



Lancashire Central – Modelling Note

DATE	25 July 2023
TO	LCC Highways
FROM	WSP Development – HB / JO
SUBJECT	70084465 - Lancashire Central – Modelling Note

INTRODUCTION

This note sets out the updates to the junction capacity modelling undertaken to inform the assessment of the likely traffic impacts of the proposed Lancashire Central development. It provides an update on the base year modelling as well as the future year modelling which assesses the full development traffic flows along with the proposed mitigation schemes. It then compares the LinSig modelling results with the VISSIM modelling results. This note focuses on the junctions where mitigation is proposed.

BASE YEAR MODELLING

The Lancashire Central Transport Assessment produced by WSP in June 2022 was informed by a comprehensive set of traffic surveys undertaken in 2016. As outlined in the WSP note 'Lancashire Central - Base year growth rates_080623', to ensure that the 2016 surveys are representative of existing traffic flows a comparison exercise was undertaken comparing the 2016 data to more recently available traffic data on the local highway network and strategic road network.

The note concluded that the majority of the 2016 survey data is higher than the more recent traffic data and therefore applying a growth rate to the 2016 data would result in an overestimation of current traffic flows, which appear to have generally reduced in recent years over the network assessed.

To avoid over-estimation of traffic flows no growth was applied to the 2016 base flows to obtain 2023 base year flows. To obtain 2024 base year flows, TEMPro growth rates were applied to the '2023 Base Year' flows, to account for any background growth forecast between 2023 and 2024.

The 2024 base year traffic flows have been used in the base year junction capacity assessments. The modelling has been updated since that presented in the Transport Assessment and the updates are based on more recently available data and observations as outlined below.

This note presents the results of the base modelling for the following junctions on the local highway network:

- A582 / A5083 Stanifield Lane / B5254 Watkin Lane
- A6 London Way / A582
- A6 Lostock Ln / B6258 Station Rd / A49 Wigan Rd

The LinSig models of these junction have been set up based upon the previous models used in the Transport Assessment and they have been updated with reference to the following information:

- **Saturation flows provided by MOVA data** – MOVA data was extracted at the junctions by Highways and Transport at LCC on 15th May 2023 and provided to WSP

- **Signal Specs and drawings** – The information within the signal specifications were used to inform the signal timings included in the modelling.
- **LCC Highways queue observations** at A582 / Stanfield Lane and A6 / Wigan Rd – LCC Highways provided queue data for these two junctions from observations undertaken in May 2023. A copy of this data is included in Appendix A.
- **WSP site observations** – WSP undertook site observations of the operation of the junctions and signal operation to gain an understanding of the current conditions on the local network during peak hours in May 2023.
- **Queue survey data** – A survey of queues on the southern arm of the A6 / A582 roundabout was undertaken on 27th June 2023. A copy of this data is also included in Appendix A.

The three models were calibrated using site observations and MOVA data. To assess the representativeness of the LinSig models, comparison to observed queue data has been undertaken to ensure that the models are illustrative of typical conditions in 2023. The models have been updated by amending time given to each phase, MOVA, utilizing bonus green time and review of the connectors.

The May 2023 observed queue data provided by LCC, and the June 2023 queue survey at the A6/A582 junction have been compared to the LinSig base model queue outputs to assess the representativeness of the base models.

LCC provided stationary and rolling queue observations at five-minute time periods including the AM and PM peak hours. Queue data was provided in meters and has been converted to PCUs using a conversion factor of 5.75m per PCU. An average stationary queue in PCUs for the peak hours was then calculated from the data and this has been used to compare to the LinSig model output.

The base models and initial queue comparisons were discussed in a meeting between Neil Stevens at LCC and WSP (21/06/2023) and the following updates to the base models were made based on comments provided by LCC.

Junction 1: A582 / A5083 Stanifield Lane / B5254 Watkin Lane

- Saturation flow is taken from MOVA data
- Cycle time is taken from signal specification, the junction operates on CLF and MOVA
- Physical lane length of the circulating lanes and lane storage has been reviewed and amended accordingly
- Cycle lanes – not modelled as the cycle lanes are not incorporated within the signal specification and we do not have any data regarding the volume and behaviour of cyclists therefore, it would be challenging to model the cycle lanes accurately at this point.

Junction 2: A6 London Way / A582

- Cycle time derived from signal specification
- MOVA data utilised to inform saturation flows
- Internal circulation lanes reviewed.
- Queue has been increased on the western arm and reduced on the eastern arm as per observations provided by Neil Stevens

Junction 4: A6 Lostock Ln / B6258 Station Rd / A49 Wigan Rd

- Cycle time derived from signal specification
- MOVA data utilised to inform saturation flows
- Internal circulation lanes reviewed.
- Western arm queue increased and eastern arm decreased as per recommendations from Neil Stevens



LANE STORAGE

For the above junctions lane storage, in particular for circulating lanes, has been reviewed by:

- Checking physical characteristics such as lane length / inputting lane storage details
- Signal Timings and Phasing - LinSig considers the storage capacities of each lane when calculating green time allocations for various traffic movement. LinSig can help to optimize signal timings to ensure efficient utilization of available space and minimize queuing and delays.
- Capacity Analysis – MOVA data

Sliver queues are common at signal roundabout circulatory stop lines, the sliver queue may lead to reporting of unrealistically long mean-max queues and over severe application of Optimiser Queue Constraints.

The de-sliver function was applied where applicable. The de-sliver mechanism detects a sliver queue which is unrealistic and prevents unrealistic back of queue values being reported. Exactly what is regarded as unrealistic is governed by the De-Sliver Threshold which is 0.5 within the models. Where applicable Excess Queue Limit has also been applied.

SATURATION FLOWS

MOVA can provide various saturation flows for LinSig because the saturation flow is influenced by several factors that can vary in different traffic conditions or scenarios. One of the reasons is MOVA allows for dynamic adjustment of signal timing parameters based on traffic demand. Also, saturation flow values may be fine-tuned / refined to achieve optimal performance, resulting in variations in the values provided for LinSig.

Saturation flows can be increased / decreased to account for variations in vehicle types and movements when determining the saturation flow rates. Different types of vehicles, such as cars, HGVs etc may have distinct characteristics that affect their travel speed or capacity to pass through a link.

MOVA data was utilised to derive the saturation flows for the junctions.

USE OF BONUS GREEN

Bonus Green has been applied where it was deemed acceptable based on the information available and professional judgement. Bonus green is an extension or shortening of the effective green period available to traffic.

TFL Modelling Guide (page 131) states the following: “In congested conditions, *MOVA optimises the signal timings to maximise junction throughput* while taking account of oversaturated approaches. MOVA and VA signal timings are not based on structured plans and there can be many different phasing and staging arrangements”. Therefore, it is rational to apply Bonus green where applicable as it is reasonable to assume that MOVA would extent the effective green period to help the overall operation of the junction and to clear the queuing.

BASE YEAR MODELLING RESULTS

The above updates were made to the base year LinSig junction models and the resulting junction model output reports for the updated 2024 base modelling are provided in Appendix B of this note. These include the full results for the three junctions.

Tables 1, 2 and 3 provide a summary of the queue comparisons from the base year models.



Table 1: 2023 Observed Queues and 2024 LinSig model queues (PCUs): J1 A582 / A5083 Stanifield Lane / B5254 Watkin Lane

	AM Peak (07:30-08:30)			PM Peak (16:30-17:30)		
	Observed	LinSig Model	Difference	Observed	LinSig Model	Difference
Farington Rd	23	23	0	49	49	0
Watkin Lane	17	12	-5	20	19	-1
Stanifield Lane	39	41	2	80	77	-3
Lostock Lane (Left)	4	14	0	7	45	9
Lostock Lane (Ahead 1)	9			29		
Lostock Lane (Ahead 2)	4	32	3	22	53	-1
Lostock Lane (Right)	24			32		

Table 2: 2023 Observed Queues and 2024 LinSig model queues (PCUs): J4 A6 Lostock Ln / B6258 Station Rd / A49 Wigan Rd

	AM Peak (07:30-08:30)			PM Peak (16:30-17:30)		
	Observed	LinSig Model	Difference	Observed	LinSig Model	Difference
Wigan Rd (Left/Ahead)	1	5	4	12	11	-1
Wigan Rd (Right)	3	4	1	4	7	3
Station Rd (Left)	9	12	3	10	9	-1
Station Rd (Ahead)	9	18	1	13	18	-8
Station Rd (Right)	9			13		
Lostock Ln EB (Left/Ahead)	17	26	9	20	37	17
Lostock Ln EB (Ahead)	11	19	2	10	39	20
Lostock Ln EB (Right)	5			8		
Lostock Ln WB (Left/Ahead)	14	11	-3	13	12	-1



Lostock Ln WB (Ahead)	13	14	-13	13	20	-8
Lostock Ln WB (Right)	14			15		

Table 3: 2023 Observed Queues and 2024 LinSig model queues (PCUs): J2 A6 /A582 Southern Approach

	AM Peak (07:30-08:30)			PM Peak (16:30-17:30)		
	Observed	LinSig Model	Difference	Observed	LinSig Model	Difference
A6 (S) Left Turn to A582	0	0	0	0	0	0
A6 (S) Lane 1	8	7	-1	7	9	2
A6 (S) Lane 2	14	8	-6	10	6	-4
A6 (S) Lane 3	3	0	-3	3	0	-3

Based on the above analysis it is concluded that the base models provide a good representation of the current conditions on the local highway network and are therefore fit for purpose for use in the assessments of these junctions.

2037 MITIGATION MODELLING

The following junctions have mitigation schemes proposed as part of the Lancashire central development proposals. The drawing references indicating the latest layouts of the proposed mitigation are listed below.

- A582 / A5083 Stanifield Lane / B5254 Watkin Lane – Drawing Ref: 84465-WSP-XX-DR-014 rev P03 and 84465-WSP-XX-DR-015 rev P03
- A6 London Way / A582 – Drawing Ref: 84465-WSP-XX-DR-016 rev P02
- A6 Lostock Ln / B6258 Station Rd / A49 Wigan Rd – Drawing Ref: 84465-WSP-XX-DR-017 rev P02
- M6 / A6 Junction 29 – Drawing Ref: 84465-WSP-XX-DR-013A rev P01.03
- M65 terminus / Site Access – Drawing Ref: 84465-WSP-XX-DR-004 rev P03

The LinSig models of these junctions have been updated to reflect these updated mitigation drawings.

The 2037 model flows have been updated based on the information provided in the following WSP Tech Notes:

- 'Lancashire Central - Base year growth rates_080623'
- 'Lancashire Central - Model Scenarios and Re-routing Assumptions_160623'

These notes outline the assumptions on base year traffic flows and the re-routing of background traffic through the development site.

The LinSig model results for the 2037 with development scenario are included in the junction modelling reports provided in Appendix C of this note.

In parallel to the LinSig modelling of the future year scenario, VISSIM modelling of the 2037 with development scenario has been undertaken. The VISSIM modelling also include all mitigation as included

in the above list of drawings and the same traffic flow assumptions. The results of the VISSIM model are outlined in full in the '230724-PS-Lancashire Central VISSIM Technical Note'.

A comparison between the queue length outputs of the VISSIM model and LinSig model for the 2037 with development scenario is provided in Table 4. The queue length from both the LinSig and VISSIM models are presented in PCUs.

Table 4: 2037 LinSig and VISSIM With Development scenario model output queue comparison (PCUs)

Junction No.	Average Length (m)	2037			
		AM Peak		PM Peak	
		LinSig	Vissim	LinSig	Vissim
Junction 1: A582 / A5083 Stanifield Lane / B5254 Watkin Lane	1- A582 Farington Rd (W)	29	55	13	46
	2- Left turn from A582 Farington Rd to B5254 Watkin Ln		1		1
	3- Left turn from B5254 Watkin Ln to A582 Lostock Ln	14	51	11	68
	4- B5254 Watkin Ln (N)		39		62
	5- A582 Lostock Ln (E)	14	16	13	36
	6- Left turn from A582 Lostock Ln to Stanifield Ln	14	9	13	6
	7- A5083 Stanifield Ln (S)	9	34	7	64
	8- Left from A5083 Stanifield Ln to A582 Farington Rd	4	18	2	48
Junction 2: A6 London Way / A582	43- A582 Lostock Ln (W)	18	23	22	21
	44- From A582 Lostock Ln to A6 London Way		0		0
	45- A6 London Way (N)	6	36	5	16
	46- Left from A6 London Way to A6 Lostock Ln	8	35	8	15
	47- A6 Lostock Ln (E)	9	15	16	16
	48- M65 (S)	7	19	4	23
Junction 4: A6 Lostock Ln / B6258 Station Rd / A49 Wigan Rd	58- M65 (S) Left Turn	22	20	29	23
	19- A6 Lostock Ln (W)	14	13	17	16
	20- Left from A6 Lostock Ln to B6258 Station Rd	15	4	17	7
	21- A6 Lostock Ln (W)		6		12
	22- B6258 Station Rd (SB)	5	8	8	18
	23- Left from B6258 Station Rd to A6 Lostock Ln	12	8	17	14
	24- A6 Lostock Ln(E) (lane 2)	16	11	13	15
	25- A6 Lostock Ln(E) (lane1)	12	10	14	11
Junction 5: M6 / A6 Junction 29	26- Wigan Rd (S)	8	9	11	11
	57- Old Lostock Lane to A6	2	3	1	3
	27- A6 Lostock Ln (W)	5	12	5	13
	28- M6 (S)	6	21	2	7
	29- M6 (N)	8	12	10	15
Junction 10: M65 terminus / Site Access	30- Church Rd (E)	5	9	9	15
	35- Slip from M6 (E)	11	29	10	13
	36- M65 (E)	17	14	9	9
	37- Development access (W)	4	5	10	6
	38- M65 (N)	16	4	20	1
	39- Left from M65 (N)	16	10	21	9

Table 4 shows that there is some variation in the modelled queuing results when comparing the LinSig outputs to the VISSIM model outputs, with the VISSIM model forecasting larger queues than the LinSig model, specifically at junctions 1 and 2, whereas results are broadly similar across the two-modelling software at junctions 4, 5 and 10.

It is worth noting that queues are calculated slightly differently in LinSig and VISSIM. In VISSIM, queues are typically detected based on the vehicle detectors placed along the road network. These detectors can

be placed like loop detectors or cameras. VISSIM tracks the position and speed of vehicles passing through these detectors. When the speed of a vehicle drops below a certain threshold (e.g., due to congestion or signal control), VISSIM registers it as part of a queue. The length of the queue is determined by the number of vehicles that meet the criteria for being in a queue. In LinSig, queue calculations are typically based on simplified analytical models. These models consider traffic volumes, signal timings, and vehicle arrival patterns to estimate the queues formed at intersections. LinSig calculates queue lengths using queuing theory algorithms and equations. It takes into account the arrival rate of vehicles, the service rate of the intersection (capacity), and the statistical distribution of inter-arrival and service times.

Therefore, due to differences in simulation approach and the way queues are recorded in the two models, differences in reported queues can be found at some locations on the network. However, overall, the results broadly show a similar representation on the future operation of the local highway network.

SUMMARY

The LinSig base models have been updated and informed by additional observations of signal timings, saturation flows, on-site observations of queuing and queue surveys. The comparison of modelled and observed queues in the base scenario found the LinSig models to be fit for purpose, providing a good representation of the existing operation of the local highway network.

The LinSig models were then used to test the proposed mitigation schemes and the impact of the proposed development traffic associated with the Lancashire Central development proposals. A 2037 with development future year assessment was undertaken.

The queue results from the 2037 LinSig models have been compared to the queue outputs from the VISSIM 2037 model scenarios. Whilst there are differences in the way queuing is reported in the two models, the queueing outputs from the LinSig and VISSIM were found to be broadly comparable at the junctions assessed.

In conclusion, the results of both the LinSig and VISSIM modelling show that the impact of the development is not considered to be severe and that the proposed mitigation measures are suitable to accommodate the proposed development traffic.



APPENDIX A – QUEUE OBSERVATIONS

Traffic Observation: Signalised roundabout at junction of Stanfield Lane, Lostock Lane, Farington Road, and Watkin Lane (Farington, Leyland).

16th May 2023

Dry Conditions, Overcast

Time	Traffic Queue Observations				Traffic Queue Observations						Cycle/Peds	Other	Photo References
	Farington Road		Watkin Lane		Stanfield Lane		Lostock Lane						
	Stationary	Rolling	Stationary	Rolling	Stationary	Rolling	Left	Ahead 1	Ahead	Right			
07:30	>150	1.4km +	>50	1.7km	350	-	25	50	25	100	Cycle S>W CW	Driver drove through green ped phase on Farington Road (WB) LL Right Turn Storage insufficient, clears during one green phase	0725 - FR - Blocking back, 0730 - FR - large gaps, 0730 FR tractor trailer 0750 - SL -380m queue, 0752 Cycle on road 0755 - WL - general traffic queue 0810 - traffic queue, rolling traffic 0826 - ll - lane starvation 0830 - fr - traffic queue, rolling traffic 0855 - FR - queueing back to railway bridge 0900 - FR -traffic queue
07:35	>150	1.4km +	>100	1.7km	350	-	25	50	25	100			
07:40	>50	1.4km +	>100	1.7km	300	-	70 LS	100	50	100	Cycle N>S CW		
07:45	>150	1.4km +	>100	1.7km	390	-	40 LS	100	50	100	Cycle E>W FW, Cycle S>N CW		
07:50	>150	1.4km +	>100	1.7km	380	-	70	50	25	100			
07:55	>100	1.4km +	>100	1.7km	300	-	10	50	25	300			
08:00	>150	1.4km +	>100	1.7km	<50	-	0	25	25	300			
08:05	>150	1.4km +	>100	1.8km +	100	-	0	0	0	300			
08:10	>100	1.4km +	>100	1.8km +	100	-	20 LS	100	25	50	2x Cycle S>W FW, Cycle N>S FW		
08:15	>150	1.4km +	>100	1.8km +	75	-	20	50	25	100	Cycle E>S CW		
08:20	>150	1.4km +	>100	1.8km +	50	-	0	25	0	25			
08:25	>150	1.4km +	<150	1.8km +	250	-	20	50	25	100	Cycle S>E CW		
08:30	>150	1.4km +	>150	1.8km +	150	-	LS	100	25	100			
08:35	<100	1.4km +	>150	1.8km +	<50	-	0	25	25	25			
08:40	<100	1.4km +	>150	1.8km +	<50	-	0	25	25	25			
08:45	<150	1.4km +	>100	1.8km +	<50	-	20	50	25	100			
08:50	<150	1.4km +	>100	1.8km +	-	-	20	<50	25	100			
08:55	>150	1.4km +	>150	1.8km +	-	-	20	50	25	100			
09:00	>150	1.4km +	>150	1.8km +	-	-	20	<50	25	100			
09:05	-	-	-	-	-	-	-	-	-	-			
09:10	-	-	-	-	-	-	-	-	-	-			
09:15	-	-	-	-	-	-	-	-	-	-			

*** Farington Road traffic has large crawling queues with significant gaps

*** Lostock Lane traffic generally cleared during green leaving little residual queueing - however it does appear that there are large platoons arriving every 3-5 cycles. Suspect network issue requiring further investigation.

***Stanfield Lane congestion extends for a significant distance

Poor lane discipline between Stanfield Lane and Farington (WB), poor Lane discipline on north of roundabout particularly for traffic from South

LS indicates Lane Starvtion is ocuring and therefore demand for stanfield lane is inaccurate. This occurs when Ahead 1 is 75m or more on Lostock Lane.

Stationary queues are measured during red immediately prior to phase change to the last stationary vehicle

Rolling queues are measured from the back of the stationary queue to the last vehicle with all vehicles travelling no more than 2x walking speed (6mph)

Traffic Observation: Signalised roundabout at junction of Stanfield Lane, Lostock Lane, Farington Road, and Watkin Lane (Farington, Leyland).

16th May 2023

Dry conditions, sunny

Time	Traffic Queue Observations				Traffic Queue Observations				Cycle/Peds	Other	Photo References		
	Farington Road		Watkin Lane		Stanfield Lane		Lostock Lane						
	Stationary	Rolling	Stationary	Rolling	Stationary	Rolling	Left	Ahead				Ahead	Right
16:00	>300m	1.4km +	-	400m	100	-	50	50	50	50	Cycle S>N CW Cycle N>S FW 2xCycle S>E CW, Cycle N>S CW, Ped NB Stan 1 Cycle S>N FW, 2x Cycle N>S CW FW 2xCycle S>N CW, Cycle W>E FW, PED NB STAN 2x Cycle S>? CW Ped SB Stan Cycle S>E CW 2 Cyclists S> CW FW 2 Ped NB Stan 2 Cyclists NB on Stanfield on F/W, 2 ped NB stan 1 Cyclist NB on Stanfield on C/W, 1 Ped SB Stan	Aggressive overtake W>E. Wrong lane change W>E. FR (WB) Exit blocked - creates LL queuing Aggressive overtake N>E. Aggressive overtake N>E. Wrong lane change W>E. Emergency vehicle W>E - Traffic/ congestion blocking Ambulance. Grass verge enabled vehicles to move over as junction was blocked by traffic. Aggressive overtake W>E. Emergency vehicle W>E - Traffic/ congestion blocking Ambulance. Grass verge enabled vehicles to move over as junction was blocked by traffic.	maps not showing SL queuing, 1614 - SL queuing at 300m 1616 - SL cyclist and lorry 1621 - LL - queuing 1626 - roundabout block 1 and 2 1630 - II queuing back 1639 - SL to LL lorry turning right 1642 - FR - no exit 1650 blocking roundabout 1727 emergency vehicle 1730 emergency vehicle 1730 LL queue, rolling queue 1740 SL 700m queue 1745 - SL - 650m queue, 1747 LL Ped phase green 1750 - SL - 600m queue
16:05	>300m	1.4km +	-	400m	150	-	50	50	50	50			
16:10	>300m	1.4km +	-	400m	400	-	50	50	50	50			
16:15	-	1.4km +	50m	516m	400	-	50LS	100	100	100			
16:20	-	1.4km +	50m	516m	300	-	LS	100	100	200			
16:25	-	1.4km +	50m	516m	300	-	LS	200	200	500+			
16:30	>200m	1.4km +	-	1.8km +	300	-	LS	500+	500+	500+			
16:35	<300m	1.4km +	-	1.8km +	350	-	LS	400+	500+	500+			
16:40	<300m	1.4km +	-	1.8km +	350	-	LS	300	300	300			
16:45	-	1.4km +	<200m	516m	430	-	LS	100	0	50			
16:50	-	1.4km +	<200m	516m	420	-	0	0	0	0			
16:55	-	1.4km +	<150m	516m	460	-	50	50	50	50			
17:00	>300m	1.4km +	-	516m	570	-	50 LS	100	50	-			
17:05	<300m	1.4km +	-	516m	450	-	50	50	0	50			
17:10	<300m	1.4km +	-	516m	520	-	50 LS	100	50	-			
17:15	-	1.4km +	<50m	516m	550	-	50	50	0	0			
17:20	-	1.4km +	<50m	516m	550	-	LS	180	50	-			
17:25	-	1.4km +	<50m	516m	600	-	LS	200	50	-			
17:30	<300m	1.4km +	-	516m	600	-	LS	180	50	-			
17:35	<300m	1.4km +	-	516m	650	-	LS	70	50	-			
17:40	<300m	1.4km +	-	516m	700	-	LS	100	100	100			
17:45	-	1.4km +	<100m	400m	650	-	LS	100	100	100			
17:50	-	1.4km +	<100m	400m	600	-	LS	50	50	50			
17:55	<200m	1.4km +	-	400m	480	-	LS	50	50	50			
18:00	<200m	1.3km	-	400m	300	-	LS	50	50	50			

Vehicles going to Farington Road (WB) changing direction to Watkin Lane on roundabout
 Farington Road (WB) creating Lostock Lane queuing (no exit from junction), also blocking N>S traffic
 Observed traffic blocking emergency vehicle (ambulance), verge on Farington Way appears to be eroded as a consequence of vehicles moving to provide emergency vehicles space
 Farington Road merge, some dangerous behaviour occurring (speeding into merge, aggressive driving, cutting up HGVs)
 There were 3 instances of vehicles driving through green pedestrian phases, 1 on Farington Way (WB) 2 on Leyland Lane (EB)
 *** Witnessed multiple occasions on Farington Road (heading west) where vehicles using the wrong lane moved over aggressively whilst cutting up HGV's. This resulted in aggressive driver behaviour from the HGV's.
 *** Watkin Lane seems to be working fine in PM, but very congested in AM.
 *** Witnessed multiple examples of speeding and aggressive driving during PM - a lot heading from S>N.
 LS indicates Lane Starvation is occurring and therefore demand for stanfield lane is inaccurate. This occurs when Ahead 1 is 75m or more on Lostock Lane.

Stationary queues are measured during red immediately prior to phase change to the last stationary vehicle
 Rolling queues are measured from the back of the stationary queue to the last vehicle with all vehicles travelling no more than 2x walking speed (6mph)

Traffic Observation: Signalised junction at Wigan Road, Lostock Lane and Station Road

25th May 2023

Time	Traffic Queue Observations																		Cycle/Peds	Other	Photo References	Old Lostock Ln Rat Running Note: values will be lower than actual (some vehicles will have been missed when walking and observing queues)				
	Wigan Road				Station Road						Lostock Lane (EB)						Lostock Lane (WB)									
	Left/Ahead		Right		Left		Ahead		Right		Left/Ahead		Ahead		Right		Left/Ahead						Ahead		Right	
Stationary	Rolling	Stationary	Rolling	Stationary	Rolling	Stationary	Rolling	Stationary	Rolling	Stationary	Rolling	Stationary	Rolling	Stationary	Rolling	Stationary	Rolling	Stationary	Rolling	Stationary	Rolling					
07:30					<50		<50		<50		175		100		30		<50		<50		>50		Cyclist E>W			
07:35					<50		<50		<50		100		50		20		<50		<50		>50		Cyclist W>E			
07:40					<50		<50		<50		40		10		0		>50		>50		>50		Aggressive overtaking whilst merging lanes		6	
07:45					<50		<50		<50		40		10		0		>50		>50		>50		Speeding/ aggressive driving W>S		5	
07:50					<50		<50		<50		170		150		60		<100		>100		<100		Cyclist E>W		10	
07:55					<50		<50		<50		50		20		20		>100		>100		>100				4	
08:00	30		70		<50		<50		<50								<100		<100		<100				6	
08:05	30		40		<50		<50		<50		200		150		80		>100		>100		>100				2	
08:10					<50		<50		<50		150		50		70		>100		>100		>150				8	
08:15	40		80		<50		<50		<50								<100		<100		<100				12	
08:20	10		50		<50		<50		<50		130		100		50		<100		<50		<50		Cyclist E>W		12	
08:25					<50		<50		<50		120		100		30		<50		<50		<50				6	
08:30					<50		<50		<50		110		120		40		<100		<100		<100				11	
08:35	50		40		<50		<50		<50								>50		>50		>50		Cyclist E>W		4	
08:40					<50		<50		<50		170		100		40		>100		>100		>100				7	
08:45					<50		<50		<50		80		40		30		<100		<50		>100				6	
08:50					<50		<50		<50		170		150		70		<100		<50		<50				6	
08:55					<50		<50		<50		130		70		20		>50		>50		>50				8	
09:00	30		30		<50		<50		<50		150		90		40		<100		<50		>100				8	
09:05	30		40		<50		<50		<50		100		70		50		<100		<50		>100				8	
09:10					<50		<50		<50								<100		<50		>100					
09:15					<50		<50		<50								<100		<50		>100					

Notes: During both AM and PM, all stationary and rolling traffic queues seem to disperse almost immediately once lights change to green.
 Notes: Typical traffic on Google shows difference in rolling traffic than what I recorded during observations. I know some schools are not open this week, could this be causing the disparity?
 Notes: Is there/ was there a cycle lane on the footway on Station Road? - There are remnants of markings and lots of cyclists riding on the footway.

Stationary queues are measured during red immediately prior to phase change to the last stationary vehicle
 Rolling queues are measured from the back of the stationary queue to the last vehicle with all vehicles travelling no more than 2x walking speed (6mph)



APPENDIX B – BASE YEAR LINSIG MODELLING RESULTS

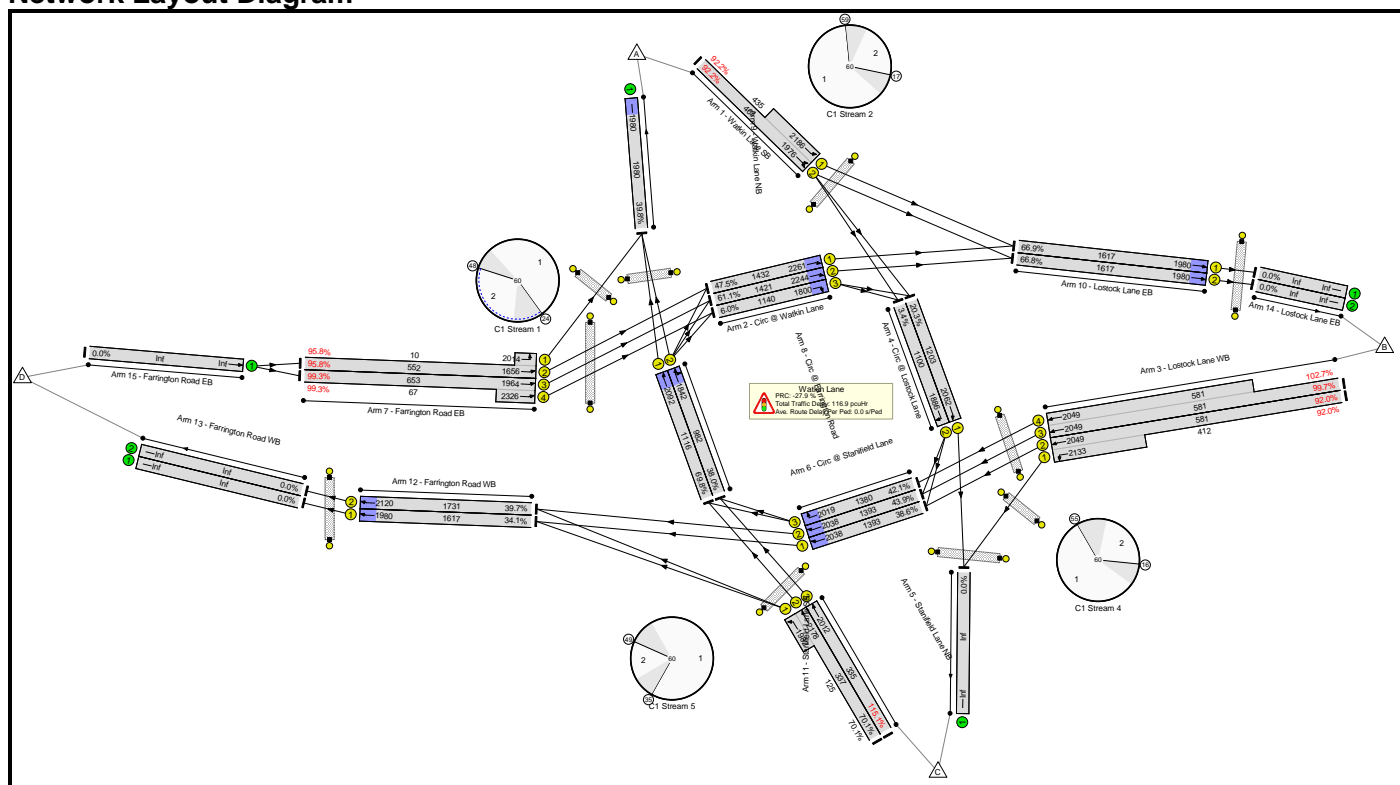
Basic Results Summary
Basic Results Summary

User and Project Details

Project:	A582
Title:	Stanfield Lane Roundabout
Location:	
Additional detail:	
File name:	J1 Stanfield Lane-A582_WSP_Baseline.lsg3x
Author:	
Company:	
Address:	

Scenario 1: 'Baseline 2024 AM' (FG1: '2024 Baseline - AM ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	Item
Network: Stanifield Lane Roundabout	-	-	-		-	-	-	-	-	-	115.1%	0	0	0	116.9	-	-	Network: Stanifield Lane Roundabout
Watkin Lane	-	-	-		-	-	-	-	-	-	115.1%	0	0	0	116.9	-	-	Watkin Lane
1/2+1/1	Watkin Lane SB Ahead Ahead2	U	E		1	13	-	826	1976:2186	461+435	92.2 : 92.2%	-	-	-	10.2	44.4	12.0	1/2+1/1
2/1	Circ @ Watkin Lane Ahead	U	D		1	37	-	701	2261	1432	47.5%	-	-	-	0.5	2.6	1.6	2/1
2/2	Circ @ Watkin Lane Ahead	U	D		1	37	-	899	2244	1421	61.1%	-	-	-	0.8	3.2	2.4	2/2
2/3	Circ @ Watkin Lane Right	U	D		1	37	-	69	1800	1140	6.0%	-	-	-	0.0	0.3	0.0	2/3
3/2+3/1	Lostock Lane WB Ahead Left	U	M N		1	16	-	913	2049:2133	581+412	92.0 : 92.0%	-	-	-	10.2	40.0	13.7	3/2+3/1
3/3+3/4	Lostock Lane WB Ahead	U	M		1	16	-	1175	2049:2049	581+581	99.7 : 102.7%	-	-	-	29.2	89.5	31.9	3/3+3/4
4/1	Circ @ Lostock Lane Ahead	U	L		1	34	-	244	2062	1203	20.3%	-	-	-	0.4	6.1	3.0	4/1
4/2	Circ @ Lostock Lane Right	U	L		1	34	-	37	1886	1100	3.4%	-	-	-	0.1	5.8	0.6	4/2
5/2+5/1	Stanifield Lane NB Ahead Left	U	P		1	9	-	324	2178:1982	337+125	70.1 : 70.1%	-	-	-	3.2	35.8	4.8	5/2+5/1
5/3	Stanifield Lane NB Ahead	U	P		1	9	-	386	2012	335	115.1%	-	-	-	32.4	302.3	36.0	5/3

Basic Results Summary

6/1	Circ @ Stanifield Lane Ahead	U	O		1	40	-	538	2038	1393	38.6%	-	-	-	0.0	0.0	0.0	6/1
6/2	Circ @ Stanifield Lane Ahead	U	O		1	40	-	612	2038	1393	43.9%	-	-	-	0.0	0.1	0.0	6/2
6/3	Circ @ Stanifield Lane Right	U	O		1	40	-	596	2019	1380	42.1%	-	-	-	0.0	0.1	0.1	6/3
7/2+7/1	Farrington Road EB Ahead Left	U	B C		1	19	-	539	1656:2014	552+10	95.8 : 95.8%	-	-	-	10.1	67.3	15.7	7/2+7/1
7/3+7/4	Farrington Road EB Ahead	U	B		1	19	-	715	1964:2326	653+67	99.3 : 99.3%	-	-	-	16.0	80.6	23.3	7/3+7/4
8/1	Circ @ Farrington Road Ahead	U	A		1	31	-	793	2092	1116	69.8%	-	-	-	0.7	3.3	3.9	8/1
8/2	Circ @ Farrington Road Right Ahead	U	A		1	31	-	425	1842	982	38.0%	-	-	-	1.1	11.1	6.0	8/2
9/1	Watkin Lane NB	U	-		-	-	-	803	1980	1980	39.8%	-	-	-	0.3	1.5	0.3	9/1
10/1	Lostock Lane EB Ahead	U	U		1	48	-	1102	1980	1617	66.9%	-	-	-	1.2	4.1	7.7	10/1
10/2	Lostock Lane EB Ahead	U	U		1	48	-	1112	1980	1617	66.8%	-	-	-	0.4	1.4	3.5	10/2
12/1	Farrington Road WB Ahead	U	J		1	48	-	551	1980	1617	34.1%	-	-	-	0.0	0.1	0.1	12/1
12/2	Farrington Road WB Ahead	U	J		1	48	-	687	2120	1731	39.7%	-	-	-	0.0	0.1	0.1	12/2
Ped Link: P1	Unnamed Ped Link	-	H		1	31	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P1
Ped Link: P2	Unnamed Ped Link	-	F		1	17	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P2
Ped Link: P3	Unnamed Ped Link	-	I		1	37	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P3

Basic Results Summary

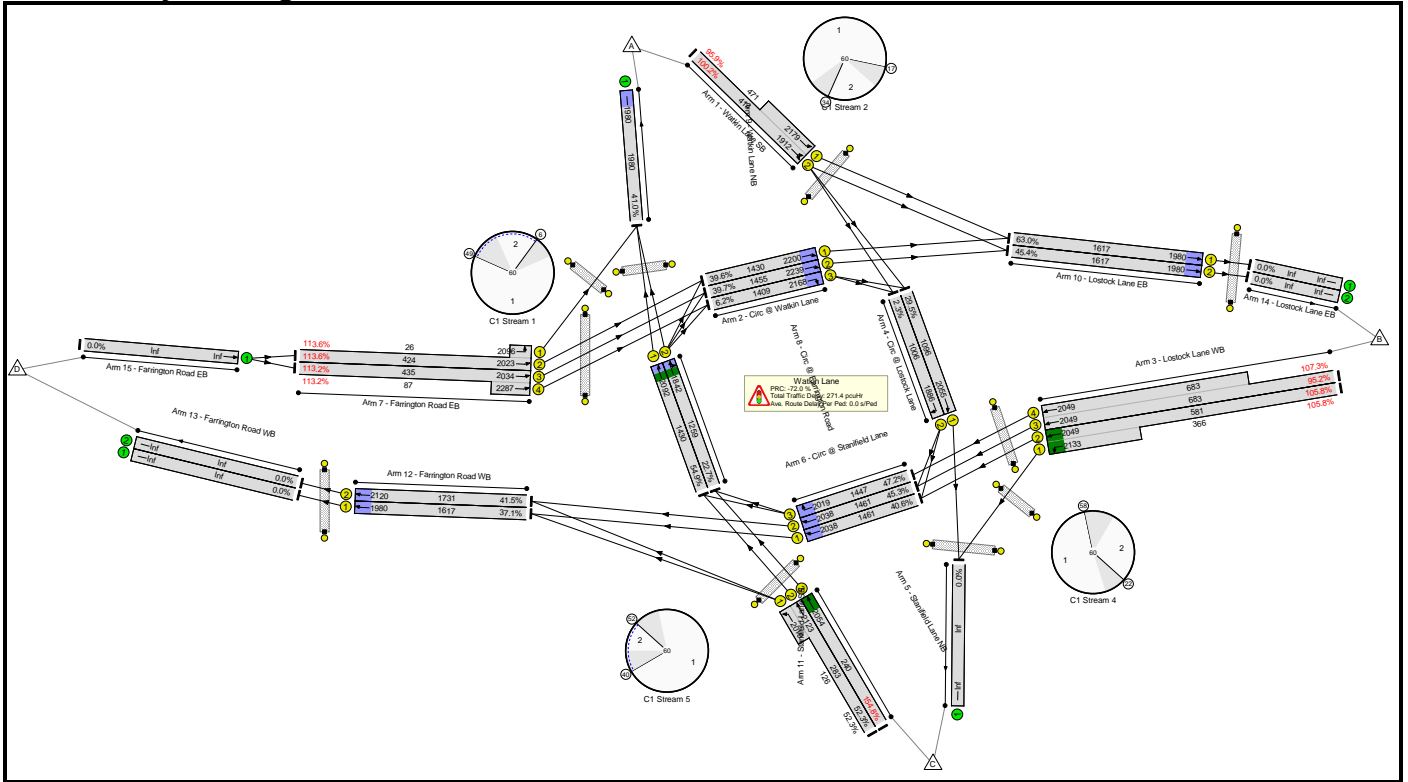
Ped Link: P4	Unnamed Ped Link	-	V		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P4
Ped Link: P5	Unnamed Ped Link	-	R		1	34	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P5
Ped Link: P6	Unnamed Ped Link	-	S		1	34	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P6
Ped Link: P7	Unnamed Ped Link	-	Q		1	14	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P7
Ped Link: P8	Unnamed Ped Link	-	T		1	41	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P8
Ped Link: P9	Unnamed Ped Link	-	K		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P9
Ped Link: P10	Unnamed Ped Link	-	G		1	31	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P10

C1	Stream: 1 PRC for Signalled Lanes (%)	-10.3	Total Delay for Signalled Lanes (pcuHr):	27.96	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%)	-2.4	Total Delay for Signalled Lanes (pcuHr):	11.45	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%)	126.8	Total Delay for Signalled Lanes (pcuHr):	0.03	Cycle Time (s):	60
C1	Stream: 4 PRC for Signalled Lanes (%)	-14.1	Total Delay for Signalled Lanes (pcuHr):	39.85	Cycle Time (s):	60
C1	Stream: 5 PRC for Signalled Lanes (%)	-27.9	Total Delay for Signalled Lanes (pcuHr):	35.67	Cycle Time (s):	60
C1	Stream: 6 PRC for Signalled Lanes (%)	34.5	Total Delay for Signalled Lanes (pcuHr):	1.64	Cycle Time (s):	60
	PRC Over All Lanes (%)	-27.9	Total Delay Over All Lanes(pcuHr):	116.93		

Basic Results Summary

Scenario 2: 'Baseline 2024 PM' (FG2: '2024 Baseline - PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	Item
Network: Stanifield Lane Roundabout	-	-	-		-	-	-	-	-	-	154.8%	0	0	0	271.4	-	-	Network: Stanifield Lane Roundabout
Watkin Lane	-	-	-		-	-	-	-	-	-	154.8%	0	0	0	271.4	-	-	Watkin Lane
1/2+1/1	Watkin Lane SB Ahead Ahead2	U	E		1	12	-	867	1912:2179	414+471	100.2 : 95.9%	-	-	-	16.8	69.7	18.5	1/2+1/1
2/1	Circ @ Watkin Lane Ahead	U	D		1	38	-	685	2200	1430	39.6%	-	-	-	0.3	1.8	1.0	2/1
2/2	Circ @ Watkin Lane Ahead	U	D		1	38	-	709	2239	1455	39.7%	-	-	-	0.2	1.3	0.7	2/2
2/3	Circ @ Watkin Lane Right	U	D		1	38	-	99	2168	1409	6.2%	-	-	-	0.0	0.0	0.0	2/3
3/2+3/1	Lostock Lane WB Ahead Left	U	M N		1	19	-	1001	2049:2133	581+366	105.8 : 105.8%	-	-	-	41.2	148.2	45.3	3/2+3/1
3/3+3/4	Lostock Lane WB Ahead	U	M		1	19	-	1383	2049:2049	683+683	95.2 : 107.3%	-	-	-	48.9	127.3	52.9	3/3+3/4
4/1	Circ @ Lostock Lane Ahead	U	L		1	31	-	335	2055	1096	29.5%	-	-	-	0.6	6.3	3.0	4/1
4/2	Circ @ Lostock Lane Right	U	L		1	31	-	23	1886	1006	2.3%	-	-	-	0.0	0.0	0.0	4/2
5/2+5/1	Stanifield Lane NB Ahead Left	U	P		1	7	-	214	2123:2019	283+126	52.3 : 52.3%	-	-	-	2.0	33.1	2.8	5/2+5/1
5/3	Stanifield Lane NB Ahead	U	P		1	7	-	371	2054	240	154.8%	-	-	-	73.9	717.3	77.0	5/3

Basic Results Summary

6/1	Circ @ Stanifield Lane Ahead	U	O		1	42	-	626	2038	1461	40.6%	-	-	-	0.0	0.1	0.1	6/1
6/2	Circ @ Stanifield Lane Ahead	U	O		1	42	-	661	2038	1461	45.3%	-	-	-	0.0	0.1	0.1	6/2
6/3	Circ @ Stanifield Lane Right	U	O		1	42	-	733	2019	1447	47.2%	-	-	-	0.0	0.2	0.2	6/3
7/2+7/1	Farrington Road EB Ahead Left	U	B C		1	12	-	511	2023:2096	424+26	113.6 : 113.6%	-	-	-	39.5	278.5	43.9	7/2+7/1
7/3+7/4	Farrington Road EB Ahead	U	B		1	12	-	592	2034:2287	435+87	113.2 : 113.2%	-	-	-	44.4	270.0	49.0	7/3+7/4
8/1	Circ @ Farrington Road Ahead	U	A		1	38	-	832	2092	1430	54.9%	-	-	-	0.1	0.5	2.7	8/1
8/2	Circ @ Farrington Road Right Ahead	U	A		1	38	-	420	1842	1259	22.7%	-	-	-	1.1	14.1	3.3	8/2
9/1	Watkin Lane NB	U	-		-	-	-	862	1980	1980	41.0%	-	-	-	0.4	1.6	0.5	9/1
10/1	Lostock Lane EB Ahead	U	U		1	48	-	1137	1980	1617	63.0%	-	-	-	1.1	3.9	6.3	10/1
10/2	Lostock Lane EB Ahead	U	U		1	48	-	865	1980	1617	45.4%	-	-	-	0.3	1.3	2.4	10/2
12/1	Farrington Road WB Ahead	U	J		1	48	-	634	1980	1617	37.1%	-	-	-	0.4	2.2	9.6	12/1
12/2	Farrington Road WB Ahead	U	J		1	48	-	719	2120	1731	41.5%	-	-	-	0.3	1.5	10.7	12/2
Ped Link: P1	Unnamed Ped Link	-	H		1	38	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P1
Ped Link: P2	Unnamed Ped Link	-	F		1	10	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P2
Ped Link: P3	Unnamed Ped Link	-	I		1	38	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P3

Basic Results Summary

Ped Link: P4	Unnamed Ped Link	-	V		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P4
Ped Link: P5	Unnamed Ped Link	-	R		1	31	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P5
Ped Link: P6	Unnamed Ped Link	-	S		1	31	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P6
Ped Link: P7	Unnamed Ped Link	-	Q		1	17	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P7
Ped Link: P8	Unnamed Ped Link	-	T		1	43	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P8
Ped Link: P9	Unnamed Ped Link	-	K		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P9
Ped Link: P10	Unnamed Ped Link	-	G		1	38	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P10

C1	Stream: 1 PRC for Signalled Lanes (%)	-26.2	Total Delay for Signalled Lanes (pcuHr)	85.15	Cycle Time (s)	60
C1	Stream: 2 PRC for Signalled Lanes (%)	-11.3	Total Delay for Signalled Lanes (pcuHr)	17.26	Cycle Time (s)	60
C1	Stream: 3 PRC for Signalled Lanes (%)	116.7	Total Delay for Signalled Lanes (pcuHr)	0.66	Cycle Time (s)	60
C1	Stream: 4 PRC for Signalled Lanes (%)	-19.2	Total Delay for Signalled Lanes (pcuHr)	90.65	Cycle Time (s)	60
C1	Stream: 5 PRC for Signalled Lanes (%)	-72.0	Total Delay for Signalled Lanes (pcuHr)	75.97	Cycle Time (s)	60
C1	Stream: 6 PRC for Signalled Lanes (%)	42.9	Total Delay for Signalled Lanes (pcuHr)	1.38	Cycle Time (s)	60
	PRC Over All Lanes (%)	-72.0	Total Delay Over All Lanes(pcuHr)	271.43		

Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	Item
Network: J2 A6 & A582	-	-	-		-	-	-	-	-	-	103.8%	0	0	0	129.4	-	-	Network: J2 A6 & A582
A6&&A582	-	-	-		-	-	-	-	-	-	103.8%	0	0	0	129.4	-	-	A6&&A582
1/1	A6 NB Approach Left	U	C1:B		1	12	-	443	2110	549	80.8%	-	-	-	4.2	33.8	7.7	1/1
1/2	A6 NB Approach Ahead	U	C1:B		1	12	-	214	1350	351	61.0%	-	-	-	1.7	29.3	3.3	1/2
1/3+1/4	A6 NB Approach Ahead	U	C1:B		1	12	-	719	2260:1560	564+406	70.7 : 78.9%	-	-	-	4.8	24.0	6.3	1/3+1/4
2/1	A6 EB Approach Left Ahead	U	C2:D		1	7	-	250	2140	342	73.0%	-	-	-	2.7	38.9	4.6	2/1
2/2	A6 EB Approach Ahead	U	C2:D		1	7	-	269	2290	366	73.4%	-	-	-	2.8	38.0	4.9	2/2
2/3	A6 EB Approach Ahead	U	C2:D		1	7	-	351	2150	344	102.0%	-	-	-	13.5	138.0	16.3	2/3
3/2+3/1	M65 SB Approach Left Ahead	U	C2:B -		1	20	-	1714	1570:2184	438+1570	85.4 : 85.4%	-	-	-	4.0	8.4	6.8	3/2+3/1
3/3+3/4	M65 SB Approach Ahead	U	C2:B		1	20	-	794	2300:2184	886+254	69.6 : 69.6%	-	-	-	3.6	16.1	7.8	3/3+3/4
4/2+4/1	A582 WB Approach Ahead Ahead2	U	C1:D C1:E		1	15:33	-	962	1890:2105	605+322	103.8 : 103.8%	-	-	-	30.6	114.5	35.8	4/2+4/1
4/3	A582 WB Approach Ahead	U	C1:D		1	15	-	602	1860	595	101.1%	-	-	-	17.1	102.3	22.5	4/3

Basic Results Summary

4/4	A582 WB Approach Ahead	U	C1:D		1	15	-	733	2250	720	101.8%	-	-	-	21.0	103.0	27.5	4/4
5/1	A6 NB Exit Through Ln Left	U	C1:F		1	36	-	334	1940	1436	23.3%	-	-	-	0.3	3.0	0.8	5/1
6/1	A6 NB Exit Ahead	U	C1:G		1	33	-	581	1965	1336	43.2%	-	-	-	0.4	2.4	0.4	6/1
6/2	A6 NB Exit Ahead	U	C1:G		1	33	-	760	1965	1336	56.7%	-	-	-	0.8	3.6	1.4	6/2
7/1	East Roundabout Ahead	U	C2:C		1	27	-	816	1720	963	84.0%	-	-	-	3.2	14.2	5.7	7/1
7/2	East Roundabout Ahead Right	U	C2:C		1	27	-	1117	2250	1260	87.6%	-	-	-	4.4	14.3	8.9	7/2
7/3	East Roundabout Right	U	C2:C		1	27	-	335	1980	1109	30.2%	-	-	-	0.9	9.8	4.7	7/3
11/1	A582 WB Exit Ahead	U	-		-	-	-	1340	1940	1940	69.1%	-	-	-	1.1	3.0	1.1	11/1
11/2	A582 WB Exit Ahead	U	-		-	-	-	259	1940	1940	13.3%	-	-	-	0.1	1.1	0.1	11/2
11/3	A582 WB Exit Ahead	U	-		-	-	-	478	1940	1940	24.6%	-	-	-	0.2	1.2	0.2	11/3
12/1	South Roundabout Ahead	U	C2:A		1	17	-	259	1400	504	51.4%	-	-	-	0.9	12.6	2.4	12/1
12/2	South Roundabout Ahead	U	C2:A		1	17	-	478	2020	727	65.7%	-	-	-	1.8	13.6	4.8	12/2
12/3	South Roundabout Right	U	C2:A		1	17	-	351	2260	814	42.3%	-	-	-	1.3	13.6	5.1	12/3
13/1	West Roundabout Ahead	U	C1:C		1	22	-	581	1880	978	59.0%	-	-	-	2.3	14.2	7.9	13/1
13/2	West Roundabout Ahead	U	C1:C		1	22	-	760	2240	1165	65.0%	-	-	-	2.2	10.3	10.4	13/2

Basic Results Summary

13/3	West Roundabout Right	U	C1:C		1	22	-	178	2220	1154	15.4%	-	-	-	0.1	1.9	0.7	13/3
14/1	North Roundabout Ahead	U	C1:A		1	25	-	573	2220	1154	48.2%	-	-	-	0.7	4.3	1.8	14/1
14/2	North Roundabout Ahead	U	C1:A		1	25	-	233	1560	811	27.9%	-	-	-	0.3	4.4	0.5	14/2
14/3	North Roundabout Right	U	C1:A		1	25	-	602	2220	1154	51.6%	-	-	-	0.5	3.2	0.5	14/3
14/4	North Roundabout Right	U	C1:A		1	25	-	733	2160	1123	64.1%	-	-	-	1.0	4.8	1.3	14/4
16/1	Ahead	U	-		-	-	-	962	2000	2000	48.1%	-	-	-	0.5	1.7	0.5	16/1
16/2	Ahead	U	-		-	-	-	1335	2200	2200	60.7%	-	-	-	0.8	2.1	0.8	16/2
Ped Link: P1	A6 NB Exit Through Ln Ped X	-	C1:H		1	4	-	0	-	5760	0.0%	-	-	-	0.0	0.0	0.0	Ped Link: P1
Ped Link: P2	A6 NB Exit Ped X	-	C1:I		1	4	-	0	-	5760	0.0%	-	-	-	0.0	0.0	0.0	Ped Link: P2
Ped Link: P3	A6 N Approach Ped X	-	C1:J		1	25	-	0	-	36000	0.0%	-	-	-	0.0	0.0	0.0	Ped Link: P3
Ped Link: P4	A6 N Peft Turn Ped X	-	C1:J		1	25	-	0	-	36000	0.0%	-	-	-	0.0	0.0	0.0	Ped Link: P4
				C1 - North Stream: 1 PRC for Signalled Lanes (%)	11.5				Total Delay for Signalled Lanes (pcuHr):				13.12		Cycle Time (s): 50			
				C1 - North Stream: 2 PRC for Signalled Lanes (%)	-15.4				Total Delay for Signalled Lanes (pcuHr):				73.50		Cycle Time (s): 50			
				C1 - North Stream: 3 PRC for Signalled Lanes (%)	58.8				Total Delay for Signalled Lanes (pcuHr):				1.14		Cycle Time (s): 50			
				C2 - South Stream: 1 PRC for Signalled Lanes (%)	5.4				Total Delay for Signalled Lanes (pcuHr):				11.59		Cycle Time (s): 50			
				C2 - South Stream: 2 PRC for Signalled Lanes (%)	-13.4				Total Delay for Signalled Lanes (pcuHr):				27.48		Cycle Time (s): 50			
				PRC Over All Lanes (%)	-15.4				Total Delay Over All Lanes(pcuHr):				129.42					

Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	Item
Network: J2 A6 & A582	-	-	-		-	-	-	-	-	-	107.7%	0	0	0	130.6	-	-	Network: J2 A6 & A582
A6&&A582	-	-	-		-	-	-	-	-	-	107.7%	0	0	0	130.6	-	-	A6&&A582
1/1	A6 NB Approach Left	U	C1:B		1	15	-	534	1900	608	87.8%	-	-	-	5.7	38.4	10.3	1/1
1/2	A6 NB Approach Ahead	U	C1:B		1	15	-	357	1960	627	56.9%	-	-	-	2.1	20.8	4.7	1/2
1/3+1/4	A6 NB Approach Ahead	U	C1:B		1	15	-	752	1720:2000	513+609	67.0 : 67.0%	-	-	-	4.0	19.3	5.8	1/3+1/4
2/1	A6 EB Approach Left Ahead	U	C2:D		1	11	-	434	2160	518	83.7%	-	-	-	4.6	38.2	8.1	2/1
2/2	A6 EB Approach Ahead	U	C2:D		1	11	-	443	2140	514	86.3%	-	-	-	5.1	41.8	8.7	2/2
2/3	A6 EB Approach Ahead	U	C2:D		1	11	-	484	1870	524	92.4%	-	-	-	7.3	53.9	11.4	2/3
3/2+3/1	M65 SB Approach Left Ahead	U	C2:B -		1	10	-	1662	1930:2184	378+1437	91.6 : 91.6%	-	-	-	6.9	14.9	9.6	3/2+3/1
3/3+3/4	M65 SB Approach Ahead	U	C2:B		1	10	-	500	1870:2184	411+214	80.0 : 80.0%	-	-	-	4.4	31.7	6.2	3/3+3/4
4/2+4/1	A582 WB Approach Ahead Ahead2	U	C1:D C1:E		1	15:33	-	869	1800:2105	504+342	102.8 : 102.8%	-	-	-	25.0	103.5	29.1	4/2+4/1
4/3	A582 WB Approach Ahead	U	C1:D		1	15	-	423	1860	595	71.1%	-	-	-	3.0	25.3	6.4	4/3

Basic Results Summary

4/4	A582 WB Approach Ahead	U	C1:D		1	15	-	717	2080	666	107.7%	-	-	-	36.1	181.4	42.1	4/4
5/1	A6 NB Exit Through Ln Left	U	C1:F		1	36	-	351	1940	1436	24.4%	-	-	-	0.3	3.0	0.8	5/1
6/1	A6 NB Exit Ahead	U	C1:G		1	33	-	346	1965	1336	25.9%	-	-	-	0.2	1.9	0.4	6/1
6/2	A6 NB Exit Ahead	U	C1:G		1	33	-	813	1965	1336	60.8%	-	-	-	0.8	3.5	1.0	6/2
7/1	East Roundabout Ahead	U	C2:C		1	23	-	780	1600	864	90.3%	-	-	-	5.5	25.3	9.5	7/1
7/2	East Roundabout Ahead Right	U	C2:C		1	23	-	1042	2230	1204	82.4%	-	-	-	4.0	14.6	8.8	7/2
7/3	East Roundabout Right	U	C2:C		1	23	-	427	2400	1296	32.8%	-	-	-	1.1	9.7	6.0	7/3
11/1	A582 WB Exit Ahead	U	-		-	-	-	1316	1940	1940	67.8%	-	-	-	1.1	2.9	1.1	11/1
11/2	A582 WB Exit Ahead	U	-		-	-	-	225	1940	1940	11.6%	-	-	-	0.1	1.0	0.1	11/2
11/3	A582 WB Exit Ahead	U	-		-	-	-	869	1940	1940	44.7%	-	-	-	0.5	2.0	2.1	11/3
12/1	South Roundabout Ahead	U	C2:A		1	27	-	225	1400	784	28.7%	-	-	-	0.3	4.2	3.0	12/1
12/2	South Roundabout Ahead	U	C2:A		1	27	-	869	2260	1266	68.6%	-	-	-	1.8	7.6	8.1	12/2
12/3	South Roundabout Right	U	C2:A		1	27	-	485	1910	1070	45.3%	-	-	-	0.7	4.9	7.1	12/3
13/1	West Roundabout Ahead	U	C1:C		1	22	-	346	2000	920	37.6%	-	-	-	0.8	7.9	5.1	13/1
13/2	West Roundabout Ahead	U	C1:C		1	22	-	813	2050	943	86.2%	-	-	-	4.4	19.5	9.0	13/2

Basic Results Summary

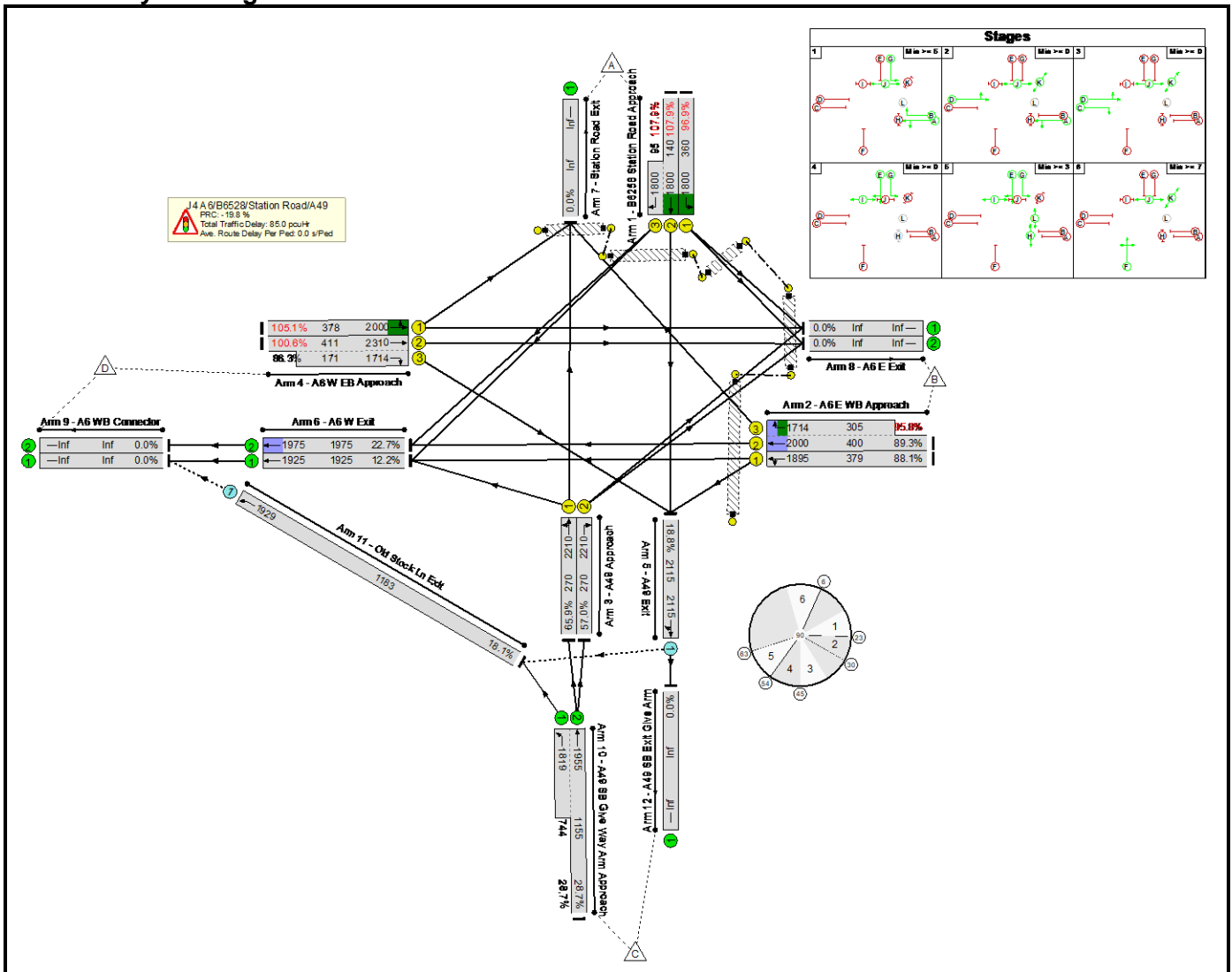
13/3	West Roundabout Right	U	C1:C		1	22	-	172	2220	1021	16.8%	-	-	-	0.3	6.6	2.3	13/3
14/1	North Roundabout Ahead	U	C1:A		1	22	-	247	2220	1021	23.9%	-	-	-	1.1	15.9	2.2	14/1
14/2	North Roundabout Ahead	U	C1:A		1	22	-	443	1490	685	63.1%	-	-	-	1.3	10.9	6.9	14/2
14/3	North Roundabout Right	U	C1:A		1	22	-	423	2220	1021	41.4%	-	-	-	0.4	3.0	0.4	14/3
14/4	North Roundabout Right	U	C1:A		1	22	-	717	2180	1003	66.4%	-	-	-	1.0	5.3	1.0	14/4
16/1	Ahead	U	-		-	-	-	869	2000	2000	43.5%	-	-	-	0.4	1.6	0.4	16/1
16/2	Ahead	U	-		-	-	-	1140	2200	2200	51.8%	-	-	-	0.5	1.7	0.5	16/2
Ped Link: P1	A6 NB Exit Through Ln Ped X	-	C1:H		1	4	-	0	-	5760	0.0%	-	-	-	0.0	0.0	0.0	Ped Link: P1
Ped Link: P2	A6 NB Exit Ped X	-	C1:I		1	4	-	0	-	5760	0.0%	-	-	-	0.0	0.0	0.0	Ped Link: P2
Ped Link: P3	A6 N Approach Ped X	-	C1:J		1	22	-	0	-	31680	0.0%	-	-	-	0.0	0.0	0.0	Ped Link: P3
Ped Link: P4	A6 N Peft Turn Ped X	-	C1:J		1	22	-	0	-	31680	0.0%	-	-	-	0.0	0.0	0.0	Ped Link: P4
				C1 - North Stream: 1 PRC for Signalled Lanes (%)	2.5				Total Delay for Signalled Lanes (pcuHr):				15.51		Cycle Time (s): 50			
				C1 - North Stream: 2 PRC for Signalled Lanes (%)	-19.7				Total Delay for Signalled Lanes (pcuHr):				69.86		Cycle Time (s): 50			
				C1 - North Stream: 3 PRC for Signalled Lanes (%)	47.9				Total Delay for Signalled Lanes (pcuHr):				0.96		Cycle Time (s): 50			
				C2 - South Stream: 1 PRC for Signalled Lanes (%)	-1.8				Total Delay for Signalled Lanes (pcuHr):				14.06		Cycle Time (s): 50			
				C2 - South Stream: 2 PRC for Signalled Lanes (%)	-2.7				Total Delay for Signalled Lanes (pcuHr):				27.65		Cycle Time (s): 50			
				PRC Over All Lanes (%)	-19.7				Total Delay Over All Lanes(pcuHr):				130.57					

Basic Results Summary
Basic Results Summary

User and Project Details

Project:	370964-Cuerden Strategic Site
Title:	J11&4 A6&Wigan Rd
Location:	Cuerden
Additional detail:	
File name:	J4&11 A6&Wigan Rd_Baseline.lsg3x
Author:	
Company:	
Address:	

Scenario 1: 'Baseline 2024 AM' (FG1: 'Baseline 2024 - AM', Plan 2: 'With Peds')
Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: J11&&4 A6&&Wigan Rd	-	-	-		-	-	-	-	-	-	107.9%	214	0	0	85.0	-	-
J4 A6/B6528/Station Road/A49	-	-	-		-	-	-	-	-	-	107.9%	214	0	0	85.0	-	-
1/1	B6258 Station Road Approach Left	U	G		2	17	-	349	1800	360	96.9%	-	-	-	9.0	92.3	11.9
1/2+1/3	B6258 Station Road Approach Ahead Right	U	E		1	11	-	253	1800:1800	140+95	107.9% : 107.9%	-	-	-	16.9	240.9	17.8
2/1	A6 E WB Approach Left Ahead	U	A		1	17	-	334	1895	379	88.1%	-	-	-	6.5	69.9	11.3
2/2+2/3	A6 E WB Approach Ahead Right	U	A B		1	17:10	-	649	2000:1714	400+305	89.3% : 95.8%	-	-	-	11.4	63.2	13.6
3/1	A49 Approach Left Ahead	U	F		1	10	-	178	2210	270	65.9%	-	-	-	2.8	56.9	5.1
3/2	A49 Approach Right	U	F		1	10	-	154	2210	270	57.0%	-	-	-	2.3	52.6	4.2
4/1	A6 W EB Approach Left Ahead	U	D		1	15	-	397	2000	378	105.1%	-	-	-	20.6	187.2	26.3
4/2+4/3	A6 W EB Approach Right Ahead	U	D C		1	15:8	-	561	2310:1714	411+171	100.6% : 86.3%	-	-	-	14.8	95.2	19.2
5/1	A49 Exit Right Ahead	O	-		-	-	-	409	2115	2115	18.8%	0	0	0	0.1	1.0	0.1
6/1	A6 W Exit Ahead	U	-		-	-	-	235	1925	1925	12.2%	-	-	-	0.1	1.1	0.1
6/2	A6 W Exit Ahead	U	-		-	-	-	448	1975	1975	22.7%	-	-	-	0.1	1.2	0.2

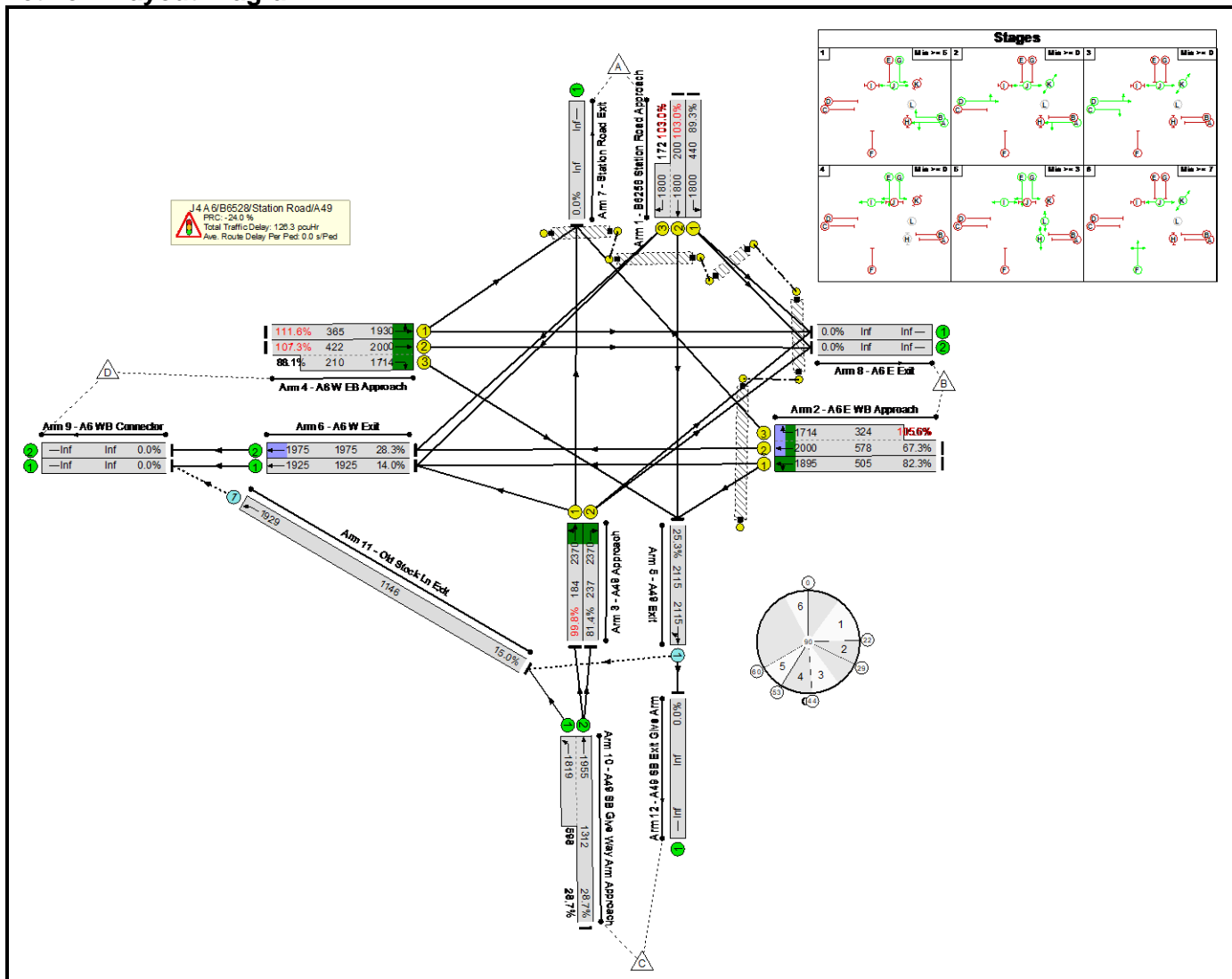
Basic Results Summary

10/2+10/1	A49 SB Give Way Arm Approach Ahead Left	U	-	-	-	-	546	1955:1819	1155+744	28.7 : 28.7%	-	-	-	0.2	1.3	0.2	
11/1	Old Stock Ln Exit Ahead	O	-	-	-	-	214	1929	1183	18.1%	214	0	0	0.1	2.2	0.8	
Ped Link: P1	Unnamed Ped Link	-	H	1	9	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P2	Unnamed Ped Link	-	K	2	45	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P3	Unnamed Ped Link	-	J	1	65	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P4	Unnamed Ped Link	-	I	1	11	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P5	Unnamed Ped Link	-	L	1	9	-	0	-	0	0.0%	-	-	-	-	-	-	
C1		PRC for Signalled Lanes (%):		-19.8		Total Delay for Signalled Lanes (pcuHr):		84.31		Cycle Time (s):		90					
		PRC Over All Lanes (%):		-19.8		Total Delay Over All Lanes(pcuHr):		84.97									

Basic Results Summary

Scenario 2: 'Baseline 2024 PM' (FG2: 'Baseline 2024 - PM', Plan 2: 'With Peds')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: J11&&4 A6&&Wigan Rd	-	-	-		-	-	-	-	-	-	111.6%	172	0	0	126.3	-	-
J4 A6/B6528/Station Road/A49	-	-	-		-	-	-	-	-	-	111.6%	172	0	0	126.3	-	-
1/1	B6258 Station Road Approach Left	U	G		2	20	-	393	1800	440	89.3%	-	-	-	5.5	50.6	9.0
1/2+1/3	B6258 Station Road Approach Ahead Right	U	E		1	9	-	383	1800:1800	200+172	103.0 : 103.0%	-	-	-	17.4	163.8	18.4
2/1	A6 E WB Approach Left Ahead	U	A		1	22	-	416	1895	505	82.3%	-	-	-	5.8	50.2	11.9
2/2+2/3	A6 E WB Approach Ahead Right	U	A B		1	22:15	-	731	2000:1714	578+324	67.3 : 105.6%	-	-	-	18.6	91.4	20.2
3/1	A49 Approach Left Ahead	U	F		1	7	-	184	2370	184	99.8%	-	-	-	8.8	172.6	11.2
3/2	A49 Approach Right	U	F		1	7	-	193	2370	237	81.4%	-	-	-	4.1	77.2	6.7
4/1	A6 W EB Approach Left Ahead	U	D		1	15	-	407	1930	365	111.6%	-	-	-	31.0	274.6	36.5
4/2+4/3	A6 W EB Approach Right Ahead	U	D C		1	15:8	-	638	2000:1714	422+210	107.3 : 88.1%	-	-	-	34.3	193.4	38.8
5/1	A49 Exit Right Ahead	O	-		-	-	-	542	2115	2115	25.3%	0	0	0	0.2	1.1	0.2
6/1	A6 W Exit Ahead	U	-		-	-	-	269	1925	1925	14.0%	-	-	-	0.1	1.1	0.1
6/2	A6 W Exit Ahead	U	-		-	-	-	562	1975	1975	28.3%	-	-	-	0.2	1.3	0.2

Basic Results Summary

10/2+10/1	A49 SB Give Way Arm Approach Ahead Left	U	-	-	-	-	549	1955:1819	1312+598	28.7 : 28.7%	-	-	-	0.2	1.3	0.2	
11/1	Old Stock Ln Exit Ahead	O	-	-	-	-	172	1929	1146	15.0%	172	0	0	0.1	1.9	0.6	
Ped Link: P1	Unnamed Ped Link	-	H	1	7	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P2	Unnamed Ped Link	-	K	2	42	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P3	Unnamed Ped Link	-	J	1	67	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P4	Unnamed Ped Link	-	I	1	9	-	0	-	0	0.0%	-	-	-	-	-	-	
Ped Link: P5	Unnamed Ped Link	-	L	1	7	-	0	-	0	0.0%	-	-	-	-	-	-	
C1		PRC for Signalled Lanes (%):		-24.0		Total Delay for Signalled Lanes (pcuHr):		125.58		Cycle Time (s):		90					
		PRC Over All Lanes (%):		-24.0		Total Delay Over All Lanes(pcuHr):		126.32									



APPENDIX C – 2037 FUTURE YEAR LINSIG MODELLING RESULTS

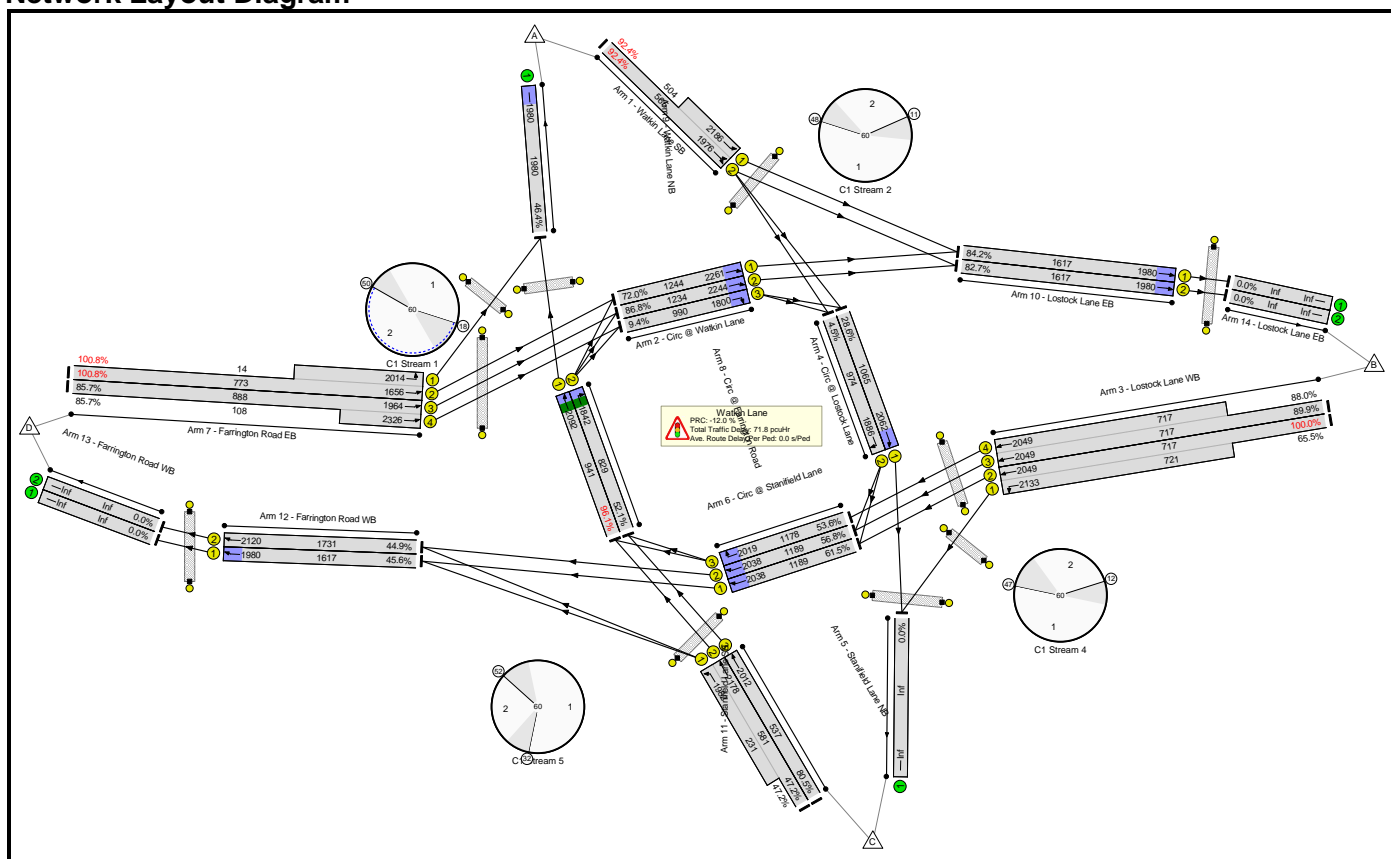
Basic Results Summary
Basic Results Summary

User and Project Details

Project:	A582
Title:	Stanfield Lane Roundabout
Location:	
Additional detail:	
File name:	J1 Stanfield Lane-A582_WSP_Mit_190623_Rev2.lsg3x
Author:	
Company:	WSP
Address:	

Scenario 1: 'DS 2037 AM' (FG1: 'DS 2037 AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	Item
Network: Stanifield Lane Roundabout	-	-	-		-	-	-	-	-	-	100.8%	0	0	0	71.8	-	-	Network: Stanifield Lane Roundabout
Watkin Lane	-	-	-		-	-	-	-	-	-	100.8%	0	0	0	71.8	-	-	Watkin Lane
1/2+1/1	Watkin Lane SB Ahead Ahead2	U	E		1	18	-	988	1976:2186	565+504	92.4 : 92.4%	-	-	-	10.5	38.1	13.7	1/2+1/1
2/1	Circ @ Watkin Lane Ahead	U	D		1	32	-	901	2261	1244	72.0%	-	-	-	1.6	6.3	4.3	2/1
2/2	Circ @ Watkin Lane Ahead	U	D		1	32	-	1071	2244	1234	86.8%	-	-	-	1.9	6.4	6.2	2/2
2/3	Circ @ Watkin Lane Right	U	D		1	32	-	93	1800	990	9.4%	-	-	-	0.1	2.2	0.1	2/3
3/2+3/1	Lostock Lane WB Ahead Left	U	M N		1	20	-	1189	2049:2133	717+721	100.0 : 65.5%	-	-	-	8.4	25.3	14.1	3/2+3/1
3/3+3/4	Lostock Lane WB Ahead	U	M		1	20	-	1276	2049:2049	717+717	89.9 : 88.0%	-	-	-	10.4	29.3	13.9	3/3+3/4
4/1	Circ @ Lostock Lane Ahead	U	L		1	30	-	305	2062	1065	28.6%	-	-	-	0.9	11.1	3.9	4/1
4/2	Circ @ Lostock Lane Right	U	L		1	30	-	44	1886	974	4.5%	-	-	-	0.1	11.1	0.7	4/2
5/2+5/1	Stanifield Lane NB Ahead Left	U	P		1	15	-	383	2178:1982	581+231	47.2 : 47.2%	-	-	-	2.4	22.3	4.3	5/2+5/1
5/3	Stanifield Lane NB Ahead	U	P		1	15	-	432	2012	537	80.5%	-	-	-	4.5	37.1	8.7	5/3

Basic Results Summary

6/1	Circ @ Stanifield Lane Ahead	U	O		1	34	-	731	2038	1189	61.5%	-	-	-	0.2	1.1	12.0	6/1
6/2	Circ @ Stanifield Lane Ahead	U	O		1	34	-	675	2038	1189	56.8%	-	-	-	0.2	1.1	10.4	6/2
6/3	Circ @ Stanifield Lane Right	U	O		1	34	-	631	2019	1178	53.6%	-	-	-	0.2	1.1	10.2	6/3
7/2+7/1	Farrington Road EB Ahead Left	U	B C		1	27	-	793	1656:2014	773+14	100.8 : 100.8%	-	-	-	19.4	88.0	28.8	7/2+7/1
7/3+7/4	Farrington Road EB Ahead	U	B		1	27	-	854	1964:2326	888+108	85.7 : 85.7%	-	-	-	6.1	25.6	14.2	7/3+7/4
8/1	Circ @ Farrington Road Ahead	U	A		1	23	-	905	2092	941	96.1%	-	-	-	1.1	4.3	5.3	8/1
8/2	Circ @ Farrington Road Right	U	A		1	23	-	432	1842	829	52.1%	-	-	-	2.2	18.0	7.7	8/2
9/1	Watkin Lane NB	U	-		-	-	-	919	1980	1980	46.4%	-	-	-	0.5	2.0	0.8	9/1
10/1	Lostock Lane EB Ahead	U	U		1	48	-	1367	1980	1617	84.2%	-	-	-	0.8	2.2	8.3	10/1
10/2	Lostock Lane EB Ahead	U	U		1	48	-	1337	1980	1617	82.7%	-	-	-	0.5	1.4	2.8	10/2
12/1	Farrington Road WB Ahead	U	J		1	48	-	738	1980	1617	45.6%	-	-	-	0.0	0.2	0.2	12/1
12/2	Farrington Road WB Ahead	U	J		1	48	-	777	2120	1731	44.9%	-	-	-	0.0	0.1	0.2	12/2
Ped Link: P1	Unnamed Ped Link	-	H		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P1
Ped Link: P2	Unnamed Ped Link	-	F		1	25	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P2
Ped Link: P3	Unnamed Ped Link	-	I		1	32	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P3

Basic Results Summary

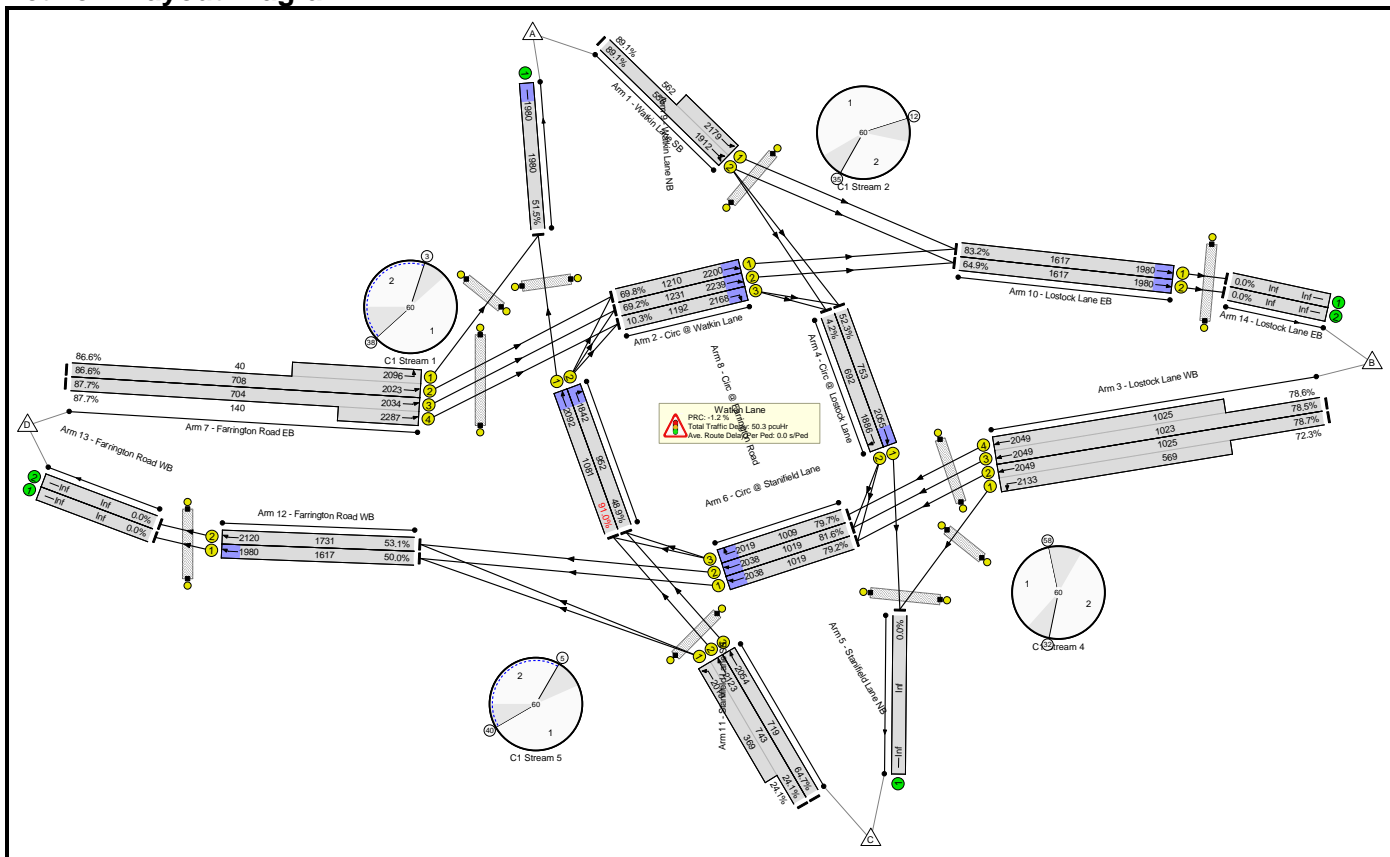
Ped Link: P4	Unnamed Ped Link	-	V		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P4
Ped Link: P5	Unnamed Ped Link	-	R		1	30	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P5
Ped Link: P6	Unnamed Ped Link	-	S		1	30	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P6
Ped Link: P7	Unnamed Ped Link	-	Q		1	18	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P7
Ped Link: P8	Unnamed Ped Link	-	T		1	35	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P8
Ped Link: P9	Unnamed Ped Link	-	K		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P9
Ped Link: P10	Unnamed Ped Link	-	G		1	23	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P10

C1	Stream: 1 PRC for Signalled Lanes (%)	-12.0	Total Delay for Signalled Lanes (pcuHr):	28.70	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%)	-2.7	Total Delay for Signalled Lanes (pcuHr):	13.96	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%)	97.2	Total Delay for Signalled Lanes (pcuHr):	0.06	Cycle Time (s):	60
C1	Stream: 4 PRC for Signalled Lanes (%)	-11.1	Total Delay for Signalled Lanes (pcuHr):	19.80	Cycle Time (s):	60
C1	Stream: 5 PRC for Signalled Lanes (%)	11.8	Total Delay for Signalled Lanes (pcuHr):	7.43	Cycle Time (s):	60
C1	Stream: 6 PRC for Signalled Lanes (%)	6.9	Total Delay for Signalled Lanes (pcuHr):	1.36	Cycle Time (s):	60
	PRC Over All Lanes (%)	-12.0	Total Delay Over All Lanes(pcuHr):	71.83		

Basic Results Summary

Scenario 2: 'DS 2037 PM' (FG2: 'DS 2037 PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	Item
Network: Stanifield Lane Roundabout	-	-	-		-	-	-	-	-	-	91.0%	0	0	0	50.3	-	-	Network: Stanifield Lane Roundabout
Watkin Lane	-	-	-		-	-	-	-	-	-	91.0%	0	0	0	50.3	-	-	Watkin Lane
1/2+1/1	Watkin Lane SB Ahead Ahead2	U	E		1	18	-	998	1912:2179	558+562	89.1 : 89.1%	-	-	-	9.0	32.4	11.4	1/2+1/1
2/1	Circ @ Watkin Lane Ahead	U	D		1	32	-	844	2200	1210	69.8%	-	-	-	1.3	5.5	3.3	2/1
2/2	Circ @ Watkin Lane Ahead	U	D		1	32	-	852	2239	1231	69.2%	-	-	-	1.3	5.5	3.4	2/2
2/3	Circ @ Watkin Lane Right	U	D		1	32	-	123	2168	1192	10.3%	-	-	-	0.0	0.0	0.1	2/3
3/2+3/1	Lostock Lane WB Ahead Left	U	M N		1	29	-	1217	2049:2133	1025+569	78.7 : 72.3%	-	-	-	5.4	16.1	12.6	3/2+3/1
3/3+3/4	Lostock Lane WB Ahead	U	M		1	29	-	1608	2049:2049	1023+1025	78.5 : 78.6%	-	-	-	7.3	16.4	12.8	3/3+3/4
4/1	Circ @ Lostock Lane Ahead	U	L		1	21	-	394	2055	753	52.3%	-	-	-	1.1	10.3	5.0	4/1
4/2	Circ @ Lostock Lane Right	U	L		1	21	-	29	1886	692	4.2%	-	-	-	0.1	7.7	0.5	4/2
5/2+5/1	Stanifield Lane NB Ahead Left	U	P		1	20	-	268	2123:2019	743+369	24.1 : 24.1%	-	-	-	1.2	15.8	2.2	5/2+5/1
5/3	Stanifield Lane NB Ahead	U	P		1	20	-	465	2054	719	64.7%	-	-	-	3.0	23.4	7.4	5/3

Basic Results Summary

6/1	Circ @ Stanifield Lane Ahead	U	O		1	29	-	807	2038	1019	79.2%	-	-	-	0.6	2.7	12.1	6/1
6/2	Circ @ Stanifield Lane Ahead	U	O		1	29	-	831	2038	1019	81.6%	-	-	-	1.0	4.3	12.7	6/2
6/3	Circ @ Stanifield Lane Right	U	O		1	29	-	805	2019	1009	79.7%	-	-	-	0.6	2.7	12.1	6/3
7/2+7/1	Farrington Road EB Ahead Left	U	B C		1	20	-	648	2023:2096	708+40	86.6 : 86.6%	-	-	-	6.3	34.8	12.4	7/2+7/1
7/3+7/4	Farrington Road EB Ahead	U	B		1	20	-	741	2034:2287	704+140	87.7 : 87.7%	-	-	-	6.9	33.7	13.1	7/3+7/4
8/1	Circ @ Farrington Road Ahead	U	A		1	30	-	984	2092	1081	91.0%	-	-	-	1.3	4.7	3.9	8/1
8/2	Circ @ Farrington Road Right	U	A		1	30	-	465	1842	952	48.9%	-	-	-	2.8	21.9	8.2	8/2
9/1	Watkin Lane NB	U	-		-	-	-	1019	1980	1980	51.5%	-	-	-	0.6	1.9	0.7	9/1
10/1	Lostock Lane EB Ahead	U	U		1	48	-	1345	1980	1617	83.2%	-	-	-	0.2	0.7	1.9	10/1
10/2	Lostock Lane EB Ahead	U	U		1	48	-	1049	1980	1617	64.9%	-	-	-	0.2	0.6	1.4	10/2
12/1	Farrington Road WB Ahead	U	J		1	48	-	808	1980	1617	50.0%	-	-	-	0.0	0.2	0.2	12/1
12/2	Farrington Road WB Ahead	U	J		1	48	-	919	2120	1731	53.1%	-	-	-	0.0	0.1	0.2	12/2
Ped Link: P1	Unnamed Ped Link	-	H		1	30	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P1
Ped Link: P2	Unnamed Ped Link	-	F		1	18	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P2
Ped Link: P3	Unnamed Ped Link	-	I		1	32	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P3

Basic Results Summary

Ped Link: P4	Unnamed Ped Link	-	V		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P4
Ped Link: P5	Unnamed Ped Link	-	R		1	21	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P5
Ped Link: P6	Unnamed Ped Link	-	S		1	21	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P6
Ped Link: P7	Unnamed Ped Link	-	Q		1	27	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P7
Ped Link: P8	Unnamed Ped Link	-	T		1	30	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P8
Ped Link: P9	Unnamed Ped Link	-	K		1	5	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P9
Ped Link: P10	Unnamed Ped Link	-	G		1	30	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P10

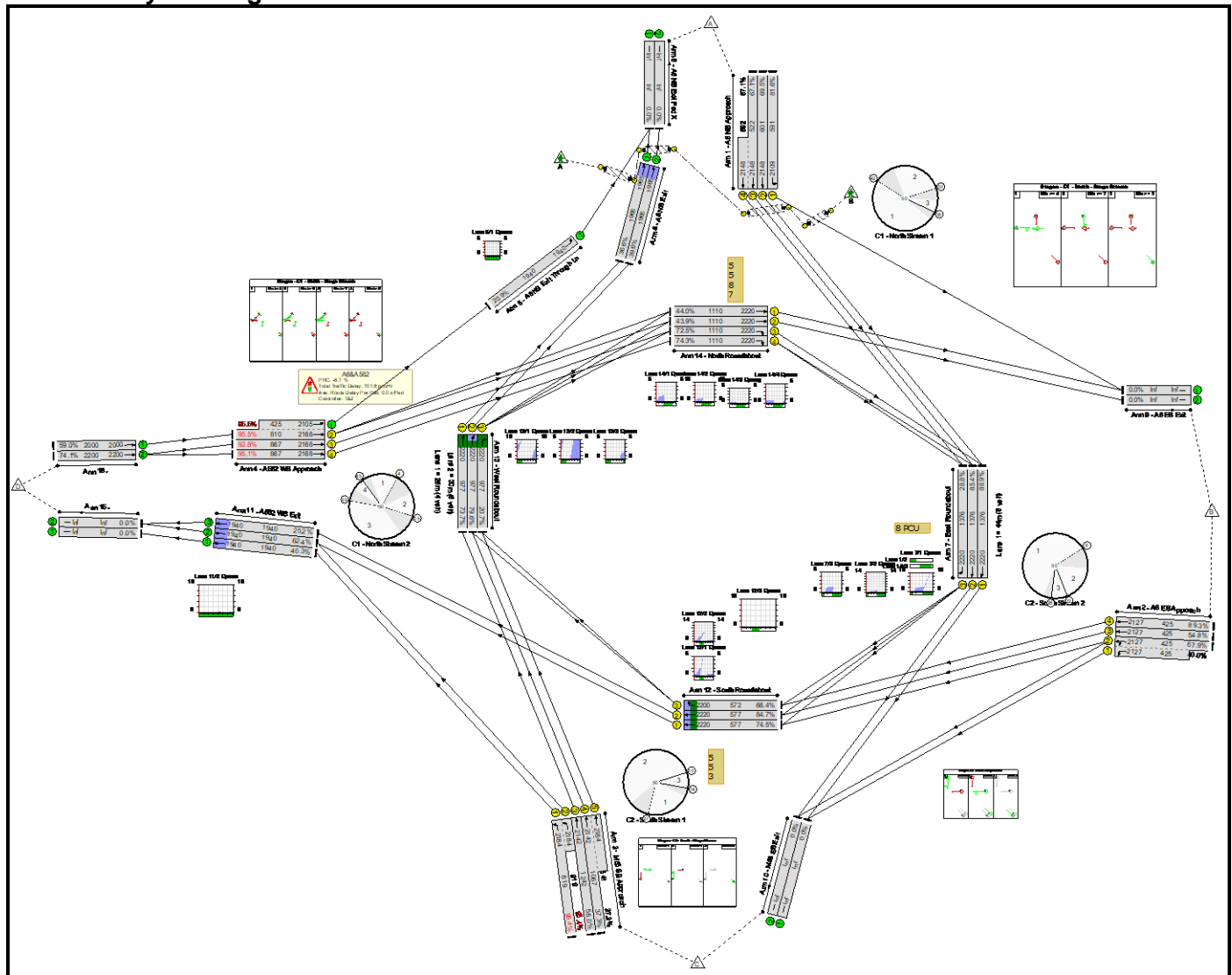
C1	Stream: 1 PRC for Signalled Lanes (%)	-1.2	Total Delay for Signalled Lanes (pcuHr):	17.31	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%)	1.0	Total Delay for Signalled Lanes (pcuHr):	11.59	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%)	69.6	Total Delay for Signalled Lanes (pcuHr):	0.06	Cycle Time (s):	60
C1	Stream: 4 PRC for Signalled Lanes (%)	14.4	Total Delay for Signalled Lanes (pcuHr):	13.95	Cycle Time (s):	60
C1	Stream: 5 PRC for Signalled Lanes (%)	10.4	Total Delay for Signalled Lanes (pcuHr):	6.40	Cycle Time (s):	60
C1	Stream: 6 PRC for Signalled Lanes (%)	8.2	Total Delay for Signalled Lanes (pcuHr):	0.44	Cycle Time (s):	60
	PRC Over All Lanes (%)	-1.2	Total Delay Over All Lanes(pcuHr):	50.29		

Basic Results Summary
Basic Results Summary

User and Project Details

Project:	370964 Cuerden Strategic Site
Title:	J2 A6 & A582 With Proposed Mitigation
Location:	Cuerden
Additional detail:	
File name:	J2 A6&A582 DS_v6_WSP_Mit_190623_Rev2.lsg3x
Author:	
Company:	WSP
Address:	

Scenario 1: 'DS 2037 AM' (FG1: 'DS 2037 AM', Plan 1: 'Network Control Plan 1')
Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	Item
Network: J2 A6 & A582 With Proposed Mitigation	-	-	-		-	-	-	-	-	-	95.5%	0	0	0	101.6	-	-	Network: J2 A6 & A582 With Proposed Mitigation
A6&&A582	-	-	-		-	-	-	-	-	-	95.5%	0	0	0	101.6	-	-	A6&&A582
1/1	A6 NB Approach Left	U	C1:B		1	13	-	482	2109	591	81.6%	-	-	-	4.4	32.8	8.3	1/1
1/2	A6 NB Approach Ahead	U	C1:B		1	13	-	418	2148	601	69.5%	-	-	-	3.0	25.8	6.2	1/2
1/3+1/4	A6 NB Approach Ahead	U	C1:B		1	13	-	747	2148:2148	522+592	67.1 : 67.1%	-	-	-	4.3	20.6	5.9	1/3+1/4
2/2+2/1	A6 EB Approach Left Ahead	U	C2:D		1	9	-	459	2127:2127	425+425	67.9 : 40.0%	-	-	-	2.9	22.7	4.3	2/2+2/1
2/3	A6 EB Approach Ahead	U	C2:D		1	9	-	233	2127	425	54.8%	-	-	-	1.8	27.3	3.4	2/3
2/4	A6 EB Approach Ahead	U	C2:D		1	9	-	380	2127	425	89.3%	-	-	-	5.7	53.7	8.7	2/4
3/1+3/2	M65 SB Approach Left	U	C2:B		1	28	-	1562	2184:2184	819+819	95.4 : 95.4%	-	-	-	11.7	27.0	22.2	3/1+3/2
3/3	M65 SB Approach Ahead	U	C2:B		1	28	-	720	2142	1242	58.0%	-	-	-	2.0	10.1	6.9	3/3
3/4+3/5	M65 SB Approach Ahead	U	C2:B		1	28	-	600	2142:2184	1067+541	37.3 : 37.3%	-	-	-	1.2	7.0	3.1	3/4+3/5
4/2+4/1	A582 WB Approach Ahead Ahead2	U	C1:D -		1	19	-	1179	2168:2105	810+425	95.5 : 95.5%	-	-	-	11.2	34.1	18.0	4/2+4/1

Basic Results Summary

4/3	A582 WB Approach Ahead	U	C1:D		1	19	-	805	2168	867	92.8%	-	-	-	8.7	38.9	16.0	4/3
4/4	A582 WB Approach Ahead	U	C1:D		1	19	-	825	2168	867	95.1%	-	-	-	10.6	46.3	18.3	4/4
5/1	A6 NB Exit Through Ln Left	U	-		-	-	-	406	1940	1940	20.9%	-	-	-	0.1	1.2	0.1	5/1
6/1	A6 NB Exit Ahead	U	-		-	-	-	720	1965	1965	36.6%	-	-	-	0.4	1.9	3.6	6/1
6/2	A6 NB Exit Ahead	U	-		-	-	-	778	1965	1965	39.6%	-	-	-	0.5	2.1	1.1	6/2
7/1	East Roundabout Ahead	U	C2:C		1	30	-	1223	2220	1376	88.9%	-	-	-	4.7	13.8	16.6	7/1
7/2	East Roundabout Ahead	U	C2:C		1	30	-	1175	2220	1376	85.4%	-	-	-	3.1	9.6	6.5	7/2
7/3	East Roundabout Right	U	C2:C		1	30	-	397	2220	1376	28.8%	-	-	-	0.7	6.2	1.5	7/3
11/1	A582 WB Exit Ahead	U	-		-	-	-	781	1940	1940	40.3%	-	-	-	0.3	1.6	0.5	11/1
11/2	A582 WB Exit Ahead	U	-		-	-	-	1211	1940	1940	62.4%	-	-	-	0.9	2.6	1.1	11/2
11/3	A582 WB Exit Ahead	U	-		-	-	-	489	1940	1940	25.2%	-	-	-	0.2	1.5	0.6	11/3
12/1	South Roundabout Ahead	U	C2:A		1	11	-	430	2220	577	74.5%	-	-	-	2.0	17.1	7.2	12/1
12/2	South Roundabout Ahead	U	C2:A		1	11	-	489	2220	577	84.7%	-	-	-	3.9	28.6	9.3	12/2
12/3	South Roundabout Right	U	C2:A		1	11	-	380	2200	572	66.4%	-	-	-	1.0	9.3	1.0	12/3
13/1	West Roundabout Ahead	U	C1:C		1	18	-	720	2220	977	73.7%	-	-	-	2.9	14.5	10.4	13/1

Basic Results Summary

13/2	West Roundabout Ahead	U	C1:C		1	18	-	778	2220	977	79.6%	-	-	-	5.9	27.5	12.5	13/2					
13/3	West Roundabout Right	U	C1:C		1	18	-	202	2220	977	20.7%	-	-	-	0.5	8.0	2.0	13/3					
14/1	North Roundabout Ahead	U	C1:A		1	24	-	488	2220	1110	44.0%	-	-	-	0.9	6.3	2.0	14/1					
14/2	North Roundabout Ahead	U	C1:A		1	24	-	487	2220	1110	43.9%	-	-	-	0.9	6.3	2.0	14/2					
14/3	North Roundabout Right	U	C1:A		1	24	-	805	2220	1110	72.5%	-	-	-	1.5	6.8	1.8	14/3					
14/4	North Roundabout Right	U	C1:A		1	24	-	825	2220	1110	74.3%	-	-	-	1.7	7.6	2.1	14/4					
16/1	Ahead	U	-		-	-	-	1179	2000	2000	59.0%	-	-	-	0.7	2.2	0.7	16/1					
16/2	Ahead	U	-		-	-	-	1630	2200	2200	74.1%	-	-	-	1.4	3.1	1.4	16/2					
Ped Link: P1	A6 NB Exit Through Ln Ped X	-	C1:H		1	7	-	0	-	10080	0.0%	-	-	-	0.0	0.0	0.0	Ped Link: P1					
Ped Link: P2	A6 NB Exit Ped X	-	C1:I		1	4	-	0	-	5760	0.0%	-	-	-	0.0	0.0	0.0	Ped Link: P2					
Ped Link: P3	A6 N Approach Ped X	-	C1:J		1	24	-	0	-	34560	0.0%	-	-	-	0.0	0.0	0.0	Ped Link: P3					
Ped Link: P4	A6 N Peft Turn Ped X	-	C1:J		1	24	-	0	-	34560	0.0%	-	-	-	0.0	0.0	0.0	Ped Link: P4					
		C1 - North		Stream: 1 PRC for Signalled Lanes (%):				10.3				Total Delay for Signalled Lanes (pcuHr):				16.64				Cycle Time (s):		50	
		C1 - North		Stream: 2 PRC for Signalled Lanes (%):				-6.1				Total Delay for Signalled Lanes (pcuHr):				39.75				Cycle Time (s):		50	
		C1 - North		Stream: 3 PRC for Signalled Lanes (%):				0.0				Total Delay for Signalled Lanes (pcuHr):				0.00				Cycle Time (s):		50	
		C2 - South		Stream: 1 PRC for Signalled Lanes (%):				-6.0				Total Delay for Signalled Lanes (pcuHr):				21.83				Cycle Time (s):		50	
		C2 - South		Stream: 2 PRC for Signalled Lanes (%):				0.8				Total Delay for Signalled Lanes (pcuHr):				18.85				Cycle Time (s):		50	
				PRC Over All Lanes (%):				-6.1				Total Delay Over All Lanes(pcuHr):				101.59							

Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	Item
Network: J2 A6 & A582 With Proposed Mitigation	-	-	-		-	-	-	-	-	-	100.2%	0	0	0	127.0	-	-	Network: J2 A6 & A582 With Proposed Mitigation
A6&&A582	-	-	-		-	-	-	-	-	-	100.2%	0	0	0	127.0	-	-	A6&&A582
1/1	A6 NB Approach Left	U	C1:B		1	16	-	578	2109	747	77.4%	-	-	-	3.9	24.2	8.4	1/1
1/2	A6 NB Approach Ahead	U	C1:B		1	16	-	415	2148	761	54.6%	-	-	-	2.0	17.6	5.0	1/2
1/3+1/4	A6 NB Approach Ahead	U	C1:B		1	16	-	901	2148:2148	593+689	70.3 : 70.3%	-	-	-	4.4	17.4	6.6	1/3+1/4
2/2+2/1	A6 EB Approach Left Ahead	U	C2:D		1	11	-	647	2127:2127	532+464	75.2 : 53.3%	-	-	-	3.8	21.3	5.8	2/2+2/1
2/3	A6 EB Approach Ahead	U	C2:D		1	11	-	402	2127	532	75.6%	-	-	-	3.4	30.2	6.4	2/3
2/4	A6 EB Approach Ahead	U	C2:D		1	11	-	522	2127	532	98.2%	-	-	-	11.8	81.6	16.1	2/4
3/1+3/2	M65 SB Approach Left	U	C2:B		1	25	-	1598	2184:2184	903+731	97.8 : 97.8%	-	-	-	16.0	36.1	28.8	3/1+3/2
3/3	M65 SB Approach Ahead	U	C2:B		1	25	-	421	2142	1160	36.3%	-	-	-	1.0	8.7	3.4	3/3
3/4+3/5	M65 SB Approach Ahead	U	C2:B		1	25	-	641	2142:2184	1016+542	41.2 : 41.2%	-	-	-	1.4	8.0	3.5	3/4+3/5
4/2+4/1	A582 WB Approach Ahead Ahead2	U	C1:D -		1	14	-	1066	2168:2105	677+447	94.8 : 94.8%	-	-	-	10.1	34.2	15.5	4/2+4/1

Basic Results Summary

4/3	A582 WB Approach Ahead	U	C1:D		1	14	-	679	2168	677	100.2%	-	-	-	16.6	87.8	22.5	4/3
4/4	A582 WB Approach Ahead	U	C1:D		1	14	-	679	2168	677	100.2%	-	-	-	16.6	87.8	22.5	4/4
5/1	A6 NB Exit Through Ln Left	U	-		-	-	-	424	1940	1940	21.9%	-	-	-	0.1	1.2	0.1	5/1
6/1	A6 NB Exit Ahead	U	-		-	-	-	421	1965	1965	21.4%	-	-	-	0.1	1.2	0.2	6/1
6/2	A6 NB Exit Ahead	U	-		-	-	-	940	1965	1965	47.8%	-	-	-	0.7	2.6	1.5	6/2
7/1	East Roundabout Ahead	U	C2:C		1	26	-	1094	2220	1341	81.5%	-	-	-	3.3	10.7	11.8	7/1
7/2	East Roundabout Ahead	U	C2:C		1	26	-	1096	2220	1341	81.6%	-	-	-	3.3	10.8	11.8	7/2
7/3	East Roundabout Right	U	C2:C		1	26	-	484	2220	1341	36.1%	-	-	-	0.5	3.9	1.0	7/3
11/1	A582 WB Exit Ahead	U	-		-	-	-	883	1940	1940	45.5%	-	-	-	0.4	1.7	0.6	11/1
11/2	A582 WB Exit Ahead	U	-		-	-	-	1345	1940	1940	69.3%	-	-	-	1.1	3.1	1.3	11/2
11/3	A582 WB Exit Ahead	U	-		-	-	-	656	1940	1940	33.8%	-	-	-	0.3	1.5	0.5	11/3
12/1	South Roundabout Ahead	U	C2:A		1	12	-	630	2220	694	90.8%	-	-	-	5.2	30.0	8.0	12/1
12/2	South Roundabout Ahead	U	C2:A		1	12	-	656	2220	740	88.6%	-	-	-	4.3	23.9	7.3	12/2
12/3	South Roundabout Right	U	C2:A		1	12	-	522	2200	687	75.9%	-	-	-	3.1	21.2	3.8	12/3
13/1	West Roundabout Ahead	U	C1:C		1	21	-	421	2220	1156	36.4%	-	-	-	0.6	5.5	4.1	13/1

Basic Results Summary

13/2	West Roundabout Ahead	U	C1:C		1	21	-	940	2220	1156	81.3%	-	-	-	6.4	24.6	14.5	13/2	
13/3	West Roundabout Right	U	C1:C		1	21	-	223	2220	1156	19.3%	-	-	-	0.3	4.7	2.0	13/3	
14/1	North Roundabout Ahead	U	C1:A		1	19	-	432	2220	925	46.7%	-	-	-	1.0	8.5	1.9	14/1	
14/2	North Roundabout Ahead	U	C1:A		1	19	-	433	2220	925	46.8%	-	-	-	1.0	8.5	1.9	14/2	
14/3	North Roundabout Right	U	C1:A		1	19	-	679	2220	925	73.2%	-	-	-	1.4	7.2	1.4	14/3	
14/4	North Roundabout Right	U	C1:A		1	19	-	679	2220	925	73.2%	-	-	-	1.4	7.2	1.4	14/4	
16/1	Ahead	U	-		-	-	-	1066	2000	2000	53.3%	-	-	-	0.6	1.9	0.6	16/1	
16/2	Ahead	U	-		-	-	-	1358	2200	2200	61.7%	-	-	-	0.8	2.1	0.8	16/2	
Ped Link: P1	A6 NB Exit Through Ln Ped X	-	C1:H		1	8	-	0	-	12000	0.0%	-	-	-	0.0	0.0	0.0	Ped Link: P1	
Ped Link: P2	A6 NB Exit Ped X	-	C1:I		1	4	-	0	-	6000	0.0%	-	-	-	0.0	0.0	0.0	Ped Link: P2	
Ped Link: P3	A6 N Approach Ped X	-	C1:J		1	19	-	0	-	28500	0.0%	-	-	-	0.0	0.0	0.0	Ped Link: P3	
Ped Link: P4	A6 N Peft Turn Ped X	-	C1:J		1	19	-	0	-	28500	0.0%	-	-	-	0.0	0.0	0.0	Ped Link: P4	
				C1 - North	Stream: 1 PRC for Signalled Lanes (%):			16.3	Total Delay for Signalled Lanes (pcuHr):			15.02	Cycle Time (s):			48			
				C1 - North	Stream: 2 PRC for Signalled Lanes (%):			-11.4	Total Delay for Signalled Lanes (pcuHr):			50.60	Cycle Time (s):			48			
				C1 - North	Stream: 3 PRC for Signalled Lanes (%):			0.0	Total Delay for Signalled Lanes (pcuHr):			0.00	Cycle Time (s):			48			
				C2 - South	Stream: 1 PRC for Signalled Lanes (%):			-8.7	Total Delay for Signalled Lanes (pcuHr):			31.15	Cycle Time (s):			48			
				C2 - South	Stream: 2 PRC for Signalled Lanes (%):			-9.1	Total Delay for Signalled Lanes (pcuHr):			26.10	Cycle Time (s):			48			
				PRC Over All Lanes (%):			-11.4	Total Delay Over All Lanes(pcuHr):			127.04								

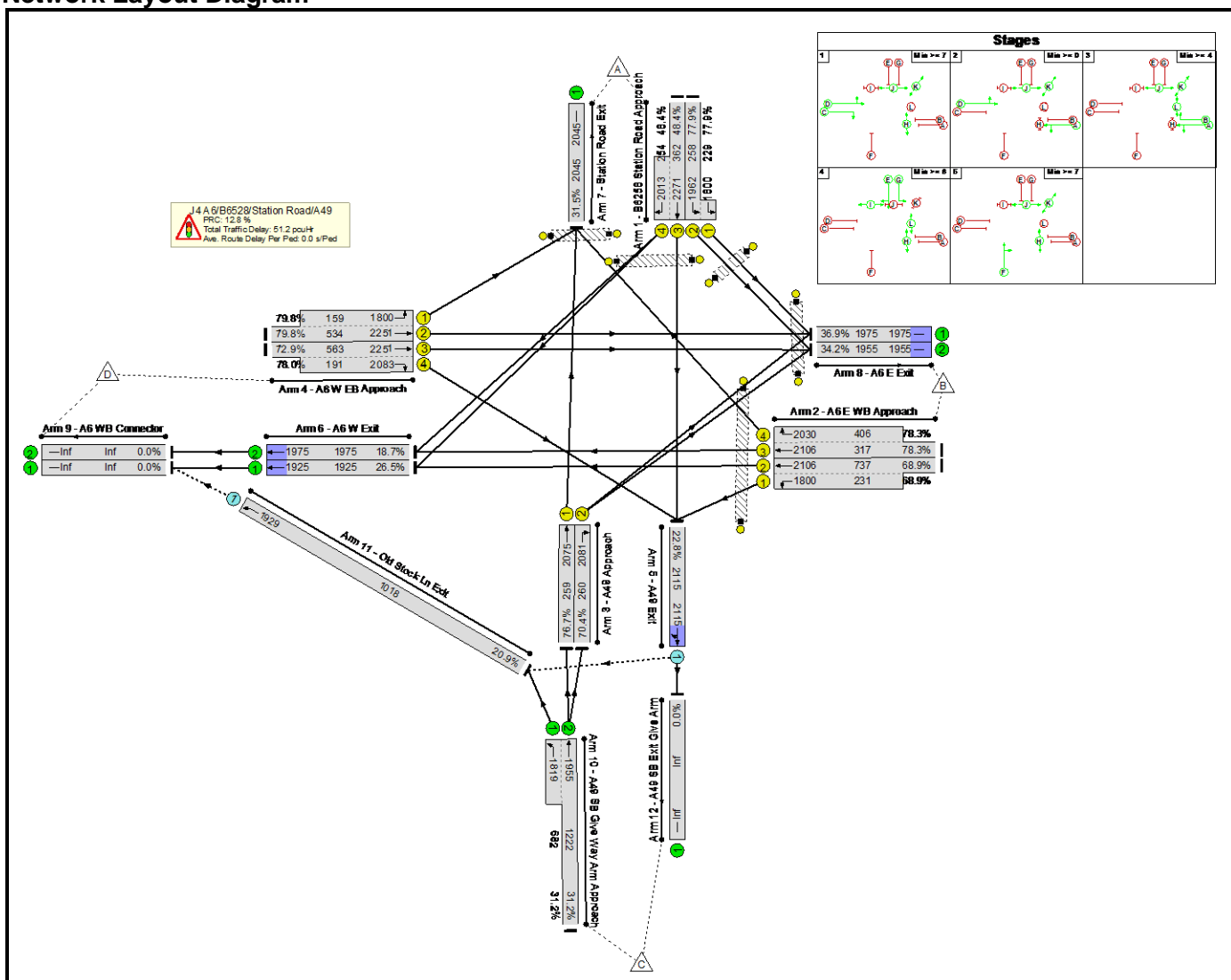
Basic Results Summary
Basic Results Summary

User and Project Details

Project:	370964-Cuerden Strategic Site
Title:	J11&4 A6&Wigan Rd
Location:	Cuerden
Additional detail:	
File name:	J4&11 A6&Wigan Rd _WSP_Mit_190623_Rev2.lsg3x
Author:	
Company:	WSP
Address:	

Scenario 1: 'DS 2037 AM' (FG1: 'DS 2037 AM', Plan 1: 'No Peds')

Network Layout Diagram



Basic Results Summary

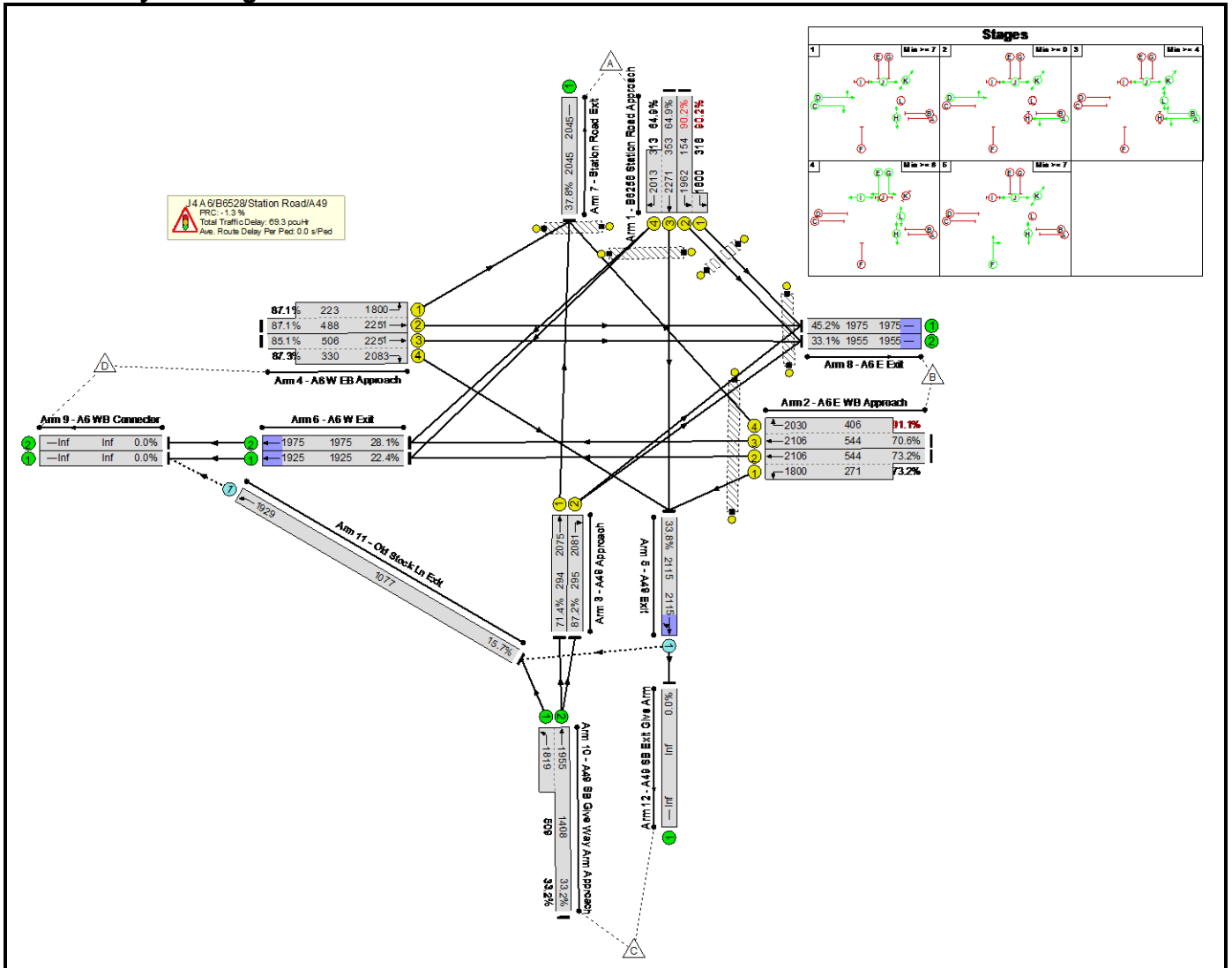
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	Item
Network: J11&&4 A6&&Wigan Rd	-	-	-		-	-	-	-	-	-	79.8%	213	0	0	51.2	-	-	Network: J11&&4 A6&&Wigan Rd
J4 A6/B6528/Station Road/A49	-	-	-		-	-	-	-	-	-	79.8%	213	0	0	51.2	-	-	J4 A6/B6528/Station Road/A49
1/2+1/1	B6258 Station Road Approach Left	U	G		1	26	-	379	1962:1800	258+229	77.9 : 77.9%	-	-	-	6.1	58.2	11.7	1/2+1/1
1/3+1/4	B6258 Station Road Approach Ahead Right	U	E		1	26	-	298	2271:2013	362+254	48.4 : 48.4%	-	-	-	3.7	44.4	5.3	1/3+1/4
2/2+2/1	A6 E WB Approach Left Ahead	U	A		1	41	-	667	2106:1800	737+231	68.9 : 68.9%	-	-	-	7.0	38.0	15.5	2/2+2/1
2/3+2/4	A6 E WB Approach Ahead Right	U	A B		1	41:23	-	566	2106:2030	317+406	78.3 : 78.3%	-	-	-	7.8	49.4	11.7	2/3+2/4
3/1	A49 Approach Ahead	U	F		1	14	-	199	2075	259	76.7%	-	-	-	4.4	79.2	8.0	3/1
3/2	A49 Approach Right	U	F		1	14	-	183	2081	260	70.4%	-	-	-	3.7	73.0	7.0	3/2
4/2+4/1	A6 W EB Approach Left Ahead	U	D		1	29	-	553	2251:1800	534+159	79.8 : 79.8%	-	-	-	8.1	52.9	15.1	4/2+4/1
4/3+4/4	A6 W EB Approach Right Ahead	U	D C		1	29:10	-	559	2251:2083	563+191	72.9 : 78.0%	-	-	-	8.3	53.6	13.9	4/3+4/4
5/1	A49 Exit Right Ahead	O	-		-	-	-	483	2115	2115	22.8%	0	0	0	0.1	1.1	0.1	5/1
6/1	A6 W Exit Ahead	U	-		-	-	-	510	1925	1925	26.5%	-	-	-	0.2	1.7	5.2	6/1

Basic Results Summary

6/2	A6 W Exit Ahead	U	-	-	-	-	369	1975	1975	18.7%	-	-	-	0.1	1.1	0.1	6/2
7/1	Station Road Exit	U	-	-	-	-	644	2045	2045	31.5%	-	-	-	0.2	1.3	0.2	7/1
8/1	A6 E Exit	U	-	-	-	-	729	1975	1975	36.9%	-	-	-	0.4	2.0	8.1	8/1
8/2	A6 E Exit	U	-	-	-	-	669	1955	1955	34.2%	-	-	-	0.3	1.8	5.9	8/2
10/2+10/1	A49 SB Give Way Arm Approach Ahead Left	U	-	-	-	-	595	1955:1819	1222+682	31.2 : 31.2%	-	-	-	0.2	1.4	0.2	10/2+10/1
11/1	Old Stock Ln Exit Ahead	O	-	-	-	-	213	1929	1018	20.9%	213	0	0	0.4	6.5	2.3	11/1
Ped Link: P1	Unnamed Ped Link	-	H	1	65	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P1
Ped Link: P2	Unnamed Ped Link	-	K	1	82	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P2
Ped Link: P3	Unnamed Ped Link	-	J	1	80	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P3
Ped Link: P4	Unnamed Ped Link	-	I	1	24	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P4
Ped Link: P5	Unnamed Ped Link	-	L	1	53	-	0	-	0	0.0%	-	-	-	-	-	-	Ped Link: P5
		C1		PRC for Signalled Lanes (%):		12.8		Total Delay for Signalled Lanes (pcuHr):		49.15		Cycle Time (s):		120			
				PRC Over All Lanes (%):		12.8		Total Delay Over All Lanes(pcuHr):		51.24							

Basic Results Summary
Scenario 2: 'DS 2037 PM' (FG2: 'DS 2037 PM', Plan 1: 'No Peds')
Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	Item
Network: J11&&4 A6&&Wigan Rd	-	-	-		-	-	-	-	-	-	91.1%	169	0	0	69.3	-	-	Network: J11&&4 A6&&Wigan Rd
J4 A6/B6528/Station Road/A49	-	-	-		-	-	-	-	-	-	91.1%	169	0	0	69.3	-	-	J4 A6/B6528/Station Road/A49
1/2+1/1	B6258 Station Road Approach Left	U	G		1	27	-	426	1962:1800	154+318	90.2 : 90.2%	-	-	-	9.1	76.9	16.8	1/2+1/1
1/3+1/4	B6258 Station Road Approach Ahead Right	U	E		1	27	-	432	2271:2013	353+313	64.9 : 64.9%	-	-	-	5.6	46.9	7.9	1/3+1/4
2/2+2/1	A6 E WB Approach Left Ahead	U	A		1	30	-	596	2106:1800	544+271	73.2 : 73.2%	-	-	-	7.9	47.6	13.4	2/2+2/1
2/3+2/4	A6 E WB Approach Ahead Right	U	A B		1	30:23	-	754	2106:2030	544+406	70.6 : 91.1%	-	-	-	11.0	52.6	13.9	2/3+2/4
3/1	A49 Approach Ahead	U	F		1	16	-	210	2075	294	71.4%	-	-	-	4.1	70.0	7.9	3/1
3/2	A49 Approach Right	U	F		1	16	-	257	2081	295	87.2%	-	-	-	6.5	91.6	11.3	3/2
4/2+4/1	A6 W EB Approach Left Ahead	U	D		1	26	-	619	2251:1800	488+223	87.1 : 87.1%	-	-	-	10.6	61.5	16.6	4/2+4/1
4/3+4/4	A6 W EB Approach Right Ahead	U	D C		1	26:18	-	719	2251:2083	506+330	85.1 : 87.3%	-	-	-	12.2	61.1	16.7	4/3+4/4
5/1	A49 Exit Right Ahead	O	-		-	-	-	715	2115	2115	33.8%	0	0	0	0.3	1.3	0.3	5/1
6/1	A6 W Exit Ahead	U	-		-	-	-	431	1925	1925	22.4%	-	-	-	0.2	1.5	2.5	6/1

Basic Results Summary

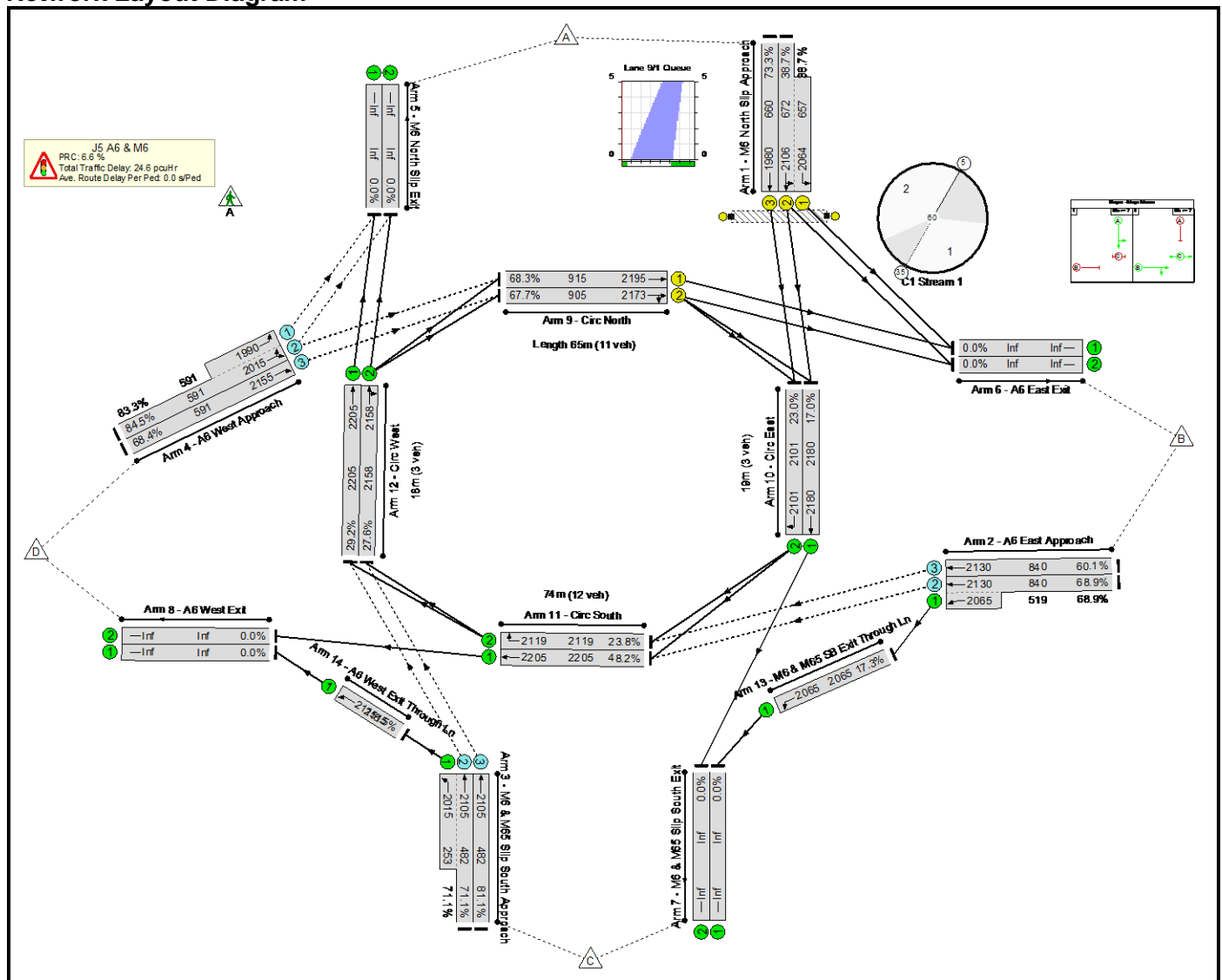
6/2	A6 W Exit Ahead	U	-	-	-	-	554	1975	1975	28.1%	-	-	-	0.2	1.4	0.5	6/2
7/1	Station Road Exit	U	-	-	-	-	774	2045	2045	37.8%	-	-	-	0.3	1.4	0.3	7/1
8/1	A6 E Exit	U	-	-	-	-	892	1975	1975	45.2%	-	-	-	0.5	2.2	9.3	8/1
8/2	A6 E Exit	U	-	-	-	-	647	1955	1955	33.1%	-	-	-	0.3	1.9	7.3	8/2
10/2+10/1	A49 SB Give Way Arm Approach Ahead Left	U	-	-	-	-	636	1955:1819	1408+509	33.2 : 33.2%	-	-	-	0.2	1.4	0.2	10/2+10/1
11/1	Old Stock Ln Exit Ahead	O	-	-	-	-	169	1929	1077	15.7%	169	0	0	0.2	4.6	1.4	11/1
Ped Link: P1	Unnamed Ped Link	-	H		1	76	-	0	-	0	0.0%	-	-	-	-	-	Ped Link: P1
Ped Link: P2	Unnamed Ped Link	-	K		1	81	-	0	-	0	0.0%	-	-	-	-	-	Ped Link: P2
Ped Link: P3	Unnamed Ped Link	-	J		1	79	-	0	-	0	0.0%	-	-	-	-	-	Ped Link: P3
Ped Link: P4	Unnamed Ped Link	-	I		1	25	-	0	-	0	0.0%	-	-	-	-	-	Ped Link: P4
Ped Link: P5	Unnamed Ped Link	-	L		1	54	-	0	-	0	0.0%	-	-	-	-	-	Ped Link: P5
		C1		PRC for Signalled Lanes (%):		-1.3		Total Delay for Signalled Lanes (pcuHr):		67.04		Cycle Time (s):		120			
				PRC Over All Lanes (%):		-1.3		Total Delay Over All Lanes(pcuHr):		69.34							

Basic Results Summary
Basic Results Summary

User and Project Details

Project:	Cuerden Strategic Site
Title:	Junction 5 Proposed Mitigation
Location:	Cuerden
Additional detail:	
File name:	J5 A6 & M6 - 2024 Scenario - Proposed mitigation.lsg3x
Author:	
Company:	WSP
Address:	

Scenario 1: 'DS 2037 AM' (FG3: 'DS 2037 - With Development AM', Plan 1: 'Network Control Plan 1')
Network Layout Diagram



Basic Results Summary

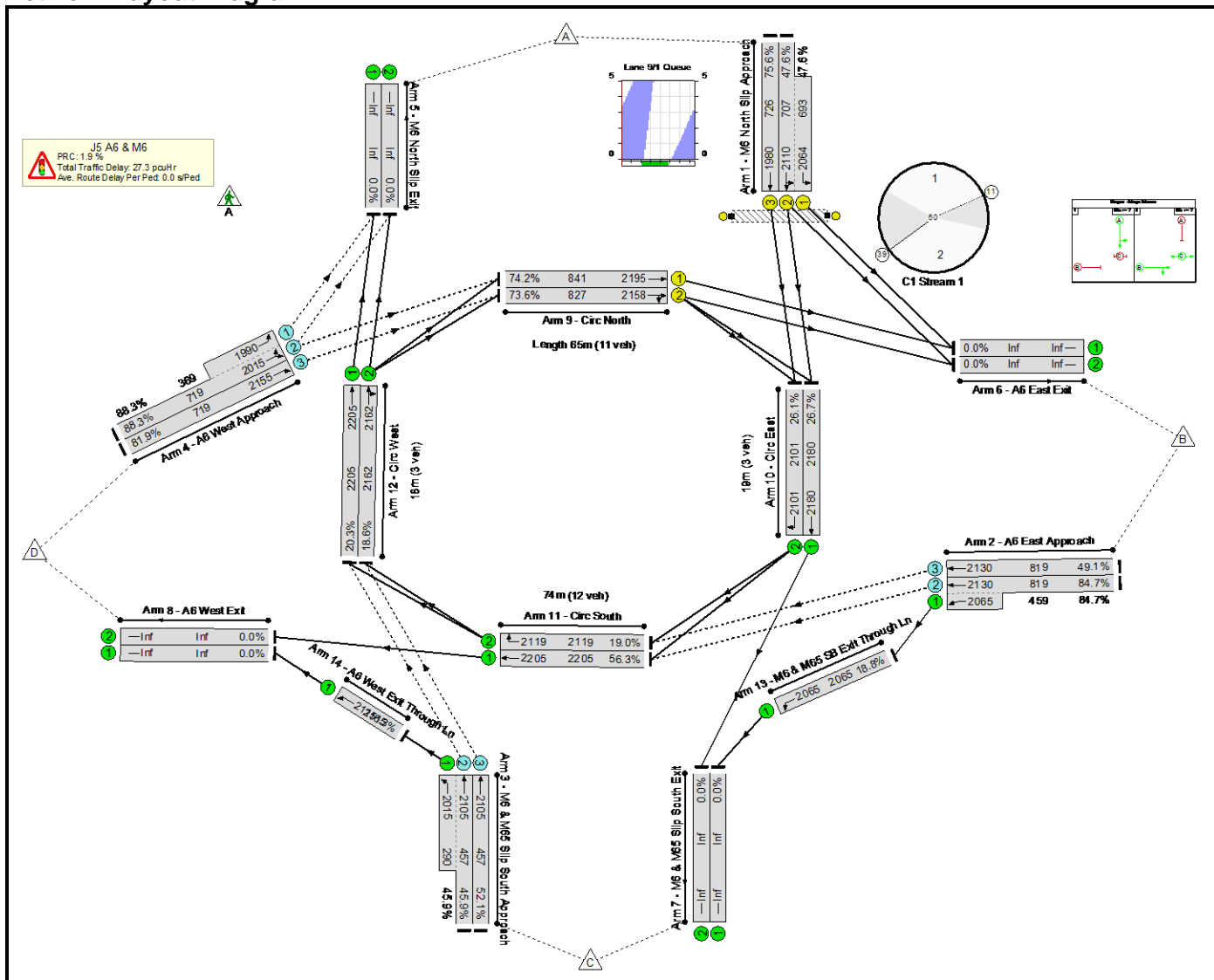
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	Item
Network: Junction 5 Proposed Mitigation	-	-	-		-	-	-	-	-	-	84.5%	4204	0	0	24.6	-	-	Network: Junction 5 Proposed Mitigation
J5 A6 & M6	-	-	-		-	-	-	-	-	-	84.5%	4204	0	0	24.6	-	-	J5 A6 & M6
1/2+1/1	M6 North Slip Approach Left Ahead	U	A		1	19	-	514	2106:2064	672+657	38.7 : 38.7%	-	-	-	2.5	17.4	3.6	1/2+1/1
1/3	M6 North Slip Approach Ahead	U	A		1	19	-	484	1980	660	73.3%	-	-	-	3.7	27.7	8.3	1/3
2/2+2/1	A6 East Approach Ahead Ahead2	O+U	-		-	-	-	937	2130:2065	840+519	68.9 : 68.9%	579	0	0	1.2	4.7	4.6	2/2+2/1
2/3	A6 East Approach Ahead	O	-		-	-	-	505	2130	840	60.1%	505	0	0	0.8	5.7	3.1	2/3
3/2+3/1	M6 & M65 Slip South Approach Ahead Left	O+U	-		-	-	-	523	2105:2015	482+253	71.1 : 71.1%	343	0	0	1.5	10.1	4.2	3/2+3/1
3/3	M6 & M65 Slip South Approach Ahead	O	-		-	-	-	391	2105	482	81.1%	391	0	0	2.4	22.3	6.2	3/3
4/2+4/1	A6 West Approach Left Ahead	O	-		-	-	-	991	2015:1990	591+591	84.5 : 83.3%	1982	0	0	2.6	9.4	5.2	4/2+4/1
4/3	A6 West Approach Ahead	O	-		-	-	-	404	2155	591	68.4%	404	0	0	1.1	9.5	1.1	4/3
9/1	Circ North Ahead	U	B		1	24	-	625	2195	915	68.3%	-	-	-	3.7	21.3	9.3	9/1
9/2	Circ North Ahead Right	U	B		1	24	-	613	2173	905	67.7%	-	-	-	3.6	21.3	9.0	9/2

Basic Results Summary

Scenario 2: 'DS 2037 PM' (FG4: 'DS 2037 - With Development PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	Item
Network: Junction 5 Proposed Mitigation	-	-	-		-	-	-	-	-	-	88.3%	4054	0	0	27.3	-	-	Network: Junction 5 Proposed Mitigation
J5 A6 & M6	-	-	-		-	-	-	-	-	-	88.3%	4054	0	0	27.3	-	-	J5 A6 & M6
1/2+1/1	M6 North Slip Approach Left Ahead	U	A		1	21	-	667	2110:2064	707+693	47.6 : 47.6%	-	-	-	3.1	16.8	4.7	1/2+1/1
1/3	M6 North Slip Approach Ahead	U	A		1	21	-	549	1980	726	75.6%	-	-	-	4.1	26.7	9.5	1/3
2/2+2/1	A6 East Approach Ahead Ahead2	O+U	-		-	-	-	1082	2130:2065	819+459	84.7 : 84.7%	693	0	0	3.1	10.2	9.2	2/2+2/1
2/3	A6 East Approach Ahead	O	-		-	-	-	402	2130	819	49.1%	402	0	0	0.5	4.4	1.8	2/3
3/2+3/1	M6 & M65 Slip South Approach Ahead Left	O+U	-		-	-	-	343	2105:2015	457+290	45.9 : 45.9%	210	0	0	0.5	4.9	1.6	3/2+3/1
3/3	M6 & M65 Slip South Approach Ahead	O	-		-	-	-	238	2105	457	52.1%	238	0	0	0.6	9.3	2.1	3/3
4/2+4/1	A6 West Approach Left Ahead	O	-		-	-	-	961	2015:1990	719+369	88.3 : 88.3%	1922	0	0	3.6	13.4	4.6	4/2+4/1
4/3	A6 West Approach Ahead	O	-		-	-	-	589	2155	719	81.9%	589	0	0	2.2	13.4	2.2	4/3
9/1	Circ North Ahead	U	B		1	22	-	624	2195	841	74.2%	-	-	-	4.1	23.8	10.0	9/1
9/2	Circ North Ahead Right	U	B		1	22	-	609	2158	827	73.6%	-	-	-	4.1	24.0	10.0	9/2

Basic Results Summary

10/1	Circ East Ahead	U	-	-	-	-	583	2180	2180	26.7%	-	-	-	0.2	1.1	0.2	10/1
10/2	Circ East Right	U	-	-	-	-	549	2101	2101	26.1%	-	-	-	0.2	1.2	0.2	10/2
11/1	Circ South Ahead	U	-	-	-	-	1242	2205	2205	56.3%	-	-	-	0.7	2.0	9.4	11/1
11/2	Circ South Right	U	-	-	-	-	402	2119	2119	19.0%	-	-	-	0.1	1.0	0.1	11/2
12/1	Circ West Ahead	U	-	-	-	-	447	2205	2205	20.3%	-	-	-	0.1	1.0	0.1	12/1
12/2	Circ West Ahead Right	U	-	-	-	-	403	2162	2162	18.6%	-	-	-	0.1	1.0	0.1	12/2
13/1	M6 & M65 SB Exit Through Ln Left	U	-	-	-	-	389	2065	2065	18.8%	-	-	-	0.1	1.1	0.1	13/1
14/1	A6 West Exit Through Ln Ahead	U	-	-	-	-	133	2115	2115	6.3%	-	-	-	0.0	0.9	0.0	14/1
Ped Link: P1	M6 North Approach	-	C		1	23	-	0	-	0	0.0%	-	-	-	-	-	Ped Link: P1
<p style="text-align: center;"> C1 Stream: 1 PRC for Signalled Lanes (%): 19.0 Total Delay for Signalled Lanes (pcuHr): 15.35 Cycle Time (s): 60 PRC Over All Lanes (%): 1.9 Total Delay Over All Lanes(pcuHr): 27.33 </p>																	

Basic Results Summary
Basic Results Summary

User and Project Details

Project:	370964 - Cuerden Strategic Site
Title:	M65 Access Roundabout Modification
Location:	Cuerden
Additional detail:	
File name:	J10_M65_Opt2 - v7.lsg3x
Author:	
Company:	WSP
Address:	

Scenario 1: 'DS1 2037 AM' (FG3: 'DS1 2037 + Proposed development - AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	1609	256	0	690	0	2555
	B	845	0	292	0	0	999	2136
	C	36	148	0	0	128	68	380
	D	417	0	272	0	0	494	1183
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	1298	1757	820	0	818	1561	6254

Basic Results Summary

Network Layout Diagram

Basic Results Summary

Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	Item
Network: M65 Access Roundabout Modification	-	-	-		-	-	-	-	-	-	88.2%	0	0	0	49.2	-	-	Network: M65 Access Roundabout Modification
M65	-	-	-		-	-	-	-	-	-	88.2%	0	0	0	49.2	-	-	M65
1/1	M65 North Approach Left	U	G		1	54	-	1168	1900	1451	80.5%	-	-	-	3.7	11.5	16.3	1/1
1/2+1/3	M65 North Approach Left Left2 Ahead	U	G		1	54	-	1387	1900:1900	1352+306	83.7 : 83.7%	-	-	-	4.2	11.0	15.7	1/2+1/3
2/2+2/1	M65 East Approach Ahead	U	B		1	33	-	1467	2100:1900	740+959	86.3 : 86.3%	-	-	-	8.4	20.6	16.9	2/2+2/1
2/3	M65 East Approach Ahead	U	B		1	33	-	669	2100	1108	60.4%	-	-	-	2.9	15.9	9.9	2/3
3/2+3/1	M6 East Approach Ahead	U	C		1	13	-	845	2100:1900	525+475	81.5 : 87.8%	-	-	-	8.7	36.9	10.6	3/2+3/1
3/3	M6 East Approach Ahead	U	C		1	13	-	338	2100	525	64.4%	-	-	-	3.2	33.7	6.9	3/3
4/1	Strategic Site Access Approach Left Left2	U	E		1	7	-	89	1900	211	42.2%	-	-	-	1.1	44.5	2.0	4/1
4/2+4/3	Strategic Site Access Approach Ahead Left	U	E		1	7	-	291	1900:1900	211+211	72.5 : 65.4%	-	-	-	3.6	44.3	4.0	4/2+4/3
9/1	East Circ Right	U	A		1	10	-	256	1900	290	88.2%	-	-	-	5.5	77.8	7.5	9/1
10/1	South Circ Ahead	U	-		-	-	-	1253	1900	1900	65.9%	-	-	-	1.0	2.8	1.5	10/1

Basic Results Summary

10/2	South Circ Ahead	U	-	-	-	-	1315	1900	1900	69.2%	-	-	-	1.2	3.2	1.4	10/2	
10/3	South Circ Ahead	U	-	-	-	-	1007	1900	1900	53.0%	-	-	-	0.6	2.1	0.9	10/3	
11/1	West Circ Ahead	U	D		1	54	-	681	1900	1451	46.9%	-	-	-	0.1	0.5	2.3	11/1
11/2	West Circ Ahead Ahead2	U	D		1	54	-	1067	1900	1451	73.5%	-	-	-	0.5	1.7	9.7	11/2
11/3	West Circ Ahead Right	U	D		1	54	-	1007	1900	1451	69.4%	-	-	-	1.6	5.7	11.4	11/3
12/1	North Circ Ahead	U	F		1	7	-	138	1900	211	65.4%	-	-	-	0.8	20.9	2.8	12/1
12/2	North Circ Ahead Ahead2 Right	U	F		1	7	-	138	1900	211	65.4%	-	-	-	0.8	21.2	2.8	12/2
14/3	Right	U	-		-	-	-	1067	1900	1900	56.2%	-	-	-	0.6	2.2	0.6	14/3
14/4	Right	U	-		-	-	-	1007	1800	1800	55.9%	-	-	-	0.7	2.4	0.9	14/4
		C1	Stream: 1 PRC for Signalled Lanes (%):		2.1		Total Delay for Signalled Lanes (pcuHr):		28.71		Cycle Time (s):		72					
		C1	Stream: 2 PRC for Signalled Lanes (%):		22.4		Total Delay for Signalled Lanes (pcuHr):		6.86		Cycle Time (s):		72					
		C1	Stream: 3 PRC for Signalled Lanes (%):		7.6		Total Delay for Signalled Lanes (pcuHr):		9.57		Cycle Time (s):		72					
			PRC Over All Lanes (%):		2.1		Total Delay Over All Lanes(pcuHr):		49.16									

Basic Results Summary

Scenario 2: 'DS1 2037 PM' (FG4: 'DS1 2037 + Proposed development - PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	1550	174	0	712	0	2436
	B	331	0	201	0	0	498	1030
	C	93	269	0	0	242	174	778
	D	628	0	164	0	0	945	1737
	E	0	0	0	0	0	0	0
	F	0	0	0	0	0	0	0
	Tot.	1052	1819	539	0	954	1617	5981

Basic Results Summary

Network Layout Diagram

Basic Results Summary

Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	Item
Network: M65 Access Roundabout Modification	-	-	-		-	-	-	-	-	-	96.5%	0	0	0	57.8	-	-	Network: M65 Access Roundabout Modification
M65	-	-	-		-	-	-	-	-	-	96.5%	0	0	0	57.8	-	-	M65
1/1	M65 North Approach Left	U	G		1	49	-	1140	1900	1319	86.4%	-	-	-	5.7	18.1	20.5	1/1
1/2+1/3	M65 North Approach Left Left2 Ahead	U	G		1	49	-	1296	1900:1900	1272+197	88.2 : 88.2%	-	-	-	6.3	17.6	20.1	1/2+1/3
2/2+2/1	M65 East Approach Ahead	U	B		1	13	-	746	2100:1900	496+449	74.8 : 83.6%	-	-	-	7.2	34.8	8.9	2/2+2/1
2/3	M65 East Approach Ahead	U	B		1	13	-	284	2100	496	57.3%	-	-	-	2.6	32.7	5.6	2/3
3/2+3/1	M6 East Approach Ahead	U	C		1	36	-	1272	2100:1900	933+936	68.1 : 68.1%	-	-	-	5.5	15.5	10.3	3/2+3/1
3/3	M6 East Approach Ahead	U	C		1	36	-	465	2100	1079	43.1%	-	-	-	1.8	13.9	6.1	3/3
4/1	Strategic Site Access Approach Left Left2	U	E		1	10	-	242	1900	290	83.4%	-	-	-	4.3	63.7	6.9	4/1
4/2+4/3	Strategic Site Access Approach Ahead Left	U	E		1	10	-	536	1900:1900	290+290	96.5 : 88.2%	-	-	-	9.4	63.2	10.4	4/2+4/3
9/1	East Circ Right	U	A		1	7	-	174	1900	211	82.4%	-	-	-	4.0	82.4	5.6	9/1
10/1	South Circ Ahead	U	-		-	-	-	1021	1900	1900	53.7%	-	-	-	0.6	2.0	0.6	10/1

Basic Results Summary

10/2	South Circ Ahead	U	-	-	-	-	1171	1900	1900	61.6%	-	-	-	0.8	2.6	1.1	10/2	
10/3	South Circ Ahead	U	-	-	-	-	749	1900	1900	39.4%	-	-	-	0.3	1.6	0.4	10/3	
11/1	West Circ Ahead	U	D		1	51	-	647	1900	1372	47.1%	-	-	-	0.4	2.3	2.0	11/1
11/2	West Circ Ahead Ahead2	U	D		1	51	-	1006	1900	1372	73.3%	-	-	-	0.6	2.0	2.7	11/2
11/3	West Circ Ahead Right	U	D		1	51	-	749	1900	1372	54.6%	-	-	-	1.0	4.7	2.5	11/3
12/1	North Circ Ahead	U	F		1	12	-	255	1900	343	74.3%	-	-	-	3.2	44.7	5.1	12/1
12/2	North Circ Ahead Ahead2 Right	U	F		1	12	-	256	1900	343	74.6%	-	-	-	3.2	45.1	5.1	12/2
14/3	Right	U	-		-	-	-	1006	1900	1900	52.9%	-	-	-	0.6	2.0	0.6	14/3
14/4	Right	U	-		-	-	-	749	1800	1800	41.6%	-	-	-	0.4	1.7	0.4	14/4
		C1	Stream: 1 PRC for Signalled Lanes (%):		7.7		Total Delay for Signalled Lanes (pcuHr):		21.04		Cycle Time (s):		72					
		C1	Stream: 2 PRC for Signalled Lanes (%):		-7.2		Total Delay for Signalled Lanes (pcuHr):		15.63		Cycle Time (s):		72					
		C1	Stream: 3 PRC for Signalled Lanes (%):		2.1		Total Delay for Signalled Lanes (pcuHr):		18.43		Cycle Time (s):		72					
			PRC Over All Lanes (%):		-7.2		Total Delay Over All Lanes(pcuHr):		57.75									