

Appendix J: Stage 1 RSA 2 (September 2025)

To Andy Hutton, Capital Road Safety

From Ali Memory, Steer

Date 11 September 2025

Project Navigator Quarter, Southampton

Memo

Project No. 24733101

Stage 1 Road Safety Audit - Brief

Introduction

- 1. This Road Safety Audit (RSA) brief has been prepared for the proposed highway improvements associated with the Navigator Quarter proposed development adjacent to Southampton Airport. This is an additional, separate survey to previous surveys undertaken in June 2025.
- 2. This audit brief forms the instructions to the RSA team defining the scope and details of the highway scheme to be subject to the RSA. The Overseeing Organisation (Hampshire County Council as the relevant highway authority) has previously confirmed that they do not need to approve the Stage 1 RSA brief or auditors CVs.

Table 1: Project Summary

PROJECT SUMMARY	
Audit Brief Date:	September 2025 (TBC)
Document Reference:	Appendix A : <u>Documents issued to Capital Road Safety</u> MSA: ILLUSTRATIVE SITE MASTERPLAN (OUTLINE DESIGN) • NQS-MSA-SI-XX-DR-A-2002-PL04 Illustrative Site Plan_CORRECT STEER DRAWINGS <u>Wide Lane Bridge:</u> • 24733101-STR-HGN-100-DR-D-00002 - REV P01 • 24733101-STR-HGN-100-SK-D-00301 - REV P01 • 24733101-STR-HGN-100-SK-D-00302 - REV P01 <u>A335/ Wide Lane Roundabout:</u> • 24733101-STR-HGN-100-DR-D-00301 - REV P01 • 24733101-STR-HGN-100-DR-D-00302 - REV P01 • 24733101-STR-HGN-100-DR-D-00303 - REV P0 <u>Spitfire Way Roundabout</u> • 24733101-STR-HGN-100-DR-D-00501 - REV P0 BURROWS GRAHAM DRAWINGS: • 30228-BGL-XX-WLB-SK-C-00001 P03 Wide Lane Bridge Vehicle Tracking • 30228-BGL-XX-XX-SK-C-00002 P01 Proposed Wide Lane Bridge Improvements

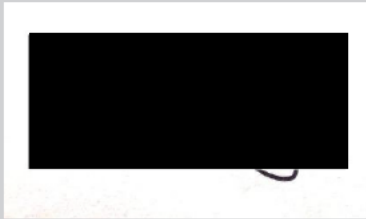
	30228-BGL-XX-XX-SK-C-00003 P01 Proposed Wide Lane Bridge Cross Sections 30228-BGL-XX-XX-SK-C-00004 P01 Proposed Wide Lane Bridge Levels
Prepared by:	Steer (Design Organisation)
On behalf of:	Hampshire County Council (Overseeing Organisation)
Our Ref.	24733101
AUTHORISATION SHEET	
Project:	Navigator Quarter, Southampton
Report Title:	Stage 1 Road Safety Audit
PREPARED BY:	
Name:	Ali Memory, Associate
Signed:	
Organisation:	Steer (Design Organisation) 14-21 Rushworth Street London, SE1 0RB T: 020 7910 5588
Date:	11 September 2025
I APPROVE THE RSA BRIEF AND INSTRUCT THE RSA TO TAKE PLACE ON BEHALF OF THE OVERSEEING ORGANISATION:	
Name:	N/A
Signed:	N/A
Organisation:	Hampshire County Council (Overseeing Organisation) Steer Note: HCC has confirmed that they do not need to approve the Audit Brief.
Date:	N/A

Table 2: General details for RSA

General details	
Highway scheme name and road number:	Navigator Quarter, Southampton Previous RSA (June 2025) covered the following items: - Masterplan Spine Road [unclassified road] - Secondary roads within masterplan This separate RSA solely covers the proposed external highways mitigation measures outside the masterplan: - Mitchell Way Roundabout improvement - Wide Lane Roundabout improvement. - Wide Lane - new shared use active route
Type of scheme:	EBC Planning Application Ref: O/25/99506 Planning application validated 17 July 2025

	Hybrid planning application for an employment site (circa 92,000 sqm) adjacent to Southampton Airport on greenfield land. The Site will effectively be split into three development parcels; identified as South Plot and North Plot, and the area for the proposed new highway infrastructure that will serve the site and form the new estate road for the proposed development. The new primary spine road will join the northern end of Mitchell Way and will then bend to the south of the existing long stay airport car park, before entering the main masterplan site. This is private highway land (i.e. not public highway) and is freehold land belonging to Southampton Airport. The new estate road has been designed, and land safeguarded adjacent to North Plot, so that this can continue to form a longer-term link road aspiration (Chickenhall Lane Link Road) if required at a later stage. The extent of the new road infrastructure ties in to the existing highway along Mitchell Way and then continues to ensure that access is provided to both South and North Plots.	
RSA stage (Interim, S1, S2, S3 S4)	Stage 1 Road Safety Audit	
Overseeing Organisation details	Hampshire County Council	
Design Organisation details	Steer, Burrows Graham and MSA	
Police contact details	Not applicable at this audit stage	
Maintaining Agent contact details	Graham Redman, Group Engineer (Highway Development Agreements) E: graham.redman@hants.gov.uk	
Proposed RSA team membership	Andy Haunton Capital Road Safety Audit Team Leader BEng (Hons) MCIHT FSoRSA Cert Comp RSA	Jonathan Thompson Capital Road Safety Audit Team Member IEng FIHE MCIHT MSoRSA Cert Comp RSA Lantra 12D M7 TTM Manager
Terms of reference	RSA to be undertaken in accordance with DMRB's GG 119 RSA, Issued Jan 2020, Revision 2.	

Table 3: Scheme Details

Scheme Details	
Scheme Description / Objective	Hybrid planning application for an employment site (circa 92,000 sqm) adjacent to Southampton Airport on greenfield land. The Site will effectively be split into three development parcels; identified as South Plot and North Plot, and the area for the proposed new highway infrastructure that will serve the site and form the new estate road for the proposed development. See figure overleaf for the local highway network. The new primary spine road will join the northern end of Mitchell Way and will then bend to the south of the existing long stay airport car park, before entering the main masterplan site. This was assessed as part of a previous separate RSA (June 2025) by Capital Road Safety. The new estate road has been designed, and land safeguarded adjacent to North Plot, so that this can continue to form a longer-term link road aspiration (Chickenhall Lane Link Road) if required at a later stage. The extent of the new road infrastructure ties in to the existing highway along Mitchell Way and then continues to ensure that access is provided to both South and North Plots. This was assessed as part of a previous separate RSA (June 2025) by Capital Road Safety. The above was subject to the previous RSA dated 4 June 2025. The RSA now requested is separate to the above and is required to cover potential improvements to the external highways and not the masterplan highways. The improvements to the external highways include: • Mitchell Way Roundabout improvement • Wide Lane Roundabout improvement. • Wide Lane - new shared use active route Details of these existing conditions relevant to these external areas are provided below and an overview of the proposed interventions are detailed subsequently in the subsequent 'Strategic decisions / Adjacent Land Uses' section of this brief. At the southern end of Mitchell Way is the four arm Spitfire Roundabout. The other three arms are George Curl Way, serving an Industrial Estate to the east, Wide Lane to the south which leads to Mountpark and onwards routes to Swaythling/Southampton, and Wide Lane to the north. The roundabout has two-lane flares on each approach arm. Footways are present on the perimeter of the roundabout and each arm has a pedestrian refuge island with dropped kerbs and tactile paving at the crossings. The A335/ Wide Lane roundabout is a three-arm roundabout with Wide Lane forming the southern arm (leading to the Spitfire Roundabout), the A335 forming the western arm which provides the key link to the M27 Junction 5 (J5), and A335 Wide Lane north forming the northern arm, which is a key route serving Eastleigh to the north. The roundabout has two lane flares on each approach arm. Wide Lane Bridge is located to the east of M27 junction 5 and is on the main route between Southampton Airport and the former Ford site (soon to be redeveloped), and the M27 motorway. It will form part of the highway connection between the Site and the M27, particularly for HGV traffic. The existing constraints at the bridge including that the existing bridge has a relatively narrow carriageway (circa 6.3m wide) and a 1.5m wide footway on the eastern side. The use of the eastern footway by cyclists, and the presence of the sharp bend which reduces forward visibility, forces HGVs to cross the centreline when negotiating the bend, in both directions, which means HGVs are unable to pass each other at the bend. Safety improvements have been discussed with HCC and EBC.

Figure 1: External highway network to the Site



Red outline = Navigator Quarter site boundary for planning

Design standards applied to the scheme design

- National Highways design standards
- LTN 1/20 Cycle Infrastructure Design

Existing Speed Limits

The northern section of Wide Lane between the Spitfire Roundabout and the A335/ Wide Lane roundabout is 40mph and passes over a railway bridge, which has an acute bend at the southern end.

Wide Lane Bridge itself is subject to a 40mph speed limit.

Mitchell Way is public highway up to the HSBC House building. This section is approximately 7.3m wide and subject to a 30mph speed limit.

Design Speed

The above road sections will remain as per their existing speed limits.

Existing traffic flows/queues

The existing Site is vacant and therefore generates no vehicle trips. ATCs undertaken on Mitchell Way in late June / early July 2023 (located south of Southampton Parkway rail station) indicate the following total vehicular flows however:

- 227 two-way flows in the AM peak hour (07:00 – 08:00)
- 1,249 two-way flows in the PM peak hour (16:00 – 17:00)
- 3,088 two-way flows across 24 hour daily period.

Pedestrian and cyclist flows were surveyed on Wide Lane Bridge, approximately at the location that Wide Lane passes over the railway lines.

Table 3.1 summarises the pedestrian and cyclist count during the morning peak hour (08:00-09:00), evening peak hour (16:00-17:00), and the daily (24 hour) counts.

Table 3.1: Wide Lane Survey Results – Pedestrians and Cyclists

Hour Starting	Friday 06/12/2024						Saturday 07/12/2024*					
	Pedestrians			Cyclists			Pedestrians			Cyclists		
	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total
08:00	6	5	11	21	16	37	3	2	5	2	1	3
16:00	8	9	17	7	16	23	1	1	2	2	3	5
Daily (24 hrs)	66	70	136	117	109	226	37	30	67	29	28	57

*Storm Darragh brought strong winds and heavy rain to western parts of England and Wales on the weekend of the 7th and 8th December 2024. Adverse weather conditions were experienced on the second day of the survey (Saturday 7th December 2024), however weather conditions were unaffected on Friday 6th December 2024. The Friday data is therefore considered to be significantly more robust.

Appendix B contains the traffic flow data through the 2 following roundabout junctions – please see the tab ‘2036 Base Proposed Dev PCU’ within the Excel spreadsheet.

- Spitfire Rbt
- Wide Lane/A335 roundabout

Forecast traffic flows

As per **Table 3.2** the Proposed Development is forecast to result in a 446 vehicle trips onto the local highway network during the AM peak hour, and 3,992 trips during the PM peak hour. Highway impact assessments have been undertaken on the local junctions to understand if the Proposed Development would pose any issues with regard to highway capacity or operation.

Table 3.2: Forecast Vehicle Trips (Scenario 1)

Mode	AM Peak (08:00-09:00)			PM Peak (17:00 - 18:00)			Daily		
	In	Out	Total	In	Out	Total	In	Out	Total
Taxi	2	2	4	2	2	3	20	20	41
Cyclists	23	2	25	3	20	23	91	77	168
Cars	270	32	303	34	225	259	1,187	1,213	2,400
Motorcycle	2	0	2	0	3	3	18	14	31
PSV	1	1	1	0	1	1	4	4	7
OGV	25	48	73	47	22	69	484	469	954
LGV	34	29	63	19	22	41	277	282	559
Total Vehicles	334	112	446	103	273	376	1,991	2,002	3,992

Pedestrian, cyclist and equestrian desire lines

The existing pedestrian/ cycle routes to/from the Site are via the Spitfire Roundabout, over Wide Lane Bridge and via the A335/Wide Lane Roundabout. Active travel users will use different parts of this highway network dependent on whether they route south towards Southampton, or north towards Eastleigh town centre.

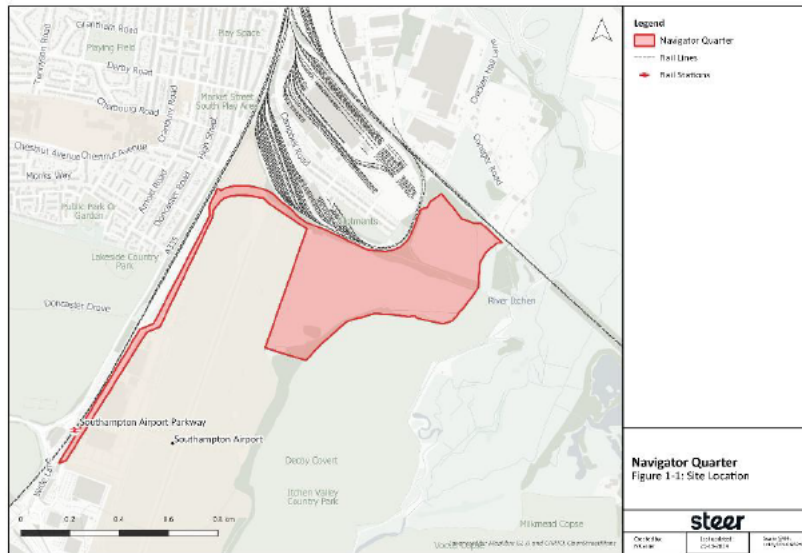
At the southern end of Mitchell Way is the four arm **Spitfire Roundabout**. The other three arms are George Curl Way, serving an Industrial Estate to the east, Wide Lane to the south which leads to Mountpark and onwards routes to Swaythling/Southampton, and Wide Lane to the north. The roundabout has two-lane flares on each approach arm. Footways are present on the perimeter of the roundabout and each arm has a pedestrian refuge island with dropped kerbs and tactile paving at the crossings.

The **Wide Lane** northern approach has a staggered cycle and pedestrian crossing with guard rails to separate users from traffic, facilitating the safe continuation of NCR23. There is a

	shared use path running between the Wide Lane northern and Wide Lane southern approaches on the western side of the Spitfire Way roundabout. Wide Lane to the south of the roundabout is 40mph up to the Mountpark Industrial Estate and then reduces to 30mph after the junction. The road is c 6.7m with localised widening for uncontrolled pedestrian crossings. The road is bordered by a pedestrian footway to the east c 1.5-2m wide and a shared use path to the west (north of Mountpark) measuring c 2-3m wide. Signalised pedestrian crossings are present at all arms of the Mountpark junction. The northern section of Wide Lane between the Spitfire Roundabout and the A335/ Wide Lane roundabout is 40mph and passes over a railway bridge, which has an acute bend at the southern end. The road width reduces to approximately 6.2m at the bridge deck with a narrow 1.7m wide footway on the eastern side. The narrow nature of the bend means two-way HGV movements are not possible on the bend. The railway bridge is also used by cyclists including those on National Cycle Route (NCR 23). The A335/ Wide Lane roundabout is a three-arm roundabout with Wide Lane forming the southern arm (leading to the Spitfire Roundabout), the A335 forming the western arm which provides the key link to the M27 Junction 5 (J5), and A335 Wide Lane north forming the northern arm, which is a key route serving Eastleigh to the north. The roundabout has two lane flares on each approach arm. The A335 (M27 Junction 5 link) is a single carriageway road (c. 8m wide at its narrowest point), with the eastbound and westbound carriageways separating on the approach to the M27 junction 5 splitting into three lanes (including a dedicated filter lane onto the M27 eastbound on-slip) on the approach to the junction. There are no pedestrian or cycle facilities provided on this link.
Environmental constraints	N/A

Table 4: Locality

Locality	
Description of locality	Background information regarding the Site: The Site is formed of two plots, a larger area immediately adjacent to the Airport that is known as the South Plot, and an area of land to the north of this, known as the North Plot. These plots are separated by an area of woodland that has established on a raised railway embankment that is now redundant and has become overgrown. The nearby railway lines form the northern boundaries to the application Site, with the railway raised on an embankment. Southampton Airport is located immediately to the south and west of the Site, on the edge of Southampton city's suburbs, but within Eastleigh. To the immediate north of the Site there is a train depot, located at the convergence of trainlines from Southampton and Portsmouth. Sandwiched between the train depot land there is also a residential area known as Campbell Road. To the north of the train depot land is the Barton Park Industrial Estate which runs from the train depot, north to Bishopstoke Road. The site location is shown in Figure 2. Figure 2: Site Location Plan



External highway network:

This RSA is separate to the previous one undertaken in June 2025, and is to cover external improvements to:

- Spitfire Roundabout improvement
- A335/Wide Lane Roundabout improvement
- Wide Lane Bridge - new shared use active route

Figure 1 previously shown details the locations of these external areas.

General description

A description of the proposed masterplan is included in the 'Scheme Description / Objective' section (at the start of Table 2). This RSA purely relates to proposed mitigation measures to the external highways:

- Spitfire Roundabout improvement.
- A335/Wide Lane Roundabout improvement.
- Wide Lane - new shared use active route.

Relevant factors which may affect road safety

Wide Lane Bridge: Section 4.5 of the Eastleigh Strategic Transport Study (2015 interim report version) sets out the existing constraints at the bridge including that the existing bridge has a relatively narrow carriageway (circa 6.3m wide) and a 1.5m wide footway on the eastern side. The use of the eastern footway by cyclists, and the presence of the sharp bend which reduces forward visibility, forces HGVs to cross the centreline when negotiating the bend, in both directions, which means HGVs are unable to pass each other at the bend.

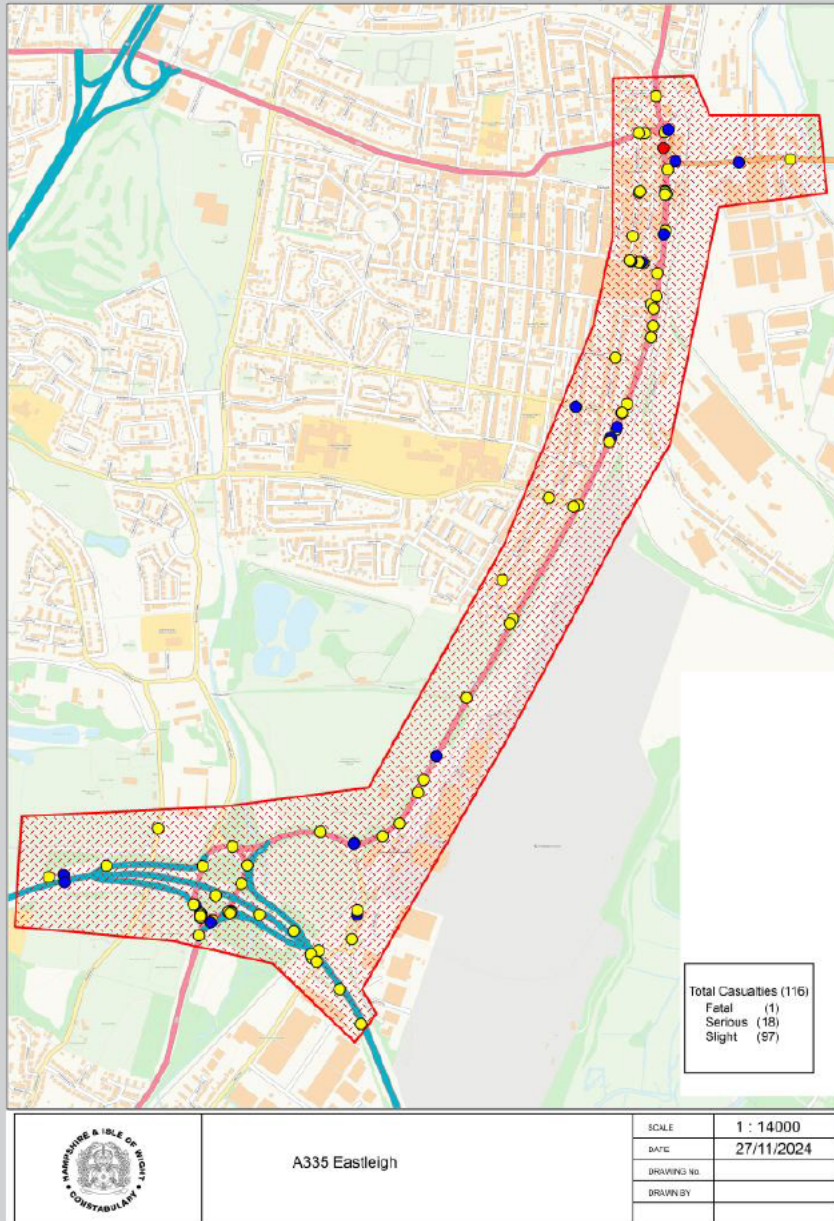
There are not considered to be any other relevant factors that may affect road safety.

Table 5: Analysis

Collision data analysis	To establish whether there any existing safety concerns associated with the highway network in the vicinity of the Site, Steer has obtained Personal Injury Accident (PIA) data from Hampshire Constabulary. Data is taken from the most recent available 5-year period; 2019-2024. In total there were 94 PIA incidents which resulted in 116 casualties. One of the incidents resulted in a fatality, 18 resulted in serious injury and the rest (97) resulted in slight injury.

The study area and accident locations are provided at **Figure 3**, and the full incident report is included within **Appendix C**. The following narrative focuses on the sections of the highway network of interest to this upcoming audit.

Figure 3: Personal Injury Traffic Collisions in the Vicinity of the Site (Eastleigh)



A335: One accident occurred on the A335, between Wide Lane and Stoneham Interchange. The accident was caused by the driver losing control due to wet weather, and resulted in a slight injury.

A335 / Wide Lane Roundabout: Two accidents occurred at this location, both of which resulted in serious injury. One accident occurred due to a road rage incident, and the other occurred because a vehicle failed to give way to a cyclist, who was already on the roundabout.

Spitfire Roundabout: One accident occurred at this roundabout, caused by a car failing to give way. This resulted in a slight injury.

Wide Lane: Eight accidents occurred along Wide Lane. The causation factors are summarised below:

- A car overtook a cyclist too closely, resulting in one serious injury and one slight injury;

	• A cyclist entered the junction from the pavement into the path of an oncoming vehicle, resulting in a slight injury; • A car failed to slow, resulting in a slight injury; • A cyclist clipped railings and went over the handlebars, resulting in a serious injury; • A car failed to look properly and turned right in error, colliding with an oncoming vehicle, resulting in a slight injury; • Failed to look properly / failed to judge other persons path or speed, resulting in a slight injury; and • Fatigue / loss on control due to wet weather, resulting in a slight injury.
Departures from standards	No relaxations or departure have been sought from the Highway Authority.
Previous RSA stage reports, RSA response reports & evidence of agreed actions	A previous separate audit was undertaken by Capital Road Safety (in accordance with the Audit Brief provided by Steer) on 4th June 2025, between 10:30 – 12:00. This covered the main masterplan and Mitchell Way which is separate to this audit. This is included within Appendix D .
Strategic decisions / Adjacent Land Uses	Immediate development area: A brief summary of the wider masterplan improvements covered in the previous RSA dated 4 June 2025 is below (further contained at Appendix D), for wider context: The new primary spine road will join the northern end of Mitchell Way and will then bend to the south of the existing long stay airport car park, before entering the main masterplan site. The road has been designed to an adoptable standard, with a 30mph speed limit and terminates to the north of the North Plot access junction. The gradient of the northern section has been designed to ensure it could form part of the CLLR and pass over the railway bridge if it were to subsequently come forward. Two main priority junctions will be provided along the primary spine route to connect with the secondary masterplan access roads that lead into the South Plots and North Plot. Space has been allocated to allow for right-turn pockets into these access roads. Figure 4: Indicative Plan of Masterplan Development Area

The following sets out the proposed improvements that are proposed to the external highways network, which will be subject to this new RSA.

- The full set of traffic modelling results for each roundabout is summarised within the Technical Note at **Appendix E**.
- The raw modelling files and output reports for each roundabout, including pre and post mitigation measures, are contained within **Appendix F**.

Spitfire Roundabout:

Given that this is the single vehicular access point to the Proposed Development from the wider highway network, a mitigation option has been explored for this junction, which is explored below.

The initial modelling results highlight that the Wide Lane (N) arm experiences poorly balanced flows on the northern arm approach, and therefore, a mitigation option is required. A mitigation option has been explored which provides better delineation the lanes. This involved separating the two lanes of the northern approach: one designated for left-turn movements to Mitchell Way and the other for ahead movements to George Curl Way and right-turn movements to Wide Lane (W). Further details are included in the Highways Modelling Technical Note appended to this brief.

The solution improves the performance of the junction with the RFC on this northern arm reducing to 0.71 and 0.82 for Lane 1 and 2 respectively in the AM peak, under the 2036 Baseline + Proposed Development. For the PM peak, this RFC reduces to 0.46 and 0.86 for Lane 1 and 2 respectively. Under the 2028 Baseline + Proposed Development scenario, there are no issues with the junction performance, with a maximum RFC of 0.75 and 0.78 experienced for Lane 2 in the AM and PM peak, respectively.

With the proposed mitigation the junction will be able to accommodate the additional demand generated from the proposed development. Further design work will need to be undertaken to finalise the layout of the junction subject to agreement of the concept by HCC Highways, however an indicative sketch is provided within **Appendix A**:

- Drawing no. 24733101-STR-HGN-100-DR-D-00501 - REV P0

A335 / Wide Lane Roundabout:

Due to the capacity issues recorded at all arms in the 2036 Baseline + Proposed Development scenarios for this roundabout (see Highways Modelling Technical Note appended to this brief), a mitigation option has been explored, which includes the following design changes to the junction layout:

- Addition of left-turn bypass on A335 (NW) arm. This bypass would run parallel to the existing Wide Lane road until the next stop-line at the adjacent Southampton Airport Parkway (SAP) junction, also resulting in increased capacity at this approach.
- Allowance of right-turners from the nearside lane on A335 (NW) arm.
- Replacement of nearside lane on Wide Lane (S) with left-turn bypass.
- Allowance of ahead movement on nearside lane on Wide Lane (NE) arm.

Drawings showing the existing layout of the A335/ Wide Lane Roundabout and the proposed indicative conceptual layout of the junction, with the above mitigation are included at **Appendix A**:

- 24733101-STR-HGN-100-DR-D-00301 - REV P01
- 24733101-STR-HGN-100-DR-D-00302 - REV P01
- 24733101-STR-HGN-100-DR-D-00303 - REV P0

This mitigation option was modelled with the same level of demand. The model results show that by implementing these changes, the junction performs vastly better with only slight capacity issues occurring in the 2036 Baseline + Proposed Development scenario on Arm 1 with an 88% RFC. However, that still compares favourably to even the existing 2025 Baseline scenario model, where the RFC on the offside lane (Arm 1 Lane 2) is 98%. The junction with

proposed mitigation would also operate within capacity during the 2028 Baseline + Proposed Development AM and PM peak scenarios.

In addition, the provision of the additional lane/ stop line on the southern arm at the SAP junction (where the segregated left turn lane ties back in), will provide that junction with enhanced capacity at the southern entry signals.

Wide Lane Bridge:

The Wide Lane Bridge over the railway line to the southwest of the site is constrained in terms of pedestrian and cycle infrastructure as well as being a bottleneck for HGVs to pass over. While the constraint has not stopped development coming forward to date it is a long-term aspiration of EBC and HCC to improve the operation of the bridge and to provide better non-motorised user access.

In the past studies have been undertaken by HCC on potential improvements to the Wide Lane Bridge to enable unimpeded two-way HGV movements and provide enhanced facilities for pedestrians and cyclists.

The Applicant's team have explored potential improvements to the Wide Lane Bridge and have identified that these could be delivered in the following form:

- A new active travel bridge to the northern side of the existing railway bridge. This could comprise a 3m wide shared use pedestrian/ cycleway which will fully separate pedestrians/ cyclists from the main carriageway over the main part of the bridge. This will tie into the existing eastern footway to the north of the bridge and will also tie back into the pedestrian footway to the south of the bridge, to the north of the existing Wide Lane pedestrian/ crossing on the northern arm of the Spitfire Roundabout.
- Removing the existing footway to the eastern/ northern side of the carriageway, along the bridge to enable the carriageway to be widened to at the bend of the bridge, to facilitate two-way HGV movements.

Conceptual 2D alignment drawings for these proposals are provided in **Appendix A:**

- 24733101-STR-HGN-100-SK-D-00301 - REV P01
- 24733101-STR-HGN-100-SK-D-00302 - REV P01

In addition, Burrows Graham drawings of the proposed Wide Lane Bridge improvements, including the required structures, cross-sections and levels. The Drawings can be found also in **Appendix A:**

- 30228-BGL-XX-WLB-SK-C-00001 P03 Wide Lane Bridge Vehicle Tracking
- 30228-BGL-XX-XX-SK-C-00002 P01 Proposed Wide Lane Bridge Improvements
- 30228-BGL-XX-XX-SK-C-00003 P01 Proposed Wide Lane Bridge Cross Sections
- 30228-BGL-XX-XX-SK-C-00004 P01 Proposed Wide Lane Bridge Levels

These drawings include highway and land ownership information which demonstrates that the proposed improvements can be delivered within public highway, Network Rail and Secretary of State for Transport ownership.

The above proposal is considered to provide the best solution for the active travel improvements, as opposed to landing a bridge within the station car park, to the north of HSBC House for the following reasons:

- The proposed active travel bridge would better serve the strategic cycle route between Southampton and Eastleigh which includes NCR 23, as it would avoid routeing cyclists along the section of Mitchell Way between the Spitfire Roundabout and the Southampton Parkway rail station car park which has a substandard width (ranging from 1.6m – 2m wide). There is no scope to widen this section of Mitchell Way as it would involve third party land take.

	Landing a bridge within the station car park would require a long, dog legged ramp. This would be less attractive to users. Furthermore it would result in significant land take from the station car park and remove the majority of the station car parking spaces. The drawings that have been included are to demonstrate that there is a viable solution for the active travel route, and widening of the carriageway over the bridge, however, neither of these schemes are included within the planning application boundary. The Spitfire Roundabout and Wide Lane Roundabout improvements are also not included within the red line but a proposed as external mitigation measures.
List of included documents and drawings	
Documents	N/A
Drawings	Please see the documents listed within Table 1: Document Reference.

Table 6: Checklist

Tick all that are included and provide reasons for those that are not included			
Site location plan	✓	Scale layout plans	✓
Departures and relaxations from standards	N/A	Construction/ typical details	N/A
Previous RSA reports	N/A	Traffic signal staging	N/A
Collision data and collision data analysis	N/A	Road traffic collision plot	N/A
Previous RSA response reports and evidence of agreed actions	N/A	Pedestrian, cyclist and horse-riding desire lines and volumes	N/A
Speed surveys	N/A	Traffic counts	✓
Walking, cycling and horse-riding assessment and reviews	N/A	Items outside the scope of the RSA/ strategic decisions	✓
Other factors that may impact on road safety	N/A	Design speeds/ speed limits	✓
Design standards used	✓	Adjacent land uses	✓

Appendices

See Sharepoint link: [Documents issued to Capital Road Safety](#)

Appendix A: Highways Drawings

Appendix B: Traffic Flow Data for Roundabouts

Appendix C: PIA Data

Appendix D: Previous RSA Audit Response (June 2025)

Appendix E: Traffic Modelling Technical Note

Appendix F: Traffic Modelling Files

Navigator Quarter, Southampton

Proposed Mitigation Measures

Stage 1 Road Safety Audit

Ref: 3221-RSA-01 A



Prepared for: **Steer, on behalf of Blocwork (Eastleigh) LLP & SIAL**

Date: **September 2025**

1.0 DOCUMENT INFORMATION

Project Title	NAVIGATOR QUARTER, SOUTHAMPTON PROPOSED MITIGATION MEASURES STAGE 1 ROAD SAFETY AUDIT
Document No	3221-RSA-01

Issue	Original (A)	Revision	Revision
Date Issued	24/09/25		

Prepared by	A Haunton		
Signature			

Checked by	J Thompson		
Signature			

Authorised by	J Thompson		
Signature			

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2.0 INTRODUCTION

2.1 Commission and Terms of Reference

- 2.1.1 This report results from a Stage 1 Road Safety Audit carried out on proposed public highway mitigation works for the proposed Navigator Quarter, part of Solent Freeport. The audit was carried out on the instruction of Steer's Martin Hubbard, dated 18th September 2025.
- 2.1.2 The Audit Team membership was as follows:
- Audit Team Leader: Andy Haunton BEng (Hons), MCIHT, FSoRSA
Capital Road Safety Ltd
- Audit Team Member: Jonathan Thompson IEng, FIHE, MCIHT, MSoRSA
Capital Road Safety Ltd
- 2.1.3 For the purposes of compliance with the National Highways standard GG 119 'Road Safety Audit' it is recorded that both the Audit Team Leader and Team Member hold a Certificate of Competency in Road Safety Audit.
- 2.1.4 The Audit was undertaken by Capital Road Safety in accordance with the Audit Brief provided by Ali Memory of Steer on 11th September 2025. It took place during late September 2025 and comprised an examination of the documents provided as listed in Appendix A, plus a visit to the site of the proposed scheme.
- 2.1.5 The Audit Team made a visit to the site of the scheme between 11:00 and 12:00hrs on 22nd September 2025. During the site visit the weather was fine and the paved highway surfaces were dry. Traffic flows were quite high and generally free flowing, with some intermittent, short-term delays across Wide Lane bridge due to alignment constraints. A modest flow of pedestrian and cycle movements was seen passing along the route.
- 2.1.6 The terms of reference of this audit are as described in the National Highways standard GG 119 Revision 2 'Road Safety Audit'. The team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria. However, to clearly explain a safety problem or the recommendation to resolve a problem the Audit Team may, on occasion, have referred to a design standard without touching on technical audit.
- 2.1.7 Unless general to the scheme, all comments and recommendations are given an identifying label and the locations have been indicated on the plan located in Appendix B. Reference may be made to the design drawings where it is necessary to clearly indicate which drawing amongst a set is the subject of comment.

2.2 Purpose of the Scheme

- 2.2.1 The overall scheme proposes a new strategic employment destination within Solent Freeport. The development's website describes it as follows:

"Navigator Quarter is a special economic zone within the Freeport. It will meet the needs of modern business and create significant economic opportunity for the

region, including the potential to support approximately 3,000 new jobs.

Our proposals for Navigator Quarter would transform approximately 110 acres of land adjacent to Southampton Airport into a vibrant location for local, national and international businesses to invest in and call their home.

We're bringing forward a planning application to provide around 92,000 sq m of high-quality employment space, with associated infrastructure works and a new access road linked to Mitchell Way. The site is allocated for employment uses within the Eastleigh Borough Local Plan."

2.2.2 The RSA Brief describes the proposals subject to this RSA as follows:

".... The improvements to the external highways include:

- Mitchell Way Roundabout improvement,*
- Wide Lane Roundabout improvement,*
- Wide Lane - new shared use active route.*

Details of these existing conditions relevant to these external areas are provided below and an overview of the proposed interventions are detailed subsequently in the subsequent 'Strategic decisions / Adjacent Land Uses' section of this brief.

At the southern end of Mitchell Way is the four arm Spitfire Roundabout. The other three arms are George Curl Way, serving an Industrial Estate to the east, Wide Lane to the south which leads to Mountpark and onwards routes to Swaythling/Southampton, and Wide Lane to the north. The roundabout has two-lane flares on each approach arm. Footways are present on the perimeter of the roundabout and each arm has a pedestrian refuge island with dropped kerbs and tactile paving at the crossings.

The A335/ Wide Lane roundabout is a three-arm roundabout with Wide Lane forming the southern arm (leading to the Spitfire Roundabout), the A335 forming the western arm which provides the key link to the M27 Junction 5 (J5), and A335 Wide Lane north forming the northern arm, which is a key route serving Eastleigh to the north. The roundabout has two lane flares on each approach arm.

Wide Lane Bridge is located to the east of M27 junction 5 and is on the main route between Southampton Airport and the former Ford site (soon to be redeveloped), and the M27 motorway. It will form part of the highway connection between the Site and the M27, particularly for HGV traffic. The existing constraints at the bridge including that the existing bridge has a relatively narrow carriageway (circa 6.3m wide) and a 1.5m wide footway on the eastern side. The use of the eastern footway by cyclists, and the presence of the sharp bend which reduces forward visibility, forces HGVs to cross the centreline when negotiating the bend, in both directions, which means HGVs are unable to pass each other at the bend. Safety improvements have been discussed with HCC and EBC."

3.0 ITEMS RAISED IN PREVIOUS ROAD SAFETY AUDIT

- 3.1 The Audit Team is not aware of any previous audits having been carried out on the proposals.

4.0 ITEMS RAISED IN THIS STAGE 1 ROAD SAFETY AUDIT

4.1 WIDE LANE ROUNDABOUT

4.1.1 PROBLEM

Location: A – Wide Lane roundabout.

Summary: Increased risk of collisions from high entry speeds.

Wide Lane junction is a normal roundabout, which is to have its central island reduced from 8.0m to the minimum 4.0m diameter. The existing layout already appears to have low entry path radii, something that the reduction will exacerbate. As described in DMRB CD 116 *“The entry path radius is a measure of the deflection to the left imposed on vehicles entering a roundabout. It is the most important determinant of safety at roundabouts because it governs the speed of vehicles through the junction and whether drivers are likely to give way to circulating vehicles.”* Hence, there is concern that the proposed central island layout may increase the risk of collisions arising by increasing entry speeds and making it more likely that drivers will fail to give way to circulating traffic.

RECOMMENDATION

The roundabout should be configured to achieve adequate entry path radii, or converted to a signalised junction.

Design Organisation Response	Accepted
Steer:	Comment is noted, however this design option is no longer being taken forward.
Client Organisation Comments	
Agree with Design Organisations' Response.	

4.1.2 PROBLEM

Location: B – NW to NE free segregated left turn lane (SLTL).

Summary: Risk of collisions due to the downstream signalised junction for the railway station.

The NW to NE SLTL will bring drivers back to the main carriageway only a little in advance of the signalised railway station junction. There is concern that this may increase the risk of:

- Sideswipe collisions from weaving / merging manoeuvres should SLTL traffic need to move across to the right turn lane for the station.
- Shunts as SLTL traffic encounters the end of any NE-bound queue for the station junction.

RECOMMENDATION

Further to 4.1.1, it is recommended that the Wide Lane roundabout should be signalised and incorporate the railway station junction.

Design Organisation Response	Accepted
Steer:	Comment is noted, however this design option is no longer being taken forward.
Client Organisation Comments	
Agree with Design Organisations' Response.	

4.1.3 PROBLEM

Location: C – NE approach to the roundabout.

Summary: Confusing lane allocation.

The carriageway markings on the NE approach to the roundabout shows three types of arrow, whereas there are only two destinations if excluding completing a 180° U-turn movement. This could be confusing and increase the risk of sideswipe collisions arising from different interpretations of the meaning of these arrows.

RECOMMENDATION

The markings should be limited to two types of arrow that best represent the actual layout of the junction.

Design Organisation Response	Accepted
Steer:	Comment is noted, however this design option is no longer being taken forward.
Client Organisation Comments	
Agree with Design Organisations' Response.	

4.2 MITCHELL WAY ROUNDABOUT

No features of the scheme were identified that could be removed or modified in order to improve the road safety of the measures proposed at Mitchell Way roundabout.

4.3 WIDE LANE SHARED USE ACTIVE ROUTE

4.3.1 PROBLEM

Location: D – Existing vehicle restraint along Wide Lane.

Summary: VRS proposals not indicated.

There is existing VRS along the eastern side of Wide Lane as the highway rises up over the railway line. Intentions for maintaining the VRS have not been indicated. Hence, there is concern that breaches in this system could increase the risk of an errant vehicle colliding with the proposed footway/cycleway structure, compromising its structural integrity.

RECOMMENDATION

The proposed layout should be able to accommodate any necessary VRS between the carriageway and footway/cycleway structure.

Design Organisation Response	Accepted
Burrows Graham:	VRS is shown on our latest drawing.
Steer:	-
Client Organisation Comments	
Agree with Design Organisations' Response.	

4.3.2 PROBLEM

Location: E – Existing footway along Wide Lane.

Summary: NMUs may be encouraged to continue along the old alignment.

The carriageway will be widened around the bend on Wide Lane, better accommodating bi-directional HGV movements. This will be achieved by diverting the footway onto a new bridge and utilising the existing footway width. However, the basic alignment illustrated on the drawings shows the gradual widening of the carriageway around the bend until it reaches its maximum width, retaining elements of the existing footway beyond the points where it will divert onto the new bridge. These residual lengths of footway may encourage NMUs to continue along the existing alignment, where they may be at greater risk of being struck by motor vehicles as the surface narrows.

RECOMMENDATION

The footway alignment should be fully diverted to the new bridge, with all elements beyond the diversion points expunged.

Design Organisation Response	Rejected
Burrows Graham:	The existing eastern footway over the bridge will be removed in its entirety along the section where the new pedestrian/cycle bridge runs, to divert all pedestrians/cyclists to use the new bridge.
Steer:	-
Client Organisation Comments	

Agree with Design Organisations' Response.

End of list of Problems identified and Recommendations offered in this Stage 1 Audit

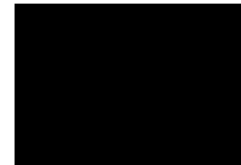
5.0 AUDIT STATEMENT

We certify that this Road Safety Audit has been carried out in accordance with GG 119.

AUDIT TEAM LEADER:

Name: Andy Haunton
BEng (Hons) MCIHT FSoRSA
Cert Comp RSA

Signed:



Date 24/09/2025

Position: Director

Organisation: Capital Road Safety

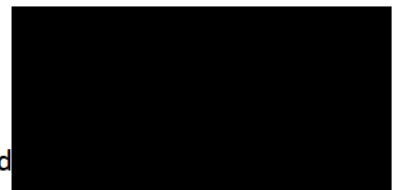
Address: Oakdene, Oak Road, Pebmarsh, Essex, CO9 2QD

Contact: enquiries@capitalroadsafety.com
www.capitalroadsafety.com

AUDIT TEAM MEMBERS:

Name: Jonathan Thompson
IEng FIHE MCIHT MSoRSA
Cert Comp RSA

Signed:



Date 24/09/2025

Position: Director

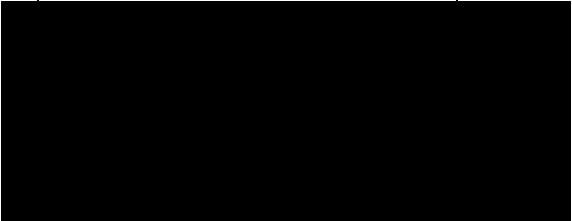
Organisation: Capital Road Safety

Address: Oakdene, Oak Road, Pebmarsh, Essex, CO9 2QD

Contact: enquiries@capitalroadsafety.com
www.capitalroadsafety.com

5.2 DESIGN TEAM STATEMENT

In accordance with GG 119, I certify that I have reviewed the items raised in this Stage 1 Road Safety Audit report. I have given due consideration to each issue raised and have stated my proposed course of action for each in this report. I seek the Client Organisations endorsement of my proposals.

Design Organisation		
Burrows Graham (BG)	Name:	Jack Williams
	Position:	Civils Director
	Signed:	
	Dated:	29 October 2025
Steer (Steer)	Name:	Carl Morrish
	Position:	Associate
	Signed:	
	Dated:	29 October 2025

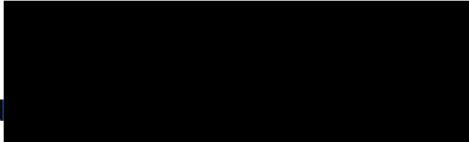
5.3 CLIENT ORGANISATION STATEMENT

I accept these proposals by the Design Organisation.

Name: Adam Connor

Position: Senior Development Manager

Organisation: Blocwork (Eastleigh) LLP

Signed: 

Dated: 08/12/25

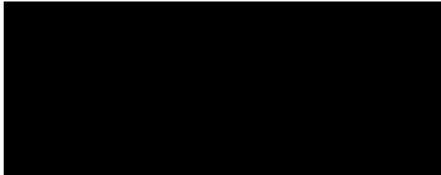
5.4 SECONDARY CLIENT ORGANISATION STATEMENT (where appropriate)

I accept these proposals by the Design Organisation.

Name: Steve Thurston

Position: AGS Group Head of Development

Organisation: AGS Airports

Signed: 

Dated: 8th December 2025

APPENDIX A

Documents forming the Audit Brief

DRAWING NUMBER	DRAWING TITLE
• 30228-BGL-XX-WLB-SK-C-00001 P03	Wide Lane Bridge Vehicle Tracking
• 30228-BGL-XX-XX-SK-C-00002 P03	Proposed Wide Lane Bridge Improvements
• 30228-BGL-XX-XX-SK-C-00003 P01	Proposed Wide Lane Bridge Cross Sections
• 30228-BGL-XX-XX-SK-C-00004 P01	Proposed Wide Lane Bridge Levels
• NQS-MSA-SI-XX-DR-A-2002-PL04	Illustrative Site Plan
• 24733101-STR-HGN-100-DR-D-00002 - REV P01	MITCHELL WAY AND WIDE LANE BRIDGE, EXISTING HIGHWAY LAYOUT, DRAWING 1 OF 2
• 24733101-STR-HGN-100-DR-D-00301 - REV P01	WIDE LANE ROUNDABOUT EXISTING JUNCTION LAYOUT
• 24733101-STR-HGN-100-DR-D-00302 - REV P01	WIDE LANE ROUNDABOUT, PROPOSED JUNCTION MITIGATION, CONCEPT DESIGN
• 24733101-STR-HGN-100-DR-D-00303 - REV P0	WIDE LANE ROUNDABOUT, PROPOSED JUNCTION MITIGATION, SWEEP PATHS
• 24733101-STR-HGN-100-DR-D-00501 - REV P0	SPITFIRE ROUNDABOUT, PROPOSED JUNCTION MITIGATION, CONCEPT DESIGN
• 24733101-STR-HGN-100-SK-D-00301 - REV P01	WIDE LANE BRIDGE, PEDESTRIAN / CYCLE BRIDGE, INDICATIVE ALIGNMENT
• 24733101-STR-HGN-100-SK-D-00302 - REV P01	WIDE LANE BRIDGE, PEDESTRIAN / CYCLE BRIDGE, HGV SWEEP PATHS

DOCUMENTS

- Navigator Quarter Stage 1 Road Safety Audit - Sept 2025_FINAL
- Turning Count Spreadsheet_v0.10 MASTER (2025 Update)
- PIA Data 01/05/2019 to 30/04/2024
- Stage 1 Road Safety Audit, Ref: 3117-RSA-01 A
- Response Report for 3117-RSA-01 A
- Navigator Quarter Modelling Technical Note_Post-Submission Version_2025 survey_FINAL
- Traffic Modelling 'Do Nothing' scenario

APPENDIX B

Problem Location Plan

