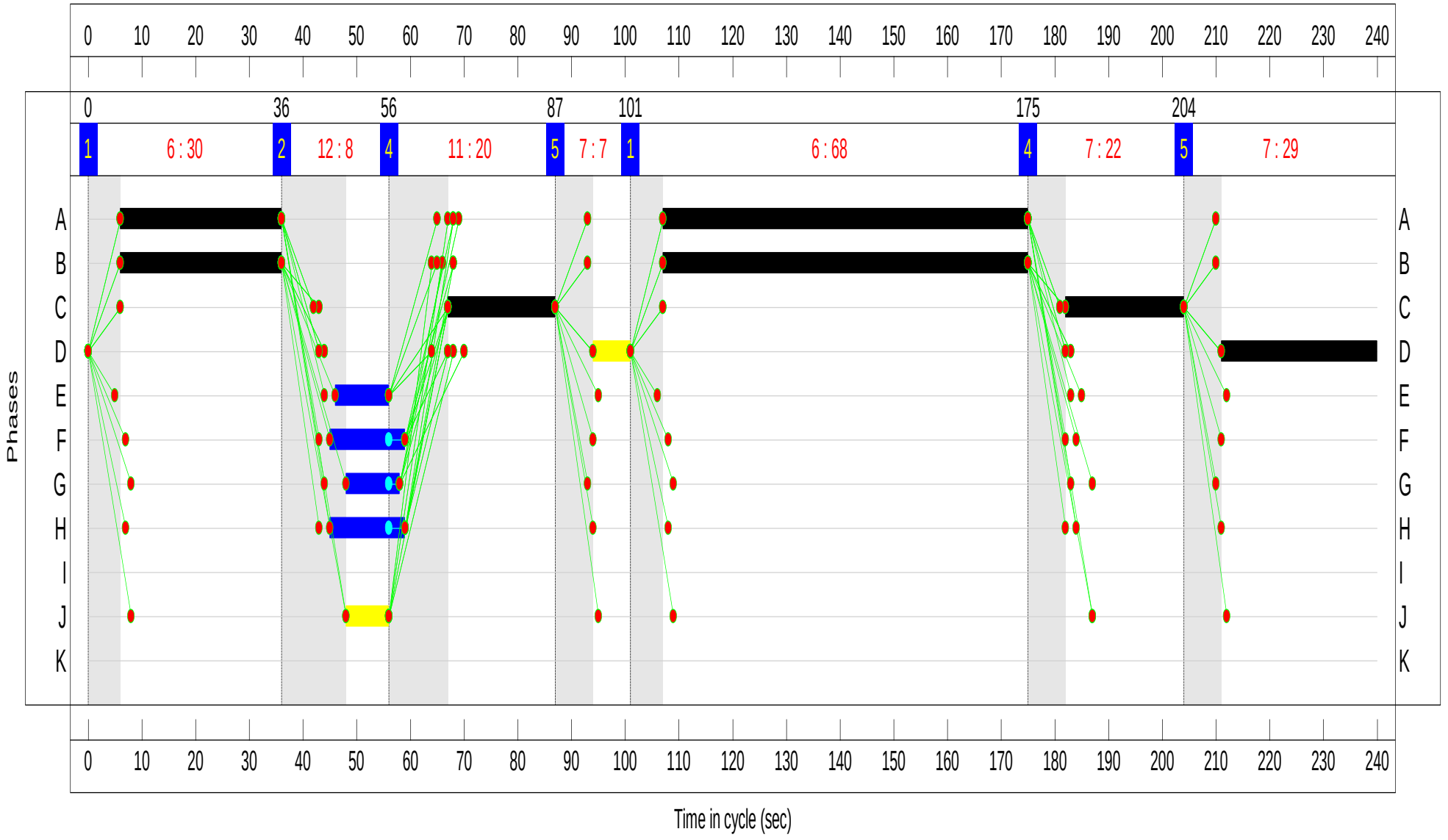
Stage Sequence Diagram



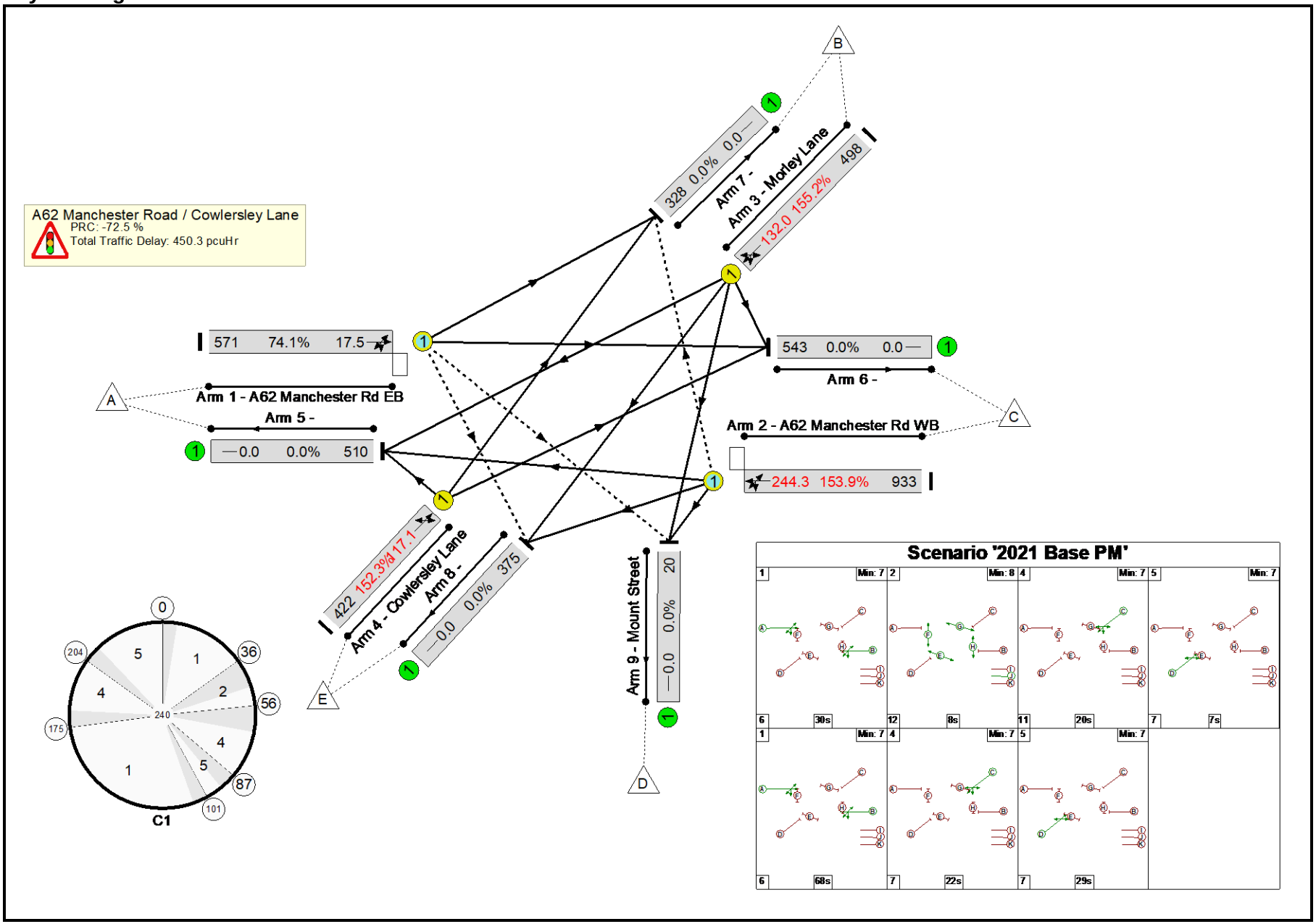
Stage Timings

Stage	1	2	4	5	1	4	5
Duration	30	8	20	7	68	22	29
Change Point	0	36	56	87	101	175	204

Signal Timings Diagram



Network Layout Diagram



Network Results

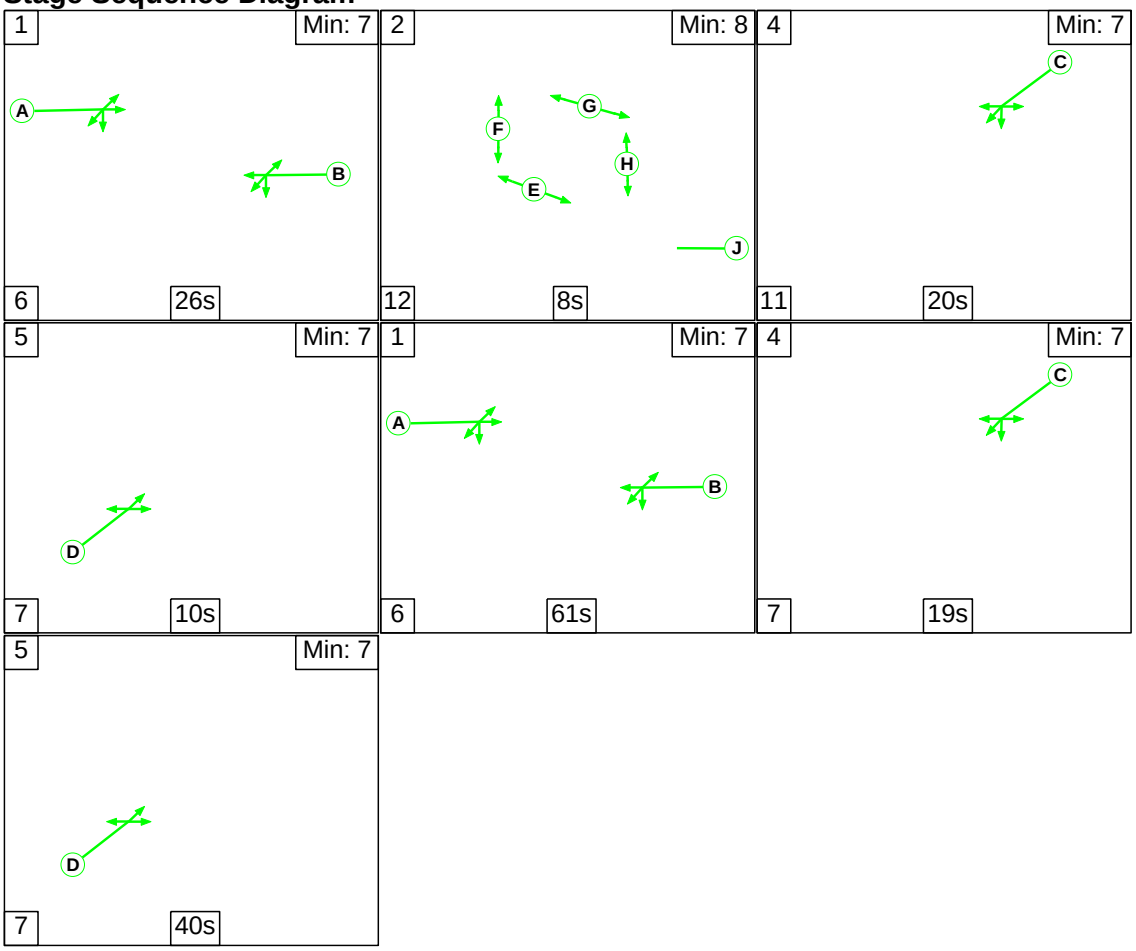
Item	Lane Description	Lane Type	Full Phase	Num Greens	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: Cowersley Lane junction	-	-	-	-	-	-	-	-	**155.2%**	-	-
A62 Manchester Road / Cowlersley Lane	-	-	-	-	-	-	-	-	**155.2%**	-	-
1/1	A62 Manchester Rd EB Ahead Ahead2 Right Right2	O	A	2	98	571	1850	771	74.1%	571	571
2/1	A62 Manchester Rd WB Ahead U-Turn Left Left2	O	B	2	98	933	1850	606	153.9%	933	606
3/1	Morley Lane Right Left Ahead Ahead2	U	C	2	42	498	1750	321	155.2%	498	321
4/1	Cowlersley Lane Left Right Ahead	U	D	2	36	422	1750	277	152.3%	422	277

Item	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: Cowersley Lane junction	**44**	**0**	**16**	**120.1**	**330.0**	**0.2**	**450.3**	-	-	-	-
A62 Manchester Road / Cowlersley Lane	**44**	**0**	**16**	**120.1**	**330.0**	**0.2**	**450.3**	-	-	-	-
1/1	5	0	1	4.7	1.4	0.0	6.1	38.8	16.1	1.4	17.5
2/1	39	0	15	53.9	164.7	0.2	218.9	844.5	79.6	164.7	244.3
3/1	-	-	-	31.3	90.0	-	121.3	877.0	42.0	90.0	132.0
4/1	-	-	-	30.1	73.9	-	103.9	886.7	43.2	73.9	117.1

C1 PRC for Signalled Lanes (%): -72.5 Total Delay for Signalled Lanes (pcuHr): 450.28 Cycle Time (s): 240
PRC Over All Lanes (%): -72.5 Total Delay Over All Lanes(pcuHr): 450.28

Scenario 3: '2021 AM with Committed' (FG3: '2021 AM+Com', Plan 1: 'Network Control Plan 1')

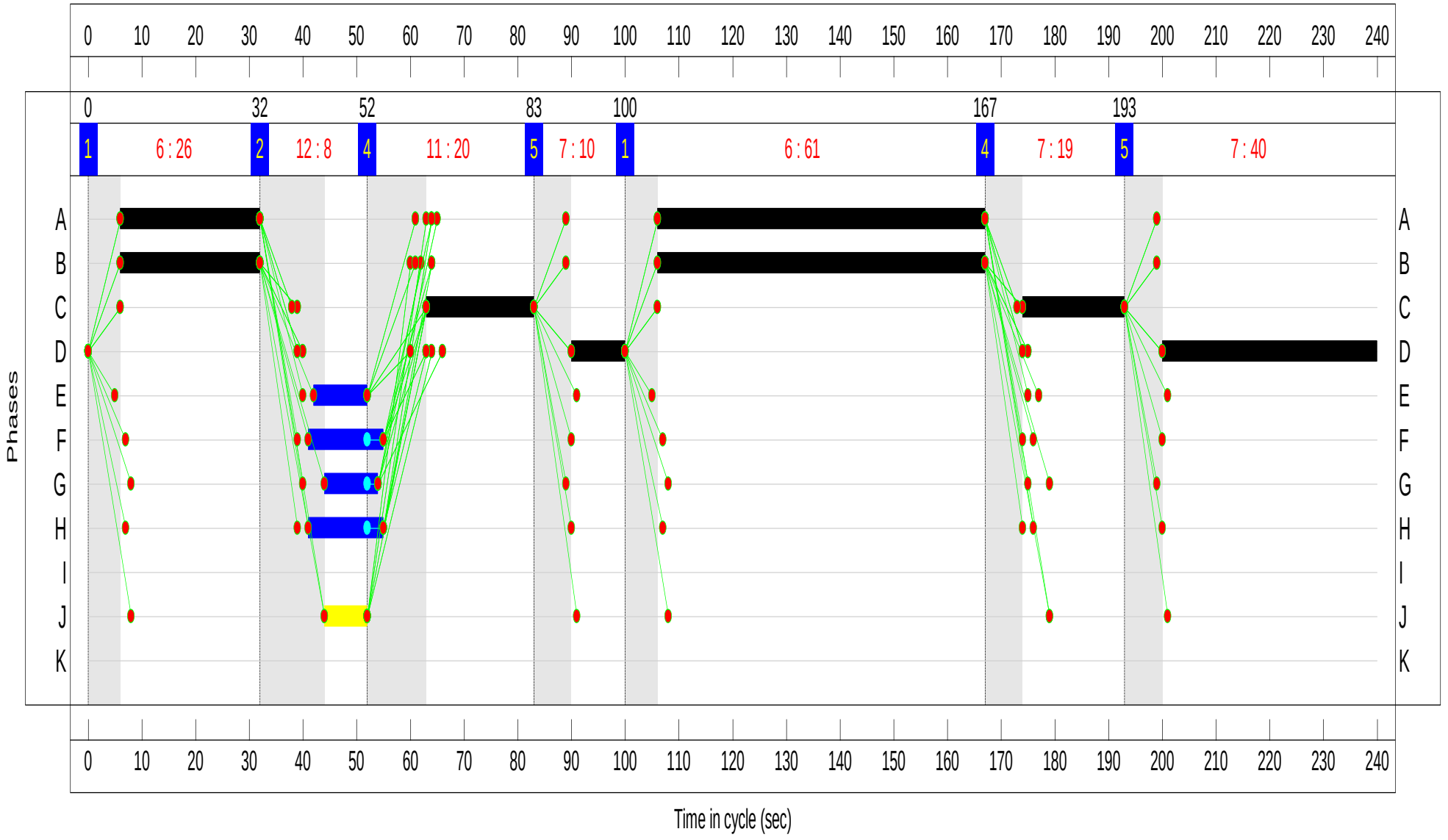
Stage Sequence Diagram



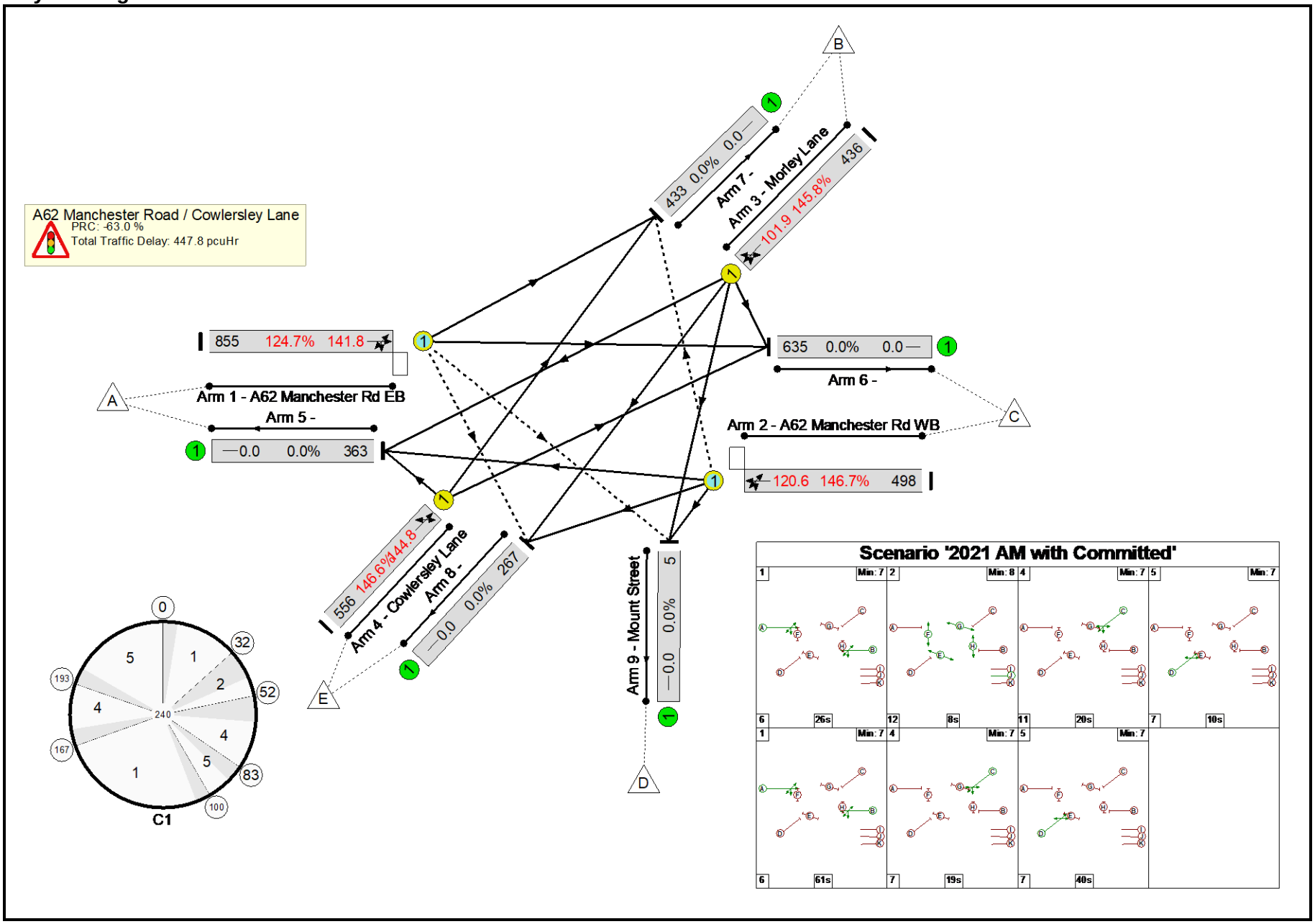
Stage Timings

Stage	1	2	4	5	1	4	5
Duration	26	8	20	10	61	19	40
Change Point	0	32	52	83	100	167	193

Signal Timings Diagram



Network Layout Diagram



Network Results

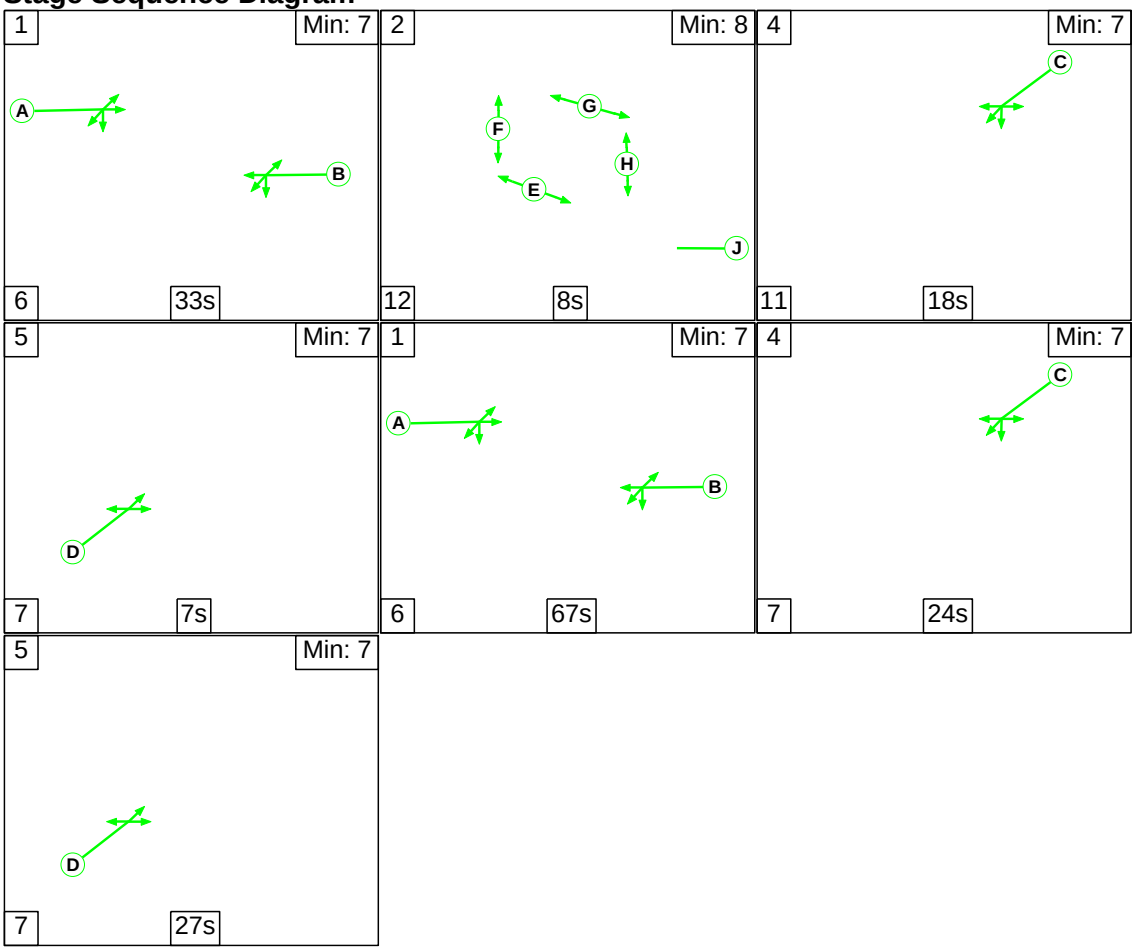
Item	Lane Description	Lane Type	Full Phase	Num Greens	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: Cowersley Lane junction	-	-	-	-	-	-	-	-	**146.7%**	-	-
A62 Manchester Road / Cowlersley Lane	-	-	-	-	-	-	-	-	**146.7%**	-	-
1/1	A62 Manchester Rd EB Ahead Ahead2 Right Right2	O	A	2	87	855	1850	686	124.7%	855	686
2/1	A62 Manchester Rd WB Ahead U-Turn Left Left2	O	B	2	87	498	1850	340	146.7%	498	340
3/1	Morley Lane Right Left Ahead Ahead2	U	C	2	39	436	1750	299	145.8%	436	299
4/1	Cowlersley Lane Left Right Ahead	U	D	2	50	556	1750	379	146.6%	556	379

Item	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: Cowersley Lane junction	**35**	**0**	**30**	**119.4**	**328.0**	**0.4**	**447.8**	-	-	-	-
A62 Manchester Road / Cowlersley Lane	**35**	**0**	**30**	**119.4**	**328.0**	**0.4**	**447.8**	-	-	-	-
1/1	35	0	0	30.6	87.2	0.1	117.9	496.3	54.7	87.2	141.8
2/1	0	0	30	28.1	80.8	0.3	109.2	789.3	39.8	80.8	120.6
3/1	-	-	-	23.6	70.1	-	93.7	773.8	31.8	70.1	101.9
4/1	-	-	-	37.0	90.0	-	127.0	822.3	54.8	90.0	144.8

C1 PRC for Signalled Lanes (%): -63.0 Total Delay for Signalled Lanes (pcuHr): 447.77 Cycle Time (s): 240
PRC Over All Lanes (%): -63.0 Total Delay Over All Lanes(pcuHr): 447.77

Scenario 4: '2021 PM with Committed' (FG4: '2021 PM+Com', Plan 1: 'Network Control Plan 1')

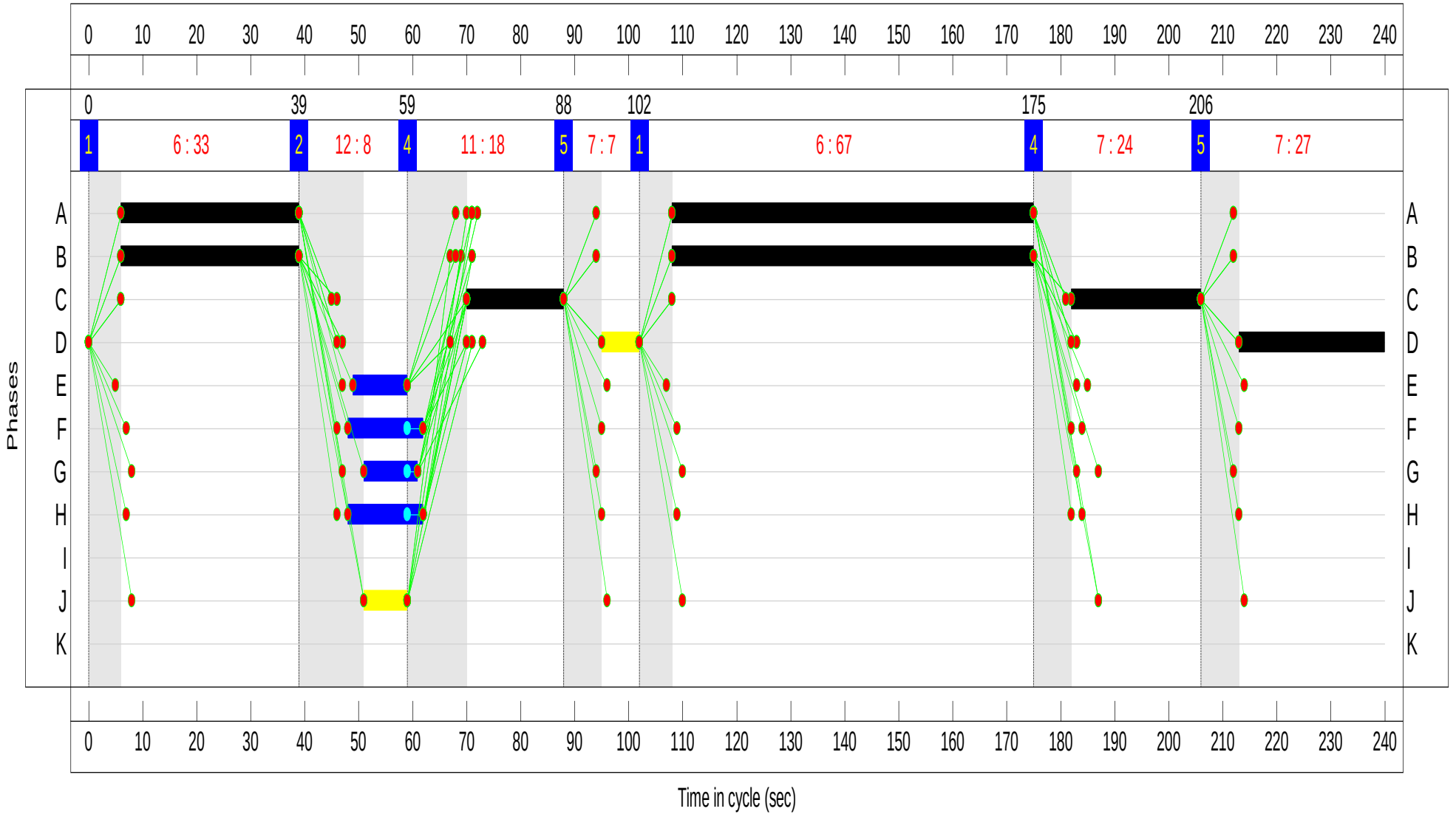
Stage Sequence Diagram



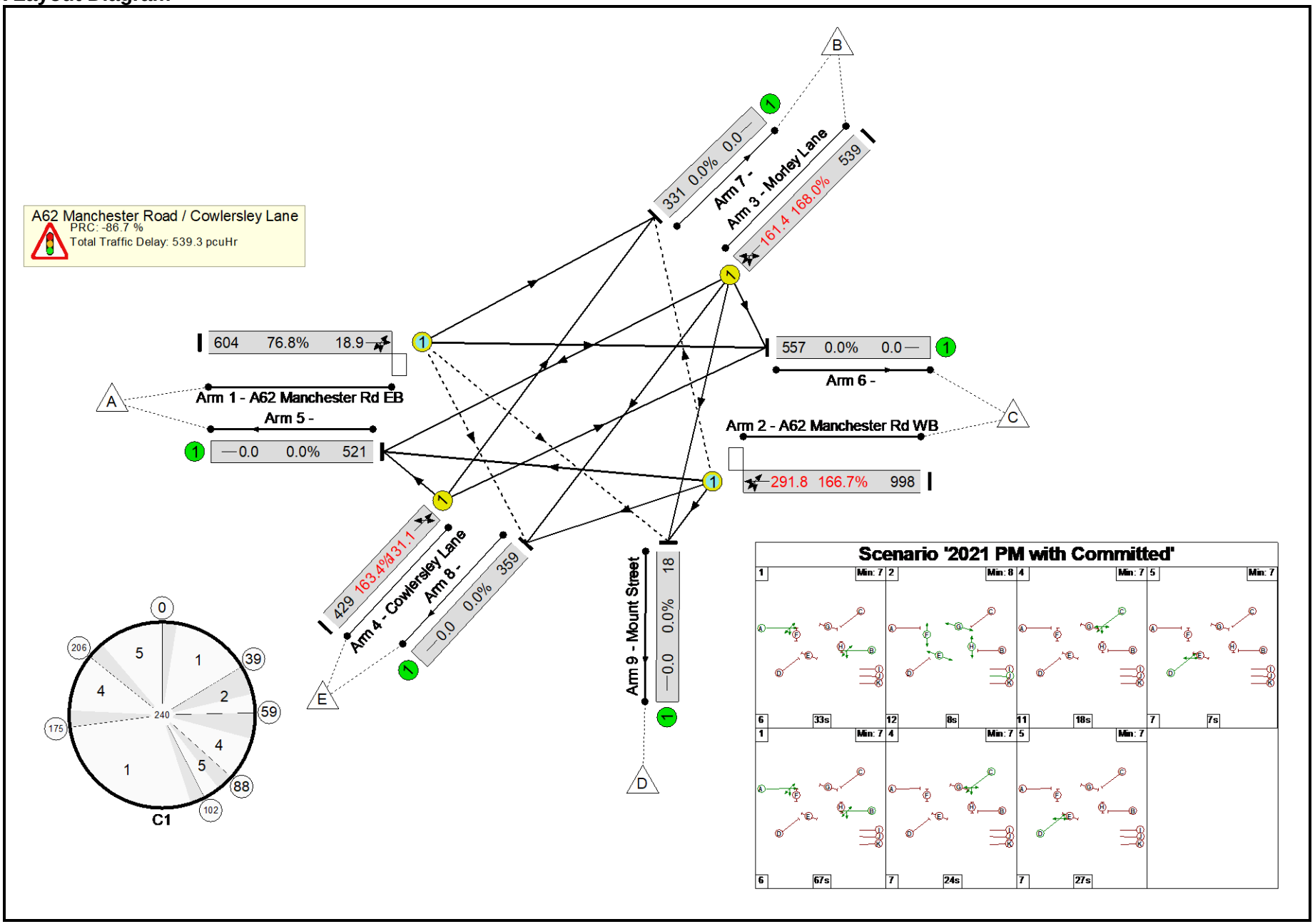
Stage Timings

Stage	1	2	4	5	1	4	5
Duration	33	8	18	7	67	24	27
Change Point	0	39	59	88	102	175	206

Signal Timings Diagram



Network Layout Diagram



Network Results

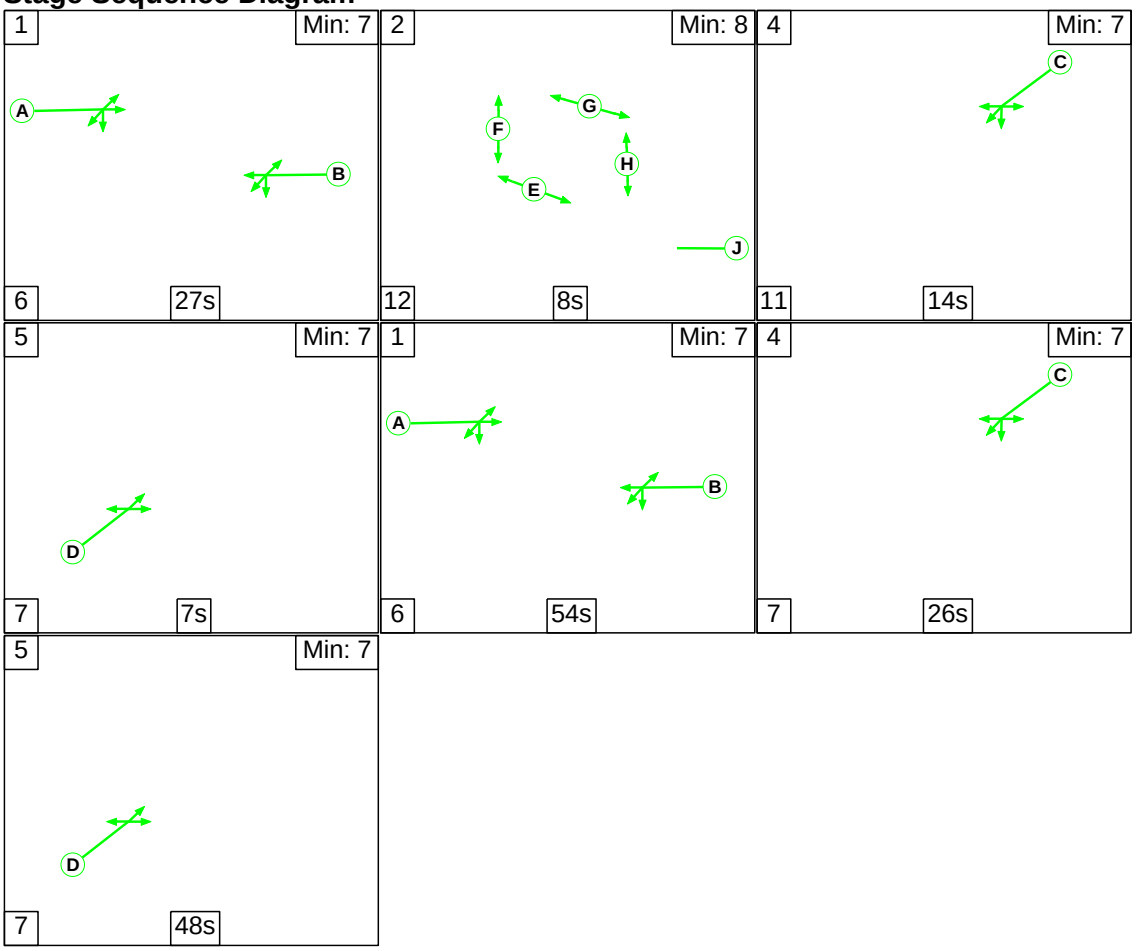
Item	Lane Description	Lane Type	Full Phase	Num Greens	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: Cowersley Lane junction	-	-	-	-	-	-	-	-	**168.0%**	-	-
A62 Manchester Road / Cowlersley Lane	-	-	-	-	-	-	-	-	**168.0%**	-	-
1/1	A62 Manchester Rd EB Ahead Ahead2 Right Right2	O	A	2	100	604	1850	786	76.8%	604	604
2/1	A62 Manchester Rd WB Ahead U-Turn Left Left2	O	B	2	100	998	1850	599	166.7%	998	599
3/1	Morley Lane Right Left Ahead Ahead2	U	C	2	42	539	1750	321	168.0%	539	321
4/1	Cowlersley Lane Left Right Ahead	U	D	2	34	429	1750	263	163.4%	429	262

Item	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: Cowersley Lane junction	**41**	**0**	**16**	**141.8**	**397.3**	**0.2**	**539.3**	-	-	-	-
A62 Manchester Road / Cowlersley Lane	**41**	**0**	**16**	**141.8**	**397.3**	**0.2**	**539.3**	-	-	-	-
1/1	5	0	1	4.9	1.6	0.0	6.6	39.3	17.3	1.6	18.9
2/1	36	0	15	64.8	200.8	0.2	265.8	958.9	91.0	200.8	291.8
3/1	-	-	-	38.8	110.3	-	149.1	995.8	51.1	110.3	161.4
4/1	-	-	-	33.3	84.5	-	117.8	988.6	46.6	84.5	131.1

C1 PRC for Signalled Lanes (%): -86.7 Total Delay for Signalled Lanes (pcuHr): 539.32 Cycle Time (s): 240
PRC Over All Lanes (%): -86.7 Total Delay Over All Lanes(pcuHr): 539.32

Scenario 5: '2021 AM with Com+Proposed' (FG5: '2021 AM+Com+Prop', Plan 1: 'Network Control Plan 1')

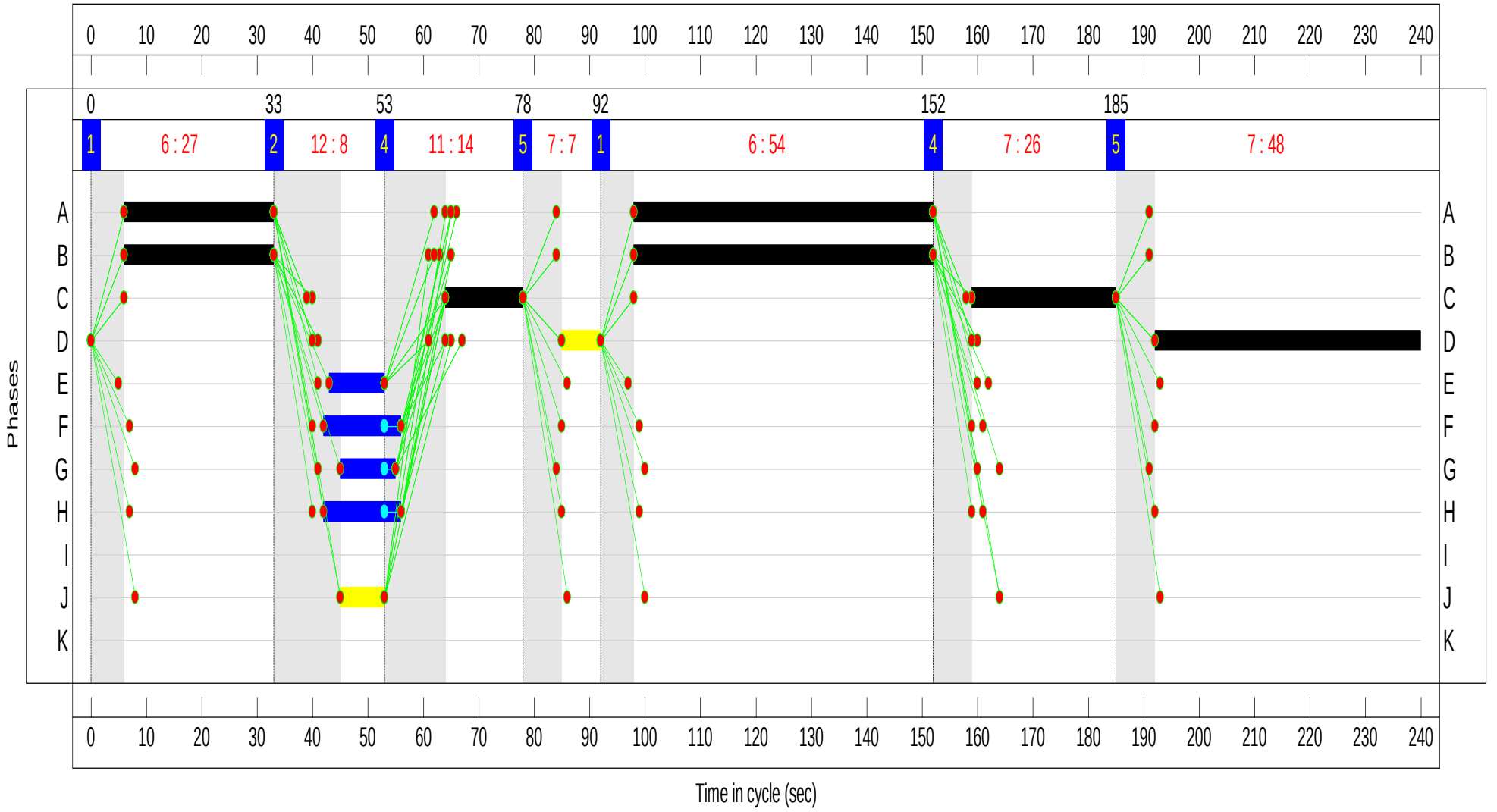
Stage Sequence Diagram



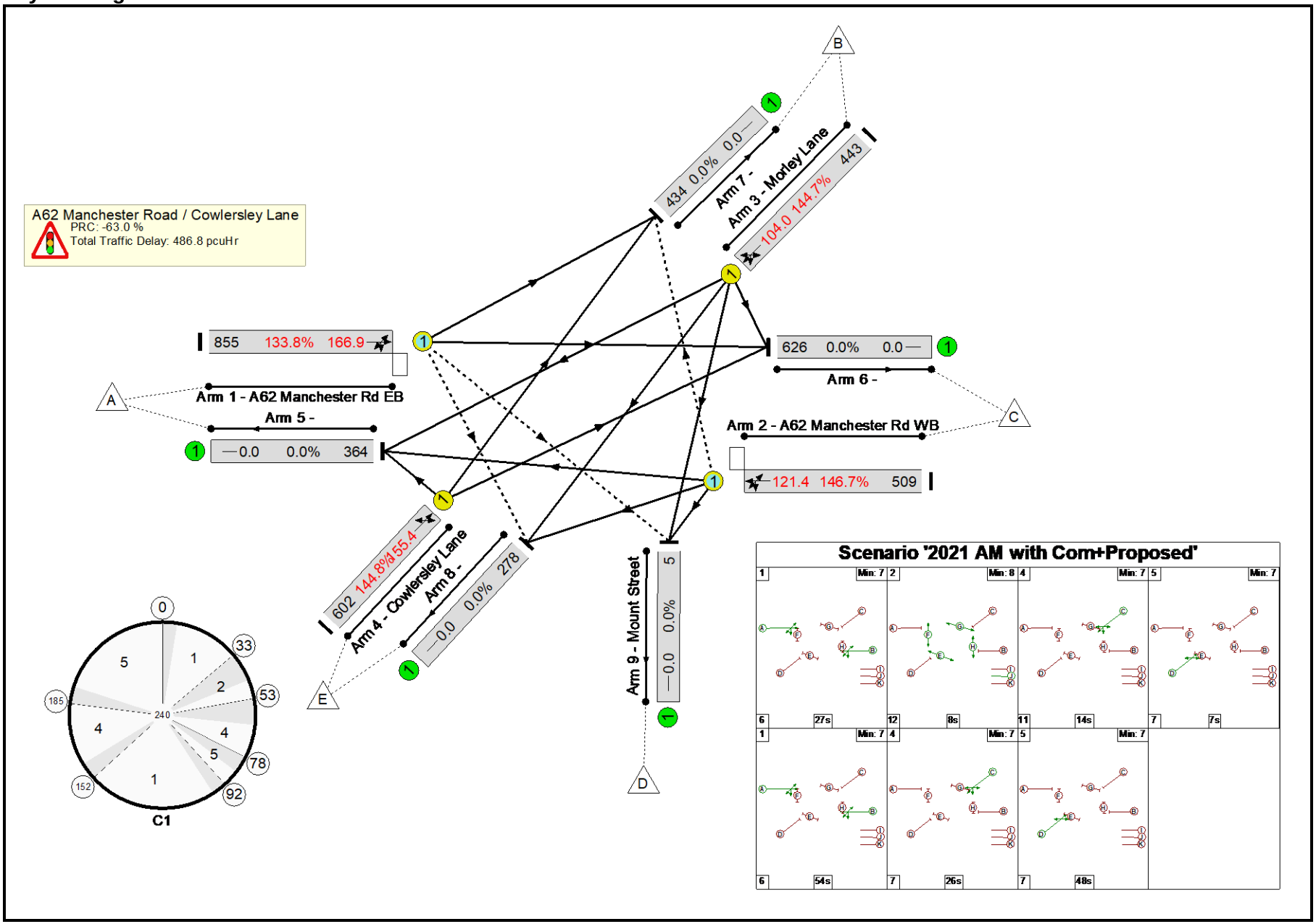
Stage Timings

Stage	1	2	4	5	1	4	5
Duration	27	8	14	7	54	26	48
Change Point	0	33	53	78	92	152	185

Signal Timings Diagram



Network Layout Diagram



Network Results

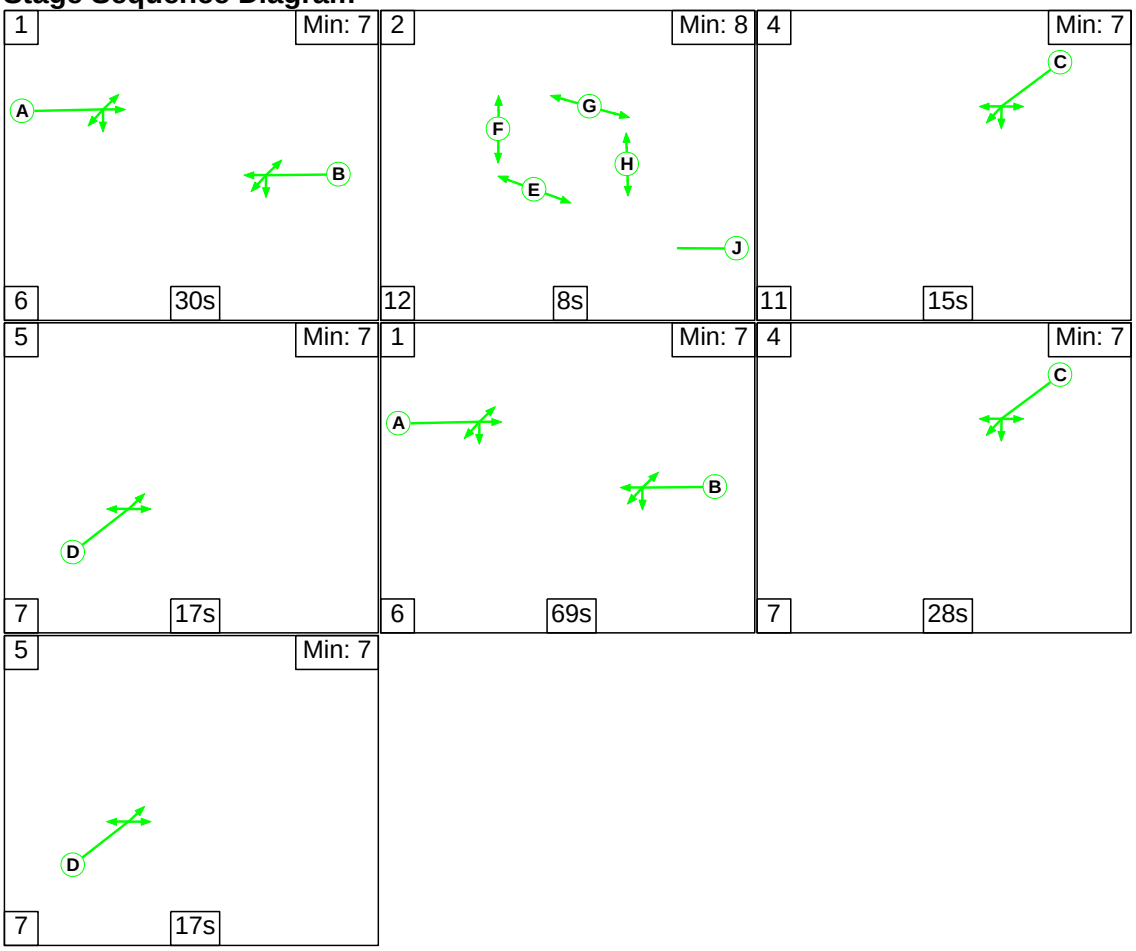
Item	Lane Description	Lane Type	Full Phase	Num Greens	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: Cowersley Lane junction	-	-	-	-	-	-	-	-	**146.7%**	-	-
A62 Manchester Road / Cowlersley Lane	-	-	-	-	-	-	-	-	**146.7%**	-	-
1/1	A62 Manchester Rd EB Ahead Ahead2 Right Right2	O	A	2	81	855	1850	639	133.8%	855	639
2/1	A62 Manchester Rd WB Ahead U-Turn Left Left2	O	B	2	81	509	1850	347	146.7%	509	347
3/1	Morley Lane Right Left Ahead Ahead2	U	C	2	40	443	1750	306	144.7%	443	306
4/1	Cowlersley Lane Left Right Ahead	U	D	2	55	602	1750	416	144.8%	602	416

Item	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: Cowersley Lane junction	**33**	**0**	**30**	**129.3**	**357.1**	**0.3**	**486.8**	-	-	-	-
A62 Manchester Road / Cowlersley Lane	**33**	**0**	**30**	**129.3**	**357.1**	**0.3**	**486.8**	-	-	-	-
1/1	33	0	0	36.8	109.9	0.1	146.8	617.9	57.0	109.9	166.9
2/1	0	0	30	28.2	82.5	0.3	111.0	785.2	38.9	82.5	121.4
3/1	-	-	-	24.4	70.0	-	94.3	766.6	34.1	70.0	104.0
4/1	-	-	-	39.9	94.8	-	134.7	805.3	60.6	94.8	155.4

C1 PRC for Signalled Lanes (%): -63.0 Total Delay for Signalled Lanes (pcuHr): 486.79 Cycle Time (s): 240
PRC Over All Lanes (%): -63.0 Total Delay Over All Lanes(pcuHr): 486.79

Scenario 6: '2021 PM with Com+Proposed' (FG6: '2021 PM+Com+Prop', Plan 1: 'Network Control Plan 1')

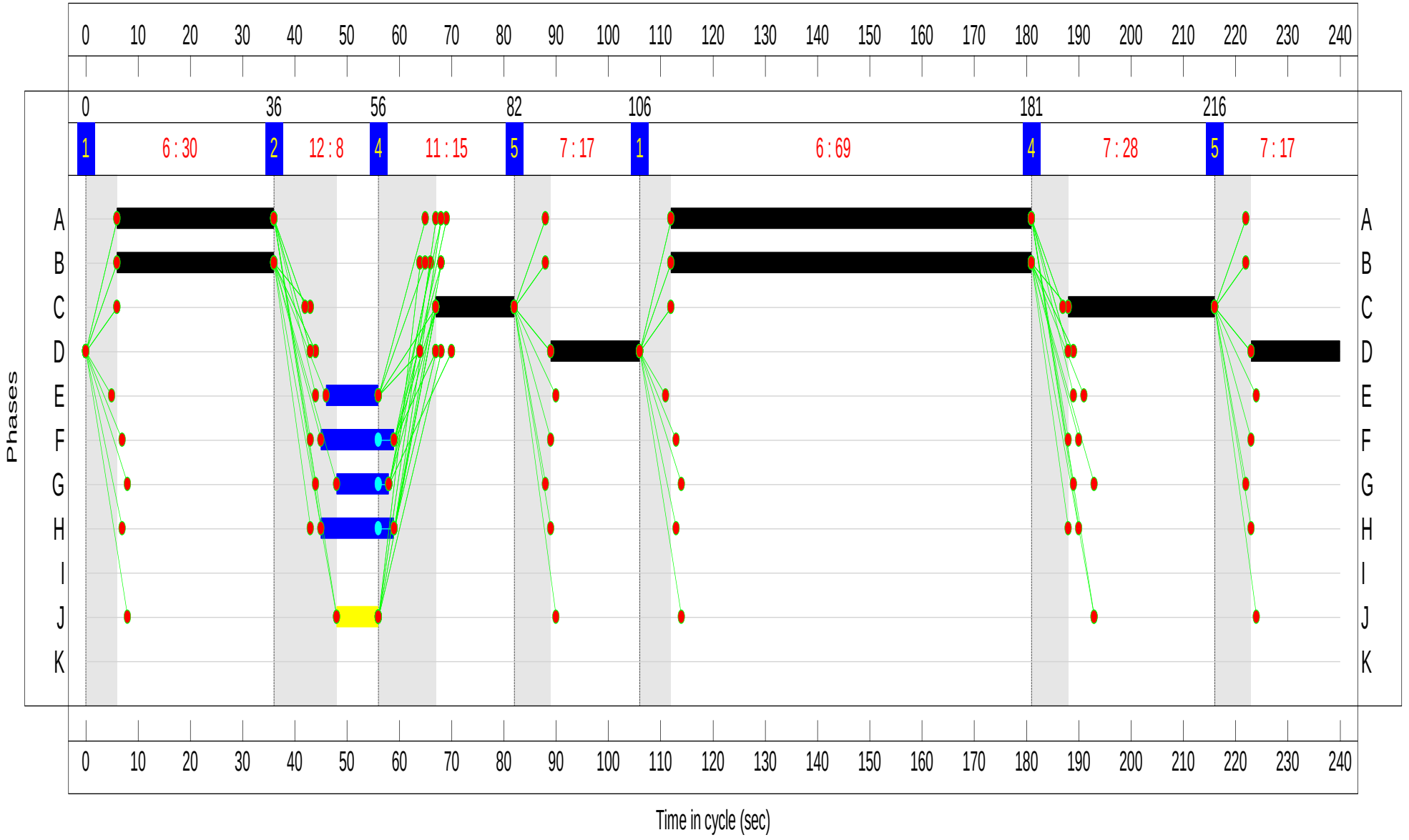
Stage Sequence Diagram



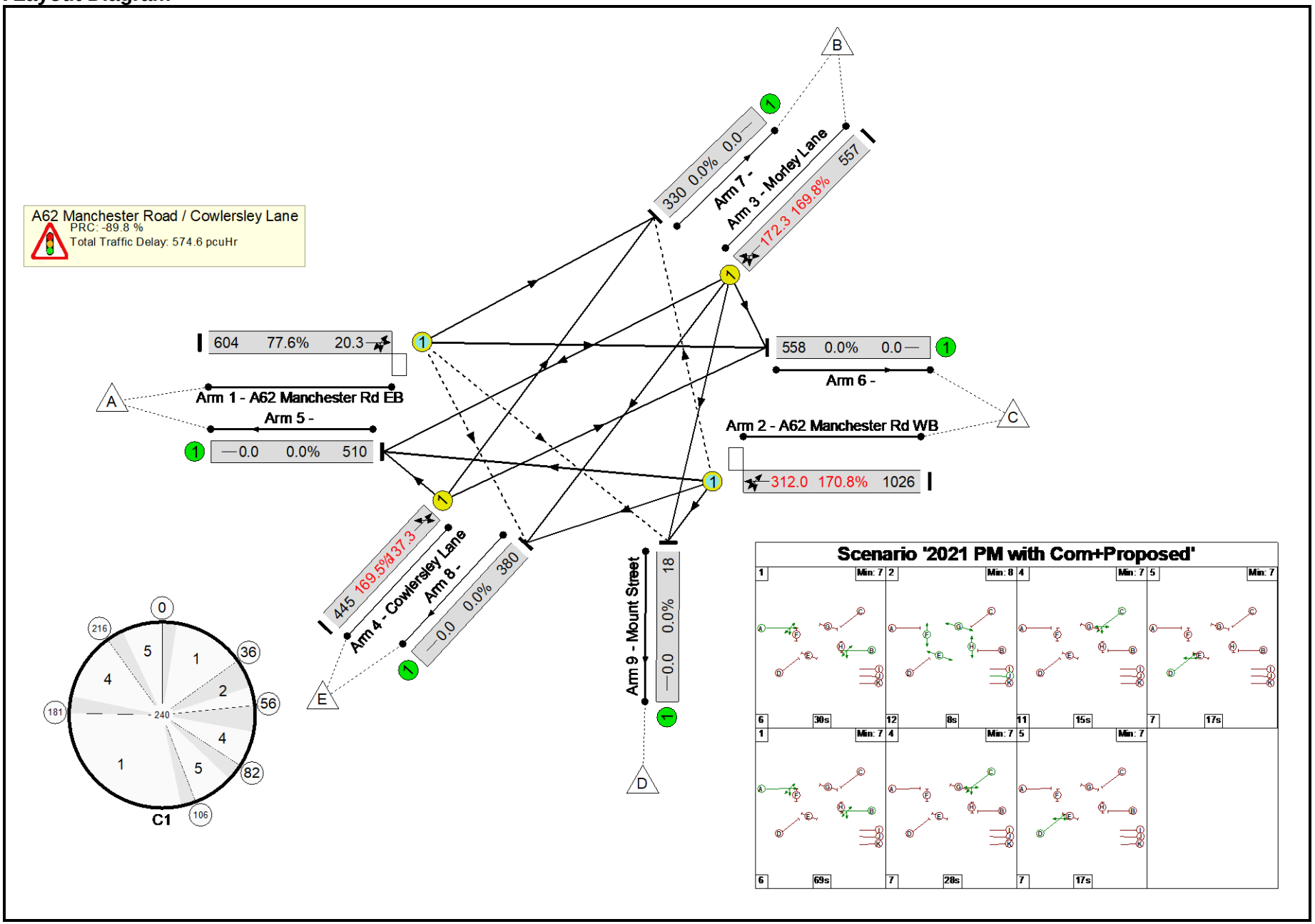
Stage Timings

Stage	1	2	4	5	1	4	5
Duration	30	8	15	17	69	28	17
Change Point	0	36	56	82	106	181	216

Signal Timings Diagram



Network Layout Diagram



Network Results

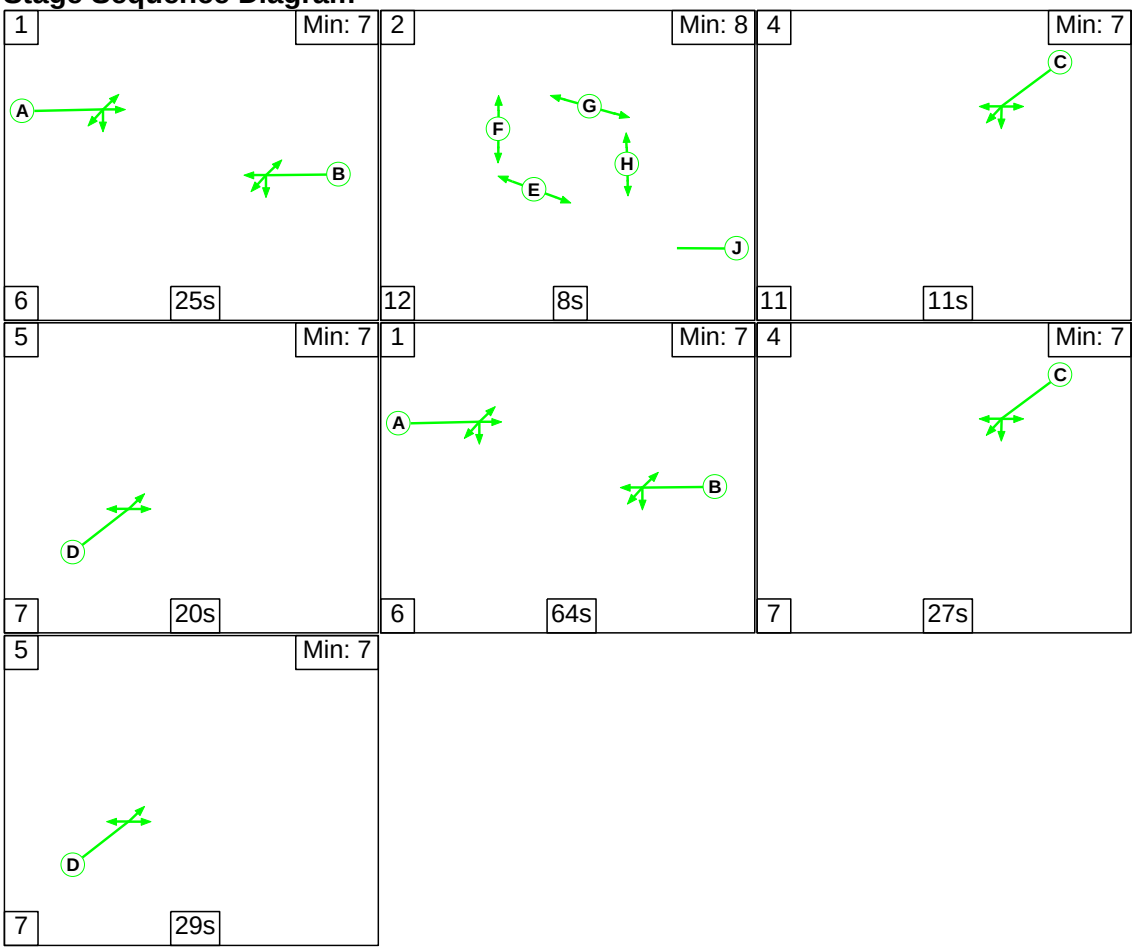
Item	Lane Description	Lane Type	Full Phase	Num Greens	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: Cowersley Lane junction	-	-	-	-	-	-	-	-	**170.8%**	-	-
A62 Manchester Road / Cowlersley Lane	-	-	-	-	-	-	-	-	**170.8%**	-	-
1/1	A62 Manchester Rd EB Ahead Ahead2 Right Right2	O	A	2	99	604	1850	779	77.6%	604	604
2/1	A62 Manchester Rd WB Ahead U-Turn Left Left2	O	B	2	99	1026	1850	601	170.8%	1026	601
3/1	Morley Lane Right Left Ahead Ahead2	U	C	2	43	557	1750	328	169.8%	557	328
4/1	Cowlersley Lane Left Right Ahead	U	D	2	34	445	1750	263	169.5%	445	262

Item	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: Cowersley Lane junction	**40**	**0**	**16**	**150.7**	**423.7**	**0.2**	**574.6**	-	-	-	-
A62 Manchester Road / Cowlersley Lane	**40**	**0**	**16**	**150.7**	**423.7**	**0.2**	**574.6**	-	-	-	-
1/1	5	0	1	5.0	1.7	0.0	6.8	40.3	18.6	1.7	20.3
2/1	35	0	15	70.4	213.9	0.2	284.5	998.3	98.0	213.9	312.0
3/1	-	-	-	41.7	115.6	-	157.4	1017.2	56.6	115.6	172.3
4/1	-	-	-	33.5	92.5	-	126.0	1018.9	44.9	92.5	137.3

C1 PRC for Signalled Lanes (%): -89.8 Total Delay for Signalled Lanes (pcuHr): 574.62 Cycle Time (s): 240
PRC Over All Lanes (%): -89.8 Total Delay Over All Lanes(pcuHr): 574.62

Scenario 7: '2031 Base AM' (FG7: '2031 AM', Plan 1: 'Network Control Plan 1')

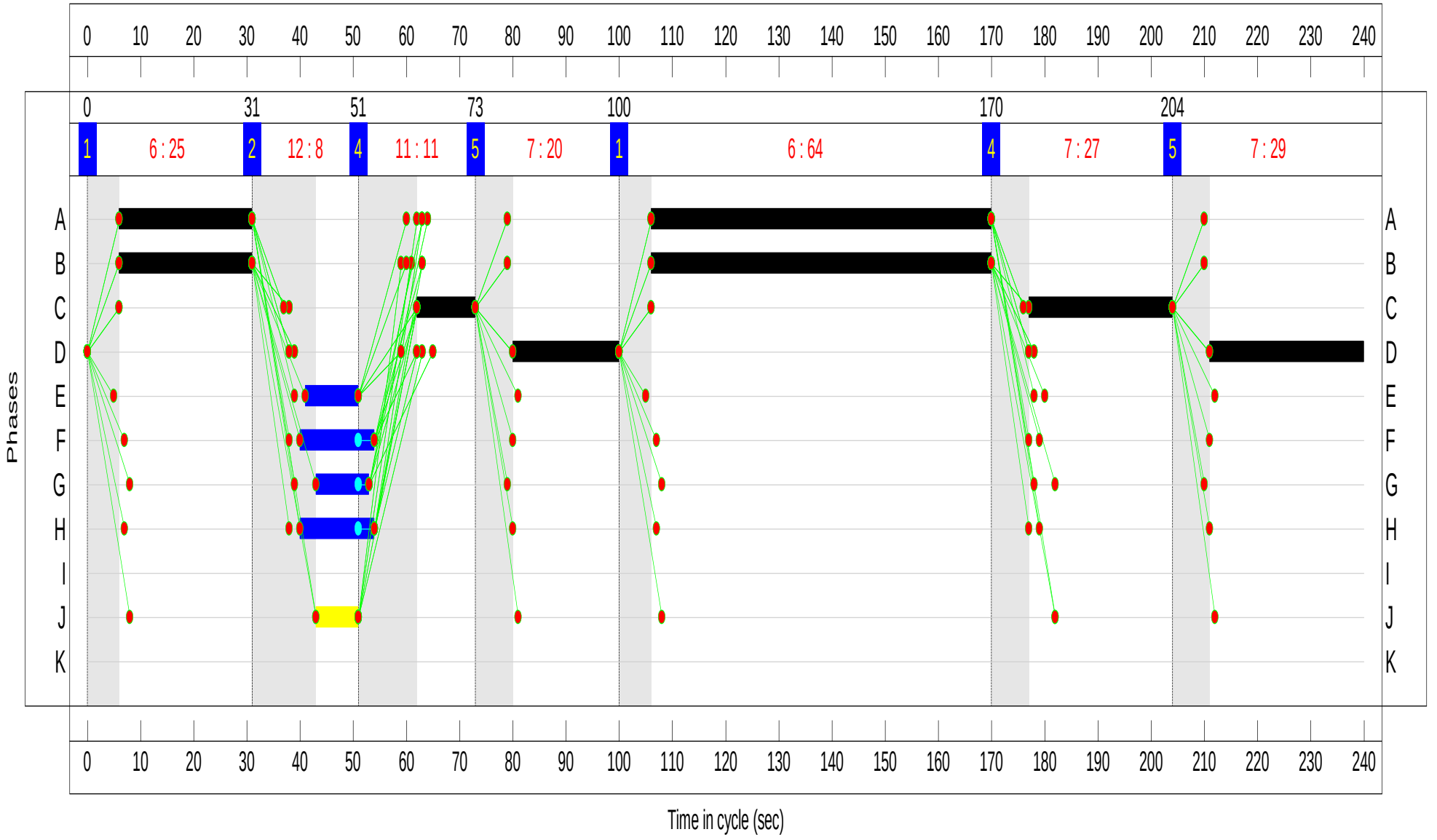
Stage Sequence Diagram



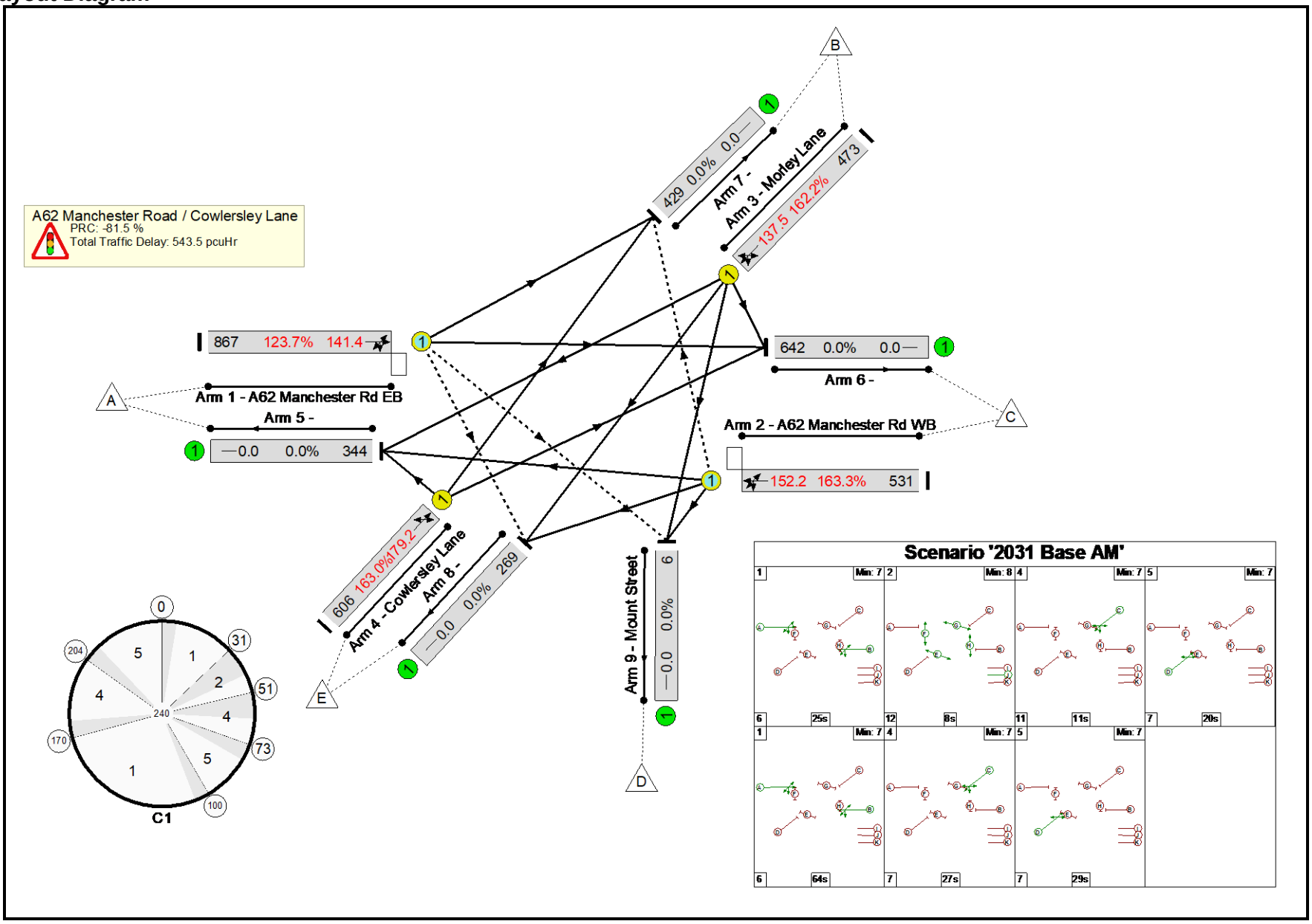
Stage Timings

Stage	1	2	4	5	1	4	5
Duration	25	8	11	20	64	27	29
Change Point	0	31	51	73	100	170	204

Signal Timings Diagram



Network Layout Diagram



Network Results

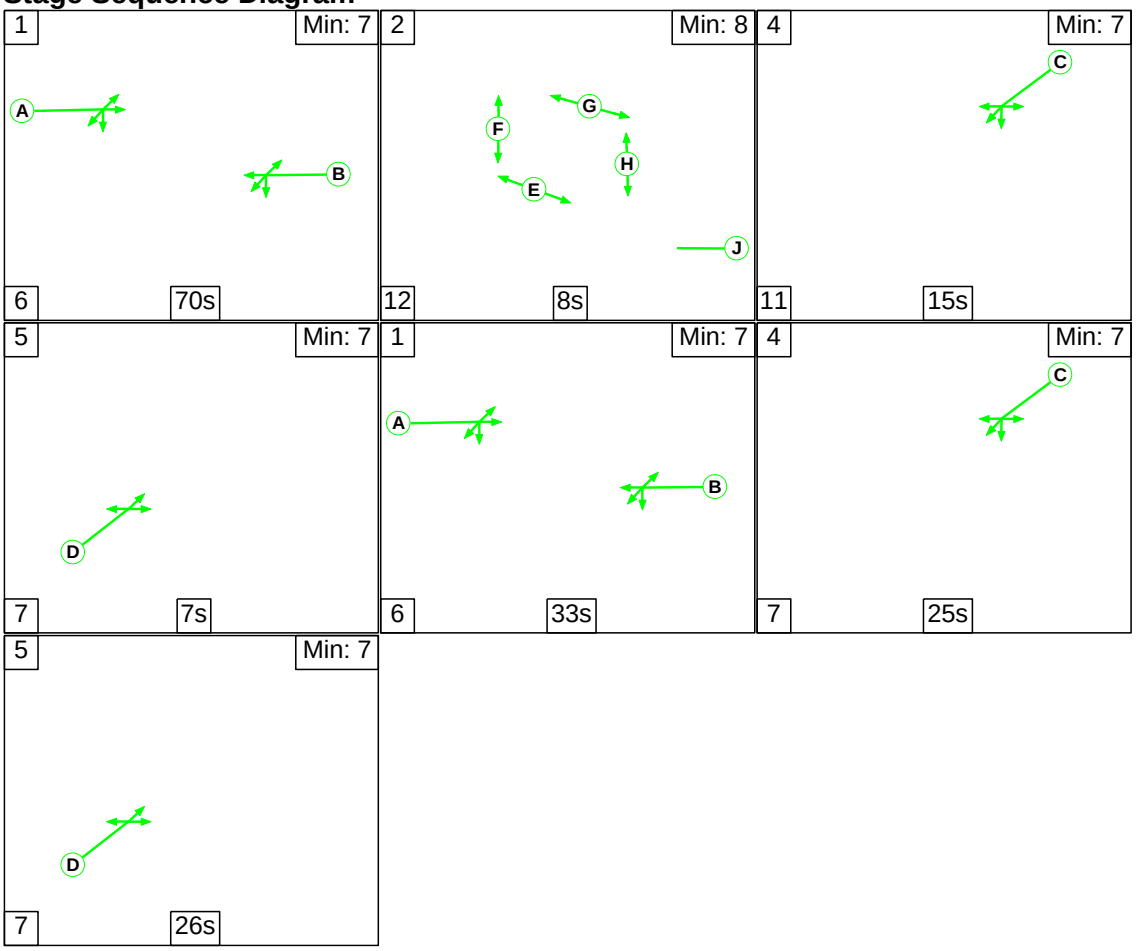
Item	Lane Description	Lane Type	Full Phase	Num Greens	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: Cowersley Lane junction	-	-	-	-	-	-	-	-	**163.3%**	-	-
A62 Manchester Road / Cowlersley Lane	-	-	-	-	-	-	-	-	**163.3%**	-	-
1/1	A62 Manchester Rd EB Ahead Ahead2 Right Right2	O	A	2	89	867	1850	701	123.7%	867	701
2/1	A62 Manchester Rd WB Ahead U-Turn Left Left2	O	B	2	89	531	1850	325	163.3%	531	325
3/1	Morley Lane Right Left Ahead Ahead2	U	C	2	38	473	1750	292	162.2%	473	292
4/1	Cowlersley Lane Left Right Ahead	U	D	2	49	606	1750	372	163.0%	606	372

Item	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: Cowersley Lane junction	**40**	**0**	**30**	**142.9**	**400.2**	**0.4**	**543.5**	-	-	-	-
A62 Manchester Road / Cowlersley Lane	**40**	**0**	**30**	**142.9**	**400.2**	**0.4**	**543.5**	-	-	-	-
1/1	40	0	0	30.2	85.7	0.1	116.0	481.7	55.7	85.7	141.4
2/1	0	0	30	35.5	104.2	0.3	140.1	949.6	48.0	104.2	152.2
3/1	-	-	-	33.2	92.0	-	125.1	952.3	45.5	92.0	137.5
4/1	-	-	-	43.9	118.3	-	162.3	964.1	60.9	118.3	179.2

C1 PRC for Signalled Lanes (%): -81.5 Total Delay for Signalled Lanes (pcuHr): 543.49 Cycle Time (s): 240
PRC Over All Lanes (%): -81.5 Total Delay Over All Lanes(pcuHr): 543.49

Scenario 8: '2031 Base PM' (FG8: '2031 PM', Plan 1: 'Network Control Plan 1')

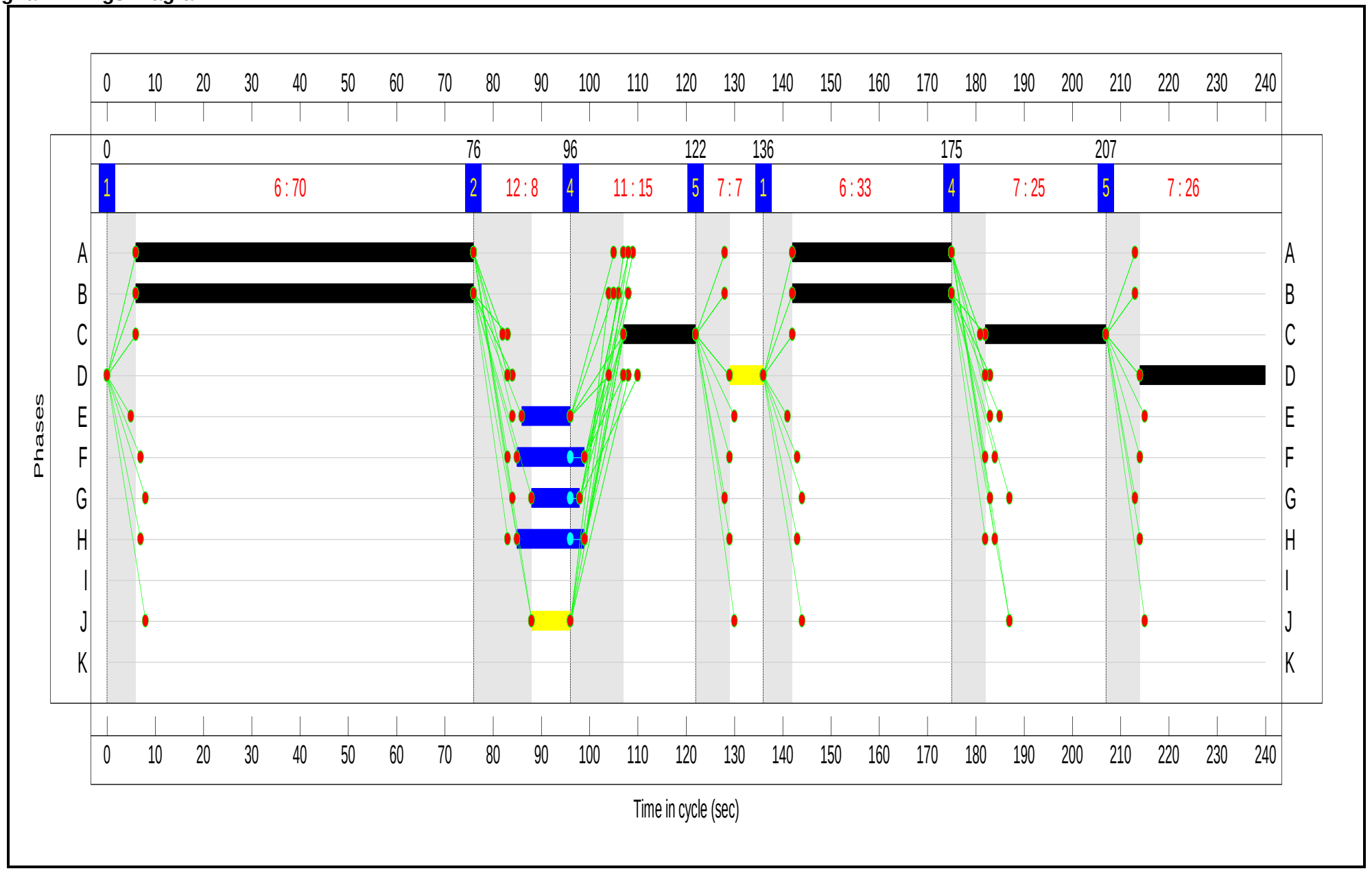
Stage Sequence Diagram



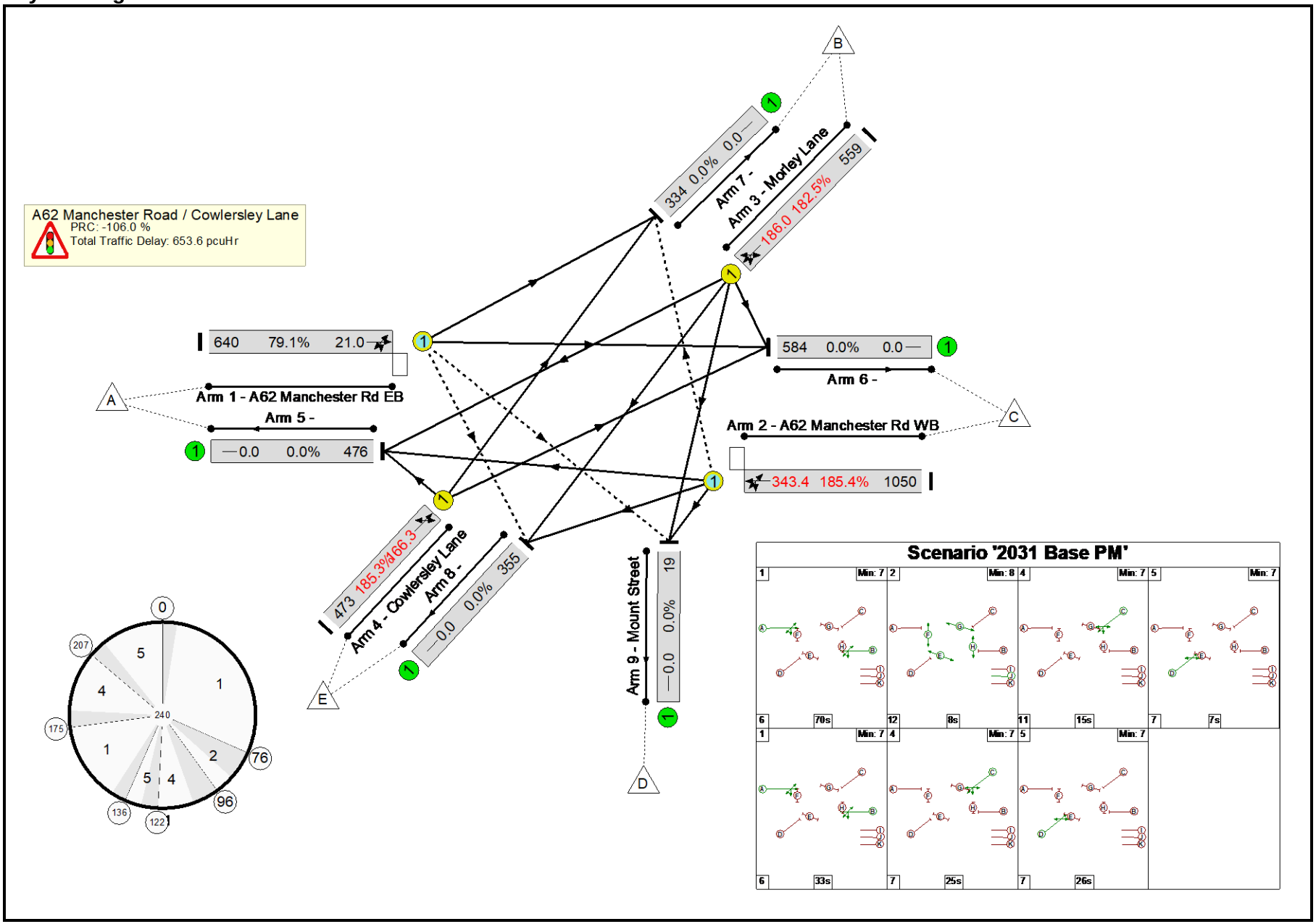
Stage Timings

Stage	1	2	4	5	1	4	5
Duration	70	8	15	7	33	25	26
Change Point	0	76	96	122	136	175	207

Signal Timings Diagram



Network Layout Diagram



Network Results

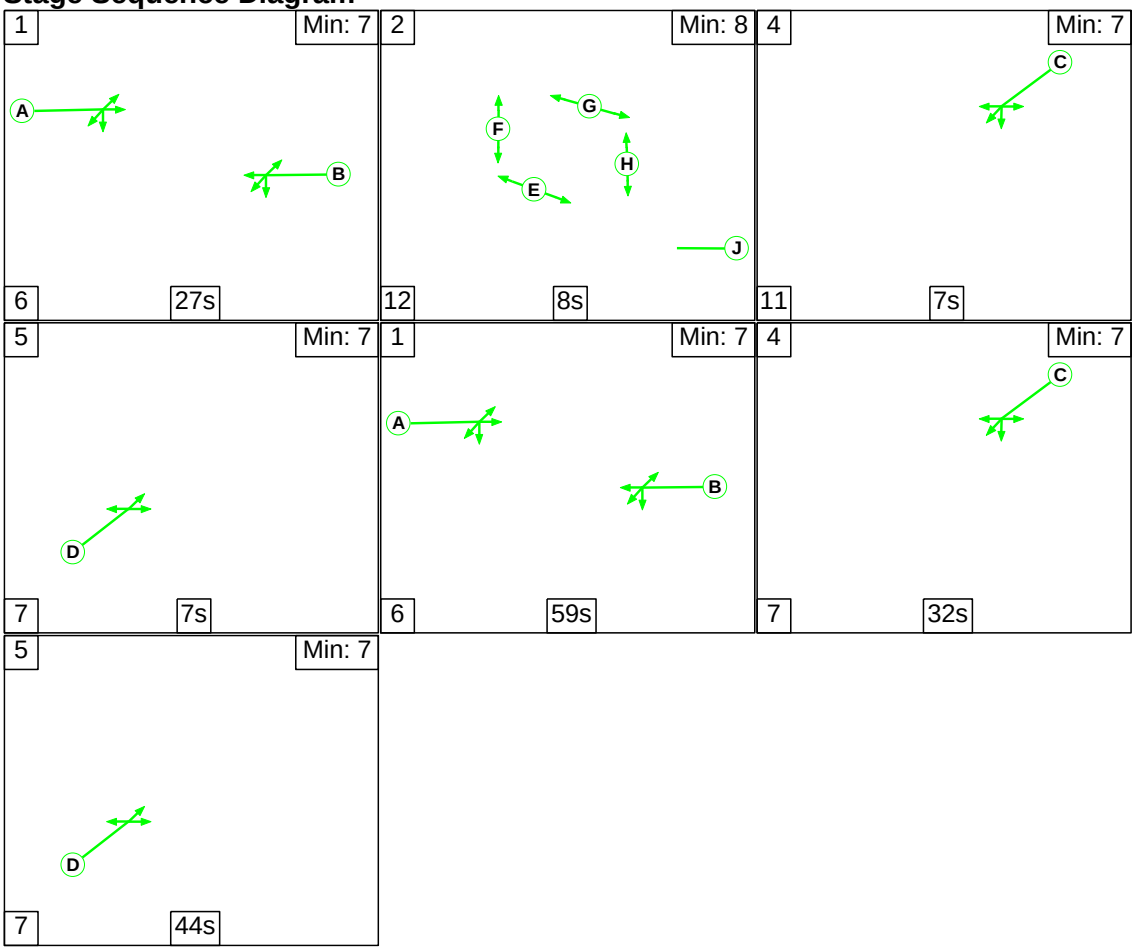
Item	Lane Description	Lane Type	Full Phase	Num Greens	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: Cowersley Lane junction	-	-	-	-	-	-	-	-	**185.4%**	-	-
A62 Manchester Road / Cowlersley Lane	-	-	-	-	-	-	-	-	**185.4%**	-	-
1/1	A62 Manchester Rd EB Ahead Ahead2 Right Right2	O	A	2	103	640	1850	809	79.1%	640	640
2/1	A62 Manchester Rd WB Ahead U-Turn Left Left2	O	B	2	103	1050	1850	566	185.4%	1050	566
3/1	Morley Lane Right Left Ahead Ahead2	U	C	2	40	559	1750	306	182.5%	559	306
4/1	Cowlersley Lane Left Right Ahead	U	D	2	33	473	1750	255	185.3%	473	255

Item	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: Cowersley Lane junction	**42**	**0**	**16**	**171.2**	**482.2**	**0.2**	**653.6**	-	-	-	-
A62 Manchester Road / Cowlersley Lane	**42**	**0**	**16**	**171.2**	**482.2**	**0.2**	**653.6**	-	-	-	-
1/1	5	0	1	5.2	1.8	0.0	7.1	39.9	19.2	1.8	21.0
2/1	37	0	15	77.7	242.9	0.2	320.8	1100.0	100.5	242.9	343.4
3/1	-	-	-	46.1	127.5	-	173.6	1117.9	58.5	127.5	186.0
4/1	-	-	-	42.2	110.0	-	152.1	1157.9	56.3	110.0	166.3

C1 PRC for Signalled Lanes (%): -106.0 Total Delay for Signalled Lanes (pcuHr): 653.64 Cycle Time (s): 240
PRC Over All Lanes (%): -106.0 Total Delay Over All Lanes(pcuHr): 653.64

Scenario 9: '2031 AM with Committed' (FG9: '2031 AM+Com', Plan 1: 'Network Control Plan 1')

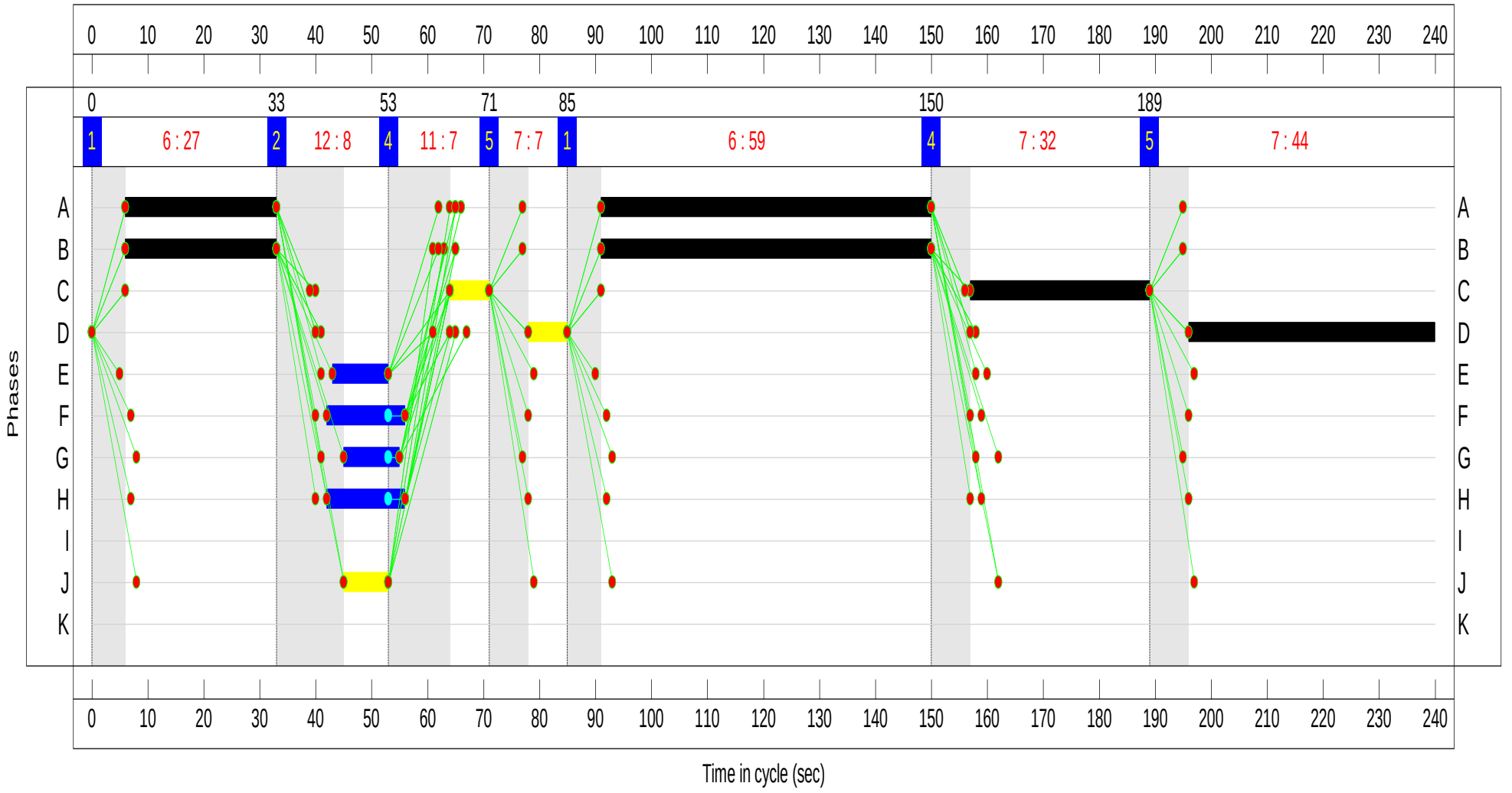
Stage Sequence Diagram



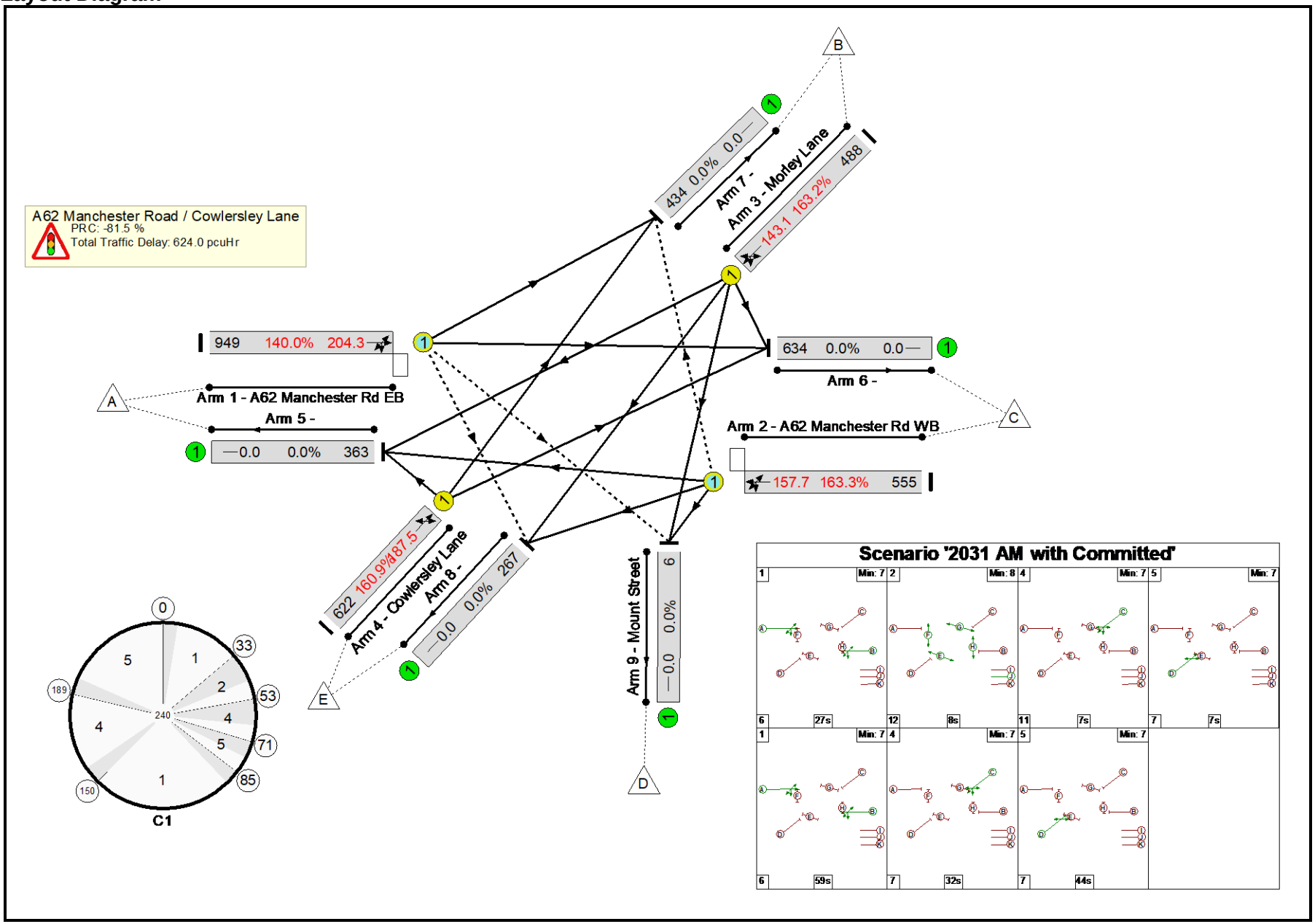
Stage Timings

Stage	1	2	4	5	1	4	5
Duration	27	8	7	7	59	32	44
Change Point	0	33	53	71	85	150	189

Signal Timings Diagram



Network Layout Diagram



Network Results

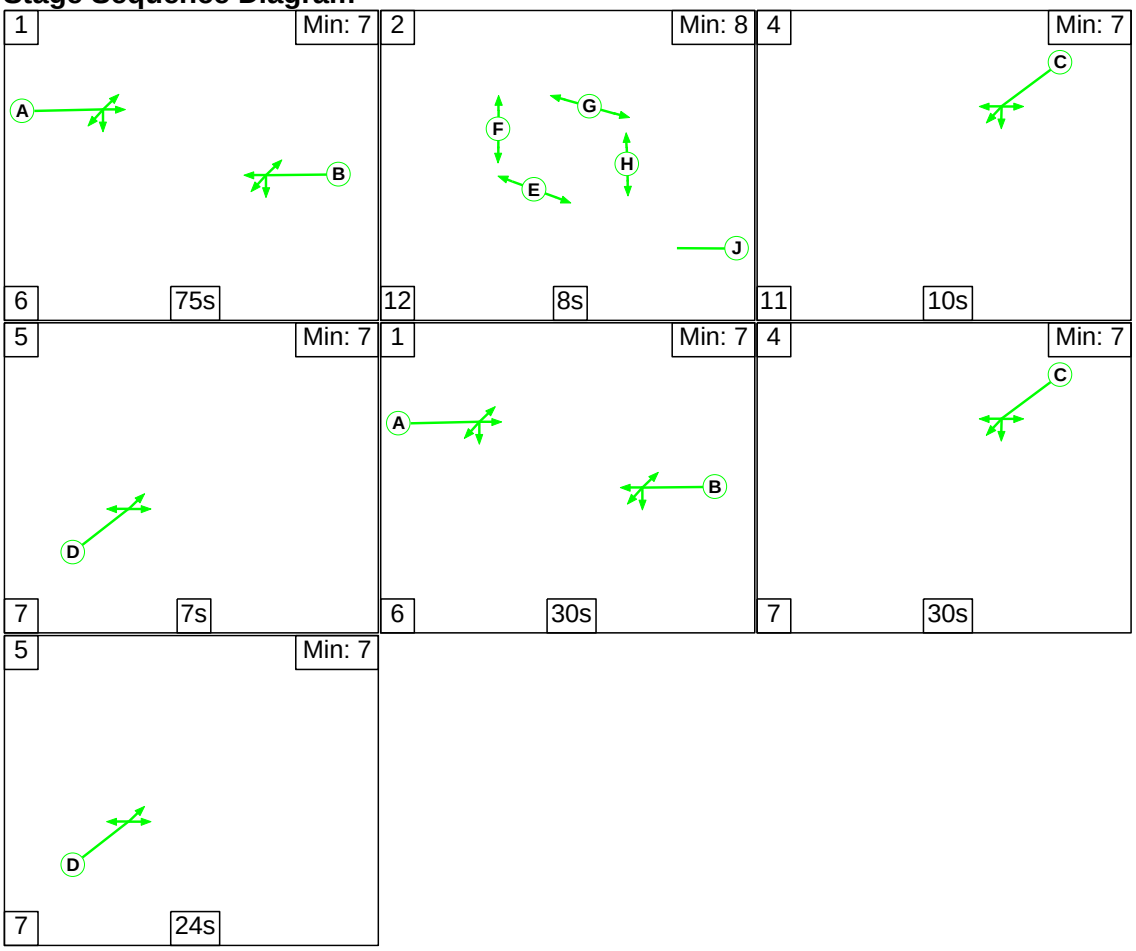
Item	Lane Description	Lane Type	Full Phase	Num Greens	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: Cowersley Lane junction	-	-	-	-	-	-	-	-	**163.3%**	-	-
A62 Manchester Road / Cowlersley Lane	-	-	-	-	-	-	-	-	**163.3%**	-	-
1/1	A62 Manchester Rd EB Ahead Ahead2 Right Right2	O	A	2	86	949	1850	678	140.0%	949	678
2/1	A62 Manchester Rd WB Ahead U-Turn Left Left2	O	B	2	86	555	1850	340	163.3%	555	340
3/1	Morley Lane Right Left Ahead Ahead2	U	C	2	39	488	1750	299	163.2%	488	299
4/1	Cowlersley Lane Left Right Ahead	U	D	2	51	622	1750	386	160.9%	622	386

Item	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: Cowersley Lane junction	**35**	**0**	**30**	**162.6**	**461.1**	**0.4**	**624.0**	-	-	-	-
A62 Manchester Road / Cowlersley Lane	**35**	**0**	**30**	**162.6**	**461.1**	**0.4**	**624.0**	-	-	-	-
1/1	35	0	0	44.6	137.3	0.1	182.0	690.4	67.0	137.3	204.3
2/1	0	0	30	36.2	108.9	0.3	145.3	942.7	48.8	108.9	157.7
3/1	-	-	-	34.4	95.8	-	130.2	960.7	47.3	95.8	143.1
4/1	-	-	-	47.3	119.1	-	166.4	963.2	68.5	119.1	187.5

C1 PRC for Signalled Lanes (%): -81.5 Total Delay for Signalled Lanes (pcuHr): 623.99 Cycle Time (s): 240
PRC Over All Lanes (%): -81.5 Total Delay Over All Lanes(pcuHr): 623.99

Scenario 10: '2031 PM with Committed' (FG10: '2031 PM+Com', Plan 1: 'Network Control Plan 1')

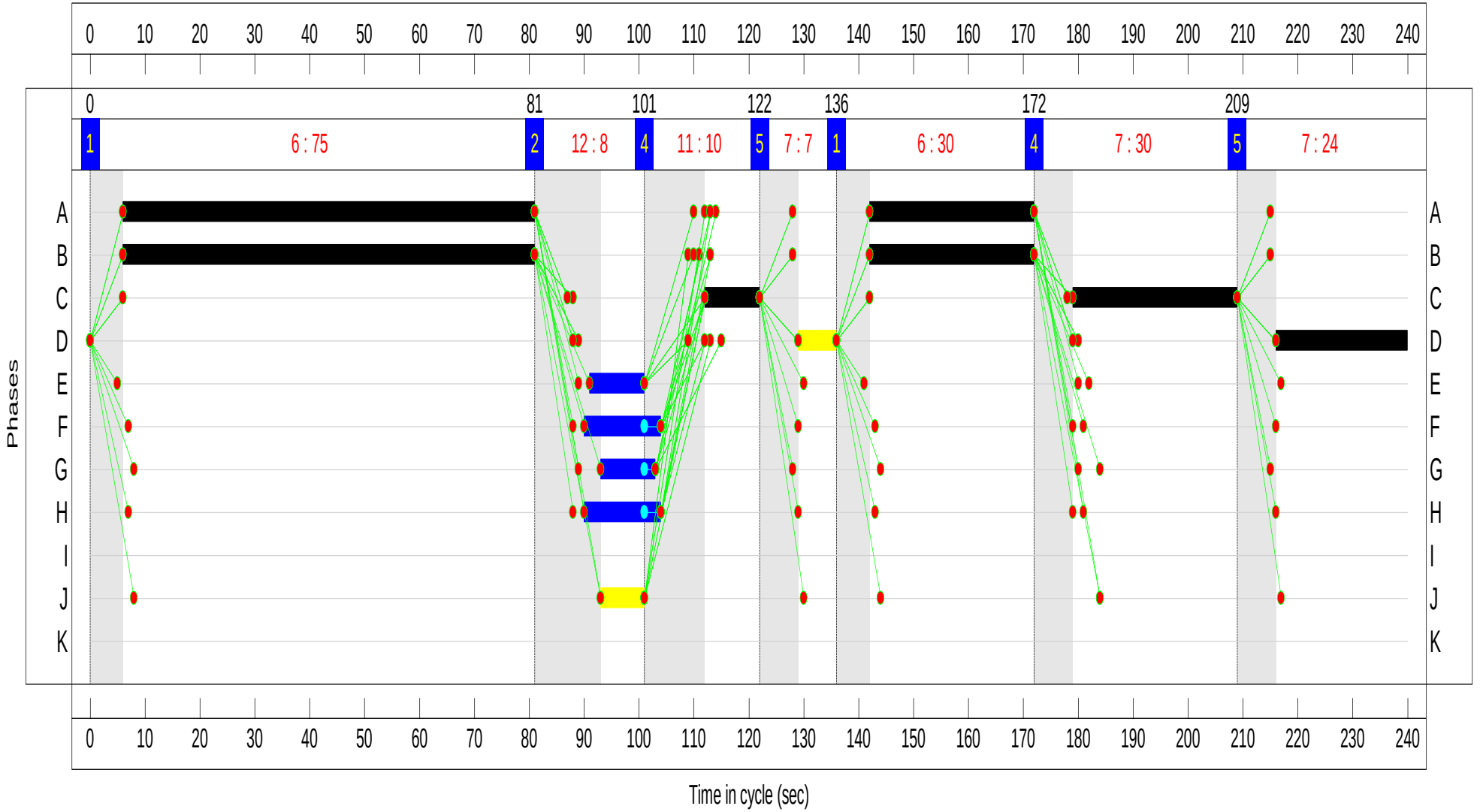
Stage Sequence Diagram



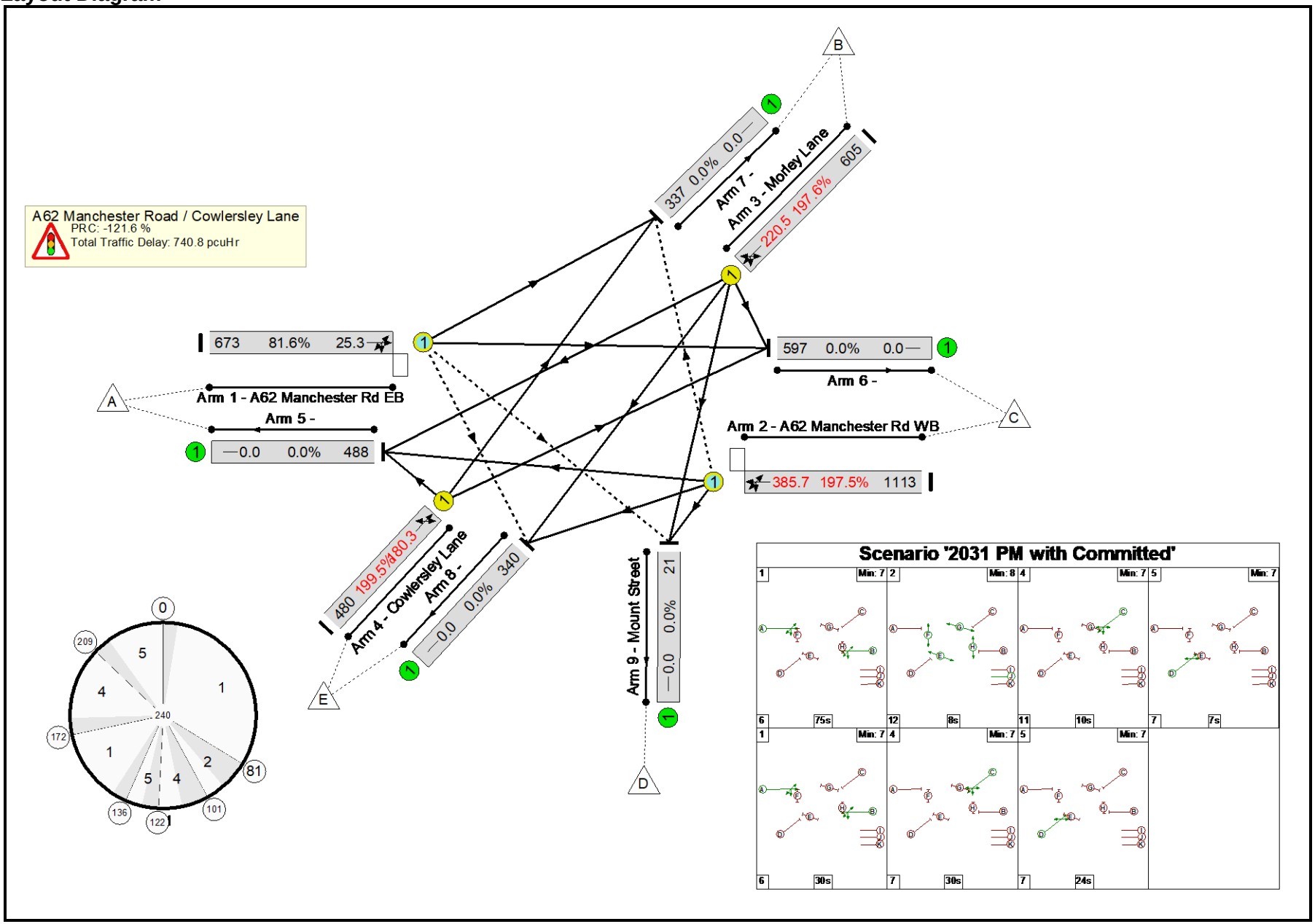
Stage Timings

Stage	1	2	4	5	1	4	5
Duration	75	8	10	7	30	30	24
Change Point	0	81	101	122	136	172	209

Signal Timings Diagram



Network Layout Diagram



Network Results

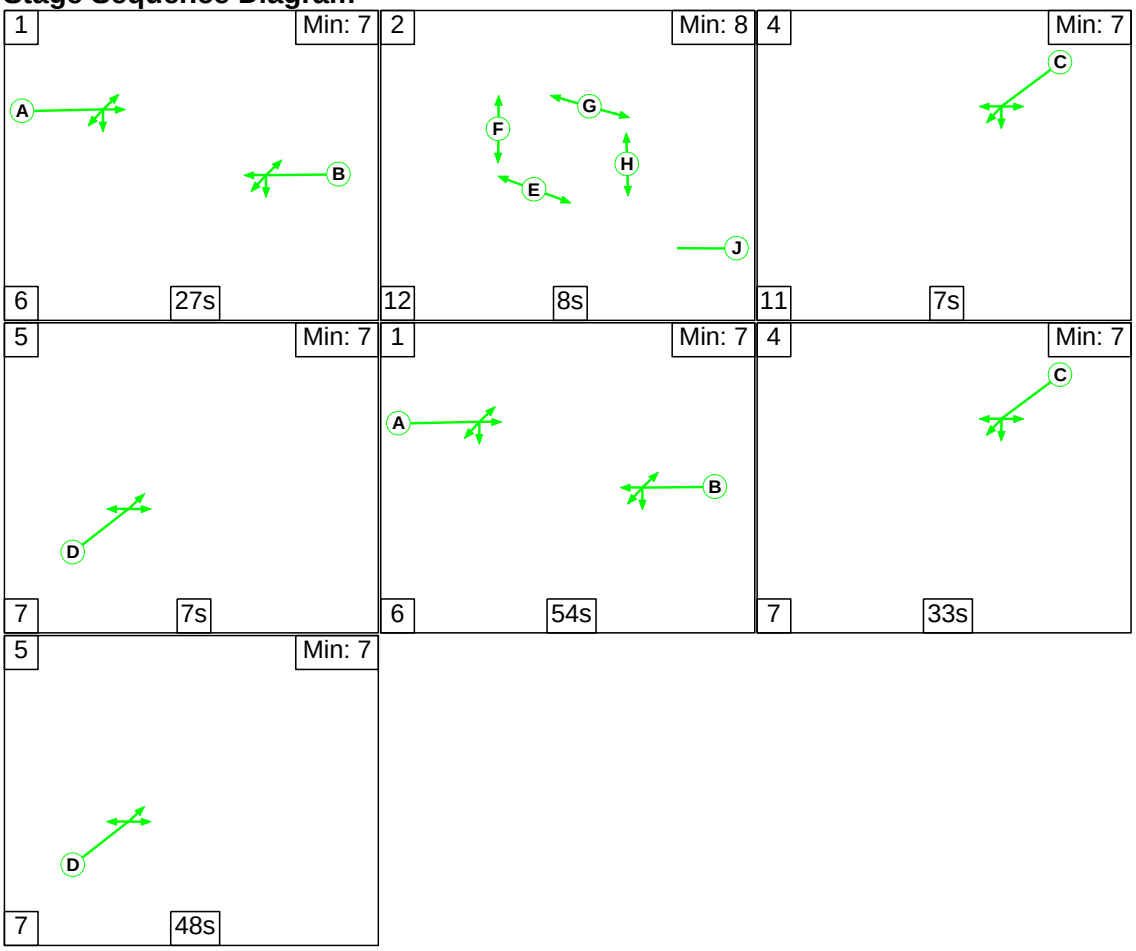
Item	Lane Description	Lane Type	Full Phase	Num Greens	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: Cowersley Lane junction	-	-	-	-	-	-	-	-	**199.5%**	-	-
A62 Manchester Road / Cowlersley Lane	-	-	-	-	-	-	-	-	**199.5%**	-	-
1/1	A62 Manchester Rd EB Ahead Ahead2 Right Right2	O	A	2	105	673	1850	825	81.6%	673	673
2/1	A62 Manchester Rd WB Ahead U-Turn Left Left2	O	B	2	105	1113	1850	563	197.5%	1113	563
3/1	Morley Lane Right Left Ahead Ahead2	U	C	2	40	605	1750	306	197.6%	605	306
4/1	Cowlersley Lane Left Right Ahead	U	D	2	31	480	1750	241	199.5%	480	241

Item	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: Cowersley Lane junction	**39**	**0**	**16**	**191.5**	**549.0**	**0.3**	**740.8**	-	-	-	-
A62 Manchester Road / Cowlersley Lane	**39**	**0**	**16**	**191.5**	**549.0**	**0.3**	**740.8**	-	-	-	-
1/1	5	0	1	6.0	2.2	0.0	8.2	43.6	23.1	2.2	25.3
2/1	34	0	15	85.5	275.8	0.2	361.6	1169.5	109.9	275.8	385.7
3/1	-	-	-	54.6	150.4	-	205.0	1219.9	70.1	150.4	220.5
4/1	-	-	-	45.4	120.7	-	166.0	1245.4	59.6	120.7	180.3

C1 PRC for Signalled Lanes (%): -121.6 Total Delay for Signalled Lanes (pcuHr): 740.79 Cycle Time (s): 240
PRC Over All Lanes (%): -121.6 Total Delay Over All Lanes(pcuHr): 740.79

Scenario 11: '2031 AM with Com+Proposed' (FG11: '2031 AM+Com+Prop', Plan 1: 'Network Control Plan 1')

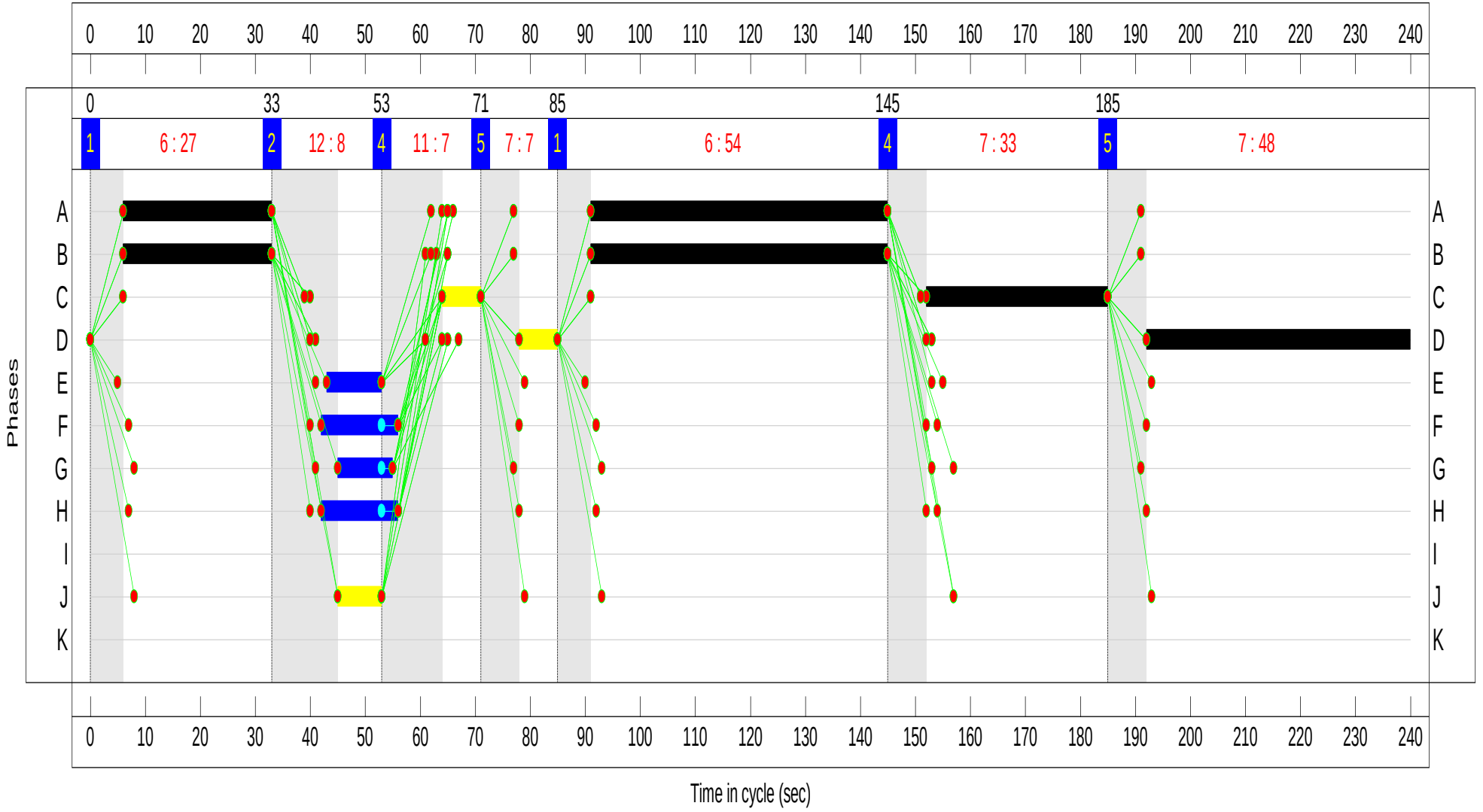
Stage Sequence Diagram



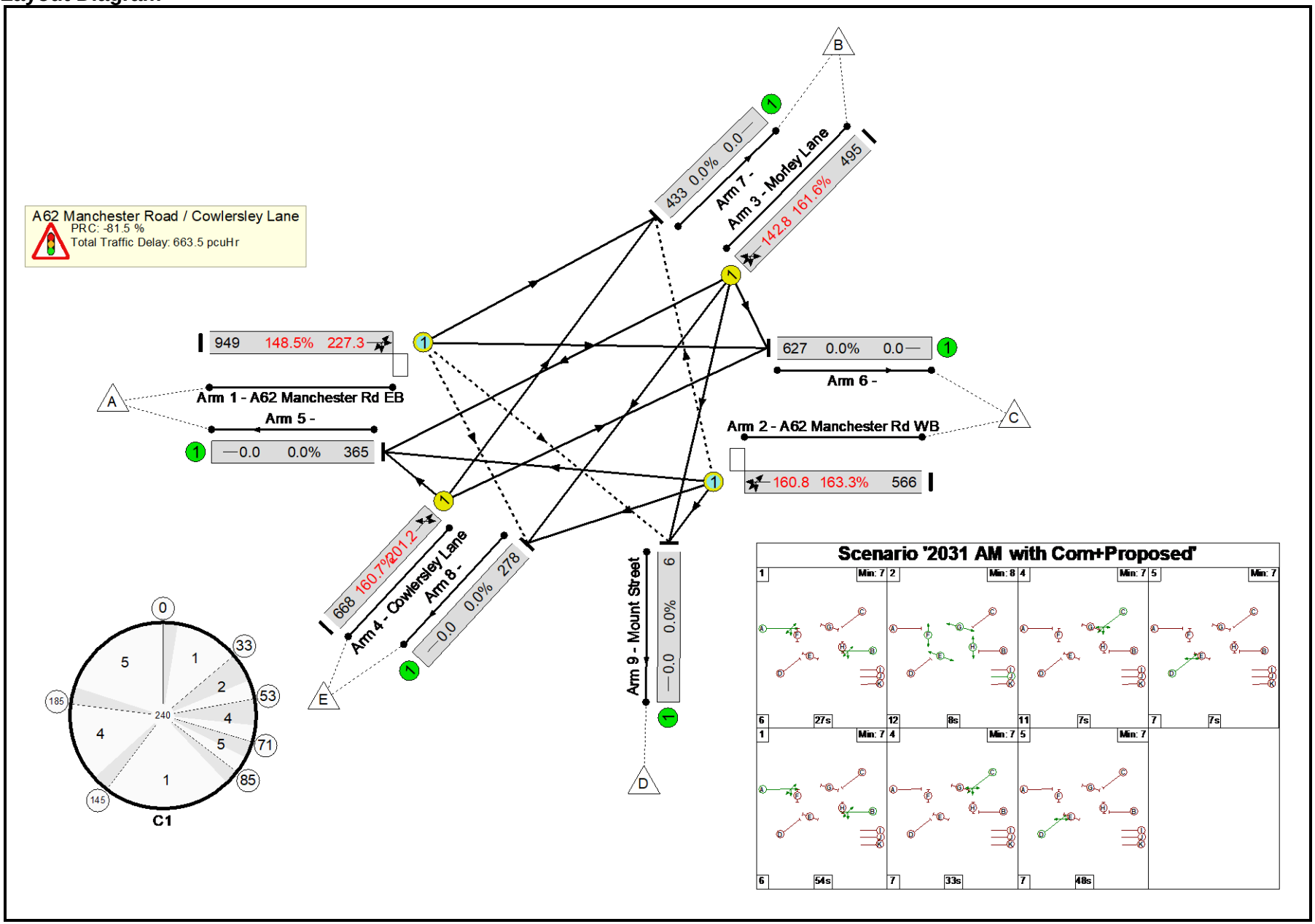
Stage Timings

Stage	1	2	4	5	1	4	5
Duration	27	8	7	7	54	33	48
Change Point	0	33	53	71	85	145	185

Signal Timings Diagram



Network Layout Diagram



Network Results

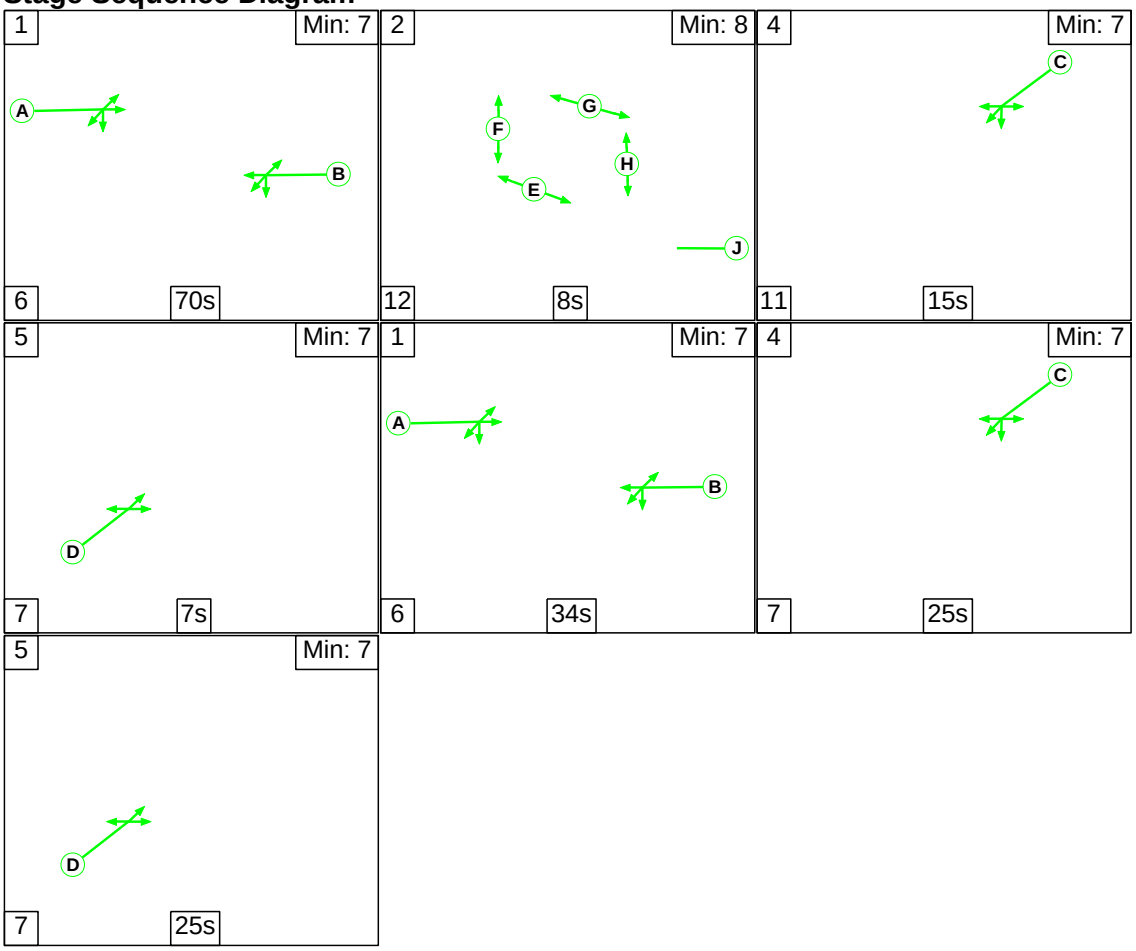
Item	Lane Description	Lane Type	Full Phase	Num Greens	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: Cowersley Lane junction	-	-	-	-	-	-	-	-	**163.3%**	-	-
A62 Manchester Road / Cowlersley Lane	-	-	-	-	-	-	-	-	**163.3%**	-	-
1/1	A62 Manchester Rd EB Ahead Ahead2 Right Right2	O	A	2	81	949	1850	639	148.5%	949	639
2/1	A62 Manchester Rd WB Ahead U-Turn Left Left2	O	B	2	81	566	1850	347	163.3%	566	347
3/1	Morley Lane Right Left Ahead Ahead2	U	C	2	40	495	1750	306	161.6%	495	306
4/1	Cowlersley Lane Left Right Ahead	U	D	2	55	668	1750	416	160.7%	668	416

Item	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: Cowersley Lane junction	**33**	**0**	**30**	**172.6**	**490.6**	**0.3**	**663.5**	-	-	-	-
A62 Manchester Road / Cowlersley Lane	**33**	**0**	**30**	**172.6**	**490.6**	**0.3**	**663.5**	-	-	-	-
1/1	33	0	0	50.8	156.4	0.1	207.3	786.2	70.8	156.4	227.3
2/1	0	0	30	36.9	111.0	0.3	148.2	942.5	49.8	111.0	160.8
3/1	-	-	-	34.2	95.7	-	129.9	944.4	47.1	95.7	142.8
4/1	-	-	-	50.7	127.5	-	178.2	960.5	73.7	127.5	201.2

C1 PRC for Signalled Lanes (%): -81.5 Total Delay for Signalled Lanes (pcuHr): 663.53 Cycle Time (s): 240
PRC Over All Lanes (%): -81.5 Total Delay Over All Lanes(pcuHr): 663.53

Scenario 12: '2031 PM with Com+Proposed' (FG12: '2031 PM+Com+Prop', Plan 1: 'Network Control Plan 1')

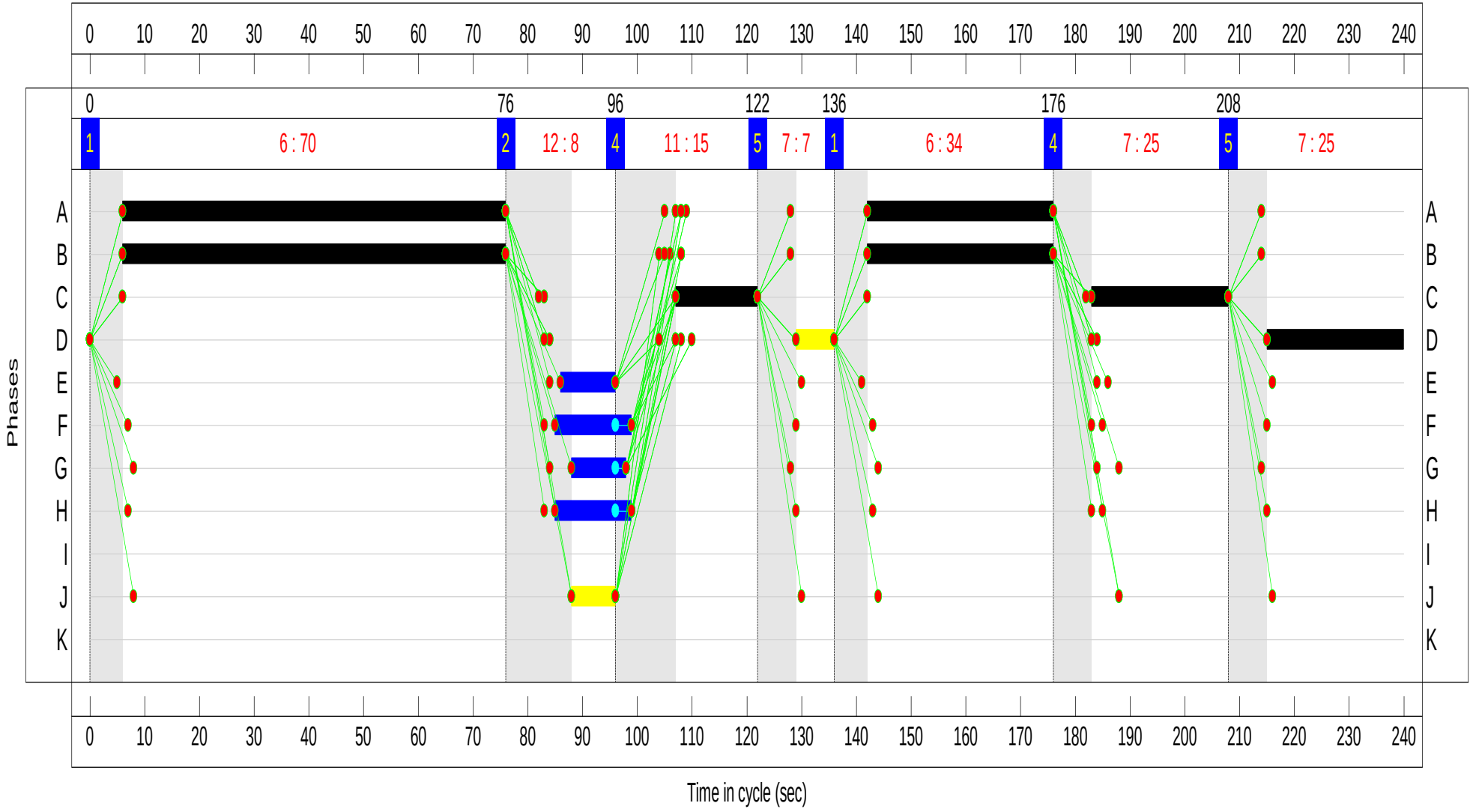
Stage Sequence Diagram



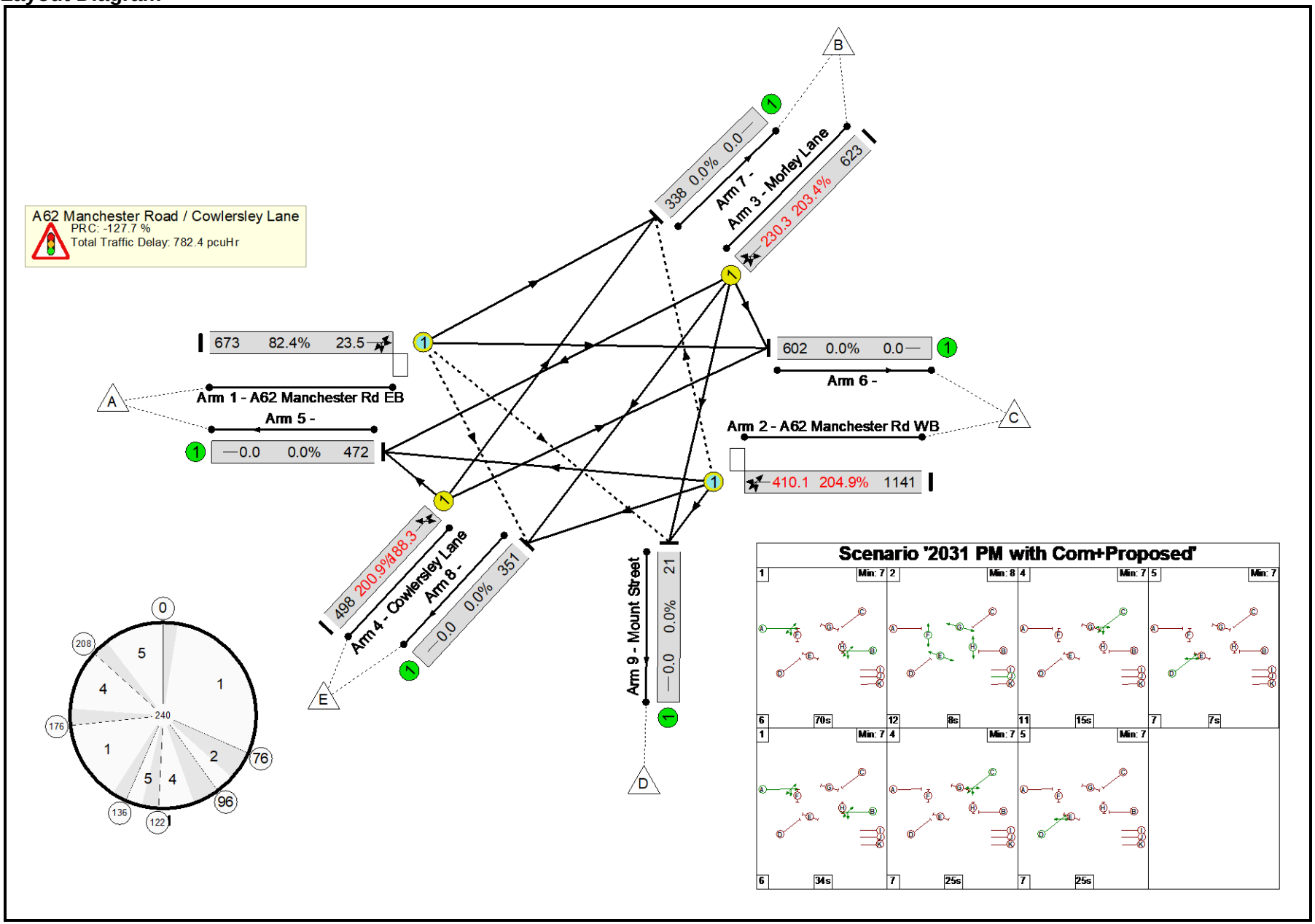
Stage Timings

Stage	1	2	4	5	1	4	5
Duration	70	8	15	7	34	25	25
Change Point	0	76	96	122	136	176	208

Signal Timings Diagram



Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Num Greens	Total Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Arriving (pcu)	Leaving (pcu)
Network: Cowersley Lane junction	-	-	-	-	-	-	-	-	**204.9%**	-	-
A62 Manchester Road / Cowlersley Lane	-	-	-	-	-	-	-	-	**204.9%**	-	-
1/1	A62 Manchester Rd EB Ahead Ahead2 Right Right2	O	A	2	104	673	1850	817	82.4%	673	673
2/1	A62 Manchester Rd WB Ahead U-Turn Left Left2	O	B	2	104	1141	1850	557	204.9%	1141	557
3/1	Morley Lane Right Left Ahead Ahead2	U	C	2	40	623	1750	306	203.4%	623	306
4/1	Cowlersley Lane Left Right Ahead	U	D	2	32	498	1750	248	200.9%	498	248

Item	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: Cowersley Lane junction	**37**	**0**	**16**	**201.5**	**580.7**	**0.3**	**782.4**	-	-	-	-
A62 Manchester Road / Cowlersley Lane	**37**	**0**	**16**	**201.5**	**580.7**	**0.3**	**782.4**	-	-	-	-
1/1	5	0	1	5.8	2.3	0.0	8.1	43.3	21.3	2.3	23.5
2/1	32	0	15	91.4	293.1	0.2	384.8	1214.0	117.0	293.1	410.1
3/1	-	-	-	56.8	159.4	-	216.2	1249.3	71.0	159.4	230.3
4/1	-	-	-	47.3	126.0	-	173.4	1253.2	62.2	126.0	188.3

C1 PRC for Signalled Lanes (%): -127.7 Total Delay for Signalled Lanes (pcuHr): 782.44 Cycle Time (s): 240
PRC Over All Lanes (%): -127.7 Total Delay Over All Lanes(pcuHr): 782.44

Appendix J

Speed Survey Results

ABACUS TRAFFIC SURVEYS
14 CLIFF HILL COURT,
HOLMFIRTH, HD9 1JF

JOB NUMBER	
DATE OF SURVEY	20/08/2020
START TIME	09:30
FINISH TIME	13:30

SPEED SURVEY

LOCATION Church Lane, Linthwaite
DIRECTION OF TRAVEL From Cowlersley Lane

SPEED (MPH)	NO. OF READINGS	SPEED (MPH)	NO. OF READINGS	SPEED (MPH)	NO. OF READINGS	SPEED (MPH)	NO. OF READINGS
1		26	15	51		76	
2		27	18	52		77	
3		28	8	53		78	
4		29	20	54		79	
5		30	20	55		80	
6		31	25	56		81	
7		32	15	57		82	
8		33	8	58		83	
9		34	13	59		84	
10		35	1	60		85	
11		36	3	61		86	
12		37	3	62		87	
13		38	3	63		88	
14		39	3	64		89	
15		40		65		90	
16		41		66		91	
17		42	1	67		92	
18		43		68		93	
19		44		69		94	
20	2	45		70		95	
21	4	46		71		96	
22	5	47		72		97	
23	2	48		73		98	
24	5	49		74		99	
25	28	50		75		100	

	202	**DUAL CARRIAGEWAY?**	N
MEAN SPEED	29.049505	**SINGLE CARRIAGEWAY?**	Y
STANDARD DEVIATION	4.06263458	**WET ROAD SURFACE?**	N
85th PERCENTILE	33.1121395		
85th PERCENTILE WET WEATHER SPEED	30.6271395 ✔		

ABACUS TRAFFIC SURVEYS
14 CLIFF HILL COURT,
HOLMFIRTH, HD9 1JF

JOB NUMBER	
DATE OF SURVEY	20/08/2020
START TIME	09:30
FINISH TIME	13:30

SPEED SURVEY

LOCATION Church Lane, Linthwaite
DIRECTION OF TRAVEL From Crosland Heath Golf Club

SPEED (MPH)	NO. OF READINGS	SPEED (MPH)	NO. OF READINGS	SPEED (MPH)	NO. OF READINGS	SPEED (MPH)	NO. OF READINGS
1		26	26	51		76	
2		27	20	52		77	
3		28	4	53		78	
4		29	20	54		79	
5		30	12	55		80	
6		31	12	56		81	
7		32	20	57		82	
8		33	16	58		83	
9		34	12	59		84	
10		35	12	60		85	
11		36	2	61		86	
12		37	2	62		87	
13		38	4	63		88	
14		39		64		89	
15		40		65		90	
16		41		66		91	
17		42		67		92	
18		43		68		93	
19	1	44		69		94	
20	1	45		70		95	
21	4	46		71		96	
22	4	47		72		97	
23	15	48		73		98	
24	4	49		74		99	
25	12	50		75		100	

	203	**DUAL CARRIAGEWAY?**	N
MEAN SPEED	28.9950739	**SINGLE CARRIAGEWAY?**	Y
STANDARD DEVIATION	4.19865318	**WET ROAD SURFACE?**	N
85th PERCENTILE	33.1937271		
85th PERCENTILE WET WEATHER SPEED	30.7087271 ✔		