

Manchester Business Park, Aviator Way

National Highways Comments – Applicant Response

Technical Note

Date: 11th March 2026

Client Name: Ask Real Estate Limited

Document Reference: 21347101-WAT-XX-XX-TN-N-800002_P01

This document has been prepared and checked in accordance with
Waterman Group's IMS (BS EN ISO 9001: 2015, BS EN ISO 14001: 2015 and BS EN ISO 45001:2018)

Issue	Prepared by	Checked by	Approved by
P02	M. Scroggs Principal Transport Planner	A. Beard Senior Associate Director	A. Beard Senior Associate Director

1. Introduction

General

- 1.1. This Technical Note (TN) has been prepared by Waterman Infrastructure and Environment Ltd (Waterman) on behalf of Ask Real Estate Limited (the Applicant) to provide highways and transport responses to the consultation comments raised by National Highways in relation to the submitted full planning application for a development of 9 no. Commercial B2 (General Industry) and B8 (Storage and distribution) units to form light industrial and ancillary office space, with associated landscaping works, access and car parking at Unit 2000, Aviator Way, near Manchester Airport, Greater Manchester, M22 1GE (the 'Site', planning ref: 144691/FO/2025).
- 1.2. Specifically, this TN addresses the further comments raised by National Highways' term consultant WSP in its Technical Note '*Additional Information February 2026 Review*' dated 19 February 2026, which followed the submission of additional information by the Applicant in response to initial questions raised by National Highways following the submission of the planning application.
- 1.3. The purpose of this TN is to respond to the further comments received from WSP on behalf of National Highways, and addresses each of the relevant points raised, with the comments raised by WSP summarised below, followed by Waterman's response addressing each comment raised in order received.

2. Response to WSP Comments

Policy

WSP comment:

Comment 1-01: 'Whilst the Applicant confirms consideration of the DfT Circular 01/2022, the TA does not explicitly reference Policy SGL 12 within the Manchester City Council Local Plan and its relationship with the allocation, or the collaborative working obligations within the Places for Everyone: Statement of Common Ground. WSP acknowledge that this proposal was submitted to Manchester City Council before MIX; however, would request that Manchester City Council confirm how this site should be considered given that the allocation is now coming forward.'

Waterman Response

- 2.1. Manchester City Council (MCC) have since confirmed on 24th February 2026 that the Manchester MIX development does not need to be considered within this assessment, as follows:

'The Council as LPA has raised this with colleagues in the Council's Highway Services team who agree that further assessment of the M56 / A555 Ringway Road West / Outwood Lane junction, incorporating MIX Manchester is not needed given that MIX is not yet a committed development.'

Existing Conditions

WSP comment:

Comment 2-01: 'The Applicant has not addressed WSP's comment and has provided no additional baseline information on the M65 Junction 5. WSP would highlight that the information being requested is to provide an understanding of the existing / current operation of the SRN junction so that National Highways can understand localised conditions before the inclusion of the proposed development.'

Waterman Response

- 2.2. In the TA, it was considered that based on the forecast low number of Proposed Development trips headed to / originating from the west via the M56, the percentage impact of these trips against the high traffic volumes at M56 Junction 5 would be negligible and therefore an assessment of this was not required.
- 2.3. However, as requested, an assessment of the percentage impact of the forecast Proposed Development trips on the M56 at Junction 5 has been undertaken using available Department for Transport (DfT) Annual Average Traffic Flow (AADF) data for 2024 levels north, south and east of the junction. Growth factors calculated using TEMPro were calculated to factor the 2024 flows to 2030 and 2035 levels in line with the future assessment years. The forecast worst-case Option 5 B2 use trip generation for the Proposed Development has been distributed and assigned to the links at the junction so that a comparison can be made between the baseline and Proposed Development traffic.

- 2.4. A summary of the flows and the resultant percentage impact of the forecast Proposed Development on the links at the junction are shown below in Table 1.

Table 1: DfT AADF Flows vs B2 Use Proposed Development Traffic at M56 Junction 5

TOTAL VEHICLES B2										
LINK	Development Flows	DfT Flows			Total Flows			% Development Flows		
		2025	2030	2035	2025	2030	2035	2025	2030	2035
M56 Airport Spur (Eastbound)	364	39657	43329	46165		43693	46529		0.83%	0.78%
M56 Airport Spur (Westbound)	364	40047	43755	46619		44119	46983		0.82%	0.77%
M56 North of J5 (Northbound)	306	76953	84079	89581		84385	89887		0.36%	0.34%
M56 North of J5 (Southbound)	306	76630	83726	89205		84032	89511		0.36%	0.34%
M56 South of J5 (Northbound)	58	69633	76081	81060		76139	81118		0.08%	0.07%
M56 South of J5 (Southbound)	58	67905	74193	79048		74251	79106		0.08%	0.07%

- 2.5. The analysis shows that the percentage impact of the Proposed Development traffic to the north, south and to the east of M56 Junction 5 would be less than 1%, which is considered be negligible and would therefore not have a significant impact on the operation of the junction and associated links.

Collision Data Analysis

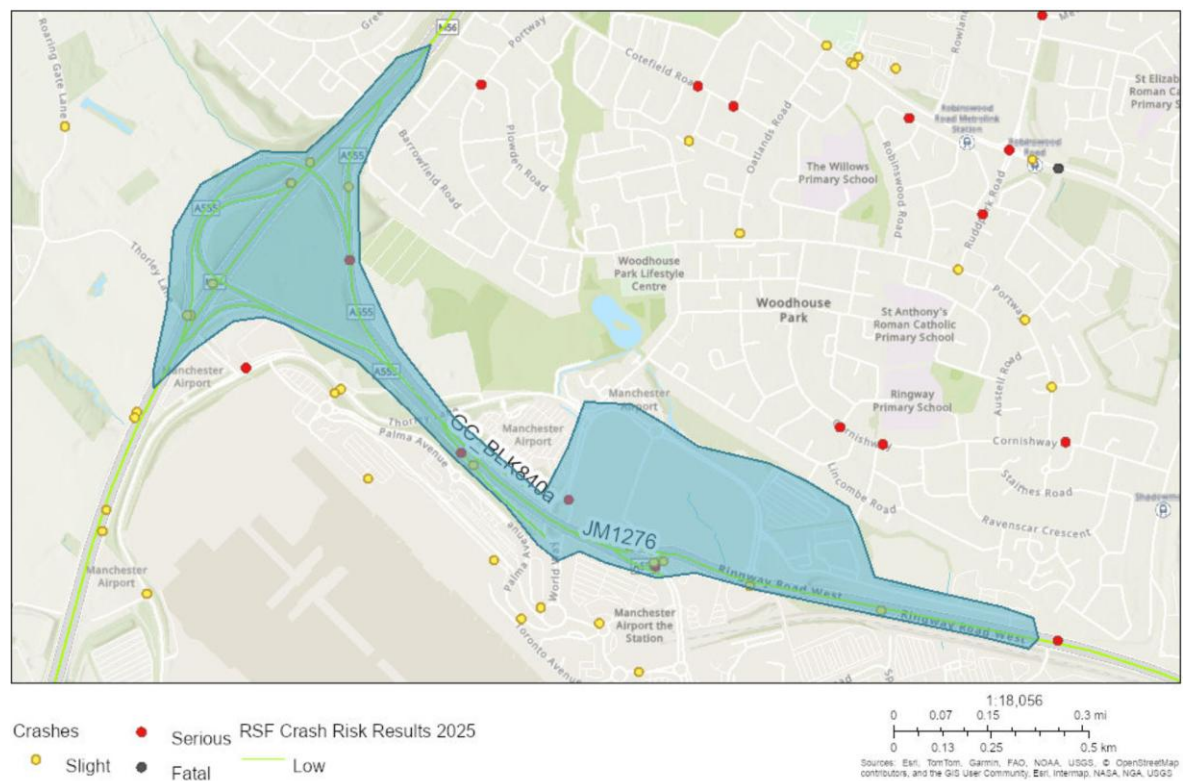
WSP comment:

*The TA provided a collision analysis based on the local highway network, summarising Personal Injury Accidents (PIA) in the Study Area. However, this analysis did not cover SRN links, including the M56 Junction 5, and did not incorporate the most recent CrashMap data. WSP advised that the safety assessment should be expanded to include SRN collisions, using the latest available dataset, to ensure compliance with the Circular 01/2022. **Comment 3-01:** This comment has not been addressed within the information / email provided by Waterman Group. This information should be provided, which will align with the information requested at Comment 2-01.*

Waterman Response

- 2.6. As requested, CrashMap Pro has been used analyse Personal Injury Accidents (PIAs) in an expanded study area to include M56 Junction 5 for the most recent 5-year period for which data is available, 2020 to 2024. The Crashmap report is attached at **Appendix A**. An extract showing the total of 17 PIAs recorded in this defined area is shown in Figure 1 below.

Figure 1: 2020-2024 PIAs within Expanded Study Area including M56 Junction 5



- 2.7. Of the 17 recorded PIAs within the five-year study period, no 'Fatal' incidents were recorded, 4 were classified as 'Serious' in severity with the remaining 13 as 'Slight'.
- 2.8. The year of occurrence and severity of each PIA is summarised in Table 2 below.

Table 2: PIA by Year and Severity (2020 to 2024)

Year	Severity		
	'Slight'	'Serious'	'Fatal'
2020	2	-	-
2021	2	1	-
2022	4	3	-
2023	3	-	-
2024	2	-	-
Total	13	4	-

- 2.9. The first 'serious' incident, involving two cars colliding, occurred in 2021 at Junction 5 of the M56 where the northbound off-slip onto the M56 Airport Spur adjoins the southbound off-slip onto the M56 Airport Spur.
- 2.10. Another 'serious' PIA took place in 2022 on the M56 Airport Spur approximately 100m southeast of the Thorley Lane bridge. This incident involved three cars travelling westbound, one of which was merging onto the carriageway from the Terminal 2 Roundabout slip road.

- 2.11. Also in 2022, a ‘serious’ incident occurred at the Terminal 2 Roundabout where a southbound car pulling off from Enterprise Way struck the offside of a motorcycle travelling west to east on the roundabout.
- 2.12. The last ‘serious’ PIA took place at the M56 Airport Spur / A555 Ringway Road West / Outwood Lane, and involved two goods vehicles colliding, one travelling west to south from the M56 Airport Spur to Outwood Lane, and the other travelling east to west from the A555 Ringway Road West to the M56 Airport Spur.
- 2.13. Table 3 below provides a summary of the breakdown of road users involved in the PIAs.

Table 3: PIA by Year and Road User (2020 to 2024)

Year	Road User Involved					
	Pedestrian	Pedal Cycle	Motorcycle	Car	Goods Vehicle	Young Driver
2020	-	-	-	2	-	-
2021	-	-	-	3	2	1
2022	-	-	1	6	3	2
2023	-	-	-	3	-	2
2024	1	-	-	2	-	-
Total	1	0	1	16	5	5

- 2.14. In terms of active travel users, one incident involved a pedestrian and none involved pedal cyclists. The incident involving the pedestrian took place on the A555 Ringway Road West and comprised a car travelling east to west striking a pedestrian in the vicinity of the Toucan Crossing by Woodhouse Lane. Additionally, 16 of the 17 PIAs involved cars, 5 involved goods vehicles and 5 involved young drivers.
- 2.15. From this assessment, no specific patterns or clusters have been identified, and the historic accident record therefore raises no specific concerns with respect to the location or development potential of the Site.

Growth Factors

WSP comment:

‘The TA presented TEMPro software to derive growth factors for the future year assessment; however in WSP’s independent check of the growth factors, it was noticed that the growth factors derived differ to those within the TA. Therefore, it was requested that confirmation is provided as to the parameters used to derive the growth factors.’ **Comment 4-01:** *‘This comment has not been addressed, and the Applicant must clarify the derivation of growth factors to ensure appropriate future year forecasting.’*

Waterman Response

- 2.16. A check of the calculation used to derive the 2025 to 2030 and 2025 to 2035 growth factors has shown that this used the ‘A Road’ road type within the NTM calculator, which is considered an

appropriate road type for the study area assessed given that the A555 straddles both the M56 / A555 Ringway Road West / Outwood Lane junction. WSP have not stated the road type used within their calculations however it is unlikely that a different road type would result in a marked difference in growth factors for these future assessment years.

Junction Assessments

WSP comment:

Comment 5-01: 'It was noted that in the initial review of the TA WSP (Comment 6-03) that the Applicant confirms how known changes to the local and adjacent road network may impact on the operation of the junctions modelled. No further information on this aspect has been provided by the Applicant. However, WSP acknowledge that Policy SGL 12 MIX – Manchester Airport is to be developed within the context of a comprehensive masterplan, therefore recognise that Waterman Group may not be able to address changes to the road network at this stage. Notwithstanding, commentary on the modelling of the existing network is provided below.'

- 2.17. This is acknowledged and as stated previously in para 2.1, Manchester City Council (MCC) have since confirmed that the Manchester MIX development does not need to be considered within this assessment.

M56 Airport Spur / A555 Ringway Road West / Outwood Lane Junction

- 2.18. The comments made by WSP regarding the LinSig modelling of the M56 Airport Spur / A555 Ringway Road West / Outwood Lane junction are addressed below.

WSP comment:

'Lane Lengths:

- J1:1-3 should be 100m;*
- J1:2-3 should be 45m;*
- J1:3-1 should be 45m;*
- J1:4-1 & -2 should be 200m; and*
- J1:5-1 should be 200m.'*

Waterman Response

- 2.19. As requested, these values have been applied to the respective model parameters.

WSP Comment:

Queue Limits:

'— It is recommended that queue limits be placed on Arms 3, 4, and 5 to reduce the risk that queues may extend to block opposing movements. This is of particular importance for Arm 3 due to the presence of a yellow box within the junction.'

Waterman Response

- 2.20. As requested, queue limits have been applied to Arms 3, 4 and 5 to restrict queues on these approach lanes.

WSP Comment:

Cruise Times:

‘— Cruise times are applied inconsistently across the model, with either 1 second, 2 seconds, or no data entered. It is recommended that these be updated with either the posted speed of the junction and associated movements, or the speed of any recorded vehicle movements.’

Waterman Response

- 2.21. As requested, the posted speed limit on each junction approach has been applied to the connectors for each junction approach lane.

WSP Comment:

Phase Setup:

‘— Phases G and H should have a 4 second minimum entered.’

- 2.22. As requested, 4 second minimum green times have been applied to Phases G and H.

WSP Comment:

Stage Timings:

‘— Stage times have only been provided for the M56 to A555 movement for the periods 08:00-08:10 and 16:00-16:00. This demonstrates that the movement was afforded significantly greater green time than is shown in the model. Further stage time assessments are requested for calibration, and for that data to align with the peak periods (see below).’

Waterman Response

- 2.23. As requested, a sample of timings have been observed from the available video footage for each traffic phase at the junction during both the AM and PM peak hours to establish how the average of these green times compare to the green times calculated by LinSig using the ‘Optimise to PRC’ facility that has previously been used to provide the previously modelled assessment. A sample of 5 green times per traffic phase within each peak hour has been recorded given the large number of phases at the junction. It is also noted that the low quantity and, in some instances, quality of the video camera footage captured during the surveys has made it difficult to make accurate observations of green start and end times for phases, with the Phase C signal head and associated stopline unable to be viewed, and therefore should therefore be treated as an approximation. These have been shown in the attached spreadsheet entitled ‘J3 Observed Green Signal Timings’.
- 2.24. The comparison between these sample observed green times and the optimised green times calculated by LinSig for the observed flow scenario shows that in many instances these are broadly similar for each traffic phase. Based on this, it has been decided to adjust the model optimised times to align more closely to those observed and to provide modelled queue lengths that generally align

to the observed queue lengths. It is considered that this approach provides a reasonable level of model calibration.

WSP Comment:

Traffic Flow Groups:

‘— It is stated in the initial TA that the peak periods identified were 08:00-09:00 and 15:45-16:45. However, the received modelling shows that the AM peak is modelled to 07:45-08:45. It is further noted that spot checks of the provided OD matrices show that the peak periods should be 07:30-08:30 and 15:30-16:30. Whilst there is the potential that the periods of 08:00-09:00 and 15:45-16:45 were chosen due to suppressed demand at the junction as identified in the provided queue logs, confirmation is requested as to why the information does not correlate.

— The Future Year and With Development scenarios appear appropriate and align with the provided flow diagrams. Notwithstanding, these are based on the previously identified peak periods which are noted to not align with either the maximum flow through the junction or the peak periods (in the case of the AM peak period) identified within the TA. Upon confirmation of peak period flow groups, further analysis can be undertaken.’

Waterman Response

- 2.25. With regard to the 07:45 to 08:45 AM and 15:45 to 16:45 PM peak hours used within the assessment, these were based on the combined total traffic flows at the three highway junction assessed within the TA (Junction 1: Enterprise Way / Aviator Way, Junction 2: A555 Ringway Road West / Enterprise Way and Junction 3: M56 Airport Spur / A555 Ringway Road West / Outwood Lane) being highest during these hours across the 07:00 to 10:00 AM and 15:00 to 19:00 PM peak periods to provide an overall network AM and PM peak hour. This analysis has been summarised below in Table 4.

Table 4: AM and PM Peak Hour Analysis

Time	AM Peak			
	Junction 1 Total Flow	Junction 2 Total Flow	Junction 3 Total Flow	Junction 1, 2 and 3 Combined Flow
07:30-08:30	972	3961	4420	9353
07:45-08:45	994	4009	4357	9360
08:00-09:00	1004	3897	4265	9166
Max	1004	4009	4420	9360
Time	PM Peak			
	Junction 1 Total Flow	Junction 2 Total Flow	Junction 3 Total Flow	Junction 1, 2 and 3 Combined Flow
15:30-16:30	925	4005	4621	9551
15:45-16:45	920	4019	4636	9575
16:00-17:00	935	3952	4417	9304
16:15-17:15	967	3892	4332	9191
16:30-17:30	1004	3784	4385	9173
16:45-17:45	980	3751	4403	9134
17:00-18:00	943	3736	4502	9181

17:15-18:15	819	3628	4485	8932
Max	1004	4019	4636	9575

- 2.26. In the AM peak period, this shows that while close between the 07:30 to 08:30 and 07:45 to 08:45 hours, it is the 07:45 to 08:45 hour that has the highest combined total flows (9,360 vehicles) across the three assessed junctions.
- 2.27. In the PM peak period, this shows that while close between the 15:30 to 16:30 and 15:45 to 16:45 hours, it is the 15:45 to 16:45 hour that has the highest combined total flows (9,575 vehicles) across the three assessed junctions.
- 2.28. It is accepted that the peak hours may be marginally higher at one junction than another when in isolation, however it is considered that the above approach to identifying the peak hours across the study area is robust and therefore all observed and future year traffic flows are reasonable for assessment.

WSP Comment:

Cycle Times:

‘— Signal timings show that the average cycle time for the junction is 2:02 and 1:55, however this is calculated from a 10-minute section of signal surveys. It is requested that this analysis be expanded to include the full hour, and that the hour used aligns with the peak hours that have been identified (see above).’

Waterman Response

- 2.29. As requested, observations of the junction signal cycle times have been recorded for the entire AM and PM peak hours to provide an average cycle time over these entire hour periods. This analysis, which has been included in the attached spreadsheet labelled ‘Junction 3 (Thursday)’, has shown that the average cycle times are as follows:
- AM Peak = 1 min 57s / 117 seconds
 - PM peak = 1 min 52s / 112 seconds
- 2.30. The average 117 second cycle time in the AM peak aligns closely to the 120 second time used in the assessment and therefore the 120 second time has been retained for the revised assessment, with 120s also being a typical standardised long cycle time at high trafficked junctions.
- 2.31. The average 112 second cycle time in the PM peak is lower than the 120 second cycle time used in the assessment so the 112 second cycle time has been applied to the revised models.

WSP Comment:

‘Evidence of Validation:

— Queue counts have been provided for the AM peak period, showing that the eastbound A555 movement queues from the Enterprise Way junction and significantly into the available queueing space for vehicles exiting the M56. This has been supported by images of the camera footage from

the survey and is corroborated by Google Traffic View (see image below – taken at 8.10am on a Wednesday) which shows queues originate from the downstream junction.

— For the PM peak period, only the time 16:00-16:45 has been used which does not reflect either the identified peak period or “one hour”.

- It is noted, however, that these queues are not accurately reflected within the modelling. It is understood that this is, in part, a shortcoming of the modelling software with queues stacked vertically and not impacting the adjoining lanes. Therefore, it is recommended that the model is further calibrated through the use of Bonus Greens to more accurately reflect the ‘lost’ green time due to vehicles not passing over the stop line.’

Waterman Response

- 2.32. With regard to the queue length data, it is noted that in the PM peak period the queue length surveys were undertaken from 16:00 to 19:00 so the queue length data for the 15:45 to 16:00 period was not recorded. However, it is considered that data over a 45-minute period is sufficient to represent an hour period in this instance as the period of high demand is consistent through the identified peak hour.
- 2.33. The two junctions were assessed in isolation due to the 200 metre distance between these and to assess their standalone operation, although it is accepted that the A555 Ringway Road West / Enterprise Way junction sometimes affects the operation of the M56 / A555 Ringway Road West / Outwood Lane junction and vice versa during the peak hours. Therefore, as requested, the following ‘End Bonus Greens’ have been applied to represent the Underutilised Green Time (UGT) caused by queueing back to and blocking of the downstream junction and result in modelled queues similar to those observed:
- AM Peak – M56 EB to Outwood Lane approach (Lanes 4/1 & 4/2): -8s
 - AM Peak - M56 EB to A555 Ringway Road West approach (Lanes 5/1 & 5/2): -15s
 - PM Peak - M56 EB to A555 Ringway Road West approach (Lanes 5/1 & 5/2): -14s
 - PM Peak – A555 Ringway Road West approach (Lanes 1/2 & 1/3): -1s
 - PM Peak – M56 EB to Outwood Lane approach (Lanes 4/1 & 4/2): -4s
- 2.34. The application of these Bonus Greens in addition to the changes in traffic phase green times and the cycle time in the PM peak have resulted in the following modelled queues in the 2025 Base model in comparison to the observed queues, as shown below in Table 5.

Table 5: 2025 Observed vs LinSig Modelled Queues Comparison at M56 Airport Spur / A555 Ringway Road West / Outwood Lane Junction

Junction Approach Lane(s)	2025 (07:45–08:45) AM Peak		2025 (15:45–16:45) PM Peak	
	Observed Mean Max Queue	Modelled Mean Max Queue	Observed Mean Max Queue	Modelled Mean Max Queue
A555 Ringway Road West WB L1	3.3	2.3	2.2	1.5
A555 Ringway Road West WB L2 + L3	50.3	50.8	49.7	46.7
Outwood Lane L1	8.5	12.7	17.6	12.8
Outwood Lane L2 + L3	9.1	8.3	13.3	13.7
M56 EB to Outwood Lane L1 + L2	31.7	29.3	32.0	28.9
M56 EB to A555 Ringway Road West L1 + L2	19.0	17.9	17.6	16.6

- 2.35. The comparison shows that all modelled queues at the junction closely align to the observed queues in both peak hours and therefore it is considered that the Base model validation is sufficient.
- 2.36. The Bonus Greens applied to the 2025 Base model have been applied to the 2030 and 2035 Base and Base + Option 5 B2 Proposed Development models and the 'Optimise to PRC' tool used within LinSig to provide optimal operation in the future year assessments. The full results are attached at **Appendix B** and also within the attached LinSig model file.
- 2.37. The results indicate that the junction will operate above actual capacity in the 2030 and 2035 Base scenarios with the following negative Practical Reserve Capacity (PRC) values:
- 2030 Base AM peak = -16.1%
 - 2030 Base PM peak = -15.5%
 - 2035 Base AM peak = -21.3%
 - 2035 Base PM peak = -20.3%
- 2.38. It has been acknowledged by WSP in their review that there are capacity issues with the operation of the existing road network in the existing and future base scenarios and this is further supported by the above modelled negative PRC values at the junction. The modelling indicates the following PRC values for the assessment inclusive of the worst-case Proposed Development traffic in 2030 and 2035:
- 2030 Base + Option 5 B2 Proposed Development AM peak = -17.6%
 - 2030 Base + Option 5 B2 Proposed Development PM peak = -18.4%
 - 2035 Base + Option 5 B2 Proposed Development AM peak = -22.7%
 - 2035 Base + Option 5 B2 Proposed Development PM peak = -23.3%

- 2.39. The PRC values shown are only marginally different from those shown for the 2030 and 2035 Base scenarios, which indicates that the addition of the forecast Proposed Development traffic would only have a negligible impact on the junction. This is also shown by the model with regard to DoS and MMQ values which are the same or only marginally different in the scenarios inclusive of the Proposed Development traffic.

A555 Ringway Road West / Enterprise Way Junction

- 2.40. The comments made by WSP regarding the LinSig modelling of the A555 Ringway Road West / Enterprise Way junction are addressed below.

WSP Comment:

RR67 Data:

‘— Appears appropriate for use with a note that some A555 lanes appear slightly too narrow which may be impacting the operation of junction and / or results validation.’

Waterman Response

- 2.41. This is noted although in a check of the values used these appear to be reasonable.

WSP Comment:

Cruise Times:

‘— Cruise times are applied inconsistently across the model, with either 1 second, 2 seconds, or no data entered. It is recommended that these be updated with either the posted speed of the junction and associated movements, or the speed of any recorded vehicle movements.’

Waterman Response

- 2.42. As requested, the posted speed limit on each junction approach has been applied to the connectors for each junction approach lane.

WSP Comment:

Cycle Times:

‘- Signal time data shows an average of 2:07 and 2:02, however this is calculated from a 10-minute section of signal surveys. It is requested that this analysis be expanded to include the full hour of operation, and that this hour aligns with the peak hours that have been identified.’

Waterman Response

- 2.43. As requested, observations of the junction signal cycle times have been recorded for the entire AM and PM peak hours to provide an average cycle time over these entire hour periods. This analysis, which has been included in the attached spreadsheet labelled ‘Junction 2 (Thursday)’, has shown that the average cycle times are as follows:

- AM Peak = 1 min 56s / 116 seconds
- PM peak = 2 min 00s / 120 seconds

- 2.44. The average 116 second cycle time in the AM peak aligns closely to the 120 second time used in the assessment and therefore the 120 second time has been retained for the revised assessment, with 120s also being a typical standardised long cycle time at high trafficked junctions.
- 2.45. The average 120 second cycle time in the AM peak matches the 120 second time used in the assessment and therefore the 120 second time has been retained for the revised assessment.

WSP Comment:

Evidence of Validation:

'Queue counts have been provided however it is noted that the counts for the PM peak period only use the 16:00-16:45 data set and do not include the period of 15:45-15:55 which is part of the identified peak hour. It is requested that this data be provided for further calibration to cover the full hour period.

— It is noted that queues on the A555 (West) arm are lower than those recorded in the queue counts.

— Potential seen for suppressed demand, noting the comments made on the M56 / A555 junction (above).'

Waterman Response

- 2.46. As in the case of the M56 / A555 Ringway Road West / Outwood Lane junction, a sample of timings have been observed from the available video footage for each traffic phase at the junction during both the AM and PM peak hours to establish how the average of these green times compare to the green times calculated by LinSig using the 'Optimise to PRC' facility that has previously been used to provide the previously modelled assessment. A sample of 5 green times per traffic phase within each peak hour has been recorded given the large number of phases at the junction. It is also noted that the low quantity and, in some instances, quality of the video camera footage captured during the surveys has made it difficult to make accurate observations of green start and end times for phases and therefore should therefore be treated as an approximation. These have been shown in the attached spreadsheet entitled 'J2 Observed Green Signal Timings'.
- 2.47. The comparison between these sample observed green times and the optimised green times calculated by LinSig for the observed flow scenario shows that in many instances these are broadly similar for each traffic phase. Based on this, it has been decided to adjust the model optimised times to align more closely to those observed and to provide modelled queue lengths that generally align to the observed queue lengths. It is considered that this approach provides a reasonable level of model calibration.
- 2.48. As noted previously, in the PM peak period the queue length surveys were undertaken from 16:00 to 19:00 so the queue length data for the 15:45 to 16:00 period was not recorded. However, it is considered that data over a 45-minute period is sufficient to represent an hour period in this instance as the period of high demand is consistent through the identified peak hour.
- 2.49. The two junctions were assessed in isolation due to the 200-metre distance between these and to assess their standalone operation, although it is accepted that the A555 Ringway Road West / Outwood Lane junction sometimes affects the operation of the M56 / A555 Ringway Road West /

Enterprise Way junction and vice versa during the peak hours. Therefore, as requested, the following 'End Bonus Greens' have been applied to represent the UGT caused by queueing back to and blocking of the downstream junction and result in modelled queues similar to those observed:

- AM Peak – A555 Ringway Road West westbound approach (Lane 3/2): -32s
- PM Peak - A555 Ringway Road West westbound approach (Lane 3/2): -34s

2.50. The application of these Bonus Greens in addition to the changes in traffic phase green times have resulted in the following modelled queues in the 2025 Base model in comparison to the observed queues, as shown below in Table 6.

Table 6: 2025 Observed vs LinSig Modelled Queues Comparison at A555 Ringway Road / Enterprise Way Junction

Junction Approach Lane(s)	2025 (07:45–08:45) AM Peak		2025 (15:45–16:45) PM Peak	
	Observed Mean Max Queue	Modelled Mean Max Queue	Observed Mean Max Queue	Modelled Mean Max Queue
A555 Ringway Road West EB L1+L2	31.3	26.3	33.0	24.5
A555 Ringway Road West EB L3	29.4	28.6	31.7	27.9
Enterprise Way L1	9.7	11.5	11.4	16.0
Enterprise Way L2	2.9	2.5	4.9	4.8
A555 Ringway Road West WB L1	5.5	12.8	6.1	12.1
A555 Ringway Road West WB L2+L3	43.3	41.3	57.8	50.6

2.51. The comparison shows that all modelled queues at the junction closely align to the observed queues in both peak hours and therefore it is considered that the Base model validation is sufficient.

2.52. The Bonus Greens applied to the 2025 Base model have been applied to the 2030 and 2035 Base and Base + Option 5 B2 Proposed Development models and the 'Optimise to PRC' tool used within LinSig to provide optimal operation in the future year assessments. The full results are attached at **Appendix C** and also within the attached LinSig model file.

2.53. The results indicate that the junction will operate above actual capacity in the 2030 and 2035 Base scenarios with the following Practical Reserve Capacity (PRC) values:

- 2030 Base AM peak = -14.2%
- 2030 Base PM peak = -14.8%
- 2035 Base AM peak = -18.1%
- 2035 Base PM peak = -19.1%

- 2.54. The modelling indicates the following PRC values for the assessment inclusive of the worst-case Proposed Development traffic in 2030 and 2035:
- 2030 Base + Option 5 B2 Proposed Development AM peak = -13.9%
 - 2030 Base + Option 5 B2 Proposed Development PM peak = -17.2%
 - 2035 Base + Option 5 B2 Proposed Development AM peak = -17.9%
 - 2035 Base + Option 5 B2 Proposed Development PM peak = -21.5%
- 2.55. The PRC values shown are only marginally different from those shown for the 2030 and 2035 Base scenarios, which indicates that the addition of the forecast Proposed Development traffic would have a negligible impact on the junction. This is also shown by the model with regard to DoS and MMQ values which are the same or only marginally different in the scenarios inclusive of the Proposed Development traffic.

Overarching Modelling Comments

WSP Comment:

'Overall, there are a number of outstanding comments which WSP require to be addressed prior to making further comment with regards to the modelling suitability of potential impacts of the proposed development on the M56.'

Waterman Response

- 2.56. It is considered that all of the points listed by WSP have been addressed and therefore the forecast impact of the Proposed Development has been established. The modelling has indicated the Proposed Development traffic would have a negligible impact on the local highway network and the M56 Strategic Road Network (SRN).

WSP Comment:

'It is recommended that, due to the potential for interaction between the junctions, that reasoning be provided as to why the models were not linked to allow for further calibration. This is particularly noteworthy with regards to what is considered the "peak hour" for the network in terms of flows.'

Waterman Response

- 2.57. The two junctions were assessed in isolation and not linked due to the 200-metre distance between these and to assess their standalone operation, however it is accepted that the A555 Ringway Road West / Enterprise Way junction occasionally affects the operation of the M56 / A555 Ringway Road West / Outwood Lane junction and vice versa during the peak hours. With regard to the 07:45 to 08:45 AM and 15:45 to 16:45 PM peak hours used within the assessment, these were based on the combined total traffic flows at the three highway junction assessed within the TA being highest during these hours across the 07:00 to 10:00 AM and 15:00 to 19:00 PM peak periods to provide an overall network AM and PM peak hour.

WSP Comment:

'It is observed that the A555 westbound movement currently sees queueing during the peak periods and this is not fully reflected in the modelling presented, inclusive of queueing across the stop line to the Enterprise Way junction. It is recommended that, if the models are not to be linked, that the Bonus Green feature be investigated to reflect the lost green time from queueing in the Base Year and that this be replicated across the future year scenarios.'

Waterman Response

- 2.58. 'End Bonus Greens' have been applied on certain approaches at both junctions to represent the Underutilised Green Time (UGT) caused by queueing back to and blocking of the downstream junction and result in modelled queues similar to those observed.

WSP Comment:

- 2.59. *'It is acknowledged, however, that this is an existing issue, and it is therefore recommended that the Applicant discuss potential solutions with both MAG and TfGM prior to continuing with development to ensure that increases in queues as a result of the development do not adversely affect the operation of the SRN at Manchester Airport.'*

Waterman Response

- 2.60. It is agreed that there are capacity issues at the two junctions in the existing situation and future year baseline scenarios, however as the modelling has indicated, the forecast impact of the Proposed Development traffic on these junctions is negligible and would not significantly affect the operation of the SRN.

3. Conclusions

- 3.1. In their Summary & Conclusions section, WSP state:

'Given the above comments it is recommended that National Highways extends the Holding Recommendation, if required, to give the Applicant sufficient time to respond to the queries in this review.'

- 3.2. It is considered that all of the points listed by WSP have been addressed within this Technical Note and therefore the forecast impact of the Proposed Development on the M56 Airport Spur / A555 Ringway Road West / Outwood Lane junction and A555 Ringway Road West / Enterprise Way junction has been established.
- 3.3. Based on the assessment undertaken, it is concluded that the forecast impact of the Proposed Development traffic on these junctions and the M56 route in general is negligible and would not significantly affect the operation of the SRN.
- 3.4. As such, this TN has further demonstrated that the scheme can be suitably and safely accommodated on the existing highway network, with no detrimental impact on highway safety or capacity, consistent with the provisions of the NPPF.
- 3.5. In conclusion, this TN has shown that in transport terms, there are no transport reasons present to prevent planning approval being granted.

A. Appendix A – Crashmap PIA Report

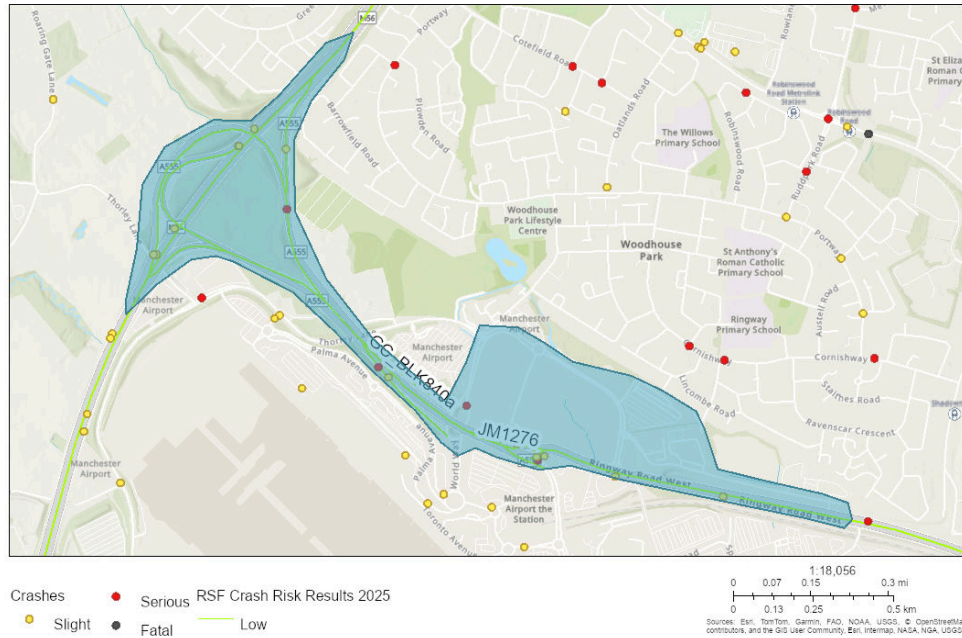


Crash Report

Area of Interest (AOI) Information

Area : 619,992.18 m²

Mar 10 2026 12:52:58 Greenwich Mean Time



Summary

Name	Count	Area(m²)	Length(m)
Crashes	17	N/A	N/A

Crashes

#	Carriageway_Hazards	Severity	Officer_Attended	Accident_DateTime	Year	Number_of_vehicles	Number_of_casualties	Easting
1	None	Slight	Police officer attended crash scene	February 4, 2020	2020	1	2	380859
2	None	Serious	Police officer attended crash scene	January 6, 2021	2021	2	1	381210
3	None	Slight	Police officer attended crash scene	July 11, 2022	2022	2	1	382232
4	None	Slight	Police officer attended crash scene	January 19, 2023	2023	2	1	380803
5	None	Slight	Police officer attended crash scene	June 9, 2023	2023	2	2	381110
6	None	Slight	No officer attended crash scene	November 15, 2021	2021	4	3	381059
7	None	Serious	Police officer attended crash scene	June 8, 2022	2022	2	2	381991
8	None	Serious	Police officer attended crash scene	December 3, 2022	2022	2	1	381768
9	None	Slight	Police officer attended crash scene	August 16, 2024	2024	1	1	380792
10	None	Slight	Police officer attended crash scene	May 31, 2022	2022	2	1	382011
11	None	Slight	Police officer attended crash scene	May 21, 2022	2022	2	1	381208
12	Unknown	Slight	No-accident reported via self-completion form	March 8, 2023	2023	2	1	381525
13	Unknown	Serious	Police officer attended crash scene	August 24, 2022	2022	3	1	381494
14	None	Slight	No-accident reported via self-completion form	March 9, 2022	2022	2	1	381986
15	None	Slight	No officer attended crash scene	July 30, 2021	2021	2	1	381060
16	None	Slight	Police officer attended crash scene	May 2, 2024	2024	1	2	382569
17	None	Slight	Police officer attended crash scene	February 7, 2020	2020	1	3	381924

#	Northing	Highway_Authority	Road_Number	Weather_conditions	Road_Type	Road_surface	Speed_Limit	Light_conditions
1	386331	Manchester	M56	Snowing without high winds	Dual carriageway	Frost or Ice	70	Darkness: street lights present and lit
2	386390	Manchester	M56	Fine without high winds	Dual carriageway	Wet or Damp	70	Darkness: street lights present and lit
3	385557	Manchester	A555	Fine without high winds	Dual carriageway	Dry	30	Daylight: regardless of presence of streetlights
4	386250	Manchester	M56	Fine without high winds	Dual carriageway	Dry	70	Darkness: street lights present and lit
5	386639	Manchester	M56	Fine without high winds	Dual carriageway	Dry	70	Daylight: regardless of presence of streetlights
6	386587	Manchester	M56	Fine without high winds	Dual carriageway	Wet or Damp	70	Daylight: regardless of presence of streetlights
7	385607	Manchester	U	Raining without high winds	Dual carriageway	Wet or Damp	40	Darkness: street lighting unknown
8	385777	Manchester	U	Fine without high winds	Roundabout	Dry	30	Daylight: regardless of presence of streetlights
9	386250	Trafford	M56	Fine without high winds	Dual carriageway	Dry	70	Daylight: regardless of presence of streetlights
10	385620	Manchester	U	Fine without high winds	Slip Road	Wet or Damp	30	Darkness: street lights present and lit
11	386576	Manchester	M56	Fine without high winds	Slip Road	Dry	70	Darkness: street lights present and lit
12	385867	Manchester	M56	Fine without high winds	Slip Road	Dry	70	Daylight: regardless of presence of streetlights
13	385898	Manchester	M56	Fine without high winds	Slip Road	Dry	70	Darkness: street lights present and lit
14	385617	Manchester	A555	Fine without high winds	Dual carriageway	Dry	50	Daylight: regardless of presence of streetlights
15	386587	Manchester	M56	Fine without high winds	Dual carriageway	Dry	70	Daylight: regardless of presence of streetlights
16	385492	Manchester	A555	Fine without high winds	Dual carriageway	Dry	40	Daylight: regardless of presence of streetlights
17	385660	Manchester	M56	Fine without high winds	Dual carriageway	Dry	70	Darkness: street lights present but unlit

#	Junction_detail	Pedestrian_Crossing	Involved_pedalcycle	Involved_Motorcycle	Pedestrian_casualty	Child_casualty	Pedal_cycleuser_casualty	Motorcycle_user_casualty
1	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	0	0	1	0	0
2	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	0	0	0	0	0
3	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	0	0	0	0	0
4	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	0	0	0	0	0
5	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	0	0	0	0	0
6	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	0	0	0	0	0
7	Unknown	No physical crossing facility within 50 metres	0	0	0	0	0	0
8	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	1	0	0	0	1
9	Not at or within 20 metres of junction	Unknown	0	0	0	0	0	0
10	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	0	0	0	0	0
11	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	0	0	0	0	0
12	Not at or within 20 metres of junction	Unknown	0	0	0	0	0	0
13	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	0	0	0	0	0
14	Unknown	Pelican, puffin, toucan or similar non-junction pedestrian light crossing	0	0	0	0	0	0
15	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	0	0	0	0	0
16	Not at or within 20 metres of junction	Unknown	0	0	1	1	0	0

17	Not at or within 20 metres of junction	No physical crossing facility within 50 metres	0	0	0	0	0	0
----	--	--	---	---	---	---	---	---

#	Involved_car	Involved_goodsvehicle	Involved_Bus	Involved_young_driver	Local_Authority_District	Junction_control	Is_Provisional	Is_Amended	Web_Link	Count
1	1	0	0	0	Manchester	Unknown	N	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=202006XE68285	1
2	1	0	0	0	Manchester	Give way or uncontrolled	N	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=202106X078910	1
3	1	1	0	0	Manchester	Unknown	N	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=2022061197178	1
4	1	0	0	1	Manchester	Unknown	N	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=2023061265677	1
5	1	0	0	1	Manchester	Unknown	N	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=2023061317318	1
6	1	1	0	1	Manchester	Unknown	N	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=2021061111097	1
7	0	1	0	0	Manchester	Auto traffic signal	N	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=2022061188280	1
8	1	0	0	0	Manchester	Give way or uncontrolled	N	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=2022061250075	1

9	1	0	0	0	Trafford	Unknown	N	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=2024061485841	1
10	1	0	0	0	Manchester	Unknown	N	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=2022061186889	1
11	1	0	0	1	Manchester	Unknown	N	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=2022061179940	1
12	1	0	0	0	Manchester	Unknown	N	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=2023061290250	1
13	1	0	0	1	Manchester	Unknown	N	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=2022061212527	1
14	1	1	0	0	Manchester	Auto traffic signal	N	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=2022061170012	1
15	1	1	0	0	Manchester	Give way or uncontrolled	N	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=2021061072112	1
16	1	0	0	0	Manchester	Unknown	N	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=2024061438466	1
17	1	0	0	0	Manchester	Unknown	N	No	https://www.crashmap.co.uk/reports/proreportservice?reportId=202006X168481	1

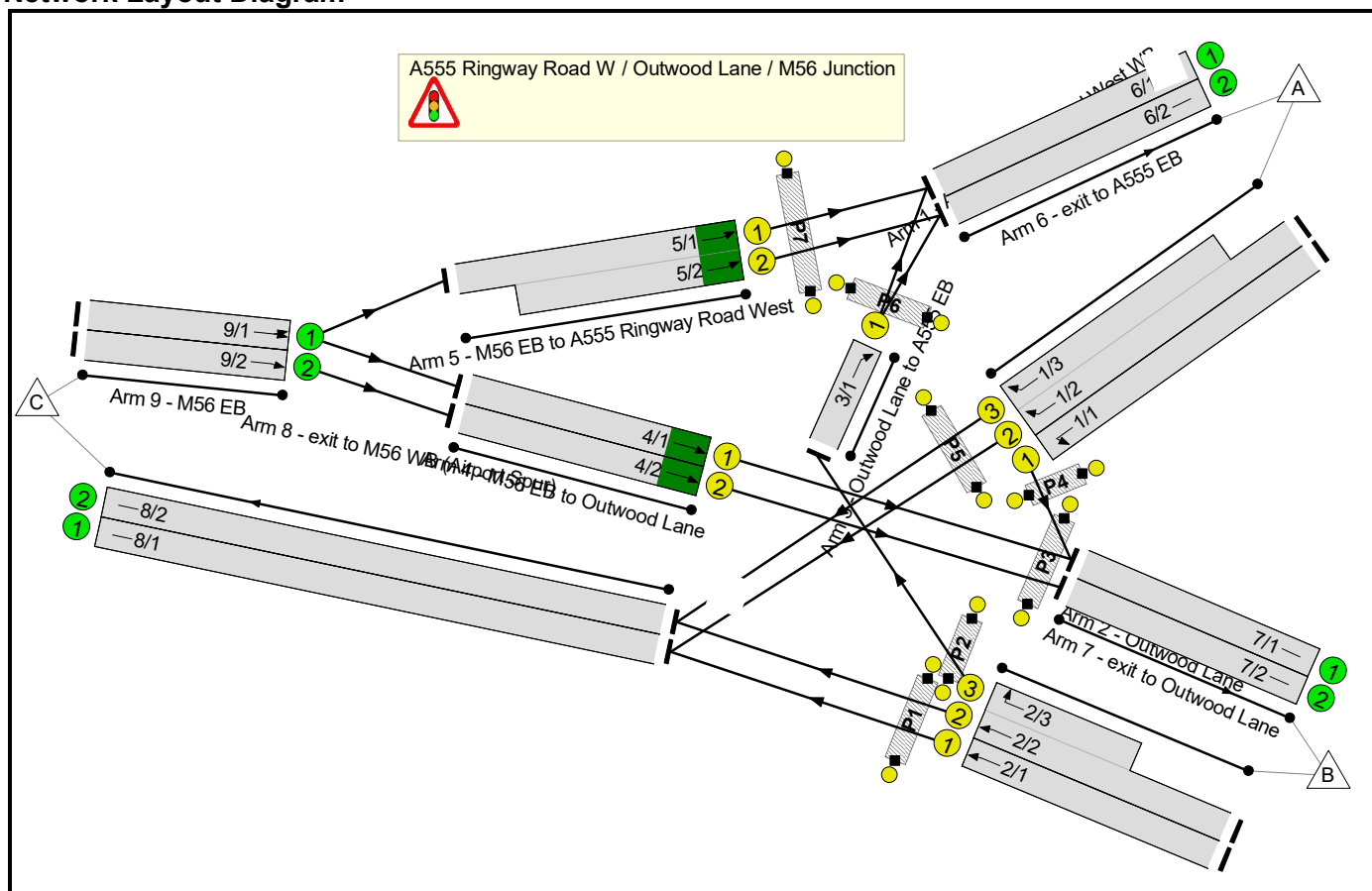
B. Appendix B – Revised LinSig Modelling Output for M56 / A555 / Outwood Lane Junction

Detailed Input Data And Results

User and Project Details

Project:	WIE21347 Aviator Way
Title:	M56 / Outwood Lane / A555 Ringway Road West
Location:	
Design Layout Ref:	J3
Date Completed:	March 2026
Model Purpose:	For Manchester Business Park, Aviator Way, TA
Additional detail:	Addresses comments by WSP on behalf of National Highways
File name:	J3) A555_M56_Outwood Lane v3 (post NH comments).lsg3x
Author:	CSMS4
Company:	WIE
Address:	
Linsig Version:	3, 3, 1, 0

Network Layout Diagram



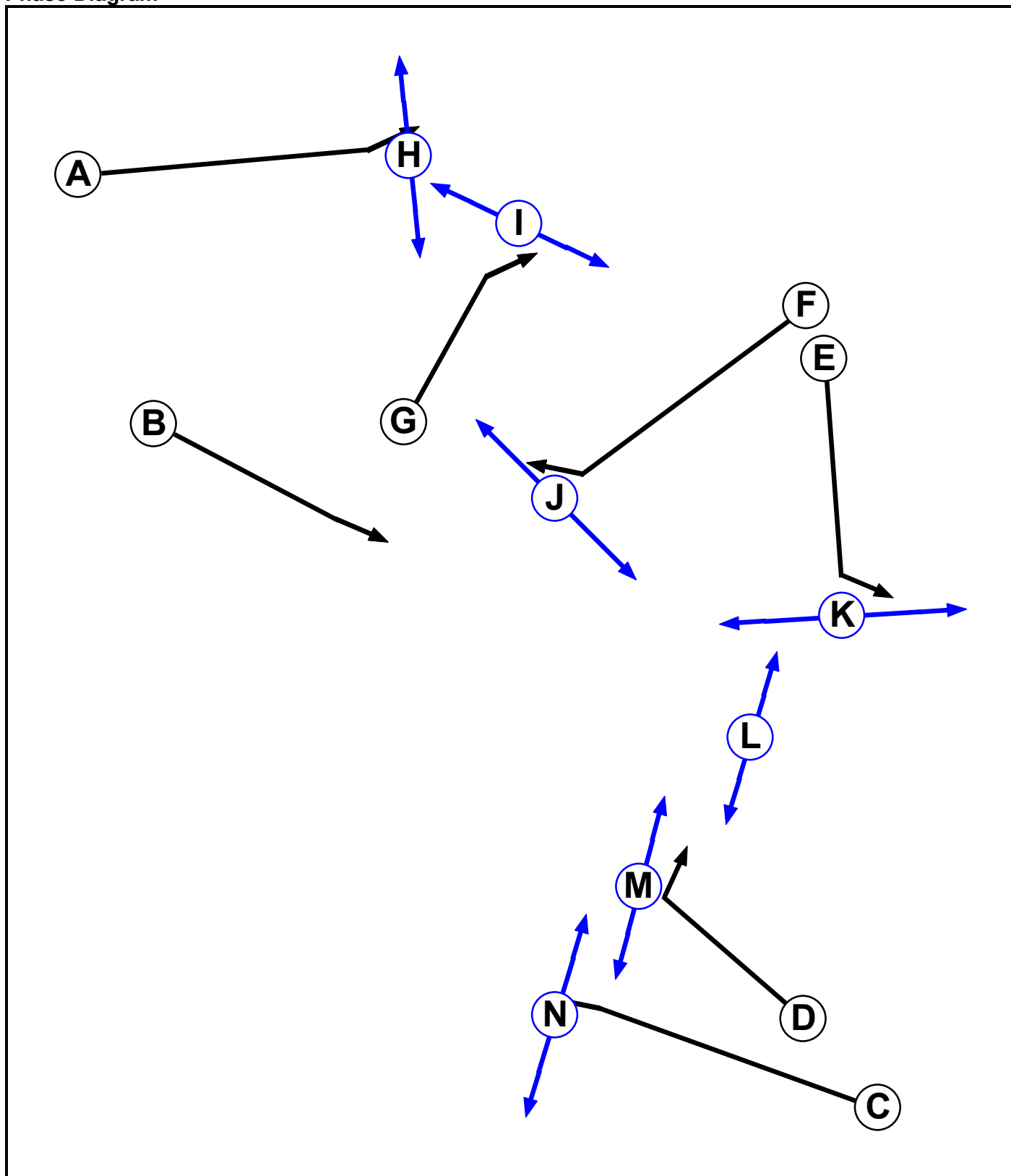
Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	2025 Observed AM Peak	2025 Observed AM Peak	Network Control Plan 1	07:45 - 08:45	120	-10.9	64.00
2	2025 Observed PM Peak	2025 Observed PM Peak	Network Control Plan 1	15:45 - 16:45	112	-10.3	65.26
3	2030 Base AM Peak	2030 Base AM Peak	Network Control Plan 1	07:45 - 08:45	120	-16.1	108.90
4	2030 Base PM Peak	2030 Base PM Peak	Network Control Plan 1	15:45 - 16:45	112	-15.5	107.13
5	2030 Base +Option 5 B2 Dev AM Peak	2030 Base + Option 5 B2 Dev AM Peak	Network Control Plan 1	07:45 - 08:45	120	-17.6	119.20
6	2030 Base +Option 5 B2 Dev PM Peak	2030 Base + Option 5 B2 Dev PM Peak	Network Control Plan 1	15:45 - 16:45	112	-18.4	127.77
7	2035 Base AM Peak	2035 Base AM Peak	Network Control Plan 1	07:45 - 08:45	120	-21.3	159.66
8	2035 Base PM Peak	2035 Base PM Peak	Network Control Plan 1	15:45 - 16:45	112	-20.3	157.98
9	2035 Base +Option 5 B2 Dev AM Peak	2035 Base + Option 5 B2 Dev AM Peak	Network Control Plan 1	07:45 - 08:45	120	-22.7	171.31
10	2035 Base +Option 5 B2 Dev PM Peak	2035 Base + Option 5 B2 Dev PM Peak	Network Control Plan 1	15:45 - 16:45	112	-23.3	181.52

Controller Summary

Controller	Type	SCN	Stage Stream	Num Phases	Num Stages	Controls Junctions	Controller Notes
C1	Gen		Stage Stream 1	14	3	A555 Ringway Road W / Outwood Lane / M56 Junction	

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	4
B	Traffic		7	7
C	Traffic		7	6
D	Traffic		7	7
E	Traffic		7	7
F	Traffic		7	7
G	Traffic		4	0
H	Pedestrian		4	0
I	Pedestrian		5	0
J	Pedestrian		5	5
K	Pedestrian		5	3
L	Pedestrian		5	5
M	Pedestrian		5	4
N	Pedestrian		5	3

Phase Intergreens Matrix

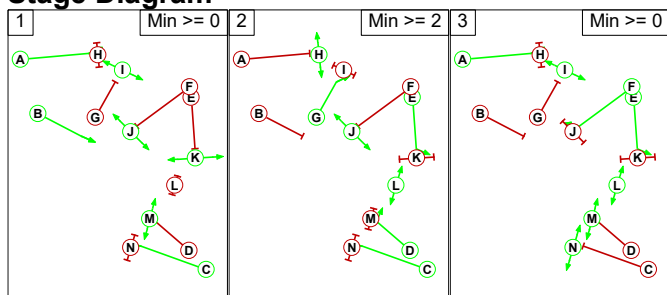
	Starting Phase													
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
Terminating Phase	A	-	-	-	-	-	7	7	-	-	-	-	-	-
	B	-	-	6	8	6	-	-	-	-	-	9	-	-
	C	-	-	-	-	5	-	-	-	-	-	-	-	6
	D	-	8	-	-	6	-	-	-	-	-	-	5	-
	E	-	6	-	-	-	-	-	-	-	6	-	-	-
	F	-	6	9	6	-	-	-	-	5	-	-	-	-
	G	7	-	-	-	-	-	5	-	-	-	-	-	-
	H	7	-	-	-	-	-	-	-	-	-	-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

Phases in Stage

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

Detailed Input Data And Results

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	A	Losing	4	4
1	2	I	Losing	5	5
1	2	K	Losing	2	2
1	2	M	Losing	1	1
1	3	C	Losing	2	2
1	3	K	Losing	2	2
2	1	E	Losing	2	2
2	1	G	Losing	10	10
2	1	H	Losing	10	10
2	1	L	Losing	2	2
2	3	C	Losing	1	1
2	3	G	Losing	10	10
2	3	H	Losing	10	10
3	1	N	Losing	2	2
3	2	A	Losing	3	3
3	2	I	Losing	5	5
3	2	M	Losing	1	1
3	2	N	Losing	2	2

Prohibited Stage Change

		To Stage		
		1	2	3
From Stage	1	11	9	
	2	17	17	
	3	9	10	

Lane Input Data

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction												
Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1 (A555 Ringway Road West WB)	U	E	2	3	60.0	Geom	-	5.00	0.00	Y	Arm 7 Left	18.00
1/2 (A555 Ringway Road West WB)	U	F	2	3	60.0	Geom	-	3.40	0.00	Y	Arm 8 Right	11.00
1/3 (A555 Ringway Road West WB)	U	F	2	3	17.4	Geom	-	3.40	0.00	Y	Arm 8 Right	12.00
2/1 (Outwood Lane)	U	C	2	3	60.0	Geom	-	3.20	0.00	Y	Arm 8 Ahead	Inf
2/2 (Outwood Lane)	U	C	2	3	60.0	Geom	-	3.60	0.00	N	Arm 8 Ahead	Inf
2/3 (Outwood Lane)	U	D	2	3	7.8	Geom	-	3.70	0.00	Y	Arm 3 Right	20.00
3/1 (Outwood Lane to A555 EB)	U	G	2	3	7.8	Geom	-	5.00	0.00	Y	Arm 6 Ahead	40.00
4/1 (M56 EB to Outwood Lane)	U	B	2	3	34.8	Geom	-	3.25	0.00	Y	Arm 7 Ahead	174.00
4/2 (M56 EB to Outwood Lane)	U	B	2	3	34.8	Geom	-	3.40	0.00	N	Arm 7 Ahead	174.00
5/1 (M56 EB to A555 Ringway Road West)	U	A	2	3	34.8	Geom	-	3.60	0.00	Y	Arm 6 Ahead	Inf
5/2 (M56 EB to A555 Ringway Road West)	U	A	2	3	26.1	Geom	-	3.50	0.00	N	Arm 6 Ahead	Inf
6/1 (exit to A555 EB)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/2 (exit to A555 EB)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (exit to Outwood Lane)	U		2	3	60.0	Inf	-	-	-	-	-	-

Detailed Input Data And Results

7/2 (exit to Outwood Lane)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (exit to M56 WB (Airport Spur))	U		2	3	60.0	Inf	-	-	-	-	-	-
8/2 (exit to M56 WB (Airport Spur))	U		2	3	60.0	Inf	-	-	-	-	-	-
9/1 (M56 EB)	U		2	3	60.0	Inf	-	-	-	-	-	-
9/2 (M56 EB)	U		2	3	60.0	Inf	-	-	-	-	-	-

Give-Way Lane Input Data

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction
--

There are no Opposed Lanes in this Junction

Lane Connector Input Data

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction				
Org Lane	Dest Lane	Junction	Modelled Mean Cruise Time (s)	Platoon Dispersion
1/1	7/1	Internal	26	35
1/2	8/1	Internal	19	35
1/3	8/2	Internal	19	35
2/1	8/1	Internal	26	35
2/2	8/2	Internal	26	35
2/3	3/1	Internal	3	35
3/1	6/1	Internal	19	35
3/1	6/2	Internal	19	35
4/1	7/1	Internal	26	35
4/2	7/2	Internal	26	35
5/1	6/1	Internal	19	35
5/2	6/2	Internal	19	35
9/1	4/1	Internal	6	35
9/1	5/1	Internal	6	35
9/2	4/2	Internal	6	35

Scenario 1: '2025 Observed AM Peak' (FG1: '2025 Observed AM Peak', Plan 1: 'Network Control Plan 1')**Lane Saturation Flows**

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A555 Ringway Road West WB)	5.00	0.00	Y	Arm 7 Left	18.00	100.0 %	1952	1952
1/2 (A555 Ringway Road West WB)	3.40	0.00	Y	Arm 8 Right	11.00	100.0 %	1720	1720
1/3 (A555 Ringway Road West WB)	3.40	0.00	Y	Arm 8 Right	12.00	100.0 %	1738	1738
2/1 (Outwood Lane)	3.20	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1935	1935
2/2 (Outwood Lane)	3.60	0.00	N	Arm 8 Ahead	Inf	100.0 %	2115	2115
2/3 (Outwood Lane)	3.70	0.00	Y	Arm 3 Right	20.00	100.0 %	1847	1847
3/1 (Outwood Lane to A555 EB)	5.00	0.00	Y	Arm 6 Ahead	40.00	100.0 %	2039	2039
4/1 (M56 EB to Outwood Lane)	3.25	0.00	Y	Arm 7 Ahead	174.00	100.0 %	1923	1923
4/2 (M56 EB to Outwood Lane)	3.40	0.00	N	Arm 7 Ahead	174.00	100.0 %	2077	2077
5/1 (M56 EB to A555 Ringway Road West)	3.60	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1975	1975
5/2 (M56 EB to A555 Ringway Road West)	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1 (exit to A555 EB Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (exit to A555 EB Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (exit to Outwood Lane Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (exit to Outwood Lane Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (exit to M56 WB (Airport Spur) Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (exit to M56 WB (Airport Spur) Lane 2)	Infinite Saturation Flow						Inf	Inf
9/1 (M56 EB Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (M56 EB Lane 2)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction					
Lane	Description	Stage Change	Type	Usage	Value (s)
4/1	M56 EB to Outwood Lane Ahead	1 -> 2	End	Underutilised Green Time	-8
4/2	M56 EB to Outwood Lane Ahead	1 -> 2	End	Underutilised Green Time	-8
5/1	M56 EB to A555 Ringway Road West Ahead	1 -> 2	End	Underutilised Green Time	-15
5/2	M56 EB to A555 Ringway Road West Ahead	1 -> 2	End	Underutilised Green Time	-15

Scenario 2: '2025 Observed PM Peak' (FG2: '2025 Observed PM Peak', Plan 1: 'Network Control Plan 1')**Lane Saturation Flows**

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A555 Ringway Road West WB)	5.00	0.00	Y	Arm 7 Left	18.00	100.0 %	1952	1952
1/2 (A555 Ringway Road West WB)	3.40	0.00	Y	Arm 8 Right	11.00	100.0 %	1720	1720
1/3 (A555 Ringway Road West WB)	3.40	0.00	Y	Arm 8 Right	12.00	100.0 %	1738	1738
2/1 (Outwood Lane)	3.20	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1935	1935
2/2 (Outwood Lane)	3.60	0.00	N	Arm 8 Ahead	Inf	100.0 %	2115	2115
2/3 (Outwood Lane)	3.70	0.00	Y	Arm 3 Right	20.00	100.0 %	1847	1847
3/1 (Outwood Lane to A555 EB)	5.00	0.00	Y	Arm 6 Ahead	40.00	100.0 %	2039	2039
4/1 (M56 EB to Outwood Lane)	3.25	0.00	Y	Arm 7 Ahead	174.00	100.0 %	1923	1923
4/2 (M56 EB to Outwood Lane)	3.40	0.00	N	Arm 7 Ahead	174.00	100.0 %	2077	2077
5/1 (M56 EB to A555 Ringway Road West)	3.60	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1975	1975
5/2 (M56 EB to A555 Ringway Road West)	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1 (exit to A555 EB Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (exit to A555 EB Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (exit to Outwood Lane Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (exit to Outwood Lane Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (exit to M56 WB (Airport Spur) Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (exit to M56 WB (Airport Spur) Lane 2)	Infinite Saturation Flow						Inf	Inf
9/1 (M56 EB Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (M56 EB Lane 2)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction					
Lane	Description	Stage Change	Type	Usage	Value (s)
1/2	A555 Ringway Road West WB Right	3 -> 1	End	Underutilised Green Time	-1
1/3	A555 Ringway Road West WB Right	3 -> 1	End	Underutilised Green Time	-1
4/1	M56 EB to Outwood Lane Ahead	1 -> 2	End	Underutilised Green Time	-4
4/2	M56 EB to Outwood Lane Ahead	1 -> 2	End	Underutilised Green Time	-4
5/1	M56 EB to A555 Ringway Road West Ahead	1 -> 2	End	Underutilised Green Time	-14
5/2	M56 EB to A555 Ringway Road West Ahead	1 -> 2	End	Underutilised Green Time	-14

Scenario 3: '2030 Base AM Peak' (FG3: '2030 Base AM Peak', Plan 1: 'Network Control Plan 1')**Lane Saturation Flows**

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A555 Ringway Road West WB)	5.00	0.00	Y	Arm 7 Left	18.00	100.0 %	1952	1952
1/2 (A555 Ringway Road West WB)	3.40	0.00	Y	Arm 8 Right	11.00	100.0 %	1720	1720
1/3 (A555 Ringway Road West WB)	3.40	0.00	Y	Arm 8 Right	12.00	100.0 %	1738	1738
2/1 (Outwood Lane)	3.20	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1935	1935
2/2 (Outwood Lane)	3.60	0.00	N	Arm 8 Ahead	Inf	100.0 %	2115	2115
2/3 (Outwood Lane)	3.70	0.00	Y	Arm 3 Right	20.00	100.0 %	1847	1847
3/1 (Outwood Lane to A555 EB)	5.00	0.00	Y	Arm 6 Ahead	40.00	100.0 %	2039	2039
4/1 (M56 EB to Outwood Lane)	3.25	0.00	Y	Arm 7 Ahead	174.00	100.0 %	1923	1923
4/2 (M56 EB to Outwood Lane)	3.40	0.00	N	Arm 7 Ahead	174.00	100.0 %	2077	2077
5/1 (M56 EB to A555 Ringway Road West)	3.60	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1975	1975
5/2 (M56 EB to A555 Ringway Road West)	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1 (exit to A555 EB Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (exit to A555 EB Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (exit to Outwood Lane Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (exit to Outwood Lane Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (exit to M56 WB (Airport Spur) Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (exit to M56 WB (Airport Spur) Lane 2)	Infinite Saturation Flow						Inf	Inf
9/1 (M56 EB Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (M56 EB Lane 2)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction					
Lane	Description	Stage Change	Type	Usage	Value (s)
4/1	M56 EB to Outwood Lane Ahead	1 -> 2	End	Underutilised Green Time	-8
4/2	M56 EB to Outwood Lane Ahead	1 -> 2	End	Underutilised Green Time	-8
5/1	M56 EB to A555 Ringway Road West Ahead	1 -> 2	End	Underutilised Green Time	-15
5/2	M56 EB to A555 Ringway Road West Ahead	1 -> 2	End	Underutilised Green Time	-15

Scenario 4: '2030 Base PM Peak' (FG4: '2030 Base PM Peak', Plan 1: 'Network Control Plan 1')**Lane Saturation Flows**

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A555 Ringway Road West WB)	5.00	0.00	Y	Arm 7 Left	18.00	100.0 %	1952	1952
1/2 (A555 Ringway Road West WB)	3.40	0.00	Y	Arm 8 Right	11.00	100.0 %	1720	1720
1/3 (A555 Ringway Road West WB)	3.40	0.00	Y	Arm 8 Right	12.00	100.0 %	1738	1738
2/1 (Outwood Lane)	3.20	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1935	1935
2/2 (Outwood Lane)	3.60	0.00	N	Arm 8 Ahead	Inf	100.0 %	2115	2115
2/3 (Outwood Lane)	3.70	0.00	Y	Arm 3 Right	20.00	100.0 %	1847	1847
3/1 (Outwood Lane to A555 EB)	5.00	0.00	Y	Arm 6 Ahead	40.00	100.0 %	2039	2039
4/1 (M56 EB to Outwood Lane)	3.25	0.00	Y	Arm 7 Ahead	174.00	100.0 %	1923	1923
4/2 (M56 EB to Outwood Lane)	3.40	0.00	N	Arm 7 Ahead	174.00	100.0 %	2077	2077
5/1 (M56 EB to A555 Ringway Road West)	3.60	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1975	1975
5/2 (M56 EB to A555 Ringway Road West)	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1 (exit to A555 EB Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (exit to A555 EB Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (exit to Outwood Lane Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (exit to Outwood Lane Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (exit to M56 WB (Airport Spur) Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (exit to M56 WB (Airport Spur) Lane 2)	Infinite Saturation Flow						Inf	Inf
9/1 (M56 EB Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (M56 EB Lane 2)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction					
Lane	Description	Stage Change	Type	Usage	Value (s)
1/2	A555 Ringway Road West WB Right	3 -> 1	End	Underutilised Green Time	-1
1/3	A555 Ringway Road West WB Right	3 -> 1	End	Underutilised Green Time	-1
4/1	M56 EB to Outwood Lane Ahead	1 -> 2	End	Underutilised Green Time	-4
4/2	M56 EB to Outwood Lane Ahead	1 -> 2	End	Underutilised Green Time	-4
5/1	M56 EB to A555 Ringway Road West Ahead	1 -> 2	End	Underutilised Green Time	-14
5/2	M56 EB to A555 Ringway Road West Ahead	1 -> 2	End	Underutilised Green Time	-14

Scenario 5: '2030 Base +Option 5 B2 Dev AM Peak' (FG5: '2030 Base + Option 5 B2 Dev AM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A555 Ringway Road West WB)	5.00	0.00	Y	Arm 7 Left	18.00	100.0 %	1952	1952
1/2 (A555 Ringway Road West WB)	3.40	0.00	Y	Arm 8 Right	11.00	100.0 %	1720	1720
1/3 (A555 Ringway Road West WB)	3.40	0.00	Y	Arm 8 Right	12.00	100.0 %	1738	1738
2/1 (Outwood Lane)	3.20	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1935	1935
2/2 (Outwood Lane)	3.60	0.00	N	Arm 8 Ahead	Inf	100.0 %	2115	2115
2/3 (Outwood Lane)	3.70	0.00	Y	Arm 3 Right	20.00	100.0 %	1847	1847
3/1 (Outwood Lane to A555 EB)	5.00	0.00	Y	Arm 6 Ahead	40.00	100.0 %	2039	2039
4/1 (M56 EB to Outwood Lane)	3.25	0.00	Y	Arm 7 Ahead	174.00	100.0 %	1923	1923
4/2 (M56 EB to Outwood Lane)	3.40	0.00	N	Arm 7 Ahead	174.00	100.0 %	2077	2077
5/1 (M56 EB to A555 Ringway Road West)	3.60	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1975	1975
5/2 (M56 EB to A555 Ringway Road West)	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1 (exit to A555 EB Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (exit to A555 EB Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (exit to Outwood Lane Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (exit to Outwood Lane Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (exit to M56 WB (Airport Spur) Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (exit to M56 WB (Airport Spur) Lane 2)	Infinite Saturation Flow						Inf	Inf
9/1 (M56 EB Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (M56 EB Lane 2)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction					
Lane	Description	Stage Change	Type	Usage	Value (s)
4/1	M56 EB to Outwood Lane Ahead	1 -> 2	End	Underutilised Green Time	-8
4/2	M56 EB to Outwood Lane Ahead	1 -> 2	End	Underutilised Green Time	-8
5/1	M56 EB to A555 Ringway Road West Ahead	1 -> 2	End	Underutilised Green Time	-15
5/2	M56 EB to A555 Ringway Road West Ahead	1 -> 2	End	Underutilised Green Time	-15

Scenario 6: '2030 Base +Option 5 B2 Dev PM Peak' (FG6: '2030 Base + Option 5 B2 Dev PM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A555 Ringway Road West WB)	5.00	0.00	Y	Arm 7 Left	18.00	100.0 %	1952	1952
1/2 (A555 Ringway Road West WB)	3.40	0.00	Y	Arm 8 Right	11.00	100.0 %	1720	1720
1/3 (A555 Ringway Road West WB)	3.40	0.00	Y	Arm 8 Right	12.00	100.0 %	1738	1738
2/1 (Outwood Lane)	3.20	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1935	1935
2/2 (Outwood Lane)	3.60	0.00	N	Arm 8 Ahead	Inf	100.0 %	2115	2115
2/3 (Outwood Lane)	3.70	0.00	Y	Arm 3 Right	20.00	100.0 %	1847	1847
3/1 (Outwood Lane to A555 EB)	5.00	0.00	Y	Arm 6 Ahead	40.00	100.0 %	2039	2039
4/1 (M56 EB to Outwood Lane)	3.25	0.00	Y	Arm 7 Ahead	174.00	100.0 %	1923	1923
4/2 (M56 EB to Outwood Lane)	3.40	0.00	N	Arm 7 Ahead	174.00	100.0 %	2077	2077
5/1 (M56 EB to A555 Ringway Road West)	3.60	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1975	1975
5/2 (M56 EB to A555 Ringway Road West)	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1 (exit to A555 EB Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (exit to A555 EB Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (exit to Outwood Lane Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (exit to Outwood Lane Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (exit to M56 WB (Airport Spur) Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (exit to M56 WB (Airport Spur) Lane 2)	Infinite Saturation Flow						Inf	Inf
9/1 (M56 EB Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (M56 EB Lane 2)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction					
Lane	Description	Stage Change	Type	Usage	Value (s)
1/2	A555 Ringway Road West WB Right	3 -> 1	End	Underutilised Green Time	-1
1/3	A555 Ringway Road West WB Right	3 -> 1	End	Underutilised Green Time	-1
4/1	M56 EB to Outwood Lane Ahead	1 -> 2	End	Underutilised Green Time	-4
4/2	M56 EB to Outwood Lane Ahead	1 -> 2	End	Underutilised Green Time	-4
5/1	M56 EB to A555 Ringway Road West Ahead	1 -> 2	End	Underutilised Green Time	-14
5/2	M56 EB to A555 Ringway Road West Ahead	1 -> 2	End	Underutilised Green Time	-14

Scenario 7: '2035 Base AM Peak' (FG7: '2035 Base AM Peak', Plan 1: 'Network Control Plan 1')**Lane Saturation Flows**

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A555 Ringway Road West WB)	5.00	0.00	Y	Arm 7 Left	18.00	100.0 %	1952	1952
1/2 (A555 Ringway Road West WB)	3.40	0.00	Y	Arm 8 Right	11.00	100.0 %	1720	1720
1/3 (A555 Ringway Road West WB)	3.40	0.00	Y	Arm 8 Right	12.00	100.0 %	1738	1738
2/1 (Outwood Lane)	3.20	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1935	1935
2/2 (Outwood Lane)	3.60	0.00	N	Arm 8 Ahead	Inf	100.0 %	2115	2115
2/3 (Outwood Lane)	3.70	0.00	Y	Arm 3 Right	20.00	100.0 %	1847	1847
3/1 (Outwood Lane to A555 EB)	5.00	0.00	Y	Arm 6 Ahead	40.00	100.0 %	2039	2039
4/1 (M56 EB to Outwood Lane)	3.25	0.00	Y	Arm 7 Ahead	174.00	100.0 %	1923	1923
4/2 (M56 EB to Outwood Lane)	3.40	0.00	N	Arm 7 Ahead	174.00	100.0 %	2077	2077
5/1 (M56 EB to A555 Ringway Road West)	3.60	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1975	1975
5/2 (M56 EB to A555 Ringway Road West)	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1 (exit to A555 EB Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (exit to A555 EB Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (exit to Outwood Lane Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (exit to Outwood Lane Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (exit to M56 WB (Airport Spur) Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (exit to M56 WB (Airport Spur) Lane 2)	Infinite Saturation Flow						Inf	Inf
9/1 (M56 EB Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (M56 EB Lane 2)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction					
Lane	Description	Stage Change	Type	Usage	Value (s)
4/1	M56 EB to Outwood Lane Ahead	1 -> 2	End	Underutilised Green Time	-8
4/2	M56 EB to Outwood Lane Ahead	1 -> 2	End	Underutilised Green Time	-8
5/1	M56 EB to A555 Ringway Road West Ahead	1 -> 2	End	Underutilised Green Time	-15
5/2	M56 EB to A555 Ringway Road West Ahead	1 -> 2	End	Underutilised Green Time	-15

Scenario 8: '2035 Base PM Peak' (FG8: '2035 Base PM Peak', Plan 1: 'Network Control Plan 1')**Lane Saturation Flows**

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A555 Ringway Road West WB)	5.00	0.00	Y	Arm 7 Left	18.00	100.0 %	1952	1952
1/2 (A555 Ringway Road West WB)	3.40	0.00	Y	Arm 8 Right	11.00	100.0 %	1720	1720
1/3 (A555 Ringway Road West WB)	3.40	0.00	Y	Arm 8 Right	12.00	100.0 %	1738	1738
2/1 (Outwood Lane)	3.20	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1935	1935
2/2 (Outwood Lane)	3.60	0.00	N	Arm 8 Ahead	Inf	100.0 %	2115	2115
2/3 (Outwood Lane)	3.70	0.00	Y	Arm 3 Right	20.00	100.0 %	1847	1847
3/1 (Outwood Lane to A555 EB)	5.00	0.00	Y	Arm 6 Ahead	40.00	100.0 %	2039	2039
4/1 (M56 EB to Outwood Lane)	3.25	0.00	Y	Arm 7 Ahead	174.00	100.0 %	1923	1923
4/2 (M56 EB to Outwood Lane)	3.40	0.00	N	Arm 7 Ahead	174.00	100.0 %	2077	2077
5/1 (M56 EB to A555 Ringway Road West)	3.60	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1975	1975
5/2 (M56 EB to A555 Ringway Road West)	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1 (exit to A555 EB Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (exit to A555 EB Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (exit to Outwood Lane Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (exit to Outwood Lane Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (exit to M56 WB (Airport Spur) Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (exit to M56 WB (Airport Spur) Lane 2)	Infinite Saturation Flow						Inf	Inf
9/1 (M56 EB Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (M56 EB Lane 2)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction					
Lane	Description	Stage Change	Type	Usage	Value (s)
1/2	A555 Ringway Road West WB Right	3 -> 1	End	Underutilised Green Time	-1
1/3	A555 Ringway Road West WB Right	3 -> 1	End	Underutilised Green Time	-1
4/1	M56 EB to Outwood Lane Ahead	1 -> 2	End	Underutilised Green Time	-4
4/2	M56 EB to Outwood Lane Ahead	1 -> 2	End	Underutilised Green Time	-4
5/1	M56 EB to A555 Ringway Road West Ahead	1 -> 2	End	Underutilised Green Time	-14
5/2	M56 EB to A555 Ringway Road West Ahead	1 -> 2	End	Underutilised Green Time	-14

Scenario 9: '2035 Base +Option 5 B2 Dev AM Peak' (FG9: '2035 Base + Option 5 B2 Dev AM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A555 Ringway Road West WB)	5.00	0.00	Y	Arm 7 Left	18.00	100.0 %	1952	1952
1/2 (A555 Ringway Road West WB)	3.40	0.00	Y	Arm 8 Right	11.00	100.0 %	1720	1720
1/3 (A555 Ringway Road West WB)	3.40	0.00	Y	Arm 8 Right	12.00	100.0 %	1738	1738
2/1 (Outwood Lane)	3.20	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1935	1935
2/2 (Outwood Lane)	3.60	0.00	N	Arm 8 Ahead	Inf	100.0 %	2115	2115
2/3 (Outwood Lane)	3.70	0.00	Y	Arm 3 Right	20.00	100.0 %	1847	1847
3/1 (Outwood Lane to A555 EB)	5.00	0.00	Y	Arm 6 Ahead	40.00	100.0 %	2039	2039
4/1 (M56 EB to Outwood Lane)	3.25	0.00	Y	Arm 7 Ahead	174.00	100.0 %	1923	1923
4/2 (M56 EB to Outwood Lane)	3.40	0.00	N	Arm 7 Ahead	174.00	100.0 %	2077	2077
5/1 (M56 EB to A555 Ringway Road West)	3.60	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1975	1975
5/2 (M56 EB to A555 Ringway Road West)	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1 (exit to A555 EB Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (exit to A555 EB Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (exit to Outwood Lane Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (exit to Outwood Lane Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (exit to M56 WB (Airport Spur) Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (exit to M56 WB (Airport Spur) Lane 2)	Infinite Saturation Flow						Inf	Inf
9/1 (M56 EB Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (M56 EB Lane 2)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction					
Lane	Description	Stage Change	Type	Usage	Value (s)
4/1	M56 EB to Outwood Lane Ahead	1 -> 2	End	Underutilised Green Time	-8
4/2	M56 EB to Outwood Lane Ahead	1 -> 2	End	Underutilised Green Time	-8
5/1	M56 EB to A555 Ringway Road West Ahead	1 -> 2	End	Underutilised Green Time	-15
5/2	M56 EB to A555 Ringway Road West Ahead	1 -> 2	End	Underutilised Green Time	-15

Scenario 10: '2035 Base +Option 5 B2 Dev PM Peak' (FG10: '2035 Base + Option 5 B2 Dev PM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A555 Ringway Road West WB)	5.00	0.00	Y	Arm 7 Left	18.00	100.0 %	1952	1952
1/2 (A555 Ringway Road West WB)	3.40	0.00	Y	Arm 8 Right	11.00	100.0 %	1720	1720
1/3 (A555 Ringway Road West WB)	3.40	0.00	Y	Arm 8 Right	12.00	100.0 %	1738	1738
2/1 (Outwood Lane)	3.20	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1935	1935
2/2 (Outwood Lane)	3.60	0.00	N	Arm 8 Ahead	Inf	100.0 %	2115	2115
2/3 (Outwood Lane)	3.70	0.00	Y	Arm 3 Right	20.00	100.0 %	1847	1847
3/1 (Outwood Lane to A555 EB)	5.00	0.00	Y	Arm 6 Ahead	40.00	100.0 %	2039	2039
4/1 (M56 EB to Outwood Lane)	3.25	0.00	Y	Arm 7 Ahead	174.00	100.0 %	1923	1923
4/2 (M56 EB to Outwood Lane)	3.40	0.00	N	Arm 7 Ahead	174.00	100.0 %	2077	2077
5/1 (M56 EB to A555 Ringway Road West)	3.60	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1975	1975
5/2 (M56 EB to A555 Ringway Road West)	3.50	0.00	N	Arm 6 Ahead	Inf	100.0 %	2105	2105
6/1 (exit to A555 EB Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (exit to A555 EB Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (exit to Outwood Lane Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (exit to Outwood Lane Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (exit to M56 WB (Airport Spur) Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (exit to M56 WB (Airport Spur) Lane 2)	Infinite Saturation Flow						Inf	Inf
9/1 (M56 EB Lane 1)	Infinite Saturation Flow						Inf	Inf
9/2 (M56 EB Lane 2)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction					
Lane	Description	Stage Change	Type	Usage	Value (s)
1/2	A555 Ringway Road West WB Right	3 -> 1	End	Underutilised Green Time	-1
1/3	A555 Ringway Road West WB Right	3 -> 1	End	Underutilised Green Time	-1
4/1	M56 EB to Outwood Lane Ahead	1 -> 2	End	Underutilised Green Time	-4
4/2	M56 EB to Outwood Lane Ahead	1 -> 2	End	Underutilised Green Time	-4
5/1	M56 EB to A555 Ringway Road West Ahead	1 -> 2	End	Underutilised Green Time	-14
5/2	M56 EB to A555 Ringway Road West Ahead	1 -> 2	End	Underutilised Green Time	-14

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2025 Observed AM Peak'	07:45	08:45	01:00	
2: '2025 Observed PM Peak'	15:45	16:45	01:00	
3: '2030 Base AM Peak'	07:45	08:45	01:00	
4: '2030 Base PM Peak'	15:45	16:45	01:00	
5: '2030 Base + Option 5 B2 Dev AM Peak'	07:45	08:45	01:00	
6: '2030 Base + Option 5 B2 Dev PM Peak'	15:45	16:45	01:00	
7: '2035 Base AM Peak'	07:45	08:45	01:00	
8: '2035 Base PM Peak'	15:45	16:45	01:00	
9: '2035 Base + Option 5 B2 Dev AM Peak'	07:45	08:45	01:00	
10: '2035 Base + Option 5 B2 Dev PM Peak'	15:45	16:45	01:00	

Traffic Flows, Desired**FG1: '2025 Observed AM Peak'****Desired Flow :**

	Destination				
		A	B	C	Tot.
Origin	A	0	175	1450	1625
	B	128	0	501	629
	C	1633	640	0	2273
	Tot.	1761	815	1951	4527

Detailed Input Data And Results

FG2: '2025 Observed PM Peak'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	155	1561	1716
	B	129	0	788	917
	C	1589	521	0	2110
	Tot.	1718	676	2349	4743

FG3: '2030 Base AM Peak'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	185	1533	1718
	B	135	0	529	664
	C	1726	676	0	2402
	Tot.	1861	861	2062	4784

FG4: '2030 Base PM Peak'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	164	1649	1813
	B	136	0	832	968
	C	1677	550	0	2227
	Tot.	1813	714	2481	5008

FG5: '2030 Base + Option 5 B2 Dev AM Peak'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	185	1553	1738
	B	135	0	529	664
	C	1780	676	0	2456
	Tot.	1915	861	2082	4858

FG6: '2030 Base + Option 5 B2 Dev PM Peak'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	164	1691	1855
	B	136	0	832	968
	C	1708	550	0	2258
	Tot.	1844	714	2523	5081

Detailed Input Data And Results

FG7: '2035 Base AM Peak'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	193	1600	1793
	B	141	0	552	693
	C	1801	706	0	2507
	Tot.	1942	899	2152	4993

FG8: '2035 Base PM Peak'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	171	1718	1889
	B	142	0	868	1010
	C	1748	574	0	2322
	Tot.	1890	745	2586	5221

FG9: '2035 Base + Option 5 B2 Dev AM Peak'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	193	1620	1813
	B	141	0	552	693
	C	1855	706	0	2561
	Tot.	1996	899	2172	5067

FG10: '2035 Base + Option 5 B2 Dev PM Peak'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	171	1761	1932
	B	142	0	868	1010
	C	1779	574	0	2353
	Tot.	1921	745	2629	5295

Scenario 1: '2025 Observed AM Peak' (FG1: '2025 Observed AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	175	1450	1625
	B	128	0	501	629
	C	1633	640	0	2273
	Tot.	1761	815	1951	4527

Traffic Flows, Difference

Difference :

	Destination				
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Scenario 2: '2025 Observed PM Peak' (FG2: '2025 Observed PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	155	1561	1716
	B	129	0	788	917
	C	1589	521	0	2110
	Tot.	1718	676	2349	4743

Traffic Flows, Difference

Difference :

	Destination				
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Scenario 3: '2030 Base AM Peak' (FG3: '2030 Base AM Peak', Plan 1: 'Network Control Plan 1')**Traffic Flows, Actual****Actual Flow :**

	Destination				
		A	B	C	Tot.
Origin	A	0	185	1533	1718
	B	135	0	529	664
	C	1726	676	0	2402
	Tot.	1861	861	2062	4784

Traffic Flows, Difference**Difference :**

	Destination				
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Scenario 4: '2030 Base PM Peak' (FG4: '2030 Base PM Peak', Plan 1: 'Network Control Plan 1')**Traffic Flows, Actual****Actual Flow :**

	Destination				
		A	B	C	Tot.
Origin	A	0	164	1649	1813
	B	136	0	832	968
	C	1677	550	0	2227
	Tot.	1813	714	2481	5008

Traffic Flows, Difference**Difference :**

	Destination				
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Detailed Input Data And Results

Scenario 5: '2030 Base +Option 5 B2 Dev AM Peak' (FG5: '2030 Base + Option 5 B2 Dev AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	185	1553	1738
	B	135	0	529	664
	C	1780	676	0	2456
	Tot.	1915	861	2082	4858

Traffic Flows, Difference

Difference :

	Destination				
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Scenario 6: '2030 Base +Option 5 B2 Dev PM Peak' (FG6: '2030 Base + Option 5 B2 Dev PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	164	1691	1855
	B	136	0	832	968
	C	1708	550	0	2258
	Tot.	1844	714	2523	5081

Traffic Flows, Difference

Difference :

	Destination				
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Detailed Input Data And Results

Scenario 7: '2035 Base AM Peak' (FG7: '2035 Base AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	193	1600	1793
	B	141	0	552	693
	C	1801	706	0	2507
	Tot.	1942	899	2152	4993

Traffic Flows, Difference

Difference :

	Destination				
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Scenario 8: '2035 Base PM Peak' (FG8: '2035 Base PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	171	1718	1889
	B	142	0	868	1010
	C	1748	574	0	2322
	Tot.	1890	745	2586	5221

Traffic Flows, Difference

Difference :

	Destination				
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Detailed Input Data And Results

Scenario 9: '2035 Base +Option 5 B2 Dev AM Peak' (FG9: '2035 Base + Option 5 B2 Dev AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	193	1620	1813
	B	141	0	552	693
	C	1855	706	0	2561
	Tot.	1996	899	2172	5067

Traffic Flows, Difference

Difference :

	Destination				
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Scenario 10: '2035 Base +Option 5 B2 Dev PM Peak' (FG10: '2035 Base + Option 5 B2 Dev PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	171	1761	1932
	B	142	0	868	1010
	C	1779	574	0	2353
	Tot.	1921	745	2629	5295

Traffic Flows, Difference

Difference :

	Destination				
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Traffic Lane Flows

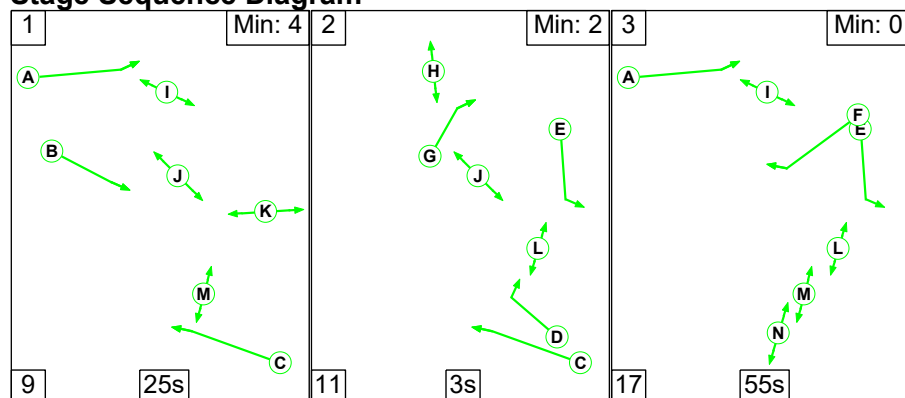
Lane	Scenario 1: 2025 Observed AM Peak	Scenario 2: 2025 Observed PM Peak	Scenario 3: 2030 Base AM Peak	Scenario 4: 2030 Base PM Peak	Scenario 5: 2030 Base +Option 5 B2 Dev AM Peak	Scenario 6: 2030 Base +Option 5 B2 Dev PM Peak
Junction: A555 Ringway Road W / Outwood Lane / M56 Junction						
1/1	175	155	185	164	185	164
1/2 (with short)	1450(In) 700(Out)	1561(In) 754(Out)	1533(In) 740(Out)	1649(In) 796(Out)	1553(In) 750(Out)	1691(In) 816(Out)
1/3 (short)	750	807	793	853	803	875
2/1	422	400	432	425	432	425
2/2 (with short)	207(In) 79(Out)	517(In) 388(Out)	232(In) 97(Out)	543(In) 407(Out)	232(In) 97(Out)	543(In) 407(Out)
2/3 (short)	128	129	135	136	135	136
3/1	128	129	135	136	135	136
4/1	305	249	323	263	323	263
4/2	335	272	353	287	353	287
5/1 (with short)	1633(In) 790(Out)	1589(In) 769(Out)	1726(In) 836(Out)	1677(In) 812(Out)	1780(In) 862(Out)	1708(In) 827(Out)
5/2 (short)	843	820	890	865	918	881
6/1	854	833	903	880	929	895
6/2	907	885	958	933	986	949
7/1	480	404	508	427	508	427
7/2	335	272	353	287	353	287
8/1	1122	1154	1172	1221	1182	1241
8/2	829	1195	890	1260	900	1282
9/1	1938	1838	2049	1940	2103	1971
9/2	335	272	353	287	353	287

Detailed Input Data And Results

Lane	Scenario 7: 2035 Base AM Peak	Scenario 8: 2035 Base PM Peak	Scenario 9: 2035 Base +Option 5 B2 Dev AM Peak	Scenario 10: 2035 Base +Option 5 B2 Dev PM Peak
Junction: A555 Ringway Road W / Outwood Lane / M56 Junction				
1/1	193	171	193	171
1/2 (with short)	1600(In) 772(Out)	1718(In) 829(Out)	1620(In) 782(Out)	1761(In) 850(Out)
1/3 (short)	828	889	838	911
2/1	442	447	442	447
2/2 (with short)	251(In) 110(Out)	563(In) 421(Out)	251(In) 110(Out)	563(In) 421(Out)
2/3 (short)	141	142	141	142
3/1	141	142	141	142
4/1	338	275	338	275
4/2	368	299	368	299
5/1 (with short)	1801(In) 872(Out)	1748(In) 846(Out)	1855(In) 898(Out)	1779(In) 861(Out)
5/2 (short)	929	902	957	918
6/1	942	917	968	932
6/2	1000	973	1028	989
7/1	531	446	531	446
7/2	368	299	368	299
8/1	1214	1276	1224	1297
8/2	938	1310	948	1332
9/1	2139	2023	2193	2054
9/2	368	299	368	299

Scenario 1: '2025 Observed AM Peak' (FG1: '2025 Observed AM Peak', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

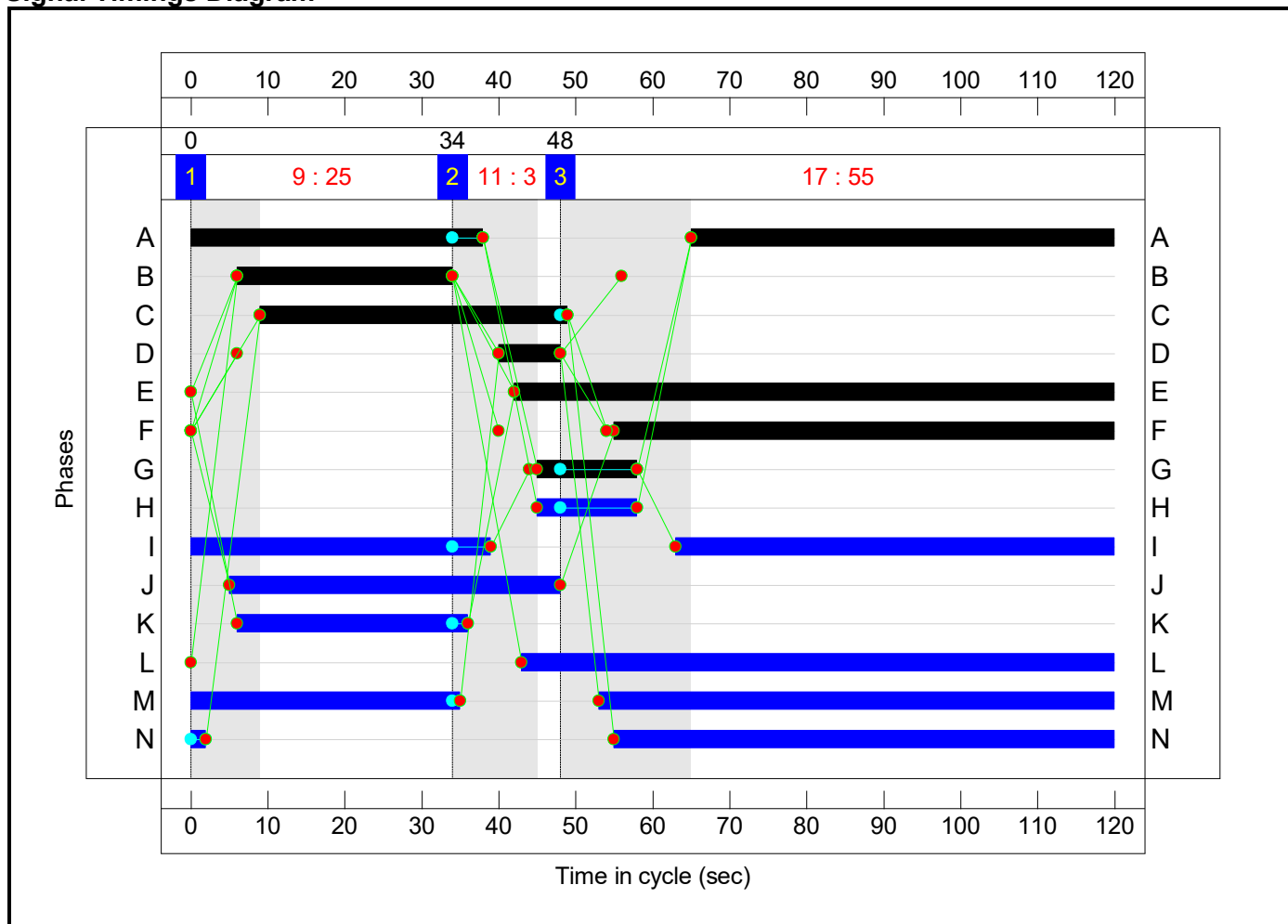


Stage Timings

Stage	1	2	3
Duration	25	3	55
Change Point	0	34	48

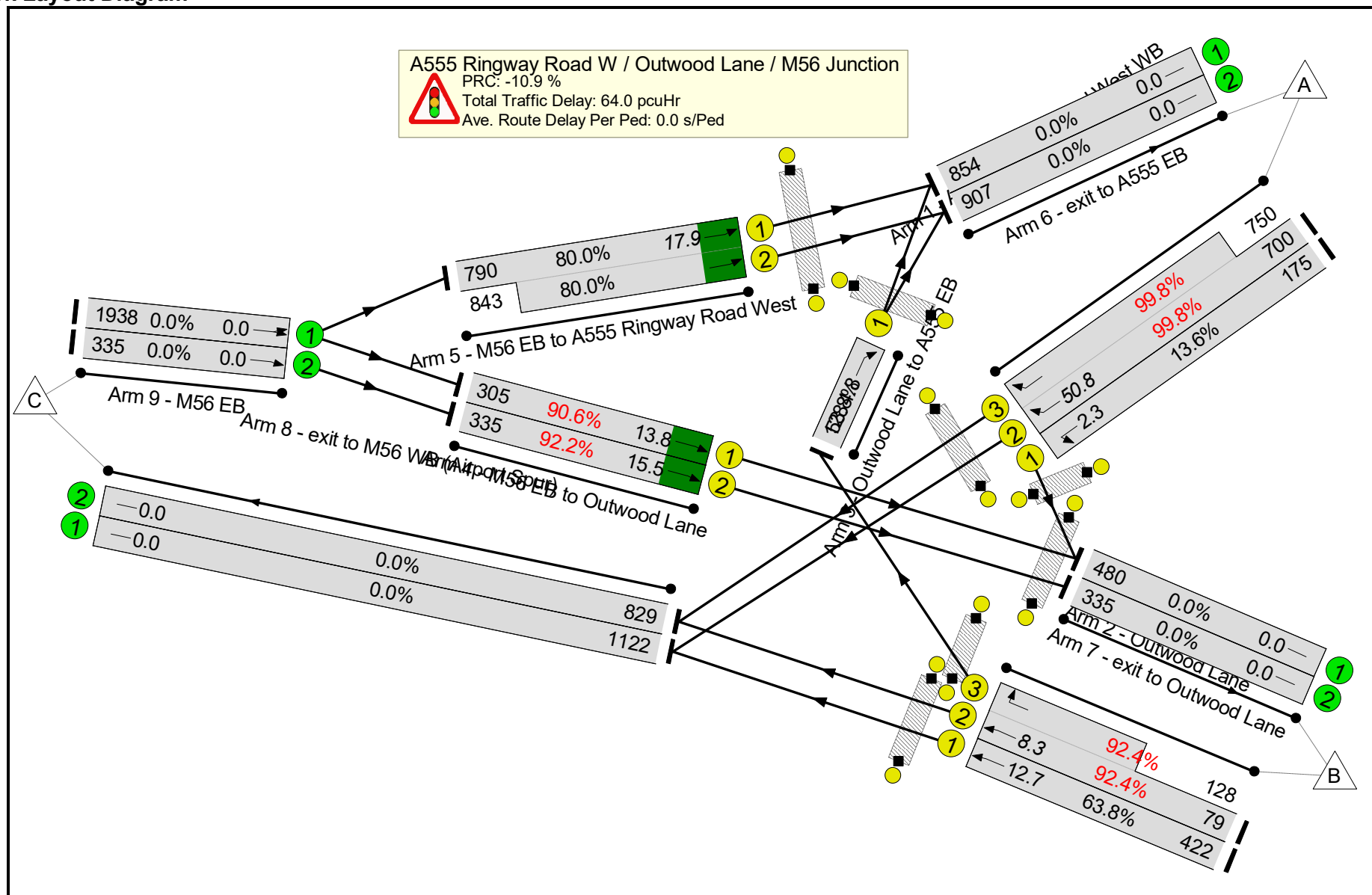
Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M56 EB to A555 Ringway Road West Ahead	Traffic	93	65	38
B	M56 EB to Outwood Lane Ahead	Traffic	28	6	34
C	Outwood Lane Ahead	Traffic	40	9	49
D	Outwood Lane Right	Traffic	8	40	48
E	A555 Ringway Road West WB Left	Traffic	78	42	0
F	A555 Ringway Road West WB Right	Traffic	65	55	0
G	Outwood Lane to A555 EB Ahead	Traffic	13	45	58
H	Pedestrians across	Pedestrian	13	45	58
I	Pedestrians across	Pedestrian	96	63	39
J	Pedestrians across	Pedestrian	43	5	48
K	Pedestrians across	Pedestrian	30	6	36
L	Pedestrians across	Pedestrian	77	43	0
M	Pedestrians across	Pedestrian	102	53	35
N	Pedestrians across	Pedestrian	67	55	2

Signal Timings Diagram**Lane Green Times**

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction					
Lane	Description	Type	Phases	Start Green	End Green
1/1	A555 Ringway Road West WB Left	U	E	42	0
1/2	A555 Ringway Road West WB Right	U	F	55	0
1/3	A555 Ringway Road West WB Right	U	F	55	0
2/1	Outwood Lane Ahead	U	C	9	49
2/2	Outwood Lane Ahead	U	C	9	49
2/3	Outwood Lane Right	U	D	40	48
3/1	Outwood Lane to A555 EB Ahead	U	G	45	58
4/1	M56 EB to Outwood Lane Ahead	U	B	6	34-8
4/2	M56 EB to Outwood Lane Ahead	U	B	6	34-8
5/1	M56 EB to A555 Ringway Road West Ahead	U	A	65	38-15
5/2	M56 EB to A555 Ringway Road West Ahead	U	A	65	38-15

Detailed Input Data And Results
Network Layout Diagram



Detailed Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M56 / Outwood Lane / A555 Ringway Road West	-	-	N/A	-	-		-	-	-	-	-	-	-	99.8%
A555 Ringway Road W / Outwood Lane / M56 Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	99.8%
1/1	A555 Ringway Road West WB Left	U	N/A	N/A	E		1	78	-	-	175	1952	1285	13.6%
1/2+1/3	A555 Ringway Road West WB Right	U	N/A	N/A	F		1	65	-	-	1450	1720:1738	701+751	99.8 : 99.8%
2/1	Outwood Lane Ahead	U	N/A	N/A	C		1	40	-	-	422	1935	661	63.8%
2/2+2/3	Outwood Lane Right Ahead	U	N/A	N/A	C D		1	40:8	-	-	207	2115:1847	85+139	92.4 : 92.4%
3/1	Outwood Lane to A555 EB Ahead	U	N/A	N/A	G		1	13	-	-	128	2039	238	53.8%
4/1	M56 EB to Outwood Lane Ahead	U	N/A	N/A	B		1	28	-	Y	305	1923	337	90.6%
4/2	M56 EB to Outwood Lane Ahead	U	N/A	N/A	B		1	28	-	Y	335	2077	363	92.2%
5/1+5/2	M56 EB to A555 Ringway Road West Ahead	U	N/A	N/A	A		1	93	-	Y:Y	1633	1975:2105	987+1053	80.0 : 80.0%
6/1	exit to A555 EB	U	N/A	N/A	-		-	-	-	-	854	Inf	Inf	0.0%
6/2	exit to A555 EB	U	N/A	N/A	-		-	-	-	-	907	Inf	Inf	0.0%
7/1	exit to Outwood Lane	U	N/A	N/A	-		-	-	-	-	480	Inf	Inf	0.0%

Detailed Input Data And Results

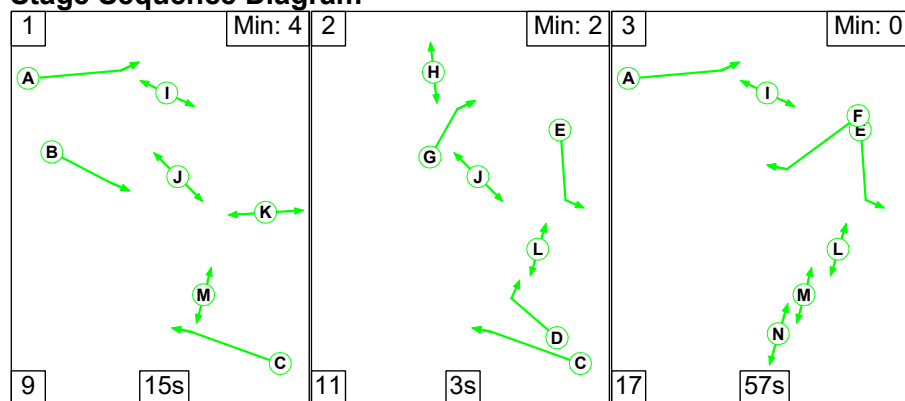
7/2	exit to Outwood Lane	U	N/A	N/A	-		-	-	-	-	335	Inf	Inf	0.0%
8/1	exit to M56 WB (Airport Spur)	U	N/A	N/A	-		-	-	-	-	1122	Inf	Inf	0.0%
8/2	exit to M56 WB (Airport Spur)	U	N/A	N/A	-		-	-	-	-	829	Inf	Inf	0.0%
9/1	M56 EB Ahead Ahead2	U	N/A	N/A	-		-	-	-	-	1938	Inf	Inf	0.0%
9/2	M56 EB Ahead	U	N/A	N/A	-		-	-	-	-	335	Inf	Inf	0.0%
Ped Link: P1	Outwood Lane WB	-	N/A	-	N		1	67	-	-	0	-	0	0.0%
Ped Link: P2	Outwood Lane RT-TN	-	N/A	-	M		1	102	-	-	0	-	0	0.0%
Ped Link: P3	Outwood Lane EB	-	N/A	-	L		1	77	-	-	0	-	0	0.0%
Ped Link: P4	A555 LT-TN	-	N/A	-	K		1	30	-	-	0	-	0	0.0%
Ped Link: P5	A	-	N/A	-	J		1	43	-	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	I		1	96	-	-	0	-	0	0.0%
Ped Link: P7	M56 EB to A555	-	N/A	-	H		1	13	-	-	0	-	0	0.0%

Detailed Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: M56 / Outwood Lane / A555 Ringway Road West	-	-	0	0	0	29.5	34.5	0.0	64.0	-	-	-	-	
A555 Ringway Road W / Outwood Lane / M56 Junction	-	-	0	0	0	29.5	34.5	0.0	64.0	-	-	-	-	
1/1	175	175	-	-	-	0.4	0.1	-	0.5	9.3	2.2	0.1	2.3	
1/2+1/3	1450	1450	-	-	-	8.7	18.5	-	27.2	67.5	32.3	18.5	50.8	
2/1	422	422	-	-	-	3.9	0.9	-	4.8	40.7	11.8	0.9	12.7	
2/2+2/3	207	207	-	-	-	2.6	4.1	-	6.7	115.8	4.2	4.1	8.3	
3/1	128	128	-	-	-	0.1	0.6	-	0.6	18.1	4.2	0.6	4.8	
4/1	305	305	-	-	-	4.1	3.9	-	8.0	94.4	9.9	3.9	13.8	
4/2	335	335	-	-	-	4.5	4.5	-	9.0	96.8	11.0	4.5	15.5	
5/1+5/2	1633	1633	-	-	-	5.3	2.0	-	7.3	16.1	15.9	2.0	17.9	
6/1	854	854	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/2	907	907	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
7/1	480	480	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
7/2	335	335	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/1	1122	1122	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/2	829	829	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/1	1938	1938	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2	335	335	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	

Detailed Input Data And Results

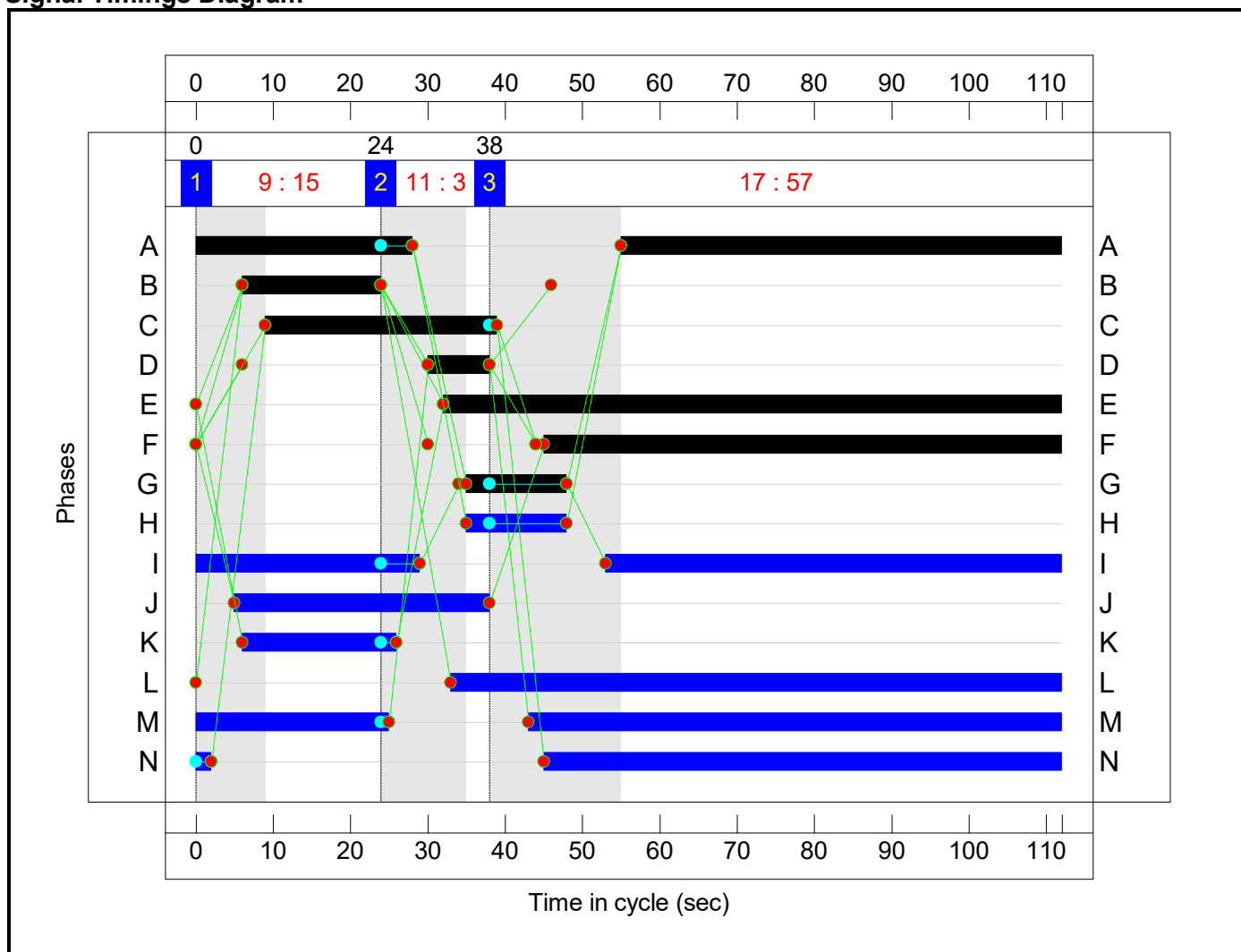
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P7	0	0	-	-	-	-	-	-	-	-	-	-	-	
C1 PRC for Signalled Lanes (%): -10.9 Total Delay for Signalled Lanes (pcuHr): 64.00 Cycle Time (s): 120 PRC Over All Lanes (%): -10.9 Total Delay Over All Lanes(pcuHr): 64.00														

Stage Sequence Diagram**Stage Timings**

Stage	1	2	3
Duration	15	3	57
Change Point	0	24	38

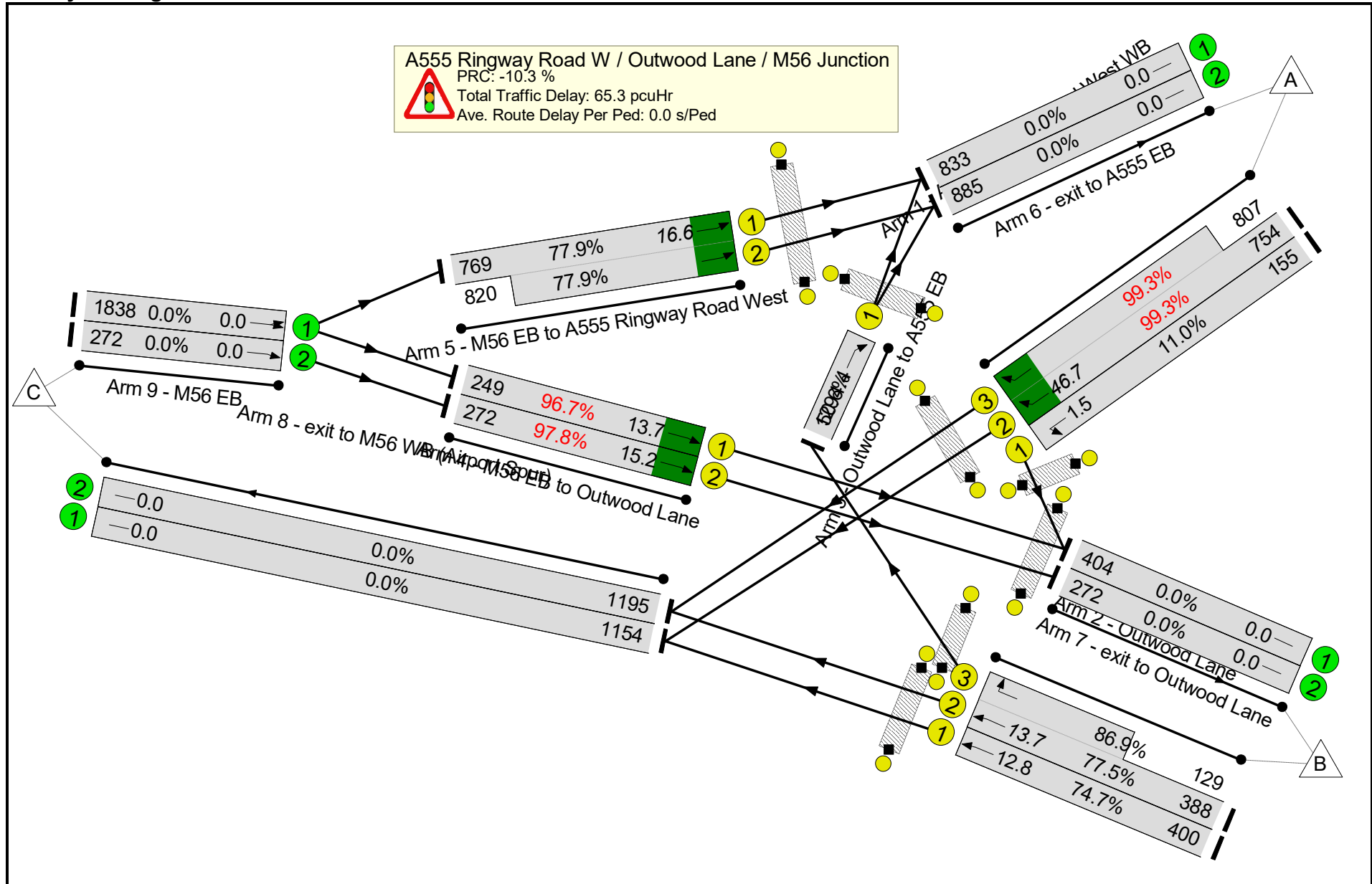
Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M56 EB to A555 Ringway Road West Ahead	Traffic	85	55	28
B	M56 EB to Outwood Lane Ahead	Traffic	18	6	24
C	Outwood Lane Ahead	Traffic	30	9	39
D	Outwood Lane Right	Traffic	8	30	38
E	A555 Ringway Road West WB Left	Traffic	80	32	0
F	A555 Ringway Road West WB Right	Traffic	67	45	0
G	Outwood Lane to A555 EB Ahead	Traffic	13	35	48
H	Pedestrians across	Pedestrian	13	35	48
I	Pedestrians across	Pedestrian	88	53	29
J	Pedestrians across	Pedestrian	33	5	38
K	Pedestrians across	Pedestrian	20	6	26
L	Pedestrians across	Pedestrian	79	33	0
M	Pedestrians across	Pedestrian	94	43	25
N	Pedestrians across	Pedestrian	69	45	2

Signal Timings Diagram**Lane Green Times**

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction					
Lane	Description	Type	Phases	Start Green	End Green
1/1	A555 Ringway Road West WB Left	U	E	32	0
1/2	A555 Ringway Road West WB Right	U	F	45	0-1
1/3	A555 Ringway Road West WB Right	U	F	45	0-1
2/1	Outwood Lane Ahead	U	C	9	39
2/2	Outwood Lane Ahead	U	C	9	39
2/3	Outwood Lane Right	U	D	30	38
3/1	Outwood Lane to A555 EB Ahead	U	G	35	48
4/1	M56 EB to Outwood Lane Ahead	U	B	6	24-4
4/2	M56 EB to Outwood Lane Ahead	U	B	6	24-4
5/1	M56 EB to A555 Ringway Road West Ahead	U	A	55	28-14
5/2	M56 EB to A555 Ringway Road West Ahead	U	A	55	28-14

Detailed Input Data And Results
Network Layout Diagram



Detailed Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M56 / Outwood Lane / A555 Ringway Road West	-	-	N/A	-	-		-	-	-	-	-	-	-	99.3%
A555 Ringway Road W / Outwood Lane / M56 Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	99.3%
1/1	A555 Ringway Road West WB Left	U	N/A	N/A	E		1	80	-	-	155	1952	1412	11.0%
1/2+1/3	A555 Ringway Road West WB Right	U	N/A	N/A	F		1	67	-	Y:Y	1561	1720:1738	759+813	99.3 : 99.3%
2/1	Outwood Lane Ahead	U	N/A	N/A	C		1	30	-	-	400	1935	536	74.7%
2/2+2/3	Outwood Lane Right Ahead	U	N/A	N/A	C D		1	30:8	-	-	517	2115:1847	500+148	77.5 : 86.9%
3/1	Outwood Lane to A555 EB Ahead	U	N/A	N/A	G		1	13	-	-	129	2039	255	50.6%
4/1	M56 EB to Outwood Lane Ahead	U	N/A	N/A	B		1	18	-	Y	249	1923	258	96.7%
4/2	M56 EB to Outwood Lane Ahead	U	N/A	N/A	B		1	18	-	Y	272	2077	278	97.8%
5/1+5/2	M56 EB to A555 Ringway Road West Ahead	U	N/A	N/A	A		1	85	-	Y:Y	1589	1975:2105	987+1053	77.9 : 77.9%
6/1	exit to A555 EB	U	N/A	N/A	-		-	-	-	-	833	Inf	Inf	0.0%
6/2	exit to A555 EB	U	N/A	N/A	-		-	-	-	-	885	Inf	Inf	0.0%
7/1	exit to Outwood Lane	U	N/A	N/A	-		-	-	-	-	404	Inf	Inf	0.0%

Detailed Input Data And Results

7/2	exit to Outwood Lane	U	N/A	N/A	-		-	-	-	-	272	Inf	Inf	0.0%
8/1	exit to M56 WB (Airport Spur)	U	N/A	N/A	-		-	-	-	-	1154	Inf	Inf	0.0%
8/2	exit to M56 WB (Airport Spur)	U	N/A	N/A	-		-	-	-	-	1195	Inf	Inf	0.0%
9/1	M56 EB Ahead Ahead2	U	N/A	N/A	-		-	-	-	-	1838	Inf	Inf	0.0%
9/2	M56 EB Ahead	U	N/A	N/A	-		-	-	-	-	272	Inf	Inf	0.0%
Ped Link: P1	Outwood Lane WB	-	N/A	-	N		1	69	-	-	0	-	0	0.0%
Ped Link: P2	Outwood Lane RT-TN	-	N/A	-	M		1	94	-	-	0	-	0	0.0%
Ped Link: P3	Outwood Lane EB	-	N/A	-	L		1	79	-	-	0	-	0	0.0%
Ped Link: P4	A555 LT-TN	-	N/A	-	K		1	20	-	-	0	-	0	0.0%
Ped Link: P5	A	-	N/A	-	J		1	33	-	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	I		1	88	-	-	0	-	0	0.0%
Ped Link: P7	M56 EB to A555	-	N/A	-	H		1	13	-	-	0	-	0	0.0%

Detailed Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: M56 / Outwood Lane / A555 Ringway Road West	-	-	0	0	0	29.5	35.8	0.0	65.3	-	-	-	-	
A555 Ringway Road W / Outwood Lane / M56 Junction	-	-	0	0	0	29.5	35.8	0.0	65.3	-	-	-	-	
1/1	155	155	-	-	-	0.2	0.1	-	0.3	6.1	1.4	0.1	1.5	
1/2+1/3	1561	1561	-	-	-	7.3	17.2	-	24.5	56.4	29.5	17.2	46.7	
2/1	400	400	-	-	-	4.1	1.4	-	5.5	49.9	11.3	1.4	12.8	
2/2+2/3	517	517	-	-	-	5.7	1.9	-	7.6	53.0	11.8	1.9	13.7	
3/1	129	129	-	-	-	0.1	0.5	-	0.6	16.1	3.9	0.5	4.4	
4/1	249	249	-	-	-	3.3	6.0	-	9.4	135.6	7.7	6.0	13.7	
4/2	272	272	-	-	-	3.7	6.8	-	10.5	139.0	8.4	6.8	15.2	
5/1+5/2	1589	1589	-	-	-	5.2	1.7	-	6.9	15.7	14.8	1.7	16.6	
6/1	833	833	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/2	885	885	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
7/1	404	404	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
7/2	272	272	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/1	1154	1154	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/2	1195	1195	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/1	1838	1838	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2	272	272	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	

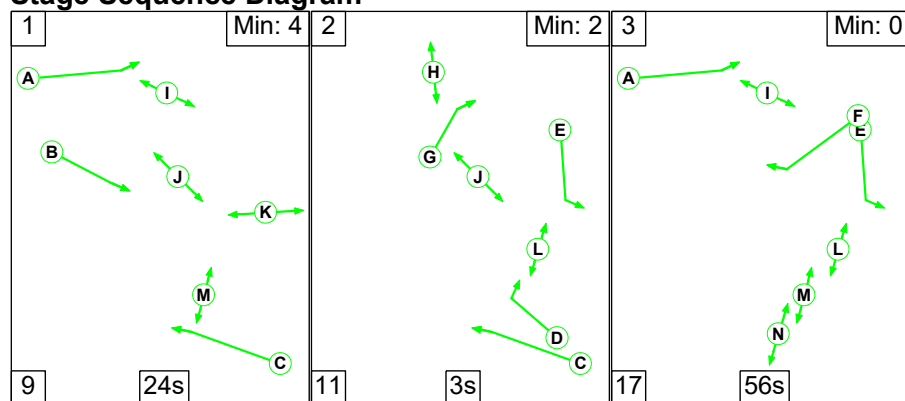
Detailed Input Data And Results

Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P7	0	0	-	-	-	-	-	-	-	-	-	-	-	
C1 PRC for Signalled Lanes (%): -10.3 Total Delay for Signalled Lanes (pcuHr): 65.26 Cycle Time (s): 112 PRC Over All Lanes (%): -10.3 Total Delay Over All Lanes(pcuHr): 65.26														

Detailed Input Data And Results

Scenario 3: '2030 Base AM Peak' (FG3: '2030 Base AM Peak', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



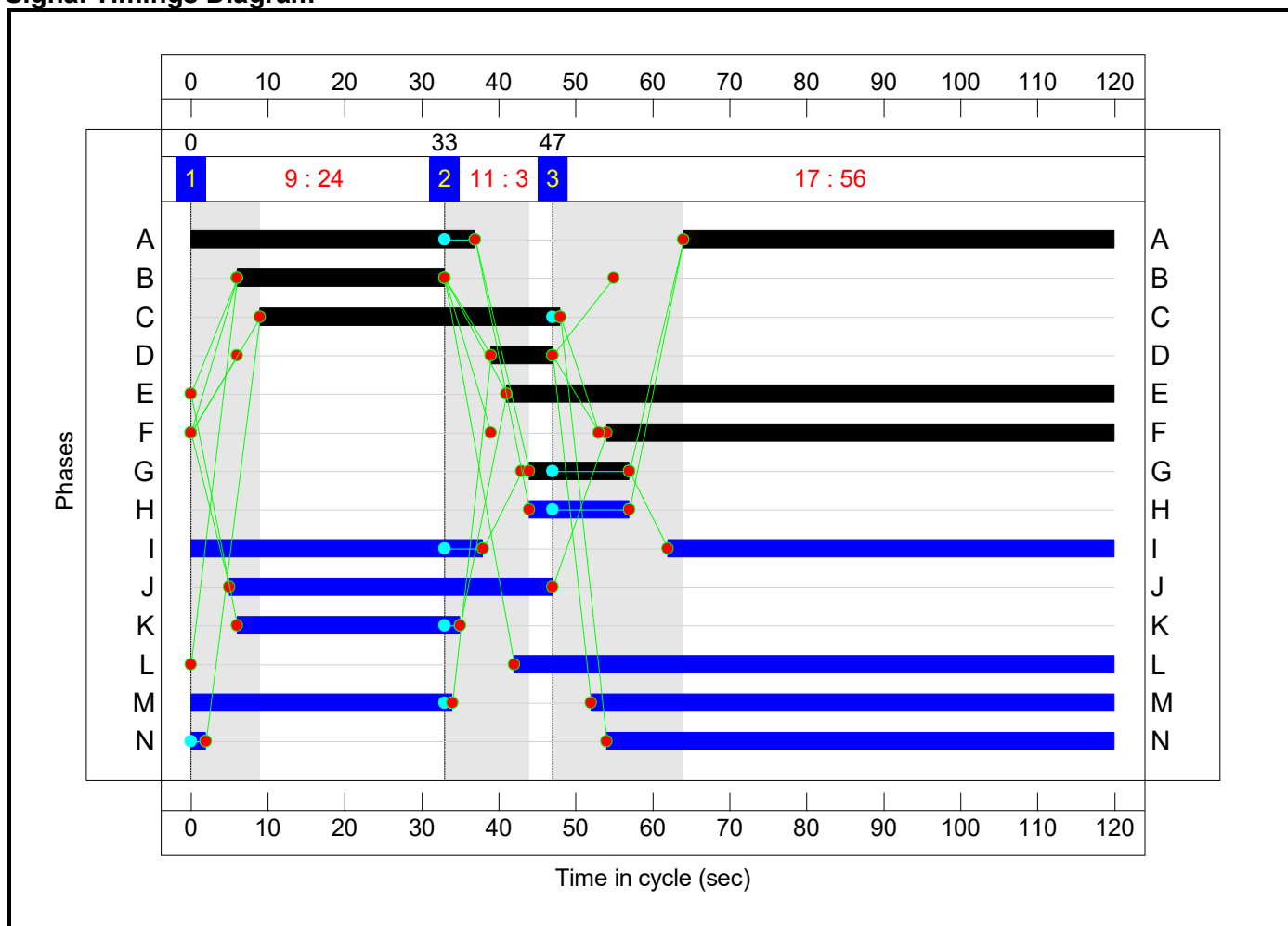
Stage Timings

Stage	1	2	3
Duration	24	3	56
Change Point	0	33	47

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M56 EB to A555 Ringway Road West Ahead	Traffic	93	64	37
B	M56 EB to Outwood Lane Ahead	Traffic	27	6	33
C	Outwood Lane Ahead	Traffic	39	9	48
D	Outwood Lane Right	Traffic	8	39	47
E	A555 Ringway Road West WB Left	Traffic	79	41	0
F	A555 Ringway Road West WB Right	Traffic	66	54	0
G	Outwood Lane to A555 EB Ahead	Traffic	13	44	57
H	Pedestrians across	Pedestrian	13	44	57
I	Pedestrians across	Pedestrian	96	62	38
J	Pedestrians across	Pedestrian	42	5	47
K	Pedestrians across	Pedestrian	29	6	35
L	Pedestrians across	Pedestrian	78	42	0
M	Pedestrians across	Pedestrian	102	52	34
N	Pedestrians across	Pedestrian	68	54	2

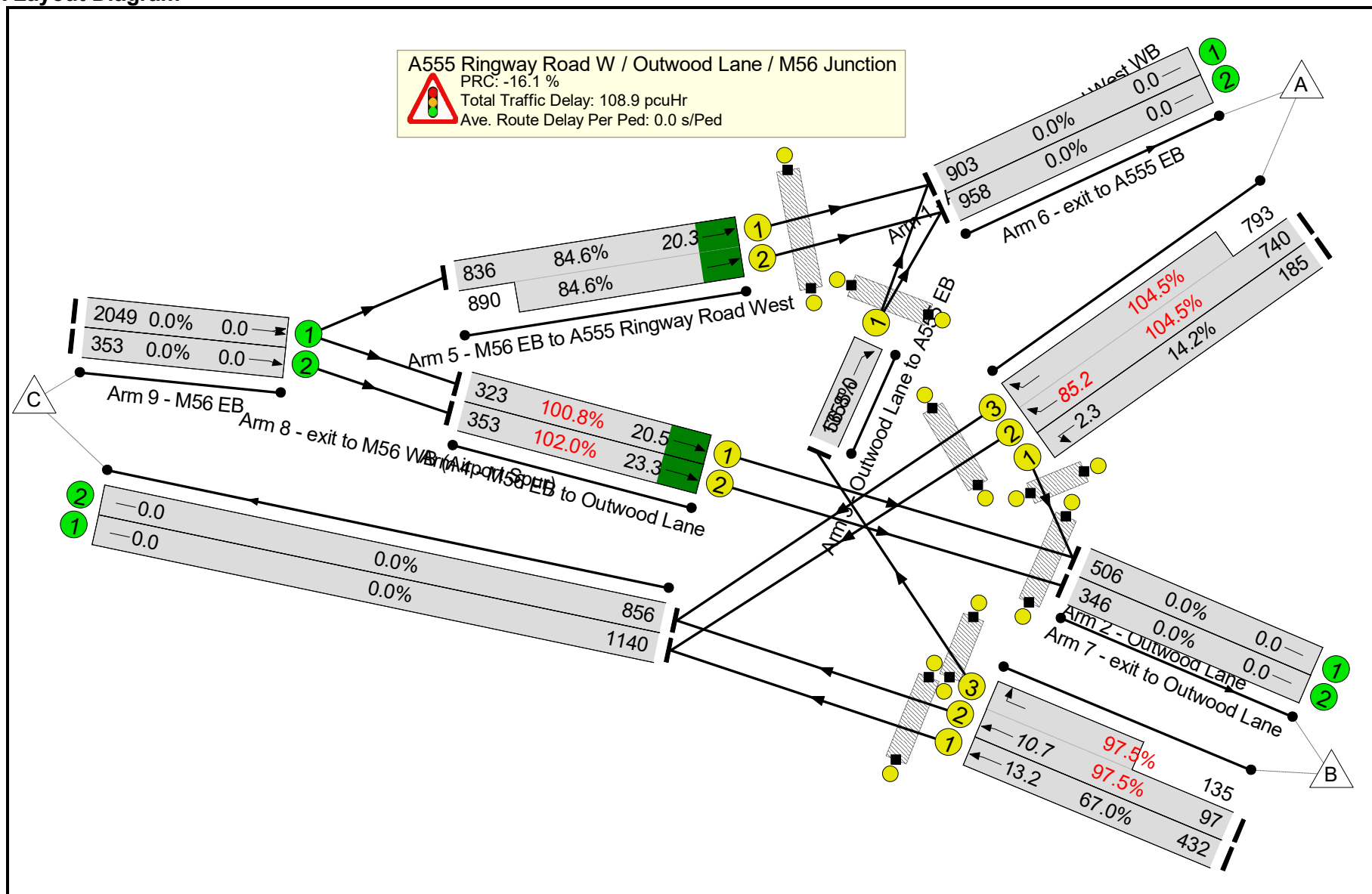
Signal Timings Diagram



Lane Green Times

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction					
Lane	Description	Type	Phases	Start Green	End Green
1/1	A555 Ringway Road West WB Left	U	E	41	0
1/2	A555 Ringway Road West WB Right	U	F	54	0
1/3	A555 Ringway Road West WB Right	U	F	54	0
2/1	Outwood Lane Ahead	U	C	9	48
2/2	Outwood Lane Ahead	U	C	9	48
2/3	Outwood Lane Right	U	D	39	47
3/1	Outwood Lane to A555 EB Ahead	U	G	44	57
4/1	M56 EB to Outwood Lane Ahead	U	B	6	33-8
4/2	M56 EB to Outwood Lane Ahead	U	B	6	33-8
5/1	M56 EB to A555 Ringway Road West Ahead	U	A	64	37-15
5/2	M56 EB to A555 Ringway Road West Ahead	U	A	64	37-15

Detailed Input Data And Results
Network Layout Diagram



Detailed Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M56 / Outwood Lane / A555 Ringway Road West	-	-	N/A	-	-		-	-	-	-	-	-	-	104.5%
A555 Ringway Road W / Outwood Lane / M56 Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	104.5%
1/1	A555 Ringway Road West WB Left	U	N/A	N/A	E		1	79	-	-	185	1952	1301	14.2%
1/2+1/3	A555 Ringway Road West WB Right	U	N/A	N/A	F		1	66	-	-	1533	1720:1738	708+759	104.5 : 104.5%
2/1	Outwood Lane Ahead	U	N/A	N/A	C		1	39	-	-	432	1935	645	67.0%
2/2+2/3	Outwood Lane Right Ahead	U	N/A	N/A	C D		1	39:8	-	-	232	2115:1847	100+139	97.5 : 97.5%
3/1	Outwood Lane to A555 EB Ahead	U	N/A	N/A	G		1	13	-	-	135	2039	238	56.8%
4/1	M56 EB to Outwood Lane Ahead	U	N/A	N/A	B		1	27	-	Y	323	1923	321	100.8%
4/2	M56 EB to Outwood Lane Ahead	U	N/A	N/A	B		1	27	-	Y	353	2077	346	102.0%
5/1+5/2	M56 EB to A555 Ringway Road West Ahead	U	N/A	N/A	A		1	93	-	Y:Y	1726	1975:2105	988+1052	84.6 : 84.6%
6/1	exit to A555 EB	U	N/A	N/A	-		-	-	-	-	903	Inf	Inf	0.0%
6/2	exit to A555 EB	U	N/A	N/A	-		-	-	-	-	958	Inf	Inf	0.0%
7/1	exit to Outwood Lane	U	N/A	N/A	-		-	-	-	-	508	Inf	Inf	0.0%

Detailed Input Data And Results

7/2	exit to Outwood Lane	U	N/A	N/A	-		-	-	-	-	353	Inf	Inf	0.0%
8/1	exit to M56 WB (Airport Spur)	U	N/A	N/A	-		-	-	-	-	1172	Inf	Inf	0.0%
8/2	exit to M56 WB (Airport Spur)	U	N/A	N/A	-		-	-	-	-	890	Inf	Inf	0.0%
9/1	M56 EB Ahead Ahead2	U	N/A	N/A	-		-	-	-	-	2049	Inf	Inf	0.0%
9/2	M56 EB Ahead	U	N/A	N/A	-		-	-	-	-	353	Inf	Inf	0.0%
Ped Link: P1	Outwood Lane WB	-	N/A	-	N		1	68	-	-	0	-	0	0.0%
Ped Link: P2	Outwood Lane RT-TN	-	N/A	-	M		1	102	-	-	0	-	0	0.0%
Ped Link: P3	Outwood Lane EB	-	N/A	-	L		1	78	-	-	0	-	0	0.0%
Ped Link: P4	A555 LT-TN	-	N/A	-	K		1	29	-	-	0	-	0	0.0%
Ped Link: P5	A	-	N/A	-	J		1	42	-	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	I		1	96	-	-	0	-	0	0.0%
Ped Link: P7	M56 EB to A555	-	N/A	-	H		1	13	-	-	0	-	0	0.0%

Detailed Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: M56 / Outwood Lane / A555 Ringway Road West	-	-	0	0	0	35.0	73.9	0.0	108.9	-	-	-	-	
A555 Ringway Road W / Outwood Lane / M56 Junction	-	-	0	0	0	35.0	73.9	0.0	108.9	-	-	-	-	
1/1	185	185	-	-	-	0.4	0.1	-	0.5	9.0	2.3	0.1	2.3	
1/2+1/3	1533	1467	-	-	-	11.9	42.3	-	54.1	127.1	43.0	42.3	85.2	
2/1	432	432	-	-	-	4.1	1.0	-	5.1	42.7	12.2	1.0	13.2	
2/2+2/3	232	232	-	-	-	2.8	6.3	-	9.1	140.9	4.5	6.3	10.7	
3/1	135	135	-	-	-	0.1	0.6	-	0.7	19.2	4.4	0.6	5.0	
4/1	323	321	-	-	-	4.6	9.6	-	14.3	159.1	10.9	9.6	20.5	
4/2	353	346	-	-	-	5.3	11.3	-	16.6	169.1	12.0	11.3	23.3	
5/1+5/2	1726	1726	-	-	-	5.8	2.7	-	8.5	17.8	17.6	2.7	20.3	
6/1	903	903	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/2	958	958	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
7/1	506	506	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
7/2	346	346	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/1	1140	1140	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/2	856	856	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/1	2049	2049	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2	353	353	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	

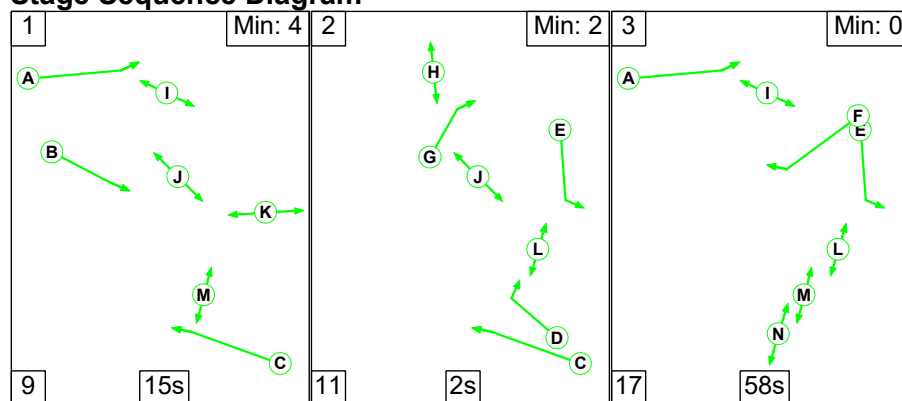
Detailed Input Data And Results

Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P7	0	0	-	-	-	-	-	-	-	-	-	-	-	
C1 PRC for Signalled Lanes (%): -16.1 Total Delay for Signalled Lanes (pcuHr): 108.90 Cycle Time (s): 120 PRC Over All Lanes (%): -16.1 Total Delay Over All Lanes(pcuHr): 108.90														

Detailed Input Data And Results

Scenario 4: '2030 Base PM Peak' (FG4: '2030 Base PM Peak', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

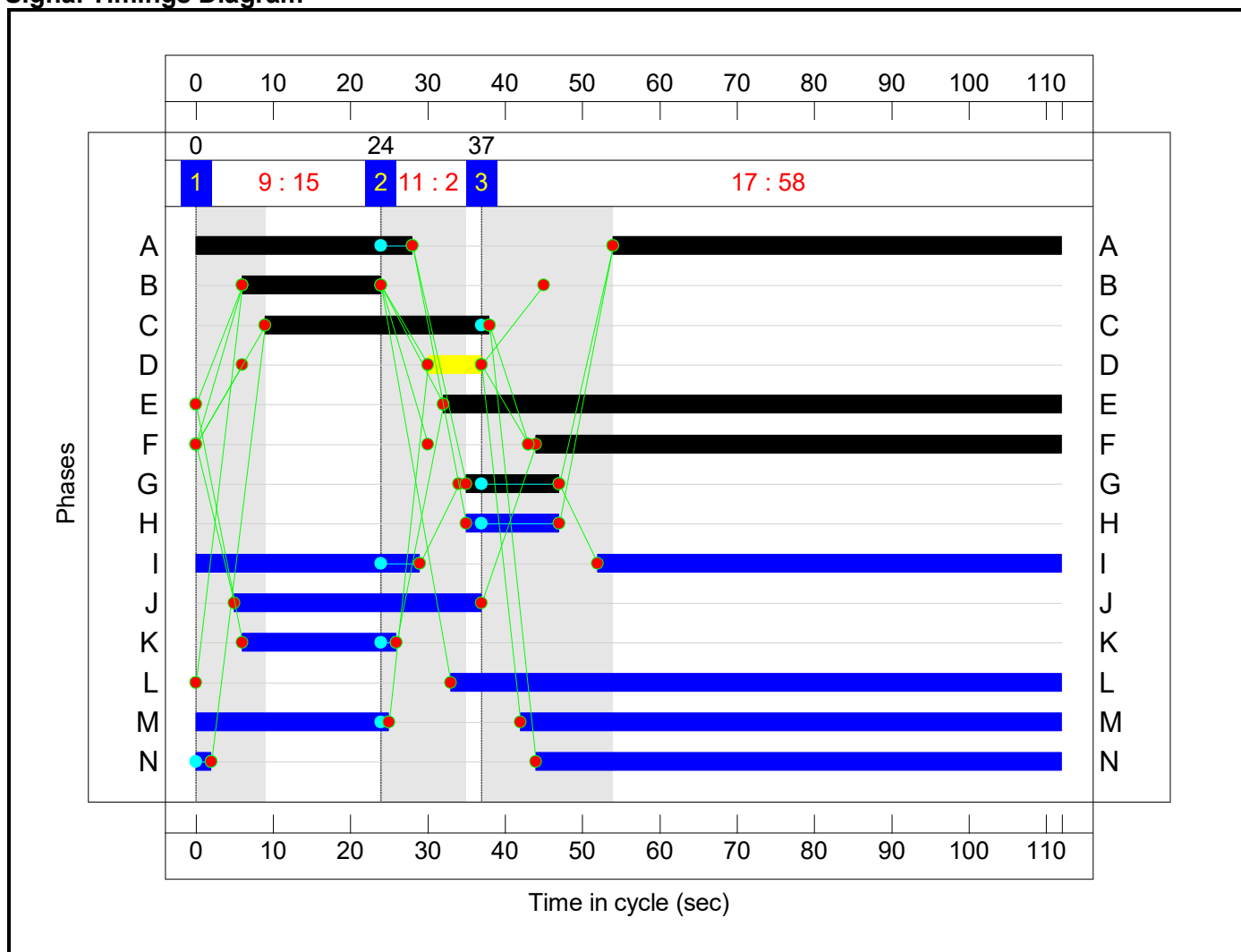


Stage Timings

Stage	1	2	3
Duration	15	2	58
Change Point	0	24	37

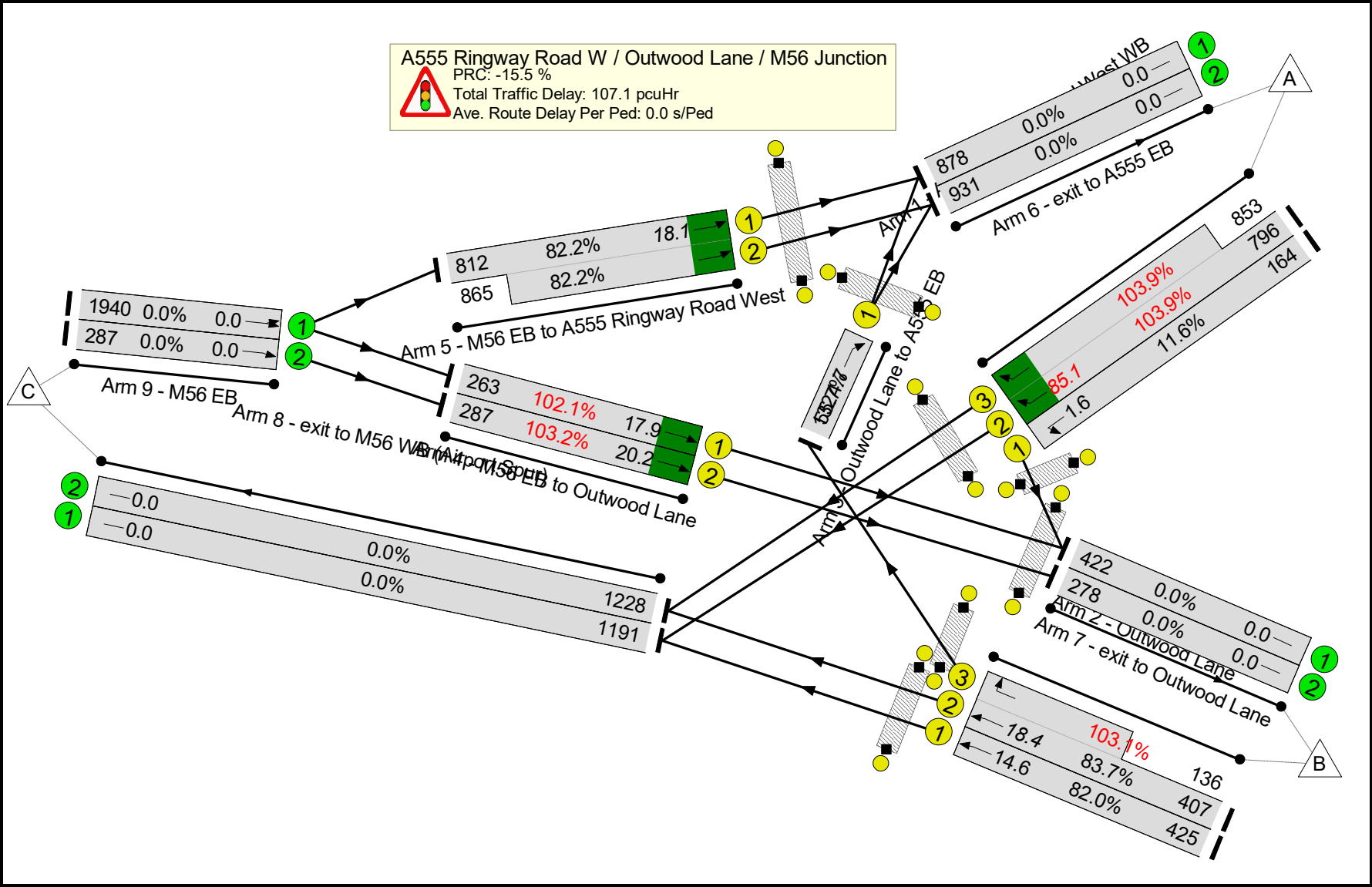
Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M56 EB to A555 Ringway Road West Ahead	Traffic	86	54	28
B	M56 EB to Outwood Lane Ahead	Traffic	18	6	24
C	Outwood Lane Ahead	Traffic	29	9	38
D	Outwood Lane Right	Traffic	7	30	37
E	A555 Ringway Road West WB Left	Traffic	80	32	0
F	A555 Ringway Road West WB Right	Traffic	68	44	0
G	Outwood Lane to A555 EB Ahead	Traffic	12	35	47
H	Pedestrians across	Pedestrian	12	35	47
I	Pedestrians across	Pedestrian	89	52	29
J	Pedestrians across	Pedestrian	32	5	37
K	Pedestrians across	Pedestrian	20	6	26
L	Pedestrians across	Pedestrian	79	33	0
M	Pedestrians across	Pedestrian	95	42	25
N	Pedestrians across	Pedestrian	70	44	2

Signal Timings Diagram**Lane Green Times**

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction					
Lane	Description	Type	Phases	Start Green	End Green
1/1	A555 Ringway Road West WB Left	U	E	32	0
1/2	A555 Ringway Road West WB Right	U	F	44	0-1
1/3	A555 Ringway Road West WB Right	U	F	44	0-1
2/1	Outwood Lane Ahead	U	C	9	38
2/2	Outwood Lane Ahead	U	C	9	38
2/3	Outwood Lane Right	U	D	30	37
3/1	Outwood Lane to A555 EB Ahead	U	G	35	47
4/1	M56 EB to Outwood Lane Ahead	U	B	6	24-4
4/2	M56 EB to Outwood Lane Ahead	U	B	6	24-4
5/1	M56 EB to A555 Ringway Road West Ahead	U	A	54	28-14
5/2	M56 EB to A555 Ringway Road West Ahead	U	A	54	28-14

Detailed Input Data And Results
Network Layout Diagram



Detailed Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M56 / Outwood Lane / A555 Ringway Road West	-	-	N/A	-	-		-	-	-	-	-	-	-	103.9%
A555 Ringway Road W / Outwood Lane / M56 Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	103.9%
1/1	A555 Ringway Road West WB Left	U	N/A	N/A	E		1	80	-	-	164	1952	1412	11.6%
1/2+1/3	A555 Ringway Road West WB Right	U	N/A	N/A	F		1	68	-	Y:Y	1649	1720:1738	766+821	103.9 : 103.9%
2/1	Outwood Lane Ahead	U	N/A	N/A	C		1	29	-	-	425	1935	518	82.0%
2/2+2/3	Outwood Lane Right Ahead	U	N/A	N/A	C D		1	29:7	-	-	543	2115:1847	486+132	83.7 : 103.1%
3/1	Outwood Lane to A555 EB Ahead	U	N/A	N/A	G		1	12	-	-	136	2039	237	55.7%
4/1	M56 EB to Outwood Lane Ahead	U	N/A	N/A	B		1	18	-	Y	263	1923	258	102.1%
4/2	M56 EB to Outwood Lane Ahead	U	N/A	N/A	B		1	18	-	Y	287	2077	278	103.2%
5/1+5/2	M56 EB to A555 Ringway Road West Ahead	U	N/A	N/A	A		1	86	-	Y:Y	1677	1975:2105	988+1052	82.2 : 82.2%
6/1	exit to A555 EB	U	N/A	N/A	-		-	-	-	-	880	Inf	Inf	0.0%
6/2	exit to A555 EB	U	N/A	N/A	-		-	-	-	-	933	Inf	Inf	0.0%
7/1	exit to Outwood Lane	U	N/A	N/A	-		-	-	-	-	427	Inf	Inf	0.0%

Detailed Input Data And Results

7/2	exit to Outwood Lane	U	N/A	N/A	-		-	-	-	-	287	Inf	Inf	0.0%
8/1	exit to M56 WB (Airport Spur)	U	N/A	N/A	-		-	-	-	-	1221	Inf	Inf	0.0%
8/2	exit to M56 WB (Airport Spur)	U	N/A	N/A	-		-	-	-	-	1260	Inf	Inf	0.0%
9/1	M56 EB Ahead Ahead2	U	N/A	N/A	-		-	-	-	-	1940	Inf	Inf	0.0%
9/2	M56 EB Ahead	U	N/A	N/A	-		-	-	-	-	287	Inf	Inf	0.0%
Ped Link: P1	Outwood Lane WB	-	N/A	-	N		1	70	-	-	0	-	0	0.0%
Ped Link: P2	Outwood Lane RT-TN	-	N/A	-	M		1	95	-	-	0	-	0	0.0%
Ped Link: P3	Outwood Lane EB	-	N/A	-	L		1	79	-	-	0	-	0	0.0%
Ped Link: P4	A555 LT-TN	-	N/A	-	K		1	20	-	-	0	-	0	0.0%
Ped Link: P5	A	-	N/A	-	J		1	32	-	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	I		1	89	-	-	0	-	0	0.0%
Ped Link: P7	M56 EB to A555	-	N/A	-	H		1	12	-	-	0	-	0	0.0%

Detailed Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: M56 / Outwood Lane / A555 Ringway Road West	-	-	0	0	0	34.9	72.2	0.0	107.1	-	-	-	-	
A555 Ringway Road W / Outwood Lane / M56 Junction	-	-	0	0	0	34.9	72.2	0.0	107.1	-	-	-	-	
1/1	164	164	-	-	-	0.2	0.1	-	0.3	6.1	1.5	0.1	1.6	
1/2+1/3	1649	1588	-	-	-	10.1	41.1	-	51.2	111.9	44.0	41.1	85.1	
2/1	425	425	-	-	-	4.5	2.2	-	6.7	56.9	12.4	2.2	14.6	
2/2+2/3	543	539	-	-	-	6.4	5.3	-	11.8	77.9	13.1	5.3	18.4	
3/1	132	132	-	-	-	0.1	0.6	-	0.7	18.9	4.0	0.6	4.7	
4/1	263	258	-	-	-	3.9	9.6	-	13.4	184.1	8.4	9.6	17.9	
4/2	287	278	-	-	-	4.4	11.0	-	15.3	192.4	9.2	11.0	20.2	
5/1+5/2	1677	1677	-	-	-	5.4	2.3	-	7.7	16.4	15.9	2.3	18.1	
6/1	878	878	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/2	931	931	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
7/1	422	422	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
7/2	278	278	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/1	1191	1191	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/2	1228	1228	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/1	1940	1940	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2	287	287	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	

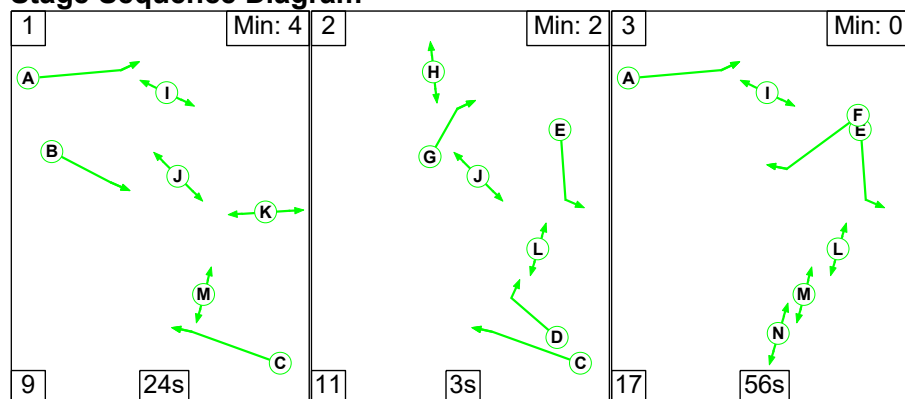
Detailed Input Data And Results

Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P7	0	0	-	-	-	-	-	-	-	-	-	-	-	
C1 PRC for Signalled Lanes (%): -15.5 Total Delay for Signalled Lanes (pcuHr): 107.13 Cycle Time (s): 112 PRC Over All Lanes (%): -15.5 Total Delay Over All Lanes(pcuHr): 107.13														

Detailed Input Data And Results

Scenario 5: '2030 Base +Option 5 B2 Dev AM Peak' (FG5: '2030 Base + Option 5 B2 Dev AM Peak', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



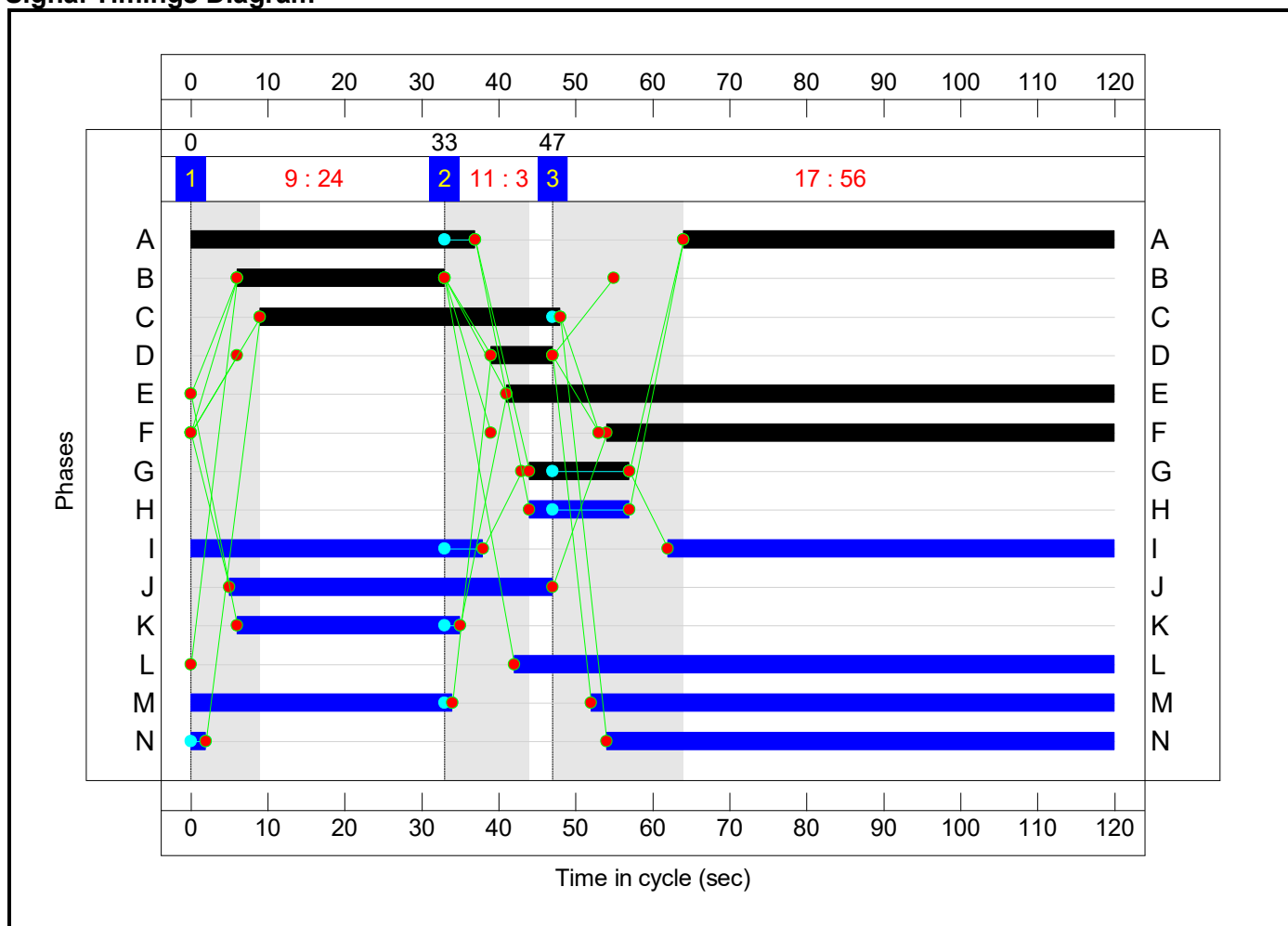
Stage Timings

Stage	1	2	3
Duration	24	3	56
Change Point	0	33	47

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M56 EB to A555 Ringway Road West Ahead	Traffic	93	64	37
B	M56 EB to Outwood Lane Ahead	Traffic	27	6	33
C	Outwood Lane Ahead	Traffic	39	9	48
D	Outwood Lane Right	Traffic	8	39	47
E	A555 Ringway Road West WB Left	Traffic	79	41	0
F	A555 Ringway Road West WB Right	Traffic	66	54	0
G	Outwood Lane to A555 EB Ahead	Traffic	13	44	57
H	Pedestrians across	Pedestrian	13	44	57
I	Pedestrians across	Pedestrian	96	62	38
J	Pedestrians across	Pedestrian	42	5	47
K	Pedestrians across	Pedestrian	29	6	35
L	Pedestrians across	Pedestrian	78	42	0
M	Pedestrians across	Pedestrian	102	52	34
N	Pedestrians across	Pedestrian	68	54	2

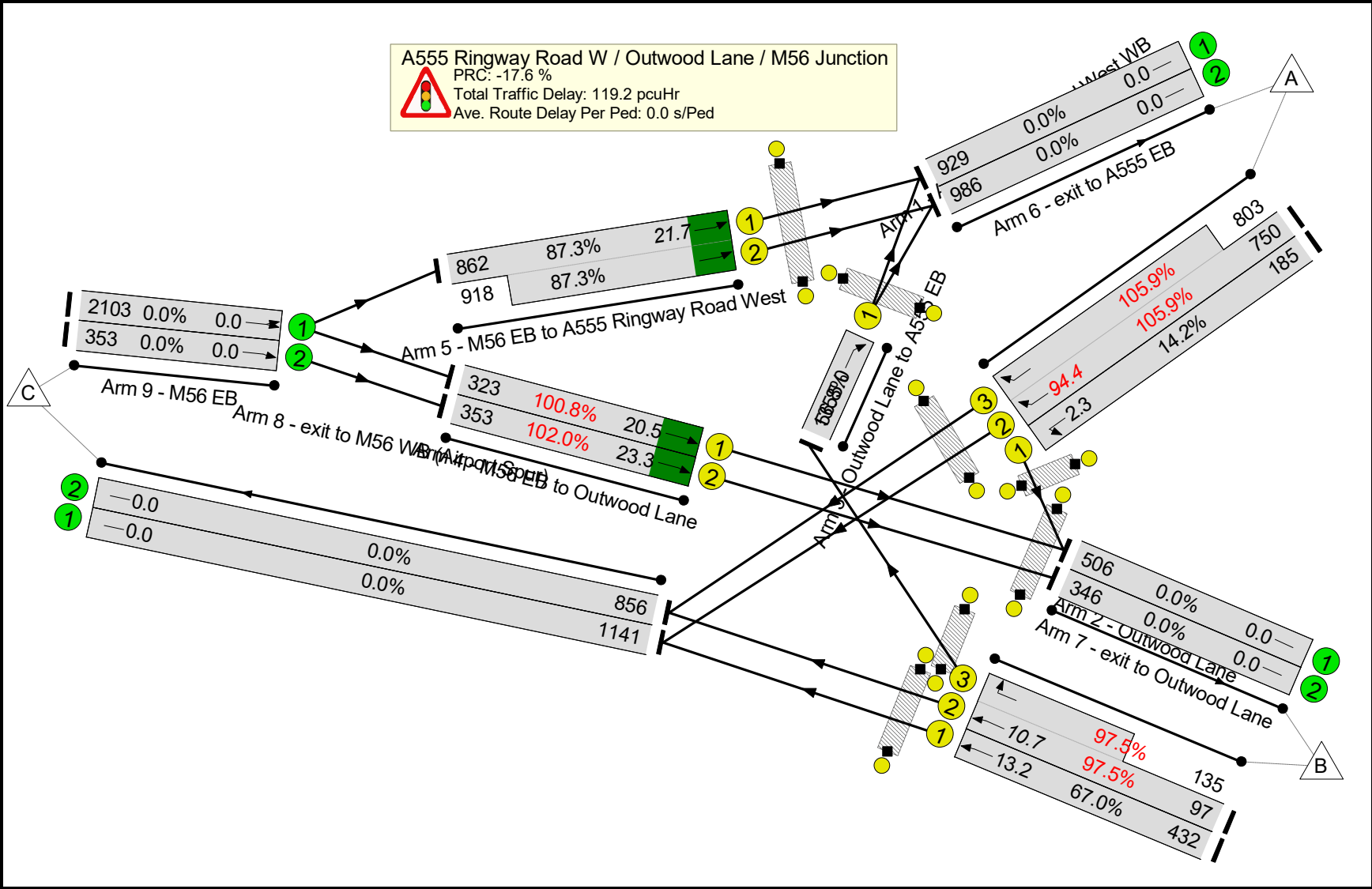
Signal Timings Diagram



Lane Green Times

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction					
Lane	Description	Type	Phases	Start Green	End Green
1/1	A555 Ringway Road West WB Left	U	E	41	0
1/2	A555 Ringway Road West WB Right	U	F	54	0
1/3	A555 Ringway Road West WB Right	U	F	54	0
2/1	Outwood Lane Ahead	U	C	9	48
2/2	Outwood Lane Ahead	U	C	9	48
2/3	Outwood Lane Right	U	D	39	47
3/1	Outwood Lane to A555 EB Ahead	U	G	44	57
4/1	M56 EB to Outwood Lane Ahead	U	B	6	33-8
4/2	M56 EB to Outwood Lane Ahead	U	B	6	33-8
5/1	M56 EB to A555 Ringway Road West Ahead	U	A	64	37-15
5/2	M56 EB to A555 Ringway Road West Ahead	U	A	64	37-15

Detailed Input Data And Results
Network Layout Diagram



Detailed Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M56 / Outwood Lane / A555 Ringway Road West	-	-	N/A	-	-		-	-	-	-	-	-	-	105.9%
A555 Ringway Road W / Outwood Lane / M56 Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	105.9%
1/1	A555 Ringway Road West WB Left	U	N/A	N/A	E		1	79	-	-	185	1952	1301	14.2%
1/2+1/3	A555 Ringway Road West WB Right	U	N/A	N/A	F		1	66	-	-	1553	1720:1738	708+759	105.9 : 105.9%
2/1	Outwood Lane Ahead	U	N/A	N/A	C		1	39	-	-	432	1935	645	67.0%
2/2+2/3	Outwood Lane Right Ahead	U	N/A	N/A	C D		1	39:8	-	-	232	2115:1847	100+139	97.5 : 97.5%
3/1	Outwood Lane to A555 EB Ahead	U	N/A	N/A	G		1	13	-	-	135	2039	238	56.8%
4/1	M56 EB to Outwood Lane Ahead	U	N/A	N/A	B		1	27	-	Y	323	1923	321	100.8%
4/2	M56 EB to Outwood Lane Ahead	U	N/A	N/A	B		1	27	-	Y	353	2077	346	102.0%
5/1+5/2	M56 EB to A555 Ringway Road West Ahead	U	N/A	N/A	A		1	93	-	Y:Y	1780	1975:2105	988+1052	87.3 : 87.3%
6/1	exit to A555 EB	U	N/A	N/A	-		-	-	-	-	929	Inf	Inf	0.0%
6/2	exit to A555 EB	U	N/A	N/A	-		-	-	-	-	986	Inf	Inf	0.0%
7/1	exit to Outwood Lane	U	N/A	N/A	-		-	-	-	-	508	Inf	Inf	0.0%

Detailed Input Data And Results

7/2	exit to Outwood Lane	U	N/A	N/A	-		-	-	-	-	353	Inf	Inf	0.0%
8/1	exit to M56 WB (Airport Spur)	U	N/A	N/A	-		-	-	-	-	1182	Inf	Inf	0.0%
8/2	exit to M56 WB (Airport Spur)	U	N/A	N/A	-		-	-	-	-	900	Inf	Inf	0.0%
9/1	M56 EB Ahead Ahead2	U	N/A	N/A	-		-	-	-	-	2103	Inf	Inf	0.0%
9/2	M56 EB Ahead	U	N/A	N/A	-		-	-	-	-	353	Inf	Inf	0.0%
Ped Link: P1	Outwood Lane WB	-	N/A	-	N		1	68	-	-	0	-	0	0.0%
Ped Link: P2	Outwood Lane RT-TN	-	N/A	-	M		1	102	-	-	0	-	0	0.0%
Ped Link: P3	Outwood Lane EB	-	N/A	-	L		1	78	-	-	0	-	0	0.0%
Ped Link: P4	A555 LT-TN	-	N/A	-	K		1	29	-	-	0	-	0	0.0%
Ped Link: P5	A	-	N/A	-	J		1	42	-	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	I		1	96	-	-	0	-	0	0.0%
Ped Link: P7	M56 EB to A555	-	N/A	-	H		1	13	-	-	0	-	0	0.0%

Detailed Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: M56 / Outwood Lane / A555 Ringway Road West	-	-	0	0	0	36.3	82.9	0.0	119.2	-	-	-	-	
A555 Ringway Road W / Outwood Lane / M56 Junction	-	-	0	0	0	36.3	82.9	0.0	119.2	-	-	-	-	
1/1	185	185	-	-	-	0.4	0.1	-	0.5	9.0	2.3	0.1	2.3	
1/2+1/3	1553	1467	-	-	-	12.8	50.7	-	63.5	147.1	43.7	50.7	94.4	
2/1	432	432	-	-	-	4.1	1.0	-	5.1	42.7	12.2	1.0	13.2	
2/2+2/3	232	232	-	-	-	2.8	6.3	-	9.1	140.9	4.5	6.3	10.7	
3/1	135	135	-	-	-	0.1	0.6	-	0.7	19.2	4.4	0.6	5.0	
4/1	323	321	-	-	-	4.6	9.6	-	14.3	159.1	10.9	9.6	20.5	
4/2	353	346	-	-	-	5.3	11.3	-	16.6	169.1	12.0	11.3	23.3	
5/1+5/2	1780	1780	-	-	-	6.1	3.3	-	9.5	19.2	18.4	3.3	21.7	
6/1	929	929	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/2	986	986	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
7/1	506	506	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
7/2	346	346	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/1	1141	1141	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/2	856	856	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/1	2103	2103	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2	353	353	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	

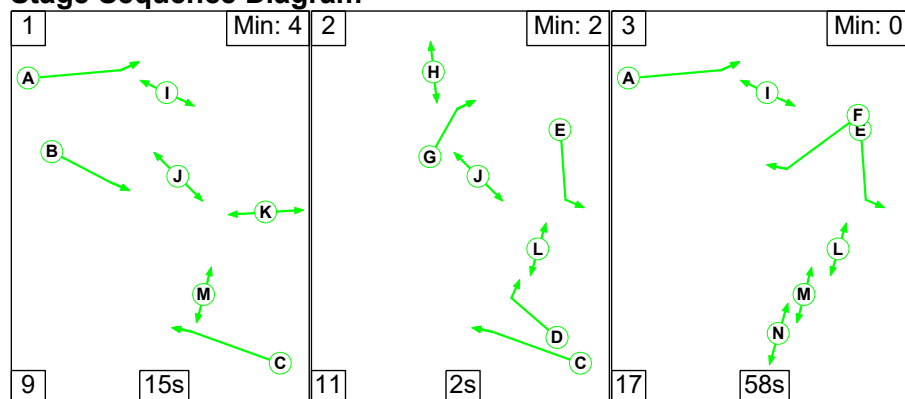
Detailed Input Data And Results

Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P7	0	0	-	-	-	-	-	-	-	-	-	-	-	
C1 PRC for Signalled Lanes (%): -17.6 Total Delay for Signalled Lanes (pcuHr): 119.20 Cycle Time (s): 120 PRC Over All Lanes (%): -17.6 Total Delay Over All Lanes(pcuHr): 119.20														

Detailed Input Data And Results

Scenario 6: '2030 Base +Option 5 B2 Dev PM Peak' (FG6: '2030 Base + Option 5 B2 Dev PM Peak', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

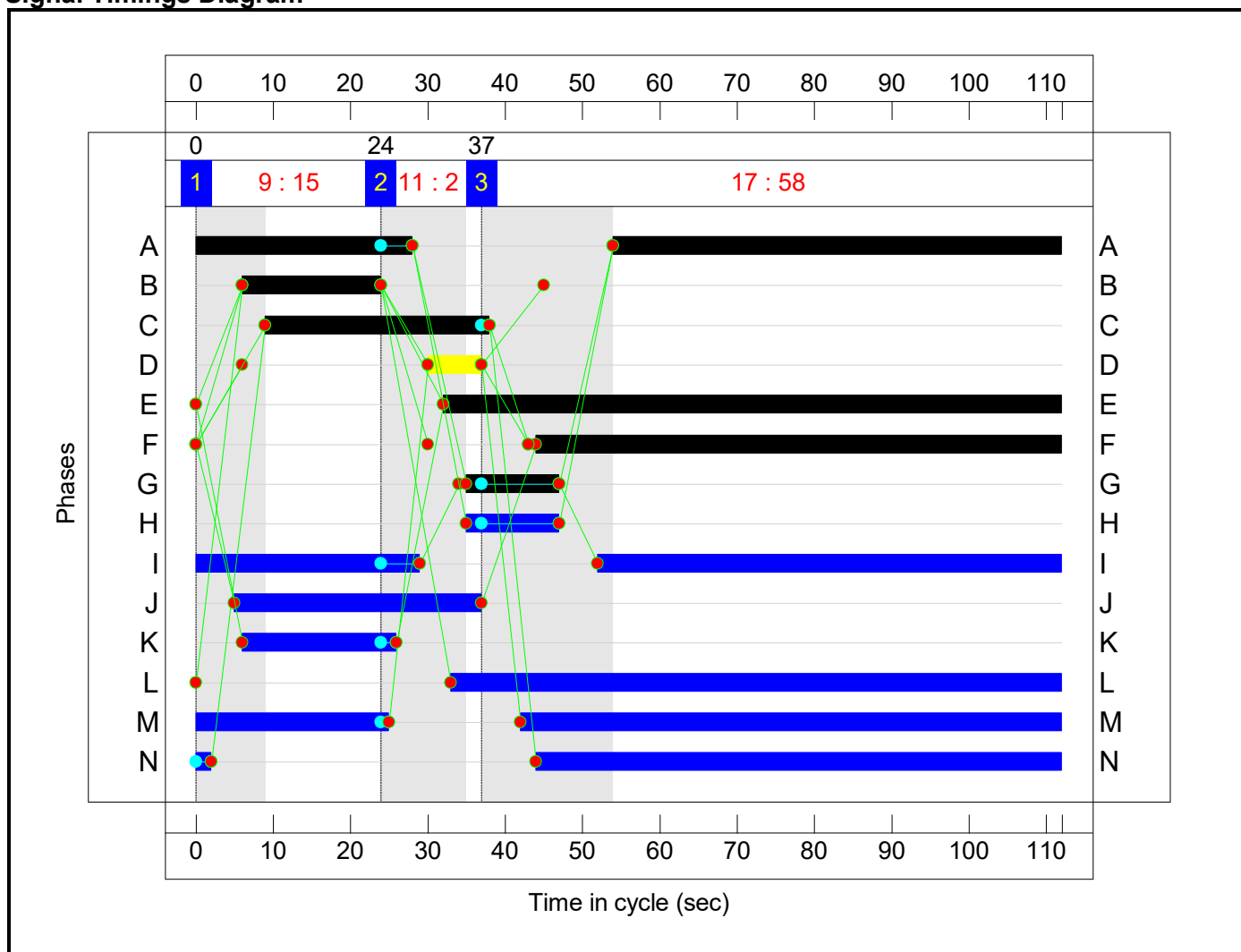


Stage Timings

Stage	1	2	3
Duration	15	2	58
Change Point	0	24	37

Phase Timings

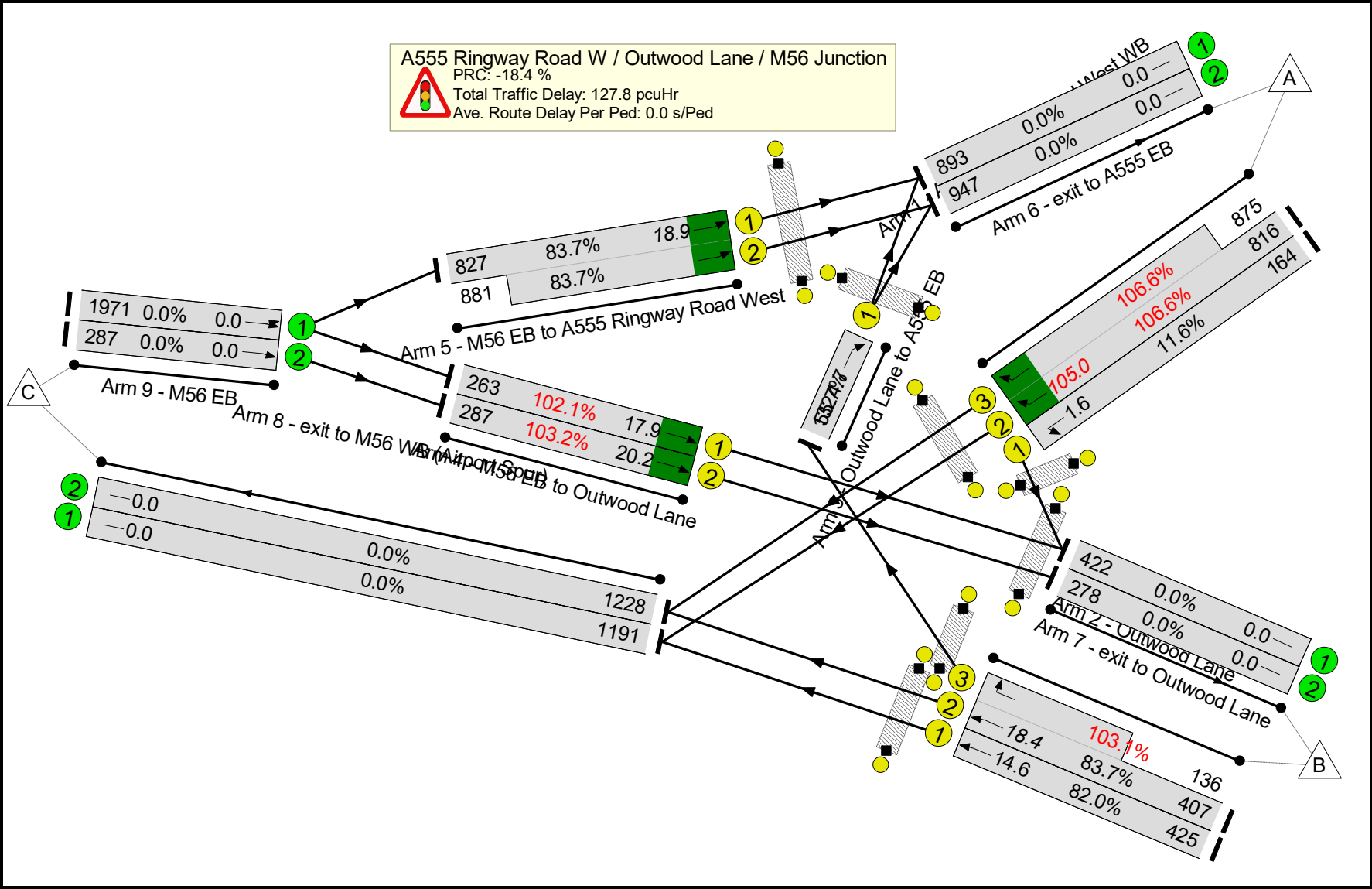
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M56 EB to A555 Ringway Road West Ahead	Traffic	86	54	28
B	M56 EB to Outwood Lane Ahead	Traffic	18	6	24
C	Outwood Lane Ahead	Traffic	29	9	38
D	Outwood Lane Right	Traffic	7	30	37
E	A555 Ringway Road West WB Left	Traffic	80	32	0
F	A555 Ringway Road West WB Right	Traffic	68	44	0
G	Outwood Lane to A555 EB Ahead	Traffic	12	35	47
H	Pedestrians across	Pedestrian	12	35	47
I	Pedestrians across	Pedestrian	89	52	29
J	Pedestrians across	Pedestrian	32	5	37
K	Pedestrians across	Pedestrian	20	6	26
L	Pedestrians across	Pedestrian	79	33	0
M	Pedestrians across	Pedestrian	95	42	25
N	Pedestrians across	Pedestrian	70	44	2

Signal Timings Diagram**Lane Green Times**

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction					
Lane	Description	Type	Phases	Start Green	End Green
1/1	A555 Ringway Road West WB Left	U	E	32	0
1/2	A555 Ringway Road West WB Right	U	F	44	0-1
1/3	A555 Ringway Road West WB Right	U	F	44	0-1
2/1	Outwood Lane Ahead	U	C	9	38
2/2	Outwood Lane Ahead	U	C	9	38
2/3	Outwood Lane Right	U	D	30	37
3/1	Outwood Lane to A555 EB Ahead	U	G	35	47
4/1	M56 EB to Outwood Lane Ahead	U	B	6	24-4
4/2	M56 EB to Outwood Lane Ahead	U	B	6	24-4
5/1	M56 EB to A555 Ringway Road West Ahead	U	A	54	28-14
5/2	M56 EB to A555 Ringway Road West Ahead	U	A	54	28-14

Detailed Input Data And Results

Network Layout Diagram



Detailed Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M56 / Outwood Lane / A555 Ringway Road West	-	-	N/A	-	-		-	-	-	-	-	-	-	106.6%
A555 Ringway Road W / Outwood Lane / M56 Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	106.6%
1/1	A555 Ringway Road West WB Left	U	N/A	N/A	E		1	80	-	-	164	1952	1412	11.6%
1/2+1/3	A555 Ringway Road West WB Right	U	N/A	N/A	F		1	68	-	Y:Y	1691	1720:1738	766+821	106.6 : 106.6%
2/1	Outwood Lane Ahead	U	N/A	N/A	C		1	29	-	-	425	1935	518	82.0%
2/2+2/3	Outwood Lane Right Ahead	U	N/A	N/A	C D		1	29:7	-	-	543	2115:1847	486+132	83.7 : 103.1%
3/1	Outwood Lane to A555 EB Ahead	U	N/A	N/A	G		1	12	-	-	136	2039	237	55.7%
4/1	M56 EB to Outwood Lane Ahead	U	N/A	N/A	B		1	18	-	Y	263	1923	258	102.1%
4/2	M56 EB to Outwood Lane Ahead	U	N/A	N/A	B		1	18	-	Y	287	2077	278	103.2%
5/1+5/2	M56 EB to A555 Ringway Road West Ahead	U	N/A	N/A	A		1	86	-	Y:Y	1708	1975:2105	988+1052	83.7 : 83.7%
6/1	exit to A555 EB	U	N/A	N/A	-		-	-	-	-	895	Inf	Inf	0.0%
6/2	exit to A555 EB	U	N/A	N/A	-		-	-	-	-	949	Inf	Inf	0.0%
7/1	exit to Outwood Lane	U	N/A	N/A	-		-	-	-	-	427	Inf	Inf	0.0%

Detailed Input Data And Results

7/2	exit to Outwood Lane	U	N/A	N/A	-		-	-	-	-	287	Inf	Inf	0.0%
8/1	exit to M56 WB (Airport Spur)	U	N/A	N/A	-		-	-	-	-	1241	Inf	Inf	0.0%
8/2	exit to M56 WB (Airport Spur)	U	N/A	N/A	-		-	-	-	-	1282	Inf	Inf	0.0%
9/1	M56 EB Ahead Ahead2	U	N/A	N/A	-		-	-	-	-	1971	Inf	Inf	0.0%
9/2	M56 EB Ahead	U	N/A	N/A	-		-	-	-	-	287	Inf	Inf	0.0%
Ped Link: P1	Outwood Lane WB	-	N/A	-	N		1	70	-	-	0	-	0	0.0%
Ped Link: P2	Outwood Lane RT-TN	-	N/A	-	M		1	95	-	-	0	-	0	0.0%
Ped Link: P3	Outwood Lane EB	-	N/A	-	L		1	79	-	-	0	-	0	0.0%
Ped Link: P4	A555 LT-TN	-	N/A	-	K		1	20	-	-	0	-	0	0.0%
Ped Link: P5	A	-	N/A	-	J		1	32	-	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	I		1	89	-	-	0	-	0	0.0%
Ped Link: P7	M56 EB to A555	-	N/A	-	H		1	12	-	-	0	-	0	0.0%

Detailed Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: M56 / Outwood Lane / A555 Ringway Road West	-	-	0	0	0	37.1	90.7	0.0	127.8	-	-	-	-	
A555 Ringway Road W / Outwood Lane / M56 Junction	-	-	0	0	0	37.1	90.7	0.0	127.8	-	-	-	-	
1/1	164	164	-	-	-	0.2	0.1	-	0.3	6.1	1.5	0.1	1.6	
1/2+1/3	1691	1586	-	-	-	12.1	59.4	-	71.5	152.1	45.6	59.4	105.0	
2/1	425	425	-	-	-	4.5	2.2	-	6.7	56.9	12.4	2.2	14.6	
2/2+2/3	543	539	-	-	-	6.4	5.3	-	11.8	77.9	13.1	5.3	18.4	
3/1	132	132	-	-	-	0.1	0.6	-	0.7	18.9	4.0	0.6	4.7	
4/1	263	258	-	-	-	3.9	9.6	-	13.4	184.1	8.4	9.6	17.9	
4/2	287	278	-	-	-	4.4	11.0	-	15.3	192.4	9.2	11.0	20.2	
5/1+5/2	1708	1708	-	-	-	5.5	2.5	-	8.1	17.0	16.4	2.5	18.9	
6/1	893	893	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/2	947	947	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
7/1	422	422	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
7/2	278	278	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/1	1191	1191	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/2	1228	1228	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/1	1971	1971	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2	287	287	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	

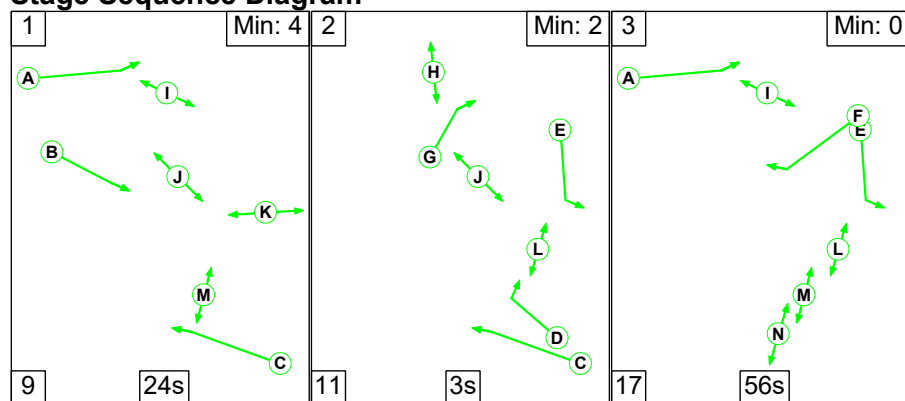
Detailed Input Data And Results

Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P7	0	0	-	-	-	-	-	-	-	-	-	-	-	
C1 PRC for Signalled Lanes (%): -18.4 Total Delay for Signalled Lanes (pcuHr): 127.77 Cycle Time (s): 112 PRC Over All Lanes (%): -18.4 Total Delay Over All Lanes(pcuHr): 127.77														

Detailed Input Data And Results

Scenario 7: '2035 Base AM Peak' (FG7: '2035 Base AM Peak', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



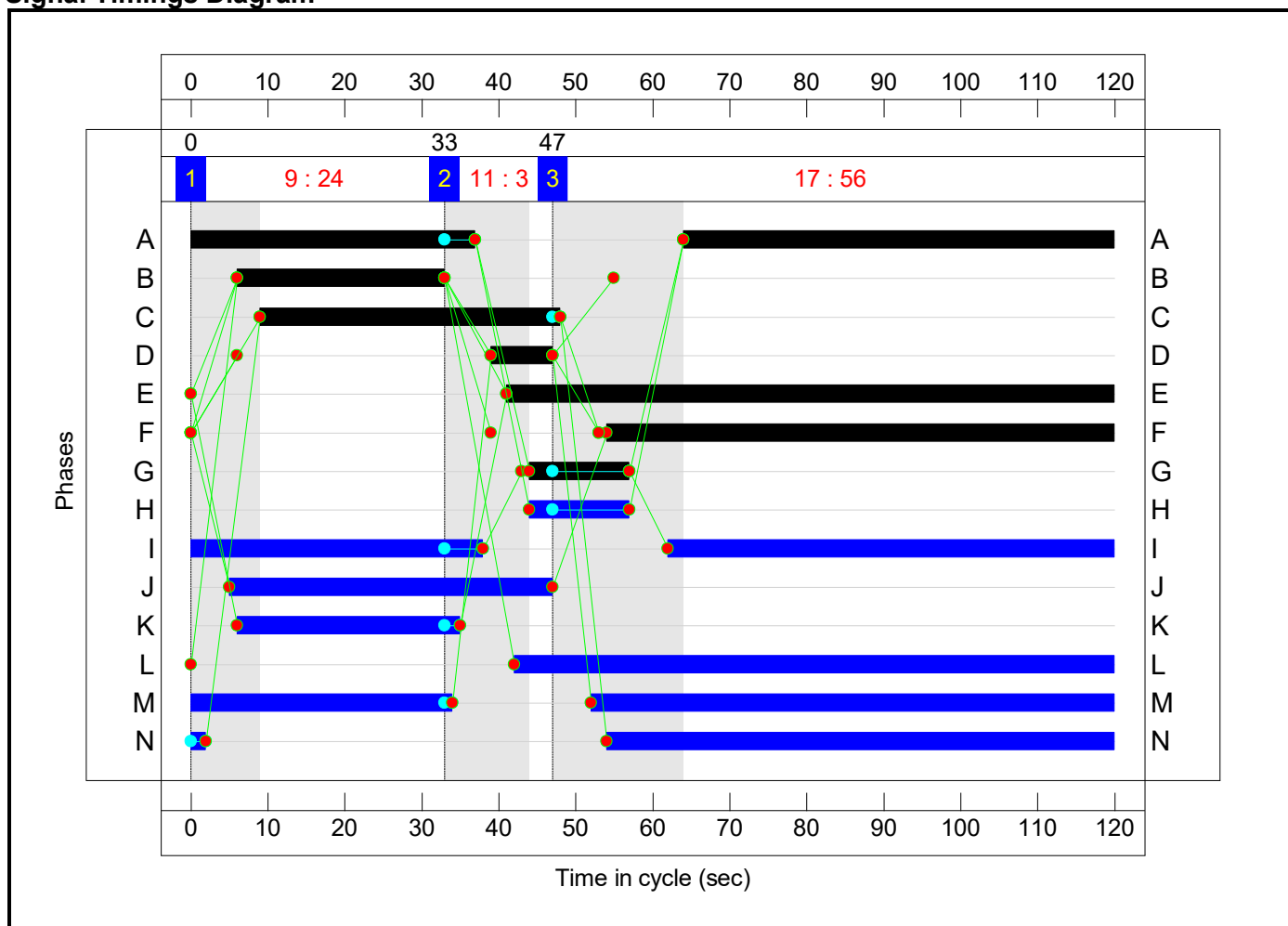
Stage Timings

Stage	1	2	3
Duration	24	3	56
Change Point	0	33	47

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M56 EB to A555 Ringway Road West Ahead	Traffic	93	64	37
B	M56 EB to Outwood Lane Ahead	Traffic	27	6	33
C	Outwood Lane Ahead	Traffic	39	9	48
D	Outwood Lane Right	Traffic	8	39	47
E	A555 Ringway Road West WB Left	Traffic	79	41	0
F	A555 Ringway Road West WB Right	Traffic	66	54	0
G	Outwood Lane to A555 EB Ahead	Traffic	13	44	57
H	Pedestrians across	Pedestrian	13	44	57
I	Pedestrians across	Pedestrian	96	62	38
J	Pedestrians across	Pedestrian	42	5	47
K	Pedestrians across	Pedestrian	29	6	35
L	Pedestrians across	Pedestrian	78	42	0
M	Pedestrians across	Pedestrian	102	52	34
N	Pedestrians across	Pedestrian	68	54	2

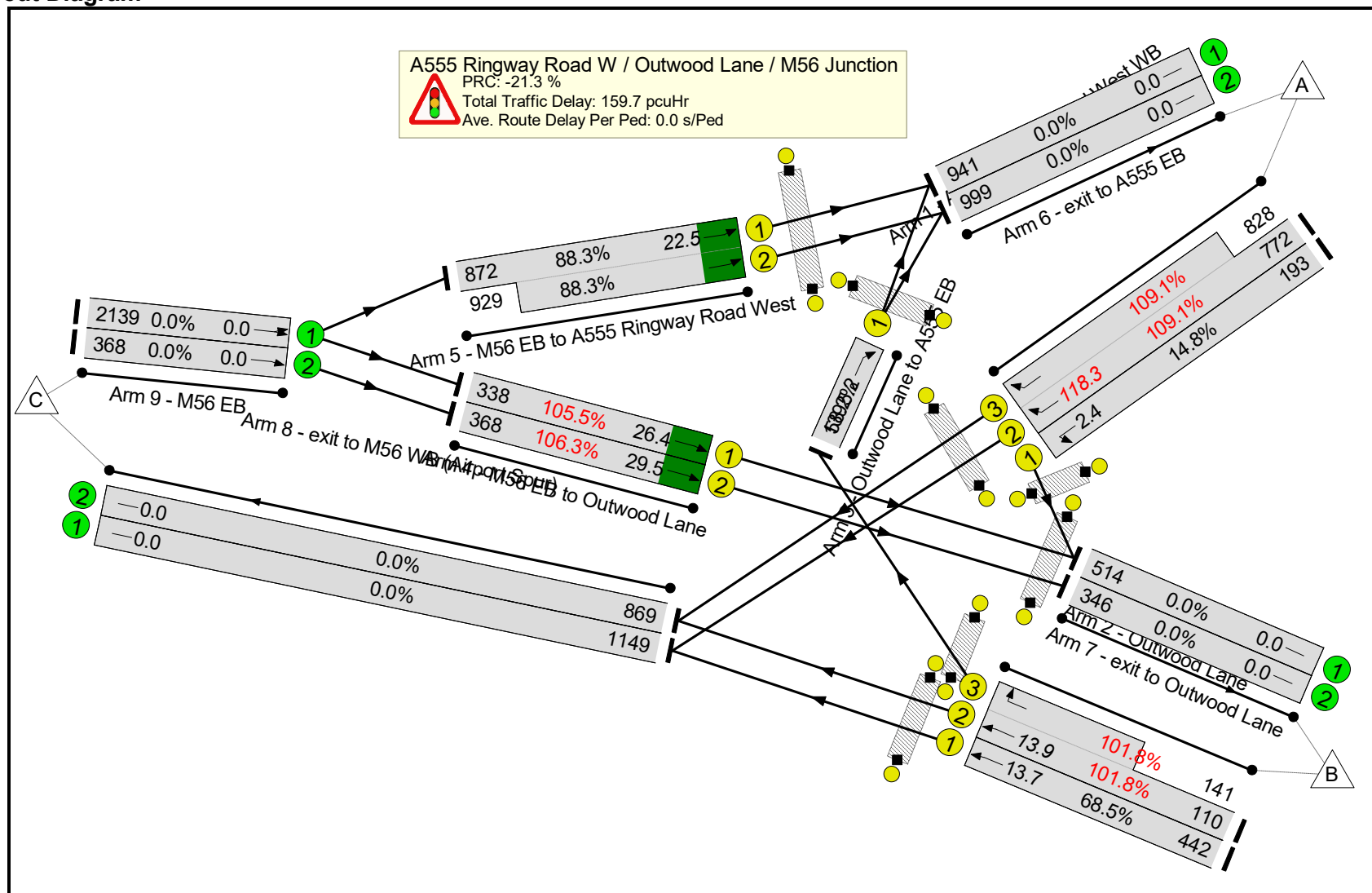
Signal Timings Diagram



Lane Green Times

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction					
Lane	Description	Type	Phases	Start Green	End Green
1/1	A555 Ringway Road West WB Left	U	E	41	0
1/2	A555 Ringway Road West WB Right	U	F	54	0
1/3	A555 Ringway Road West WB Right	U	F	54	0
2/1	Outwood Lane Ahead	U	C	9	48
2/2	Outwood Lane Ahead	U	C	9	48
2/3	Outwood Lane Right	U	D	39	47
3/1	Outwood Lane to A555 EB Ahead	U	G	44	57
4/1	M56 EB to Outwood Lane Ahead	U	B	6	33-8
4/2	M56 EB to Outwood Lane Ahead	U	B	6	33-8
5/1	M56 EB to A555 Ringway Road West Ahead	U	A	64	37-15
5/2	M56 EB to A555 Ringway Road West Ahead	U	A	64	37-15

Detailed Input Data And Results
Network Layout Diagram



Detailed Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M56 / Outwood Lane / A555 Ringway Road West	-	-	N/A	-	-		-	-	-	-	-	-	-	109.1%
A555 Ringway Road W / Outwood Lane / M56 Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	109.1%
1/1	A555 Ringway Road West WB Left	U	N/A	N/A	E		1	79	-	-	193	1952	1301	14.8%
1/2+1/3	A555 Ringway Road West WB Right	U	N/A	N/A	F		1	66	-	-	1600	1720:1738	707+759	109.1 : 109.1%
2/1	Outwood Lane Ahead	U	N/A	N/A	C		1	39	-	-	442	1935	645	68.5%
2/2+2/3	Outwood Lane Right Ahead	U	N/A	N/A	C D		1	39:8	-	-	251	2115:1847	108+139	101.8 : 101.8%
3/1	Outwood Lane to A555 EB Ahead	U	N/A	N/A	G		1	13	-	-	141	2039	238	58.2%
4/1	M56 EB to Outwood Lane Ahead	U	N/A	N/A	B		1	27	-	Y	338	1923	321	105.5%
4/2	M56 EB to Outwood Lane Ahead	U	N/A	N/A	B		1	27	-	Y	368	2077	346	106.3%
5/1+5/2	M56 EB to A555 Ringway Road West Ahead	U	N/A	N/A	A		1	93	-	Y:Y	1801	1975:2105	988+1052	88.3 : 88.3%
6/1	exit to A555 EB	U	N/A	N/A	-		-	-	-	-	942	Inf	Inf	0.0%
6/2	exit to A555 EB	U	N/A	N/A	-		-	-	-	-	1000	Inf	Inf	0.0%
7/1	exit to Outwood Lane	U	N/A	N/A	-		-	-	-	-	531	Inf	Inf	0.0%

Detailed Input Data And Results

7/2	exit to Outwood Lane	U	N/A	N/A	-		-	-	-	-	368	Inf	Inf	0.0%
8/1	exit to M56 WB (Airport Spur)	U	N/A	N/A	-		-	-	-	-	1214	Inf	Inf	0.0%
8/2	exit to M56 WB (Airport Spur)	U	N/A	N/A	-		-	-	-	-	938	Inf	Inf	0.0%
9/1	M56 EB Ahead Ahead2	U	N/A	N/A	-		-	-	-	-	2139	Inf	Inf	0.0%
9/2	M56 EB Ahead	U	N/A	N/A	-		-	-	-	-	368	Inf	Inf	0.0%
Ped Link: P1	Outwood Lane WB	-	N/A	-	N		1	68	-	-	0	-	0	0.0%
Ped Link: P2	Outwood Lane RT-TN	-	N/A	-	M		1	102	-	-	0	-	0	0.0%
Ped Link: P3	Outwood Lane EB	-	N/A	-	L		1	78	-	-	0	-	0	0.0%
Ped Link: P4	A555 LT-TN	-	N/A	-	K		1	29	-	-	0	-	0	0.0%
Ped Link: P5	A	-	N/A	-	J		1	42	-	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	I		1	96	-	-	0	-	0	0.0%
Ped Link: P7	M56 EB to A555	-	N/A	-	H		1	13	-	-	0	-	0	0.0%

Detailed Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: M56 / Outwood Lane / A555 Ringway Road West	-	-	0	0	0	41.6	118.1	0.0	159.7	-	-	-	-	
A555 Ringway Road W / Outwood Lane / M56 Junction	-	-	0	0	0	41.6	118.1	0.0	159.7	-	-	-	-	
1/1	193	193	-	-	-	0.4	0.1	-	0.5	9.0	2.4	0.1	2.4	
1/2+1/3	1600	1466	-	-	-	15.2	72.4	-	87.6	197.1	45.8	72.4	118.3	
2/1	442	442	-	-	-	4.2	1.1	-	5.3	43.3	12.6	1.1	13.7	
2/2+2/3	251	249	-	-	-	3.2	9.1	-	12.3	175.9	4.8	9.1	13.9	
3/1	139	139	-	-	-	0.1	0.7	-	0.8	19.8	4.6	0.7	5.2	
4/1	338	321	-	-	-	5.8	14.6	-	20.3	216.5	11.9	14.6	26.4	
4/2	368	346	-	-	-	6.5	16.5	-	23.0	224.6	13.0	16.5	29.5	
5/1+5/2	1801	1801	-	-	-	6.3	3.7	-	9.9	19.8	18.8	3.7	22.5	
6/1	941	941	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/2	999	999	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
7/1	514	514	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
7/2	346	346	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/1	1149	1149	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/2	869	869	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/1	2139	2139	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2	368	368	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	

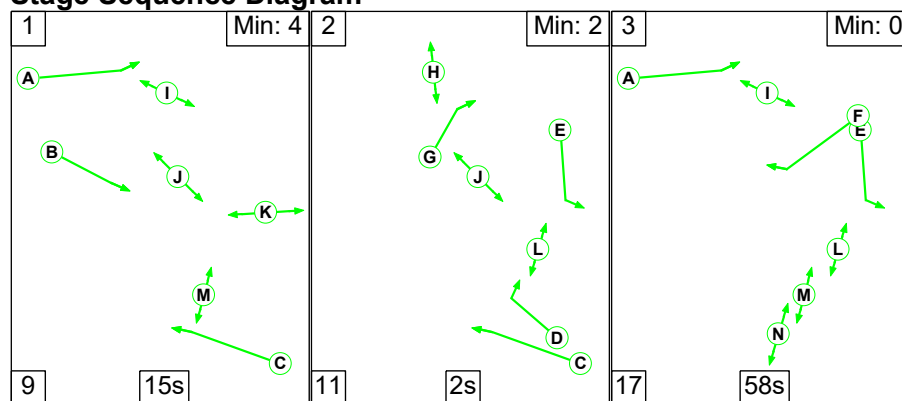
Detailed Input Data And Results

Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P7	0	0	-	-	-	-	-	-	-	-	-	-	-	
C1 PRC for Signalled Lanes (%): -21.3 Total Delay for Signalled Lanes (pcuHr): 159.66 Cycle Time (s): 120 PRC Over All Lanes (%): -21.3 Total Delay Over All Lanes(pcuHr): 159.66														

Detailed Input Data And Results

Scenario 8: '2035 Base PM Peak' (FG8: '2035 Base PM Peak', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

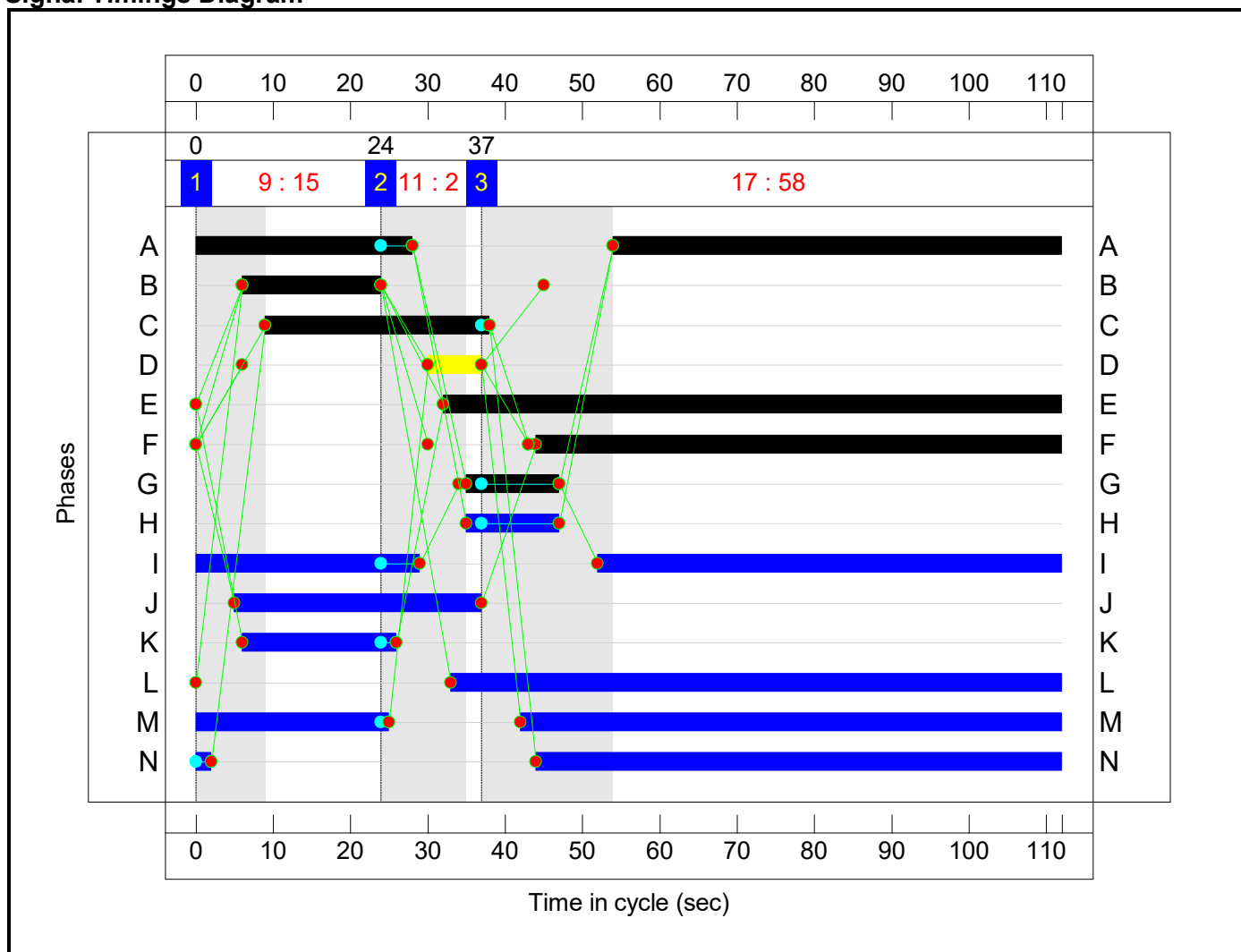


Stage Timings

Stage	1	2	3
Duration	15	2	58
Change Point	0	24	37

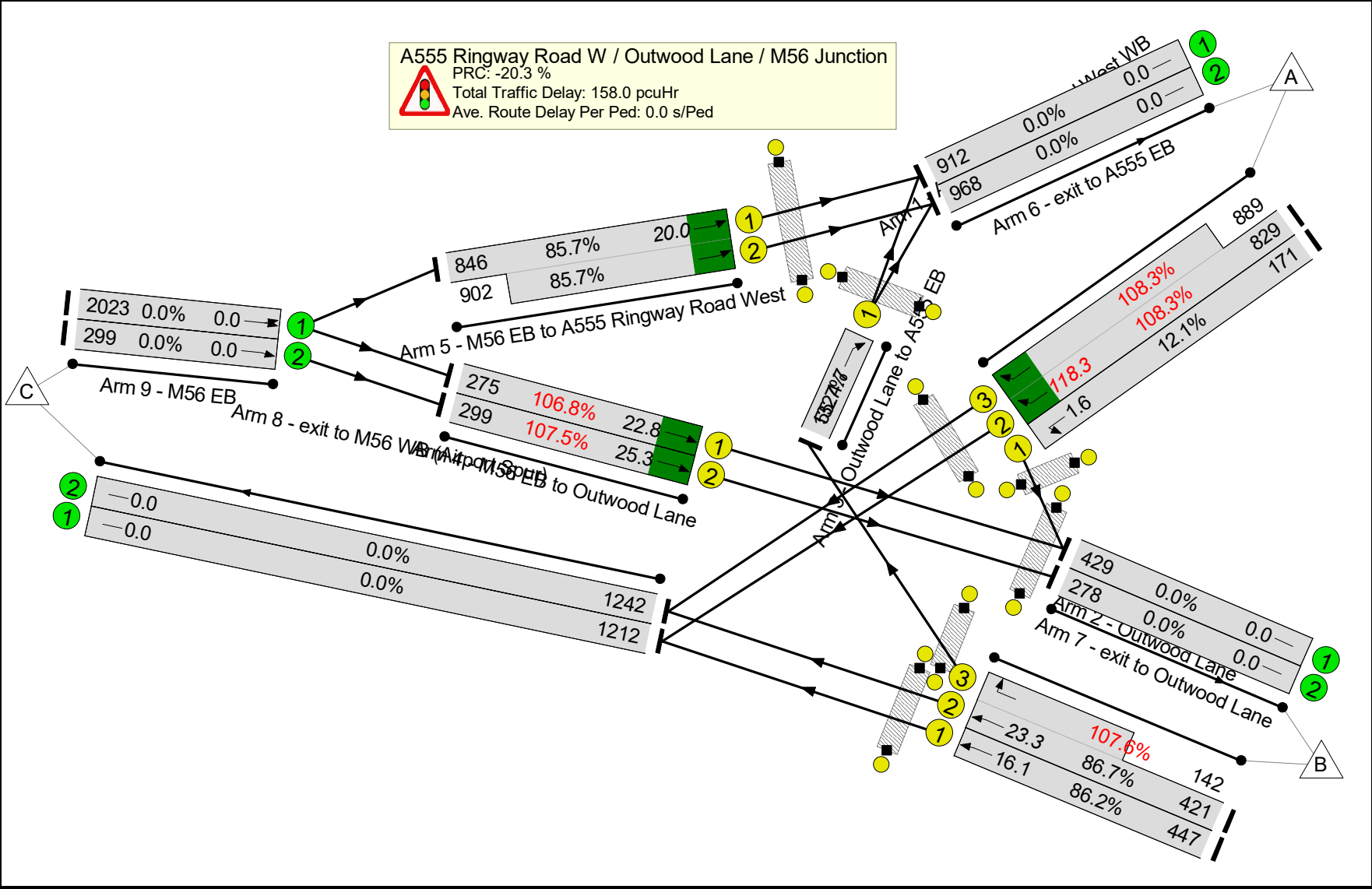
Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M56 EB to A555 Ringway Road West Ahead	Traffic	86	54	28
B	M56 EB to Outwood Lane Ahead	Traffic	18	6	24
C	Outwood Lane Ahead	Traffic	29	9	38
D	Outwood Lane Right	Traffic	7	30	37
E	A555 Ringway Road West WB Left	Traffic	80	32	0
F	A555 Ringway Road West WB Right	Traffic	68	44	0
G	Outwood Lane to A555 EB Ahead	Traffic	12	35	47
H	Pedestrians across	Pedestrian	12	35	47
I	Pedestrians across	Pedestrian	89	52	29
J	Pedestrians across	Pedestrian	32	5	37
K	Pedestrians across	Pedestrian	20	6	26
L	Pedestrians across	Pedestrian	79	33	0
M	Pedestrians across	Pedestrian	95	42	25
N	Pedestrians across	Pedestrian	70	44	2

Signal Timings Diagram**Lane Green Times**

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction					
Lane	Description	Type	Phases	Start Green	End Green
1/1	A555 Ringway Road West WB Left	U	E	32	0
1/2	A555 Ringway Road West WB Right	U	F	44	0-1
1/3	A555 Ringway Road West WB Right	U	F	44	0-1
2/1	Outwood Lane Ahead	U	C	9	38
2/2	Outwood Lane Ahead	U	C	9	38
2/3	Outwood Lane Right	U	D	30	37
3/1	Outwood Lane to A555 EB Ahead	U	G	35	47
4/1	M56 EB to Outwood Lane Ahead	U	B	6	24-4
4/2	M56 EB to Outwood Lane Ahead	U	B	6	24-4
5/1	M56 EB to A555 Ringway Road West Ahead	U	A	54	28-14
5/2	M56 EB to A555 Ringway Road West Ahead	U	A	54	28-14

Detailed Input Data And Results
Network Layout Diagram



Detailed Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M56 / Outwood Lane / A555 Ringway Road West	-	-	N/A	-	-		-	-	-	-	-	-	-	108.3%
A555 Ringway Road W / Outwood Lane / M56 Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	108.3%
1/1	A555 Ringway Road West WB Left	U	N/A	N/A	E		1	80	-	-	171	1952	1412	12.1%
1/2+1/3	A555 Ringway Road West WB Right	U	N/A	N/A	F		1	68	-	Y:Y	1718	1720:1738	765+821	108.3 : 108.3%
2/1	Outwood Lane Ahead	U	N/A	N/A	C		1	29	-	-	447	1935	518	86.2%
2/2+2/3	Outwood Lane Right Ahead	U	N/A	N/A	C D		1	29:7	-	-	563	2115:1847	486+132	86.7 : 107.6%
3/1	Outwood Lane to A555 EB Ahead	U	N/A	N/A	G		1	12	-	-	142	2039	237	55.7%
4/1	M56 EB to Outwood Lane Ahead	U	N/A	N/A	B		1	18	-	Y	275	1923	258	106.8%
4/2	M56 EB to Outwood Lane Ahead	U	N/A	N/A	B		1	18	-	Y	299	2077	278	107.5%
5/1+5/2	M56 EB to A555 Ringway Road West Ahead	U	N/A	N/A	A		1	86	-	Y:Y	1748	1975:2105	987+1053	85.7 : 85.7%
6/1	exit to A555 EB	U	N/A	N/A	-		-	-	-	-	917	Inf	Inf	0.0%
6/2	exit to A555 EB	U	N/A	N/A	-		-	-	-	-	973	Inf	Inf	0.0%
7/1	exit to Outwood Lane	U	N/A	N/A	-		-	-	-	-	446	Inf	Inf	0.0%

Detailed Input Data And Results

7/2	exit to Outwood Lane	U	N/A	N/A	-		-	-	-	-	299	Inf	Inf	0.0%
8/1	exit to M56 WB (Airport Spur)	U	N/A	N/A	-		-	-	-	-	1276	Inf	Inf	0.0%
8/2	exit to M56 WB (Airport Spur)	U	N/A	N/A	-		-	-	-	-	1310	Inf	Inf	0.0%
9/1	M56 EB Ahead Ahead2	U	N/A	N/A	-		-	-	-	-	2023	Inf	Inf	0.0%
9/2	M56 EB Ahead	U	N/A	N/A	-		-	-	-	-	299	Inf	Inf	0.0%
Ped Link: P1	Outwood Lane WB	-	N/A	-	N		1	70	-	-	0	-	0	0.0%
Ped Link: P2	Outwood Lane RT-TN	-	N/A	-	M		1	95	-	-	0	-	0	0.0%
Ped Link: P3	Outwood Lane EB	-	N/A	-	L		1	79	-	-	0	-	0	0.0%
Ped Link: P4	A555 LT-TN	-	N/A	-	K		1	20	-	-	0	-	0	0.0%
Ped Link: P5	A	-	N/A	-	J		1	32	-	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	I		1	89	-	-	0	-	0	0.0%
Ped Link: P7	M56 EB to A555	-	N/A	-	H		1	12	-	-	0	-	0	0.0%

Detailed Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: M56 / Outwood Lane / A555 Ringway Road West	-	-	0	0	0	41.2	116.8	0.0	158.0	-	-	-	-	
A555 Ringway Road W / Outwood Lane / M56 Junction	-	-	0	0	0	41.2	116.8	0.0	158.0	-	-	-	-	
1/1	171	171	-	-	-	0.2	0.1	-	0.3	6.2	1.6	0.1	1.6	
1/2+1/3	1718	1586	-	-	-	13.3	71.8	-	85.1	178.3	46.5	71.8	118.3	
2/1	447	447	-	-	-	4.8	2.9	-	7.7	62.4	13.2	2.9	16.1	
2/2+2/3	563	553	-	-	-	7.0	9.5	-	16.5	105.3	13.8	9.5	23.3	
3/1	132	132	-	-	-	0.1	0.6	-	0.7	18.9	4.0	0.6	4.7	
4/1	275	258	-	-	-	4.7	13.7	-	18.5	241.6	9.1	13.7	22.8	
4/2	299	278	-	-	-	5.2	15.3	-	20.5	247.3	10.0	15.3	25.3	
5/1+5/2	1748	1748	-	-	-	5.8	2.9	-	8.7	17.9	17.0	2.9	20.0	
6/1	912	912	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/2	968	968	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
7/1	429	429	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
7/2	278	278	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/1	1212	1212	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/2	1242	1242	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/1	2023	2023	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2	299	299	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	

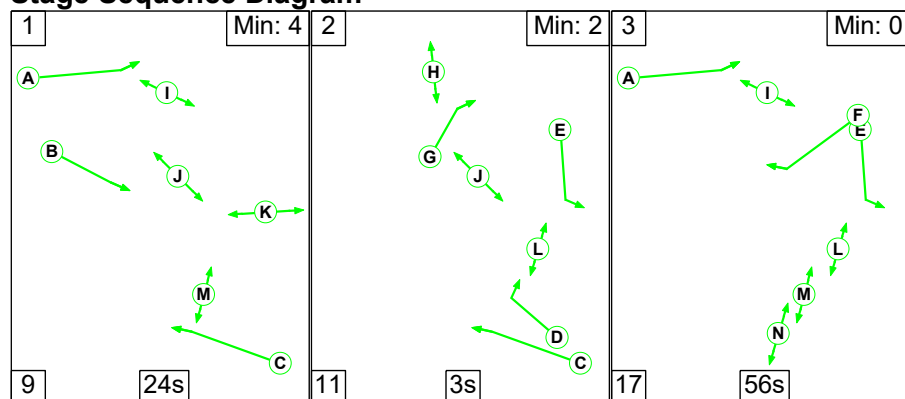
Detailed Input Data And Results

Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P7	0	0	-	-	-	-	-	-	-	-	-	-	-	
C1 PRC for Signalled Lanes (%): -20.3 Total Delay for Signalled Lanes (pcuHr): 157.98 Cycle Time (s): 112 PRC Over All Lanes (%): -20.3 Total Delay Over All Lanes(pcuHr): 157.98														

Detailed Input Data And Results

Scenario 9: '2035 Base +Option 5 B2 Dev AM Peak' (FG9: '2035 Base + Option 5 B2 Dev AM Peak', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



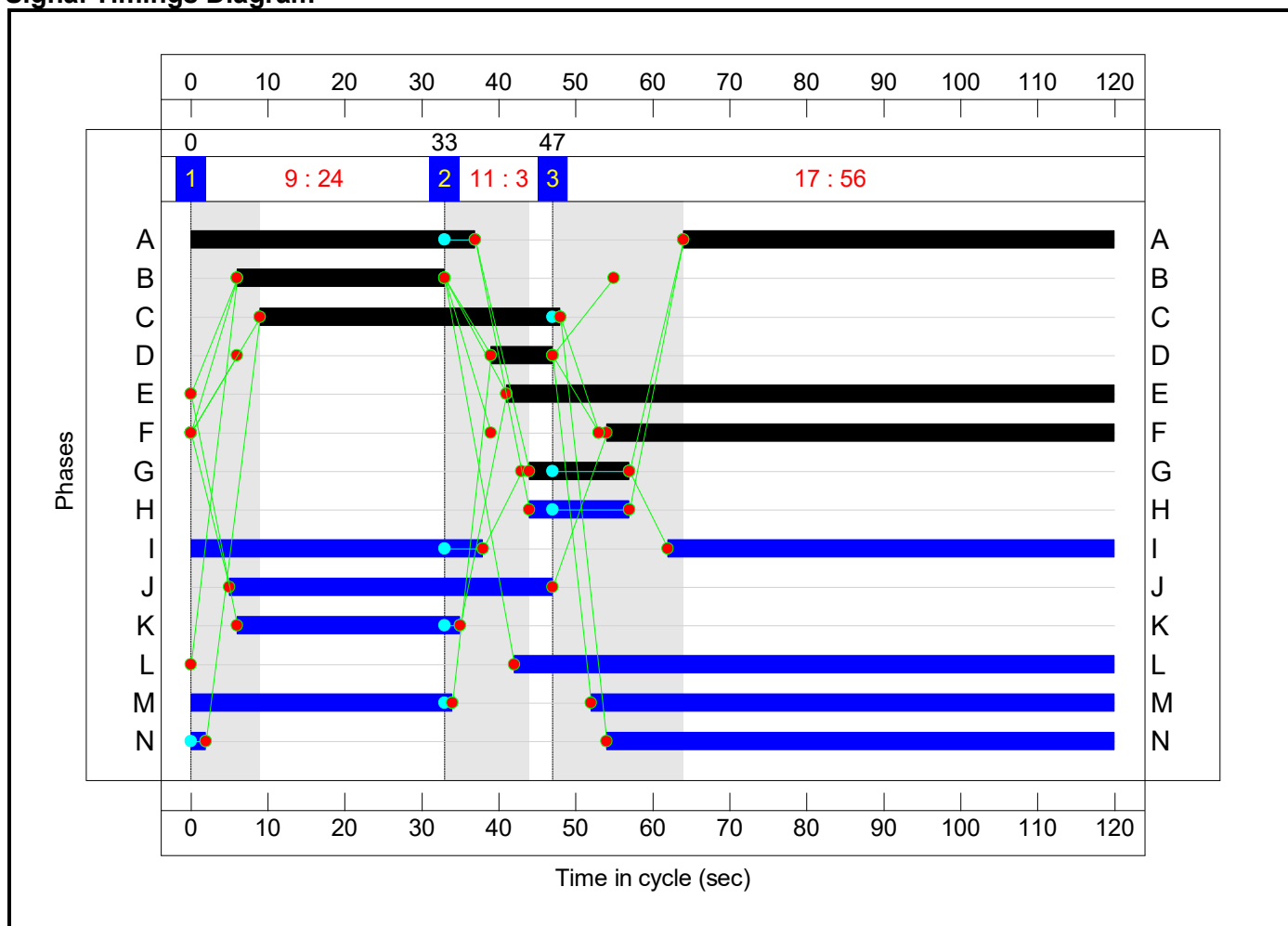
Stage Timings

Stage	1	2	3
Duration	24	3	56
Change Point	0	33	47

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M56 EB to A555 Ringway Road West Ahead	Traffic	93	64	37
B	M56 EB to Outwood Lane Ahead	Traffic	27	6	33
C	Outwood Lane Ahead	Traffic	39	9	48
D	Outwood Lane Right	Traffic	8	39	47
E	A555 Ringway Road West WB Left	Traffic	79	41	0
F	A555 Ringway Road West WB Right	Traffic	66	54	0
G	Outwood Lane to A555 EB Ahead	Traffic	13	44	57
H	Pedestrians across	Pedestrian	13	44	57
I	Pedestrians across	Pedestrian	96	62	38
J	Pedestrians across	Pedestrian	42	5	47
K	Pedestrians across	Pedestrian	29	6	35
L	Pedestrians across	Pedestrian	78	42	0
M	Pedestrians across	Pedestrian	102	52	34
N	Pedestrians across	Pedestrian	68	54	2

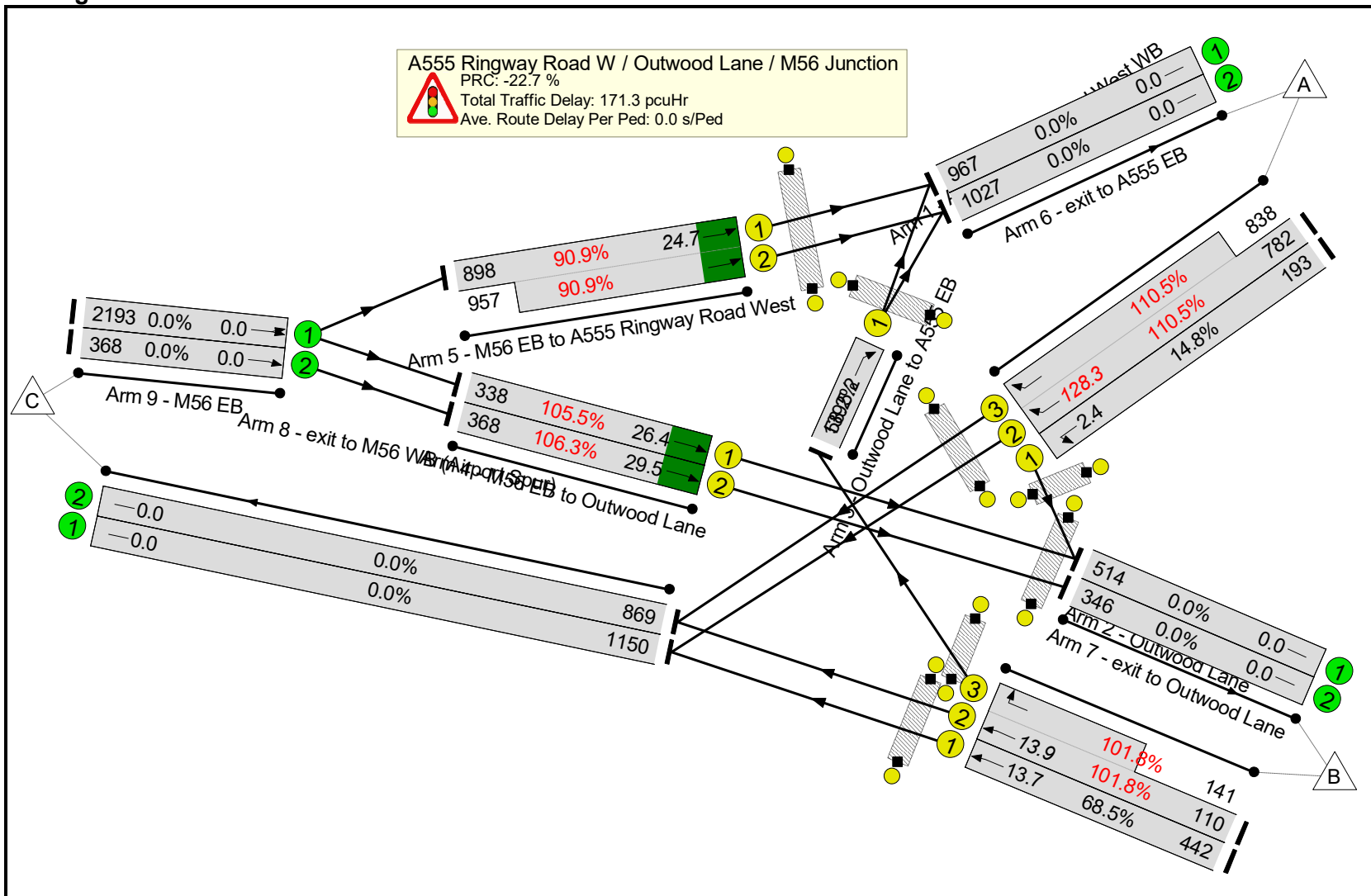
Signal Timings Diagram



Lane Green Times

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction					
Lane	Description	Type	Phases	Start Green	End Green
1/1	A555 Ringway Road West WB Left	U	E	41	0
1/2	A555 Ringway Road West WB Right	U	F	54	0
1/3	A555 Ringway Road West WB Right	U	F	54	0
2/1	Outwood Lane Ahead	U	C	9	48
2/2	Outwood Lane Ahead	U	C	9	48
2/3	Outwood Lane Right	U	D	39	47
3/1	Outwood Lane to A555 EB Ahead	U	G	44	57
4/1	M56 EB to Outwood Lane Ahead	U	B	6	33-8
4/2	M56 EB to Outwood Lane Ahead	U	B	6	33-8
5/1	M56 EB to A555 Ringway Road West Ahead	U	A	64	37-15
5/2	M56 EB to A555 Ringway Road West Ahead	U	A	64	37-15

Detailed Input Data And Results
Network Layout Diagram



Detailed Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M56 / Outwood Lane / A555 Ringway Road West	-	-	N/A	-	-		-	-	-	-	-	-	-	110.5%
A555 Ringway Road W / Outwood Lane / M56 Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	110.5%
1/1	A555 Ringway Road West WB Left	U	N/A	N/A	E		1	79	-	-	193	1952	1301	14.8%
1/2+1/3	A555 Ringway Road West WB Right	U	N/A	N/A	F		1	66	-	-	1620	1720:1738	708+759	110.5 : 110.5%
2/1	Outwood Lane Ahead	U	N/A	N/A	C		1	39	-	-	442	1935	645	68.5%
2/2+2/3	Outwood Lane Right Ahead	U	N/A	N/A	C D		1	39:8	-	-	251	2115:1847	108+139	101.8 : 101.8%
3/1	Outwood Lane to A555 EB Ahead	U	N/A	N/A	G		1	13	-	-	141	2039	238	58.2%
4/1	M56 EB to Outwood Lane Ahead	U	N/A	N/A	B		1	27	-	Y	338	1923	321	105.5%
4/2	M56 EB to Outwood Lane Ahead	U	N/A	N/A	B		1	27	-	Y	368	2077	346	106.3%
5/1+5/2	M56 EB to A555 Ringway Road West Ahead	U	N/A	N/A	A		1	93	-	Y:Y	1855	1975:2105	988+1052	90.9 : 90.9%
6/1	exit to A555 EB	U	N/A	N/A	-		-	-	-	-	968	Inf	Inf	0.0%
6/2	exit to A555 EB	U	N/A	N/A	-		-	-	-	-	1028	Inf	Inf	0.0%
7/1	exit to Outwood Lane	U	N/A	N/A	-		-	-	-	-	531	Inf	Inf	0.0%

Detailed Input Data And Results

7/2	exit to Outwood Lane	U	N/A	N/A	-		-	-	-	-	368	Inf	Inf	0.0%
8/1	exit to M56 WB (Airport Spur)	U	N/A	N/A	-		-	-	-	-	1224	Inf	Inf	0.0%
8/2	exit to M56 WB (Airport Spur)	U	N/A	N/A	-		-	-	-	-	948	Inf	Inf	0.0%
9/1	M56 EB Ahead Ahead2	U	N/A	N/A	-		-	-	-	-	2193	Inf	Inf	0.0%
9/2	M56 EB Ahead	U	N/A	N/A	-		-	-	-	-	368	Inf	Inf	0.0%
Ped Link: P1	Outwood Lane WB	-	N/A	-	N		1	68	-	-	0	-	0	0.0%
Ped Link: P2	Outwood Lane RT-TN	-	N/A	-	M		1	102	-	-	0	-	0	0.0%
Ped Link: P3	Outwood Lane EB	-	N/A	-	L		1	78	-	-	0	-	0	0.0%
Ped Link: P4	A555 LT-TN	-	N/A	-	K		1	29	-	-	0	-	0	0.0%
Ped Link: P5	A	-	N/A	-	J		1	42	-	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	I		1	96	-	-	0	-	0	0.0%
Ped Link: P7	M56 EB to A555	-	N/A	-	H		1	13	-	-	0	-	0	0.0%

Detailed Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: M56 / Outwood Lane / A555 Ringway Road West	-	-	0	0	0	42.9	128.4	0.0	171.3	-	-	-	-	
A555 Ringway Road W / Outwood Lane / M56 Junction	-	-	0	0	0	42.9	128.4	0.0	171.3	-	-	-	-	
1/1	193	193	-	-	-	0.4	0.1	-	0.5	9.0	2.4	0.1	2.4	
1/2+1/3	1620	1467	-	-	-	16.1	81.7	-	97.8	217.4	46.7	81.7	128.3	
2/1	442	442	-	-	-	4.2	1.1	-	5.3	43.3	12.6	1.1	13.7	
2/2+2/3	251	249	-	-	-	3.2	9.1	-	12.3	175.9	4.8	9.1	13.9	
3/1	139	139	-	-	-	0.1	0.7	-	0.8	19.8	4.6	0.7	5.2	
4/1	338	321	-	-	-	5.8	14.6	-	20.3	216.5	11.9	14.6	26.4	
4/2	368	346	-	-	-	6.5	16.5	-	23.0	224.6	13.0	16.5	29.5	
5/1+5/2	1855	1855	-	-	-	6.6	4.8	-	11.4	22.1	19.9	4.8	24.7	
6/1	967	967	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/2	1027	1027	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
7/1	514	514	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
7/2	346	346	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/1	1150	1150	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/2	869	869	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/1	2193	2193	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2	368	368	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	

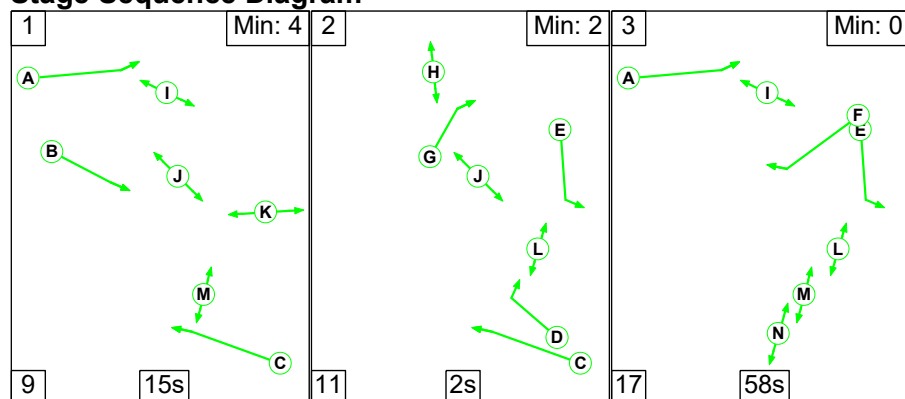
Detailed Input Data And Results

Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P7	0	0	-	-	-	-	-	-	-	-	-	-	-	
C1 PRC for Signalled Lanes (%): -22.7 Total Delay for Signalled Lanes (pcuHr): 171.31 Cycle Time (s): 120 PRC Over All Lanes (%): -22.7 Total Delay Over All Lanes(pcuHr): 171.31														

Detailed Input Data And Results

Scenario 10: '2035 Base +Option 5 B2 Dev PM Peak' (FG10: '2035 Base + Option 5 B2 Dev PM Peak', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



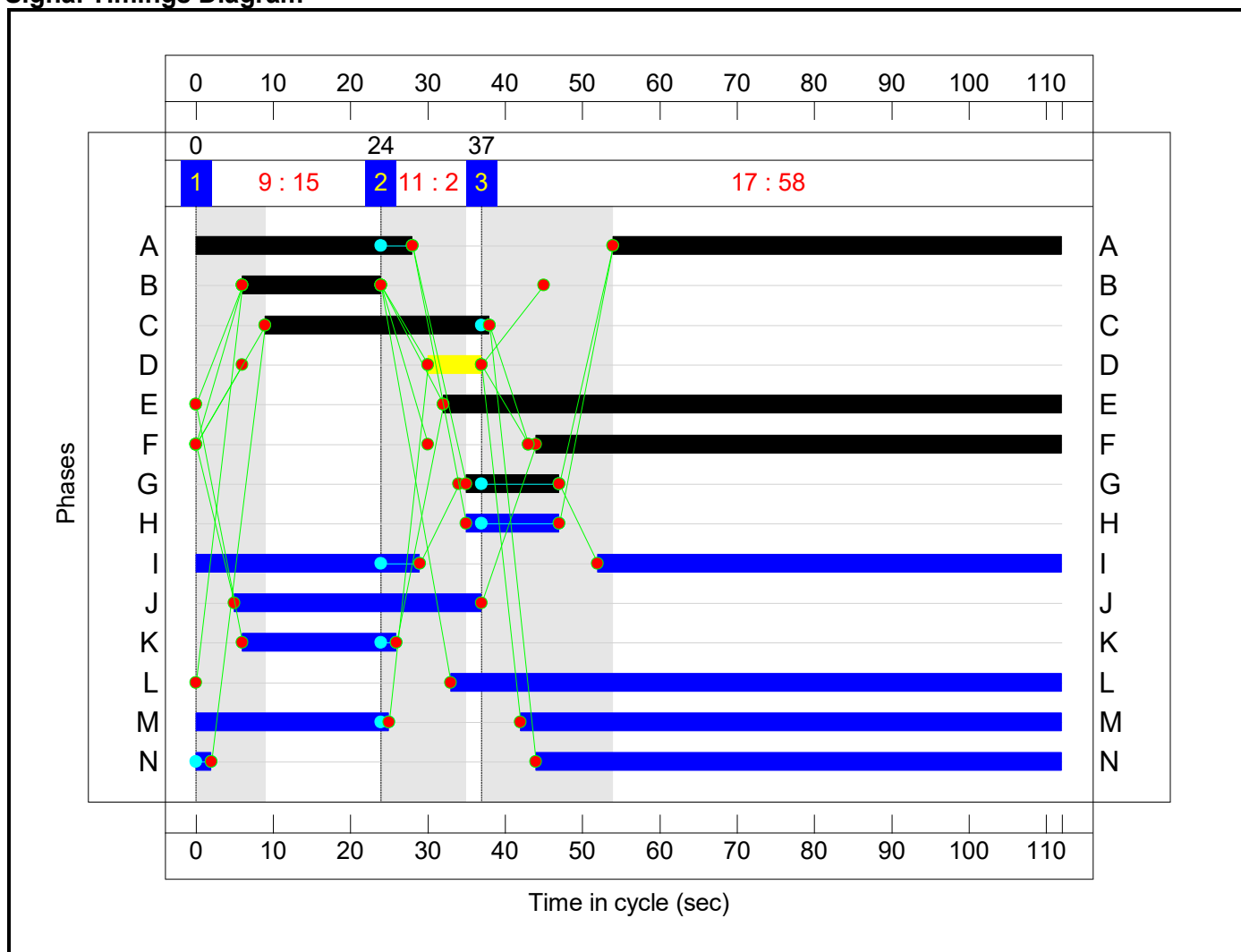
Stage Timings

Stage	1	2	3
Duration	15	2	58
Change Point	0	24	37

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	M56 EB to A555 Ringway Road West Ahead	Traffic	86	54	28
B	M56 EB to Outwood Lane Ahead	Traffic	18	6	24
C	Outwood Lane Ahead	Traffic	29	9	38
D	Outwood Lane Right	Traffic	7	30	37
E	A555 Ringway Road West WB Left	Traffic	80	32	0
F	A555 Ringway Road West WB Right	Traffic	68	44	0
G	Outwood Lane to A555 EB Ahead	Traffic	12	35	47
H	Pedestrians across	Pedestrian	12	35	47
I	Pedestrians across	Pedestrian	89	52	29
J	Pedestrians across	Pedestrian	32	5	37
K	Pedestrians across	Pedestrian	20	6	26
L	Pedestrians across	Pedestrian	79	33	0
M	Pedestrians across	Pedestrian	95	42	25
N	Pedestrians across	Pedestrian	70	44	2

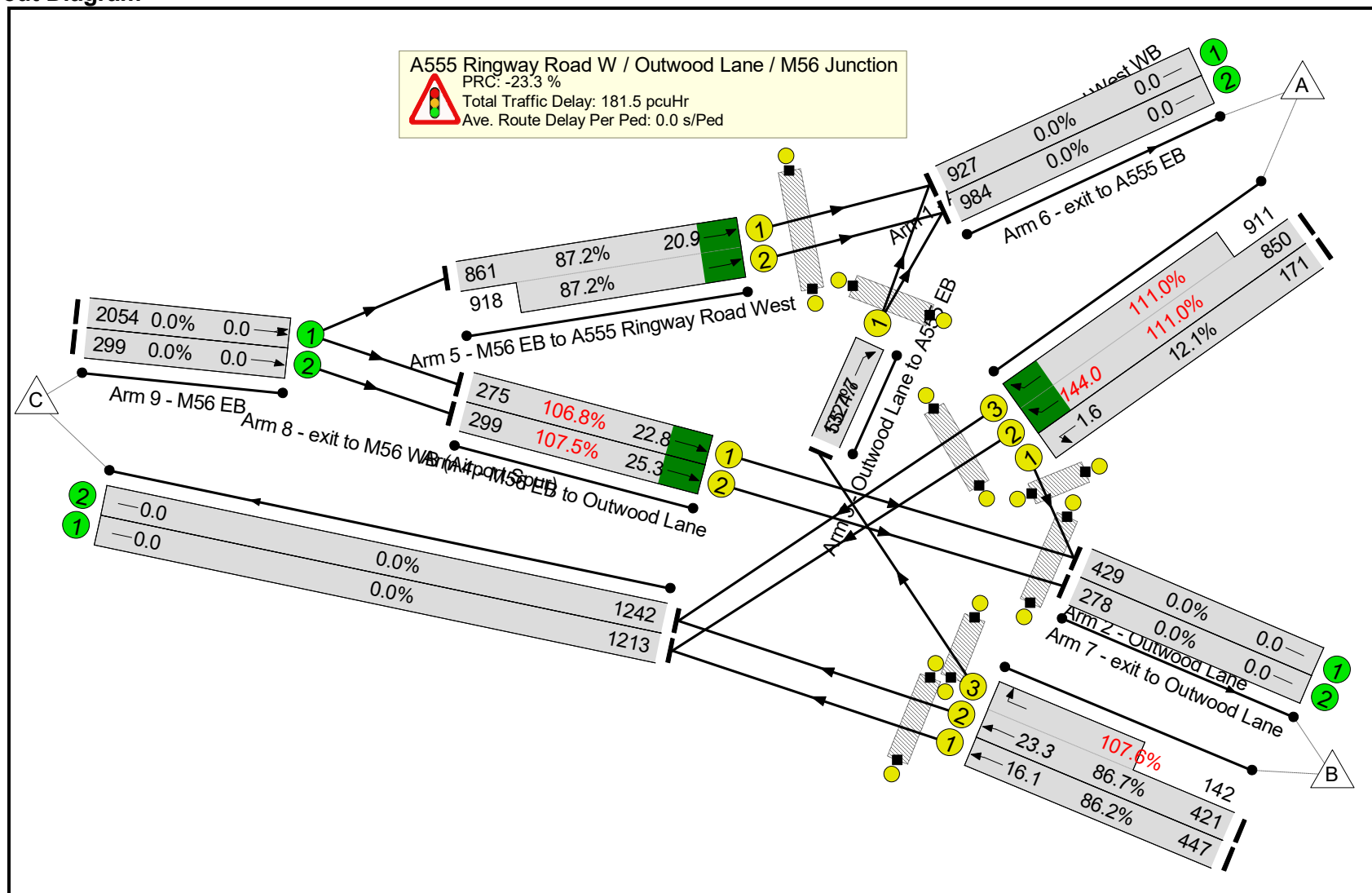
Signal Timings Diagram



Lane Green Times

Junction: A555 Ringway Road W / Outwood Lane / M56 Junction					
Lane	Description	Type	Phases	Start Green	End Green
1/1	A555 Ringway Road West WB Left	U	E	32	0
1/2	A555 Ringway Road West WB Right	U	F	44	0-1
1/3	A555 Ringway Road West WB Right	U	F	44	0-1
2/1	Outwood Lane Ahead	U	C	9	38
2/2	Outwood Lane Ahead	U	C	9	38
2/3	Outwood Lane Right	U	D	30	37
3/1	Outwood Lane to A555 EB Ahead	U	G	35	47
4/1	M56 EB to Outwood Lane Ahead	U	B	6	24-4
4/2	M56 EB to Outwood Lane Ahead	U	B	6	24-4
5/1	M56 EB to A555 Ringway Road West Ahead	U	A	54	28-14
5/2	M56 EB to A555 Ringway Road West Ahead	U	A	54	28-14

Detailed Input Data And Results
Network Layout Diagram



Detailed Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: M56 / Outwood Lane / A555 Ringway Road West	-	-	N/A	-	-		-	-	-	-	-	-	-	111.0%
A555 Ringway Road W / Outwood Lane / M56 Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	111.0%
1/1	A555 Ringway Road West WB Left	U	N/A	N/A	E		1	80	-	-	171	1952	1412	12.1%
1/2+1/3	A555 Ringway Road West WB Right	U	N/A	N/A	F		1	68	-	Y:Y	1761	1720:1738	766+821	111.0 : 111.0%
2/1	Outwood Lane Ahead	U	N/A	N/A	C		1	29	-	-	447	1935	518	86.2%
2/2+2/3	Outwood Lane Right Ahead	U	N/A	N/A	C D		1	29:7	-	-	563	2115:1847	486+132	86.7 : 107.6%
3/1	Outwood Lane to A555 EB Ahead	U	N/A	N/A	G		1	12	-	-	142	2039	237	55.7%
4/1	M56 EB to Outwood Lane Ahead	U	N/A	N/A	B		1	18	-	Y	275	1923	258	106.8%
4/2	M56 EB to Outwood Lane Ahead	U	N/A	N/A	B		1	18	-	Y	299	2077	278	107.5%
5/1+5/2	M56 EB to A555 Ringway Road West Ahead	U	N/A	N/A	A		1	86	-	Y:Y	1779	1975:2105	987+1053	87.2 : 87.2%
6/1	exit to A555 EB	U	N/A	N/A	-		-	-	-	-	932	Inf	Inf	0.0%
6/2	exit to A555 EB	U	N/A	N/A	-		-	-	-	-	989	Inf	Inf	0.0%
7/1	exit to Outwood Lane	U	N/A	N/A	-		-	-	-	-	446	Inf	Inf	0.0%

Detailed Input Data And Results

7/2	exit to Outwood Lane	U	N/A	N/A	-		-	-	-	-	299	Inf	Inf	0.0%
8/1	exit to M56 WB (Airport Spur)	U	N/A	N/A	-		-	-	-	-	1297	Inf	Inf	0.0%
8/2	exit to M56 WB (Airport Spur)	U	N/A	N/A	-		-	-	-	-	1332	Inf	Inf	0.0%
9/1	M56 EB Ahead Ahead2	U	N/A	N/A	-		-	-	-	-	2054	Inf	Inf	0.0%
9/2	M56 EB Ahead	U	N/A	N/A	-		-	-	-	-	299	Inf	Inf	0.0%
Ped Link: P1	Outwood Lane WB	-	N/A	-	N		1	70	-	-	0	-	0	0.0%
Ped Link: P2	Outwood Lane RT-TN	-	N/A	-	M		1	95	-	-	0	-	0	0.0%
Ped Link: P3	Outwood Lane EB	-	N/A	-	L		1	79	-	-	0	-	0	0.0%
Ped Link: P4	A555 LT-TN	-	N/A	-	K		1	20	-	-	0	-	0	0.0%
Ped Link: P5	A	-	N/A	-	J		1	32	-	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	I		1	89	-	-	0	-	0	0.0%
Ped Link: P7	M56 EB to A555	-	N/A	-	H		1	12	-	-	0	-	0	0.0%

Detailed Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: M56 / Outwood Lane / A555 Ringway Road West	-	-	0	0	0	44.2	137.4	0.0	181.5	-	-	-	-	
A555 Ringway Road W / Outwood Lane / M56 Junction	-	-	0	0	0	44.2	137.4	0.0	181.5	-	-	-	-	
1/1	171	171	-	-	-	0.2	0.1	-	0.3	6.2	1.6	0.1	1.6	
1/2+1/3	1761	1587	-	-	-	16.1	91.9	-	108.1	220.9	52.1	91.9	144.0	
2/1	447	447	-	-	-	4.8	2.9	-	7.7	62.4	13.2	2.9	16.1	
2/2+2/3	563	553	-	-	-	7.0	9.5	-	16.5	105.3	13.8	9.5	23.3	
3/1	132	132	-	-	-	0.1	0.6	-	0.7	18.9	4.0	0.6	4.7	
4/1	275	258	-	-	-	4.7	13.7	-	18.5	241.6	9.1	13.7	22.8	
4/2	299	278	-	-	-	5.2	15.3	-	20.5	247.3	10.0	15.3	25.3	
5/1+5/2	1779	1779	-	-	-	6.0	3.3	-	9.3	18.8	17.6	3.3	20.9	
6/1	927	927	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/2	984	984	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
7/1	429	429	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
7/2	278	278	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/1	1213	1213	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
8/2	1242	1242	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/1	2054	2054	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
9/2	299	299	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	

Detailed Input Data And Results

Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P7	0	0	-	-	-	-	-	-	-	-	-	-	-	
C1 PRC for Signalled Lanes (%): -23.3 Total Delay for Signalled Lanes (pcuHr): 181.52 Cycle Time (s): 112 PRC Over All Lanes (%): -23.3 Total Delay Over All Lanes(pcuHr): 181.52														

C. Appendix C – Revised LinSig Modelling Output for A555 / Enterprise Way Junction

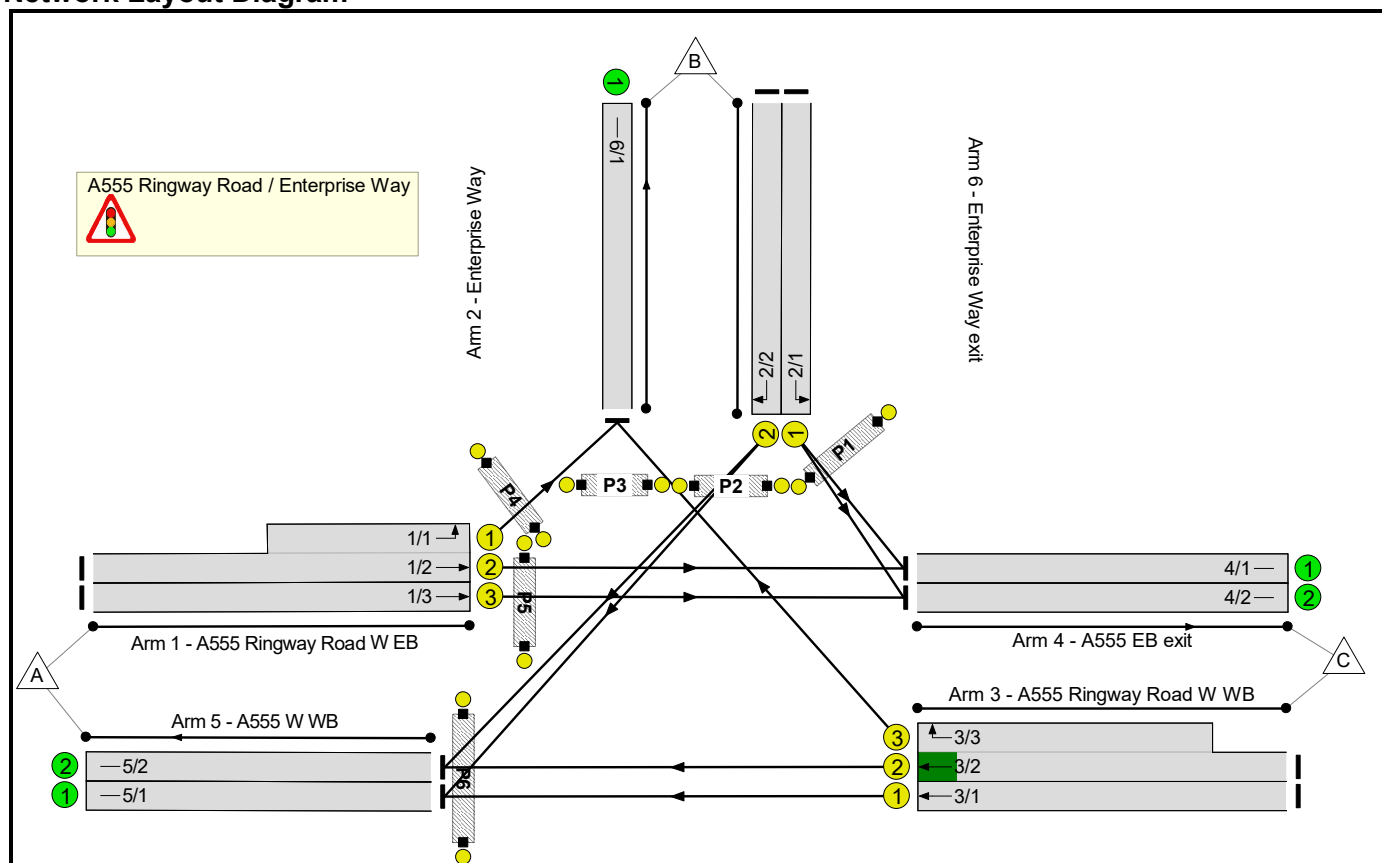
Detailed Input Data And Results

Detailed Input Data And Results

User and Project Details

Project:	WIE21347 Aviator Way
Title:	A555 Ringway Road West / Enterprise Way Junction
Location:	
Site Ref(s):	J2
Date Completed:	March 2026
Model Purpose:	For Manchester Business Park, Aviator Way, TA
Additional detail:	Addresses comments from WSP on behalf of National Highways
File name:	J2) A555_Enterprise Way v3 (post NH comments).lsg3x
Author:	CSMS4
Company:	WIE
Address:	
Linsig Version:	3, 3, 1, 0

Network Layout Diagram

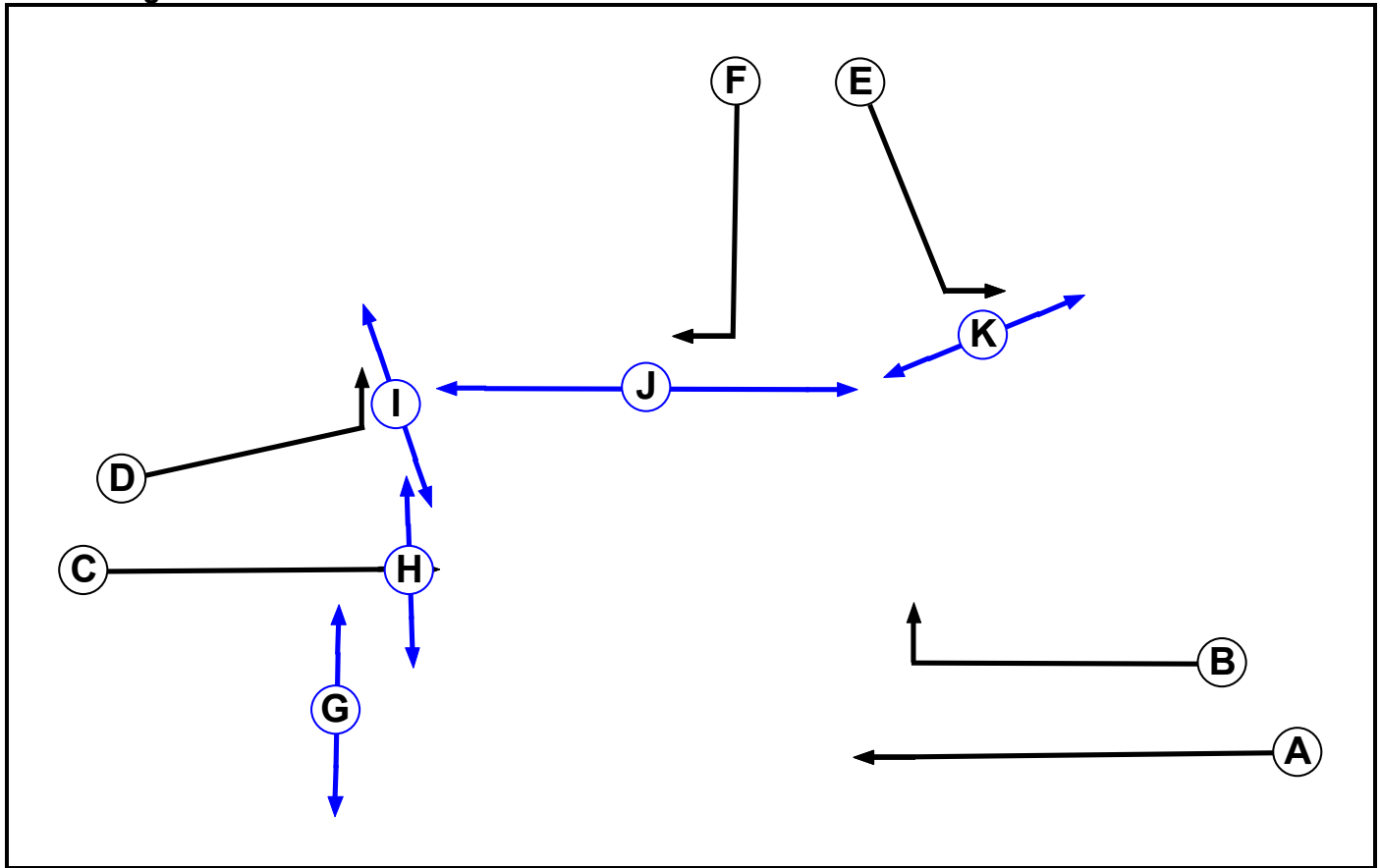


Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	2025 Observed AM Peak	2025 AM Peak	Network Control Plan 1	07:45 - 08:45	120	-9.2	48.17
2	2025 Observed PM Peak	2025 PM Peak	Network Control Plan 1	15:45 - 16:45	120	-12.9	58.00
3	2030 Base AM Peak	2030 Base AM Peak	Network Control Plan 1	07:45 - 08:45	120	-14.2	64.61
4	2030 Base PM Peak	2030 Base PM Peak	Network Control Plan 1	15:45 - 16:45	120	-14.8	70.43
5	2030 Base + Option 5 B2 Dev AM Peak	2030 Base + Option 5 B2 Dev AM Peak	Network Control Plan 1	07:45 - 08:45	120	-13.9	65.05
6	2030 Base + Option 5 B2 Dev PM Peak	2030 Base + Option 5 B2 Dev PM Peak	Network Control Plan 1	15:45 - 16:45	120	-17.2	85.58
7	2035 Base AM Peak	2035 Base AM Peak	Network Control Plan 1	07:45 - 08:45	120	-18.1	86.50
8	2035 Base PM Peak	2035 Base PM Peak	Network Control Plan 1	15:45 - 16:45	120	-19.1	93.81
9	2035 Base + Option 5 B2 Dev AM Peak	2035 Base + Option 5 B2 Dev AM Peak	Network Control Plan 1	07:45 - 08:45	120	-17.9	87.40
10	2035 Base + Option 5 B2 Dev PM Peak	2035 Base + Option 5 B2 Dev PM Peak	Network Control Plan 1	15:45 - 16:45	120	-21.5	110.57

Controller Summary

Controller	Type	SCN	Stage Stream	Num Phases	Num Stages	Controls Junctions	Controller Notes
C1	Gen		Stage Stream 1	11	4	A555 Ringway Road / Enterprise Way	

Phase Diagram**Phase Input Data**

Phase Name	Phase Type	Assoc. Phase	Street Min (s)	Cont Min (s)
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Traffic		7	7
F	Traffic		7	7
G	Pedestrian		5	5
H	Pedestrian		5	5
I	Pedestrian		5	2
J	Pedestrian		10	10
K	Pedestrian		5	1

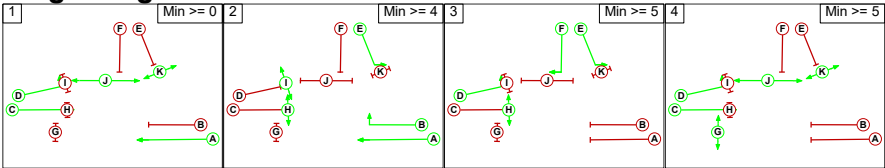
Phase Intergreens Matrix

Terminating Phase	Starting Phase											
		A	B	C	D	E	F	G	H	I	J	K
	A		-	-	-	-	6	9	-	-	-	-
	B	-		6	8	-	5	-	-	-	9	-
	C	-	6		-	9	7	-	6	-	-	-
	D	-	5	-		-	-	-	-	6	-	-
	E	-	-	5	-		-	-	-	-	-	6
	F	8	7	5	-	-		13	-	-	6	-
	G	6	-	-	-	-	4		-	-	-	-
	H	-	-	6	-	-	-	-		-	-	-
	I	-	-	-	5	-	-	-	-		-	-
	J	-	6	-	-	-	5	-	-	-		-
	K	-	-	-	-	5	-	-	-	-	-	

Phases in Stage

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

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	K	Losing	4	4
1	3	A	Losing	1	1
1	3	J	Losing	2	2
1	3	K	Losing	4	4
2	1	E	Losing	1	1
2	1	I	Losing	3	3
2	3	I	Losing	3	3
2	4	E	Losing	1	1
2	4	I	Losing	3	3
3	2	D	Losing	2	2
4	2	K	Losing	4	4
4	3	G	Losing	3	3
4	3	J	Losing	2	2
4	3	K	Losing	4	4

Prohibited Stage Change

		To Stage			
From Stage		1	2	3	4
	1		9	9	9
	2	9		8	9
	3	8	8		13
	4	6	9	9	

Lane Input Data

Junction: A555 Ringway Road / Enterprise Way												
Lane	Lane Type	Phases	Start Disp. (s)	End Disp. (s)	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient (%)	Nearside Lane	Turns	Turning Radius (m)
1/1 (A555 Ringway Road W EB)	U	D	2	3	10.4	Geom	-	4.09	0.00	Y	Arm 6 Left	42.58
1/2 (A555 Ringway Road W EB)	U	C	2	3	60.0	Geom	-	2.75	0.00	Y	Arm 4 Ahead	Inf
1/3 (A555 Ringway Road W EB)	U	C	2	3	60.0	Geom	-	3.79	0.00	N	Arm 4 Ahead	Inf
2/1 (Enterprise Way)	U	E	2	3	60.0	Geom	-	5.00	0.00	Y	Arm 4 Left	33.04
2/2 (Enterprise Way)	U	F	2	3	60.0	Geom	-	3.40	0.00	Y	Arm 5 Right	20.20
3/1 (A555 Ringway Road W WB)	U	A	2	3	60.0	Geom	-	2.52	0.00	Y	Arm 5 Ahead	Inf
3/2 (A555 Ringway Road W WB)	U	A	2	3	60.0	Geom	-	3.54	0.00	N	Arm 5 Ahead	Inf
3/3 (A555 Ringway Road W WB)	U	B	2	3	19.1	Geom	-	2.95	0.00	Y	Arm 6 Right	16.33
4/1 (A555 EB exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
4/2 (A555 EB exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (A555 W WB)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2 (A555 W WB)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Enterprise Way exit)	U		2	3	60.0	Inf	-	-	-	-	-	-

Give-Way Lane Input Data

Junction: A555 Ringway Road / Enterprise Way

There are no Opposed Lanes in this Junction

Detailed Input Data And Results

Lane Connector Input Data

Junction: A555 Ringway Road / Enterprise Way				
Org Lane	Dest Lane	Junction	Modelled Mean Cruise Time (s)	Platoon Dispersion
1/1	6/1	Internal	19	35
1/2	4/1	Internal	19	35
1/3	4/2	Internal	19	35
2/1	4/1	Internal	19	35
2/1	4/2	Internal	19	35
2/2	5/1	Internal	19	35
2/2	5/2	Internal	19	35
3/1	5/1	Internal	19	35
3/2	5/2	Internal	19	35
3/3	6/1	Internal	19	35

Scenario 1: '2025 Observed AM Peak' (FG1: '2025 AM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: A555 Ringway Road / Enterprise Way								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A555 Ringway Road W EB)	4.09	0.00	Y	Arm 6 Left	42.58	100.0 %	1955	1955
1/2 (A555 Ringway Road W EB)	2.75	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1890	1890
1/3 (A555 Ringway Road W EB)	3.79	0.00	N	Arm 4 Ahead	Inf	100.0 %	2134	2134
2/1 (Enterprise Way)	5.00	0.00	Y	Arm 4 Left	33.04	100.0 %	2023	2023
2/2 (Enterprise Way)	3.40	0.00	Y	Arm 5 Right	20.20	100.0 %	1820	1820
3/1 (A555 Ringway Road W WB)	2.52	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1867	1867
3/2 (A555 Ringway Road W WB)	3.54	0.00	N	Arm 5 Ahead	Inf	100.0 %	2109	2109
3/3 (A555 Ringway Road W WB)	2.95	0.00	Y	Arm 6 Right	16.33	100.0 %	1749	1749
4/1 (A555 EB exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (A555 EB exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (A555 W WB Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A555 W WB Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Enterprise Way exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

Junction: A555 Ringway Road / Enterprise Way					
Lane	Description	Stage Change	Type	Usage	Value (s)
3/2	A555 Ringway Road W WB Ahead	2 -> 3	End	Underutilised Green Time	-32

Scenario 2: '2025 Observed PM Peak' (FG2: '2025 PM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: A555 Ringway Road / Enterprise Way								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A555 Ringway Road W EB)	4.09	0.00	Y	Arm 6 Left	42.58	100.0 %	1955	1955
1/2 (A555 Ringway Road W EB)	2.75	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1890	1890
1/3 (A555 Ringway Road W EB)	3.79	0.00	N	Arm 4 Ahead	Inf	100.0 %	2134	2134
2/1 (Enterprise Way)	5.00	0.00	Y	Arm 4 Left	33.04	100.0 %	2023	2023
2/2 (Enterprise Way)	3.40	0.00	Y	Arm 5 Right	20.20	100.0 %	1820	1820
3/1 (A555 Ringway Road W WB)	2.52	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1867	1867
3/2 (A555 Ringway Road W WB)	3.54	0.00	N	Arm 5 Ahead	Inf	100.0 %	2109	2109
3/3 (A555 Ringway Road W WB)	2.95	0.00	Y	Arm 6 Right	16.33	100.0 %	1749	1749
4/1 (A555 EB exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (A555 EB exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (A555 W WB Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A555 W WB Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Enterprise Way exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

Junction: A555 Ringway Road / Enterprise Way					
Lane	Description	Stage Change	Type	Usage	Value (s)
3/2	A555 Ringway Road W WB Ahead	2 -> 3	End	Underutilised Green Time	-34

Scenario 3: '2030 Base AM Peak' (FG3: '2030 Base AM Peak', Plan 1: 'Network Control Plan 1')**Lane Saturation Flows**

Junction: A555 Ringway Road / Enterprise Way								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A555 Ringway Road W EB)	4.09	0.00	Y	Arm 6 Left	42.58	100.0 %	1955	1955
1/2 (A555 Ringway Road W EB)	2.75	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1890	1890
1/3 (A555 Ringway Road W EB)	3.79	0.00	N	Arm 4 Ahead	Inf	100.0 %	2134	2134
2/1 (Enterprise Way)	5.00	0.00	Y	Arm 4 Left	33.04	100.0 %	2023	2023
2/2 (Enterprise Way)	3.40	0.00	Y	Arm 5 Right	20.20	100.0 %	1820	1820
3/1 (A555 Ringway Road W WB)	2.52	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1867	1867
3/2 (A555 Ringway Road W WB)	3.54	0.00	N	Arm 5 Ahead	Inf	100.0 %	2109	2109
3/3 (A555 Ringway Road W WB)	2.95	0.00	Y	Arm 6 Right	16.33	100.0 %	1749	1749
4/1 (A555 EB exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (A555 EB exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (A555 W WB Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A555 W WB Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Enterprise Way exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

Junction: A555 Ringway Road / Enterprise Way					
Lane	Description	Stage Change	Type	Usage	Value (s)
3/2	A555 Ringway Road W WB Ahead	2 -> 3	End	Underutilised Green Time	-32

Scenario 4: '2030 Base PM Peak' (FG4: '2030 Base PM Peak', Plan 1: 'Network Control Plan 1')**Lane Saturation Flows**

Junction: A555 Ringway Road / Enterprise Way								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A555 Ringway Road W EB)	4.09	0.00	Y	Arm 6 Left	42.58	100.0 %	1955	1955
1/2 (A555 Ringway Road W EB)	2.75	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1890	1890
1/3 (A555 Ringway Road W EB)	3.79	0.00	N	Arm 4 Ahead	Inf	100.0 %	2134	2134
2/1 (Enterprise Way)	5.00	0.00	Y	Arm 4 Left	33.04	100.0 %	2023	2023
2/2 (Enterprise Way)	3.40	0.00	Y	Arm 5 Right	20.20	100.0 %	1820	1820
3/1 (A555 Ringway Road W WB)	2.52	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1867	1867
3/2 (A555 Ringway Road W WB)	3.54	0.00	N	Arm 5 Ahead	Inf	100.0 %	2109	2109
3/3 (A555 Ringway Road W WB)	2.95	0.00	Y	Arm 6 Right	16.33	100.0 %	1749	1749
4/1 (A555 EB exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (A555 EB exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (A555 W WB Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A555 W WB Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Enterprise Way exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

Junction: A555 Ringway Road / Enterprise Way					
Lane	Description	Stage Change	Type	Usage	Value (s)
3/2	A555 Ringway Road W WB Ahead	2 -> 3	End	Underutilised Green Time	-34

Scenario 5: '2030 Base + Option 5 B2 Dev AM Peak' (FG5: '2030 Base + Option 5 B2 Dev AM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: A555 Ringway Road / Enterprise Way								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A555 Ringway Road W EB)	4.09	0.00	Y	Arm 6 Left	42.58	100.0 %	1955	1955
1/2 (A555 Ringway Road W EB)	2.75	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1890	1890
1/3 (A555 Ringway Road W EB)	3.79	0.00	N	Arm 4 Ahead	Inf	100.0 %	2134	2134
2/1 (Enterprise Way)	5.00	0.00	Y	Arm 4 Left	33.04	100.0 %	2023	2023
2/2 (Enterprise Way)	3.40	0.00	Y	Arm 5 Right	20.20	100.0 %	1820	1820
3/1 (A555 Ringway Road W WB)	2.52	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1867	1867
3/2 (A555 Ringway Road W WB)	3.54	0.00	N	Arm 5 Ahead	Inf	100.0 %	2109	2109
3/3 (A555 Ringway Road W WB)	2.95	0.00	Y	Arm 6 Right	16.33	100.0 %	1749	1749
4/1 (A555 EB exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (A555 EB exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (A555 W WB Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A555 W WB Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Enterprise Way exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

Junction: A555 Ringway Road / Enterprise Way					
Lane	Description	Stage Change	Type	Usage	Value (s)
3/2	A555 Ringway Road W WB Ahead	2 -> 3	End	Underutilised Green Time	-32

Scenario 6: '2030 Base + Option 5 B2 Dev PM Peak' (FG6: '2030 Base + Option 5 B2 Dev PM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: A555 Ringway Road / Enterprise Way								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A555 Ringway Road W EB)	4.09	0.00	Y	Arm 6 Left	42.58	100.0 %	1955	1955
1/2 (A555 Ringway Road W EB)	2.75	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1890	1890
1/3 (A555 Ringway Road W EB)	3.79	0.00	N	Arm 4 Ahead	Inf	100.0 %	2134	2134
2/1 (Enterprise Way)	5.00	0.00	Y	Arm 4 Left	33.04	100.0 %	2023	2023
2/2 (Enterprise Way)	3.40	0.00	Y	Arm 5 Right	20.20	100.0 %	1820	1820
3/1 (A555 Ringway Road W WB)	2.52	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1867	1867
3/2 (A555 Ringway Road W WB)	3.54	0.00	N	Arm 5 Ahead	Inf	100.0 %	2109	2109
3/3 (A555 Ringway Road W WB)	2.95	0.00	Y	Arm 6 Right	16.33	100.0 %	1749	1749
4/1 (A555 EB exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (A555 EB exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (A555 W WB Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A555 W WB Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Enterprise Way exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

Junction: A555 Ringway Road / Enterprise Way					
Lane	Description	Stage Change	Type	Usage	Value (s)
3/2	A555 Ringway Road W WB Ahead	2 -> 3	End	Underutilised Green Time	-34

Scenario 7: '2035 Base AM Peak' (FG7: '2035 Base AM Peak', Plan 1: 'Network Control Plan 1')**Lane Saturation Flows**

Junction: A555 Ringway Road / Enterprise Way								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A555 Ringway Road W EB)	4.09	0.00	Y	Arm 6 Left	42.58	100.0 %	1955	1955
1/2 (A555 Ringway Road W EB)	2.75	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1890	1890
1/3 (A555 Ringway Road W EB)	3.79	0.00	N	Arm 4 Ahead	Inf	100.0 %	2134	2134
2/1 (Enterprise Way)	5.00	0.00	Y	Arm 4 Left	33.04	100.0 %	2023	2023
2/2 (Enterprise Way)	3.40	0.00	Y	Arm 5 Right	20.20	100.0 %	1820	1820
3/1 (A555 Ringway Road W WB)	2.52	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1867	1867
3/2 (A555 Ringway Road W WB)	3.54	0.00	N	Arm 5 Ahead	Inf	100.0 %	2109	2109
3/3 (A555 Ringway Road W WB)	2.95	0.00	Y	Arm 6 Right	16.33	100.0 %	1749	1749
4/1 (A555 EB exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (A555 EB exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (A555 W WB Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A555 W WB Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Enterprise Way exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

Junction: A555 Ringway Road / Enterprise Way					
Lane	Description	Stage Change	Type	Usage	Value (s)
3/2	A555 Ringway Road W WB Ahead	2 -> 3	End	Underutilised Green Time	-32

Scenario 8: '2035 Base PM Peak' (FG8: '2035 Base PM Peak', Plan 1: 'Network Control Plan 1')**Lane Saturation Flows**

Junction: A555 Ringway Road / Enterprise Way								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A555 Ringway Road W EB)	4.09	0.00	Y	Arm 6 Left	42.58	100.0 %	1955	1955
1/2 (A555 Ringway Road W EB)	2.75	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1890	1890
1/3 (A555 Ringway Road W EB)	3.79	0.00	N	Arm 4 Ahead	Inf	100.0 %	2134	2134
2/1 (Enterprise Way)	5.00	0.00	Y	Arm 4 Left	33.04	100.0 %	2023	2023
2/2 (Enterprise Way)	3.40	0.00	Y	Arm 5 Right	20.20	100.0 %	1820	1820
3/1 (A555 Ringway Road W WB)	2.52	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1867	1867
3/2 (A555 Ringway Road W WB)	3.54	0.00	N	Arm 5 Ahead	Inf	100.0 %	2109	2109
3/3 (A555 Ringway Road W WB)	2.95	0.00	Y	Arm 6 Right	16.33	100.0 %	1749	1749
4/1 (A555 EB exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (A555 EB exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (A555 W WB Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A555 W WB Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Enterprise Way exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

Junction: A555 Ringway Road / Enterprise Way					
Lane	Description	Stage Change	Type	Usage	Value (s)
3/2	A555 Ringway Road W WB Ahead	2 -> 3	End	Underutilised Green Time	-34

Scenario 9: '2035 Base + Option 5 B2 Dev AM Peak' (FG9: '2035 Base + Option 5 B2 Dev AM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: A555 Ringway Road / Enterprise Way								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A555 Ringway Road W EB)	4.09	0.00	Y	Arm 6 Left	42.58	100.0 %	1955	1955
1/2 (A555 Ringway Road W EB)	2.75	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1890	1890
1/3 (A555 Ringway Road W EB)	3.79	0.00	N	Arm 4 Ahead	Inf	100.0 %	2134	2134
2/1 (Enterprise Way)	5.00	0.00	Y	Arm 4 Left	33.04	100.0 %	2023	2023
2/2 (Enterprise Way)	3.40	0.00	Y	Arm 5 Right	20.20	100.0 %	1820	1820
3/1 (A555 Ringway Road W WB)	2.52	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1867	1867
3/2 (A555 Ringway Road W WB)	3.54	0.00	N	Arm 5 Ahead	Inf	100.0 %	2109	2109
3/3 (A555 Ringway Road W WB)	2.95	0.00	Y	Arm 6 Right	16.33	100.0 %	1749	1749
4/1 (A555 EB exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (A555 EB exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (A555 W WB Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A555 W WB Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Enterprise Way exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

Junction: A555 Ringway Road / Enterprise Way					
Lane	Description	Stage Change	Type	Usage	Value (s)
3/2	A555 Ringway Road W WB Ahead	2 -> 3	End	Underutilised Green Time	-32

Scenario 10: '2035 Base + Option 5 B2 Dev PM Peak' (FG10: '2035 Base + Option 5 B2 Dev PM Peak', Plan 1: 'Network Control Plan 1')

Lane Saturation Flows

Junction: A555 Ringway Road / Enterprise Way								
Lane	Lane Width (m)	Gradient (%)	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A555 Ringway Road W EB)	4.09	0.00	Y	Arm 6 Left	42.58	100.0 %	1955	1955
1/2 (A555 Ringway Road W EB)	2.75	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1890	1890
1/3 (A555 Ringway Road W EB)	3.79	0.00	N	Arm 4 Ahead	Inf	100.0 %	2134	2134
2/1 (Enterprise Way)	5.00	0.00	Y	Arm 4 Left	33.04	100.0 %	2023	2023
2/2 (Enterprise Way)	3.40	0.00	Y	Arm 5 Right	20.20	100.0 %	1820	1820
3/1 (A555 Ringway Road W WB)	2.52	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1867	1867
3/2 (A555 Ringway Road W WB)	3.54	0.00	N	Arm 5 Ahead	Inf	100.0 %	2109	2109
3/3 (A555 Ringway Road W WB)	2.95	0.00	Y	Arm 6 Right	16.33	100.0 %	1749	1749
4/1 (A555 EB exit Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (A555 EB exit Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (A555 W WB Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (A555 W WB Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Enterprise Way exit Lane 1)	Infinite Saturation Flow						Inf	Inf

Bonus Green Times

Junction: A555 Ringway Road / Enterprise Way					
Lane	Description	Stage Change	Type	Usage	Value (s)
3/2	A555 Ringway Road W WB Ahead	2 -> 3	End	Underutilised Green Time	-34

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2025 AM Peak'	07:45	08:45	01:00	
2: '2025 PM Peak'	15:45	16:45	01:00	
3: '2030 Base AM Peak'	07:45	08:45	01:00	
4: '2030 Base PM Peak'	15:45	16:45	01:00	
5: '2030 Base + Option 5 B2 Dev AM Peak'	07:45	08:45	01:00	
6: '2030 Base + Option 5 B2 Dev PM Peak'	15:45	16:45	01:00	
7: '2035 Base AM Peak'	07:45	08:45	01:00	
8: '2035 Base PM Peak'	15:45	16:45	01:00	
9: '2035 Base + Option 5 B2 Dev AM Peak'	07:45	08:45	01:00	
10: '2035 Base + Option 5 B2 Dev PM Peak'	15:45	16:45	01:00	

Traffic Flows, Desired**FG1: '2025 AM Peak'****Desired Flow :**

	Destination				
		A	B	C	Tot.
Origin					
	A	0	128	1724	1852
	B	62	0	407	469
	C	1528	356	0	1884
	Tot.	1590	484	2131	4205

FG2: '2025 PM Peak'**Desired Flow :**

	Destination				
		A	B	C	Tot.
Origin					
	A	0	41	1774	1815
	B	110	0	502	612
	C	1487	223	0	1710
	Tot.	1597	264	2276	4137

Detailed Input Data And Results

FG3: '2030 Base AM Peak'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	135	1821	1956
	B	66	0	430	496
	C	1614	377	0	1991
	Tot.	1680	512	2251	4443

FG4: '2030 Base PM Peak'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	43	1872	1915
	B	116	0	530	646
	C	1570	235	0	1805
	Tot.	1686	278	2402	4366

FG5: '2030 Base + Option 5 B2 Dev AM Peak'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	189	1821	2010
	B	86	0	434	520
	C	1614	385	0	1999
	Tot.	1700	574	2255	4529

FG6: '2030 Base + Option 5 B2 Dev PM Peak'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	74	1872	1946
	B	158	0	536	694
	C	1570	240	0	1810
	Tot.	1728	314	2408	4450

FG7: '2035 Base AM Peak'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	141	1901	2042
	B	68	0	449	517
	C	1685	393	0	2078
	Tot.	1753	534	2350	4637

Detailed Input Data And Results

FG8: '2035 Base PM Peak'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	45	1951	1996
	B	121	0	552	673
	C	1636	245	0	1881
	Tot.	1757	290	2503	4550

FG9: '2035 Base + Option 5 B2 Dev AM Peak'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	195	1901	2096
	B	89	0	452	541
	C	1685	401	0	2086
	Tot.	1774	596	2353	4723

FG10: '2035 Base + Option 5 B2 Dev PM Peak'

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	76	1951	2027
	B	163	0	559	722
	C	1636	249	0	1885
	Tot.	1799	325	2510	4634

Scenario 1: '2025 Observed AM Peak' (FG1: '2025 AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	128	1724	1852
	B	62	0	407	469
	C	1528	356	0	1884
	Tot.	1590	484	2131	4205

Detailed Input Data And Results

Traffic Flows, Difference

Difference :

	Destination				
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Scenario 2: '2025 Observed PM Peak' (FG2: '2025 PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	41	1774	1815
	B	110	0	502	612
	C	1487	223	0	1710
	Tot.	1597	264	2276	4137

Traffic Flows, Difference

Difference :

	Destination				
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Scenario 3: '2030 Base AM Peak' (FG3: '2030 Base AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	135	1821	1956
	B	66	0	430	496
	C	1614	377	0	1991
	Tot.	1680	512	2251	4443

Detailed Input Data And Results

Traffic Flows, Difference

Difference :

	Destination				
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Scenario 4: '2030 Base PM Peak' (FG4: '2030 Base PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	43	1872	1915
	B	116	0	530	646
	C	1570	235	0	1805
	Tot.	1686	278	2402	4366

Traffic Flows, Difference

Difference :

	Destination				
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Scenario 5: '2030 Base + Option 5 B2 Dev AM Peak' (FG5: '2030 Base + Option 5 B2 Dev AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	189	1821	2010
	B	86	0	434	520
	C	1614	385	0	1999
	Tot.	1700	574	2255	4529

Detailed Input Data And Results

Traffic Flows, Difference

Difference :

	Destination				
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Scenario 6: '2030 Base + Option 5 B2 Dev PM Peak' (FG6: '2030 Base + Option 5 B2 Dev PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	74	1872	1946
	B	158	0	536	694
	C	1570	240	0	1810
	Tot.	1728	314	2408	4450

Traffic Flows, Difference

Difference :

	Destination				
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Scenario 7: '2035 Base AM Peak' (FG7: '2035 Base AM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	141	1901	2042
	B	68	0	449	517
	C	1685	393	0	2078
	Tot.	1753	534	2350	4637

Traffic Flows, Difference**Difference :**

	Destination				
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Scenario 8: '2035 Base PM Peak' (FG8: '2035 Base PM Peak', Plan 1: 'Network Control Plan 1')**Traffic Flows, Actual****Actual Flow :**

	Destination				
		A	B	C	Tot.
Origin	A	0	45	1951	1996
	B	121	0	552	673
	C	1636	245	0	1881
	Tot.	1757	290	2503	4550

Traffic Flows, Difference**Difference :**

	Destination				
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Scenario 9: '2035 Base + Option 5 B2 Dev AM Peak' (FG9: '2035 Base + Option 5 B2 Dev AM Peak', Plan 1: 'Network Control Plan 1')**Traffic Flows, Actual****Actual Flow :**

	Destination				
		A	B	C	Tot.
Origin	A	0	195	1901	2096
	B	89	0	452	541
	C	1685	401	0	2086
	Tot.	1774	596	2353	4723

Detailed Input Data And Results

Traffic Flows, Difference

Difference :

	Destination				
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Scenario 10: '2035 Base + Option 5 B2 Dev PM Peak' (FG10: '2035 Base + Option 5 B2 Dev PM Peak', Plan 1: 'Network Control Plan 1')

Traffic Flows, Actual

Actual Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	76	1951	2027
	B	163	0	559	722
	C	1636	249	0	1885
	Tot.	1799	325	2510	4634

Traffic Flows, Difference

Difference :

	Destination				
		A	B	C	Tot.
Origin	A	0	0	0	0
	B	0	0	0	0
	C	0	0	0	0
	Tot.	0	0	0	0

Traffic Lane Flows

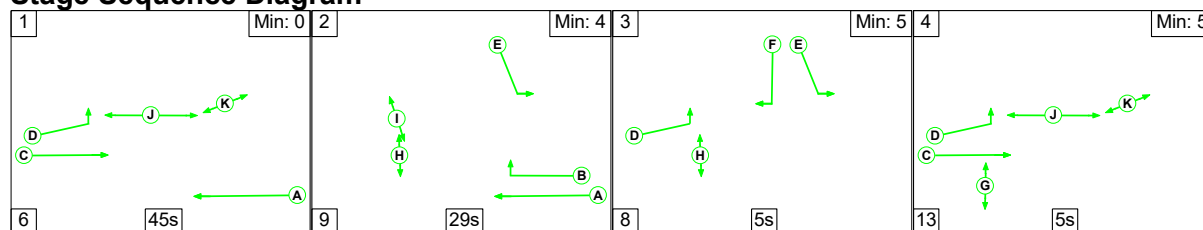
Lane	Scenario 1: 2025 Observed AM Peak	Scenario 2: 2025 Observed PM Peak	Scenario 3: 2030 Base AM Peak	Scenario 4: 2030 Base PM Peak	Scenario 5: 2030 Base + Option 5 B2 Dev AM Peak	Scenario 6: 2030 Base + Option 5 B2 Dev PM Peak
Junction: A555 Ringway Road / Enterprise Way						
1/1 (short)	128	41	135	43	189	74
1/2 (with short)	909(In) 781(Out)	860(In) 819(Out)	958(In) 823(Out)	908(In) 865(Out)	1000(In) 811(Out)	933(In) 859(Out)
1/3	943	955	998	1007	1010	1013
2/1	407	502	430	530	434	536
2/2	62	110	66	116	86	158
3/1	742	692	793	735	798	747
3/2 (with short)	1142(In) 786(Out)	1018(In) 795(Out)	1198(In) 821(Out)	1070(In) 835(Out)	1201(In) 816(Out)	1063(In) 823(Out)
3/3 (short)	356	223	377	235	385	240
4/1	984	1070	1038	1130	1028	1127
4/2	1147	1206	1213	1272	1227	1281
5/1	773	747	826	793	841	826
5/2	817	850	854	893	859	902
6/1	484	264	512	278	574	314

Detailed Input Data And Results

Lane	Scenario 7: 2035 Base AM Peak	Scenario 8: 2035 Base PM Peak	Scenario 9: 2035 Base + Option 5 B2 Dev AM Peak	Scenario 10: 2035 Base + Option 5 B2 Dev PM Peak
Junction: A555 Ringway Road / Enterprise Way				
1/1 (short)	141	45	195	76
1/2 (with short)	999(In) 858(Out)	947(In) 902(Out)	1041(In) 846(Out)	971(In) 895(Out)
1/3	1043	1049	1055	1056
2/1	449	552	452	559
2/2	68	121	89	163
3/1	837	770	841	783
3/2 (with short)	1241(In) 848(Out)	1111(In) 866(Out)	1245(In) 844(Out)	1102(In) 853(Out)
3/3 (short)	393	245	401	249
4/1	1082	1178	1072	1174
4/2	1268	1325	1281	1336
5/1	871	830	885	864
5/2	882	927	889	935
6/1	534	290	596	325

Scenario 1: '2025 Observed AM Peak' (FG1: '2025 AM Peak', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

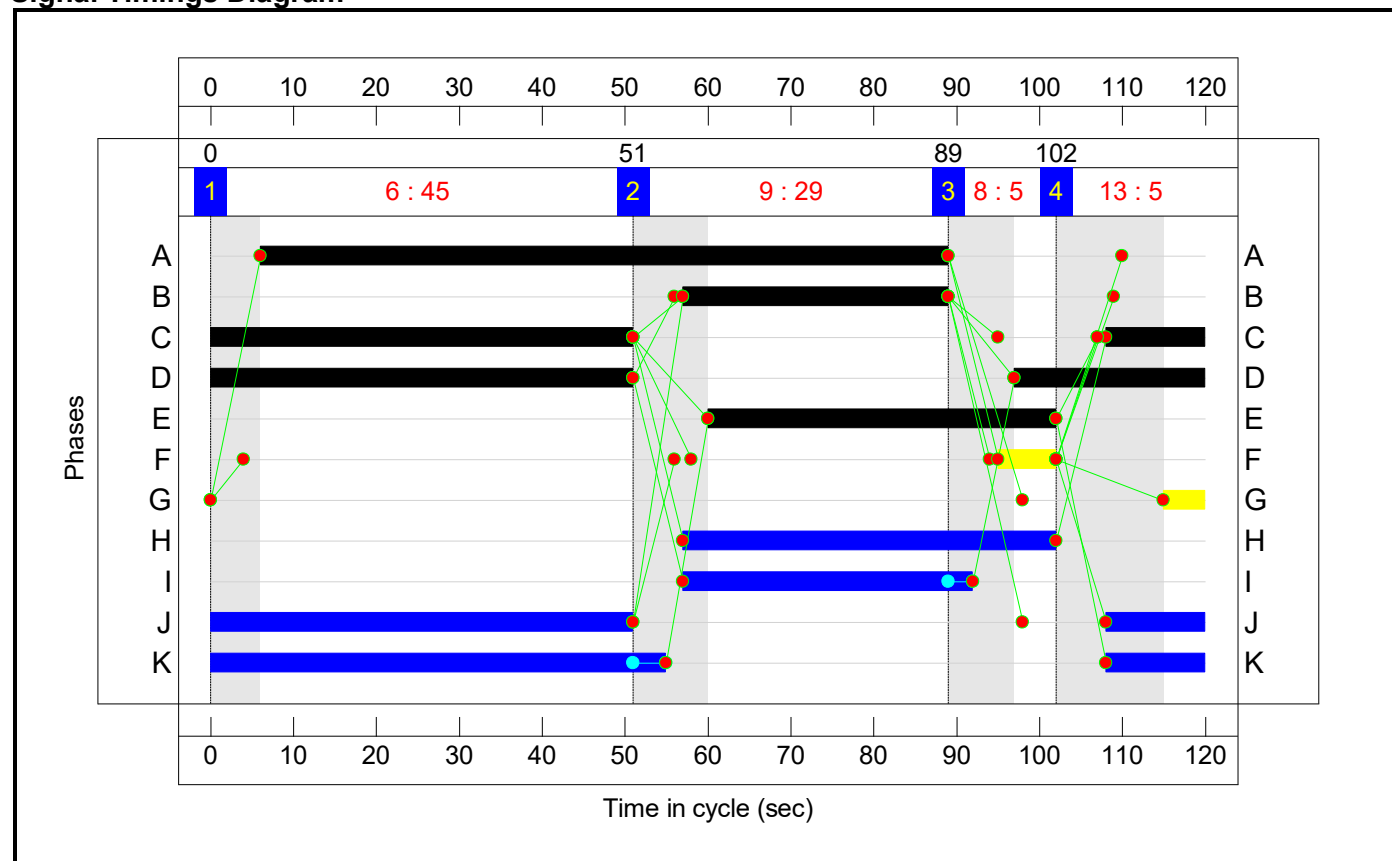


Stage Timings

Stage	1	2	3	4
Duration	45	29	5	5
Change Point	0	51	89	102

Phase Timings

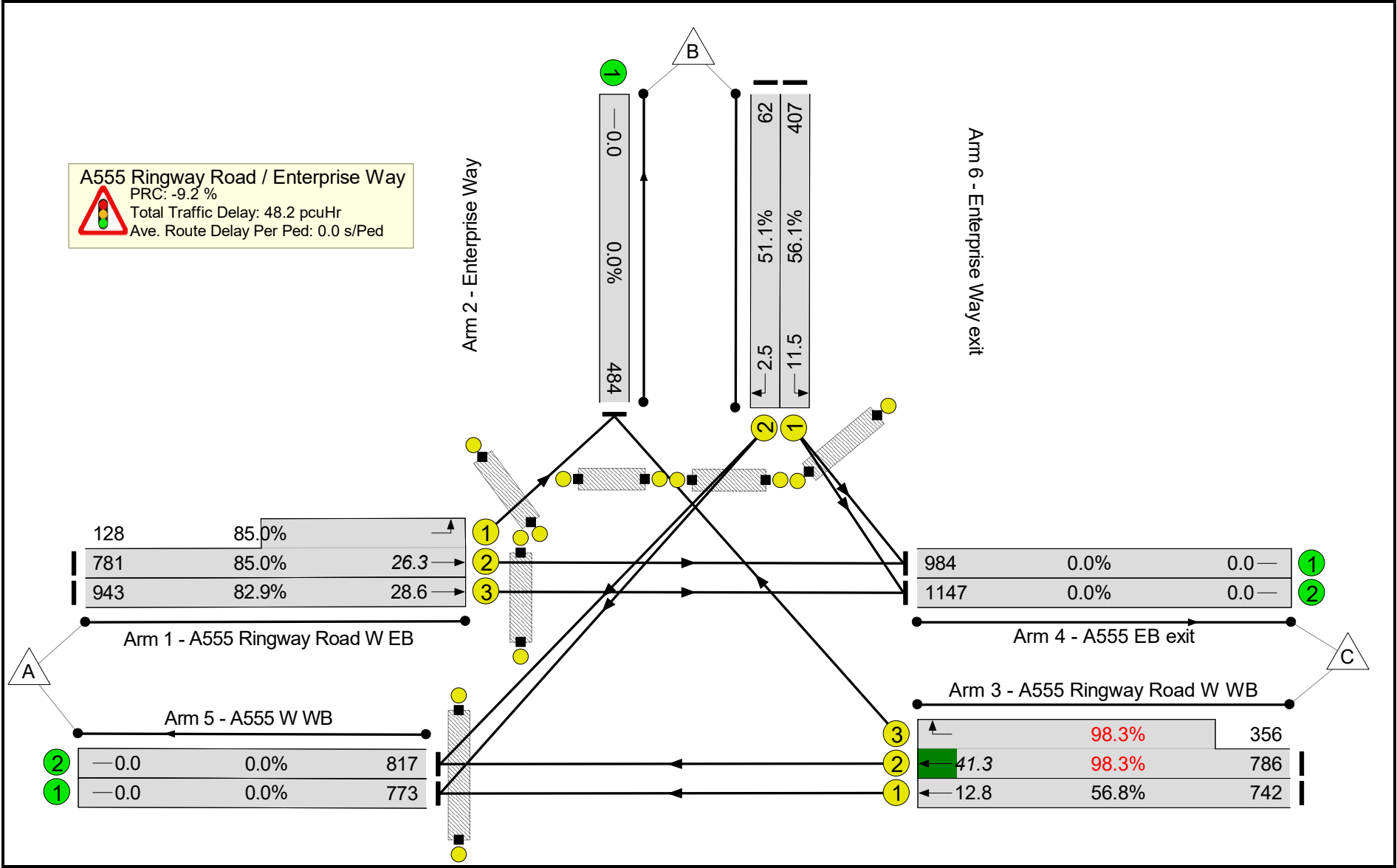
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	A555 Ringway Road W WB Ahead	Traffic	83	6	89
B	A555 Ringway Road W WB Right	Traffic	32	57	89
C	A555 Ringway Road W EB Ahead	Traffic	63	108	51
D	A555 Ringway Road W EB Left	Traffic	74	97	51
E	Enterprise Way Left	Traffic	42	60	102
F	Enterprise Way Right	Traffic	7	95	102
G	Pedestrians across	Pedestrian	5	115	0
H	Pedestrians across	Pedestrian	45	57	102
I	Pedestrians across	Pedestrian	35	57	92
J	Pedestrians across	Pedestrian	63	108	51
K	Pedestrians across	Pedestrian	67	108	55

Signal Timings Diagram

Lane Green Times

Junction: A555 Ringway Road / Enterprise Way					
Lane	Description	Type	Phases	Start Green	End Green
1/1	A555 Ringway Road W EB Left	U	D	97	51
1/2	A555 Ringway Road W EB Ahead	U	C	108	51
1/3	A555 Ringway Road W EB Ahead	U	C	108	51
2/1	Enterprise Way Left	U	E	60	102
2/2	Enterprise Way Right	U	F	95	102
3/1	A555 Ringway Road W WB Ahead	U	A	6	89
3/2	A555 Ringway Road W WB Ahead	U	A	6	89-32
3/3	A555 Ringway Road W WB Right	U	B	57	89

Detailed Input Data And Results
Network Layout Diagram



Detailed Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A555 Ringway Road West / Enterprise Way Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	98.3%
A555 Ringway Road / Enterprise Way	-	-	N/A	-	-		-	-	-	-	-	-	-	98.3%
1/2+1/1	A555 Ringway Road W EB Ahead Left	U	N/A	N/A	C D		1	63:74	-	-	909	1890:1955	919+151	85.0 : 85.0%
1/3	A555 Ringway Road W EB Ahead	U	N/A	N/A	C		1	63	-	-	943	2134	1138	82.9%
2/1	Enterprise Way Left	U	N/A	N/A	E		1	42	-	-	407	2023	725	56.1%
2/2	Enterprise Way Right	U	N/A	N/A	F		1	7	-	-	62	1820	121	51.1%
3/1	A555 Ringway Road W WB Ahead	U	N/A	N/A	A		1	83	-	-	742	1867	1307	56.8%
3/2+3/3	A555 Ringway Road W WB Ahead Right	U	N/A	N/A	A B		1	83:32	-	Y:-	1142	2109:1749	800+362	98.3 : 98.3%
4/1	A555 EB exit	U	N/A	N/A	-		-	-	-	-	984	Inf	Inf	0.0%
4/2	A555 EB exit	U	N/A	N/A	-		-	-	-	-	1147	Inf	Inf	0.0%
5/1	A555 W WB	U	N/A	N/A	-		-	-	-	-	773	Inf	Inf	0.0%
5/2	A555 W WB	U	N/A	N/A	-		-	-	-	-	817	Inf	Inf	0.0%
6/1	Enterprise Way exit	U	N/A	N/A	-		-	-	-	-	484	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	K		1	67	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	J		1	63	-	-	0	-	0	0.0%

Detailed Input Data And Results

Ped Link: P3	Unnamed Ped Link	-	N/A	-	J		1	63	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	I		1	35	-	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	H		1	45	-	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	G		1	5	-	-	0	-	0	0.0%

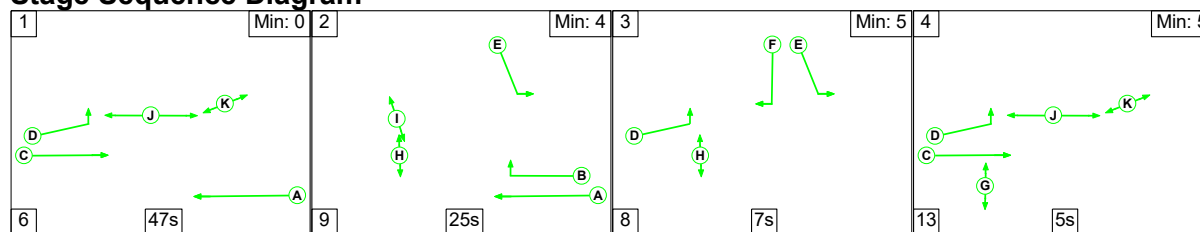
Detailed Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A555 Ringway Road West / Enterprise Way Junction	-	-	0	0	0	28.6	19.6	0.0	48.2	-	-	-	-	
A555 Ringway Road / Enterprise Way	-	-	0	0	0	28.6	19.6	0.0	48.2	-	-	-	-	
1/2+1/1	909	909	-	-	-	5.5	2.7	-	8.2	32.5	23.5	2.7	26.3	
1/3	943	943	-	-	-	6.1	2.4	-	8.5	32.4	26.2	2.4	28.6	
2/1	407	407	-	-	-	3.5	0.6	-	4.1	36.6	10.9	0.6	11.5	
2/2	62	62	-	-	-	0.9	0.5	-	1.4	83.9	2.0	0.5	2.5	
3/1	742	742	-	-	-	1.8	0.7	-	2.5	12.1	12.2	0.7	12.8	
3/2+3/3	1142	1142	-	-	-	10.7	12.7	-	23.4	73.7	28.6	12.7	41.3	
4/1	984	984	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	1147	1147	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	773	773	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	817	817	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	484	484	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-	
C1 PRC for Signalled Lanes (%): -9.2 PRC Over All Lanes (%): -9.2 Total Delay for Signalled Lanes (pcuHr): 48.17 Total Delay Over All Lanes(pcuHr): 48.17 Cycle Time (s): 120														

Detailed Input Data And Results

Scenario 2: '2025 Observed PM Peak' (FG2: '2025 PM Peak', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

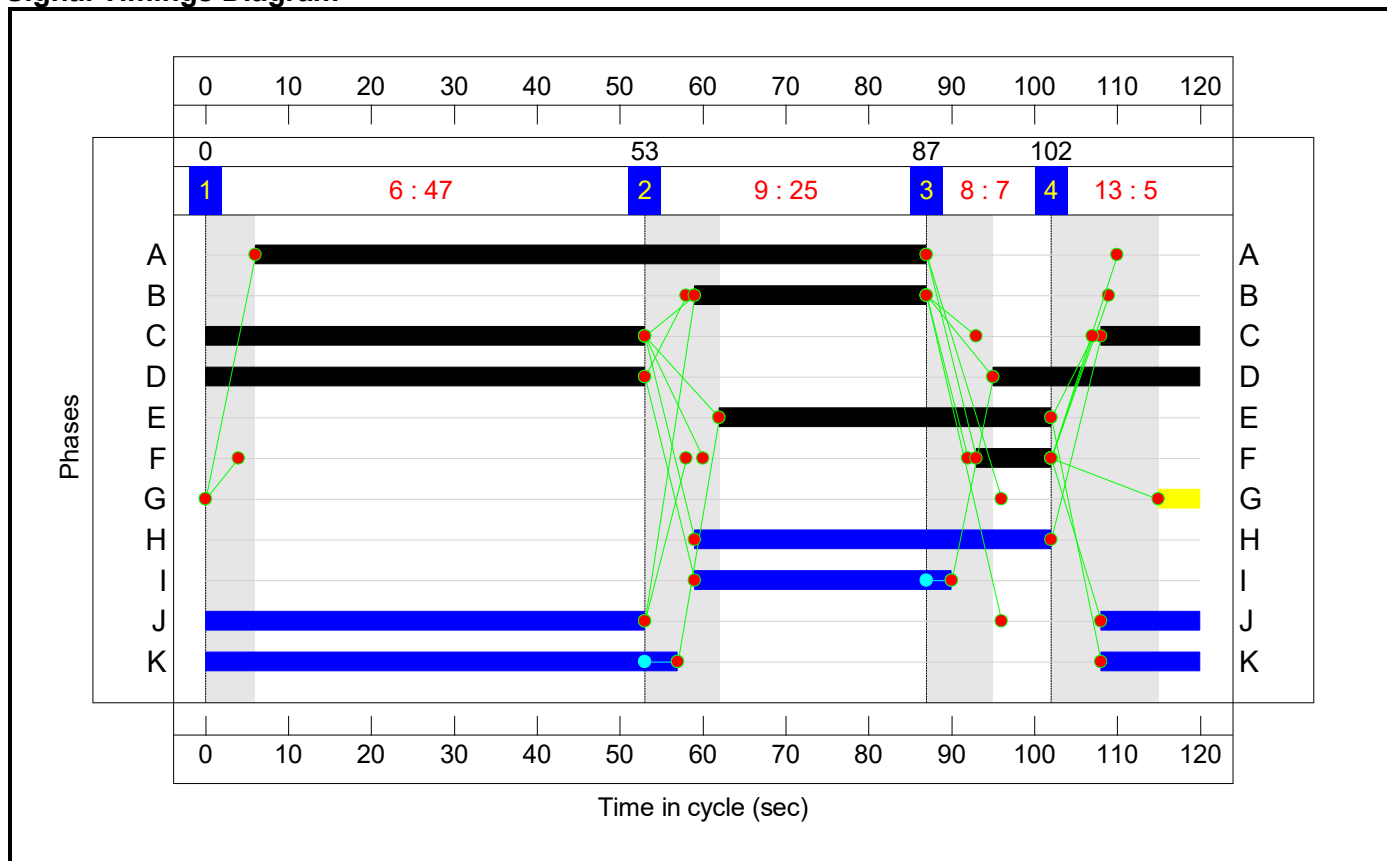


Stage Timings

Stage	1	2	3	4
Duration	47	25	7	5
Change Point	0	53	87	102

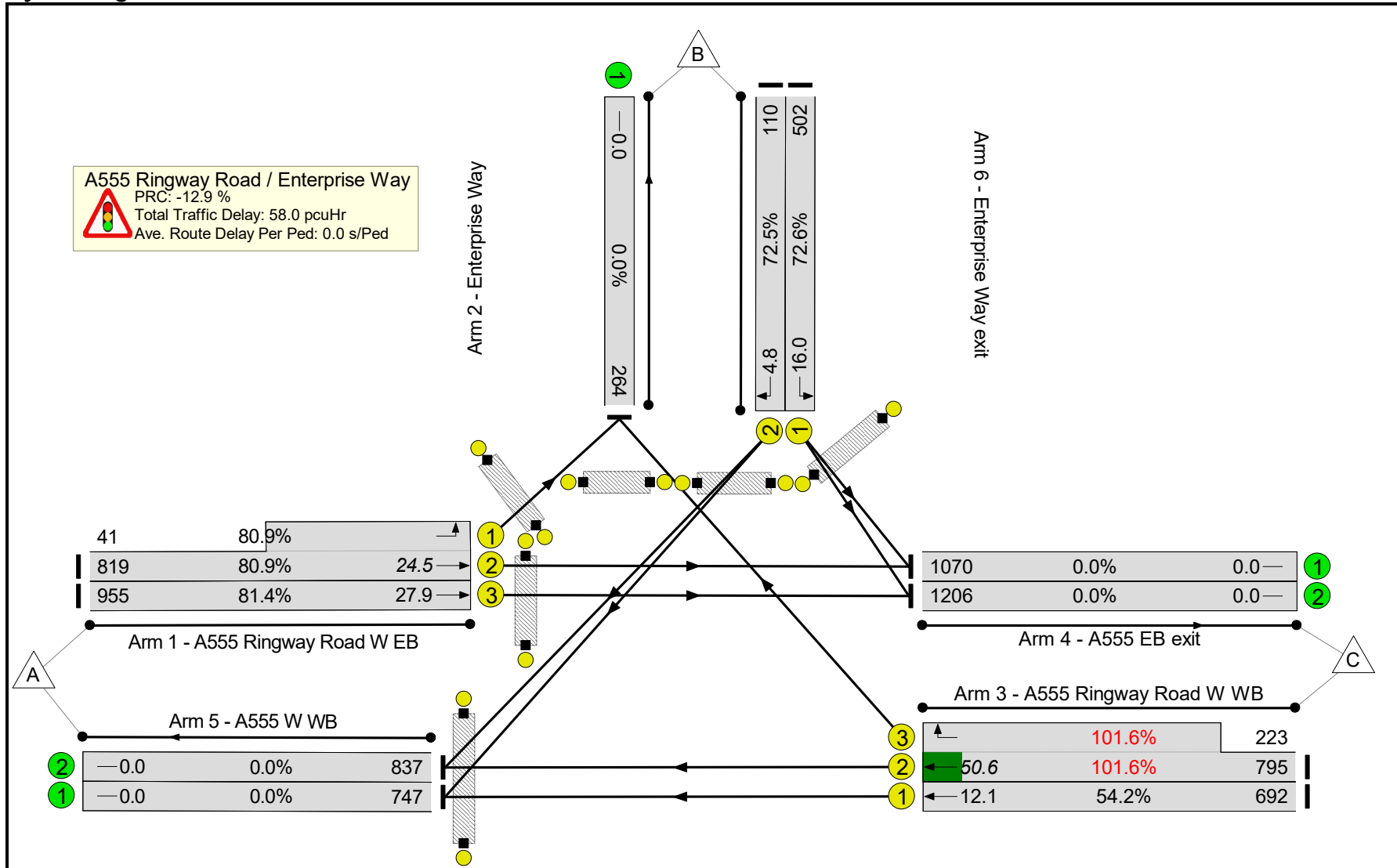
Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	A555 Ringway Road W WB Ahead	Traffic	81	6	87
B	A555 Ringway Road W WB Right	Traffic	28	59	87
C	A555 Ringway Road W EB Ahead	Traffic	65	108	53
D	A555 Ringway Road W EB Left	Traffic	78	95	53
E	Enterprise Way Left	Traffic	40	62	102
F	Enterprise Way Right	Traffic	9	93	102
G	Pedestrians across	Pedestrian	5	115	0
H	Pedestrians across	Pedestrian	43	59	102
I	Pedestrians across	Pedestrian	31	59	90
J	Pedestrians across	Pedestrian	65	108	53
K	Pedestrians across	Pedestrian	69	108	57

Signal Timings Diagram**Lane Green Times**

Junction: A555 Ringway Road / Enterprise Way					
Lane	Description	Type	Phases	Start Green	End Green
1/1	A555 Ringway Road W EB Left	U	D	95	53
1/2	A555 Ringway Road W EB Ahead	U	C	108	53
1/3	A555 Ringway Road W EB Ahead	U	C	108	53
2/1	Enterprise Way Left	U	E	62	102
2/2	Enterprise Way Right	U	F	93	102
3/1	A555 Ringway Road W WB Ahead	U	A	6	87
3/2	A555 Ringway Road W WB Ahead	U	A	6	87-34
3/3	A555 Ringway Road W WB Right	U	B	59	87

Detailed Input Data And Results
Network Layout Diagram



Detailed Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A555 Ringway Road West / Enterprise Way Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	101.6%
A555 Ringway Road / Enterprise Way	-	-	N/A	-	-		-	-	-	-	-	-	-	101.6%
1/2+1/1	A555 Ringway Road W EB Ahead Left	U	N/A	N/A	C D		1	65:78	-	-	860	1890:1955	1012+51	80.9 : 80.9%
1/3	A555 Ringway Road W EB Ahead	U	N/A	N/A	C		1	65	-	-	955	2134	1174	81.4%
2/1	Enterprise Way Left	U	N/A	N/A	E		1	40	-	-	502	2023	691	72.6%
2/2	Enterprise Way Right	U	N/A	N/A	F		1	9	-	-	110	1820	152	72.5%
3/1	A555 Ringway Road W WB Ahead	U	N/A	N/A	A		1	81	-	-	692	1867	1276	54.2%
3/2+3/3	A555 Ringway Road W WB Ahead Right	U	N/A	N/A	A B		1	81:28	-	Y:-	1018	2109:1749	782+219	101.6 : 101.6%
4/1	A555 EB exit	U	N/A	N/A	-		-	-	-	-	1070	Inf	Inf	0.0%
4/2	A555 EB exit	U	N/A	N/A	-		-	-	-	-	1206	Inf	Inf	0.0%
5/1	A555 W WB	U	N/A	N/A	-		-	-	-	-	747	Inf	Inf	0.0%
5/2	A555 W WB	U	N/A	N/A	-		-	-	-	-	850	Inf	Inf	0.0%
6/1	Enterprise Way exit	U	N/A	N/A	-		-	-	-	-	264	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	K		1	69	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	J		1	65	-	-	0	-	0	0.0%

Detailed Input Data And Results

Ped Link: P3	Unnamed Ped Link	-	N/A	-	J		1	65	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	I		1	31	-	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	H		1	43	-	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	G		1	5	-	-	0	-	0	0.0%

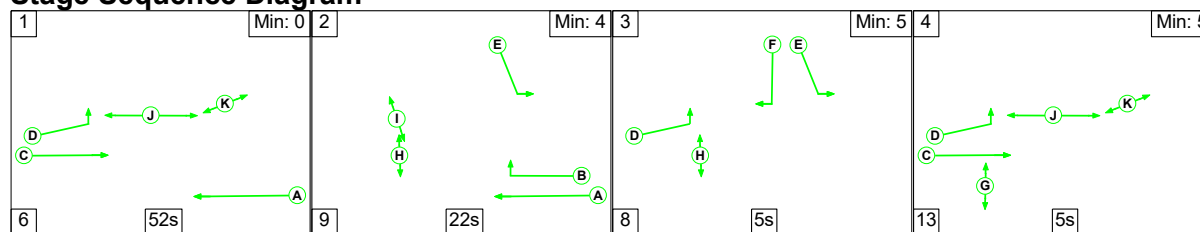
Detailed Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A555 Ringway Road West / Enterprise Way Junction	-	-	0	0	0	30.0	28.0	0.0	58.0	-	-	-	-	
A555 Ringway Road / Enterprise Way	-	-	0	0	0	30.0	28.0	0.0	58.0	-	-	-	-	
1/2+1/1	860	860	-	-	-	5.0	2.1	-	7.1	29.8	22.4	2.1	24.5	
1/3	955	955	-	-	-	5.8	2.1	-	8.0	30.1	25.7	2.1	27.9	
2/1	502	502	-	-	-	4.8	1.3	-	6.1	44.0	14.6	1.3	16.0	
2/2	110	110	-	-	-	1.6	1.2	-	2.9	94.4	3.6	1.2	4.8	
3/1	692	692	-	-	-	1.8	0.6	-	2.4	12.6	11.5	0.6	12.1	
3/2+3/3	1018	1005	-	-	-	10.9	20.6	-	31.5	111.2	30.0	20.6	50.6	
4/1	1070	1070	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	1206	1206	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	747	747	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	837	837	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	264	264	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-	
C1 PRC for Signalled Lanes (%): -12.9 PRC Over All Lanes (%): -12.9 Total Delay for Signalled Lanes (pcuHr): 58.00 Total Delay Over All Lanes(pcuHr): 58.00 Cycle Time (s): 120														

Detailed Input Data And Results

Scenario 3: '2030 Base AM Peak' (FG3: '2030 Base AM Peak', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

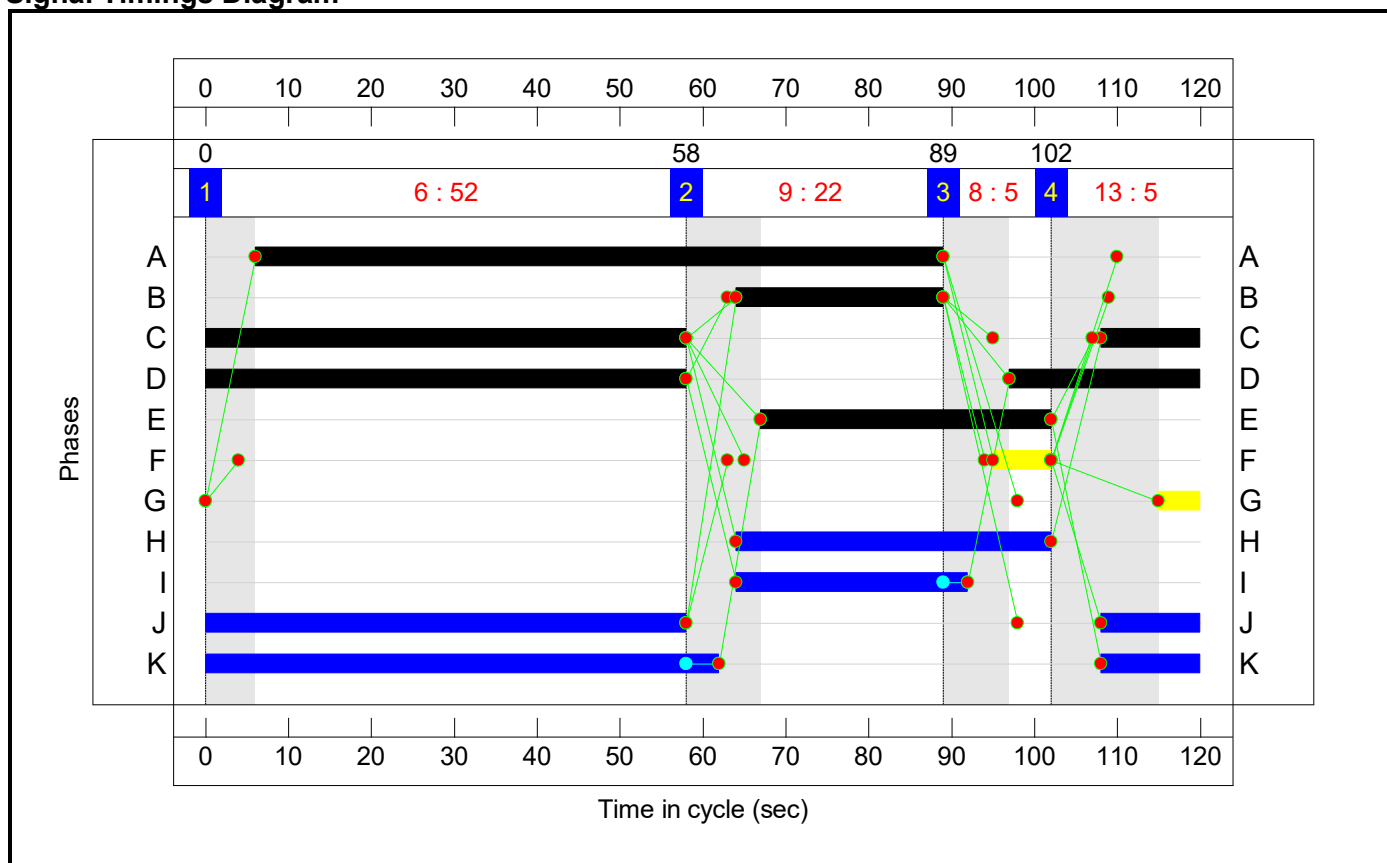


Stage Timings

Stage	1	2	3	4
Duration	52	22	5	5
Change Point	0	58	89	102

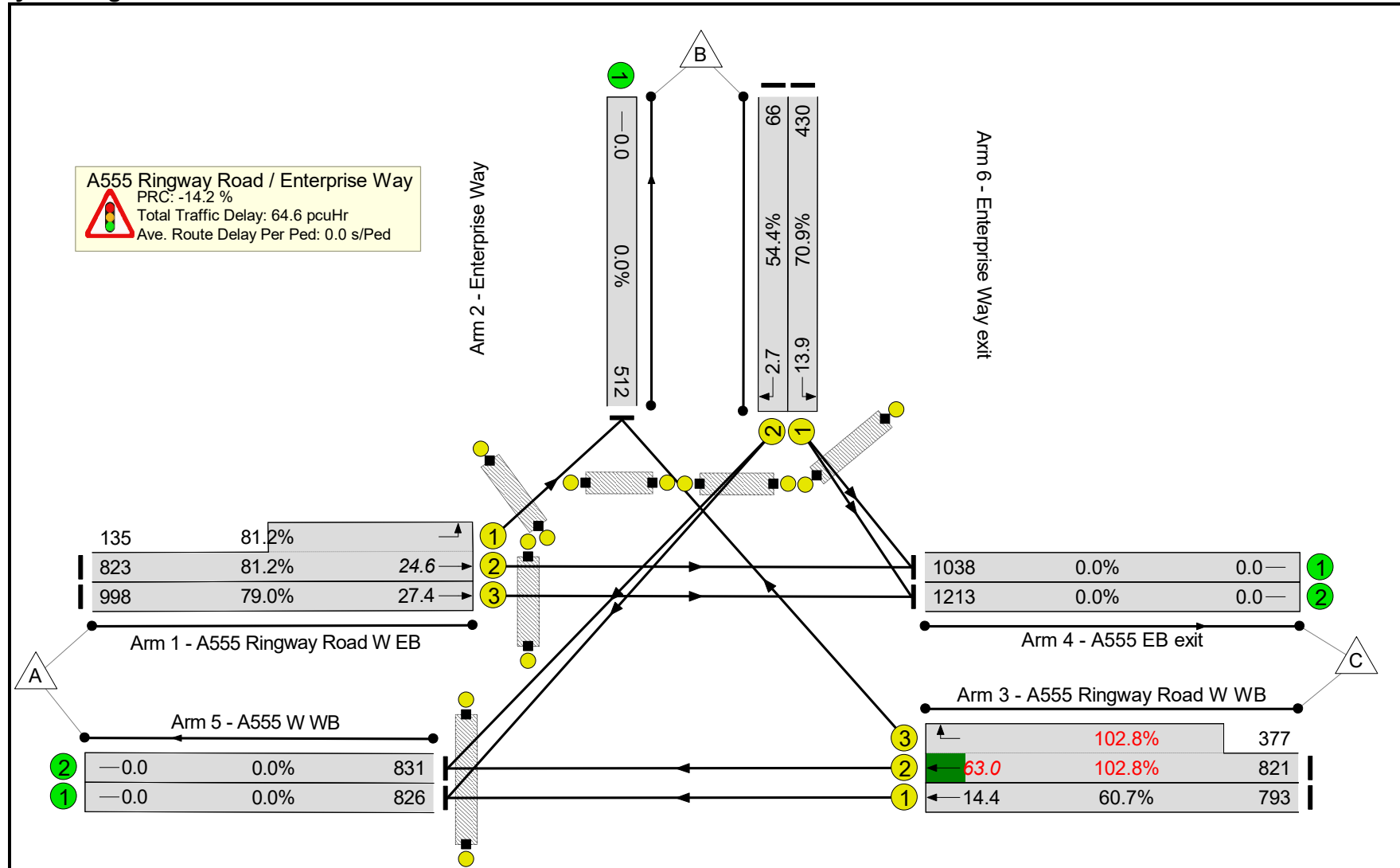
Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	A555 Ringway Road W WB Ahead	Traffic	83	6	89
B	A555 Ringway Road W WB Right	Traffic	25	64	89
C	A555 Ringway Road W EB Ahead	Traffic	70	108	58
D	A555 Ringway Road W EB Left	Traffic	81	97	58
E	Enterprise Way Left	Traffic	35	67	102
F	Enterprise Way Right	Traffic	7	95	102
G	Pedestrians across	Pedestrian	5	115	0
H	Pedestrians across	Pedestrian	38	64	102
I	Pedestrians across	Pedestrian	28	64	92
J	Pedestrians across	Pedestrian	70	108	58
K	Pedestrians across	Pedestrian	74	108	62

Signal Timings Diagram**Lane Green Times**

Junction: A555 Ringway Road / Enterprise Way					
Lane	Description	Type	Phases	Start Green	End Green
1/1	A555 Ringway Road W EB Left	U	D	97	58
1/2	A555 Ringway Road W EB Ahead	U	C	108	58
1/3	A555 Ringway Road W EB Ahead	U	C	108	58
2/1	Enterprise Way Left	U	E	67	102
2/2	Enterprise Way Right	U	F	95	102
3/1	A555 Ringway Road W WB Ahead	U	A	6	89
3/2	A555 Ringway Road W WB Ahead	U	A	6	89-32
3/3	A555 Ringway Road W WB Right	U	B	64	89

Detailed Input Data And Results
Network Layout Diagram



Detailed Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A555 Ringway Road West / Enterprise Way Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	102.8%
A555 Ringway Road / Enterprise Way	-	-	N/A	-	-		-	-	-	-	-	-	-	102.8%
1/2+1/1	A555 Ringway Road W EB Ahead Left	U	N/A	N/A	C D		1	70:81	-	-	958	1890:1955	1014+166	81.2 : 81.2%
1/3	A555 Ringway Road W EB Ahead	U	N/A	N/A	C		1	70	-	-	998	2134	1263	79.0%
2/1	Enterprise Way Left	U	N/A	N/A	E		1	35	-	-	430	2023	607	70.9%
2/2	Enterprise Way Right	U	N/A	N/A	F		1	7	-	-	66	1820	121	54.4%
3/1	A555 Ringway Road W WB Ahead	U	N/A	N/A	A		1	83	-	-	793	1867	1307	60.7%
3/2+3/3	A555 Ringway Road W WB Ahead Right	U	N/A	N/A	A B		1	83:25	-	Y:-	1198	2109:1749	798+367	102.8 : 102.8%
4/1	A555 EB exit	U	N/A	N/A	-		-	-	-	-	1038	Inf	Inf	0.0%
4/2	A555 EB exit	U	N/A	N/A	-		-	-	-	-	1213	Inf	Inf	0.0%
5/1	A555 W WB	U	N/A	N/A	-		-	-	-	-	826	Inf	Inf	0.0%
5/2	A555 W WB	U	N/A	N/A	-		-	-	-	-	854	Inf	Inf	0.0%
6/1	Enterprise Way exit	U	N/A	N/A	-		-	-	-	-	512	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	K		1	74	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	J		1	70	-	-	0	-	0	0.0%

Detailed Input Data And Results

Ped Link: P3	Unnamed Ped Link	-	N/A	-	J		1	70	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	I		1	28	-	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	H		1	38	-	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	G		1	5	-	-	0	-	0	0.0%

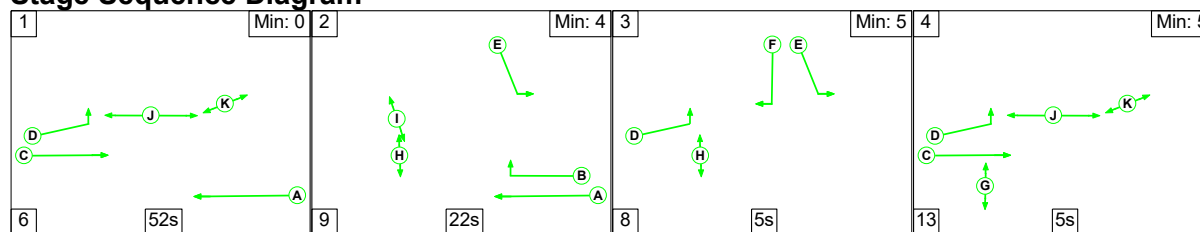
Detailed Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A555 Ringway Road West / Enterprise Way Junction	-	-	0	0	0	30.7	33.9	0.0	64.6	-	-	-	-	
A555 Ringway Road / Enterprise Way	-	-	0	0	0	30.7	33.9	0.0	64.6	-	-	-	-	
1/2+1/1	958	958	-	-	-	4.6	2.1	-	6.7	25.0	22.5	2.1	24.6	
1/3	998	998	-	-	-	5.2	1.9	-	7.1	25.5	25.5	1.9	27.4	
2/1	430	430	-	-	-	4.5	1.2	-	5.7	47.4	12.7	1.2	13.9	
2/2	66	66	-	-	-	1.0	0.6	-	1.6	86.1	2.1	0.6	2.7	
3/1	793	793	-	-	-	2.1	0.8	-	2.8	12.9	13.7	0.8	14.4	
3/2+3/3	1198	1175	-	-	-	13.4	27.4	-	40.8	122.6	35.6	27.4	63.0	
4/1	1038	1038	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	1213	1213	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	826	826	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	831	831	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	512	512	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-	
C1 PRC for Signalled Lanes (%): -14.2 PRC Over All Lanes (%): -14.2 Total Delay for Signalled Lanes (pcuHr): 64.61 Total Delay Over All Lanes(pcuHr): 64.61 Cycle Time (s): 120														

Detailed Input Data And Results

Scenario 4: '2030 Base PM Peak' (FG4: '2030 Base PM Peak', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

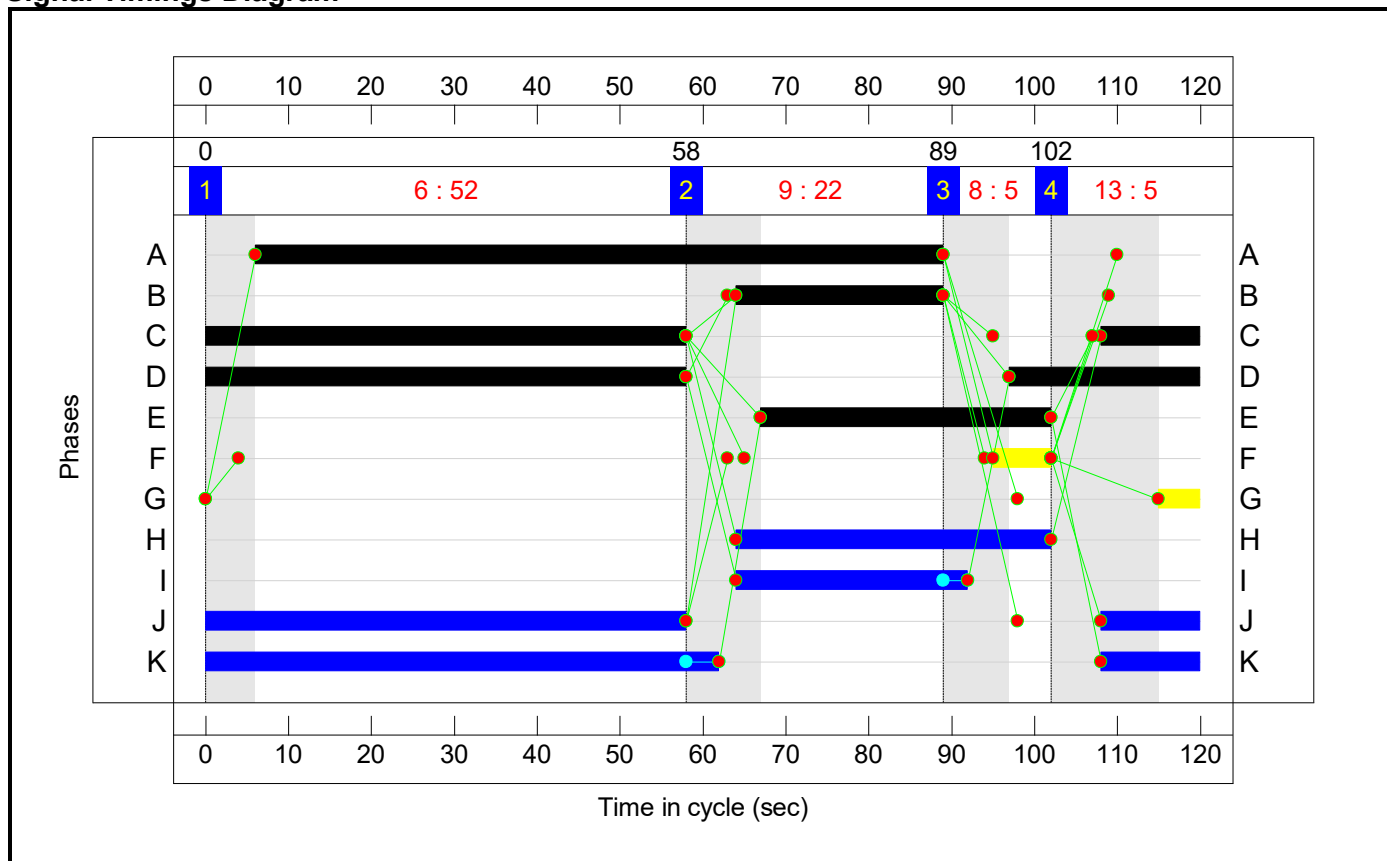


Stage Timings

Stage	1	2	3	4
Duration	52	22	5	5
Change Point	0	58	89	102

Phase Timings

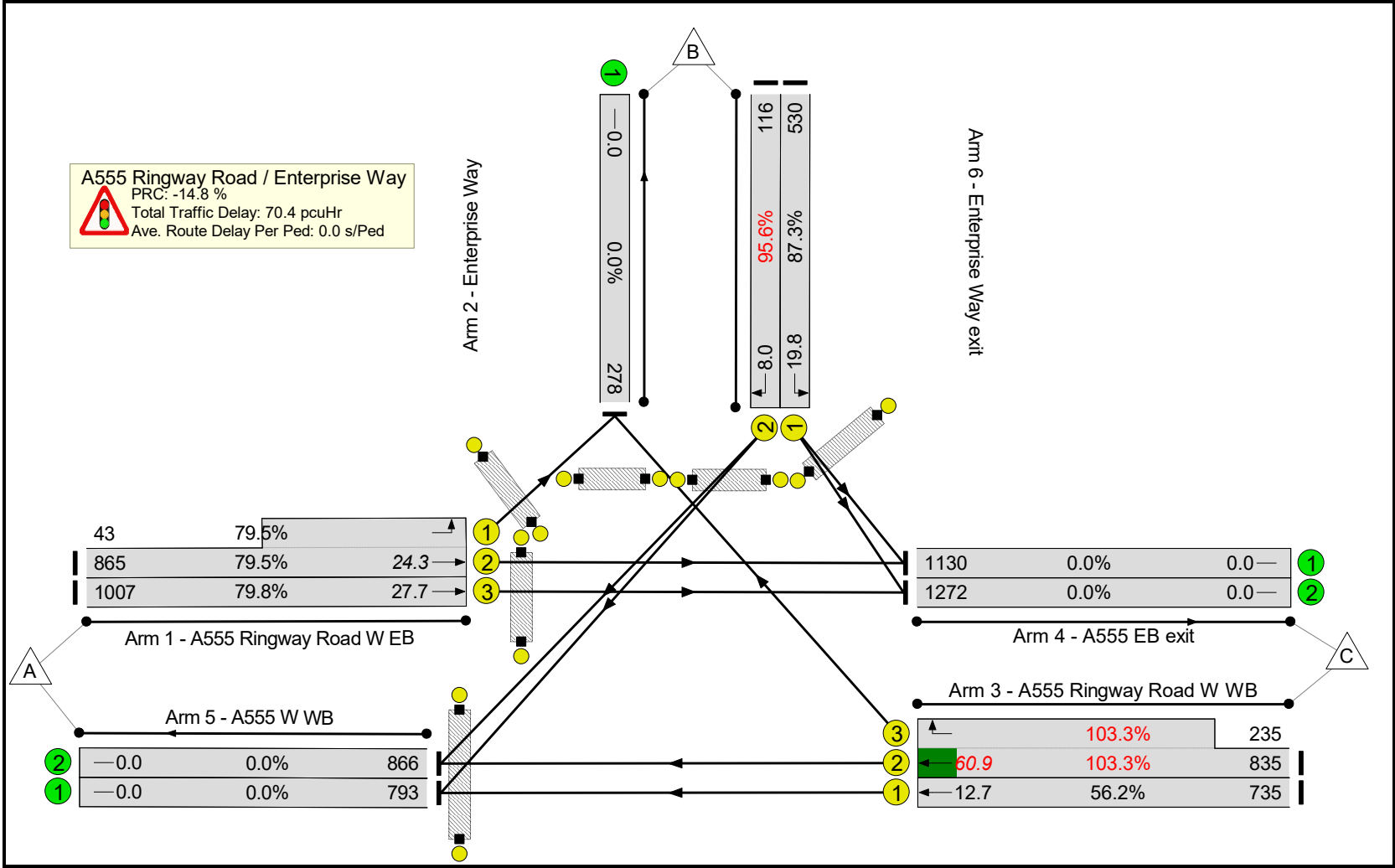
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	A555 Ringway Road W WB Ahead	Traffic	83	6	89
B	A555 Ringway Road W WB Right	Traffic	25	64	89
C	A555 Ringway Road W EB Ahead	Traffic	70	108	58
D	A555 Ringway Road W EB Left	Traffic	81	97	58
E	Enterprise Way Left	Traffic	35	67	102
F	Enterprise Way Right	Traffic	7	95	102
G	Pedestrians across	Pedestrian	5	115	0
H	Pedestrians across	Pedestrian	38	64	102
I	Pedestrians across	Pedestrian	28	64	92
J	Pedestrians across	Pedestrian	70	108	58
K	Pedestrians across	Pedestrian	74	108	62

Signal Timings Diagram**Lane Green Times**

Junction: A555 Ringway Road / Enterprise Way					
Lane	Description	Type	Phases	Start Green	End Green
1/1	A555 Ringway Road W EB Left	U	D	97	58
1/2	A555 Ringway Road W EB Ahead	U	C	108	58
1/3	A555 Ringway Road W EB Ahead	U	C	108	58
2/1	Enterprise Way Left	U	E	67	102
2/2	Enterprise Way Right	U	F	95	102
3/1	A555 Ringway Road W WB Ahead	U	A	6	89
3/2	A555 Ringway Road W WB Ahead	U	A	6	89-34
3/3	A555 Ringway Road W WB Right	U	B	64	89

Detailed Input Data And Results

Network Layout Diagram



Detailed Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A555 Ringway Road West / Enterprise Way Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	103.3%
A555 Ringway Road / Enterprise Way	-	-	N/A	-	-		-	-	-	-	-	-	-	103.3%
1/2+1/1	A555 Ringway Road W EB Ahead Left	U	N/A	N/A	C D		1	70:81	-	-	908	1890:1955	1088+54	79.5 : 79.5%
1/3	A555 Ringway Road W EB Ahead	U	N/A	N/A	C		1	70	-	-	1007	2134	1263	79.8%
2/1	Enterprise Way Left	U	N/A	N/A	E		1	35	-	-	530	2023	607	87.3%
2/2	Enterprise Way Right	U	N/A	N/A	F		1	7	-	-	116	1820	121	95.6%
3/1	A555 Ringway Road W WB Ahead	U	N/A	N/A	A		1	83	-	-	735	1867	1307	56.2%
3/2+3/3	A555 Ringway Road W WB Ahead Right	U	N/A	N/A	A B		1	83:25	-	Y:-	1070	2109:1749	808+227	103.3 : 103.3%
4/1	A555 EB exit	U	N/A	N/A	-		-	-	-	-	1130	Inf	Inf	0.0%
4/2	A555 EB exit	U	N/A	N/A	-		-	-	-	-	1272	Inf	Inf	0.0%
5/1	A555 W WB	U	N/A	N/A	-		-	-	-	-	793	Inf	Inf	0.0%
5/2	A555 W WB	U	N/A	N/A	-		-	-	-	-	893	Inf	Inf	0.0%
6/1	Enterprise Way exit	U	N/A	N/A	-		-	-	-	-	278	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	K		1	74	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	J		1	70	-	-	0	-	0	0.0%

Detailed Input Data And Results

Ped Link: P3	Unnamed Ped Link	-	N/A	-	J		1	70	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	I		1	28	-	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	H		1	38	-	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	G		1	5	-	-	0	-	0	0.0%

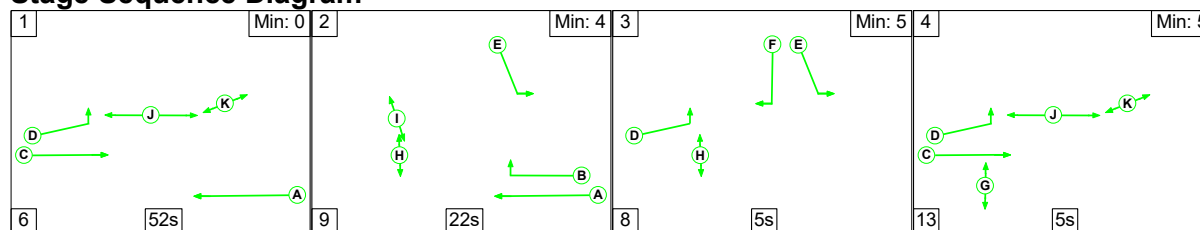
Detailed Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A555 Ringway Road West / Enterprise Way Junction	-	-	0	0	0	31.5	39.0	0.0	70.4	-	-	-	-	
A555 Ringway Road / Enterprise Way	-	-	0	0	0	31.5	39.0	0.0	70.4	-	-	-	-	
1/2+1/1	908	908	-	-	-	4.6	1.9	-	6.5	25.8	22.4	1.9	24.3	
1/3	1007	1007	-	-	-	5.3	1.9	-	7.2	25.9	25.7	1.9	27.7	
2/1	530	530	-	-	-	5.9	3.2	-	9.0	61.5	16.6	3.2	19.8	
2/2	116	116	-	-	-	1.8	4.2	-	6.0	186.6	3.8	4.2	8.0	
3/1	735	735	-	-	-	1.8	0.6	-	2.5	12.0	12.0	0.6	12.7	
3/2+3/3	1070	1043	-	-	-	12.1	27.1	-	39.2	131.8	33.8	27.1	60.9	
4/1	1130	1130	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	1272	1272	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	793	793	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	866	866	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	278	278	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-	
C1 PRC for Signalled Lanes (%): -14.8 PRC Over All Lanes (%): -14.8 Total Delay for Signalled Lanes (pcuHr): 70.43 Total Delay Over All Lanes(pcuHr): 70.43 Cycle Time (s): 120														

Detailed Input Data And Results

Scenario 5: '2030 Base + Option 5 B2 Dev AM Peak' (FG5: '2030 Base + Option 5 B2 Dev AM Peak', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

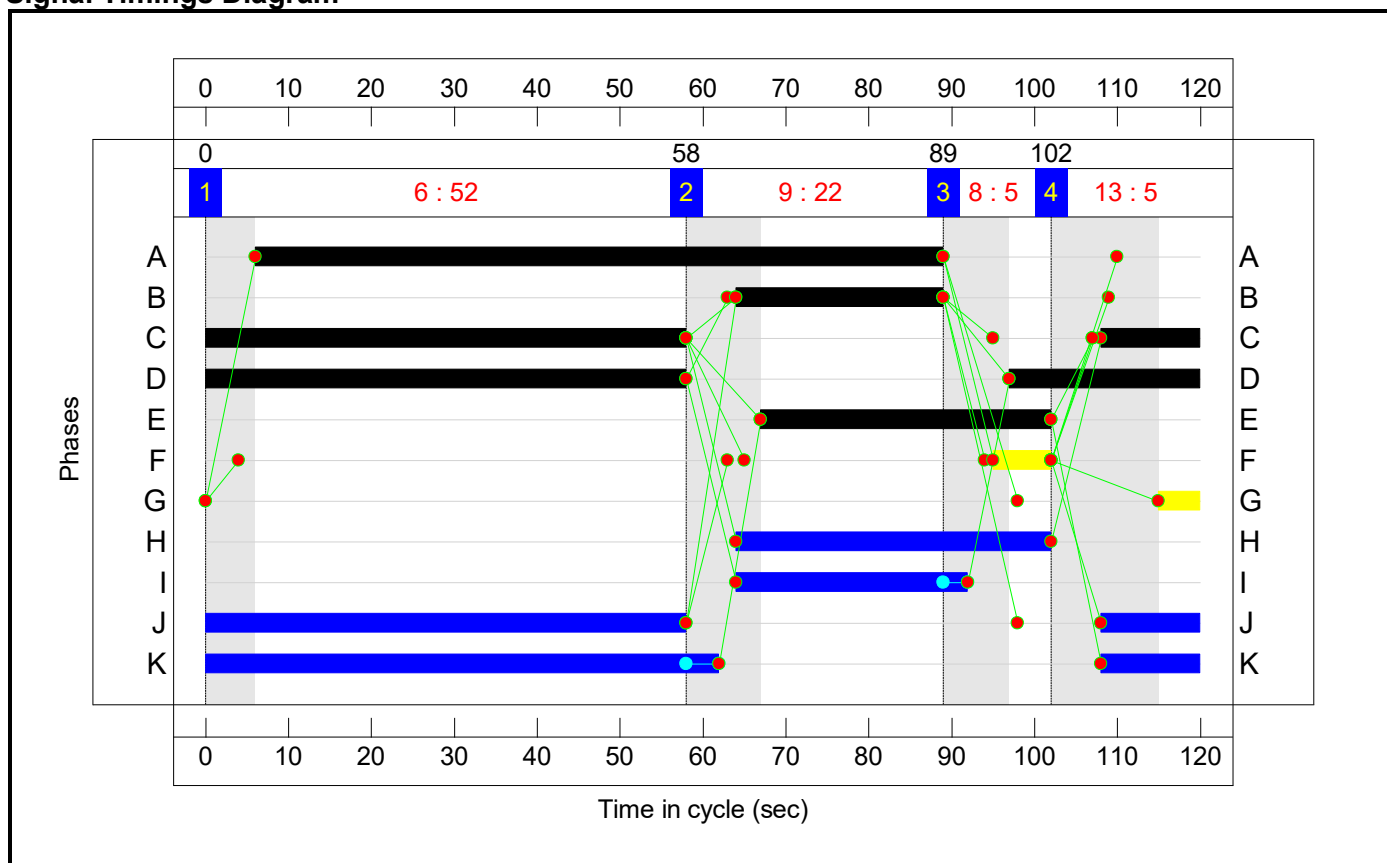


Stage Timings

Stage	1	2	3	4
Duration	52	22	5	5
Change Point	0	58	89	102

Phase Timings

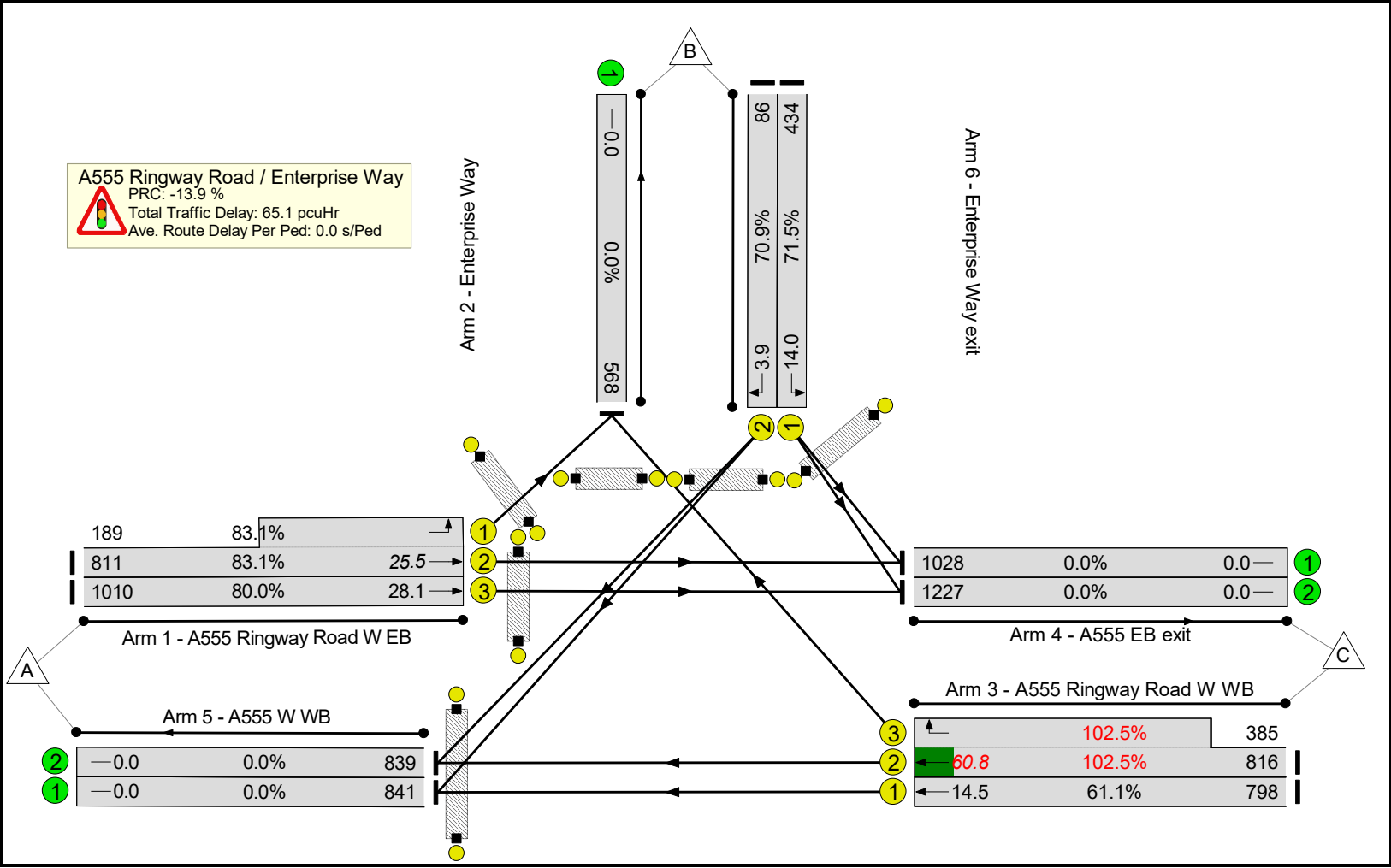
Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	A555 Ringway Road W WB Ahead	Traffic	83	6	89
B	A555 Ringway Road W WB Right	Traffic	25	64	89
C	A555 Ringway Road W EB Ahead	Traffic	70	108	58
D	A555 Ringway Road W EB Left	Traffic	81	97	58
E	Enterprise Way Left	Traffic	35	67	102
F	Enterprise Way Right	Traffic	7	95	102
G	Pedestrians across	Pedestrian	5	115	0
H	Pedestrians across	Pedestrian	38	64	102
I	Pedestrians across	Pedestrian	28	64	92
J	Pedestrians across	Pedestrian	70	108	58
K	Pedestrians across	Pedestrian	74	108	62

Signal Timings Diagram**Lane Green Times**

Junction: A555 Ringway Road / Enterprise Way					
Lane	Description	Type	Phases	Start Green	End Green
1/1	A555 Ringway Road W EB Left	U	D	97	58
1/2	A555 Ringway Road W EB Ahead	U	C	108	58
1/3	A555 Ringway Road W EB Ahead	U	C	108	58
2/1	Enterprise Way Left	U	E	67	102
2/2	Enterprise Way Right	U	F	95	102
3/1	A555 Ringway Road W WB Ahead	U	A	6	89
3/2	A555 Ringway Road W WB Ahead	U	A	6	89-32
3/3	A555 Ringway Road W WB Right	U	B	64	89

Detailed Input Data And Results

Network Layout Diagram



Detailed Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A555 Ringway Road West / Enterprise Way Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	102.5%
A555 Ringway Road / Enterprise Way	-	-	N/A	-	-		-	-	-	-	-	-	-	102.5%
1/2+1/1	A555 Ringway Road W EB Ahead Left	U	N/A	N/A	C D		1	70:81	-	-	1000	1890:1955	976+227	83.1 : 83.1%
1/3	A555 Ringway Road W EB Ahead	U	N/A	N/A	C		1	70	-	-	1010	2134	1263	80.0%
2/1	Enterprise Way Left	U	N/A	N/A	E		1	35	-	-	434	2023	607	71.5%
2/2	Enterprise Way Right	U	N/A	N/A	F		1	7	-	-	86	1820	121	70.9%
3/1	A555 Ringway Road W WB Ahead	U	N/A	N/A	A		1	83	-	-	798	1867	1307	61.1%
3/2+3/3	A555 Ringway Road W WB Ahead Right	U	N/A	N/A	A B		1	83:25	-	Y:-	1201	2109:1749	796+376	102.5 : 102.5%
4/1	A555 EB exit	U	N/A	N/A	-		-	-	-	-	1028	Inf	Inf	0.0%
4/2	A555 EB exit	U	N/A	N/A	-		-	-	-	-	1227	Inf	Inf	0.0%
5/1	A555 W WB	U	N/A	N/A	-		-	-	-	-	841	Inf	Inf	0.0%
5/2	A555 W WB	U	N/A	N/A	-		-	-	-	-	859	Inf	Inf	0.0%
6/1	Enterprise Way exit	U	N/A	N/A	-		-	-	-	-	574	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	K		1	74	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	J		1	70	-	-	0	-	0	0.0%

Detailed Input Data And Results

Ped Link: P3	Unnamed Ped Link	-	N/A	-	J		1	70	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	I		1	28	-	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	H		1	38	-	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	G		1	5	-	-	0	-	0	0.0%

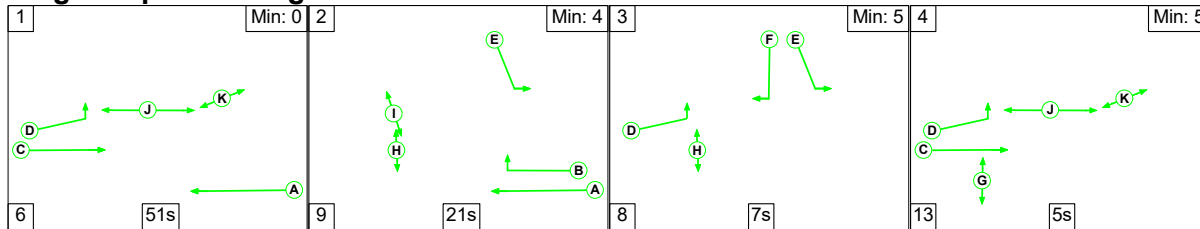
Detailed Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A555 Ringway Road West / Enterprise Way Junction	-	-	0	0	0	31.5	33.6	0.0	65.1	-	-	-	-	
A555 Ringway Road / Enterprise Way	-	-	0	0	0	31.5	33.6	0.0	65.1	-	-	-	-	
1/2+1/1	1000	1000	-	-	-	4.7	2.4	-	7.1	25.4	23.1	2.4	25.5	
1/3	1010	1010	-	-	-	5.3	2.0	-	7.3	26.0	26.1	2.0	28.1	
2/1	434	434	-	-	-	4.5	1.2	-	5.7	47.7	12.8	1.2	14.0	
2/2	86	86	-	-	-	1.3	1.1	-	2.5	102.7	2.8	1.1	3.9	
3/1	798	798	-	-	-	2.1	0.8	-	2.9	13.0	13.7	0.8	14.5	
3/2+3/3	1201	1175	-	-	-	13.6	26.0	-	39.6	118.8	34.8	26.0	60.8	
4/1	1028	1028	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	1227	1227	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	841	841	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	839	839	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	568	568	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-	
C1 PRC for Signalled Lanes (%): -13.9 PRC Over All Lanes (%): -13.9 Total Delay for Signalled Lanes (pcuHr): 65.05 Total Delay Over All Lanes(pcuHr): 65.05 Cycle Time (s): 120														

Detailed Input Data And Results

Scenario 6: '2030 Base + Option 5 B2 Dev PM Peak' (FG6: '2030 Base + Option 5 B2 Dev PM Peak', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



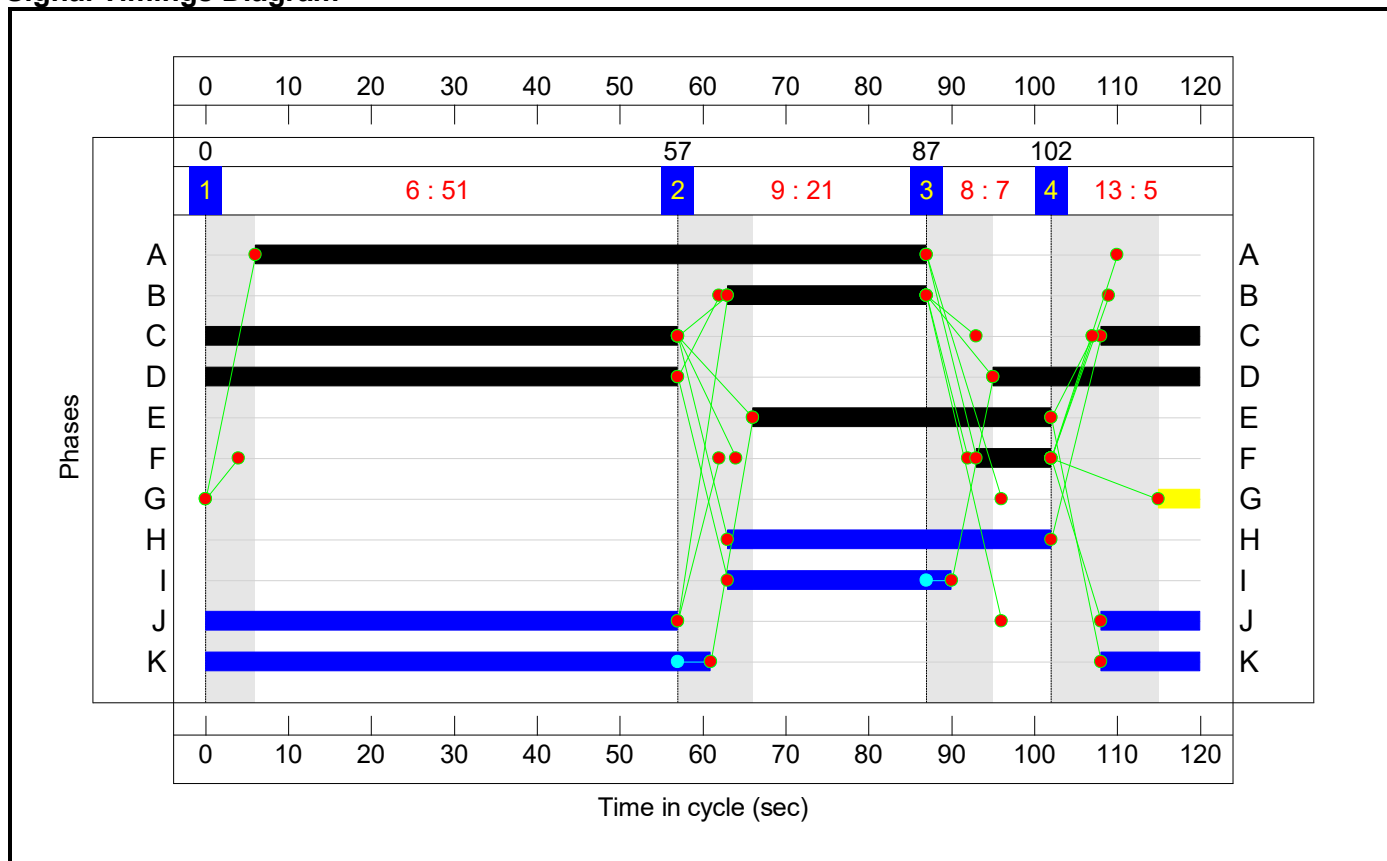
Stage Timings

Stage	1	2	3	4
Duration	51	21	7	5
Change Point	0	57	87	102

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	A555 Ringway Road W WB Ahead	Traffic	81	6	87
B	A555 Ringway Road W WB Right	Traffic	24	63	87
C	A555 Ringway Road W EB Ahead	Traffic	69	108	57
D	A555 Ringway Road W EB Left	Traffic	82	95	57
E	Enterprise Way Left	Traffic	36	66	102
F	Enterprise Way Right	Traffic	9	93	102
G	Pedestrians across	Pedestrian	5	115	0
H	Pedestrians across	Pedestrian	39	63	102
I	Pedestrians across	Pedestrian	27	63	90
J	Pedestrians across	Pedestrian	69	108	57
K	Pedestrians across	Pedestrian	73	108	61

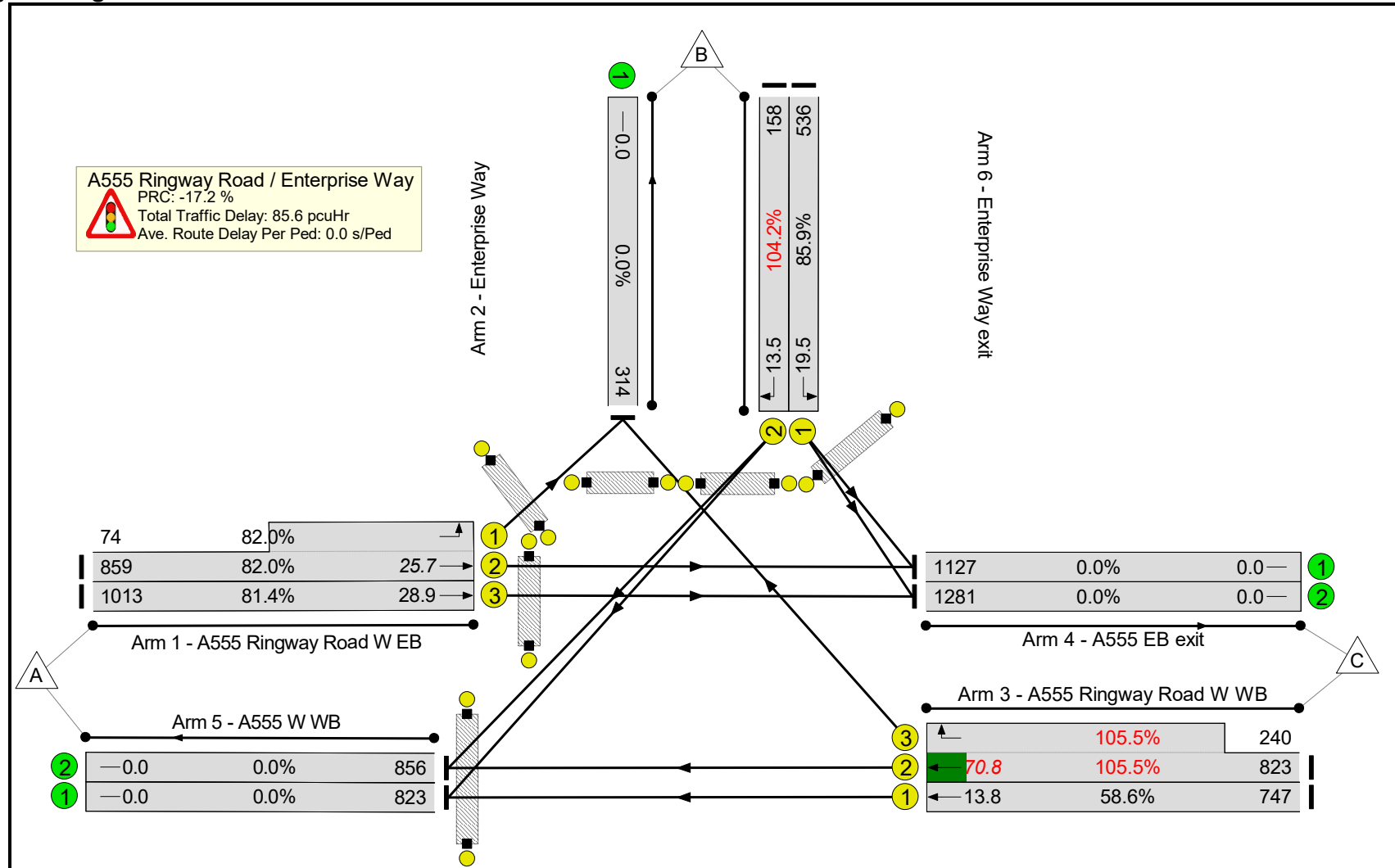
Signal Timings Diagram



Lane Green Times

Junction: A555 Ringway Road / Enterprise Way					
Lane	Description	Type	Phases	Start Green	End Green
1/1	A555 Ringway Road W EB Left	U	D	95	57
1/2	A555 Ringway Road W EB Ahead	U	C	108	57
1/3	A555 Ringway Road W EB Ahead	U	C	108	57
2/1	Enterprise Way Left	U	E	66	102
2/2	Enterprise Way Right	U	F	93	102
3/1	A555 Ringway Road W WB Ahead	U	A	6	87
3/2	A555 Ringway Road W WB Ahead	U	A	6	87-34
3/3	A555 Ringway Road W WB Right	U	B	63	87

Detailed Input Data And Results
Network Layout Diagram



Detailed Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A555 Ringway Road West / Enterprise Way Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	105.5%
A555 Ringway Road / Enterprise Way	-	-	N/A	-	-		-	-	-	-	-	-	-	105.5%
1/2+1/1	A555 Ringway Road W EB Ahead Left	U	N/A	N/A	C D		1	69:82	-	-	933	1890:1955	1048+90	82.0 : 82.0%
1/3	A555 Ringway Road W EB Ahead	U	N/A	N/A	C		1	69	-	-	1013	2134	1245	81.4%
2/1	Enterprise Way Left	U	N/A	N/A	E		1	36	-	-	536	2023	624	85.9%
2/2	Enterprise Way Right	U	N/A	N/A	F		1	9	-	-	158	1820	152	104.2%
3/1	A555 Ringway Road W WB Ahead	U	N/A	N/A	A		1	81	-	-	747	1867	1276	58.6%
3/2+3/3	A555 Ringway Road W WB Ahead Right	U	N/A	N/A	A B		1	81:24	-	Y:-	1063	2109:1749	780+227	105.5 : 105.5%
4/1	A555 EB exit	U	N/A	N/A	-		-	-	-	-	1127	Inf	Inf	0.0%
4/2	A555 EB exit	U	N/A	N/A	-		-	-	-	-	1281	Inf	Inf	0.0%
5/1	A555 W WB	U	N/A	N/A	-		-	-	-	-	826	Inf	Inf	0.0%
5/2	A555 W WB	U	N/A	N/A	-		-	-	-	-	902	Inf	Inf	0.0%
6/1	Enterprise Way exit	U	N/A	N/A	-		-	-	-	-	314	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	K		1	73	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	J		1	69	-	-	0	-	0	0.0%

Detailed Input Data And Results

Ped Link: P3	Unnamed Ped Link	-	N/A	-	J		1	69	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	I		1	27	-	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	H		1	39	-	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	G		1	5	-	-	0	-	0	0.0%

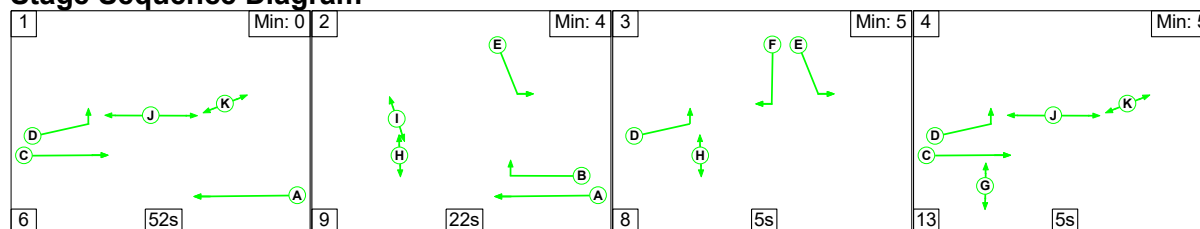
Detailed Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A555 Ringway Road West / Enterprise Way Junction	-	-	0	0	0	34.3	51.3	0.0	85.6	-	-	-	-	
A555 Ringway Road / Enterprise Way	-	-	0	0	0	34.3	51.3	0.0	85.6	-	-	-	-	
1/2+1/1	933	933	-	-	-	4.8	2.2	-	7.1	27.3	23.5	2.2	25.7	
1/3	1013	1013	-	-	-	5.6	2.1	-	7.7	27.5	26.7	2.1	28.9	
2/1	536	536	-	-	-	5.8	2.9	-	8.7	58.3	16.7	2.9	19.5	
2/2	158	152	-	-	-	2.7	8.1	-	10.7	244.4	5.5	8.1	13.5	
3/1	747	747	-	-	-	2.1	0.7	-	2.8	13.4	13.1	0.7	13.8	
3/2+3/3	1063	1020	-	-	-	13.3	35.3	-	48.6	164.6	35.6	35.3	70.8	
4/1	1127	1127	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	1281	1281	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	823	823	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	856	856	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	314	314	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-	
C1 PRC for Signalled Lanes (%): -17.2 PRC Over All Lanes (%): -17.2 Total Delay for Signalled Lanes (pcuHr): 85.58 Total Delay Over All Lanes(pcuHr): 85.58 Cycle Time (s): 120														

Detailed Input Data And Results

Scenario 7: '2035 Base AM Peak' (FG7: '2035 Base AM Peak', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



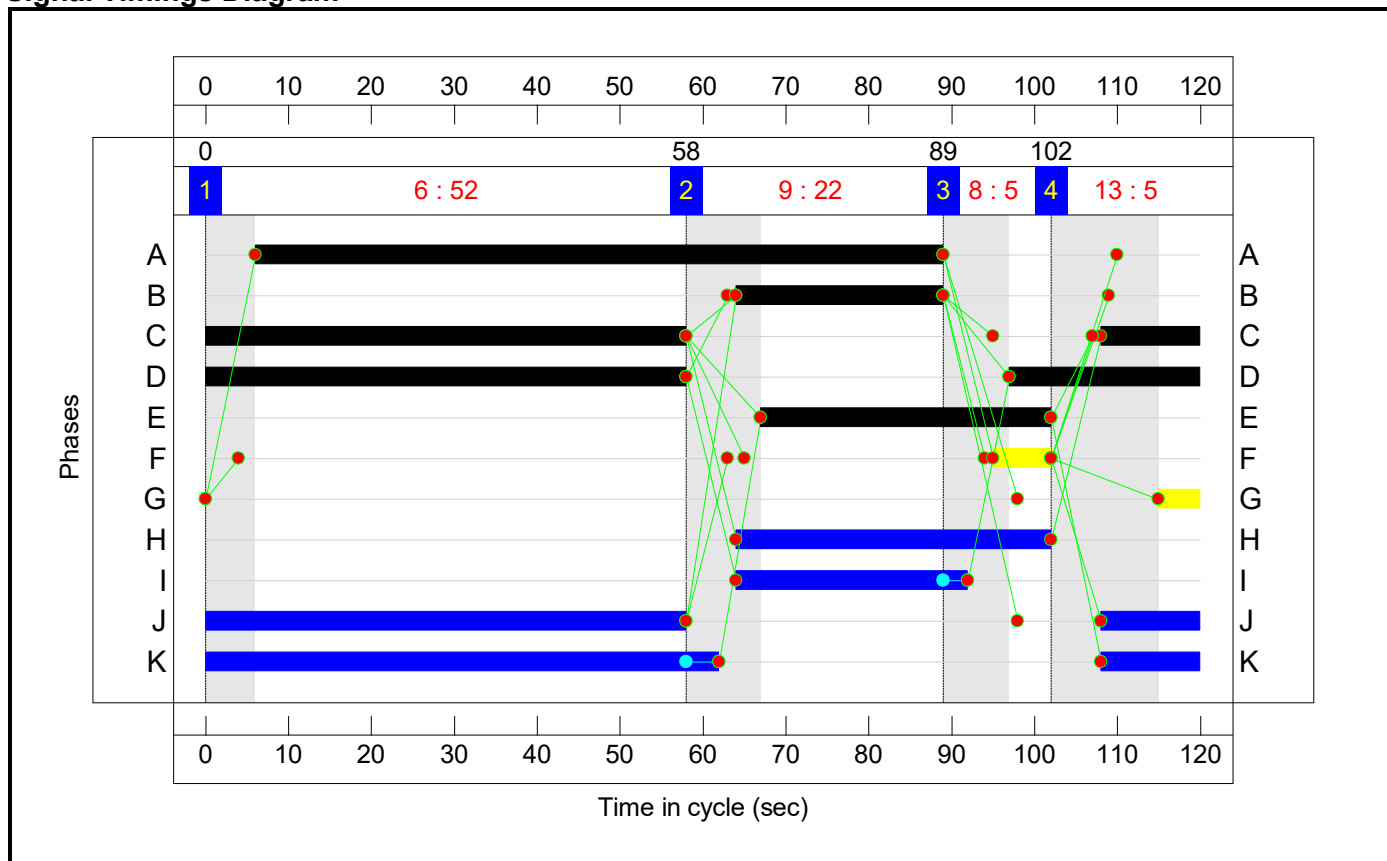
Stage Timings

Stage	1	2	3	4
Duration	52	22	5	5
Change Point	0	58	89	102

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	A555 Ringway Road W WB Ahead	Traffic	83	6	89
B	A555 Ringway Road W WB Right	Traffic	25	64	89
C	A555 Ringway Road W EB Ahead	Traffic	70	108	58
D	A555 Ringway Road W EB Left	Traffic	81	97	58
E	Enterprise Way Left	Traffic	35	67	102
F	Enterprise Way Right	Traffic	7	95	102
G	Pedestrians across	Pedestrian	5	115	0
H	Pedestrians across	Pedestrian	38	64	102
I	Pedestrians across	Pedestrian	28	64	92
J	Pedestrians across	Pedestrian	70	108	58
K	Pedestrians across	Pedestrian	74	108	62

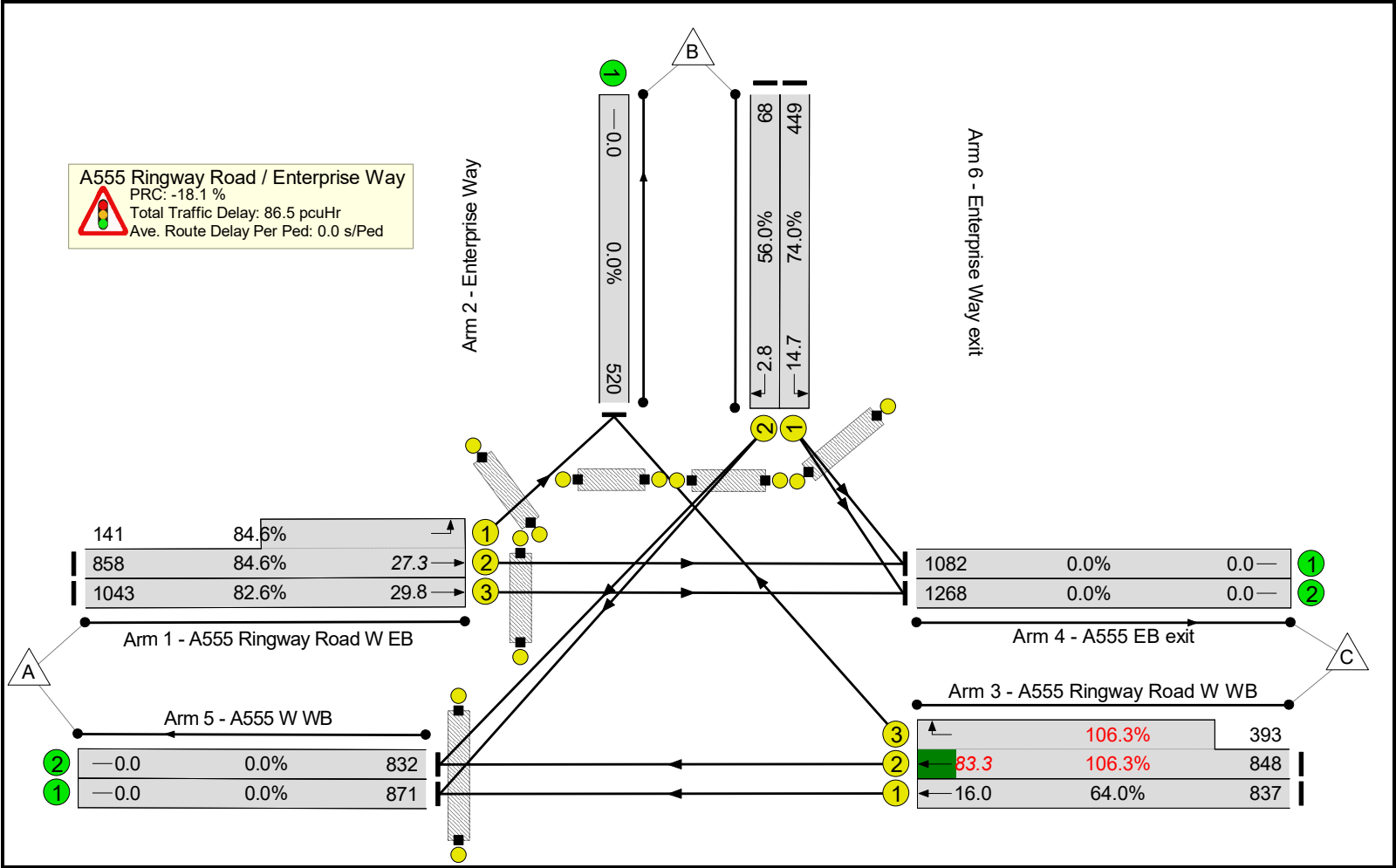
Signal Timings Diagram



Lane Green Times

Junction: A555 Ringway Road / Enterprise Way					
Lane	Description	Type	Phases	Start Green	End Green
1/1	A555 Ringway Road W EB Left	U	D	97	58
1/2	A555 Ringway Road W EB Ahead	U	C	108	58
1/3	A555 Ringway Road W EB Ahead	U	C	108	58
2/1	Enterprise Way Left	U	E	67	102
2/2	Enterprise Way Right	U	F	95	102
3/1	A555 Ringway Road W WB Ahead	U	A	6	89
3/2	A555 Ringway Road W WB Ahead	U	A	6	89-32
3/3	A555 Ringway Road W WB Right	U	B	64	89

Detailed Input Data And Results
Network Layout Diagram



Detailed Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A555 Ringway Road West / Enterprise Way Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	106.3%
A555 Ringway Road / Enterprise Way	-	-	N/A	-	-		-	-	-	-	-	-	-	106.3%
1/2+1/1	A555 Ringway Road W EB Ahead Left	U	N/A	N/A	C D		1	70:81	-	-	999	1890:1955	1014+167	84.6 : 84.6%
1/3	A555 Ringway Road W EB Ahead	U	N/A	N/A	C		1	70	-	-	1043	2134	1263	82.6%
2/1	Enterprise Way Left	U	N/A	N/A	E		1	35	-	-	449	2023	607	74.0%
2/2	Enterprise Way Right	U	N/A	N/A	F		1	7	-	-	68	1820	121	56.0%
3/1	A555 Ringway Road W WB Ahead	U	N/A	N/A	A		1	83	-	-	837	1867	1307	64.0%
3/2+3/3	A555 Ringway Road W WB Ahead Right	U	N/A	N/A	A B		1	83:25	-	Y:-	1241	2109:1749	798+370	106.3 : 106.3%
4/1	A555 EB exit	U	N/A	N/A	-		-	-	-	-	1082	Inf	Inf	0.0%
4/2	A555 EB exit	U	N/A	N/A	-		-	-	-	-	1268	Inf	Inf	0.0%
5/1	A555 W WB	U	N/A	N/A	-		-	-	-	-	871	Inf	Inf	0.0%
5/2	A555 W WB	U	N/A	N/A	-		-	-	-	-	882	Inf	Inf	0.0%
6/1	Enterprise Way exit	U	N/A	N/A	-		-	-	-	-	534	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	K		1	74	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	J		1	70	-	-	0	-	0	0.0%

Detailed Input Data And Results

Ped Link: P3	Unnamed Ped Link	-	N/A	-	J		1	70	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	I		1	28	-	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	H		1	38	-	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	G		1	5	-	-	0	-	0	0.0%

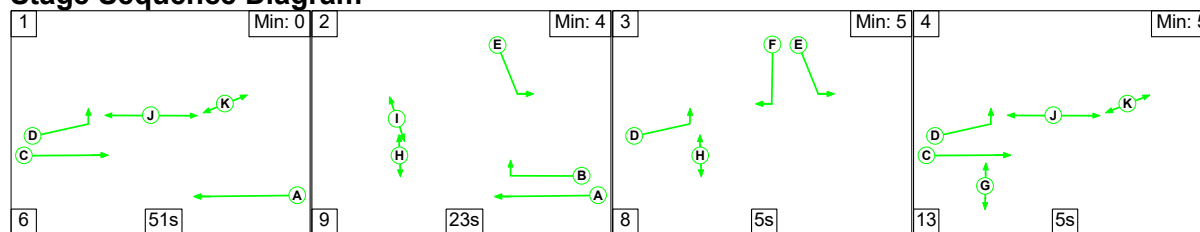
Detailed Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A555 Ringway Road West / Enterprise Way Junction	-	-	0	0	0	34.7	51.8	0.0	86.5	-	-	-	-	
A555 Ringway Road / Enterprise Way	-	-	0	0	0	34.7	51.8	0.0	86.5	-	-	-	-	
1/2+1/1	999	999	-	-	-	5.0	2.7	-	7.6	27.5	24.7	2.7	27.3	
1/3	1043	1043	-	-	-	5.7	2.3	-	8.0	27.6	27.5	2.3	29.8	
2/1	449	449	-	-	-	4.7	1.4	-	6.1	49.0	13.3	1.4	14.7	
2/2	68	68	-	-	-	1.0	0.6	-	1.6	87.3	2.2	0.6	2.8	
3/1	837	837	-	-	-	2.3	0.9	-	3.2	13.6	15.1	0.9	16.0	
3/2+3/3	1241	1177	-	-	-	16.1	43.9	-	59.9	173.9	39.4	43.9	83.3	
4/1	1082	1082	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	1268	1268	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	871	871	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	832	832	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	520	520	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-	
C1 PRC for Signalled Lanes (%): -18.1 PRC Over All Lanes (%): -18.1 Total Delay for Signalled Lanes (pcuHr): 86.50 Total Delay Over All Lanes(pcuHr): 86.50 Cycle Time (s): 120														

Detailed Input Data And Results

Scenario 8: '2035 Base PM Peak' (FG8: '2035 Base PM Peak', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram



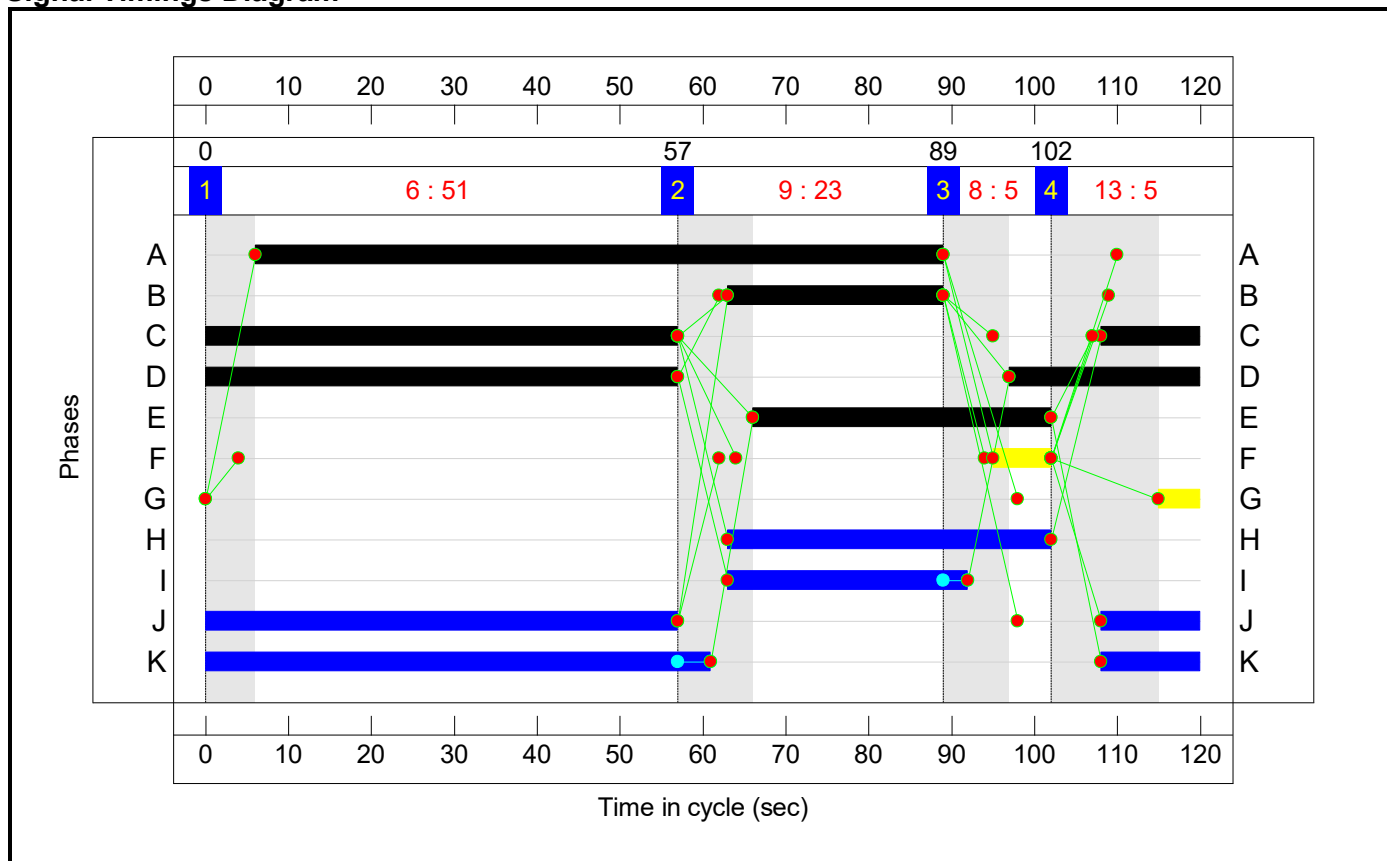
Stage Timings

Stage	1	2	3	4
Duration	51	23	5	5
Change Point	0	57	89	102

Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	A555 Ringway Road W WB Ahead	Traffic	83	6	89
B	A555 Ringway Road W WB Right	Traffic	26	63	89
C	A555 Ringway Road W EB Ahead	Traffic	69	108	57
D	A555 Ringway Road W EB Left	Traffic	80	97	57
E	Enterprise Way Left	Traffic	36	66	102
F	Enterprise Way Right	Traffic	7	95	102
G	Pedestrians across	Pedestrian	5	115	0
H	Pedestrians across	Pedestrian	39	63	102
I	Pedestrians across	Pedestrian	29	63	92
J	Pedestrians across	Pedestrian	69	108	57
K	Pedestrians across	Pedestrian	73	108	61

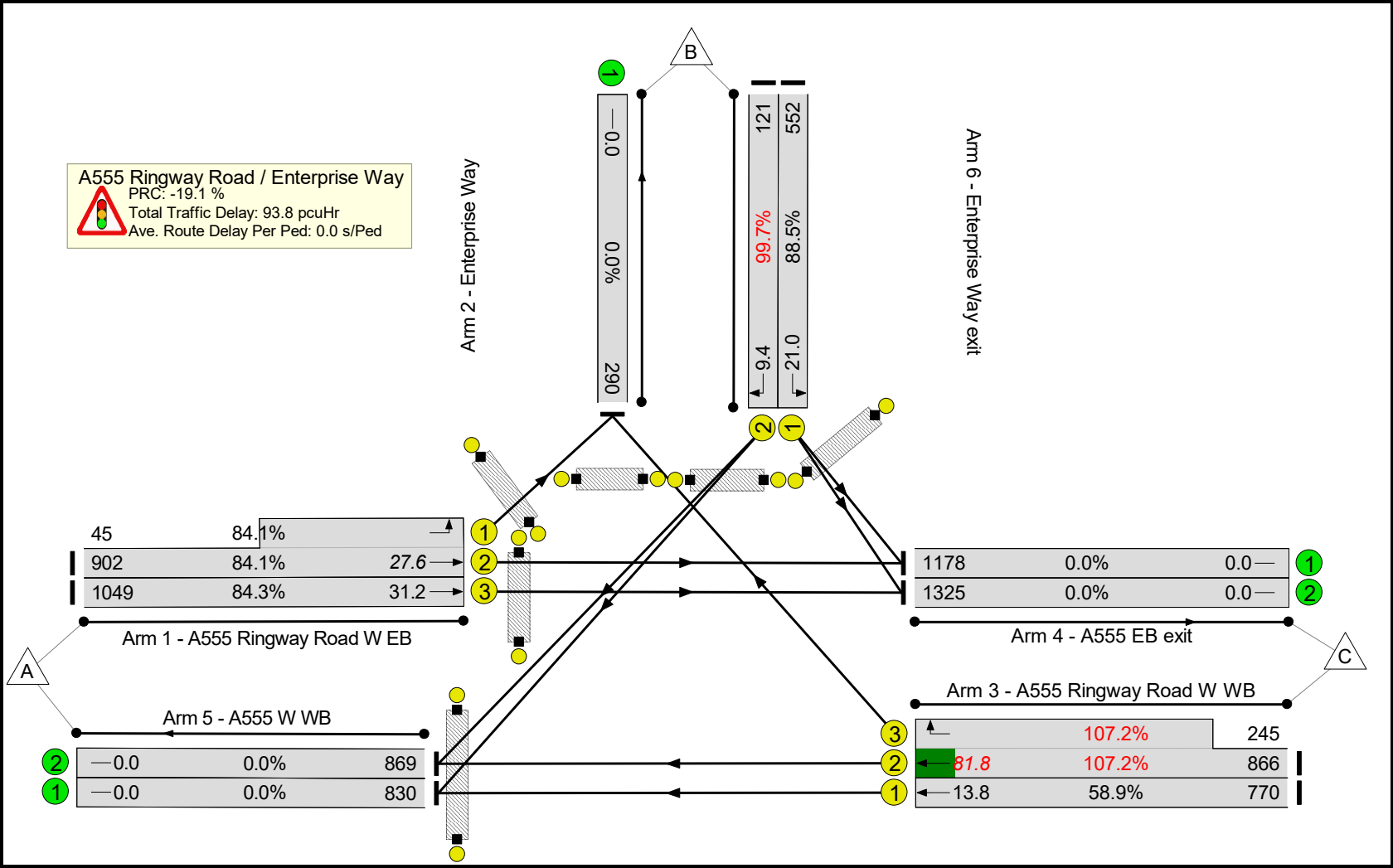
Signal Timings Diagram



Lane Green Times

Junction: A555 Ringway Road / Enterprise Way					
Lane	Description	Type	Phases	Start Green	End Green
1/1	A555 Ringway Road W EB Left	U	D	97	57
1/2	A555 Ringway Road W EB Ahead	U	C	108	57
1/3	A555 Ringway Road W EB Ahead	U	C	108	57
2/1	Enterprise Way Left	U	E	66	102
2/2	Enterprise Way Right	U	F	95	102
3/1	A555 Ringway Road W WB Ahead	U	A	6	89
3/2	A555 Ringway Road W WB Ahead	U	A	6	89-34
3/3	A555 Ringway Road W WB Right	U	B	63	89

Detailed Input Data And Results
Network Layout Diagram



Detailed Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A555 Ringway Road West / Enterprise Way Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	107.2%
A555 Ringway Road / Enterprise Way	-	-	N/A	-	-		-	-	-	-	-	-	-	107.2%
1/2+1/1	A555 Ringway Road W EB Ahead Left	U	N/A	N/A	C D		1	69:80	-	-	947	1890:1955	1072+54	84.1 : 84.1%
1/3	A555 Ringway Road W EB Ahead	U	N/A	N/A	C		1	69	-	-	1049	2134	1245	84.3%
2/1	Enterprise Way Left	U	N/A	N/A	E		1	36	-	-	552	2023	624	88.5%
2/2	Enterprise Way Right	U	N/A	N/A	F		1	7	-	-	121	1820	121	99.7%
3/1	A555 Ringway Road W WB Ahead	U	N/A	N/A	A		1	83	-	-	770	1867	1307	58.9%
3/2+3/3	A555 Ringway Road W WB Ahead Right	U	N/A	N/A	A B		1	83:26	-	Y:-	1111	2109:1749	808+229	107.2 : 107.2%
4/1	A555 EB exit	U	N/A	N/A	-		-	-	-	-	1178	Inf	Inf	0.0%
4/2	A555 EB exit	U	N/A	N/A	-		-	-	-	-	1325	Inf	Inf	0.0%
5/1	A555 W WB	U	N/A	N/A	-		-	-	-	-	830	Inf	Inf	0.0%
5/2	A555 W WB	U	N/A	N/A	-		-	-	-	-	927	Inf	Inf	0.0%
6/1	Enterprise Way exit	U	N/A	N/A	-		-	-	-	-	290	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	K		1	73	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	J		1	69	-	-	0	-	0	0.0%

Detailed Input Data And Results

Ped Link: P3	Unnamed Ped Link	-	N/A	-	J		1	69	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	I		1	29	-	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	H		1	39	-	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	G		1	5	-	-	0	-	0	0.0%

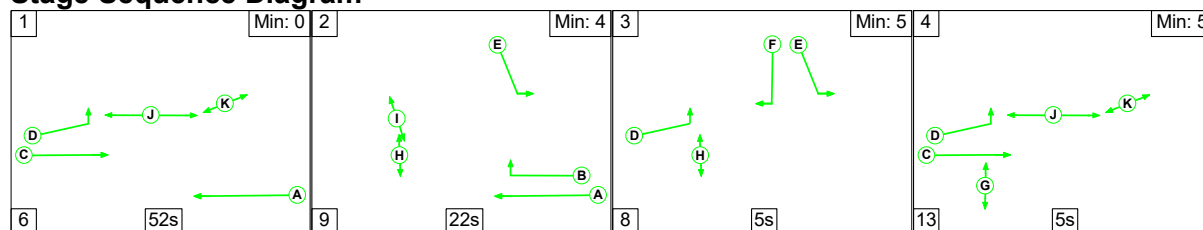
Detailed Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A555 Ringway Road West / Enterprise Way Junction	-	-	0	0	0	35.4	58.5	0.0	93.8	-	-	-	-	
A555 Ringway Road / Enterprise Way	-	-	0	0	0	35.4	58.5	0.0	93.8	-	-	-	-	
1/2+1/1	947	947	-	-	-	5.2	2.6	-	7.8	29.5	25.0	2.6	27.6	
1/3	1049	1049	-	-	-	6.0	2.6	-	8.6	29.4	28.6	2.6	31.2	
2/1	552	552	-	-	-	6.1	3.5	-	9.6	62.3	17.5	3.5	21.0	
2/2	121	121	-	-	-	1.9	5.4	-	7.3	217.2	4.0	5.4	9.4	
3/1	770	770	-	-	-	2.0	0.7	-	2.7	12.5	13.0	0.7	13.8	
3/2+3/3	1111	1053	-	-	-	14.3	43.6	-	57.9	187.7	38.1	43.6	81.8	
4/1	1178	1178	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	1325	1325	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	830	830	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	869	869	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	290	290	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-	
C1 PRC for Signalled Lanes (%): -19.1 PRC Over All Lanes (%): -19.1 Total Delay for Signalled Lanes (pcuHr): 93.81 Total Delay Over All Lanes(pcuHr): 93.81 Cycle Time (s): 120														

Detailed Input Data And Results

Scenario 9: '2035 Base + Option 5 B2 Dev AM Peak' (FG9: '2035 Base + Option 5 B2 Dev AM Peak', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

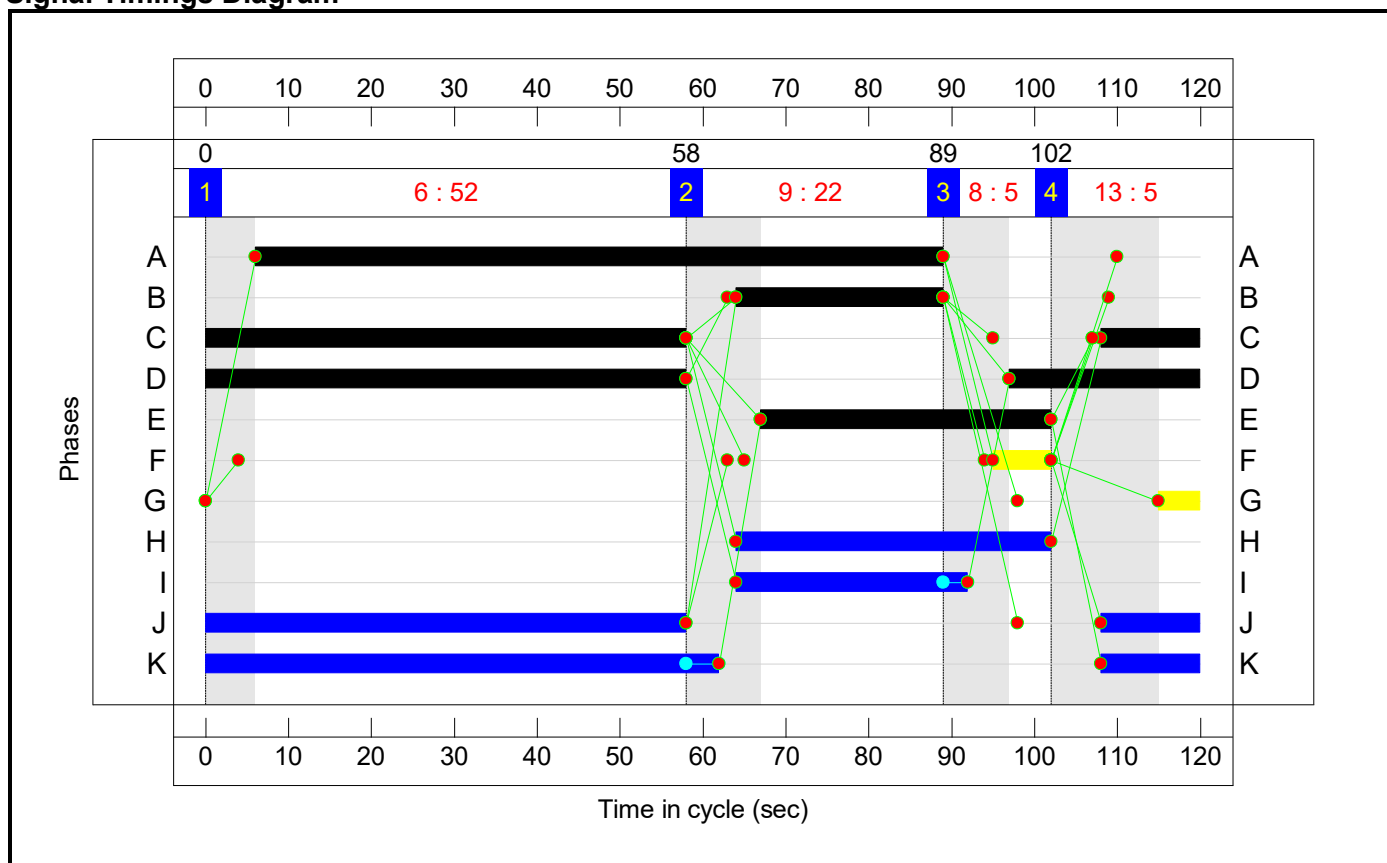


Stage Timings

Stage	1	2	3	4
Duration	52	22	5	5
Change Point	0	58	89	102

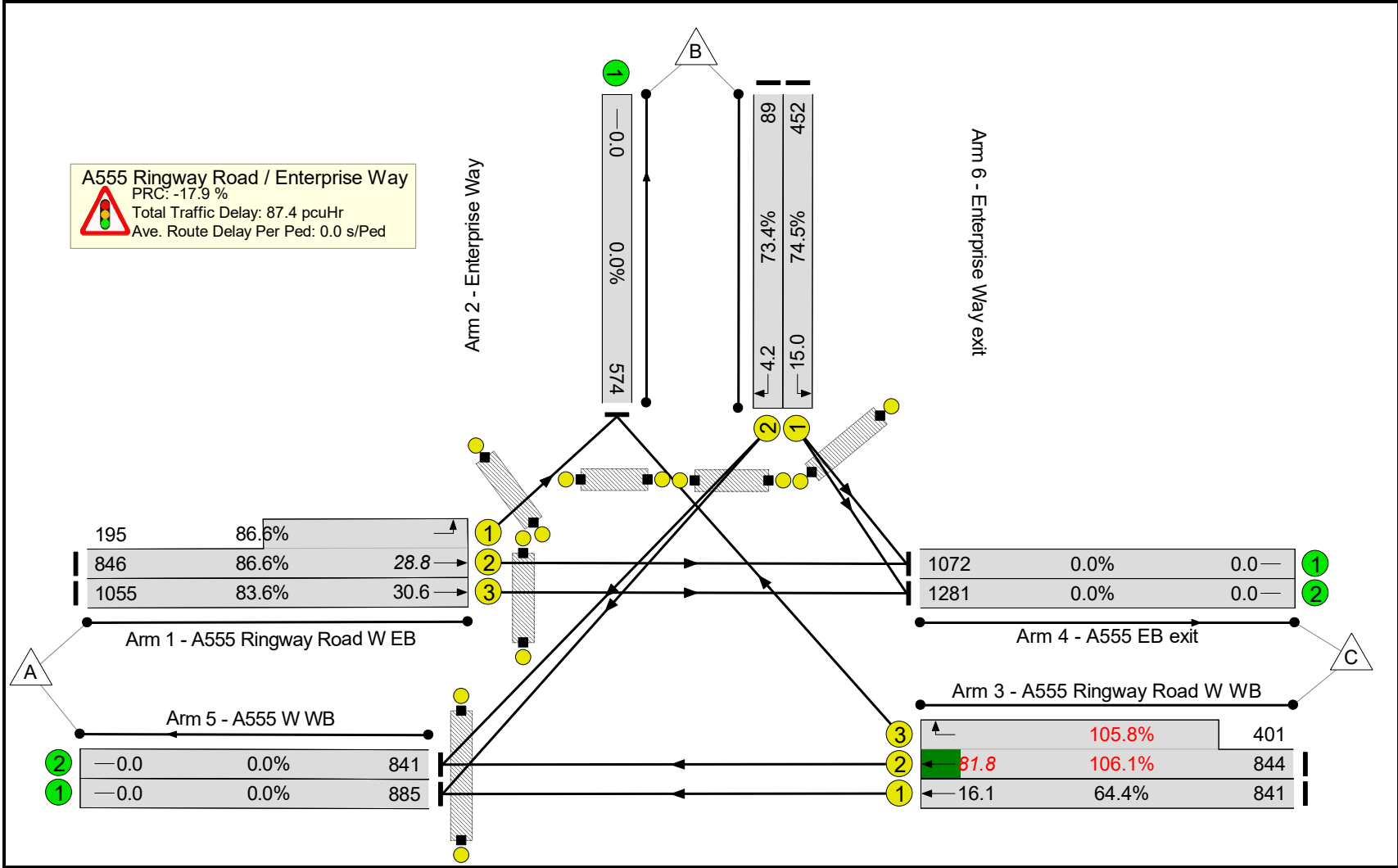
Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	A555 Ringway Road W WB Ahead	Traffic	83	6	89
B	A555 Ringway Road W WB Right	Traffic	25	64	89
C	A555 Ringway Road W EB Ahead	Traffic	70	108	58
D	A555 Ringway Road W EB Left	Traffic	81	97	58
E	Enterprise Way Left	Traffic	35	67	102
F	Enterprise Way Right	Traffic	7	95	102
G	Pedestrians across	Pedestrian	5	115	0
H	Pedestrians across	Pedestrian	38	64	102
I	Pedestrians across	Pedestrian	28	64	92
J	Pedestrians across	Pedestrian	70	108	58
K	Pedestrians across	Pedestrian	74	108	62

Signal Timings Diagram**Lane Green Times**

Junction: A555 Ringway Road / Enterprise Way					
Lane	Description	Type	Phases	Start Green	End Green
1/1	A555 Ringway Road W EB Left	U	D	97	58
1/2	A555 Ringway Road W EB Ahead	U	C	108	58
1/3	A555 Ringway Road W EB Ahead	U	C	108	58
2/1	Enterprise Way Left	U	E	67	102
2/2	Enterprise Way Right	U	F	95	102
3/1	A555 Ringway Road W WB Ahead	U	A	6	89
3/2	A555 Ringway Road W WB Ahead	U	A	6	89-32
3/3	A555 Ringway Road W WB Right	U	B	64	89

Detailed Input Data And Results
Network Layout Diagram



Detailed Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A555 Ringway Road West / Enterprise Way Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	106.1%
A555 Ringway Road / Enterprise Way	-	-	N/A	-	-		-	-	-	-	-	-	-	106.1%
1/2+1/1	A555 Ringway Road W EB Ahead Left	U	N/A	N/A	C D		1	70:81	-	-	1041	1890:1955	977+225	86.6 : 86.6%
1/3	A555 Ringway Road W EB Ahead	U	N/A	N/A	C		1	70	-	-	1055	2134	1263	83.6%
2/1	Enterprise Way Left	U	N/A	N/A	E		1	35	-	-	452	2023	607	74.5%
2/2	Enterprise Way Right	U	N/A	N/A	F		1	7	-	-	89	1820	121	73.4%
3/1	A555 Ringway Road W WB Ahead	U	N/A	N/A	A		1	83	-	-	841	1867	1307	64.4%
3/2+3/3	A555 Ringway Road W WB Ahead Right	U	N/A	N/A	A B		1	83:25	-	Y:-	1245	2109:1749	796+379	106.1 : 105.8%
4/1	A555 EB exit	U	N/A	N/A	-		-	-	-	-	1072	Inf	Inf	0.0%
4/2	A555 EB exit	U	N/A	N/A	-		-	-	-	-	1281	Inf	Inf	0.0%
5/1	A555 W WB	U	N/A	N/A	-		-	-	-	-	885	Inf	Inf	0.0%
5/2	A555 W WB	U	N/A	N/A	-		-	-	-	-	889	Inf	Inf	0.0%
6/1	Enterprise Way exit	U	N/A	N/A	-		-	-	-	-	596	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	K		1	74	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	J		1	70	-	-	0	-	0	0.0%

Detailed Input Data And Results

Ped Link: P3	Unnamed Ped Link	-	N/A	-	J		1	70	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	I		1	28	-	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	H		1	38	-	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	G		1	5	-	-	0	-	0	0.0%

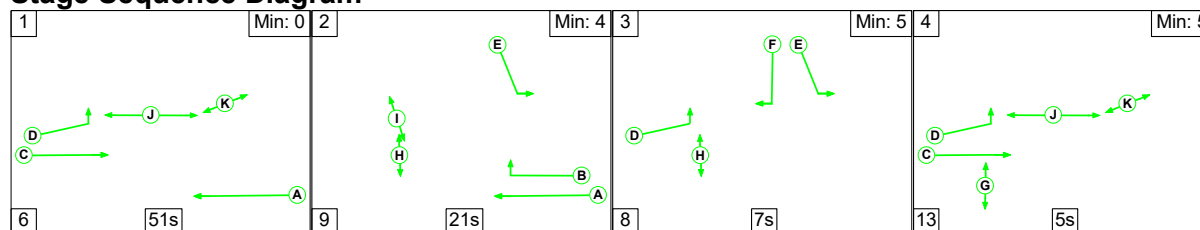
Detailed Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A555 Ringway Road West / Enterprise Way Junction	-	-	0	0	0	35.7	51.7	0.0	87.4	-	-	-	-	
A555 Ringway Road / Enterprise Way	-	-	0	0	0	35.7	51.7	0.0	87.4	-	-	-	-	
1/2+1/1	1041	1041	-	-	-	5.1	3.1	-	8.2	28.4	25.7	3.1	28.8	
1/3	1055	1055	-	-	-	5.8	2.5	-	8.3	28.3	28.1	2.5	30.6	
2/1	452	452	-	-	-	4.8	1.4	-	6.2	49.3	13.6	1.4	15.0	
2/2	89	89	-	-	-	1.4	1.3	-	2.6	106.6	2.9	1.3	4.2	
3/1	841	841	-	-	-	2.3	0.9	-	3.2	13.7	15.2	0.9	16.1	
3/2+3/3	1245	1175	-	-	-	16.4	42.5	-	58.9	170.3	39.3	42.5	81.8	
4/1	1072	1072	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	1281	1281	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	885	885	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	841	841	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	574	574	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-	
C1 PRC for Signalled Lanes (%): -17.9 PRC Over All Lanes (%): -17.9 Total Delay for Signalled Lanes (pcuHr): 87.40 Total Delay Over All Lanes(pcuHr): 87.40 Cycle Time (s): 120														

Detailed Input Data And Results

Scenario 10: '2035 Base + Option 5 B2 Dev PM Peak' (FG10: '2035 Base + Option 5 B2 Dev PM Peak', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

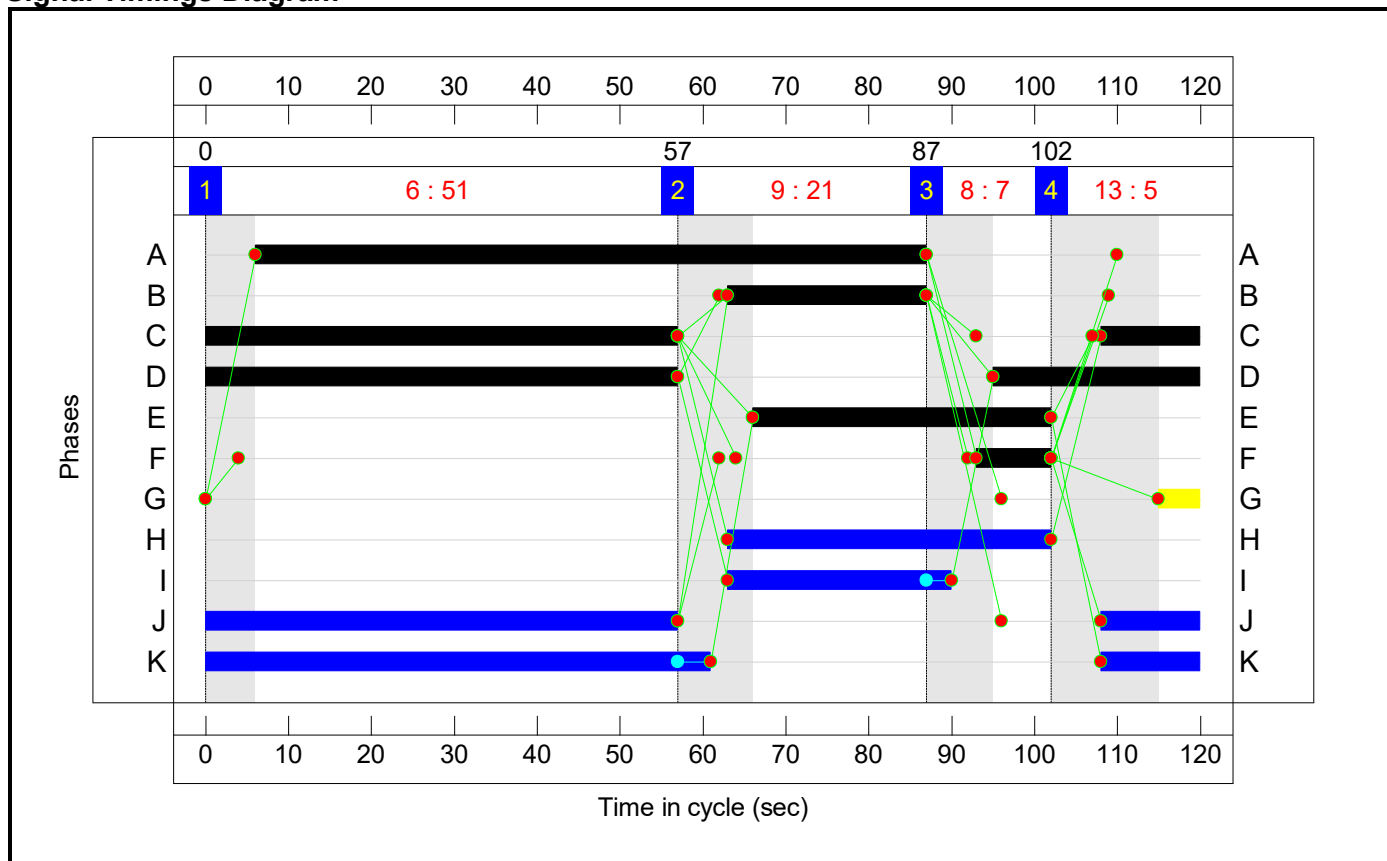


Stage Timings

Stage	1	2	3	4
Duration	51	21	7	5
Change Point	0	57	87	102

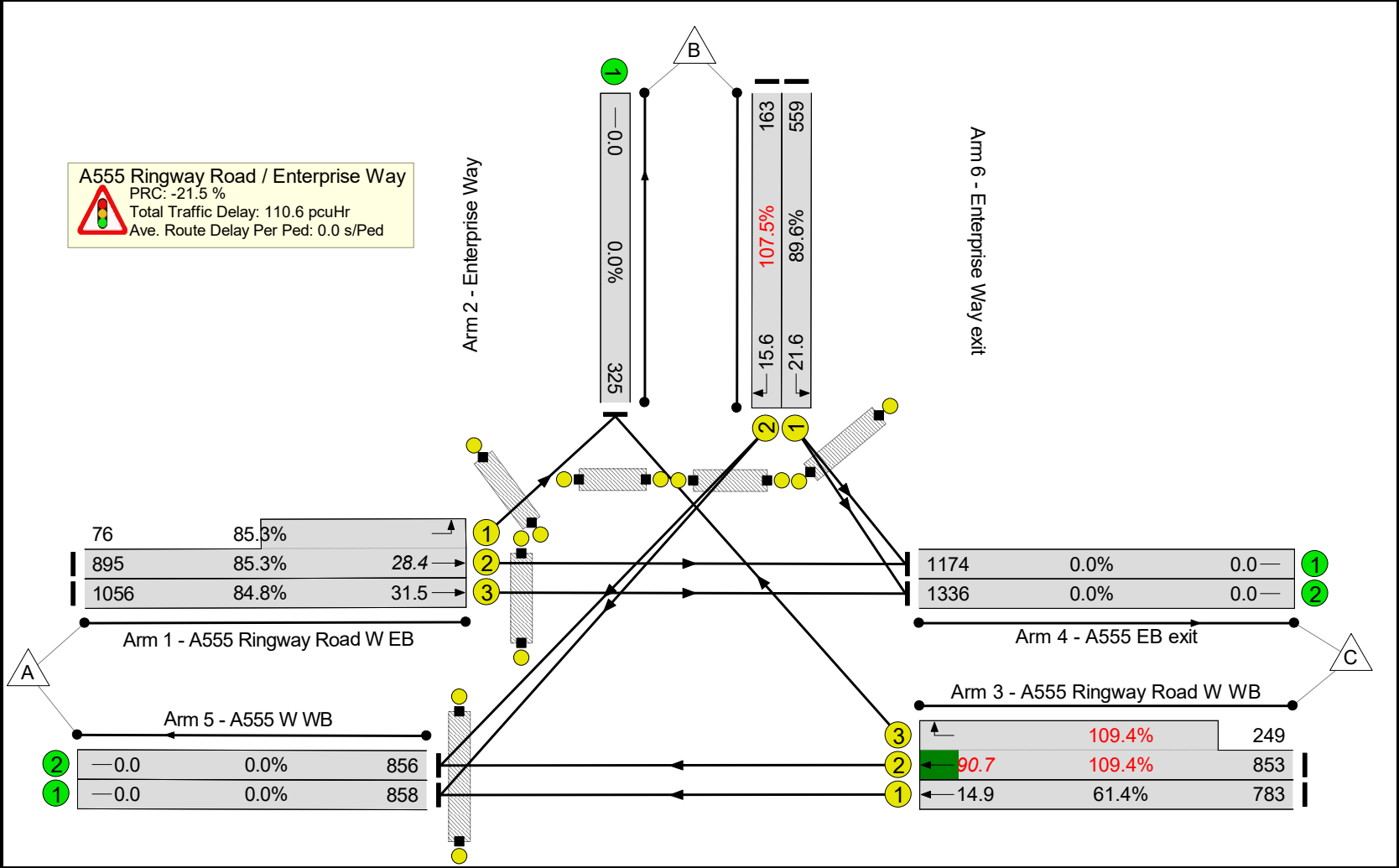
Phase Timings

Phase Name	Description	Phase	Green Period 1		
			Total Green	Start Time	End Time
A	A555 Ringway Road W WB Ahead	Traffic	81	6	87
B	A555 Ringway Road W WB Right	Traffic	24	63	87
C	A555 Ringway Road W EB Ahead	Traffic	69	108	57
D	A555 Ringway Road W EB Left	Traffic	82	95	57
E	Enterprise Way Left	Traffic	36	66	102
F	Enterprise Way Right	Traffic	9	93	102
G	Pedestrians across	Pedestrian	5	115	0
H	Pedestrians across	Pedestrian	39	63	102
I	Pedestrians across	Pedestrian	27	63	90
J	Pedestrians across	Pedestrian	69	108	57
K	Pedestrians across	Pedestrian	73	108	61

Signal Timings Diagram**Lane Green Times**

Junction: A555 Ringway Road / Enterprise Way					
Lane	Description	Type	Phases	Start Green	End Green
1/1	A555 Ringway Road W EB Left	U	D	95	57
1/2	A555 Ringway Road W EB Ahead	U	C	108	57
1/3	A555 Ringway Road W EB Ahead	U	C	108	57
2/1	Enterprise Way Left	U	E	66	102
2/2	Enterprise Way Right	U	F	93	102
3/1	A555 Ringway Road W WB Ahead	U	A	6	87
3/2	A555 Ringway Road W WB Ahead	U	A	6	87-34
3/3	A555 Ringway Road W WB Right	U	B	63	87

Detailed Input Data And Results
Network Layout Diagram



Detailed Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: A555 Ringway Road West / Enterprise Way Junction	-	-	N/A	-	-		-	-	-	-	-	-	-	109.4%
A555 Ringway Road / Enterprise Way	-	-	N/A	-	-		-	-	-	-	-	-	-	109.4%
1/2+1/1	A555 Ringway Road W EB Ahead Left	U	N/A	N/A	C D		1	69:82	-	-	971	1890:1955	1049+89	85.3 : 85.3%
1/3	A555 Ringway Road W EB Ahead	U	N/A	N/A	C		1	69	-	-	1056	2134	1245	84.8%
2/1	Enterprise Way Left	U	N/A	N/A	E		1	36	-	-	559	2023	624	89.6%
2/2	Enterprise Way Right	U	N/A	N/A	F		1	9	-	-	163	1820	152	107.5%
3/1	A555 Ringway Road W WB Ahead	U	N/A	N/A	A		1	81	-	-	783	1867	1276	61.4%
3/2+3/3	A555 Ringway Road W WB Ahead Right	U	N/A	N/A	A B		1	81:24	-	Y:-	1102	2109:1749	780+228	109.4 : 109.4%
4/1	A555 EB exit	U	N/A	N/A	-		-	-	-	-	1174	Inf	Inf	0.0%
4/2	A555 EB exit	U	N/A	N/A	-		-	-	-	-	1336	Inf	Inf	0.0%
5/1	A555 W WB	U	N/A	N/A	-		-	-	-	-	864	Inf	Inf	0.0%
5/2	A555 W WB	U	N/A	N/A	-		-	-	-	-	935	Inf	Inf	0.0%
6/1	Enterprise Way exit	U	N/A	N/A	-		-	-	-	-	325	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	K		1	73	-	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	J		1	69	-	-	0	-	0	0.0%

Detailed Input Data And Results

Ped Link: P3	Unnamed Ped Link	-	N/A	-	J		1	69	-	-	0	-	0	0.0%
Ped Link: P4	Unnamed Ped Link	-	N/A	-	I		1	27	-	-	0	-	0	0.0%
Ped Link: P5	Unnamed Ped Link	-	N/A	-	H		1	39	-	-	0	-	0	0.0%
Ped Link: P6	Unnamed Ped Link	-	N/A	-	G		1	5	-	-	0	-	0	0.0%

Detailed Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)	
Network: A555 Ringway Road West / Enterprise Way Junction	-	-	0	0	0	38.2	72.4	0.0	110.6	-	-	-	-	
A555 Ringway Road / Enterprise Way	-	-	0	0	0	38.2	72.4	0.0	110.6	-	-	-	-	
1/2+1/1	971	971	-	-	-	5.3	2.8	-	8.1	29.9	25.5	2.8	28.4	
1/3	1056	1056	-	-	-	6.0	2.7	-	8.8	29.9	28.7	2.7	31.5	
2/1	559	559	-	-	-	6.2	3.9	-	10.0	64.5	17.7	3.9	21.6	
2/2	163	152	-	-	-	2.9	9.8	-	12.8	281.6	5.8	9.8	15.6	
3/1	783	783	-	-	-	2.3	0.8	-	3.0	14.0	14.1	0.8	14.9	
3/2+3/3	1102	1029	-	-	-	15.5	52.4	-	67.9	221.9	38.3	52.4	90.7	
4/1	1174	1174	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
4/2	1336	1336	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/1	858	858	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
5/2	856	856	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
6/1	325	325	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P3	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P4	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P5	0	0	-	-	-	-	-	-	-	-	-	-	-	
Ped Link: P6	0	0	-	-	-	-	-	-	-	-	-	-	-	
C1 PRC for Signalled Lanes (%): -21.5 PRC Over All Lanes (%): -21.5 Total Delay for Signalled Lanes (pcuHr): 110.57 Total Delay Over All Lanes(pcuHr): 110.57 Cycle Time (s): 120														