

Appendix I - J03 A335/ Wide Lane – Signal Mitigation Option 1 - Junction Modelling Results

Basic Results Summary

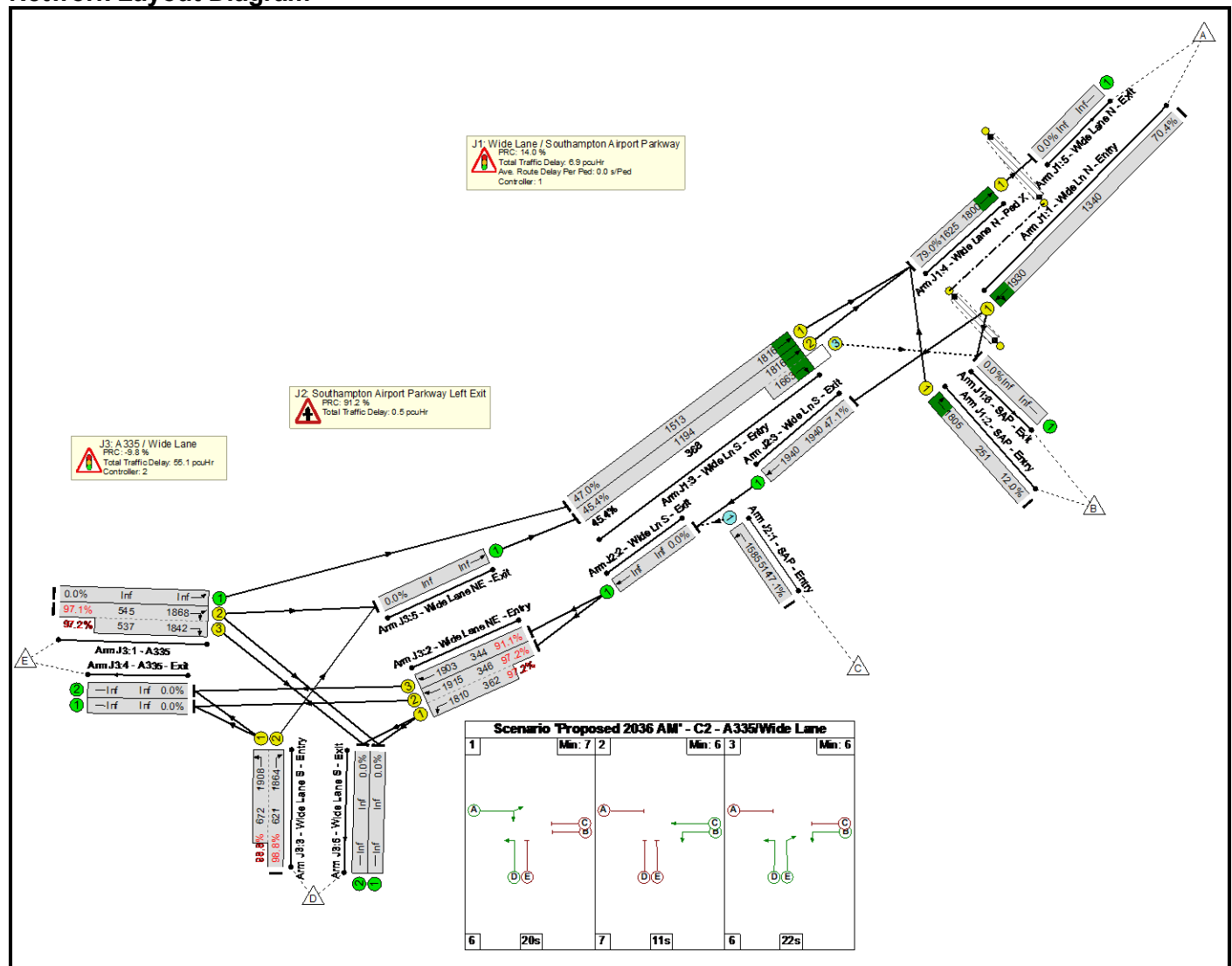
Basic Results Summary

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	Wide Lane Mitigation_SigFinal_v2.lsg3x
Author:	
Company:	
Address:	

Scenario 7: 'Proposed 2036 AM' (FG5: 'Proposed 2036 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)
Network	-	-	-		-	-	-	-	-	-	98.8%	215	34	5	62.5	-	-
J1: Wide Lane / Southampton Airport Parkway	-	-	-		-	-	-	-	-	-	79.0%	127	34	5	6.9	-	-
1/1	Wide Ln N - Entry Left Ahead	U	C1:B		1	39	-	943	1930	1340	70.4%	-	-	-	2.9	11.1	12.4
2/1	SAP - Entry Right	U	C1:C		1	12	-	30	1805	251	12.0%	-	-	-	0.3	35.3	0.6
3/1	Wide Ln S - Entry Ahead	U	C1:A		1	49	-	711	1816	1513	47.0%	-	-	-	0.8	3.9	4.2
3/2+3/3	Wide Ln S - Entry Ahead Right	U+O	C1:A	C1:D	1	49	4	709	1816:1663	1194+368	45.4 : 45.4%	127	34	5	0.6	3.3	6.4
4/1	Wide Lane N - Ped X Ahead	U	C1:E		1	54	-	1283	1800	1625	79.0%	-	-	-	2.3	6.4	16.9
Ped Link: P1	Unnamed Ped Link	-	C1:F		1	21	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	C1:G		1	6	-	0	-	0	0.0%	-	-	-	-	-	-
J2: Southampton Airport Parkway Left Exit	-	-	-		-	-	-	-	-	-	47.1%	88	0	0	0.5	-	-
1/1	SAP - Entry Left	O	-		-	-	-	88	1585	514	17.1%	88	0	0	0.1	4.2	0.1
3/1	Wide Ln S - Exit Ahead	U	-		-	-	-	913	1940	1940	47.1%	-	-	-	0.4	1.8	0.4
J3: A335 / Wide Lane	-	-	-		-	-	-	-	-	-	98.8%	0	0	0	55.1	-	-
1/2+1/3	A335 Ahead Right	U	C2:A		1	20	-	1051	1868:1842	545+537	97.1 : 97.2%	-	-	-	17.6	60.2	20.6
2/2+2/1	Wide Lane NE - Entry Ahead Left	U	C2:C C2:B		1	12:39	-	688	1915:1810	346+362	97.2 : 97.2%	-	-	-	11.8	61.5	15.6

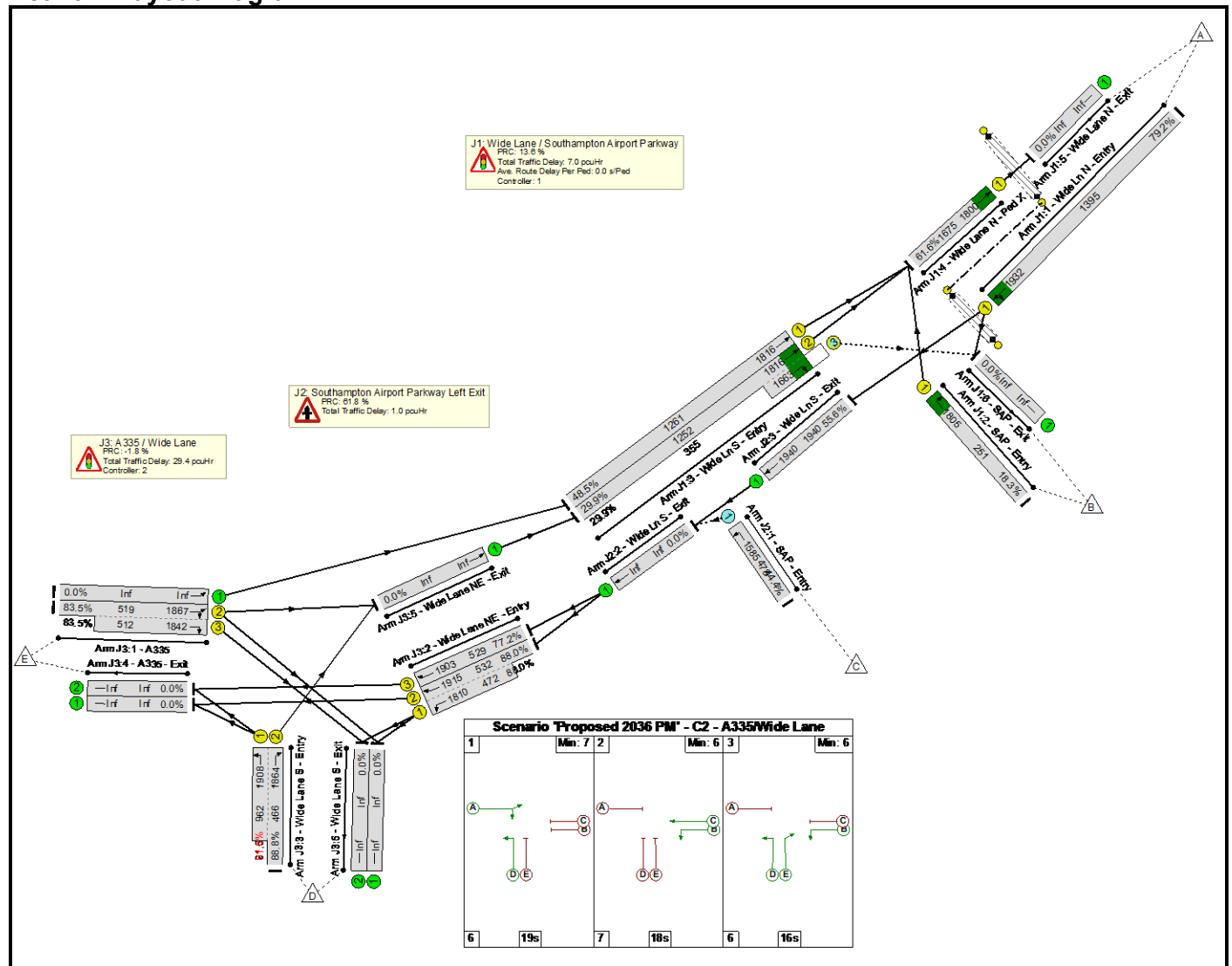
Basic Results Summary

2/3	Wide Lane NE - Entry Ahead	U	C2:C		1	12	-	313	1903	344	91.1%	-	-	-	6.2	71.6	10.1
3/2+3/1	Wide Lane S - Entry Left Right	U	C2:E C2:D		1	23:48	-	1278	1864:1908	621+672	98.8 : 98.8%	-	-	-	19.6	55.1	26.6
C1 - SIG197			PRC for Signalled Lanes (%):		14.0		Total Delay for Signalled Lanes (pcuHr):			6.88		Cycle Time (s):		72			
C2 - A335/Wide Lane			PRC for Signalled Lanes (%):		-9.8		Total Delay for Signalled Lanes (pcuHr):			55.11		Cycle Time (s):		72			
			PRC Over All Lanes (%):		-9.8		Total Delay Over All Lanes(pcuHr):			62.55							

Basic Results Summary

Scenario 8: 'Proposed 2036 PM' (FG6: 'Proposed 2036 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)
Network	-	-	-		-	-	-	-	-	-	91.6%	284	27	7	37.4	-	-
J1: Wide Lane / Southampton Airport Parkway	-	-	-		-	-	-	-	-	-	79.2%	72	27	7	7.0	-	-
1/1	Wide Ln N - Entry Left Ahead	U	C1:B		1	39	-	1105	1932	1395	79.2%	-	-	-	3.9	12.6	16.0
2/1	SAP - Entry Right	U	C1:C		1	12	-	46	1805	251	18.3%	-	-	-	0.5	36.2	0.9
3/1	Wide Ln S - Entry Ahead	U	C1:A		1	49	-	612	1816	1261	48.5%	-	-	-	1.3	7.8	6.1
3/2+3/3	Wide Ln S - Entry Ahead Right	U+O	C1:A	C1:D	1	49	4	480	1816:1663	1252+355	29.9 : 29.9%	72	27	7	0.5	3.5	0.5
4/1	Wide Lane N - Ped X Ahead	U	C1:E		1	54	-	1032	1800	1675	61.6%	-	-	-	0.9	3.1	7.8
Ped Link: P1	Unnamed Ped Link	-	C1:F		1	21	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	C1:G		1	6	-	0	-	0	0.0%	-	-	-	-	-	-
J2: Southampton Airport Parkway Left Exit	-	-	-		-	-	-	-	-	-	55.6%	212	0	0	1.0	-	-
1/1	SAP - Entry Left	O	-		-	-	-	212	1585	478	44.4%	212	0	0	0.4	6.8	0.4
3/1	Wide Ln S - Exit Ahead	U	-		-	-	-	1079	1940	1940	55.6%	-	-	-	0.6	2.1	0.6
J3: A335 / Wide Lane	-	-	-		-	-	-	-	-	-	91.6%	0	0	0	29.4	-	-
1/2+1/3	A335 Ahead Right	U	C2:A		1	19	-	860	1867:1842	519+512	83.5 : 83.5%	-	-	-	8.3	34.7	10.5
2/2+2/1	Wide Lane NE - Entry Ahead Left	U	C2:C C2:B		1	19:40	-	883	1915:1810	532+472	88.0 : 88.0%	-	-	-	6.9	28.1	12.3

Basic Results Summary

2/3	Wide Lane NE - Entry Ahead	U	C2:C		1	19	-	408	1903	529	77.2%	-	-	-	3.8	33.5	9.1
3/2+3/1	Wide Lane S - Entry Left Right	U	C2:E C2:D		1	17:41	-	1295	1864:1908	466+962	88.8 : 91.6%	-	-	-	10.4	28.9	19.2
C1 - SIG197			PRC for Signalled Lanes (%):		13.6		Total Delay for Signalled Lanes (pcuHr):			7.01		Cycle Time (s):		72			
C2 - A335/Wide Lane			PRC for Signalled Lanes (%):		-1.8		Total Delay for Signalled Lanes (pcuHr):			29.40		Cycle Time (s):		72			
			PRC Over All Lanes (%):		-1.8		Total Delay Over All Lanes(pcuHr):			37.43							

Appendix J - J03 A335/ Wide Lane – Signal Mitigation Option 1 – HCC Response

**ITS Group
Universal Services Directorate
Hampshire County Council**

Navigator Quarter: Wide Lane Junctions, Eastleigh

Concept Design Check

ITS comments

Latest Update: 19/11/2025

Prepared by Graham Lee,

Approved by Jonathan Mundy

The following comments are provided following a concept design check; a detailed design check will be undertaken at the appropriate time.

The following documents/revisions have been considered:

Drawing/ File Reference	Revision	Description
Spitfire Roundabout		
24733101-STR-HGN-100-SK-D-011	02	Spitfire Roundabout with crossing
24733101-STR-HGN-100-SK-D-013	02	Spitfire roundabout improvements without crossing
J04_SpitfireRbt_lanesim_	V1	Modelling
J04_SpitfireRbt_lanesim_Lane allocation	V1	
J04_SpitfireRbt_lanesim_Mit_11_v1_Junctions 9	V1	
J04_SpitfireRbt_lanesim_Mit_13	V1	
Various non-lane sim models		
A335 / Wide Lane Junction		
24733101-STR-HGN-100-SK-D-01201	R0	Proposed Signalisation
24733101-STR-HGN-100-SK-D-01202 - REV P0	R0	Vehicular Track Analysis
24733101-STR-HGN-100-SK-D-01203 - REV P0	R0	
24733101-STR-HGN-100-SK-D-01204 - REV P0	R0	
Various Junction 9 Models		
Wide Lane Mitigation_SigFinal_v2		LinSig modelling

Spitfire Roundabout

- 1) A PmV^2 (PV^2 in this case) has not been provided as requested. For ITS to support a crossing, we required a PmV^2 in line with TG4-2. Given the timescales of this project and the anticipated difficulty in predicting pedestrian and cycle flows, we are prepared to consider a modified approach...

Using the simplified version of the equation (PV^2) please use the traffic demand during the peak hours (AM and PM) and calculate the volume of pedestrians/ cyclists required to satisfy a value of 0.5×10^8 and again for 1.0×10^8 . We will consider if these values are in the right 'ballpark'. Any commentary you can provide on likely pedestrian desire lines, along with an idea of how many crossing users might be generated at the site, would be helpful.

Should we be satisfied that a crossing is appropriate, a complete pedestrian/cyclist survey, as detailed in TG4-2 and PmV^2 assessment, will still be required at the preliminary stage.

- 2) The roundabout has been modelled in Junctions 9 using lane simulation, which appears to be giving more reasonable results than the split model(s) previously provided. The pedestrian crossing has been included in one of the runs; however, no pedestrian flow has been entered, so the crossing does not run at all during the model period, which will need to be addressed before comments can be made on the impact. The change in results between scenarios is due to the revised geometry rather than the impact of the crossing operation.
- 3) Within the Junctions 9 model, the pedestrian clearance period can be 8, amber time preceding red 3.
- 4) Generally happy with the Toucan crossing layout shown in drawing 24733101-STR-HGN-100-SK-D-01102 at this stage. There will be further considerations and tweaks that can be addressed at the preliminary design stage.

Wide Lane / A335 Junction

The proposed design (drawing 24733101-STR-HGN-100-SK-D-01201 rev P0) contains a series of fundamental safety and operational concerns. The 'Y' junction design concept would not be acceptable. Below are the most significant issues identified at the concept design stage.

- 5) Concern exists that the two lanes turning right from Wide Lane and the two lanes turning right from the A335 will be unsafe and result in side-swipe collisions. The right turn from the A335 is of particular concern, as traffic in the nearside lane must turn past the exit and then turn back to avoid a conflict. This is an unnatural turning movement and is likely to see side impact collisions. While the issue could be addressed to some extent through the use of the road markings, such markings would be tracked over by turning vehicles and quickly deteriorate. This would leave the County Council with a costly maintenance burden and an ongoing safety issue.
- 6) The design uses 3.65m lanes, which are excessive given the circumstances and lane widths between 3.2m and 3.5m would be acceptable.
- 7) The design includes a flare on the A335 approach and merge on the A335 exit. It would be beneficial for both safety and capacity to dual in both directions all the way to the motorway junction. This may require a structure to extend the highway over the playing fields track.
- 8) The A335 eastbound diverge and westbound merge happen at the same location. Given the geometry and lack of physical separation, there is concern that this could lead to head-on collisions.
- 9) The segregated left turn lane from A335 to Wide Lane north is shown as 4m wide. This will need to be wide enough to accommodate a broken-down vehicle and still allow a 16.5m artic to pass. This will result in a much wider lane width. An alternative would be to remove much of the separation island and replace it with a hatched area that vehicles may enter should one break down. However, this would introduce the risk of drivers from the segregated lane overrunning the hatched area to cut across the adjacent lane in an attempt to turn right into Parkway Station.
- 10) Drivers from the A335 headed to Parkway Station may use the segregated lane to bypass the signals and then find themselves unable to access Parkway Station at the junction. Signing would be insufficient to avoid this. This could

lead to drivers attempting to turn right from the segregated lane at the Parkway junction.

- 11) The footpath shown at the pinch point on the Wide Lane northern approach is only 1.2m wide. The footway width should be 2m minimum throughout.
- 12) The exit lane on Wide Lane north is 3.65m wide between kerbs. Although the section is relatively short it may need to be widened to accommodate a broken down vehicle to pass.
- 13) The merge on the Wide Lane south exit is substandard at circa 40m, which will require a departure from standard which is unlikely to be supported. It should be noted that with a short merge distance very few drivers would be likely to use A335 nearside lane to turn right. This is further compounded by the unconventional right turn movement from the nearside lane. As shown on the layout the A335 to Wide Lane south movement is effectively a single lane for modelling purposes.
- 14) The Wide Lane south exit merge occurs at the entrance to the Parkway multi-storey car park. A merge where vehicles are potentially changing lane to exit is a safety concern and should be removed from the design.
- 15) The end of the segregated left turn lane stops at the Parkway station entrance junction. The model shows the two ahead lanes running in the same stage which would require traffic to merge within the junction and over the exit pedestrian crossing. This should either be:
 - split into different phases and run separately. The impact of those using the exit pedestrian crossing would need to be carefully considered;
 - extended through the junction with the merge starting after the intervisibility envelope and be at least 100m long. The impact of those using the exit pedestrian crossing would need to be carefully considered; or
 - The segregation could continue through the junction (so there would be no stop line for the segregated lane except for the pedestrian crossing) with a full-size merge starting after the junction.

Additionally, the merge is shown through the pedestrian crossing, which is unacceptable on safety grounds.

- 16) A revised solution may require the use of the highway land to the north of the junction and possibly land to the west (between the highway boundary and the existing kerb). This may require a retaining structure to deal with the levels. Suggest obtaining more detailed topographic information in these areas.
- 17) Within the LinSig model, stages 2 and 3 should be swapped so that phases are not shut down whilst an adjacent phase remains on. This is unsafe and would result in driver confusion.
- 18) The LinSig model includes a 63m offside flare on the A335 approach. However, the plan measures 40m back to the 2.5m dimension. A 3.0m wide lane should be considered as the start of a full lane, the flare length would be significantly less than modelled.
- 19) The LinSig model also includes a 63m flare length for the Wide Lane north nearside lane. The plan measures 40m back to the 2.5m dimension. A 3.0m

wide lane should be considered as the start of a full lane, the flare length would be significantly less than modelled.

- 20) The LinSig model includes a 76m flare length on the Wide Lane approach nearside flare. The plan measures 38m back to the 2.5m dimension. A 3.0m wide lane should be considered as the start of a full lane, the flare length would be significantly less than modelled.
- 21) A double signal head is shown at the Parkway Station junction between the Wide Lane segregated lane and the ahead lane. This is shown on a 1.3m island, which would need to be at least 2.2m wide to accommodate this signal arrangement.
- 22) The separation island at the junction is shown as 1.5m wide. This will need to be at least 1.8m, preferably 2m wide minimum to accommodate the signal heads.
- 23) Wide Lane north should include a splitter island (minimum 2m wide) between the left turn and two right turn lanes to accommodate signal heads for these split phases.
- 24) At the left turn exit from the Parkway Station on to Wide Lane north the existing centre island should be retained to physically prevent the right turn movement.
- 25) Given the extent of the safety and operational issues outlined above it is recommended that alternatives to the 'Y' shape junction should be considered (even if it is to rule them out). The following layouts are suggested for investigation:
 - A 'T' junction with the A335 and Wide Lane south forming the 'mainline'
 - A 'T' junction with the A335 and Wide Lane north forming the 'mainline'
 - A single stream signal roundabout with closely associated stop lines, taking advantage of platoon compression effects. Such solutions would require an island between any movements which run in separate phases on the same approach. An example of this arrangement is the Wharfedale Road/ A3290 junction in Wokingham (close to Reading).

Ali Memory

From: Gammer, Nick <Nick.Gammer@hants.gov.uk>
Sent: 25 November 2025 13:37
To: Martin Hubbard; Lee, Graham
Cc: McCart, Gemma; Harrison, Liz; Matthew Thomas; Jamie Loxley; Adam Connor; john; joeoxford; Steve Thurston; Jon Williams; Ali Memory; Carl Morrish; Dan Watts; David Loveman
Subject: RE: Navigator Quarter Spitfire Rbt and Wide Lane Rbt Mitigation
Attachments: 20251119 Wide Lane Junctions ITS Review.docx

Hi Martin

I've had the attached from Graham. In summary, we require more information before we can support the crossing amendments at spitfire roundabout. The Wide Lane/ A335 junction concept design provided is unacceptable in a number of areas; we have significant concerns regarding the modelling, safety and operation of the proposal, to the point where we feel alternative solutions should be considered.

I've also had the following comments on the Wide Lane ped/ cycle side bridge from our Structures team (my addition in italics).

Comments are based on the high-level drawings submitted to date:

- Given it's a shared use route, it's not clear widths are sufficient. These should be checked against the footbridge Design Criteria document CD 353 and also in LTN 1/20. Some labels say 3m others say 3.5m on the drawing. *(I believe you will be providing an updated drawing clarifying the width as 4m throughout)*
- The bridge adjacent to it is Network Rail's, who will likely want a reasonable gap between their bridge and this one. This is partly to stop people jumping between the two, unlikely but still a consideration, and to enable space for scaffolding to be erected for inspection/repair to both structures.
- Supports for approaches would need to be concrete or steel, no timber.
- Main footbridge would be expected to be steel as it is over the railway and have a long lasting paint system.
- Retaining walls would be expected to be concrete and/or brick.
- Assuming there is land outside the Highway, a 2m easement along the side to enable inspection and future maintenance of all structural elements will be required.

The above are initial thoughts; more comments would be inevitable with detailed drawings.

Happy to discuss Wide Lane/ A335 again (or any of the above) if you feel it'd be beneficial.

Best wishes

Nick

Nick Gammer
Team Leader - Transport Policy
Hampshire 2050
Hampshire County Council, The Castle, Winchester, SO23 8UL
Email: nick.gammer@hants.gov.uk
Web: www.hants.gov.uk

Hampshire County Council operates a pre-application highway advice service for developers.

Hampshire County Council welcomes and encourages discussions before a developer submits a planning application. Please follow this link for further information

<https://www.hants.gov.uk/transport/developers/highwaysdevelopmentplanning>

From: Martin Hubbard <Martin.Hubbard@steergroup.com>

Sent: 25 November 2025 12:07

To: Lee, Graham <Graham.Lee@hants.gov.uk>; Gammer, Nick <Nick.Gammer@hants.gov.uk>

Cc: McCart, Gemma <Gemma.McCart2@hants.gov.uk>; Harrison, Liz <liz.harrison@eastleigh.gov.uk>; Matthew Thomas <m.thomas@msa-architects.co.uk>; Jamie Loxley <j.loxley@msa-architects.co.uk>; Adam Connor <AdamConnor@blocgroup.org>; John <john@atkinsproperty.co.uk>; joeoxford <joeoxford@blocgroup.org>; Steve Thurston <steve.thurston@agsairports.co.uk>; Jon Williams <Jon.Williams@steergroup.com>; Ali Memory <Ali.Memory@steergroup.com>; Carl Morrish <Carl.Morrish@steergroup.com>; Dan Watts <Dan.Watts@steergroup.com>; David Loveman <David.Loveman@steergroup.com>

Subject: RE: Navigator Quarter Spitfire Rbt and Wide Lane Rbt Mitigation

EXTERNAL EMAIL - This email was sent by a person outside the organisation. Do not open any links or attachments if you were not expecting them. If in doubt, contact the IT Service Desk.

Hi Graham,

Just wanted to follow up to check that you are still on course to provide your comments by cop today.

If you could confirm it would be appreciated.

Kind regards,

Martin

Martin Hubbard

Associate



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From: Lee, Graham <Graham.Lee@hants.gov.uk>

Sent: 21 November 2025 14:02

To: Martin Hubbard <Martin.Hubbard@steergroup.com>; Gammer, Nick <nick.gammer@hants.gov.uk>

Cc: McCart, Gemma <gemma.mccart2@hants.gov.uk>; Harrison, Liz <liz.harrison@eastleigh.gov.uk>; Matthew Thomas <m.thomas@msa-architects.co.uk>; Jamie Loxley <j.loxley@msa-architects.co.uk>; Adam Connor <AdamConnor@blocgroup.org>; John <john@atkinsproperty.co.uk>; joeoxford <joeoxford@blocgroup.org>; Steve Thurston <steve.thurston@agsairports.co.uk>; Jon Williams <Jon.Williams@steergroup.com>; Ali Memory

<Ali.Memory@steergroup.com>; Carl Morrish <Carl.Morrish@steergroup.com>; Dan Watts <Dan.Watts@steergroup.com>; David Loveman <David.Loveman@steergroup.com>

Subject: RE: Navigator Quarter Spitfire Rbt and Wide Lane Rbt Mitigation

Hi Martin,

I'm waiting for approval, I should have the comments with you by COP Tuesday 25th November.

Kind Regards

Graham

From: Martin Hubbard <Martin.Hubbard@steergroup.com>

Sent: 21 November 2025 09:12

To: Gammer, Nick <Nick.Gammer@hants.gov.uk>; Lee, Graham <Graham.Lee@hants.gov.uk>

Cc: McCart, Gemma <Gemma.McCart2@hants.gov.uk>; Harrison, Liz <liz.harrison@eastleigh.gov.uk>; Matthew Thomas <m.thomas@msa-architects.co.uk>; Jamie Loxley <j.loxley@msa-architects.co.uk>; Adam Connor <AdamConnor@blocgroup.org>; John <john@atkinsproperty.co.uk>; joeoxford <joeoxford@blocgroup.org>; Steve Thurston <steve.thurston@agsairports.co.uk>; Jon Williams <Jon.Williams@steergroup.com>; Ali Memory <Ali.Memory@steergroup.com>; Carl Morrish <Carl.Morrish@steergroup.com>; Dan Watts <Dan.Watts@steergroup.com>; David Loveman <David.Loveman@steergroup.com>

Subject: RE: Navigator Quarter Spitfire Rbt and Wide Lane Rbt Mitigation

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Hi Graham,

Further to my email dated 14 November and Nick's response on 17 November would it be possible to advise when you will be in a position to provide a response from your perspective please on the submitted modelling information layouts? We have noted Nick's comments below but we would like to receive your comments before we consider further.

Kind regards,

Martin

Martin Hubbard

Associate

—



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From: Gammer, Nick <Nick.Gammer@hants.gov.uk>

Sent: 17 November 2025 14:41

To: Martin Hubbard <Martin.Hubbard@steergroup.com>; graham.lee <graham.lee@hants.gov.uk>

Cc: McCart, Gemma <gemma.mccart2@hants.gov.uk>; Harrison, Liz <liz.harrison@eastleigh.gov.uk>; Matthew Thomas <m.thomas@msa-architects.co.uk>; Jamie Loxley <j.loxley@msa-architects.co.uk>; Adam Connor <AdamConnor@blocgroup.org>; John <john@atkinsproperty.co.uk>; joeoxford <joeoxford@blocgroup.org>; Steve

Thurston <steve.thurston@agsairports.co.uk>; Jon Williams <Jon.Williams@steergroup.com>; Ali Memory <Ali.Memory@steergroup.com>; Carl Morrish <Carl.Morrish@steergroup.com>; Dan Watts <Dan.Watts@steergroup.com>; David Loveman <David.Loveman@steergroup.com>

Subject: RE: Navigator Quarter Spitfire Rbt and Wide Lane Rbt Mitigation

Hi Martin

I'll leave Graham to comment on the below, but just to say we would need to resolve the 1.2m shared use footway/ cycleway width before approving any mitigation scheme in principle as this would not be acceptable.

Best wishes

Nick

Nick Gammer

Team Leader - Transport Policy

Hampshire 2050

Hampshire County Council, The Castle, Winchester, SO23 8UL

Email: nick.gammer@hants.gov.uk

Web: www.hants.gov.uk



Hampshire County Council operates a pre-application highway advice service for developers.

Hampshire County Council welcomes and encourages discussions before a developer submits a planning application. Please follow this link for further information

<https://www.hants.gov.uk/transport/developers/highwaysdevelopmentplanning>

From: Martin Hubbard <Martin.Hubbard@steergroup.com>

Sent: 14 November 2025 17:00

To: Gammer, Nick <Nick.Gammer@hants.gov.uk>; Lee, Graham <Graham.Lee@hants.gov.uk>

Cc: McCart, Gemma <Gemma.McCart2@hants.gov.uk>; Harrison, Liz <liz.harrison@eastleigh.gov.uk>; Matthew Thomas <m.thomas@msa-architects.co.uk>; Jamie Loxley <j.loxley@msa-architects.co.uk>; Adam Connor <AdamConnor@blocgroup.org>; john <john@atkinsproperty.co.uk>; joeoxford <joeoxford@blocgroup.org>; Steve Thurston <steve.thurston@agsairports.co.uk>; Jon Williams <Jon.Williams@steergroup.com>; Ali Memory <Ali.Memory@steergroup.com>; Carl Morrish <Carl.Morrish@steergroup.com>; Dan Watts <Dan.Watts@steergroup.com>; David Loveman <David.Loveman@steergroup.com>

Subject: Navigator Quarter Spitfire Rbt and Wide Lane Rbt Mitigation

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Nick, Graham,

Thanks for your time on Monday to discuss potential junction mitigation options for the Wide Lane and Spitfire Roundabouts.

Please see the link below to download the CAD layout designs and model files as requested. Please note that the Wide Lane junction design at this stage includes a proposed 1.2m shared footway link (same width as existing) between the northeastern and southern arms, and does not consider extending the physical separation on the segregated left turn lane between the northwestern and northeastern arm at this stage. We

would like to agree the general principles first from the modelling perspective, as we do not think the requested changes would significantly impact the modelling results.

[External Junction Mitigation](#)

I have attached the following:

- Powerpoint presentation summarising the mitigation options and modelling results presented in the meeting. Please note the results in slide 3 have changed since the meeting – now below DoS of 100% on all arms following internal review.
- Potential junction mitigation layout design drawings:
 - Potential Wide Lane signalised junction – see Drawing 1201.
 - Two mitigation design options for the Spitfire Roundabout:
 - Option 1 - Extending the flare on the Wide Lane north arm to 18 metres (to increase capacity) without a signalised crossing on the northern Wide Lane arm. This involves reprofiling the crossing island (see Drawing 01301)
 - Option 2 - Extending the flare on the Wide Lane north arm to 18 metres with a signalised toucan crossing included on the northern arm (see Drawing 01102)
- Meeting minutes.

Wide Lane Junction Mitigation

This junction is operating at theoretical capacity (Ratio of Flow to capacity (RFC) of 1) in the 2025 AM baseline scenario and exceeds theoretical capacity in the 2028 and 2036 baselines (without Navigator Quarter development) in its current roundabout configuration (see slide 1 of powerpoint presentation). In the 2036 Baseline the queue on the northwestern arm is c 373m which extends back almost as far to the M27 J5 central junction circulation lanes. The addition of Navigator trips in the 2028 and 2036 Baseline + Proposed Development scenarios exacerbate this and means queues extend into the M27 J5 central circulation. However, it is important to note that the junction is already operating above capacity in the baseline any additional traffic results in queues rising exponentially as the junction is exceeding theoretical capacity.

The mitigation option explored involves converting this to a signalised junction (see drawing 0201) – including the following changes:

- Linking to Southampton Airport Parkway signals junction (SAP)
- Signalised stoplines at all approaches.
- Left turn lane on A335 northwestern arm feeding into additional lane on the approach to the SAP junction (northeastern arm) (physical separation to stop traffic changing lanes to access SAP).
- Additional left turn lane flare on northeastern arm approach – traffic destined for Wide Lane south.
- Two lane exits on Wide Lane southern arm and A335 northwestern arm.
- Share use route on southern side of northeastern eastern arm leading to southern arm – realigned and retained at existing width of 1.2m (due to land ownership constraints). This is substandard but it is substandard in the existing situation.

We have run modelling scenarios for the mitigation which significantly enhances the junction (see slide 3 of attached powerpoint):

- Reduces AM peak Degree of saturation (DoS) below theoretical capacity (<100%).
- Reduces PM peak DoS below practical capacity (<90%) – junction operates within capacity.

Please note this is a conceptual layout and would be subject to more detailed feasibility studies at a later stage (full topo survey and review of trees). However, all the trees fall within public highway land.

Spitfire Roundabout

Slide 5 in the attached powerpoint presentation presents the junction capacity modelling results with and without mitigation for the following scenarios:

- **Base** = 2025 Base,

- **FB 2026** = Future baseline without development,
- **DS 2036** = Future baseline + Dev (Navigator Quarter development), with no junction mitigation
- **DS 2036 lane reallocation** = includes better delineation/ reallocation (lane marking arrows) of lanes on N and W arms.
- **DS 2036 Mitigation** – includes an unsignalized roundabout with a northern arm 18m flare, no signalised crossing on northern arm, lane reallocation on western arm. See attached drawing 01301
- **DS 2036 Mitigation + Signals** = includes an unsignalized roundabout with a northern arm 18m flare, signalised crossing on northern Wide Lane arm, lane reallocation on western arm. See attached drawing 01102.

The current roundabout will be operating above theoretical capacity ($RFC > 1.0$) on the northern Wide Lane arm in the 2036 Future Baseline PM (FB 2036) even without the Navigator Quarter Development (see slide 5 of attached presentation). The addition of Navigator Quarter development trips (DS 2036) exacerbates this if there is no mitigation at the junction:

- Increases the RFC to 1.22 (further over theoretical capacity) on the northern arm with a queue of 90 PCU (517m) which would queue back across the Wide Lane junction to the north.
- Increases the RFC to 1.43 on the western arm (Wide Lane west – towards Southampton) in the PM peak with a queue of 213 PCU.

However an important point to note is that queues rise exponentially when a junction exceeds theoretical capacity, so it is unlikely they would be to the full extent of the above.

The **DS 2036 Mitigation** option (unsignalized roundabout) which extends the flare on the northern arm but retains the existing unsignalized pedestrian/ cycle crossing on a reprofiled island (Drawing 01301) and has better lane delineation on the western arm, enhances the operation of the junction as follows:

- Northern arm RFC reduces to 0.98 below theoretical capacity in PM peak with a queue of 20.8 PCU (119m). This queues back to the current bend on Wide Lane bridge so will not extend back to the Wide Lane junction.
- Western arm RFC still operates over theoretical capacity in AM peak (1.12 RFC) but the queue is c 51m (294m). However, it would not queue back to the Mount Park junction (480m).

The **2036 Mitigation + Signals** (unsignalized roundabout) scenario which extends the flare on the northern Wide Lane arm and includes a new signalised crossing (see Drawing 01102) increases the length of queue on the western arm to 72 PCU (414m) but also results in a very large queue on the northern arm (130 PCU – 750m – back from the signalised crossing stop line which would extend into and beyond the Wide Lane junction).

It was, however, noted during the meeting that if the Wide Lane junction further to the north was signalised, there would not be a flat profile of flows arriving on the northern arm of the Spitfire Roundabout.

We would welcome your views on these results and particularly the level of additional queuing that would result from a signalised crossing on the northern arm of the Spitfire Roundabout. I have not included SCC or National Highways in the email at this stage as we wanted to discuss the options with HCC in the first instance.

The above will ultimately be included in our detailed response to post application comments and formally submitted.

Kind regards,

Martin

Martin Hubbard

Associate

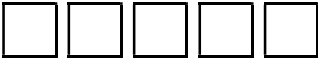
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***Appendix K - J03 A335/ Wide Lane – Signal Mitigation Option 2 –
Conceptual Layout and Steer Response to HCC Comments***

**ITS Group
Universal Services Directorate
Hampshire County Council**

Navigator Quarter: Wide Lane Junctions, Eastleigh

Concept Design Check

ITS comments

Latest Update: 19/11/2025

Prepared by Graham Lee,

Approved by Jonathan Mundy

The following comments are provided following a concept design check; a detailed design check will be undertaken at the appropriate time.

The following documents/revisions have been considered:

Drawing/ File Reference	Revision	Description
Spitfire Roundabout		
24733101-STR-HGN-100-SK-D-011	02	Spitfire Roundabout with crossing
24733101-STR-HGN-100-SK-D-013	02	Spitfire roundabout improvements without crossing
J04_SpitfireRbt_lanesim_	V1	Modelling
J04_SpitfireRbt_lanesim_Lane allocation	V1	
J04_SpitfireRbt_lanesim_Mit_11_v1_Junctions 9	V1	
J04_SpitfireRbt_lanesim_Mit_13	V1	
Various non-lane sim models		
A335 / Wide Lane Junction		
24733101-STR-HGN-100-SK-D-01201	R0	Proposed Signalisation
24733101-STR-HGN-100-SK-D-01202 - REV P0	R0	Vehicular Track Analysis
24733101-STR-HGN-100-SK-D-01203 - REV P0	R0	
24733101-STR-HGN-100-SK-D-01204 - REV P0	R0	
Various Junction 9 Models		
Wide Lane Mitigation_SigFinal_v2		LinSig modelling

Steer Responses added in red – 12 December 2025

Spitfire Roundabout

- 1) A PmV^2 (PV^2 in this case) has not been provided as requested. For ITS to support a crossing, we required a PmV^2 in line with TG4-2. Given the timescales of this project and the anticipated difficulty in predicting pedestrian and cycle flows, we are prepared to consider a modified approach...

Using the simplified version of the equation (PV^2) please use the traffic demand during the peak hours (AM and PM) and calculate the volume of pedestrians/ cyclists required to satisfy a value of 0.5×10^8 and again for 1.0×10^8 . We will consider if these values are in the right 'ballpark'. Any commentary you can provide on likely pedestrian desire lines, along with an idea of how many crossing users might be generated at the site, would be helpful.

Should we be satisfied that a crossing is appropriate, a complete pedestrian/cyclist survey, as detailed in TG4-2 and PmV^2 assessment, will still

be required at the preliminary stage. Issued by email on 5 December 2025 and submitted within response issued 12 December 2025.

- 2) The roundabout has been modelled in Junctions 9 using lane simulation, which appears to be giving more reasonable results than the split model(s) previously provided. The pedestrian crossing has been included in one of the runs; however, no pedestrian flow has been entered, so the crossing does not run at all during the model period, which will need to be addressed before comments can be made on the impact. The change in results between scenarios is due to the revised geometry rather than the impact of the crossing operation. Issued by email on 5 December 2025 and submitted within response issued 12 December 2025.
- 3) Within the Junctions 9 model, the pedestrian clearance period can be 8, amber time preceding red 3. Issued by email on 5 December 2025 and submitted within Response issued 12 December 2025.
- 4) Generally happy with the Toucan crossing layout shown in drawing 24733101-STR-HGN-100-SK-D-01102 at this stage. There will be further considerations and tweaks that can be addressed at the preliminary design stage.

Wide Lane / A335 Junction

The proposed design (drawing 24733101-STR-HGN-100-SK-D-01201 rev P0) contains a series of fundamental safety and operational concerns. The 'Y' junction design concept would not be acceptable. Below are the most significant issues identified at the concept design stage.

- 5) Concern exists that the two lanes turning right from Wide Lane and the two lanes turning right from the A335 will be unsafe and result in side-swipe collisions. The right turn from the A335 is of particular concern, as traffic in the nearside lane must turn past the exit and then turn back to avoid a conflict. This is an unnatural turning movement and is likely to see side impact collisions. While the issue could be addressed to some extent through the use of the road markings, such markings would be tracked over by turning vehicles and quickly deteriorate. This would leave the County Council with a costly maintenance burden and an ongoing safety issue.
 - The alignment has been adjusted slightly as a result of other changes made, however the overall junction alignment is dictated by the orientation of the existing approach roads. Swept paths are shown for 16.5m artic vehicles which show the proposed layout can be navigated.
- 6) The design uses 3.65m lanes, which are excessive given the circumstances and lane widths between 3.2m and 3.5m would be acceptable.
 - Noted – 3.65m lane widths were used as the standard lane width, however these have been reduced in places, in conjunction with addressing the other comments.
- 7) The design includes a flare on the A335 approach and merge on the A335 exit. It would be beneficial for both safety and capacity to dual in both directions all the way to the motorway junction. This may require a structure to extend the highway over the playing fields track.
 - Dualling added between Wide Lane junction and motorway roundabout junction.

- 8) The A335 eastbound diverge and westbound merge happen at the same location. Given the geometry and lack of physical separation, there is concern that this could lead to head-on collisions.
- See response to 7 above, dualling and continuous central reserve addresses this comment.
- 9) The segregated left turn lane from A335 to Wide Lane north is shown as 4m wide. This will need to be wide enough to accommodate a broken-down vehicle and still allow a 16.5m artic to pass. This will result in a much wider lane width. An alternative would be to remove much of the separation island and replace it with a hatched area that vehicles may enter should one break down. However, this would introduce the risk of drivers from the segregated lane overrunning the hatched area to cut across the adjacent lane in an attempt to turn right into Parkway Station.
- This has been left as-is, however refer to comment 12 which we have addressed by widening to provide space if a vehicle is broken down. This seems the pragmatic approach – if a vehicle were to break down in the segregated left turn lane, then that lane could be closed and all traffic could still proceed to the junction to turn left via the nearside lane instead.
- 10) Drivers from the A335 headed to Parkway Station may use the segregated lane to bypass the signals and then find themselves unable to access Parkway Station at the junction. Signing would be insufficient to avoid this. This could lead to drivers attempting to turn right from the segregated lane at the Parkway junction.
- Segregated left turn lane/island has been extended through the junction and the widening extended accordingly to the north of the junction, such that drivers in this lane cannot attempt to turn right at this junction.
- 11) The footpath shown at the pinch point on the Wide Lane northern approach is only 1.2m wide. The footway width should be 2m minimum throughout.
- The kerb line has been realigned by narrowing the westbound lanes to 3.35m each, providing space for a 2.0m wide footway with 0.5m buffer to the road, within the highway boundary.
- 12) The exit lane on Wide Lane north is 3.65m wide between kerbs. Although the section is relatively short it may need to be widened to accommodate a broken down vehicle to pass.
- This exit has been widened to provide width for a 16.5m artic to pass a broken down vehicle. Standard lane width shown with the “excess width” hatched out.
- 13) The merge on the Wide Lane south exit is substandard at circa 40m, which will require a departure from standard which is unlikely to be supported. It should be noted that with a short merge distance very few drivers would be likely to use A335 nearside lane to turn right. This is further compounded by the unconventional right turn movement from the nearside lane. As shown on the layout the A335 to Wide Lane south movement is effectively a single lane for modelling purposes.
- Carriageway widening is now shown on the west side of Wide Lane south to extend the 2-lane southbound exit from the junction as far south as possible, before merging into 1-lane at the railway bridge. This

results in a length of approximately 75m on exit from the junction before merging into 1-lane.

- 14) The Wide Lane south exit merge occurs at the entrance to the Parkway multi-storey car park. A merge where vehicles are potentially changing lane to exit is a safety concern and should be removed from the design.

- See response to comment 13 where the merge has been extended further south as far as is feasible, which takes the merge south of the car park access.

- 15) The end of the segregated left turn lane stops at the Parkway station entrance junction. The model shows the two ahead lanes running in the same stage which would require traffic to merge within the junction and over the exit pedestrian crossing. This should either be:

- split into different phases and run separately. The impact of those using the exit pedestrian crossing would need to be carefully considered;
- extended through the junction with the merge starting after the intervisibility envelope and be at least 100m long. The impact of those using the exit pedestrian crossing would need to be carefully considered; or
- The segregation could continue through the junction (so there would be no stop line for the segregated lane except for the pedestrian crossing) with a full-size merge starting after the junction.

Additionally, the merge is shown through the pedestrian crossing, which is unacceptable on safety grounds.

- See response to comment 10 where the segregated left lane/island has been extended further east through the junction.

- 16) A revised solution may require the use of the highway land to the north of the junction and possibly land to the west (between the highway boundary and the existing kerb). This may require a retaining structure to deal with the levels. Suggest obtaining more detailed topographic information in these areas.

- Noted, and this is incorporated/considered in conjunction with design changes being made in response to other comments.

- 17) Within the LinSig model, stages 2 and 3 should be swapped so that phases are not shut down whilst an adjacent phase remains on. This is unsafe and would result in driver confusion.

- Noted – this has been addressed in latest LinSig model. Updated signal staging diagram shown on the drawing.

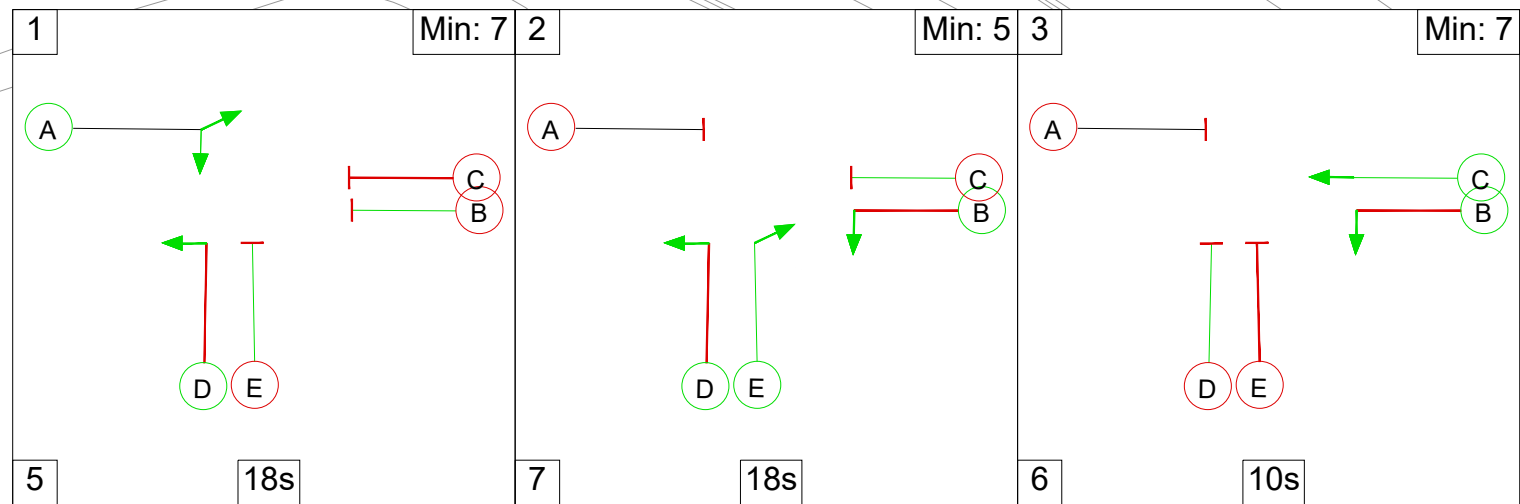
- 18) The LinSig model includes a 63m offside flare on the A335 approach. However, the plan measures 40m back to the 2.5m dimension. A 3.0m wide lane should be considered as the start of a full lane, the flare length would be significantly less than modelled.

- This has been addressed by comment 7, as this arm has been dualled.

- 19) The LinSig model also includes a 63m flare length for the Wide Lane north nearside lane. The plan measures 40m back to the 2.5m dimension. A 3.0m wide lane should be considered as the start of a full lane, the flare length would be significantly less than modelled.

- Noted – this has been addressed in latest LinSig model

- 20) The LinSig model includes a 76m flare length on the Wide Lane approach nearside flare. The plan measures 38m back to the 2.5m dimension. A 3.0m wide lane should be considered as the start of a full lane, the flare length would be significantly less than modelled.
- **Noted – this has been addressed in latest LinSig model**
- 21) A double signal head is shown at the Parkway Station junction between the Wide Lane segregated lane and the ahead lane. This is shown on a 1.3m island, which would need to be at least 2.2m wide to accommodate this signal arrangement.
- **Segregated island widened locally to 2.2m in the vicinity of the signal.**
- 22) The separation island at the junction is shown as 1.5m wide. This will need to be at least 1.8m, preferably 2m wide minimum to accommodate the signal heads.
- **All islands widened locally to 1.8m in the vicinity of the signals.**
- 23) Wide Lane north should include a splitter island (minimum 2m wide) between the left turn and two right turn lanes to accommodate signal heads for these split phases.
- **Splitter lane added.**
- 24) At the left turn exit from the Parkway Station on to Wide Lane north the existing centre island should be retained to physically prevent the right turn movement.
- **Island added back in to help block the right turn movement out of the station car park exit.**
- 25) Given the extent of the safety and operational issues outlined above it is recommended that alternatives to the ‘Y’ shape junction should be considered (even if it is to rule them out). The following layouts are suggested for investigation:
- A ‘T’ junction with the A335 and Wide Lane south forming the ‘mainline’
 - A ‘T’ junction with the A335 and Wide Lane north forming the ‘mainline’
 - A single stream signal roundabout with closely associated stop lines, taking advantage of platoon compression effects. Such solutions would require an island between any movements which run in separate phases on the same approach. An example of this arrangement is the Wharfedale Road/ A3290 junction in Wokingham (close to Reading).



NOTE:
THIS DESIGN IS A HIGH-LEVEL INDICATIVE
CONCEPT DESIGN TO UNDERSTAND THE
OVERALL ALIGNMENT AND LAND
IMPLICATIONS.
NOTE THAT THIS DESIGN IS BASED ON OS
MAPPING IN PLACES, AND HAS THEREFORE
NOT CONSIDERED EXISTING UTILITIES,
CURRENT INFRASTRUCTURE, LIGHTING,
CIVILS, DRAINAGE, TREES/ECOLOGY, OR
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HIGHWAY BOUNDARY
 - PROPOSED KERB
 - PROPOSED EDGING KERB / BACK OF
FOOTWAY
 - PROPOSED WHITE ROAD MARKING
 - PROPOSED TRAFFIC SIGNAL

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Drawing Title: WIDE LANE ROUNDABOUT PROPOSED JUNCTION MITIGATION OVERVIEW			
Status: FIT FOR INFORMATION			
Size: A1	Scale: 1:1000	Suitability S2	Rev. P0
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Multi Storey Car Park

Southampton Airport
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WIDE LANE ROUNDABOUT PROPOSED JUNCTION MITIGATION

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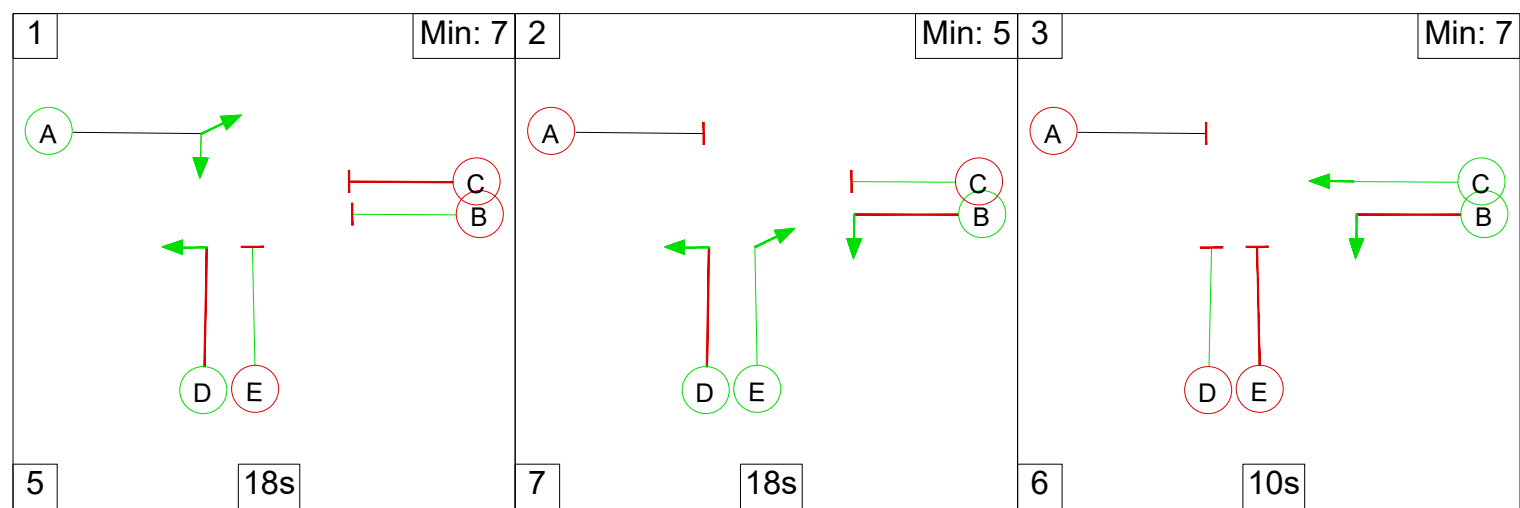
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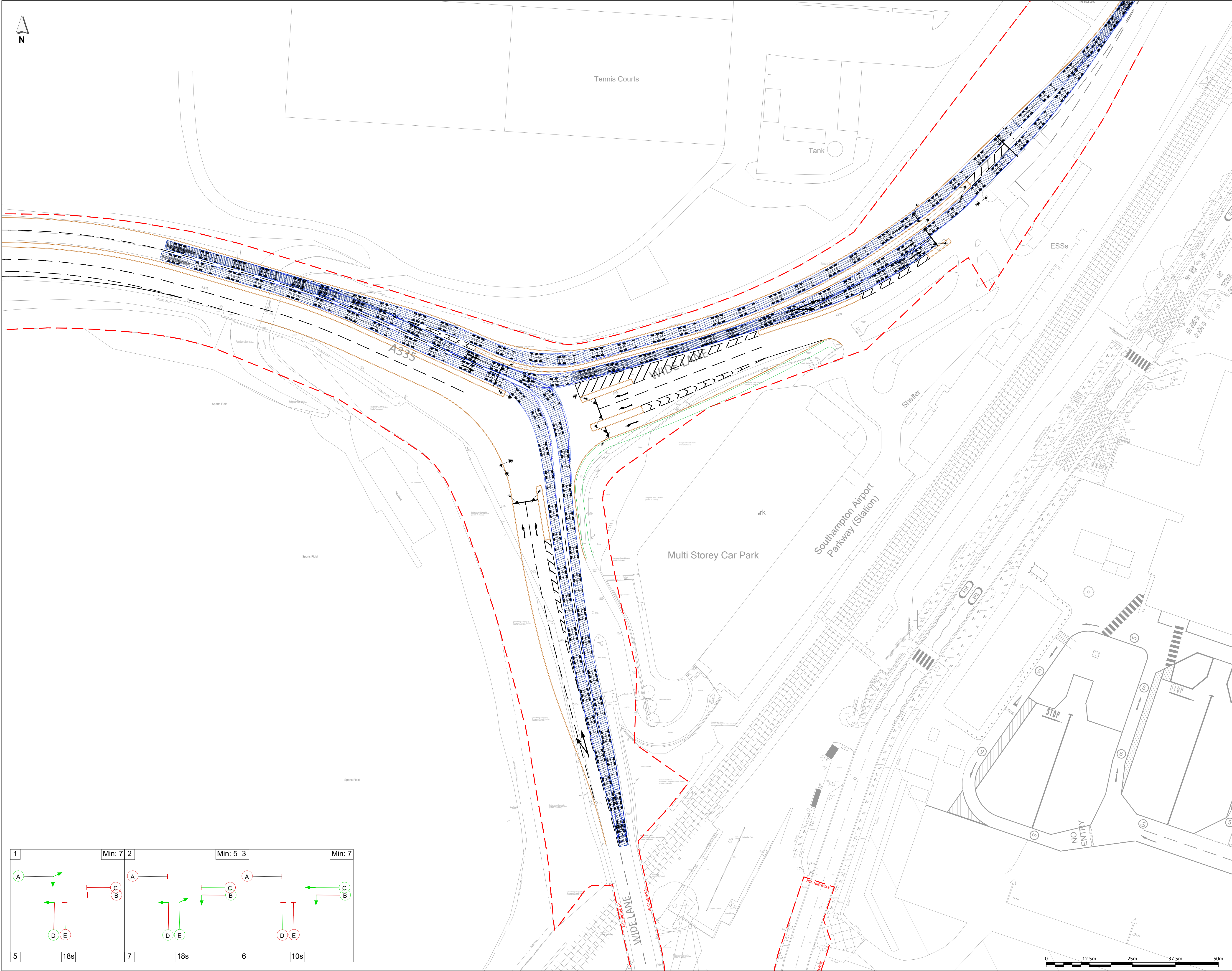
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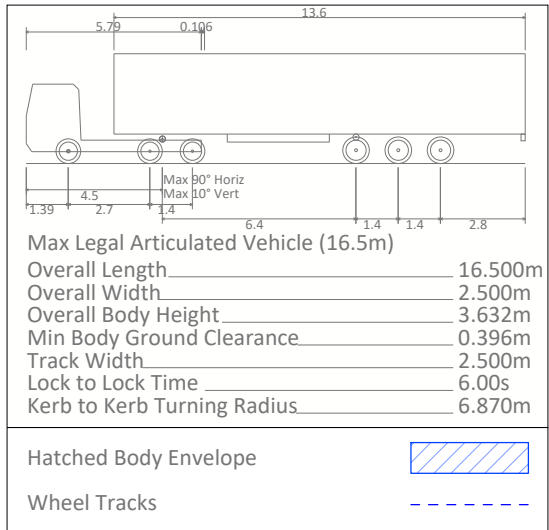
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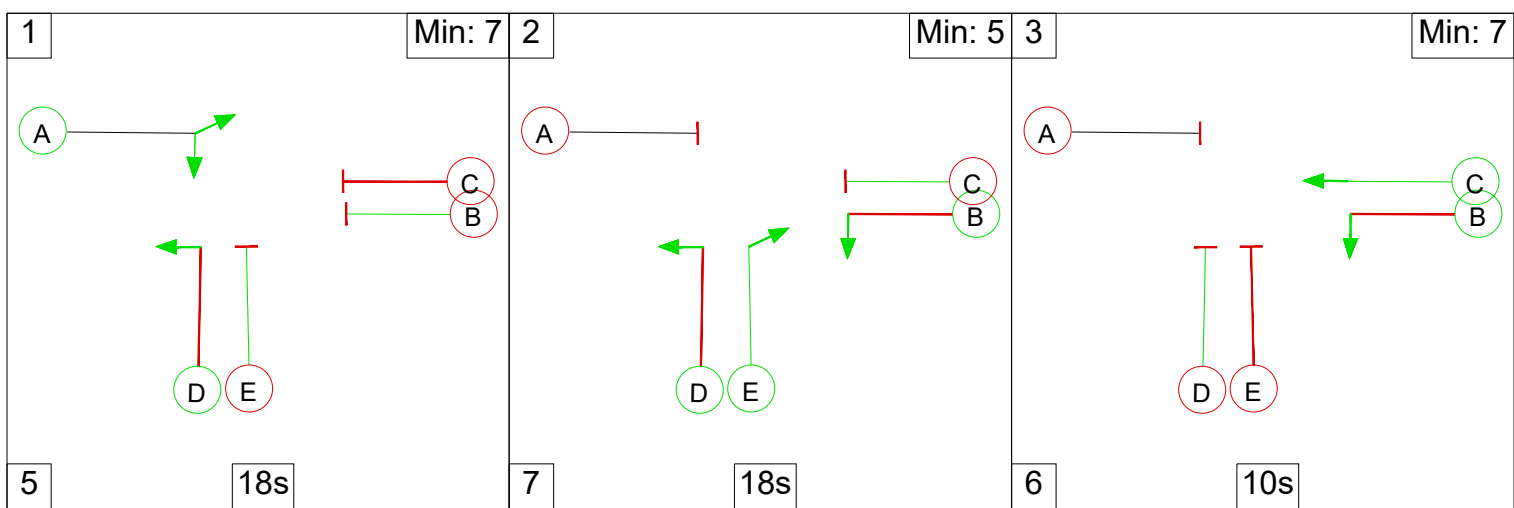
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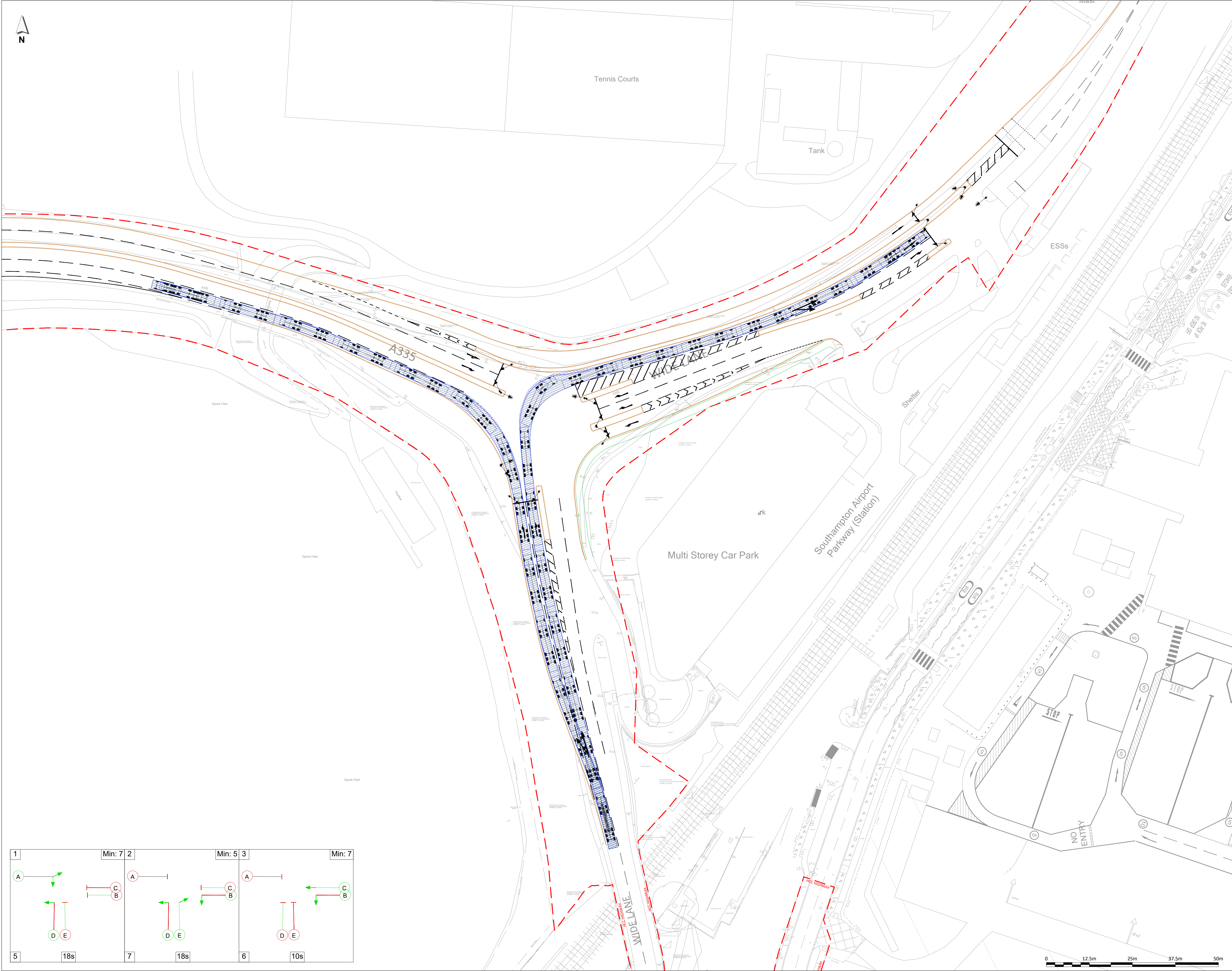
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SWEEP PATH ANALYSIS
SHEET 1**

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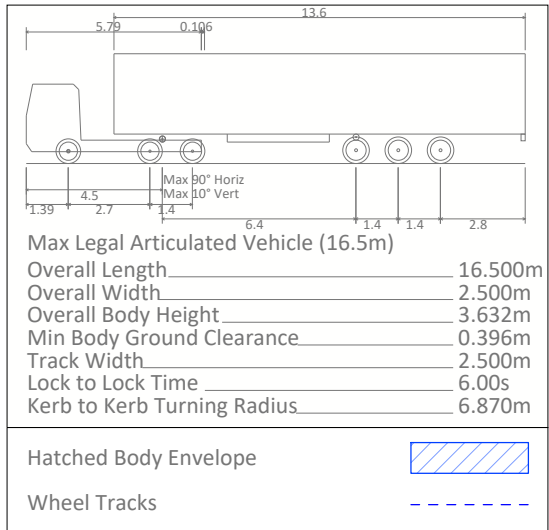
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 - PROPOSED KERB
 - PROPOSED EDGING KERB / BACK OF FOOTWAY
 - PROPOSED WHITE ROAD MARKING
 - PROPOSED TRAFFIC SIGNAL



P1	07DEC25	UPDATED BASED ON HCC COMMENTS	CJM	CJM	JWL
P0	28OCT25	ORIGINAL ISSUE	CJM	CJM	JWL
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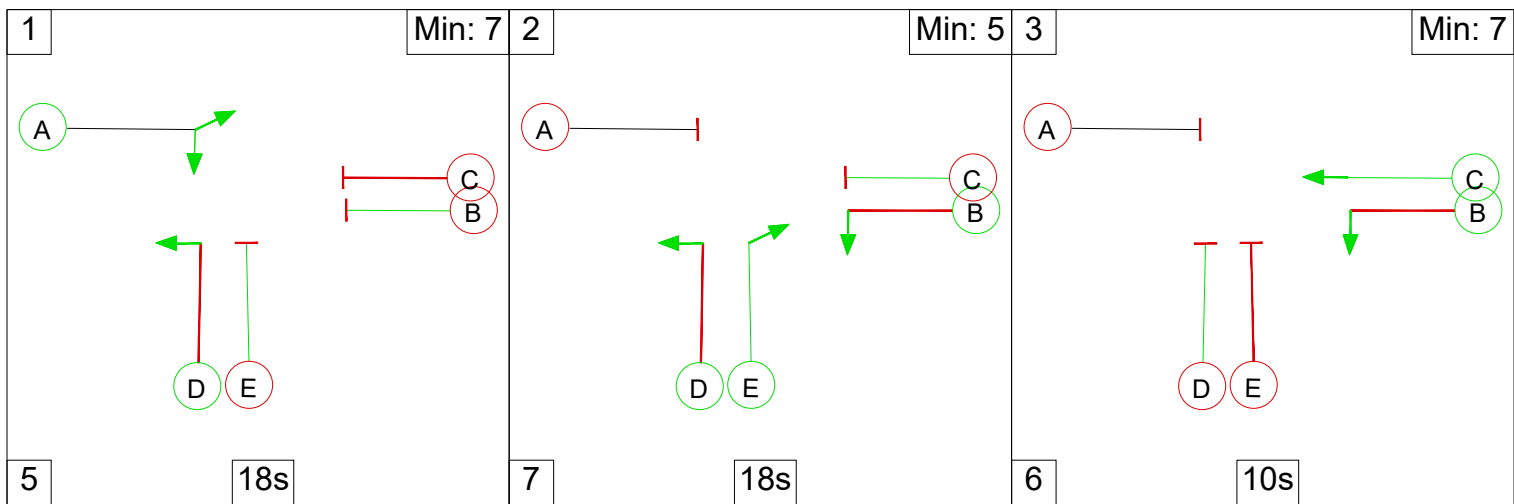
Project Title:
NAVIGATOR QUARTER, SOUTHAMPTON

Drawing Title:
**WIDE LANE ROUNDABOUT
PROPOSED JUNCTION MITIGATION
SWEEP PATH ANALYSIS
SHEET 2**

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24733101-STR-HGN-100-SK-D-01203



Appendix L - J03 A335/ Wide Lane – Signal Mitigation Option 2 - Junction Modelling Results

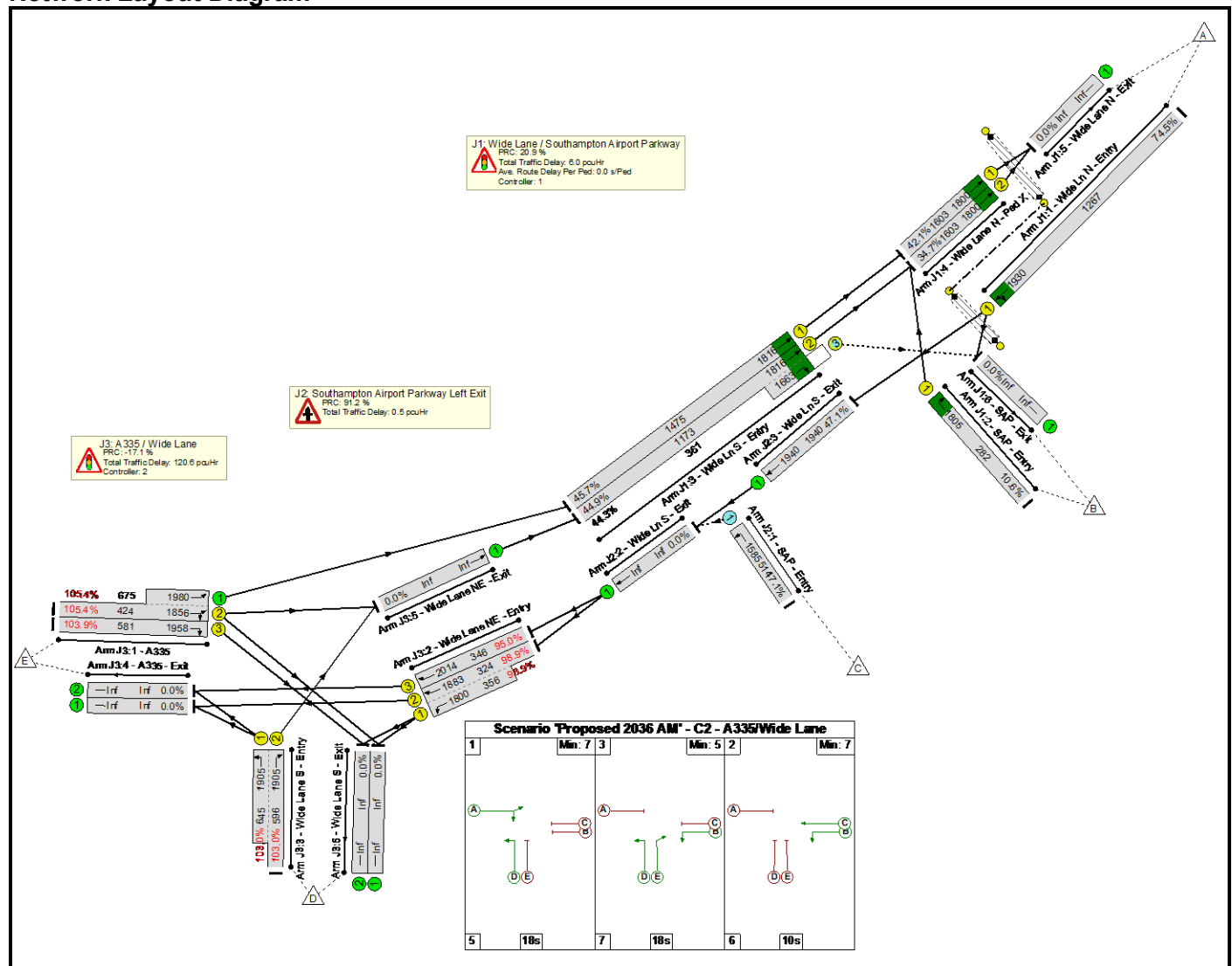
Basic Results Summary

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	Wide Lane Mitigation_SigFinal_v3.lsg3x
Author:	
Company:	
Address:	

Scenario 7: 'Proposed 2036 AM' (FG5: 'Proposed 2036 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)
Network	-	-	-		-	-	-	-	-	-	105.4%	222	23	3	127.1	-	-
J1: Wide Lane / Southampton Airport Parkway	-	-	-		-	-	-	-	-	-	74.5%	134	23	3	6.0	-	-
1/1	Wide Ln N - Entry Left Ahead	U	C1:B		1	31	-	943	1930	1267	74.5%	-	-	-	3.4	12.9	12.7
2/1	SAP - Entry Right	U	C1:C		1	12	-	30	1805	282	10.6%	-	-	-	0.3	30.3	0.5
3/1	Wide Ln S - Entry Ahead	U	C1:A		1	41	-	711	1816	1475	45.7%	-	-	-	0.8	4.2	3.8
3/2+3/3	Wide Ln S - Entry Ahead Right	U+O	C1:A	C1:D	1	41	4	709	1816:1663	1173+361	44.9 : 44.3%	134	23	3	0.9	4.9	6.4
4/1	Wide Lane N - Ped X Ahead	U	C1:E		1	46	-	711	1800	1603	42.1%	-	-	-	0.4	2.0	0.4
4/2	Wide Lane N - Ped X Ahead	U	C1:E		1	46	-	572	1800	1603	34.7%	-	-	-	0.3	1.9	0.8
Ped Link: P1	Unnamed Ped Link	-	C1:F		1	21	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	C1:G		1	6	-	0	-	0	0.0%	-	-	-	-	-	-
J2: Southampton Airport Parkway Left Exit	-	-	-		-	-	-	-	-	-	47.1%	88	0	0	0.5	-	-
1/1	SAP - Entry Left	O	-		-	-	-	88	1585	514	17.1%	88	0	0	0.1	4.2	0.1
3/1	Wide Ln S - Exit Ahead	U	-		-	-	-	913	1940	1940	47.1%	-	-	-	0.4	1.8	0.4
J3: A335 / Wide Lane	-	-	-		-	-	-	-	-	-	105.4%	0	0	0	120.6	-	-
1/2+1/1	A335 Ahead Ahead2 Right	U	C2:A -		1	18	-	1158	1856:1980	424+675	105.4 : 105.4%	-	-	-	40.8	126.9	49.9

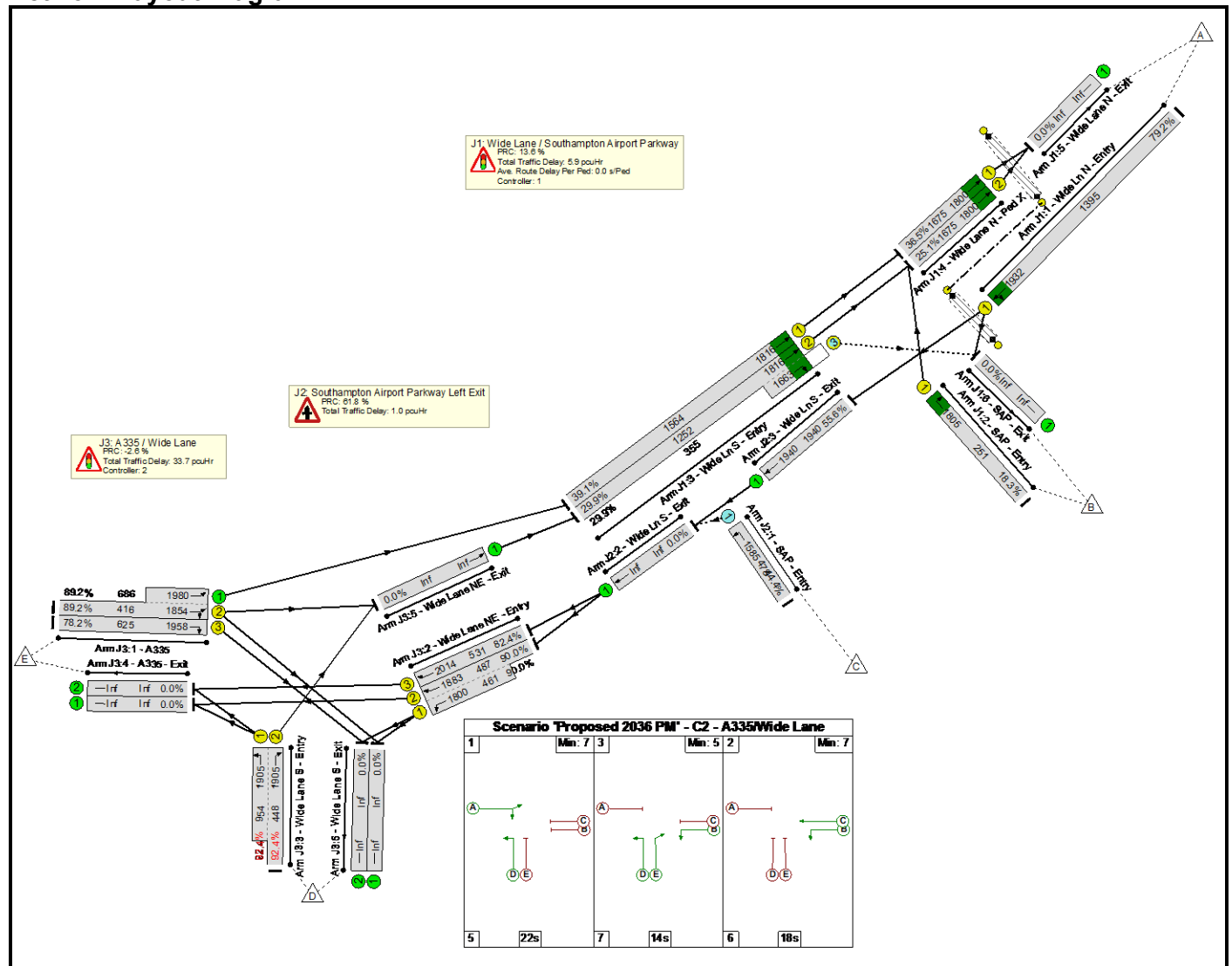
Basic Results Summary

1/3	A335 Right	U	C2:A		1	18	-	604	1958	581	103.9%	-	-	-	23.9	142.2	30.4
2/2+2/1	Wide Lane NE - Entry Ahead Left	U	C2:C C2:B		1	10:34	-	672	1883:1800	324+356	98.9 : 98.9%	-	-	-	13.4	71.8	16.8
2/3	Wide Lane NE - Entry Ahead	U	C2:C		1	10	-	329	2014	346	95.0%	-	-	-	7.5	82.3	11.5
3/2+3/1	Wide Lane S - Entry Left Right	U	C2:E C2:D		1	20:43	-	1278	1905:1905	596+645	103.0 : 103.0%	-	-	-	35.0	98.5	45.0
C1 - SIG197 C2 - A335/Wide Lane PRC for Signalled Lanes (%): PRC for Signalled Lanes (%): PRC Over All Lanes (%): 20.9 -17.1 -17.1 Total Delay for Signalled Lanes (pcuHr): Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr): 6.02 120.57 127.14 Cycle Time (s): Cycle Time (s): 64 64																	

Basic Results Summary

Scenario 8: 'Proposed 2036 PM' (FG6: 'Proposed 2036 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)
Network	-	-	-		-	-	-	-	-	-	92.4%	294	23	2	40.6	-	-
J1: Wide Lane / Southampton Airport Parkway	-	-	-		-	-	-	-	-	-	79.2%	82	23	2	5.9	-	-
1/1	Wide Ln N - Entry Left Ahead	U	C1:B		1	39	-	1105	1932	1395	79.2%	-	-	-	3.9	12.6	16.0
2/1	SAP - Entry Right	U	C1:C		1	12	-	46	1805	251	18.3%	-	-	-	0.5	36.2	0.9
3/1	Wide Ln S - Entry Ahead	U	C1:A		1	49	-	612	1816	1564	39.1%	-	-	-	0.5	2.9	2.9
3/2+3/3	Wide Ln S - Entry Ahead Right	U+O	C1:A	C1:D	1	49	4	480	1816:1663	1252+355	29.9 : 29.9%	82	23	2	0.6	4.3	0.9
4/1	Wide Lane N - Ped X Ahead	U	C1:E		1	54	-	612	1800	1675	36.5%	-	-	-	0.3	1.7	0.3
4/2	Wide Lane N - Ped X Ahead	U	C1:E		1	54	-	420	1800	1675	25.1%	-	-	-	0.2	1.7	1.0
Ped Link: P1	Unnamed Ped Link	-	C1:F		1	21	-	0	-	0	0.0%	-	-	-	-	-	-
Ped Link: P2	Unnamed Ped Link	-	C1:G		1	6	-	0	-	0	0.0%	-	-	-	-	-	-
J2: Southampton Airport Parkway Left Exit	-	-	-		-	-	-	-	-	-	55.6%	212	0	0	1.0	-	-
1/1	SAP - Entry Left	O	-		-	-	-	212	1585	478	44.4%	212	0	0	0.4	6.8	0.4
3/1	Wide Ln S - Exit Ahead	U	-		-	-	-	1079	1940	1940	55.6%	-	-	-	0.6	2.1	0.6
J3: A335 / Wide Lane	-	-	-		-	-	-	-	-	-	92.4%	0	0	0	33.7	-	-
1/2+1/1	A335 Ahead Ahead2 Right	U	C2:A -		1	22	-	983	1854:1980	416+686	89.2 : 89.2%	-	-	-	6.0	22.1	11.1
1/3	A335 Right	U	C2:A		1	22	-	489	1958	625	78.2%	-	-	-	4.8	35.1	10.6

Basic Results Summary

2/2+2/1	Wide Lane NE - Entry Ahead Left	U	C2:C C2:B		1	18:38	-	853	1883:1800	487+461	90.0 : 90.0%	-	-	-	7.1	30.0	12.5
2/3	Wide Lane NE - Entry Ahead	U	C2:C		1	18	-	438	2014	531	82.4%	-	-	-	4.6	37.9	10.4
3/2+3/1	Wide Lane S - Entry Left Right	U	C2:E C2:D		1	16:43	-	1295	1905:1905	448+954	92.4 : 92.4%	-	-	-	11.1	30.9	22.4
C1 - SIG197 C2 - A335/Wide Lane				PRC for Signalled Lanes (%):			13.6	Total Delay for Signalled Lanes (pcuHr):			5.89	Cycle Time (s):			72		
				PRC for Signalled Lanes (%):			-2.6	Total Delay for Signalled Lanes (pcuHr):			33.66	Cycle Time (s):			72		
				PRC Over All Lanes (%):			-2.6	Total Delay Over All Lanes(pcuHr):			40.58						