

**PROPOSED NEW DEVELOPMENT OF UP TO 475 RESIDENTIAL DWELLINGS
AND ASSOCIATED OPEN SPACE, ON LAND NORTH WEST OF GORING
RAILWAY STATION, GORING BY SEA WORTHING, WEST SUSSEX**

HIGHWAYS AND TRANSPORTATION

PROOF OF EVIDENCE OF

**Stephen Gee BA MSC CMILT
Principal Transport Planner**

West Sussex County Council

**Worthing Borough Council ref: AWDM/1264/20.
Planning Inspectorate ref: Appeal Reference: APP/M3835/W/21/3281813**

December 2021

1 Qualifications and Experience

1.1 Introduction

1.1.1 My name is Stephen Gee. I am a Principal Transport Planner at West Sussex County Council (WSSCC) and have been involved in development control and transport policy development within the public and private sectors for fifteen years. My evidence explains the local highway authority's consideration of the planning application, consideration of reason for refusal 3 which is no longer being pursued and addresses reason for refusal 4, which is as follows:

The Local Planning Authority does not consider that adequate information has been submitted to demonstrate that the mitigation proposed is acceptable in terms of its impact on the local highway network including (but not limited to) the Goring Crossroads and A259/Goring Way/Aldsworth Avenue junctions and Strategic Road Network. As such it has not been demonstrated that the development would not have a severe impact on the local highway network and therefore the proposal fails to comply with paragraph 109 of the National Planning Policy Framework 2019.

1.1.2 I hold a MSc in Transport Planning from Oxford Brookes and a BA (Hons) in Human Geography from the University of Portsmouth. I am a Chartered Member of the Institute of Logistics and Transport.

1.1.3 This evidence which has been prepared and provided in this Proof of Evidence is true and is given in accordance with the guidance of my professional institution and I confirm the opinions expressed are my true professional opinions.

1.2 Scheme involvement

1.2.1 I have been involved as the principal point of contact for WSCC Highways since November 2018. I provided pre-application advice to the Appellant and assessed the planning application on behalf of the Highway Authority. I have visited the site on several occasions, and I am familiar with the local highway network having assessed a wide range of proposals within Worthing and the adjoining district of Arun.

1.3 Scope and Structure

1.3.1 The structure of my evidence is as follows:

- a) Section 2 sets out relevant background information and identifies the policies of particular relevance to my evidence;
- b) Section 3 explains the local highway authority's consideration of the application;
- c) Section 4 provides detail on the work and information submitted following the refusal of permission;
- d) Section 5 sets out WCC's current position on the appeal scheme;
- e) Section 6 sets out my conclusions.

2 Background

2.1 Existing Site

2.1.1 The site is located to the western edge of the Worthing district, bounded by the A259 to the north and the south coast railway line to the south.

2.1.2 The site is currently accessed via a field gate onto the A259 Goring Street, A 40mph single carriageway road that runs north south, to the east of the existing site access is a junction between the A259 and The Strand. To the North East of the site is the Goring Crossroads Junction (A2700 Titnore Lane/A2032 Littlehampton Road/A259 Goring Way/A259 Littlehampton Road) to the south east of the site (south of the railway) is the A259/ Goring Way / Aldsworth Avenue junction.

2.1.3 There are limited east/west corridors within the vicinity of the site, due to the limitations of the sea to the south and South Down to the north. For East West journeys to avoid the network surrounding the site vehicles would either utilise Marine Drive 1.5km south of the site or access the A27 2.5km north of the site at an alternative junction to the A27/A280.

2.1.4 Footways are currently provided along the A259 Goring Street site frontage and connect into provision to Goring station to the south and via a Toucan Crossing and footbridge to Northbrook College.

2.1.5 Two pedestrian rights of way extend over the site with PROW 2121 providing a link adjacent to the railway line between Ferring Lane/Langbury Lane junction and Goring Street and PROW 2121_1 providing a north south link between PROW 2121 and Ferring Lane at the applications site western boundary (also the Arun/Worthing district boundary).

2.1.6 A shared use cycle route is provided along the site frontage and extends to the north of the site on the southern side of the A259 Littlehampton Road.

2.1.7 Bus stops are located approximately 250m and 350m to the south east of the site and provide access to service 10 (Worthing to Durrington) and service 9 (Arundel to Shoreham) to the south east and the south west of the site access to the frequent 700 service (Brighton to Chichester via Littlehampton) can be accessed.

2.1.8 The site is located in close proximity to Goring Rail station which benefits from regular services to Worthing, Brighton, Littlehampton, Chichester and beyond. The station currently provides 23 cycle parking spaces and step free access is achievable via the level crossing. No dedicated car parking for the station is provided however on street parking is utilised by rail users.

2.2 Scheme history

2.2.1 Pre-application discussions were undertaken with the applicant and its transport consultants in November 2018 and December 2019. A copy of these discussions are included in Appendix 1 and some relevant extracts below. I provided pre-application advice to the Appellant in respect of the appeal proposal.

2.2.2 The 2018 pre-application advice provided by myself on behalf of WSCC stated in respect of the A259/ Goring Crossroads junction that *“It should be noted that the Transport Study that has been produced to support the [emerging Worthing] local plan provides a high level scheme for the junction, A range of sensitivity tests have been provided which include/exclude the site (albeit at a lower number of dwellings). The application would be required to develop a scheme that can accommodate both the development and that to come forward through the local plan. I have also began the process of requesting the model files via Worthing District Council.”*

2.2.3 The 2019 pre application advice explained the following, *“The application should not rely on the Local Plan mitigation as being fully sufficient for a development on the same site which has these key differences in scale and in the consequences of the network change proposed at A259 Goring St / The Strand”.*

2.2.4 As such, it was made clear at the pre-application stage that the appeal proposal would not be able to rely on the mitigation identified in the emerging Worthing Local Plan because the impacts of the development at a lower level had already been considered and been viewed as not suitable to be mitigated by the proposed level of mitigation.

2.3 Policy and Guidance context

2.3.1 Worthing Core Strategy (2011 to 2026) and saved policies of the Worthing Local Plan 2023

2.3.1.1 The full policy context for the determination of the appeal is set out in the Proof of Evidence of Mr Peck on behalf of the Local Planning Authority. Below I have extracted the policies most relevant to my evidence in respect of reason for refusal 4.

2.3.1.2 Policy 19 of the Worthing Core Strategy states “The demands that users have for local public transport services and the impacts that car users have on the surrounding road network will be assessed for all new development. Developer contributions will be sought to implement any necessary measures to reduce local road congestion. Major new development will require the provision of a Transport Assessment, which will specify how it will affect the surrounding transport environment and how it can mitigate against any adverse effects. Where appropriate, new development will require the provision of a Travel Plan and/or a Transport Assessment, which will need to demonstrate what infrastructure is needed to promote the priorities set out in the Local Transport Plan and the Statement of Common Ground.”

2.3.2 The Emerging Worthing Local Plan

2.3.2.1 The current status of the emerging Worthing Local Plan is discussed in detail in the Proof of Evidence of Mr Peck. This part of my evidence focuses on those emerging policies that are of particular relevance to my evidence:

2.3.3 Policy DM15 of the emerging local plan states– “Sustainable Transport and Active Travel In order to manage the anticipated growth in demand for travel, development proposals which promote an improved and integrated transport network, with a re-balancing in favour of non-car modes as a means of access to jobs, homes, services and facilities, will be encouraged and supported. “

“A, Worthing Borough Council will promote and support development that prioritises active travel by walking, cycling, Non-Motorised User routes and public transport, and reduces the proportion of journeys made by car. This will help to achieve a rebalancing of transport in favour of sustainable modes by:

- i) ensuring that new development is located in sustainable locations with good access to schools, shops, jobs and other key services by walking, cycling and public transport in order to reduce the need to travel by car;
- ii) ensuring that the design and layout of new development prioritises the needs of pedestrians, cyclists and users of public transport over ease of access by the motorist;

iii) ensuring that new development minimises the need to travel and, where appropriate, incorporates measures to mitigate for any transport impacts which may arise from that development;

iv) requiring new development to provide for an appropriate level of cycle, car parking and electric vehicle space allocations that takes into consideration the impact of development upon on-street parking and accords with West Sussex County Council standards / guidance;

v) promoting the provision of, and participation in, car club schemes;

vi) requiring development which generates a significant demand for travel, and/or is likely to have other transport implications to:

be supported by a Transport Assessment / Transport Statement and sustainable Travel Plan (in line with West Sussex County Council guidance and the NPPF); contribute to improved sustainable transport infrastructure, including the provision of safe and reliable sustainable transport modes; and provide facilities and measures to support sustainable travel modes.

B, The local planning authority will work with West Sussex County Council and other relevant agencies to encourage and support measures that promote improved accessibility, create safer roads, reduce the environmental impact of traffic movements, enhance the pedestrian environment, or facilitate highway improvements. In particular, the local planning authority will:

i) support the expansion and improvement of public transport services;

ii) encourage improvements to existing rail services, new or enhanced connections or interchanges between bus and rail services, and improvements to the quality and quantity of car and cycle parking at railway stations;

iii) support the development of a network of high quality walking and cycling routes throughout the borough, including those identified in the Local Cycling and Walking Infrastructure Plan, including improved access across the A27, and railway line and better connectivity with the South Downs National Park and green infrastructure network; 11

iv) support the development of key arterial cycle routes at: National Cycle Network Route 2; George V Avenue and Sea Lane and A24 Worthing Town Centre to Washington; phase 1 Findon Valley to Findon Village as identified in the WSCC Local Transport Investment Programme

- v) ensure new development contributes to the mitigation of air pollution, particularly in Air Quality Management Areas. New development should be located and designed to incorporate facilities for electric vehicle charging points, thereby extending the current network;
- vi) pursue ways of managing the impact of HGVs and implement measures as appropriate;
- vii) support improvements to the road network including the A259 and A27 and, as identified in the Worthing Local Plan Transport Study, provide appropriate mitigation measures to address capacity issues at a number of key junctions and road safety impacts on identified road links.” Pages 152-153 Submission Draft Local Plan

2.3.4 Worthing Local Plan Transport Study

2.3.4.1 A scheme of 345 dwellings on the appeal site was tested as part of the Worthing Local Plan Transport Study, which was published in 2018. The study utilised a SATURN model to test the impact of a 345 dwelling development, alongside other proposed development, on the local highway network. Two models scenarios were run as part of this assessment. The first model run assumed that there was to be residential development on the appeal site. The second model run, which is identified as ‘sensitivity test 2 on page 87 of the study, did not include development on the appeal site or at the Goring-Ferring Gap.

2.3.4.2 At that stage, the study identified a high level intervention at the Goring Crossroads (carriageway widening on Titnore Lane to 2 Lanes, A2032 to 3 lanes and Goring Street to 3 lanes) that would accommodate the traffic growth associated with sensitivity test 2 (excluding the appeal site and Goring-Ferring Gap). No further mitigation was proposed as part of the study that could accommodate the appellant site and Goring – Ferring Gap site.

2.3.5 West Sussex Local Transport Plan 2011-2026

2.3.5.1 The WSCC Local Transport Plan 3 (‘LTP 3’) was published in February 2011 and sets out a long-term strategy and implementation plan for making improvements to the transport system throughout the county over the next 20 years. LTP 3 remains the most up to date local transport plan.

2.3.5.2 The plan identifies that “road congestion during peak periods affects many parts of the highway network throughout the borough, disrupting journey times and causing poor air quality. Particular problems are on main routes into the town centre (A259 and A24) and along the A27, where the lack of safe crossing points causes community severance. In addition, level crossings on the West Coastway railway line contribute to the levels of congestion, especially during peak periods, disrupting journey times and increasing traffic pollution” Page 66-67

2.3.5.3 “The strategy for Worthing aims to tackle the identified transport issues as and when funding becomes available. New development is also expected to contribute to the delivery of these aims. The Plan seeks to ensure that all new schemes and developments contribute and support in some way to the following: increasing use of sustainable modes of transport; improving network efficiency in order to reduce emissions and delays; improving safety for all road user,, reducing the impact of HGVs on the local community, in such a way that will support the local economy and reducing the need to travel” Page 67-68.

2.3.6 National Planning Policy Framework

2.3.6.1 The following paragraphs of the NPPF (2021) are of particular relevance to my evidence:

“Considering development proposals

104. Transport issues should be considered from the earliest stages of plan-making and development proposals, so that: a) the potential impacts of development on transport networks can be addressed; b) opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated; c) opportunities to promote walking, cycling and public transport use are identified and pursued; d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and e) patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places.

110. In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that:

a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location; b) safe and suitable access to the site can be achieved for all users; c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code 46; and d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.

111. Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.

112. Within this context, applications for development should: a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use; b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport; c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards; d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.

113. All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed.”

3 Application

3.1 The planning application (application ref: AWDM/1264/20), which is now the subject of this appeal seeks outline permission for a mixed use development comprising up to 475 dwellings along with associated access, internal roads and footpaths, car parking, public open space, landscaping, local centre (uses including A1, A2, A3, A4, A5, D1, D2, as proposed to be amended to use classes E, F and Sui Generis) with associated car parking, car parking for the adjacent railway station, undergrounding of overhead HV cables and other supporting infrastructure and utilities (Outline with all matters reserved). It is located on land known as 'Land North West of Goring Railway Station Goring Street Worthing West Sussex' (the appeal site). The planning application was accompanied by a Transport Assessment produced by the appellant's transport consultants.

3.1.1 The Transport Assessment provided details on the highway works required to create the site access including closure of the A259 Goring Street and minor Goring Street (leading to the station) Creation of a new 3 arm roundabout with the A259 and the modification of the A259/The strand junction to ban right turns manoeuvres

3.1.2 The appellant proposes mitigation at the Goring Crossroads in the form of the extension of two entry lanes from the north (Titnore Lane), and the provision of three lane entries on the eastern (A259 Littlehampton Road) and southern arms (A259 Goring Street), with the southern section of the circulatory to be widened to accommodate three lanes.

3.1.3 The appellant also proposes the widening of all entry arms at the A259 Goring Street/Goring Way/Aldsworth Avenue/Ardingly Drive roundabout

3.2 WSCC's Position on the Application

3.2.1 WSCC Highways provided a formal response to the appellant's planning application on 10th of September 2020. The response indicated WSCC Highways's view that the Appellant had provided insufficient information to assess the application and requested further information on several other issues detailed in section 3.2.3 of this Proof (A full copy of the comments can be found in Appendix B).

3.2.2 At the time of determination, WSCC Highways objected to the application for the following reasons:

“Due to the junction modelling being undertaken in isolation it has not been demonstrated that a safe and suitable access could be provided to accommodate the level of development. As such the formation and use of an additional access to the public highway at this point would add to the hazards of highway users to an unacceptable degree and interrupt the free flow of traffic.

Due to the lack of pedestrian and cycle linkages to the North and cycle linkages to the north west of the site, the proposal would not achieve safe and convenient access by a choice of means of travel nor encourage and enable and increase in environmentally sustainable means of travel such as walking and cycling and thereby minimise the impact of car journeys.

Insufficient information has been provided to assess the impacts of the offsite mitigation and as such it has not been demonstrated that the development would not result in a severe impact on the local highway network” WSCC consultation response

3.2.3 WSCC sought further information in respect of the following matters:

- a) Consideration of how cycling infrastructure meets the needs of Local Transport Note 1/20 and Worthing Local Cycling and Walking Improvement Program ;
- b) Provision of further pedestrian and cycle links to the A259 north of the site; as discussed during pre-app discussions;
- c) Provision of routes to public transport stops and improvements to the stops themselves including shelters, real time information and cycle parking;
- d) Confirmation of trip assignment methodology;
- e) Site access modelling parameters;
- f) Confirmation of trip generation / what has been modelled;
- g) Confirmation if reassigned The Strand flows have been added to the A259 Goring Crossroad assessments;
- h) Further modelling/mitigation of Goring Crossroads / Site Access/ A259 The Strand and

- i) Further modelling/mitigation of A259/Goring Way / Aldsworth Avenue including consideration to the need for Microsimulation modelling;
- j) Revised Travel Plan; and
- k) Consideration of further cycle parking in the vicinity of the station.

3.2.4 Additional information in the form of a draft Transport Assessment Addendum was subsequently provided on 10th February 2021 to WSCC. This information was not been formally submitted to the Local Planning Authority at this time, but had been partially considered by WSCC as highway authority at the time of the Local Planning Authority's determination of the application. The information included a plan to provide a pedestrian cycle link to the north west corner of the appeal site. This was sufficient to resolve the second objection identified by WSCC, outlined above. As such, this objection was resolved prior to the determination of the application.

3.2.5 Prior to determination the Appellant also commissioned a consultant to develop a VISSIM model to assess the interaction between the proposed access and the mitigation to be provided to the junctions to the north and south (Goring Crossroads and A259/ Goring Way / Aldsworth Avenue) in combination. Initial results were received within the Transport Assessment Addendum however, the base model had not been validated or agreed as fit for purpose by the date of the determination of the application.

3.2.6 Because of this, WSCC was not satisfied that this additional material was adequate to enable the proper assessment of the Appeal Scheme or to exclude the risk of severe residual impacts on the local highway network.

3.3 Reasons for refusal

3.3.1 The planning application was determined by Worthing Borough Council as Local Planning Authority on 11th March 2021. The officer report details that WSCC had objected to the application and had not had chance to fully consider the Transport Assessment Addendum prior to determination.

3.3.2 The three reasons for refusal ('RfR') that are associated with transport are set out below:

RfR3: *"The Local Planning Authority is not satisfied that adequate information has been submitted to demonstrate that the proposal is acceptable in terms of access and would not therefore give rise to increased hazards to highway users including the Strategic Road Network. The proposal therefore fails to comply with the relevant guidance of the National Planning Policy Framework which requires that the potential impacts of development on transport networks can be addressed in development proposals."*

RfR4: *"The Local Planning Authority does not consider that adequate information has been submitted to demonstrate that the mitigation proposed is acceptable in terms of its impact on the local highway network including (but not limited to) the Goring Crossroads and A259/Goring Way / Aldsworth Avenue junctions and Strategic Road Network. As such it has not been demonstrated that the development would not have a severe impact on the local highway network and therefore the proposal fails to comply with paragraph 109 of the National Planning Policy Framework 2019."*

RfR6: *"It has not been demonstrated to the satisfaction of the Local Planning Authority that the infrastructure requirements of the development can be adequately met in respect of the provision of affordable housing, public and open space, highways improvements and off site mitigation for the provision of nesting birds."*

3.3.3 It has been agreed between the Local Planning Authority and the Appellant that RfR6 can be dealt with by appropriately worded conditions and section 106 obligations. To the extent that the concerns in RfR6 overlap with those in RfR 4, they remain outstanding.

4 Post Refusal Work

4.1 Since the refusal of permission, the Appellant has provided certain additional information and a full review of the Transport Assessment Addendum has been undertaken.

4.1.1 The Transport Assessment Addendum provided sufficient information to address the majority of issues raised within the Highway Authorities formal response. In particular, the additional information explained that the queues associated with the Goring Crossroads junction and A259/ Goring Way / Aldsworth Avenue junction would not impact on the operation of the site access. As a result, WSCC is satisfied that the lack of information which underpinned RfR3 has been remedied. That RfR is no longer pursued.

4.1.2 The remaining outstanding matters that were not addressed within the Transport Assessment Addendum are:

1. Further modelling an/ or mitigation of Goring Crossroads / Site Access/ A259 The Strand;
2. Further modelling and/or mitigation of A259/Goring Way / Aldsworth Avenue

4.1.3 As explained below, there has since been further information submitted by the Appellant.

4.2 Further VISSIM Modelling

4.2.1 To address the outstanding matters identified at paragraph 4.1.3 above, the appellant developed its VISSIM model further.

4.2.2 The VISSIM model has been constructed by European Transportation Consultancy, and following review was confirmed as being acceptable for use by WSCC Highways consultants, WSP, in October 2021.

4.2.3 The original runs of the validated VISSIM model that had been provided within the Transport Assessment Addendum [Feb 2021] did not include all the proposed allocations within the Worthing Local Plan and as such additional runs were requested.

4.2.4 The scenarios presented within the VISSIM model are a 2033 'base year' ('without development') scenario with the existing highway network, and a 2033 'with development' scenario, which includes the Appellant's proposed mitigation.

4.2.5 It is acknowledged that the VISSIM modelled flows provide a robust scenario in terms of future year development flows and no wider reassignment to alternative routes can take place as vehicles follow a fixed route in the model. It is considered due to the limited routes available for vehicles to travel East West there is limited scope of vehicles to reassign to other routes outside the assessed network (A27 or Marine Drive).

4.2.6 Final model runs were provided by the appellant on the 14 December 2021. These are now considered to provide sufficient information to enable WSCC Highways to consider the impacts of the appeal proposal and the suitability of the mitigation offered.

4.2.7 The results of the Appellant's modelling is shown within appendix 3. In summary, it is my view that the appellant's modelling shows in both scenarios extensive queueing and delays within the modelled network, as I explain in section 5 of my Proof.

4.3 Sustainable Transport Infrastructure

4.3.1 Through discussion with the Appellant, a further suggested approach to offset a degree of highways impact was considered. This solution was through the provision of additional sustainable transport infrastructure.

4.3.2 The Appellant has attempted to do so through the development of a scheme to extend a cycle route that links the site to the Northbrook College, replacing the existing overbridge with an at grade Toucan Crossing as shown on drawing titled 'Proposed Pedestrian and Cycle Enhancements' and numbered 18122/006

4.3.3 These improved links for non-motorised users would provide improved travel options for students and staff of the college and potentially reduce vehicle trips. However, I am of the view that this would not reduce the number of vehicle movements sufficiently to suitably mitigate the severe impact of the proposed development (as explained at section 5 below).

4.3.4 As at the date of writing, road safety audits and the accompanying designers responses are in the process of being agreed.

5 Current Position

5.1 Reason for Refusal 3

5.1.1 As noted above, the Appellant's VISSIM modelling demonstrates that the site access junction would work within capacity.

5.1.2 It is noted that the average and maximum queues in the AM peak on The Strand would be increased as a result of the network changes with vehicles needing to travel south to perform a U turn at the new site access roundabout before heading north however alternative routes options exist and it could be expected these queues would dissipate across the wider network.

5.1.3 The site access shows an improved performance within the VISSIM model compared to that of the standalone ARCADY model contained within the Transport Assessment.

5.1.4 As such, given this further information being provided, reason for refusal 3 is no longer pursued by WSCC.

5.2 Reason for Refusal 4

5.2.1 However, WSCC maintain its original position in respect of RfR4, for the following reasons.

5.2.2 The Appellant's VISSIM model has been utilised to test the operation of the three key junctions in combination, namely Goring Crossroads, Site Access and A259/ Goring Way / Aldsworth Avenue. The modelling provides a 2033 'future year base scenario' that includes the proposed Worthing Local Plan developments, and a 2033' mitigation scenario' that includes the impacts of the proposed application site, in combination with the proposed mitigation.

5.3 RfR4 - Goring Crossroads

5.3.1 The results of the ARCADY Model 2033 scenario with development and mitigation is shown below in table 1. The table shows a Ratio to Flow Capacity (RFC) where a figure of 0.85 indicates that the arm of the junction is operating close to capacity and at 1.00 would be over theoretical capacity. Queues and average delay. The results show the junction operating with all arms of the junction with a RFC over 1.00 significant queues and delays on all arms that WSCC would consider severe.

Arm	AM peak (8:00 - 9:00)			PM Peak (17:00 - 18:00)		
	RFC	Queue (Veh)	Delay (S)	RFC	Queue (Veh)	Delay (S)
A2700 Titnore Lane	1.5	108	1355.86	1.42	125.2	898.52
A2032 Littlehampton Road	1.29	167.7	629.85	1.28	194.2	601.06
A259 Goring Street	1.27	240.2	584.62	1.29	240.2	631.6
A259 Littlehampton Road	1.27	245.6	583.62	1.13	118.7	225.89
Junction Delay (s)	667.5			520.83		

Table 1 Appellants TA 2033 Base+ Development

5.3.2 It is noted that the Appellant has not provided a scenario that includes the impact of the proposed improvements at the Goring Crossroads within the VISSIM modelling as identified in the Worthing Local Plan Transport Study 2018 as suitable to accommodate the level of growth identified within the emerging Local Plan. This gives the skewed view on the effectiveness of the appellants proposed mitigation at the junction against a do nothing scenario of the existing junction arrangement

5.3.3 The Worthing Local Plan Transport Study modelling is shown below in Table 2 and details in sensitivity test 2 a level of queues (AM - 127 vehicles and PM – 85vehicles) and delays (AM -191 seconds and PM 127 seconds) on the A259 Littlehampton Road that has been considered acceptable at the junction within comments supplied by WSCC on the Local Plan.

Approach Arm	Do Minimum			WLP Sites (mitigation)			Sensitivity 2 (mitigation)		
	RFC	MMQ (pcu)	Delay (s)	RFC	MMQ (pcu)	Delay (s)	RFC	MMQ (pcu)	Delay (s)
A - A2032 Littlehampton Road E	0.58	1.5	5	0.51	1	4	0.52	1	4
B - Goring Street	0.80	4	15	0.67	2	6	0.57	1	5
C - A259 Littlehampton Road W	1.03	49	82	1.20	190	336	1.12	127	191
D - Titnore Lane	1.65	133	1024	0.86	6	27	0.85	5	26

Table 7-4: A259 / A2032 / Goring Street roundabout operational assessment results (PM Peak)

Approach Arm	Do Minimum			WLP Sites (mitigation)			Sensitivity 2 (mitigation)		
	RFC	MMQ (pcu)	Delay (s)	RFC	MMQ (pcu)	Delay (s)	RFC	MMQ (pcu)	Delay (s)
A - A2032 Littlehampton Road E	0.78	4	11	0.64	2	5	0.62	2	5
B - Goring Street	0.95	14	47	0.71	2	6	0.65	2	5
C - A259 Littlehampton Road W	0.98	22	44	1.12	113	181	1.08	85	137
D - Titnore Lane	1.34	81	455	0.81	4	19	0.73	3	13

Table 2 Worthing Local Plan modelling extract

5.3.4 The mitigation proposed to accommodate the proposed level of growth within the local plan (carriageway widening on Titnore Lane to 2 Lanes, A2032 to 3 lanes and Goring Street to 3 lanes) is similar in nature to that proposed by the appellant to accommodate both the local plan allocations and the appeal site. Should the development be permitted WSCC would require the opportunity to revisit comments made on the suitability of the proposed mitigation within the emerging Worthing local plan.

2033 AM PEAK QUEUE COMPARISON					
NO.	ARM	BASE		WITH MITIGATION	
		N AVG [veh]	N MAX [veh]	N AVG [veh]	N MAX [veh]
1	A259 Littlehampton Road	193	362	229	425
2	Titnore Lane	32	54	2	10
3	A2032 Littlehampton Road	67	147	60	128
4	A259 Goring Street	2	19	0	13

2033 PM PEAK QUEUE COMPARISON					
NO.	ARM	BASE		WITH MITIGATION	
		N AVG [veh]	N MAX [veh]	N AVG [veh]	N MAX [veh]
1	A259 Littlehampton Road	88	163	143	280
2	Titnore Lane	41	77	9	27
3	A2032 Littlehampton Road	61	109	7	28
4	A259 Goring Street	22	35	0	6

Table 3 Appellants VISSIM model

5.3.5 The appellant’s VISSIM results are shown in Table 3. The model utilises a base year that includes the local plan developments impact on the local road network without any mitigation, this is considered to be an unrealistic scenario.

5.3.6 Table 2 identifies that the ‘do minimum’ scenario would result in extensive delays and a severe impact on a number of arms of the Goring Crossroads and as such as each application comes forward it is realistic to expect that each site would be expected to mitigate its own impacts. As such it considered that sensitivity test 2 of the local plan transport study provides a suitable baseline to consider the impacts of the development against.

5.3.7 It is acknowledged that comparing the outputs of Saturn model and VISSIM model will not result in directly comparable outputs and results due to the operation of each model and ability of vehicles to reroute within the Saturn model however both modelling packages provide an average/mean max queue output that is considered below.

	Local Plan Transport Study Scenario 2 (Mean Max Queue)	VISSIM with mitigation (Average)	Difference
AM Peak A259 Littlehampton Road	127	229	+102
PM Peak A259 Littlehampton Road	85	143	+58

Table 4 Comparison of average queues

5.3.8 Table 4 shows that the proposed development, including the Appellant's proposed mitigation, would increase queues on the A259 Littlehampton Road by 102 vehicles in the AM peak and 58 in the PM peak above the baseline provided by 'sensitivity test 2'. The maximum queue recorded within the VISSIM would be 432 vehicles in the AM and 283 in the PM peak. Assuming an equal distribution across lanes, this would extend back approximately 1.3km¹ (from the junction to the built up area north of Langbury Lane).

5.3.9 On all other arms of the junction the proposed development, including the proposed mitigation, would adequately mitigate the effects of the development as against the base year provided by the Appellant. However, when compared to the Local Plan modelling, the proposed development (including mitigation) would result in additional queues on the A2032 Littlehampton Road.

5.3.10 Utilising the VISSIM base year average, journey times between the A259 Littlehampton and the A259 Goring Way (East) would increase in the AM peak from 933 seconds to 1087 seconds an increase of 154 seconds and in the PM peak from 348 seconds to 612 seconds an increase of 264 seconds.

5.3.11 It is the view of the local highway authority that the increase in average queues on an arm that is already predicted to show a high level of queuing vehicles, of 107 vehicles in the AM peak and 64 in the PM peak and the anticipated additional delays for journeys utilising the A259 Littlehampton Road would constitute a severe impact in line with NPPF para 111. The delays in combination with approaches to the A259/ Goring Way / Aldsworth Avenue would significantly affect journeys on the key West to East corridors in the peak periods and would not be sufficiently offset by the benefit of the additional sustainable transport offered by the applicant linking the site to Northbrook College.

5.3.12 The appellant has also not provided any information to assess on the safety impact of additional queueing vehicles across uncontrolled pedestrian crossings (Highdown Road, Ferring Lane and side roads/accesses (Highdown Road, Highdown Industrial Park, Highdown Vineyard and Lansdown Nursery)

¹ Based on 6m per vehicle

5.4 RfR 4 - A259/ Goring Way / Aldsworth Avenue junction

5.4.1 The ARCADY Model 2033 with the proposed development and proposed mitigation is shown below in Table 5. The table shows a Ratio to Flow Capacity (RFC) where a figure of 0.85 indicates that the arm of the junction is operating close to capacity and at 1.00 would be over theoretical capacity. Queues and average delay. The results show arms of the junction operating with a RFC over 1.00 significant queues and delays on all arms that WSCC would consider severe.

Arm	AM peak (8:00 - 9:00)			PM Peak (17:00 - 18:00)		
	RFC	Queue (Veh)	Delay (S)	RFC	Queue (Veh)	Delay (S)
A259 (North)	1.05	53.8	109.1	0.91	8.8	22.85
Ardingly Drive	1.2	13.7	407.81	1.08	10.8	267.91
A259 Goring Street (East)	1.29	131.5	615.36	1.37	187.8	777.46
Aldsworth Avenue	0.73	2.5	30.26	0.71	2.3	27.58
Goring Way (West)	0.97	13.2	79.33	0.98	12.9	99.54
Junction Delay (s)	240.43			278.92		

Table 5 Appellants TA with Mitigation ARCADY results

5.4.2 The VISSIM model results are shown below in Table 6 and show that the proposed development would increase average and maximum queues on Goring Way West to 54 and 100 vehicles in the AM peak and significant queues would remain on the A259 Goring Way East of 84/171 in the PM peak.

2033 AM PEAK QUEUE COMPARISON					
NO.	ARM	BASE		WITH MITIGATION	
		N AVG [veh]	N MAX [veh]	N AVG [veh]	N MAX [veh]
8	Goring Way (W)	33	67	54	100
9	Aldsworth Avenue	7	22	6	23
10	A259 Goring Way (E)	12	50	9	45
11	A259 Goring Street N	57	75	47	66
12	Ardingly Drive	1	9	1	11

2033 PM PEAK QUEUE COMPARISON					
NO.	ARM	BASE		WITH MITIGATION	
		N AVG [veh]	N MAX [veh]	N AVG [veh]	N MAX [veh]
8	Goring Way (W)	35	79	7	28
9	Aldsworth Avenue	15	33	14	30
10	A259 Goring Way (E)	82	172	84	171
11	A259 Goring Street N	1	26	3	37
12	Ardingly Drive	0	4	0	4

Table 6 Appellants VISSIM model outputs

5.4.3 The A259 Goring Way (east) maximum queues would extend approximately 1km² impacting the junctions at a number of side roads (Goring Way, Jupp's Lane Compton Avenue, Mulberry Lane and Goring Road). And at Goring Way (west) the queues would extend 600m³ impacting a number of side roads (Goring Street, Rudgwick Avenue and Gyldne Avenue). No information has been provided on the safety impact of the queues on these junctions.

5.4.4 It is my view that the increase in average and maximum queues would constitute a severe impact in line with NPPF para 111 The delays in combination with approaches to the Goring Crossroads would significantly affect journeys on the key West to East corridors in the peak periods and would not be offset by the benefit of the additional sustainable transport offered by the applicant linking the site to Northbrook College.

² Based on 6m per vehicle

³ Based on 6m per vehicle

5.5 RfR 4 - Strategic Road Network

5.5.1 At the time of the determination of the planning application, National Highways (then, Highways England) objected to the proposed development and sought that wording was added to RfR4 to include the impact on the strategic road network. It is understood that National Highways withdrew their objection to the proposed development on 16 December 2021 on a conditional basis. National Highways are seeking a condition requiring the provision of the tested mitigation prior to any occupation of the site.

5.6 Reason for Refusal 6

5.6.1 As noted above, I understand that it has been agreed between the local planning authority and the Appellant that this reason for refusal can be overcome by the imposition of planning conditions and/or obligations. To date WSCC has not been provided with any heads of terms or a draft section 106 as to what would be secured should the development be approved. I understand that this will be provided and discussed during the course of the Inquiry.

5.6.2 Without prejudice to my position that the appeal should be refused on the basis of the impact of the proposal on the local highways network, should the inspector be minded to allow the appeal it is recommended the following are secured via s106/condition:

- I. Site Access inc Station Car park provision as shown on drawing titled Proposed Access Strategy and Numbered 18122-001 Rev C;
- II. Improvements to Goring Crossroads as shown drawing titled Proposed Northern Roundabout Mitigation Measures and numbered 18122-002 Rev D;
- III. Improvements to Goring Crossroads as shown on drawing titled Proposed Pedestrian and Cycle Enhancements and numbered 18122/006;
- IV. Improvements to the A259 Roundabout with Goring Way and Aldsworth Avenue as shown on drawing titled Proposed Southern Roundabout Mitigation Measures and numbered 18122-003 Rev B;
- V. Improvements to PT infrastructure (Shelter and seating) at Goring Street bus stops;
- VI. Provision of £30,000 towards the provision of real time passenger information at Goring Street and Ferring, War Memorial bus stops ;
- VII. Inclusion of a ped/cycle link to the north west of the site as shown on drawing ref 18122/SK11;

- VIII. Travel Plan;
- IX. Travel Plan auditing Fee of £5,000;
- X. improvements to A280/A27/Titnore Lane roundabout as shown on i-Transport's drawing number "ITB9105-GA-024 – Proposed Improvement Scheme to A280/A27/Titnore Lane Roundabout;
- XI. Improvements to the A280/Long Furlong Junction (drawing number to be confirmed in conjunction with National Highways response);
- XII. Levels of Residential Parking;
- XIII. Levels of Electric Vehicle Parking;
- XIV. Levels of Cycle Parking;
- XV. Improvements to the surfacing of PROW 2121 and 2121_1; and
- XVI. Construction Management Plan.

6 Conclusion

6.1 WSCC Highways no longer pursue Reason for Refusal 3. However, I am of the view that there remains a clear reason for refusal in respect of reason for refusal 4. Due to the impact of the development in increase queues and delays at the Goring Crossroads and A259/Goring Way / Aldsworth Avenue junction For these reasons, granting planning permission for the proposed development would be contrary to paragraph 111 of the NPPF.

Appendices

1. Appendix A – Pre-Application Advice dated 15/11/2018 and 06/01/2020
2. WSCC Highways Formal Comments Dated 20/9/2020
3. Appellants VISSIM Model Comments received on 14/20/2021