M3 Junction 9 Improvement

Scheme Number: TR010055

7.1 Case for the Scheme (Rev 1) Tracked

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7.1 CASE FOR THE SCHEME

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Rev 0	November 2022	Application Submission
Rev 1	6 June 2023	Deadline 1 Submission

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Executive summary

This Case for the Scheme relates to an application for a Development Consent Order (DCO) for a Nationally Significant Infrastructure Project (NSIP). The application is being made by National Highways (the Applicant) to the Secretary of State for Transport (the SoS) via the Planning Inspectorate under Section 37 of the Planning Act 2008. If made, the DCO would grant consent for the M3 Junction 9 Improvement Scheme (the Scheme).

The Scheme is an Environmental Impact Assessment (EIA) development; therefore an **Environmental Statement (ES) (Document Reference 6.1)** has been submitted as part of this DCO application.

Scheme development

A wide ranging and detailed optioneering process, involving extensive study and consultation, has considered reasonable alternatives.

In 2013, a Feasibility Study was undertaken to examine the strategic case and provide an estimation of the expected performance of potential improvement schemes to M3 Junction 9. The 2013 Feasibility Study proposed and assessed nine ‘packages’ and identified that Package 3 - direct free-flow links from the M3 to the A34 and remodelling Junction 9 – would most likely be the best option to relieve congestion whilst reducing land-take.

Package 3 was developed into nine options at the option identification stage. Following this, during the early part of the option identification stage, five of these options (Options 11, 14, 16A, 16B and 18) were shortlisted for further consideration.

From 9 January to 20 February 2018, non-statutory consultation was undertaken which presented the preferred option (Option 14) (the 2018 non-statutory consultation). During the consultation, the rejected options and environmental design considerations were also presented.

In July 2018, Option 14, which proposed free-flowing road links between the M3 and the A34 both northbound and southbound, as well as upgrading the current footpath through Junction 9 to become part of the National Cycle Network was announced as the preferred route.

The Scheme has been developed further since the preferred route announcement, taking on board feedback from non-statutory and statutory engagement that followed in order to develop the design of the Scheme that is now set out within the DCO application. This is considered to the best option to meet the Scheme’s defined objectives, and the delivery of a comprehensive set of benefits.

The Scheme

The improvements proposed as part of the Scheme both maintain existing connectivity on the road network, whilst providing enhanced capacity, simplified routing and

improved facilities for walking, cycling and horse-riding routes and landscaping enhancements. The Scheme would provide new free flow links between the M3 and A34, as well as a dedicated new A33 alignment. The Scheme elements are as follows:

- Widening of the M3 from a dual two-lane motorway (two-lane motorway with hard shoulders) to a four-lane motorway (with hard shoulders) between the proposed M3 Junction 9 gyratory north and south slip roads.
- A new smaller grade separated gyratory roundabout arrangement within the footprint of the existing roundabout, incorporating new connections over the M3 with improved walking, cycling and horse-riding routes.
- Connector roads from and to the new gyratory roundabout.
- Improved slip roads to/from the M3.
- New structures (in the form of gyratory bridges, underpasses, retaining walls, subway and a new cycle and footbridge over the River Itchen).
- A new surface water runoff system with associated drainage and infiltration features.
- New signage and gantries.
- Utility diversions.
- New lighting (subways, ,underpasses and gantries).
- Modifications to topography through cuttings and false cuttings as well as re-profiling of existing landform.
- New walking, cycling and horse-riding provision.
- Creation of new areas of chalk grassland, woodland, scrub planting and species rich grassland.

The Application Boundary covers an area of approximately 109 hectares (ha). This includes the proposed land required for gantries, signage, temporary construction compound areas, areas for environmental mitigation, areas for drainage requirements (some of which would be temporary) and traffic management.

The Scheme includes a package of environmental mitigation and enhancement measures to reduce the impacts from the Scheme to the environment where possible. Consideration has also been given to the enhancement of the South Downs National Park where reasonably practicable.

Bridleways, footpaths and cycleways have been designed to allow all gradients to be less than 1:20 to comply with Department for Transport's (DfT) inclusive mobility impaired users. The walking, cycling and horse-riding routes are designed for cyclists, and therefore as all horizontal radii are suited for cyclists, they are also considered

acceptable for mobility impaired users. The range of opportunities and barriers to all forms of users have been given due consideration in the design of the Scheme.

A number of new structures are required to be both constructed and demolished to facilitate the Scheme. Some of the main structures are as follows:

- The existing bridges at the M3 Junction 9 gyratory roundabout are proposed to be demolished and replaced by the two new bridge structures carrying the new gyratory
- A new underpass is proposed to carry the A34 southbound under the new A33 link road and the existing M3. The A34 northbound underpass would carry the new A34 northbound over the new A33 link
- The existing subways (Winnall Subway East and Winnall Subway West) located under the existing gyratory are proposed to be demolished to facilitate the construction of the reconfigured roundabout. New subways are proposed along the proposed walking, cycling and horse-riding route
- A new footbridge over the River Itchen is proposed between the existing Itchen Bridge, (which carries the A34 northbound carriageway), and the existing Kings Worthy Bridge which will carry the A33 north and southbound carriageways and the A34 southbound carriageway, respectively.

The walking, cycling and horse-riding facilities around and within the Scheme are to be upgraded. This includes an improvement to the National Cycle Network (NCN) Route 23. An additional footpath, cyclepath and bridleway is proposed on the eastern side of the Scheme to link Easton Lane with Long Walk. Such a route would provide a circular leisure path for those using the South Downs National Park with a link to the other paths around Long Walk with their links to local villages. A new combined footpath and cyclepath for the western side of the Scheme is proposed to link the A33 / B3047 Junction to Winnall Industrial Estate situated on Easton Lane.

A detailed description of the Scheme is provided in **Chapter 1 (Introduction)** and **Chapter 2 (The Scheme and Its Surroundings)** of the **ES (Document Reference 6.1)**.

The need for the Scheme

The M3 Junction 9 is a key transport interchange which connects South Hampshire's vital deep water ports of Southampton and Portsmouth and the wider region, facilitating intensive movements of freight cargo and important tourism traffic. It is a crucial confluence between the region and London via the M3 and the Midlands/North via the A34 (which also links to the principal east–west A303 corridor) and is a primary access point to the city of Winchester.

M3 Junction 9 currently experiences a high level of congestion and delay with poor journey time reliability. The significant volumes of traffic act as a bottleneck on the local highway network, causing significant delays throughout the day. Northbound and southbound movements between the M3 and the A34 are particularly intensive with

downstream queues forming on the northbound off-slip of the M3 partially caused by the high proportion of HGVs travelling between the M27, M3 and A34 and often backing onto the main carriageway of the M3, resulting in significant disruption and safety concerns during peak periods.

Projected development of the region's ports is anticipated to substantially increase heavy goods vehicle (HGV) movements and as demand for freight grows, existing congestion on the M3 and A34 is likely to worsen.

Safety on the existing route is also currently an issue and a high accident rate has been an unfortunate effect. During the period 2015-2019 there were 80 collisions with 106 casualties.

There is a need case for the Scheme in order to address the significant existing congestion and road safety issues at the A34/M3 interchange. While it is recognised that great weight is attached to conserving the South Downs National Park, it is also considered that addressing the existing road safety issue and removing an impediment to strategic economic growth is in the public interest.

The Scheme aims to increase connectivity at M3 Junction 9, whilst increasing capacity, enhancing journey time reliability, supporting development in line with Local Plans, simplifying routing and improving facilities for walking, cycling and horse-riding.

The objectives of the Scheme are:

- To reduce delays at M3 Junction 9 on all links M3, A33 and A34.
- Smooth the flow of traffic by improving journey time reliability and reducing delays (time lost per vehicle per mile) at M3 Junction 9 and the exit and entry roads for the A33 and A34.
- Improve the safety for all road users and reduce the annual collision frequency and severity ratio on the M3 Junction 9.
- Support economic growth and ensure the junction can accommodate additional traffic.
- Improvements for walkers and cyclists including connecting the National Cycle Network Route 23 which is severed by the current junction layout.

Transport case for the Scheme

The Scheme is included within the Department for Transport's (DfT) *Road Investment Strategy 2015/16 – 2019/20* (RIS1) and *Road Investment Strategy 2 2020 – 2025* (2020) (RIS2). RIS2 sets out the road investment strategy, including the list of schemes that are to be developed by the Applicant in the period 2020-2025.

The Hampshire Local Transport Plan (2011) (LTP) identifies the need to explore scope for affordable and environmentally acceptable solutions to address congestion at Junction 9 of the M3.

The modelling assessment shows journey time improvements for some of the most congested places at the junction as a result of the Scheme.

Over the 60-year assessment period there will be improvements in safety as a result of the Scheme, by a reduction in Killed or Seriously Injured (KSI) accidents.

The use of existing walking, cycling and horse-riding routes near M3 Junction 9 and potential opportunities have been assessed and a list of improvements to existing facilities are being brought forward as part of the Scheme. This includes a new footbridge over the River Itchen, new subways under Junction 9, a new bridleway to the east to link Easton Lane and Long Walk and a new shared path (unsegregated combined footpath, cycle track and footway) to the west to link the A33 / B3047 junction to Byway R23.

Economic case overview

The Scheme is forecast to generate economic benefits. The greatest benefit relates to user travel time savings, amounting to £155.5M, which are predominantly due to the provision of the free-flow movement between the A34 and the M3. With consideration of user benefits plus the effects of delays during construction, accident benefits, indirect taxation benefits, and monetised environmental impacts, the total present value of benefits is £~~161.7M~~152.3M. The scheme is also forecast to generate wider economic benefits of £41.8M.

The Scheme is predicted to deliver a Net Present Value (NPV) of £~~49.0M~~39.5M, resulting in an Initial Benefit Cost Ratio (BCR) of ~~1.44~~1.35. Inclusion of wider economic impacts gives an adjusted BCR of ~~1.81~~1.72 which represents 'Medium' Value for Money.

Conformity with Planning Policy and Transport Plans

National policy highlights a critical need for improvement of the national networks and to provide a transport network that is capable of stimulating and supporting economic growth.

The Scheme complies with national policy in that it will create capacity to cope with peak demand and growth on the strategic road network (SRN) at this location, ensuring a free flowing, safe, reliable and resilient network that will stimulate economic activity. The Scheme therefore helps to address the compelling need for development of the national networks identified in the National Planning Statement for National Networks (NPS NN).

RIS1 identified improvements to M3 Junction 9 as one of the key investments in the SRN for the London and South East region and RIS2 supports the upgrade of M3 Junction 9 to allow free movement from the A34 to the M3. The Scheme is also identified in the *Highways England Delivery Plan 2020-2025* and the *National Highways Delivery Plan 2022-2023*.

The Scheme supports the delivery of National Planning Policy Framework (NPPF) core land-use planning principles, by providing improved infrastructure to support economic

growth within the wider region through delivering capacity enhancements to the strategic road network.

The Enterprise M3 *A Strategic Economic Plan for the Enterprise M3 Area 2018-2030* suggests that efficient functioning of this SRN is a priority for businesses, communities and visitors to the area, as well as the UK's economy. The Scheme recognises the crucial role the M3 plays in supporting wider economic prosperity and competitiveness, as well as prioritising the efficient functioning of the network, through the development and delivery of works for increasing capacity, enhancing journey time reliability and supporting development in line with Local Plans.

The Scheme is specifically mentioned in the Solent Local Enterprise Partnership's *Solent Strategic Transport Investment Plan* (2016) and responds to the need to improve economic performance by generating economic benefits relating to travel time savings due to the provision of the free-flow movement between the A34 and the M3.

The Scheme is considered to be in accordance with local planning and transport policy.

Development proposed within nationally designated areas

The Scheme design incorporates a range of design features and environmental mitigation that have been developed to reduce adverse environmental effects in relation to the South Downs National Park.

The Applicant considers that there are exceptional circumstances for the grant of consent for the Scheme within the South Downs National Park; there are compelling reasons for the Scheme and the benefits of the Scheme significantly outweigh its costs; and the Scheme will be carried out to high environmental standards and provide environmental enhancements.

Biodiversity and ecological conservation

The Scheme is considered to comply with the key NPS NN policy tests in relation to biodiversity and ecological conservation, through mitigation, compensation and enhancement measures. Measures have been designed into the Scheme to enhance other aspects of the environment. These go further than providing mitigation for the effects of the Scheme and would actually enhance the environment beyond the existing baseline and deliver a net gain in biodiversity.

Conclusions

This Case for the Scheme sets out the policy context against which the Scheme should be assessed. It demonstrates a clear need for the Scheme which is grounded in national, sub-regional and local planning and transport policy.

The NPS NN, *National Infrastructure Delivery Plan* 2016-2021 (NIDP) and the RIS set out a strong base for delivery of national networks that meet the country's long-term network needs, by reducing delays, improving journey time reliability, improving safety and supporting economic growth.

The Scheme will deliver extensive benefits including a reduction in congestion and delays; improving journey times; economic benefits; safety improvements; improvements to visual amenity and landscape character over the long-term; wildlife and green infrastructure enhancements; enhanced pollution and run-off control; and enhanced provision for pedestrians, cyclists and horse riders.

The Scheme incorporates a range of design features and environmental mitigation that have been developed to minimise potential negative environmental effects as far as possible. Measures have also been designed into the Scheme which go further than providing mitigation for the effects of the Scheme and would actually enhance the environment beyond the existing baseline.

This Case for the Scheme demonstrates that any unavoidable adverse environmental effects which may remain following mitigation are outweighed by the public benefit that will accrue as a result of the Scheme and the Government's commitment to upgrading the SRN.

The Scheme complies with the NPS NN and has had regard to all other relevant and important matters which need to be taken into consideration, including the adopted development plan for the local area and the NPPF.

1 Introduction

1.1 Purpose of this document

1.1.1 This Case for the Scheme (this document) relates to an application for a Development Consent Order (DCO) made by National Highways (the Applicant) to the Secretary of State for Transport (the SoS) via the Planning Inspectorate under Section 37 of the Planning Act 2008. If made, the DCO would grant consent for the M3 Junction 9 Improvement Scheme (the Scheme).

1.1.2 Under Section 104(2) of the Planning Act 2008, when deciding an application for a DCO, the SoS must (among other matters) have regard to *"any relevant national policy statement".* The relevant national policy statement (NPS) for the Scheme is the *National Policy Statement for National Networks* (2014) (NPS NN) which sets out the need for, and Government's policies to deliver, development of nationally significant infrastructure projects (NSIPs) on the national road and rail networks in England.

1.1.3 Under Section 104(3) of the Planning Act 2008, the SoS must decide the DCO application in accordance with any relevant NPS, subject to the exceptions set out in Section 104 (4) to (8). The Scheme's compliance with the NPS NN is assessed in the **NPS NN Accordance Table (Document Reference 7.2)**.

1.1.4 This document is therefore intended to set out the need for the Scheme as well as supplement the assessment of the Scheme's compliance with the NPS NN and also identify 'any other matters' that are considered 'important and relevant' to the determination of the DCO application, in accordance with Section 104(2) of the Planning Act 2008.

1.1.5 Whilst submission of a Case for the Scheme is not a mandatory requirement for a DCO application under the Planning Act 2008, this document has been prepared in order to summarise how the Scheme complies with government policy and the relevant planning policy context and provides details of the transport and economic analysis upon which the need for the Scheme is based.

1.2 The Applicant

1.2.1 National Highways is the Applicant and the strategic highways company as defined in the Infrastructure Act 2015, and is charged with operating, maintaining and improving England's motorways and major A-roads on behalf of the Department for Transport (DfT).

1.2.2 The Applicant's Road network totals over 4,300 miles (6,920 kilometres). Whilst this represents only 2% of all roads in England by length, these roads carry a third of all traffic by mileage and two-thirds of all heavy goods traffic.

1.2.3 In summer 2021, Highways England rebranded to National Highways, therefore all references to the Applicant prior to summer 2021 will be to Highways England and all references post summer 2021 will be to National Highways.

1.3 Requirement for a Development Consent Order

1.3.1 The Scheme is an NSIP within Sections 14(1)(h) and 22(1)(b) of the Planning Act 2008. Under Section 22, an NSIP must fall within one of the three categories specified, which are expressly stated to be alternatives. This Scheme is the alteration of a highway within the meaning of Section 22(1)(b). The alteration is to the M3 motorway by the creation of a new Junction 9, which will form part of the motorway, and will include related highway works necessary to allow the M3 Junction 9 to be integrated into the surrounding trunk and classified road network.

1.3.2 The Scheme satisfies Section 22(3) and 22(4) as follows:

a. The highway is wholly in England,

b. The Applicant, as the strategic highways company, will be the highway authority for the highway, and

c. The area of development within the Application Boundary is greater than the relevant limit set out in subsection (4), which in this case is 15 hectares (Sections 22(3)(c) and 22(4)(a)).

1.3.3 As the Scheme is an NSIP, development consent must be obtained from the SoS for Transport to authorise it, and an application for a DCO must be made to the Planning Inspectorate who administer the DCO process on behalf of the SoS under Section 37 of the Planning Act 2008. If granted by the SoS, the DCO would provide the necessary authorisation to allow the Scheme to be constructed and operated.

1.4 Requirement for an Environmental Impact Assessment

1.4.1 The Scheme is an Environmental Impact Assessment (EIA) development, as defined by the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (as amended) (the EIA Regulations).

1.4.2 In January 2019, the Applicant submitted an EIA Scoping Report to the SoS, who duly adopted a Scoping Opinion in March 2019 (the 2019 Scoping Opinion).

1.4.3 As explained in **Chapter 3 (Assessment of Alternatives)** of the **ES (Document Reference 6.1)**, comments received through the 2019 statutory consultation process showed that whilst there was a high level of support for the Scheme, one concern raised was in relation to the weaving length for vehicles joining the A34 from Junction 9 and then heading towards Kings Worthy. Subsequently, the Applicant undertook to amend the design as consulted upon, to seek to resolve the identified issues.

1.4.4 Through design refinements, it was identified that there were potentially material changes when compared to the proposed Scheme as considered in the original 2019 EIA Scoping process. The Applicant therefore determined that a new

scoping exercise was required and accordingly, a request for a second Scoping Opinion, superseding the previous scoping process, was submitted to the SoS in October 2020 and a second Scoping Opinion was adopted by the SoS in November 2020 (the 2020 Scoping Opinion).

1.4.5 An **Environmental Statement (ES) (Document Reference 6.1)** has been submitted as part of the DCO application. The ES presents a description of the M3, the reasonable alternatives considered and the main reasons for the option chosen, the likely significant environmental effects of the Scheme and the measures to avoid or reduce such effects.

1.5 Planning policy context

1.5.1 Section 104(2) of the Planning Act 2008 states that, in deciding a DCO application, the SoS must have regard to the following with relevance to the application:

- any relevant national policy statement;
- any local impact report;
- any matters prescribed in relation to development of the description to which the application relates; and
- any other matters which the Secretary of State thinks are both important and relevant to the decision.

1.5.2 The SoS must decide the DCO application in accordance with any relevant NPS, except in certain circumstances. This includes circumstances where the adverse impacts of the proposed development would outweigh the benefits.

1.5.3 The NPS of relevance to the Scheme is the NPS NN. The NPS NN was published in 2014 and designated in 2015, it sets out the need for, and Government's policies to deliver, development of NSIPs on the national road and rail networks in England. Further details can also be found in **Section 6** of this document and the **NPS NN Accordance Table (Document Reference 7.2)**.

1.5.4 The aims of the Scheme are directly in line with the Government's policies and illustrate the need for the Scheme on a national level.

1.5.5 The improvement to M3 Junction 9 was also included in the DfT *Road Investment Strategy 2015/16 – 2019/20* (2015) (RIS1) and *Road Investment Strategy 2 2020–2025* (2020) (RIS2).

1.5.6 The *National Planning Policy Framework* (2021) (NPPF) sets out the Government's planning policy framework for the whole of England, the overall strategic aims of the NPS NN and NPPF are consistent. The NPPF is an 'important and relevant' matter to be considered in the decision making for NSIPs.

1.5.7 The Scheme is located within the administrative boundaries of Winchester City Council, South Downs National Park Authority and Hampshire County Council. The local planning policy documents of relevance to the Scheme, which form part of the adopted Development Plan, comprise:

- *Winchester District Local Plan Part 1 – Joint Core Strategy* (adopted March 2013).
- *Winchester District Local Plan Part 2 – Development Management and Site Allocations* (adopted April 2017).
- *South Downs National Park Local Plan* (adopted July 2019).
- *Hampshire Minerals and Waste Plan* (adopted October 2013).

1.5.8 The *Hampshire Local Transport Plan* (adopted 2011) (LTP) is also considered a material consideration.

1.5.9 The emerging *Winchester District Local Plan 2018 – 2038* is still in draft form and is anticipated to be adopted in Summer 2024.

1.5.10 The *Hampshire Local Transport Plan 4* (LTP4) is anticipated to be adopted in early 2023.

1.5.11 There are also a number of Supplementary Planning Documents (SPDs) relevant to the Scheme. The SPDs comprise:

- *Winchester High Quality Places SPD* (2015).
- *Winchester Air Quality Emerging SPD* (draft 2021).
- *South Downs Sustainable Construction SPD* (2020).
- *South Downs Design Guide Emerging SPD* (draft 2021).

1.5.12 There are defined Neighbourhood Plan Areas within the relevant local authorities, but the Scheme is not located within any Neighbourhood Plan Area.

1.5.13 The *Winchester Movement Strategy* (2019) is neither a Development Plan Document nor an SPD but is a local strategy of relevance to the Scheme.

1.5.14 Section 104(2) of the Planning Act 2008 states that, in deciding a DCO application, the SoS must have regard, with relevance to the application, to any relevant national policy statement and any local impact report. This document considers the national policy context and other relevant design standards in **Section 6** and the local planning policy context is considered in **Section 6** and **Appendix A**.

1.6 Structure of this document

1.6.1 This document is structured as follows:

- Section 2: Scheme Development and Options Considered – sets out the development history of the Scheme and alternative options considered, the identification of options, the selection of the preferred route as well as statutory and non-statutory consultation that has been undertaken to date.

- Section 3: The need for the Scheme – sets out an overview of the need for the Scheme, a high-level description of the Scheme, its location, existing land use and the key objectives of the Scheme.

- Section 4: Transport Case for the Scheme – sets out an overview of the transport policy that has been considered, the baseline data, current and future network performance and road safety assessments.

- Section 5: Economic Case for the Scheme – sets out an overview of the economic appraisal and methodology used, the anticipated monetised and non-monetised benefits of the Scheme, and a summary of the economic benefit of the Scheme.

- Section 6: Conformity with Planning Policy and Transport Plans – sets out the policy context, how the Scheme complies with the NPS NN and conformity with local development plans and local transport plans, as well as other key policy areas including (but not limited to) ecology, biodiversity, landscape, the historic environment, air quality, noise and sustainability.

- Section 7: Development proposed within nationally designated areas – sets out how the Scheme meets the NPS NN policy tests with regard to developing a Scheme of national networks infrastructure within a National Park.

- Section 8: Biodiversity and ecological conservation – sets out how the Scheme meets the NPS NN policy tests with regard to biodiversity and ecological conservation.

- Section 9: Conclusion – sets out a conclusion and outlines the compliance of the Scheme against policy.

- Appendix A of contains a review of Scheme against the policies set out within the relevant local planning policy documents.

2 Scheme development and options considered

2.1 Development history and alternative options

2.1.1 This chapter provides a chronology of the options considered to meet the key objectives of the Scheme outlined in **Section 3.6**. Further information regarding the assessment of alternative options is also provided in **Chapter 3 (Assessment of Alternatives)** of the **ES (Document Reference 6.1)**.

2.1.2 In 2013, Hampshire County Council commissioned a feasibility study to examine the strategic case and provide an estimation of the expected performance of potential improvement schemes (Atkins, 2013) (the 2013 Feasibility Study).

2.1.3 The 2013 Feasibility Study proposed and assessed nine 'packages' that were grouped into three themes, as follows:

Direct links between A34 and M3 (or A272)

- Package 1 - Free-flow links with a loop from the A34 joining M3 north of Junction 9.
- Package 2 – Free-flow links with a loop from the A34 joining M3 north of Junction 9 with alternative north facing slip roads.
- Package 3 – Direct free-flow links from M3 to A34 and Junction 9 remodelled.
- Package 4 – Direct free-flow links from A34 to M3 south of Junction 9.
- Package 5 – Direct A34 link to A272/A31.

Improvements to the M3 Junction 9 Roundabout

- Package 6 – Improvements to the M3 Junction 9 roundabout.
- Package 7 – A34 link through Junction 9 (Hamburger).

Modified access to Winchester

- Package 8 – New access for Winchester.
- Package 9 – Revised access for Winchester.

2.1.4 The 2013 Feasibility Study identified that Package 3 - direct free-flow links from the M3 to the A34 and remodelling Junction 9 – would most likely be the best option to relieve congestion whilst reducing land-take.

2.1.5 In December 2014, RIS1 was published. RIS1 set out the list of schemes that were to be delivered by the Applicant over the period 2015 to 2020. RIS1

identified improvements to M3 J9 Winnall Interchange as one of the key investments in the Strategic Road Network (SRN) for the London and South East region.

2.1.6 The Scheme was included in the *Solent to Midlands Route Strategy* (Highways England, 2017), which identified the M3 Junction 9 Improvement as a major improvement project as part of this route upgrade. Within this, Junction 9 of the M3 was specifically highlighted as being a location where there is a substantial barrier to connectivity in relation to the South Downs National Park and walking, cycling and horse-riding.

2.1.7 In 2020, RIS2 was published, setting out the planned enhancement schemes that were to be delivered over the period 2020-2025. The Scheme was identified and committed to in RIS2.

2.2 Options identification

2.2.1 In 2013, the Asset Support Contractor (Kier) for the area reviewed package 3 in more detail and further developed three free-flow options as below:

- Option 1 – 70mph (120km/h) speed limit (A34 free-flow link below M3, but could also be considered over M3).
- Option 2 – 50mph (80km/h) speed limit (A34 free-flow link below M3, but could also be considered over M3).
- Option 3 – 40mph (65km/h) speed limit (A34 free-flow link below M3, but could also be considered over M3).

2.2.2 The Applicant developed the above mentioned three options further in the Stage 1 Technical Appraisal Report (WSP, November 2016) (TAR) (**Appendix 3.1** of the **ES (Document Reference 6.3)**). During the strategy, shaping and prioritisation stages, Option 1 70mph (120km/h) speed limit (A34 free-flow link below M3, but could also be considered over M3) was developed into a further alternative, Option 4. Option 4 made more use of existing infrastructure, such as retaining, rather than demolishing, the Applicant depot, while delivering broadly similar journey time benefits.

2.2.3 Some options were combined for the next stage of option identification. As such, the Applicant decided that the options should be renumbered to provide more clarity. As the original options were numbered 1 to 4, it was decided to renumber subsequent options 11 to 18. The Options were as follows:

- Option 11 – A development of Option 1 to include south facing Junction 9 slip roads; retain the Applicant's depot; and remove sweeping A33 southbound link to retain existing merge. This option provides free-flow links between A34 and M3 with the A34 southbound link passing under the M3 with a 120kph design speed. The A34 northbound Link also has a 120kph design speed. Junction 9 would be rebuilt with a dumbbell roundabout layout.

- Option 12 – This option provided free-flow links between A34 and M3 with the A34 southbound link passing under the M3 with a 70mph (120km/h) design speed and a two-step relaxation on horizontal geometry. The A34 northbound link had a 70mph (120km/h) design speed.

- Option 13 – This option provided free-flow links between A34 and M3 with the A34 southbound link passing over the M3 with a 70mph (120km/h) design speed. The A34 northbound link had a 70mph (120km/h) design speed.

- Option 14 – A variant of Option 4 provided free-flow links between A34 and M3 with the A34 southbound link passing under the M3 with a 100kph design speed with a three-step relaxation on horizontal geometry. The A34 northbound Link has a 120kph design speed. Junction 9 would be rebuilt with a dumbbell roundabout layout.

- Option 15 – This option provided free-flow links between A34 and M3 with the A34 southbound link passing over the M3 with an 53mph (85km/h) design speed and a two-step relaxation on horizontal geometry. The A34 northbound link had a 70mph (120km/h) design speed.

- Option 16A – A variant of Option 4 provided incremental delivery of Option 14. This provides a free-flow for the A34 southbound with a 100kph design speed with a three-step relaxation on horizontal geometry. The northbound A34 would still use the existing A34 through the Junction 9 roundabout. This option is considered to facilitate potential scheme capital costs within the affordable budgets of RIS1.

- Option 16B – A variant of Option 4 provided incremental delivery of Option 14. This provides a free-flow for the A34 northbound, which has a 120kph design speed. The southbound A34 would still use the existing A34 through the Junction 9 roundabout. This option is considered to facilitate potential scheme capital costs within the affordable budgets of RIS1

- Option 17 – This option provided free-flowing links with a 75 metre loop for the A34 southbound link under the M3. The A34 northbound link had a 70mph (120km/h) design speed.

- Option 18 – A variant of Option 1 provided a through-about at M3 Junction 9 (Do-Minimum design) with a 70kph design speed. This option is developed, to consider a reduced cost option of converting the current Junction 9 roundabout to a through-about. This option is considered to facilitate potential scheme capital costs within the affordable budgets of RIS1.

2.2.4 During the early part of the option identification stage, Options 11, 14, 16A, 16B and 18 were shortlisted for further consideration.

2.2.5 Options 12, 13, 15 and 17 were considered during the strategy, shaping and prioritisation stages but ultimately rejected for further consideration due to land-take, visual impact, cost inefficiencies and environmental issues. Further information on rejected Options 12, 13, 15 and 17 is included in **Section 3** of **Chapter 3 (Assessment of Alternatives)** of the **ES (Document Reference 6.1)**.

2.3 Options selection

2.3.1 The TAR (WSP, November 2016) (**Appendix 3.1** of the **ES (Document Reference 6.3)**) considered and assessed Options 11, 14, 16A, 16B and 18 in in further detail in relation to planning factors, traffic analysis, economic assessment, safety assessment and environmental assessment.

2.3.2 The TAR (**Appendix 3.1** of the **ES (Document Reference 6.3)**) summarised the effects identified within the Environmental Study Report (ESR) (WSP, September 2016). The ESR was prepared to inform the selection and development of Scheme options and provide an overview of the environmental constraints for the Scheme, and the potential environmental benefits associated with the Scheme options. The report presented the findings of the high-level environmental assessment and provided a comparison of each of the options related to air quality, cultural heritage, landscape (and arboriculture), nature conservation, geology and soils, materials, noise and vibration, people and communities and road drainage and the environment. A summary of the conclusions of the ESR and TAR (**Appendix 3.1** of the **ES (Document Reference 6.3)**) are set out in **Section 3** of **Chapter 3 (Assessment of Alternatives)** of the **ES (Document Reference 6.1)**.

2.3.3 **Table 2.1** below details which options were discounted, and which were taken forward for further development within Project Control Framework (PCF) Stage 2.

Table 2.1: Options discounted and taken forward for further development

Option	Discounted or taken forward	Reason
11	Discounted	Option 11 was discounted due to its significant adverse environmental effects (particularly on the River Itchen), high cost and a low Benefit Cost Ratio (BCR) compared to other options.
14	Taken forward	The TAR (**Appendix 3.1** of the **ES (Document Reference 6.3)**) summarised that, of the two options that fully met the Scheme objectives as set out in **Section 3.6** of this document (Options 11 and 14), Option 14 should be taken forward for further development during PCF Stage 2 as it was

Option	Discounted or taken forward	Reason
		the option that has the lower environmental effects, lower costs and higher BCR in comparison to Option 11. It was also considered likely to be safer than Option 11 as the proposed horizontal curve and speed limit was similar to the existing A34 approach to Junction 9 and was of a similar standard to other motorway to motorway links on the local network.
16A	Taken forward	The TAR (**Appendix 3.1** of the **ES (Document Reference 6.3)**) also recommended that Option 16A and 16B (the incremental delivery of Option 14) should be taken forward for further development within PCF Stage 2, having achieved a "Medium" and "High" Value for Money (VfM) category respectively and due to the high likelihood of the BCR, and therefore VfM, increasing even more with further design and cost refinement. These options individually were financially viable, however did not fully comply with the Scheme objectives. Option 16A and Option 16B were considered only partially compatible with the Scheme objectives as they each only provided free flowing links in one direction. However, they were taken forward to facilitate the incremental delivery of Option 14 in two or more phases in a financially viable way. It was decided that Option 16B would be built first as it had a lower cost and higher BCR, followed by a variation to Option 16A in order to complete the construction of a scheme comparable to Option 14. The variation to Option 16A was named Option 16C to distinguish it from the original Option 16A, as it required additional improvements such as the dumbbell roundabout and the widening of the Option 16B A34 northbound link under Junction 9 from one lane to two lanes and alteration of the diverge from a ghost island diverge for lane drop to a two lane drop.
16B	Taken forward	As above.
18	Discounted	Option 18 had the second highest BCR but was also unlikely to have a significant effect

Option	Discounted or taken forward	Reason
		on congestion and queueing traffic on the A34 and M3 which was a key Scheme objective. It was also considered likely to make queueing worse on the A272 Spitfire Link and Easton Lane. Option 18 was discounted as it was not compliant with the RIS's objectives for providing free-flowing links from the A34 to the M3.

2.3.4 Therefore, Options 11 and 18 were not taken forward to public consultation or further detailed design.

2.4 2018 non-statutory consultation

2.4.1 From 9 January to 20 February 2018, non-statutory consultation was undertaken which presented the preferred option (Option 14) (the 2018 non-statutory consultation). During the consultation, the rejected options and environmental design considerations were also presented. The consultation was held to gather feedback and identify issues associated with the proposals. Feedback from this non-statutory consultation helped to develop the Preferred Route Announcement (PRA) made in July 2018 as well as subsequent preliminary design work.

2.4.2 Option 14 was the preferred option because there was clear evidence that Option 14 was more efficient and cost effective to build in one phase rather than the two phases of Option 16B followed by 16C.

2.4.3 The Option proposed the following:

- Free-flowing road links between the M3 and the A34 both northbound and southbound with no need to enter the Junction 9 roundabout to travel between the A34 and M3.
- The A34 southbound link to instead pass under the M3.
- Direct access to the A33 would remain.
- Upgrading the current footpath through Junction 9 to become part of the National Cycle Network (route 23).
- Other existing non-motorised routes within the Application Boundary would be maintained or upgraded as appropriate.

2.4.4 Option 16 was a variation of Option 14 which would involve incremental delivery in two phases, Option 16B followed by Option 16C. The Highways England PCF Stage 2 - Scheme Assessment Report (2018) (**Appendix 3.2** of the **ES**

(Document Reference 6.3)) concluded that there were limited differences between Option 16B, Option 16C and Option 14 in relation to environmental issues. Option 16B has less adverse effects due to its smaller scale but does not provide the walking, cycling and horse-riding benefits of Option 14 and 16C. Option 16C has less adverse effects than Option 14 and provides walking, cycling and horse-riding benefits, but it would only be constructed after Option 16B had been completed, so the combined adverse effects of Option 16B and 16C would be similar to Option 14 and the walking, cycling and horse-riding benefits of Option 16C would be delivered later than Option 14. Therefore, Option 14 was chosen as the preferred environmental option because it has similar adverse effects to the other options, but provides walking, cycling and horse-riding benefits sooner.

2.4.5 The report also concluded that Option 14 performed similarly to Option 16 in terms of land take and better than Option 16 in terms of estimated construction duration, expected opening year, total number of accidents saved, expected scheme costs and Benefit Cost Ratio.

2.4.6 The rejected options presented in the 2018 consultation brochure (see **Appendix D.1** of the **Consultation Report (Document Reference 5.1)**) were Option 11, Option 18 and Option 16 (Option 16B and Option 16C combined), as stated above.

2.4.7 In total, 854 responses to the 2018 non-statutory consultation were received. Feedback +highlighted that the main concerns with the preferred option were about access from Junction 9 to the A33. These related to safety concerns with the weaving length from the A34 northbound merge, from the Junction 9 link, to the subsequent offside diverge to the A33.

2.4.8 During the 2018 non-statutory consultation process, the majority of respondents felt that the proposed Option 14 would meet the Scheme objectives, especially reducing congestion along the M3 and A34 approaching the junction, improving safety for all users of the junction as there will be less queueing traffic.

2.4.9 In addition, two thirds of respondents believed that the Scheme would provide better facilities for pedestrians, cyclists and equestrians with a new cycle/pathway.

2.4.10 Overall, 85% of respondents were in support of the proposed Option 14 for the M3 Junction 9, with 11% opposing the proposal, with most of the respondents fully or partially understanding why Options 11, 16 and 18 were rejected. Furthermore, at the briefing events, councillors were pleased that something is being done to improve traffic on M3 Junction 9.

2.4.11 The Report on Public Consultation, which was published in March 2018 (see **Appendix D.3** of the **Consultation Report (Document Reference 5.1)**), sets out a detailed account of the 2018 non-statutory consultation including how it was carried out, the feedback received and how the Applicant had regard to the feedback. A summary of that information is provided in the sections below.

2.5 Preferred route announcement

2.5.1 Following the 2018 non-statutory consultation, the PRA was made in July 2018. Option 14 was selected as the Preferred Route to be progressed to the next stage of development.

2.5.2 In general, during the non-statutory consultation there was agreement that there was a need to improve the junction and the reasons for rejecting the other options was understood. The non-statutory consultation highlighted the need for further design development to be carried out to address the A34/A33 merging concerns.

2.5.3 As a result of the non-statutory consultation process undertaken in 2018, further concerns were raised which resulted in the requirement to reconsider the design of the Proposed Development. Concerns related to:

- Disruption during construction, both for motorists and cyclists.
- Local stakeholder perception.
- Environmental impacts.
- Traffic capacity.
- Operational safety.
- Land take from the South Downs National Park.

2.6 2019 statutory consultation

2.6.1 Between 2 July and 27 August 2019, the Applicant carried out a consultation on the proposed Scheme in accordance with Section 42, Section 47 and Section 48 of the Planning Act 2008 (the 2019 statutory consultation).

2.6.2 The purpose of the consultation was to present the Scheme to, and receive feedback from, stakeholders and the local community, including the changes and updates to the design developed since the PRA and the three main areas for improvement that were identified, as follows:

- Safety concerns in relation to merging the A34 and A33, particularly the weaving length (the time drivers have in which to change lanes) when travelling from Junction 9 to the A33.
- The width of the shared surface path across the junction for walkers and cyclists and the need for this to be separated from the road by a security barrier.
- Junction 9 to River Itchen footpath to be made cycleway compliant and extended to the Cart and Horses junction on the A33.

2.6.3 A total of 482 responses were received during this consultation period.

2.6.4 The majority of respondents who completed the questionnaire agreed with the case for making improvements to the M3 Junction 9.

2.6.5 Feedback from the 2019 statutory consultation carried out between July and August 2019 showed that there was a high level of support for the proposed Scheme. However, some important comments were provided at that time, including:

- The weaving length for vehicles joining the A34 from Junction 9 and then heading onto the A33/Kings Worthy.
- The future capacity of the Scheme.
- Duration of construction impacts.

2.6.6 A summary of the responses received to the 2019 statutory consultation is contained in **Chapter 9** of the **Consultation Report (Document Reference 5.1)**.

2.7 2021 statutory consultation

2.7.1 Following the adoption of the 2020 Scoping Opinion in November 2020, the Applicant undertook a further round of statutory consultation between 27 May and 8 July 2021 in accordance with Section 42, Section 47 and Section 48 of the Planning Act 2008 (the 2021 statutory consultation).

2.7.2 The aim of the 2021 statutory consultation was to seek the views of the local community and key stakeholders on all aspects of the proposal and specifically invited comments on the following design changes made to the Scheme since the 2019 statutory consultation:

- New highway and roundabout design.
- Extra space to build the Scheme in a safe, efficient and sensitive manner while keeping vehicles running through the junction.
- New areas for environmental works and deposition areas.
- New areas for temporary construction compounds.
- New footbridge over the River Itchen.
- Revised walking and cycling routes.

2.7.3 A total of 386 responses were submitted to the Applicant in response to the 2021 statutory consultation.

2.7.4 A summary of the responses received to the 2021 statutory consultation, and the Applicant's detailed comments on these, are contained in **Appendix K.1** to **K.3** of the **Consultation Report (Document Reference 5.1)**.

Design development following 2021 statutory consultation

2.7.5 The Applicant undertook reviews of relevant responses received through the 2021 statutory consultation process and these have influenced the evolution of the Scheme.

2.7.6 In summary, feedback informed the development of the Scheme in the following ways:

- Development of design.
- Approach to assessment methodologies and commitment to mitigation and enhancement measures in the EIA.

2.7.7 Whilst comments were noted and have been responded to (see the **Consultation Report (Document Reference 5.1)**), comments received from the South Downs National Park Authority and Natural England were considered to result in the need to revisit key aspects of the design of the Scheme.

2.7.8 Comments from the South Downs National Park Authority related to concerns regarding (at the time of the Preliminary Environmental Impact Report (Stantec, 2021)), the proposed reprofiled earthworks and undulating chalk grassland screening feature along the eastern flank of the M3 between Easton Lane and Long Walk. The South Downs National Park Authority considered that the design would interrupt and truncate views to the higher ground to the east, and Natural England considered that the Scheme could be much more ambitious in providing landscape enhancements.

2.7.9 Accordingly, the design of the earthworks between Easton Lane and Long Walk was revisited to create a more sympathetic feature and reinforce the existing characteristics of the South Downs National Park whilst balancing visual screening requirements. This design was progressed in consultation with South Downs National Park Authority who confirmed they were generally content with the progress the design was showing to respond to some of the concerns, specifically changes to landform and topography.

2.7.10 In re-profiling the landform in this area, it was calculated that the excess spoil predicted to be raised during the construction phase would be sufficient to construct the new earthworks. This, in turn, prevented the need for the areas of search for excess spoil deposition which resulted in a reduction in the Application Boundary, reduced visual and acoustic intrusion into the South Downs National Park as well as the need to affect less best and most versatile (BMV) agricultural land.

2.7.11 Following comments from the South Downs National Park Authority, further work was undertaken after the 2021 statutory consultation to reduce the impact

of the main construction compound. The footprint was reduced following more detailed work to understand the main construction compound requirements and the compound was moved north of a tree line to aid screening.

2.8 2021 targeted consultation

2.8.1 Through ongoing engineering review and development of the Scheme proposals, several minor refinements were made to the Application Boundary that had been consulted on during the 2021 statutory consultation. The minor refinements of the Application Boundary relate to a small amount of land being added to the Application Boundary and also the removal of land that is no longer required for the Scheme.

2.8.2 The Applicant identified the land interests potentially affected by the changes to the Applicant Boundary and undertook targeted consultation with these parties between 17 November and 22 December 2021 (the '2021 targeted consultation').

2.9 2022 'Scheme update' activity

2.9.1 Following a ministerial statement on 12 January 2022, the roll out of all lane running (ALR) schemes not yet constructed was paused. Prior to the ministerial statement, the Scheme tied into a proposed ALR scheme known as the 'M3 Junction 9 to 14 Motorway Upgrade Project', which was independent of the Scheme. As the M3 Junction 9 to 14 Motorway Upgrade Project tied into the Scheme on the south facing slips of the gyratory roundabout, some minor design development was undertaken to ensure the Scheme could tie-in to the existing highway.

Design changes following the All Lane Running pause

2.9.2 Although the M3 Junction 9 to 14 Motorway Upgrade Project is independent from the Scheme, there was an interface where the schemes diverge and therefore minor amendments to the Scheme design were required. The minor amendments relate to the reconfiguration of slip roads and merge lanes, the introduction of a new retaining wall, a new portal gantry and signage.

2.9.3 The resulting changes did not require any amendments to the Application Boundary.

2.9.4 The traffic model was re-run to align with the revised design and this showed that the Scheme continued to meet the Scheme objectives.

The approach to the 'Scheme update' activity

2.9.5 The Applicant provided a Scheme update in September 2022 to provide further information about the minor design amendments and proposed timescales following the ALR pause. The Applicant also used the Scheme update activity to notify stakeholders about the design changes following the responses received from the 2021 statutory consultation.

2.9.6 The update was disseminated to stakeholders through various methods, including public information events on 25 September 2022 and 26 September 2022, an online information portal and stakeholder briefings.

2.9.7 During the period of the Scheme update, engagement with prescribed bodies, relevant local authorities and landowners was ongoing.

2.9.8 Further details are provided in **Chapter 14** of the **Consultation Report (Document Reference 5.1).**

2.10 2022 meeting with Hampshire County Council regarding the Cart and Horses Junction

2.10.1 At a meeting on 27 September 2022, Hampshire County Council tabled a concept design for the Cart and Horses Junction (for which Hampshire County Council is Highway Authority) to resolve the existing safety issues. Hampshire County Council were unable to provide any information regarding engineering, funding, or timescales for the works to be executed. They recommended that the Scheme should be amended to tie into the new twin roundabout layout, but the Applicant stated that without any timescales or a confirmed design it would not be possible for the Scheme to tie into the proposed layout.

2.10.2 It was agreed that further discussions would be held with the Applicant as Hampshire County Council developed their proposals and that the tie into the twin roundabout junction improvement could not be incorporated into the DCO application for the Scheme as submitted.

3 The need for the Scheme

3.1 Overview

3.1.1 The M3 Junction 9 is a key transport interchange which connects South Hampshire's vital deep water ports of Southampton and Portsmouth and the wider region, facilitating intensive movements of freight cargo and important tourism traffic. It is a crucial confluence between the region and London via the M3 and the Midlands/North via the A34 (which also links to the principal east–west A303 corridor) and is a primary access point to the city of Winchester.

3.1.2 Due to the high traffic volumes, the existing interchange has already become overwhelmed by the demands placed upon it. M3 Junction 9 currently experiences a high level of congestion and delay with poor journey time reliability. The significant volumes of traffic act as a bottleneck on the local highway network, causing significant delays throughout the day. Northbound and southbound movements between the M3 and the A34 are particularly intensive with downstream queues forming on the northbound off-slip of the M3 partially caused by the high proportion of HGVs travelling between the M27, M3 and A34 and often backing onto the main carriageway of the M3, resulting in significant disruption and safety concerns during peak periods.

3.1.3 Projected development of the region's ports is anticipated to substantially increase heavy goods vehicle (HGV) movements and as demand for freight grows, existing congestion on the M3 and A34 is likely to worsen. Freight's contribution to congestion is magnified by the physical size of HGVs, slower speeds, longer braking distances, and a disproportionate involvement in critical highway incidents and without improvement the future for M3 Junction 9 looks unpromising.

3.1.4 As one of the primary access points for Winchester City Centre and Winnall, M3 Junction 9 facilitates intra- and inter-labour market access key to the local economy where commuting in and out of Winchester is an important driver of the local economy where inflows of commuters grossly exceed outflows. When last recorded at the 2011 Census, approximately 56.8% of all jobs in Winchester District were occupied by commuters living outside the local authority area.

3.1.5 An improved and properly functioning M3 Junction 9 will support the visitor economy by facilitating trips to visitor attractions in Winchester and the Solent from major urban centres. This includes the South Downs National Park, which brings an estimated £465 million in visitor expenditure to the local economy.

3.1.6 It also serves key facilities including major retailers, and key recreational opportunities including the South Downs National Park.

3.1.7 Traffic routed along the M3 to the M25 London Orbital passes through the M3 Junction 9, linking the Winchester, Southampton, and neighbouring centres to Heathrow Airport. Heathrow is the largest airport in the UK, serving 81 million passengers and 1.6 million tonnes of cargo in 2019. Heathrow acts as a major

economic driver for the South East, supporting an estimated 77,000 jobs and £3.6 billion in annual GVA.

3.1.8 As a key link on the SRN, a significant volume of traffic uses M3 Junction 9. Approximately 6,000 vehicles pass through the junction per hour during the peak periods. A high proportion of journeys on the Solent to Midlands and M25 to Solent routes are commercial trips with traffic transporting freight to and from the Solent ports.

3.1.9 The problems at M3 Junction 9 have been recognised for some time. In 2013, Hampshire County Council identified that infrastructure improvements were necessary to reduce congestion levels and assist with the strategic movement of traffic at Junction 9 of the M3, a key arterial intersection, to make sure that traffic congestion and increased journey times do not compromise the scale of potential future economic growth in the sub-region.

3.1.10 Following this, the improvement to M3 Junction 9 was included in RIS1. The Scheme contributes to national transport objectives by:

- Providing additional capacity (via dedicated new free flow links on the A34 – M3 southbound and M3 northbound to A34, reducing the need for traffic to interact with the gyratory roundabout at Junction 9).
- Enhancing journey time reliability (through reducing congestion at Junction 9).
- Supporting the development of housing and the creation of jobs, as set out in the existing and emerging local plans, listed within **Section 1.5** of this document (through the potential to accelerate local development sites by improving marketability and mitigating potential capacity constraints, increasing adjacent commercial and industrial land value and the potential to accelerate ongoing trends towards densification and new development in Winnall).

3.1.11 M3 Junction 9 is included in the *Solent to Midlands Route Strategy* (Highways England, 2017), which identifies the improvement as a major improvement project as part of this route upgrade. Within this, Junction 9 of the M3 is specifically highlighted as being a location where there is a substantial barrier to connectivity in relation to the South Downs National Park and walking, cycling and horse-riding.

3.1.12 In 2020, RIS2 was published, setting out the planned enhancement schemes that were to be delivered over the period 2020-2025. The Scheme was identified and committed to in RIS2.

3.1.13 RIS2 introduces the schemes in the south and west of England committed for Road Programme 2. RIS2 includes the *"M3 junction 9 – upgrade to the junction to allow free movement from the A34 to the M3."*

3.1.14 To summarise, the Scheme is necessary for the following reasons:

- The M3 Junction 9 currently attracts a significant amount of SRN traffic between the M3 and the A34. This causes delays impacting strategic and local traffic flows, and also affecting commuters and local businesses.
- To relieve northbound and southbound movements between the M3 and the A34 which are particularly intensive, with downstream queues on the northbound off-slip of the M3 often resulting in safety concerns during peak periods.
- To address lengthy queues on the A272 Spitfire Link and Easton Lane during the morning and evening peak periods respectively.
- To connect the National Cycle Network (NCN) 23 which is incomplete through the M3 Junction 9.

3.1.15 The Scheme aims to increase connectivity at M3 Junction 9, whilst increasing capacity, enhancing journey time reliability, supporting development in line with Local Plans, simplifying routing and improving facilities for walking, cycling and horse-riding.

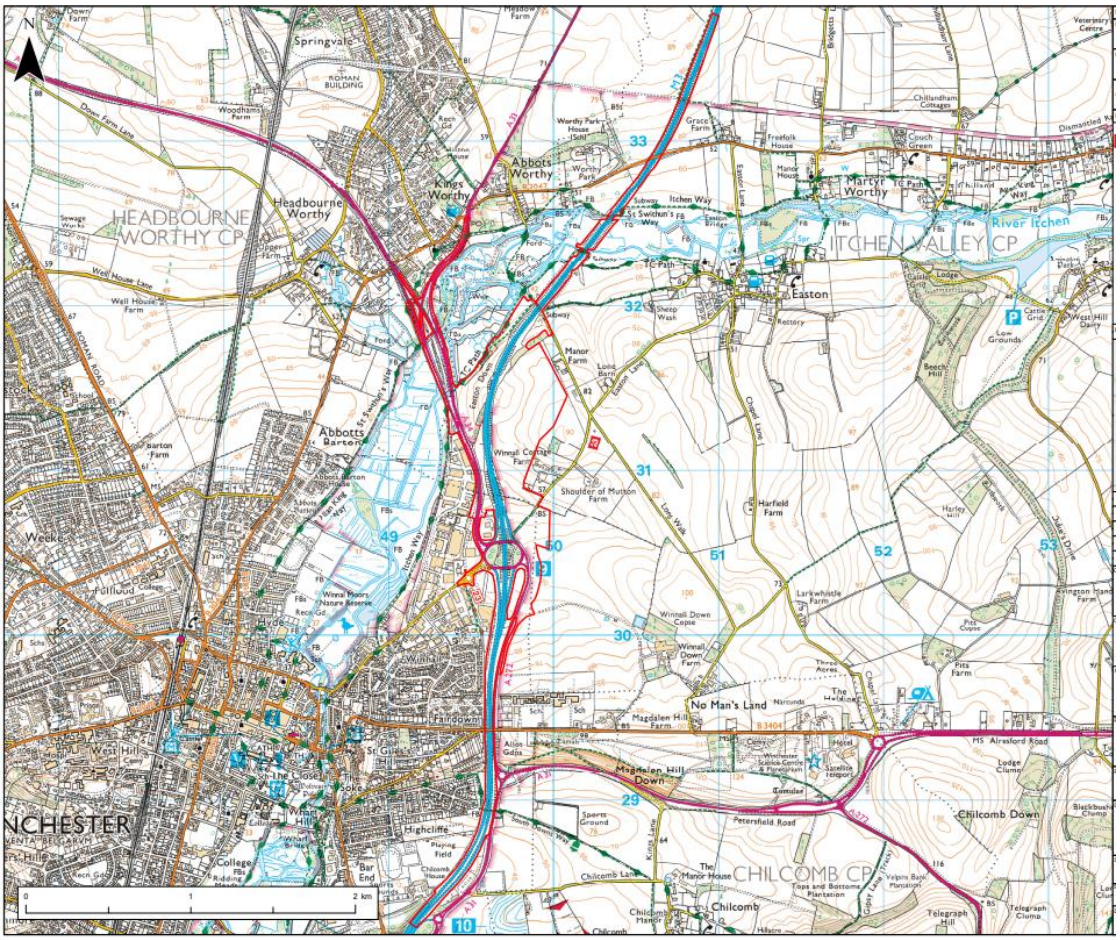
3.1.16 The Scheme includes a package of environmental mitigation and enhancement measures to reduce the impacts from the Scheme to the environment where possible. Consideration has also been given to the enhancement of the South Downs National Park where reasonably practicable, as the Scheme constitutes 'major development' within the park. This is outlined within **Section 7** of this document which considers in detail the compliance of the Scheme with the NPS NN in relation to its development within the South Downs National Park.

3.1.17 A summary description of the Scheme is included in **Section 3.4** below and a detailed description of the Scheme is provided in **Chapter 2 (The Scheme and Its Surroundings)** of the **ES (Document Reference 6.1)**.

3.2 Scheme location

3.2.1 The Scheme is located within the administrative boundaries of Winchester City Council, South Downs National Park Authority and Hampshire County Council. The Application Boundary and surrounding area are presented in **Figure 3.1**.

Figure 3.1: Application Boundary



3.2.2 M3 Junction 9 lies to the east of the City of Winchester which is the county town of Hampshire. As per the 2011 Census, the Winchester District including Alresford and Bishop's Waltham has a population of 116,800. M3 Junction 9 is located adjacent to the settlement of Winnall.

3.2.3 The SRN around Winchester forms a key gateway between South Hampshire and the East (via the M3), the Midlands and the north (via the A34) and the west (via the A303) (see **Figure 3.1**).

3.2.4 The Winnall Industrial Estate lies to the north of Winchester and is adjacent to M3 Junction 9. Easton Lane is the main route from Junction 9 to Winchester City Centre with the industrial estate laid out to the north and south of Easton Road with various points of local access. The east of the industrial estate is bounded by the M3, with access provided to the SRN by Junction 9.

3.2.5 Winnall is the largest and most established industrial area in the council area. The development of the industrial estate is guided by the *Winnall Planning Framework*, published by Winchester City Council in 2015. The framework seeks to reinforce Winnall as a major employment centre, an attractive place to live, and an important link between employment areas and the city centre.

3.2.6 The *Winchester District Local Plan Part 2 – Development Management and Site Allocations* (2017, p. 47) states that the Council expects the Winnall Industrial Estate to remain as the main employment area for Winchester. It states that the Council will continue to apply Policy CP9 of the *Winchester District Local Plan Part 1 – Joint Core Strategy* (2013) to resist loss of existing or allocated employment land. The existing M3 Junction 9 is a grade separated, partially signalised gyratory roundabout connecting multiple nationally and locally significant routes. The M3 here is joined with the A34 towards Newbury and Salisbury, A272 towards Petersfield and southern Winchester, and Easton Lane towards Winnall and northern Winchester. Approximately 1 kilometre (km) north of the roundabout, the A33 from Basingstoke connects with the A34, and approximately 1 km south of the roundabout the A31 from Alton connects to the A272.

3.3 Existing land uses and character

Land use

3.3.1 The surrounding area is primarily urban to the west of the M3 and primarily rural to the east. There are large concentrations of residential receptors close to the A34 to the north of the Application Boundary (in Headbourne Worthy, Kings Worthy and Abbots Worthy) and close to the M3 to the south of the Application Boundary (on the eastern fringe of Winchester). A small number of isolated farm holdings or rural dwellings lie to the east and south-east of the Application Boundary.

3.3.2 There are a small number of schools and education facilities, including St Swithun's School north of the B3404 and east of the M3, Winnall primary school and Stepping Stones pre-school to the south-west of the junction.

3.3.3 Immediately west of the Application Boundary, there is an area of commercial development. This includes Sun Valley Business Park, Tesco, Winnall Industrial Estate and Scylla Industrial Estate. Wykeham Trade Park and National Highway's maintenance depot are located to the north-west of the junction.

3.3.4 NCN 23 is located to the north-east and south-west of the Application Boundary.

Topography

3.3.5 The Application Boundary comprises an area of land which lies to the east of the City of Winchester which is the county town of Hampshire. The Junction 9 roundabout and highways infrastructure lies to the south of the Application Boundary including slip roads and the A272/Spitfire Link are lower than the surrounding land. There is a 10m, almost vertical cut under the B3404 at the southern end of the Scheme area, which is the most notable engineered landform. The highways infrastructure of the A34/Winchester Bypass is slightly elevated in order to cross the River Itchen floodplain in the north-western extents of the Scheme area.

3.3.6 To the north of Junction 9 the M3 rises gradually at an even gradient to pass over Easton Down, this is achieved by embankments through a small combe/hollow near the Applicant's depot and then cuttings on the higher ground. There are numerous ditches, water bodies, streams and rivers in the area. The largest watercourse is the River Itchen and its tributaries, which run through the northern section of the Scheme area across a wide, flat floodplain.

Landscape designations and character

3.3.7 The existing landscape pattern is complex and strongly influenced by the M3 and A34 transport corridors and road features such as bridges, slip roads and signage. There are large areas of trees and shrubs and established vegetation on embankments planted at the time of construction of these roads.

3.3.8 The area to the east and south of the M3 is a valued landscape of rolling chalk downland with large agricultural fields interspersed with small woodlands and copses, hedgerow field boundaries and a small number of farm holdings and houses. St Catherine's Hill is a prominent landscape feature to the south of Winchester. There are some important public rights of way used for recreation near the Proposed Scheme including St Swithun's Way, the Itchen Way Long Distance Path, the South Downs Way and National Cycle Network Route 23 which provides a link from Winchester to the South Downs National Park.

3.3.9 The South Downs National Park is an important designated area within and adjacent to the Application Boundary to the north, east, south and in some areas, the west. The special qualities of the South Downs National Park include diverse, inspirational and breath-taking views; a rich variety of wildlife and habitats including rare and internationally important species; tranquil and unspoilt places; and environment shaped by centuries of farming and embracing new enterprise; great opportunities for recreational activities and learning experiences; well-conserved historical features and a rich cultural heritage; and distinctive towns and villages, and communities with real pride in their area. The Scheme constitutes 'Major Development' within the National Park. **Section 7** of this document considers in detail the compliance of the Scheme with the NPS NN in relation to development within the South Downs National Park. The western extent of the wider South Downs National Park boundary is shown on **Figure 1.3 (Environmental Constraints Plan)** of the **ES (Document Reference 6.2)**.

Ecological designations

3.3.10 The River Itchen Special Area of Conservation (SAC) is located (in part) beneath the existing alignment of the existing A34, the A33 and the M3 and lies partially within the Application Boundary. The River Itchen SAC is designated for its riverine habitats and species which it supports including southern damselfly, *Coenagrion mercurial*, bullhead *Cottus gobio*, white-clawed crayfish *Austropotamobius pallipes*, brook lamprey *Lampetra planeri*, Atlantic salmon *Salmo salar,* and otter *Lutra lutra*.

3.3.11 Mottisfont Bats SAC lies approximately 16km to the west of the Scheme. This SAC is designated as its woodlands support an important population of the rare barbastelle bat Barbastella barbastellus.

3.3.12 The River Itchen Site of Special Scientific Interest (SSSI) falls partially within the Application Boundary where the M3, a34 and A433 road bridges cross the River Itchen. The SSSI also forms part of the western boundary of the Scheme. The SSSI is designated due to the complex mosaic of habitats found within the riparian zone including the chalk stream and associated fen meadow, flood pasture and swamp habitats which support species such as otter, water vole Arvicola amphibius, and white-clawed crayfish. Unlike the SAC, the SSSI designation also includes some of the habitats adjacent to the river channel.

3.3.13 St Catherine's Hill SSSI is located approximately 500m south of the Application Boundary. This SSSI is designated for chalk grassland and associated habitats.

3.3.14 The following SSSIs are each over 2km away from the Scheme:

- Cheesefoot Head SSSI - designated for chalk grassland and a colony of the Duke of Burgundy *Hamearis lucina butterfly*
- River Test SSSI - designated for chalk stream habitats
- Highclere Park SSSI - designated for wood pasture and grassland habitats
- Burghclere Beacon SSSI - designated for chalk grassland

3.3.15 The statutory designated sites are shown on **Figure 1.3 (Environmental Constraints Plan)** of the **ES (Document Reference 6.2)**.

3.3.16 There are 26 Sites of Importance for Nature Conservation (SINC) and two Road Verges of Ecological Importance (RVEI) within a 2km radius of the Scheme. Easton Down SINC lies partially within the Application Boundary. All other non-statutory designated areas within 2km of the Scheme fall outside the Application Boundary. Details of these are presented within **Appendix 8.1y (Biodiversity Desk Study Report)** of the **ES (Document Reference 6.3)**.

3.3.17 The Winnall Moors Nature Reserve is located to the west of the Scheme, and west of the Winnall Industrial Estate. At its northern extent, the reserve boundary lies parallel to the Application Boundary along the existing alignment of the A34, however the Nature Reserve boundary does not interact with the Application Boundary.

3.3.18 Owing to the above, compliance of the Scheme with the NPS NN with regard to the generic impact of 'biodiversity and ecological conservation' (NPS NN Chapter 5) is considered in detail in **Chapter 8** of this document.

Heritage designations

3.3.19 There are a number of Scheduled Monuments and Listed Buildings adjacent to the Application Boundary. Designated cultural heritage assets are shown on **Figure 1.3 (Environmental Constraints Plan)** of the **ES (Document Reference 6.2)**.

3.3.20 There are no registered parks and gardens located within 500m of the Scheme area, the nearest being Magdalen cemetery which is outside the zone of visual influence (ZVI) and some 1.4km distant. There are three Conservation Areas within the landscape study area, although all of these are outside the ZVI and therefore do not have intervisibility with the Application Boundary.

3.3.21 A total of 214 heritage assets were identified within 1km of the Scheme, including:

- 4 Scheduled Monuments.
- 2 Grade I Listed Buildings.
- 12 Grade II* Listed Buildings.
- 76 Grade II Listed Buildings.
- 4 Conservation Areas.
- 11 Locally listed historic parks and gardens.
- 10 Water Meadows of national significance.
- 95 non-designated heritage assets.

Water and flood risk

3.3.22 The Scheme crosses the River Itchen at three locations along the A34, A33 and M3. The Scheme also crosses one of the River Itchen's tributaries, the Nun's Walk Stream, which is crossed by the A34. The River Itchen is designated as a SAC and a SSSI.

3.3.23 Two Groundwater Source Protection Zones (SPZ) lie within the northern extent of land within the Application Boundary. They are classified as Groundwater Source Protection Zone (SPZ) 1 (inner zone) and SPZ 2 (outer zone).

3.3.24 The Environment Agency Flood Map for Planning indicates that the northern and western parts of land within the Application Boundary, particularly at the A34 Winchester Bypass and M3 north of Long Walk, extend into an area designated as Flood Zone 3: area with a 1% (1 in 100) Annual Exceedance Probability (AEP) risk or greater of fluvial flooding. The designated Flood Zone 3 area is associated with the River Itchen and its tributaries.

3.3.25 The northern and western part of the Application Boundary also extend into a Flood Zone 2 area: risk between a 0.1% (1 in 1,000) and 1% (1 in 100) AEP of fluvial flooding. The remainder of the study area is situated within Flood Zone 1: less than 0.1% (1 in 1,000) AEP risk of flooding.

3.3.26 The Application Boundary is not located within an area at risk of tidal flooding.

3.3.27 There are existing drainage features within the Scheme boundary that pose a risk of pollution or flooding. The general geology of the area is chalk which provides a high level of water storage, with some alluvium.

Noise

3.3.28 There are a number of existing noise sources around the Application Boundary. Noise levels were measured at a number of locations near the Scheme in 2019 and 2021.

3.3.29 Much of the noise comes from road traffic using the M3, A34 and A33. Some areas within the Scheme are not near these major roads so are quieter. Other noise comes from commercial areas, aircraft and the local Winchester to Basingstoke train line.

3.3.30 Noise Important Areas (NIA) are shown on **Figure 1.3 (Environmental Constraints Plan)** of the **ES (Document Reference 6.2)**.

Air quality

3.3.31 There are a number of local authority air quality monitoring stations within 1km of the air quality study area in Winchester City Council and Eastleigh Borough Council.

3.3.32 Winchester City Council has one Air Quality Management Area (AQMA) in Winchester Town Centre where the annual nitrogen dioxide objective was exceeded in 2019.

3.3.33 The Scheme is not located within the AQMA.

3.3.34 According to the Department for Environment, Food and Rural Affairs data and the relevant Pollution Climate Mapping links that intersect the Scheme, levels of nitrogen dioxide and fine particulate matter are below the air quality thresholds.

3.3.35 The oxides of nitrogen levels around the Scheme are below the critical level at most of the key ecological habitats except St Catherine's Hill SSSI. The nitrogen deposition rates are below the critical level at all key habitats apart from Highclere Park SSSI and Burghclere Beacon SSSI.

3.3.36 AQMAs are shown on **Figure 1.3 (Environmental Constraints Plan)** of the **ES (Document Reference 6.2)**.

3.4 Scheme description

3.4.1 The improvements proposed as part of the Scheme both maintain existing connectivity on the road network, whilst providing enhanced capacity, simplified routing and improved facilities for walking, cycling and horse-riding routes and landscaping enhancements. The Scheme would provide new free flow links between the M3 and A34, as well as a dedicated new A33 alignment. The Scheme elements are as follows:

- Widening of the M3 from a dual two-lane motorway (two-lane motorway with hard shoulders) to a four-lane motorway (with hard shoulders) between the proposed M3 Junction 9 gyratory north and south slip roads.
- A new smaller grade separated gyratory roundabout arrangement within the footprint of the existing roundabout, incorporating new connections over the M3 with improved walking, cycling and horse-riding routes.
- Connector roads from and to the new gyratory roundabout.
- Improved slip roads to/from the M3.
- New structures (in the form of gyratory bridges, underpasses, retaining walls, subway and a new cycle and footbridge over the River Itchen).
- A new surface water runoff system with associated drainage and infiltration features.
- New signage and gantries.
- Utility diversions.
- New lighting (subways, underpasses and gantries).
- Modifications to topography through cuttings and false cuttings as well as re-profiling of existing landform.
- New walking, cycling and horse-riding provision.
- Creation of new areas of chalk grassland, woodland, scrub planting and species rich grassland.

3.4.2 The Application Boundary covers an area of approximately 109 hectares. This includes the proposed land required for gantries, signage, temporary construction compound areas, areas for environmental mitigation, areas for drainage requirements (some of which would be temporary) and traffic management.

3.4.3 The Scheme includes a package of environmental mitigation and enhancement measures to reduce the impacts from the Scheme to the environment where

possible. Consideration has also been given to the enhancement of the South Downs National Park where reasonably practicable.

3.4.4 Bridleways, footpaths and cycleways have been designed to allow all gradients to be less than 1:20 to comply with DfT's inclusive mobility impaired users. The walking, cycling and horse-riding routes are designed for cyclists, and therefore as all horizontal radii are suited for cyclists, they are also considered acceptable for mobility impaired users. The range of opportunities and barriers to all forms of users have been given due consideration in the design of the Scheme.

3.4.5 A number of new structures are required to be both constructed and demolished to facilitate the Scheme. Some of the main structures are as follows:

- The existing bridges at the M3 Junction 9 gyratory roundabout are proposed to be demolished and replaced by the two new bridge structures carrying the new gyratory
- A new underpass is proposed to carry the A34 southbound under the new A33 link road and the existing M3. The A34 northbound underpass would carry the new A34 northbound over the new A33 link
- The existing subways (Winnall Subway East and Winnall Subway West) located under the existing gyratory are proposed to be demolished to facilitate the construction of the reconfigured roundabout. New subways are proposed along the proposed walking, cycling and horse-riding route
- A new footbridge over the River Itchen is proposed between the existing Itchen Bridge (which carries the A34 northbound carriageway), and the existing Kings Worthy Bridge which will carry the A33 north and southbound carriageways and the A34 southbound carriageway, respectively.

3.4.6 The walking, cycling and horse-riding facilities around and within the Scheme are to be upgraded. This includes an improvement to the National Cycle Network (NCN) Route 23. An additional footpath, cyclepath and bridleway is proposed on the eastern side of the Scheme to link Easton Lane with Long Walk. Such a route would provide a circular leisure path for those using the South Downs National Park with a link to the other paths around Long Walk with their links to local villages. A new combined footpath and cyclepath for the western side of the Scheme is proposed to link the A33 / B3047 Junction to Winnall Industrial Estate situated on Easton Lane.

3.4.7 A detailed description of the Scheme is provided in **Chapter 1 (Introduction)** and **Chapter 2 (The Scheme and Its Surroundings)** of the **ES (Document Reference 6.1)**.

3.5 Key objectives of the Scheme

3.5.1 The Scheme has five strategic objectives, supported by the Highways England Delivery Plan 2015-2020 (Highways England, 2015):

- To reduce delays at M3 Junction 9 on all links M3, A33 and A34.
- Smooth the flow of traffic by improving journey time reliability and reducing delays (time lost per vehicle per mile) at M3 Junction 9 and the exit and entry roads for the A33 and A34.
- Improve the safety for all road users and reduce the annual collision frequency and severity ratio on the M3 Junction 9.
- Support economic growth and ensure the junction can accommodate additional traffic.
- Improvements for walkers and cyclists including connecting the National Cycle Network Route 23 which is severed by the current junction layout.

How the Scheme meets the Scheme objectives

3.5.2 **Table 3.1** below considers the Scheme against the Scheme's objectives.

Table 3.1: Consideration of the Scheme against the Scheme objectives

Scheme Objectives	Scheme Compliance
To reduce delays at M3 Junction 9 on all links M3, A33 and A34	The Scheme reduces the delays at key areas currently congested. The Scheme also reduces journey times from the M3 to the A34 and the A34 to the M3 in the AM and PM peak period. Furthermore, there are reductions in journey times from the A33 to Easton Lane and Easton Lane to the A33. The Transport case for the Scheme in **Section 4** of this document and the **Transport Assessment Report (Document Reference 7.13)** provide more details regarding the traffic improvements.
Smooth the flow of traffic by improving journey time reliability and reducing delays (time lost per vehicle per mile) at M3 Junction 9 and the exit and entry roads for the A33 and A34	The operational traffic model shows that there are reductions in journey times with the Scheme in place on key approaches to the M3 Junction 9. There are reductions in delays on the M3 southbound off-slip/A34 in the PM peak and reductions in delays on the A33 approach to the Junction in the AM and PM peak period. The A34 route between M3 Junction 10 and the A34/A272 junction is predicted to have journey time savings in excess of two minutes in 2027, in excess of three minutes in 2042, and in excess of four minutes in 2047 in the PM peak period and

Scheme Objectives	Scheme Compliance
	around one minute for the AM Peak. The equivalent southbound journey time savings are approximately one minute in 2027, 2042 and 2047. The Scheme provides a direct connection between the M3 and A34, hence the journey time improvements. The Transport case for the Scheme in **Section 4** of this document and the **Transport Assessment Report (Document Reference 7.13)** provide more details regarding the traffic improvements.
Improve the safety for all road users and reduce the annual collision frequency and severity ratio on the M3 Junction 9	The study area, identified in **Figure 8.2** of the **Transport Assessment Report (Document Reference 7.13),** will experience a decrease in the total number of collisions and casualties with the Scheme. The greatest benefits are experienced as a consequence of the reduced traffic demand through the junction gyratory. The Transport case for the Scheme in **Section 4** of this document and the **Transport Assessment Report (Document Reference 7.13)** provide more details on the safety benefits.
Support economic growth and ensure the junction can accommodate additional traffic	The Scheme has wider economic benefits of £41.8 million which is expected to stimulate local development sites and economic activity. The Scheme is forecast to generate economic benefits in the order of £~~161.7~~152.3M. The greatest benefit relates to travel time savings, amounting to £155.5M, which are predominantly due to the provision of the free-flow movement between the A34 and the M3. The Economic Case Overview in **Section 5** of this document and the **Combined Modelling and Appraisal Report (Document Reference 7.10)** provide more details regarding the economic benefits of the Scheme.
Improvements for walkers and cyclists including connecting the National Cycle Network Route 23	The walking, cycling and horse-riding facilities around and within the Scheme are to be upgraded. This includes an improvement to the National Cycle Network (NCN) Route 23. A bridleway

Scheme Objectives	Scheme Compliance
which is severed by the current junction layout	(allowing people to walk, cycle and horse-ride along the route) is proposed on the eastern side of the Scheme to link Easton Lane with Long Walk. Such a route would provide a circular leisure path for those using the South Downs National Park with a link to the other paths around Long Walk with their links to local villages. A shared path (an unsegregated, combined footpath, cycle track and footway) for the western side of the Scheme is proposed to link the A33 / B3047 Junction to Winnall Industrial Estate situated on Easton Lane. The provision of safer travel infrastructure will reduce fear of accidents for pedestrians and cyclists which will improve journey quality. The Scheme improvements to cycle connectivity, especially for the National Cycle Network route 23, are expected to result in benefits associated with the fitness impact of increased physical activity. In total, an additional 4.8km of public rights of way are to be provided as part of the Scheme.

3.5.3 Overall, the Scheme performs well when assessed against the Scheme objectives.

3.6 Conformity of the Scheme with NPS NN strategic objectives

3.6.1 The NPS NN sets out the need, and Government's policies for delivering NSIP developments on the national road network. The compliance of the Scheme with the environmental requirements of the NPS NN is considered in detail in the **NPS NN Accordance Table (Document Reference 7.2)**. This section sets out how the Scheme is consistent with the aims of the NPS NN at a strategic level.

3.6.2 Paragraph 2.2 of the NPS NN recognises that *"there is a critical need to improve the national road and rail networks to address road congestion and crowding on the railways to provide safe, expeditious and resilient networks that better support social and economic activity; and to provide a transport network that is capable of stimulating and supporting economic growth. Improvements may also be required to address the impact of the national networks on quality of life and environmental factors."*

3.6.3 Paragraph 2.6 of the NPS NN confirms that the development of the national networks helps to support national and local economic growth, and that

"improved and new transport links can facilitate economic growth by bringing businesses closer to their workers, their markets and each other".

3.6.4 NPS NN Paragraph 2.10 states that the Government has *"concluded that at a strategic level there is a compelling need for development of the national networks. The Examining Authority and the Secretary of State should therefore start their assessment of applications for infrastructure covered by this NPS on that basis."*

3.6.5 Paragraph 2.13 of the NPS NN states that the SRN *"provides critical links between cities, joins up communities, connects our major ports, airports and rail terminals. It provides a vital role in people's journeys, and drives prosperity by supporting new and existing development, encouraging trade and attracting investment. A well-functioning SRN is critical in enabling safe and reliable journeys and the movement of goods in support of the national and regional economies."*

3.6.6 Paragraph 2.22 of the NPS NN confirms the importance of improving the road network as without doing so *"it will be difficult to support further economic development, employment and housing and this will impede economic growth and reduce people's quality of life. The Government has therefore concluded that at a strategic level there is a compelling need for development of all national road networks."*

3.6.7 Paragraph 2.23 of the NPS NN states that *"the Government's wider policy to bring forward improvements and enhancements to the existing SRN to address the needs set out earlier. Enhancements to the existing national road network will include:*

- *junction improvements, new slip roads and upgraded technology to address congestion and improve performance and resilience at junctions, which are a major source of congestion;*
- *implementing "smart motorways" to increase capacity and improve performance; and*
- *improvements to trunk roads, in particular dualling of single carriageway strategic trunk roads and additional lanes on existing dual carriageways to increase capacity and to improve performance and resilience."*

3.6.8 Paragraph 4.2 of the NPS NN states that *"subject to the detailed policies and protections in this NPS, and the legal constraints set out in the Planning Act 2008, there is a presumption in favour of granting development consent for national network NSIPs that fall within the need for infrastructure established in this NPS."*

3.6.9 Paragraph 4.3 of the NPS NN states that *"in considering any proposed development, and in particular, when weighing its adverse impacts against its*

benefits, the Examining Authority and Secretary of State should take into account:

- *its potential benefits, including the facilitation of economic development including job creation, housing and environmental improvement, and any long-term or wider benefits.*
- *its potential adverse effects, including any longer-term and cumulative adverse impacts, as well as measures to avoid, reduce or compensate for any adverse impacts."*

3.6.10 **Table 3.2** below illustrates how the Scheme will fulfil the strategic objectives of the NPS NN.

Table 3.2: Conformity with the NPS NN strategic objectives

NPS NN Strategic Objectives (NPS NN Page 9)	Conformity of the Scheme
Networks with the capacity and connectivity and resilience to support national and local economic activity and facilitate growth and create jobs	Hampshire County Council identified in 2013 that infrastructure improvements were necessary to reduce congestion levels and assist with the strategic movement of traffic at Junction 9 of the M3, a key arterial intersection, to make sure that traffic congestion and increased journey times do not compromise the scale of potential future economic growth in the sub-region. One of the Scheme objectives is to support economic growth and ensure the junction can accommodate additional traffic. The **Transport Assessment Report (Document Reference 7.13)** states that the Scheme is expected to improve journey time reliability where it provides more capacity which reduces congestion and journey time delays. **Table 12.28** of **Chapter 12 (Population and Human Health)** of the **ES (Document Reference 6.1)** details potential impacts of the Scheme on development land and business. **Table 12.28** reports a moderate beneficial effect on the Winnall Industrial Estate including CEMEX once the Scheme is operational, due to a reduction in journey times for those who are accessing the site via M3 Junction 9. It states that, given the proximity of this receptor to the junction, this is likely to make up a substantial proportion of its users.

NPS NN Strategic Objectives (NPS NN Page 9)	Conformity of the Scheme
	As detailed in **Table 3.1** and **Section 5** of this document and the **Combined Modelling and Appraisal Report (Document Reference 7.10)**, the Scheme has wider economic benefits of £41.8 million which is expected to stimulate local development sites and economic activity.
Networks which support and improve journey quality, reliability and safety	The Scheme objectives include: reducing delays at M3 Junction 9 on all links M3, A33 and A34; smoothing the flow of traffic by improving journey time reliability and reducing delays at M3 Junction 9 and the exit and entry roads for the A33 and A34; and improving the safety for all road users and reducing the annual collision frequency and severity ratio at the junction. The quality of journeys will be improved by the Scheme as a result of reduced journey times and therefore reduced frustration for drivers. The Scheme is expected to improve journey time reliability where it provides more capacity which reduces congestion and journey time delays. This is evident from the forecast journey time savings associated with the Scheme, particularly to/from the Easton Lane gyratory approach at M3 Junction 9. As these routes are shown to be more “free flowing” with the Scheme, it can be expected that journey time reliability along these routes would improve. The study area will experience a decrease in the total number of collisions and casualties with the Scheme. The greatest benefits are experienced as a consequence of the reduced traffic demand through the junction gyratory. The predicted reduction in accidents with the Scheme would also have a positive impact on journey time reliability.
Networks which support the delivery of environmental	**Chapter 14 (Climate Change)** of the **ES (Document Reference 6.1)** assesses the potential climate impacts of the Scheme and sets out design, mitigation and enhancement measures to minimise carbon through

NPS NN Strategic Objectives (NPS NN Page 9)	Conformity of the Scheme
goals and the move to a low carbon economy	design and construction. **Paragraph 14.10.16** states that, when compared with UK carbon budgets, the Scheme is expected to contribute approximately 0.002% of the UK's 4th carbon budget and 0.001% of the 5th carbon budget and 0.002% of the 6th carbon budget. This is considered a small increase in the magnitude of emissions from the Scheme, and it is deemed unlikely that this Scheme, in isolation, would materially affect the UK's ability to meet its carbon budgets. Therefore, the Scheme is not anticipated to give rise to a significant effect on climate.
Networks which join up our communities and link effectively to each other	One of the Scheme objectives is to provide improvements for walkers, cyclists including connecting the National Cycle Network Route 23 which is severed by the current junction layout. The Scheme will provide significantly enhanced provision for pedestrians, cyclists and horse-riders and the new public rights of way network will increase opportunity for active travel, including upgrades to the existing PRoW that cross Junction 9, including the NCN 23, and provision of safe walking routes along the length of the road used for recreation and commuting. Through the Scheme, the existing severance between Winchester and the South Downs National Park, created by the current M3 Junction 9 alignment, would be addressed, with improved, safe facilities to access open and recreational space. There are some positive impacts on the local road network within Winchester as set out in **Combined Modelling and Appraisal Report (Document Reference 7.10)**. One reason for this is that the introduction of the Scheme reduces the incentive to avoid Junction 9 and consequently reduces flows across the city. **Chapter 12 (Population and Human Health)** of the **ES (Document Reference 6.1)** reports that, during its operational phase, the Scheme is anticipated to enhance the accessibility of community, recreational,

NPS NN Strategic Objectives (NPS NN Page 9)	Conformity of the Scheme
	education and healthcare facilities due to reduced congestion and greater journey time reliability.

4 Transport case for the Scheme

4.1 Overview of transport policy considered

4.1.1 This section sets out the national, regional, and local transport related policies that are relevant to the Scheme. In depth detail of the Scheme's accordance with all relevant national and local policies, local transport plans and associated supplementary documents, particularly the NPS NN, is provided in **Section 6** of this document and in the **NPS NN Accordance Table (Document Reference 7.2)**.

4.2 National policy

National Policy Statement for National Networks

4.2.1 The NPS NN sets out the need for, and the Government's policies to deliver, the development of NSIPs on the national road networks in England. The NPS NN provides planning guidance for promotors of NSIPs on the road and rail networks. The SoS will use the NPS NN as the primary basis for making decisions on development consent applications.

4.2.2 The Appraisal of Sustainability accompanying the NPS NN recognises that some developments will have some adverse local impacts on noise, emissions, landscape/visual amenity, biodiversity, cultural heritage and water resources. The significance of these effects and the effectiveness of mitigation is uncertain at the strategic and non-locationally specific level of the NPS NN. Therefore, whilst applicants should deliver developments in accordance with Government policy and in an environmentally sensitive way, including considering opportunities to deliver environmental benefits, some adverse local effects of development may remain. This is discussed in the **ES (Document Reference 6.1)**.

National Planning Policy Framework (2021)

4.2.3 The NPPF sets out the Government's planning policies for England and how these should be applied strategically in the development plan system and in the management of development.

4.2.4 The overall strategic aims of the NPPF and NPS are consistent. Paragraph 5 of the NPPF makes clear that it does not contain specific policies for NSIPs. These are determined in accordance with the decision-making framework in the Planning Act 2008 and relevant NPSs for major infrastructure, as well as any other matters that are relevant to the that project (which may include the NPPF).

4.2.5 The NPPF states that the purpose of the planning system is to contribute to the achievement of sustainable development. In this regard there are three interdependent overarching objectives; economic, social and environmental which need to be pursued in mutually supportive ways with the aim of securing

net gains across each. Accordingly, the NPPF states a "*presumption in favour of sustainable development*" (NPPF Paragraph 10).

Road Investment Strategy 1

4.2.6 In December 2014, RIS1 was published by the DfT. RIS1 set out the list of schemes that were to be delivered by the Applicant over the period 2015 to 2020. RIS1 identified improvements to M3 J9 Winnall Interchange as one of the key investments in the Strategic Road Network (SRN) for the London and South East region.

Road Investment Strategy 2

4.2.7 In April 2020, RIS2 was published by the DfT. RIS2 sets out the road investment strategy, including the list of schemes that are to be developed by the Applicant in the period 2020-2025.

4.2.8 The Applicant, as the strategic highways company and appointed by the SoS must, in exercising its functions and complying with its legal duties and other obligations, act in a manner which it considers best calculated to, among others:

- minimise the environmental impacts of operating, maintaining, and improving its network and seek to protect and enhance the quality of the surrounding environment.
- conform to the principles of sustainable development.

4.2.9 RIS2 introduces the schemes in the south and west of England committed for Road Programme 2. RIS2 includes the *"M3 junction 9 – upgrade to the junction to allow free movement from the A34 to the M3."*

4.3 National Highways policy

Highways England Strategic Business Plan 2020-2025

4.3.1 The *Highways England Strategic Business Plan 2020-2025* (2020) responds to and aligns with the Government's RIS2. It provides the high-level direction for every part of National Highways for Road Period 2 (RP2) (2020 to 2025) and is supported by the *Highways England Delivery Plan 2020-2025* included below.

Highways England Delivery Plan 2020-2025

4.3.2 The *Highways England Delivery Plan 2020-2025* (2020) explains how the Applicant will invest Government funding in the SRN up to 2025 and supports the *Highways England Strategic Business Plan* included above.

4.3.3 The M3 Junction 9 Scheme is listed within the Regional Investment Programme (the Programme) which is used to deliver enhancement schemes. The Programme states that the Applicant will begin an additional 16 schemes and open 16 for traffic during RP2. The M3 Junction 9 is listed as a Scheme for

which works are due to start in 2023-24 and which is due to open for traffic in RP3.

4.3.4 Annex B of the *Highways England Delivery Plan 2020-2025* sets out the six key performance outcomes agreed with the DfT for RP2:

- Improving safety for all.
- Providing fast and reliable journeys.
- A well-maintained and resilient network.
- Delivering better environmental outcomes.
- Meeting the needs of all users.
- Achieving efficient delivery.

National Highways Delivery Plan 2022-2023

4.3.5 The *National Highways Delivery Plan 2022-2023* (2022) is an annual update to the *Highways England Delivery Plan 2020-2025* included above. M3 Junction 9 is listed as a Scheme for which works are due to start in 2023-24 and which is due to open for traffic in RP3 (no change to timescales detailed in the *Highways England Delivery Plan* 2020-2025).

4.4 Local policy

Hampshire Local Transport Plan 2011-2031

4.4.1 The LTP was adopted in 2011 and subject to a minor review in 2013. The LTP sets out a long-term vision for how the transport network of Hampshire will be developed over a 20-year period.

4.4.2 The LTP identifies that the junction of the A34 and M3 at Winnall, which acts as a gateway to the south Hampshire sub-region, presents particular difficulties. The LTP states that as well as capacity problems at this key intersection, there are also significant difficulties for local traffic wishing to join the strategic network at this point, particularly from nearby employment areas. Further increases in traffic may necessitate changes to the layout of the junction to offer increased capacity to reduce congestion at this location.

4.4.3 The LTP identifies within Chapter 6 (Transport Strategy for Central Hampshire and the New Forest) the following potential options that could be considered for delivery in support of the highway network:

- Providing a well-maintained, resilient highway network.

- Over the longer-term, work with the Highways Agency to explore scope for affordable and environmentally acceptable solutions to address congestion at Junction 9 of the M3.

4.5 Policy summary

4.5.1 The Government has highlighted the critical need for improvements to the national networks within the NPS NN. RIS1 identified improvements to M3 J9 as one of the key investments in the SRN for the London and South East region and RIS2 supports the upgrade of M3 Junction 9 to allow free movement from the A34 to the M3

4.5.2 The Scheme also accords with the LTP by addressing congestion at M3 Junction 9.

4.6 Baseline data and development of model

4.6.1 This section provides a summary of the M3 Junction 9 Scheme baseline data collection and the modelling assessment. A more detailed description of the modelling assessment is included within the **Combined Modelling and Appraisal Report (Document Reference 7.10)**.

Baseline data

4.6.2 The baseline data used for the highway assessment of the Scheme is a combination of Automated Number Plate Recognition (ANPR), Mobile Network Data (MND), traffic count data, which included Manual Classified Counts (MCC) and Automated Traffic Counts (ATC), and journey time data.

4.6.3 The baseline data has been used in the model development process to calibrate and validate the baseline model. The validated and calibrated baseline model provides a sound basis on which the future year scenarios can be built upon.

4.6.4 Further data which has been collected for the assessment of the Scheme, is historical accident data which informs the road safety assessment. Public transport, walking, cycling and horse-riding data has also been used within the assessment.

Modelling

4.6.5 A modelling assessment has been used to provide a comparison between the 'with-scheme' and 'without-scheme' scenarios (i.e. with and without the M3 Junction 9 improvements).

4.6.6 In parallel to the Scheme, the Applicant developed the M3M27 SMI Model, which was based on the Applicant's South East Regional Traffic Model (SERTM) (which was developed to assist in the assessment of schemes in the Road Investment Strategy (RIS1)). The Applicant judged the M3M27 SMI Model to be fit for modelling SRN schemes and this model was adopted and enhanced

further for use in the full Scheme assessment. This model is referred to as the M3 Junction 9 Model.

4.6.7 The M3 Junction 9 Model is calibrated to a 2015 base year. The model used contains the Morning Peak (AM), Inter Peak (IP) and Evening Peak (PM) time segments as 07:00 to 10:00, 10:00 – 16:00 and 16:00 – 19:00 respectively. An average hour is modelled within each of these time segments. The five trip purposes within the model are comprised of 5 user groups which include car employer business, car commute, car other, light goods vehicles (LGVs) and heavy goods vehicles (HGVs).

4.6.8 To build a future year model, the traffic forecasts built upon the base year data with future household and employment growth which is derived from national and local growth forecasts. For key areas of the model relevant local authorities provided a list of developments coming forward or with the potential to come forward in the future which were added to an uncertainty log (this is appended to the **Combined Modelling and Appraisal Report (Document Reference 7.10)**. The Local Authorities also provided a list of transport schemes to add to the log. This uncertainty log details the level of uncertainty for each of the developments and transport schemes. Data not provided by the Local Authorities or deemed not to have sufficient impact on the scheme was forecast using the National Trip End Model (NTEM) growth factors.

4.6.9 A core scenario represents the unbiased and realistic set of assumptions which is a robust evidence-based decision-making process. The forecasting approach created an initial reference case travel demand which reflected changes in car ownership, population, employment and other demographic and economic factors. However, traffic growth resulting from other sources, such as changes in generalised costs due to traffic conditions, were not included in the reference case forecasts.

4.6.10 Variable demand modelling takes into account changes in generalised costs and their impact on travel choices including destination choice and mode choice. Public transport demand and supply data was taken from the M3M27 SMI model.

4.6.11 The modelled forecast years are as follows (for both the Do-Minimum ‘without Scheme’ and Do-Something ‘with Scheme’ scenarios):

- 2027 – This is assumed to be the opening year of the Scheme and the same time as the development forecasts.
- 2042 – This is the design year (15 years after the opening year).
- 2047 – This is known as the horizon year for modelling.

4.6.12 Low and high growth scenarios have also been run to provide an overview of the future traffic conditions and impact of the Scheme if less/more growth comes forward than anticipated within the Core Scenario. The high growth scenario

consisted of forecasts that are based on a percentage proportion of base year demand added to the demand from the core scenario, whilst the low growth scenario is based on the same ranges below the core scenario. This is explained further in the **Combined Modelling and Appraisal Report (Document Reference 7.10)**. The economic assessment of the scenarios is presented in **Table 5.24** of the **Combined Modelling and Appraisal Report (Document Reference 7.10)**.

4.6.13 An operational assessment has been carried out using a micro-simulation model (VISSIM) of the M3 Junction 9. The model extent is shown in **Figure 4.1**.

Figure 4.1: VISSIM Model Extent

4.6.14 The base year of the operational model is 2017. The model was developed from ANPR data, along with turning counts at key junctions and journey time data.

4.6.15 The operational model was prepared for the AM peak hour (7.15 – 8.15) and PM peak hour (16.00 - 17.00).

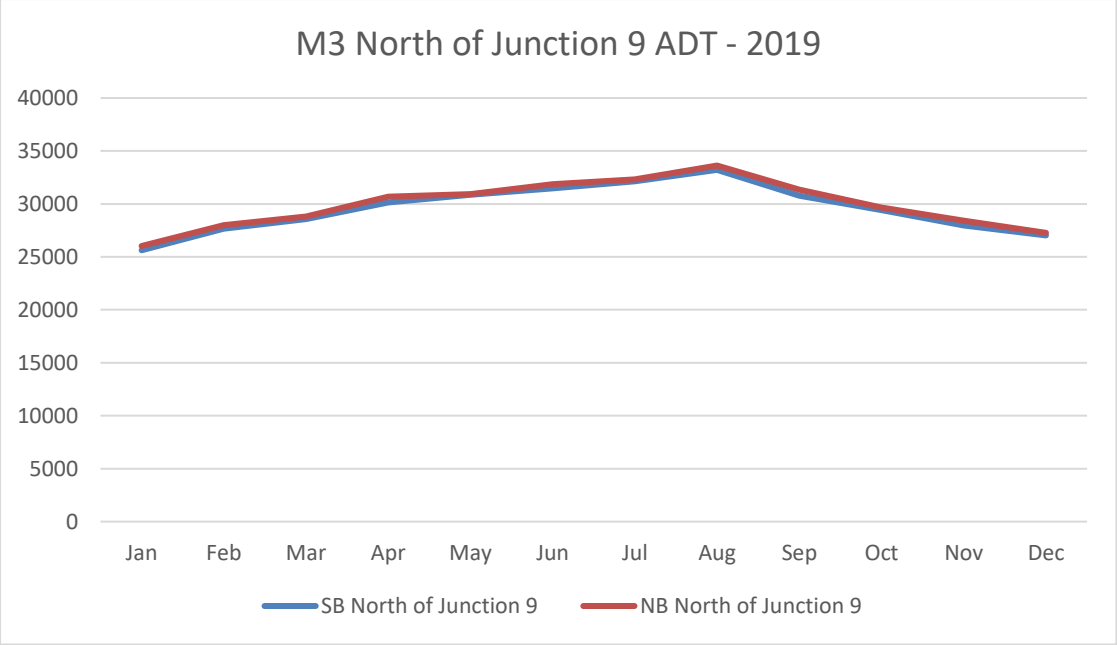
4.6.16 The forecast demand matrices were generated using growth rates derived from the strategic model. The forecast year is consistent with the strategic model as 2047.

4.7 Current network performance

4.7.1 The M3 Junction 9 is a key strategic route interchange which connects South Hampshire and the ports of Southampton and Portsmouth with the wider sub region. It also connects the region to London and the north-west via the M3, and the Midlands and the north via the A34. The A34 also provides a connection to the principal east-west corridor of the A303. The junction acts as a bottleneck on the local and strategic highways network and causes significant delay, especially during peak hours.

4.7.2 Data collected by the Applicant[1] indicates that the Annual Average daily traffic flows along the A34 in 2019 (pre-COVID-19) were around 32,900 vehicles in the northbound direction and 30,800 vehicles in the southbound direction, of which 26,000 were from the A34 and 4,800 from the A33. The annual average daily traffic flow along the M3 (north of Junction 9) was approximately 29,000 vehicles in each direction. The Junction 9 slip roads have around 26,600 vehicles on the northbound off-slip and 25,300 on the southbound onslip. The data indicates very high flows from the A34/A33 to and from the M3 southbound.

Figure 4.2: Monthly Flow Profile M3 North of Junction 9



4.7.3 **Figure 4.2** shows the Average Daily Traffic (ADT) for the year of 2019 on the M3 just north of Junction 9 from WebTRIS. The flows across the year indicate that there is a fairly stable flow along the M3. There is a steady rise in flow into the summer months with a peak in August and then a fall in flow between August and September. The northbound and southbound direction have very similar ADT.

[1] Highways England - WebTRIS - Map View

Figure 4.3: A34 Daily Traffic Flow Profile

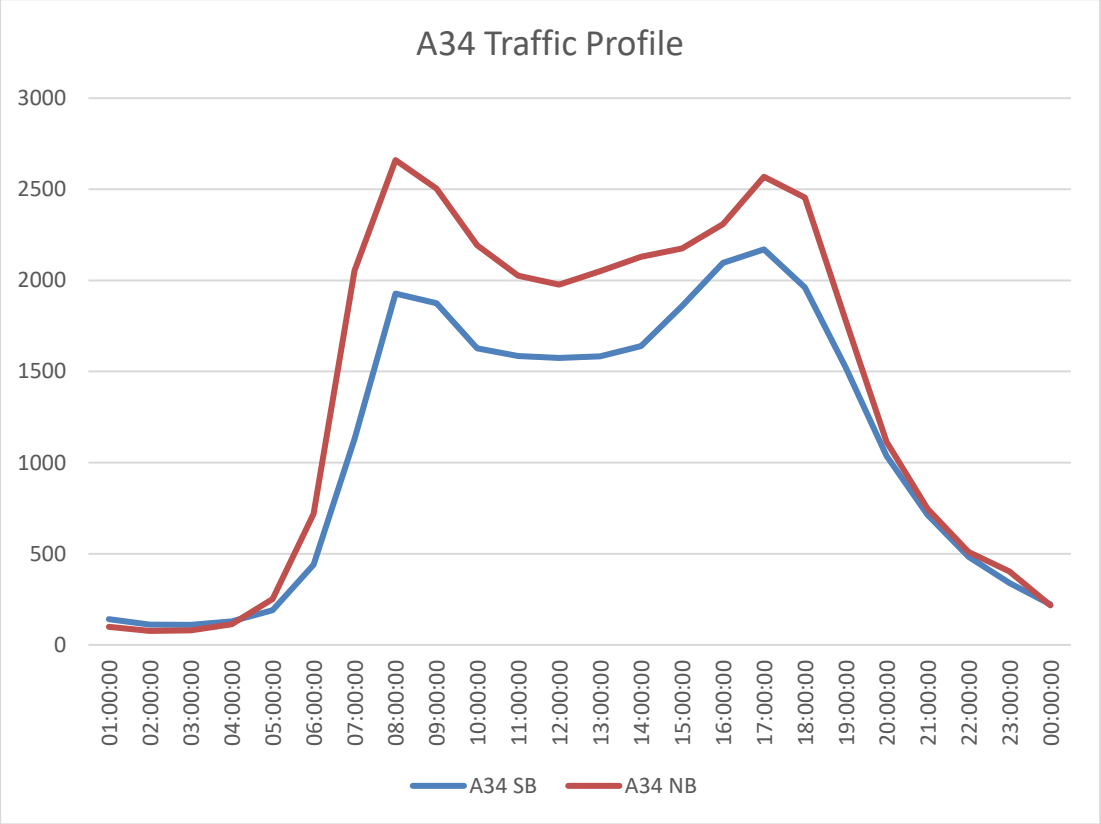
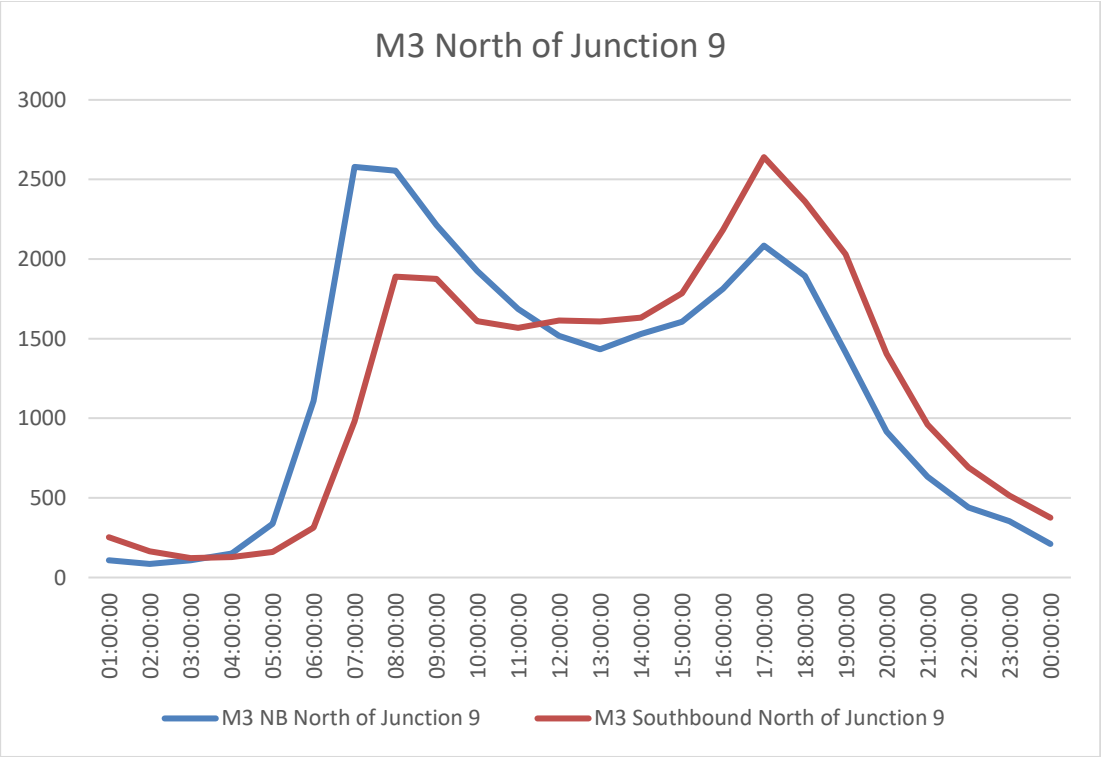


Figure 4.4: Daily Flow Profile of the M3 Junction 9

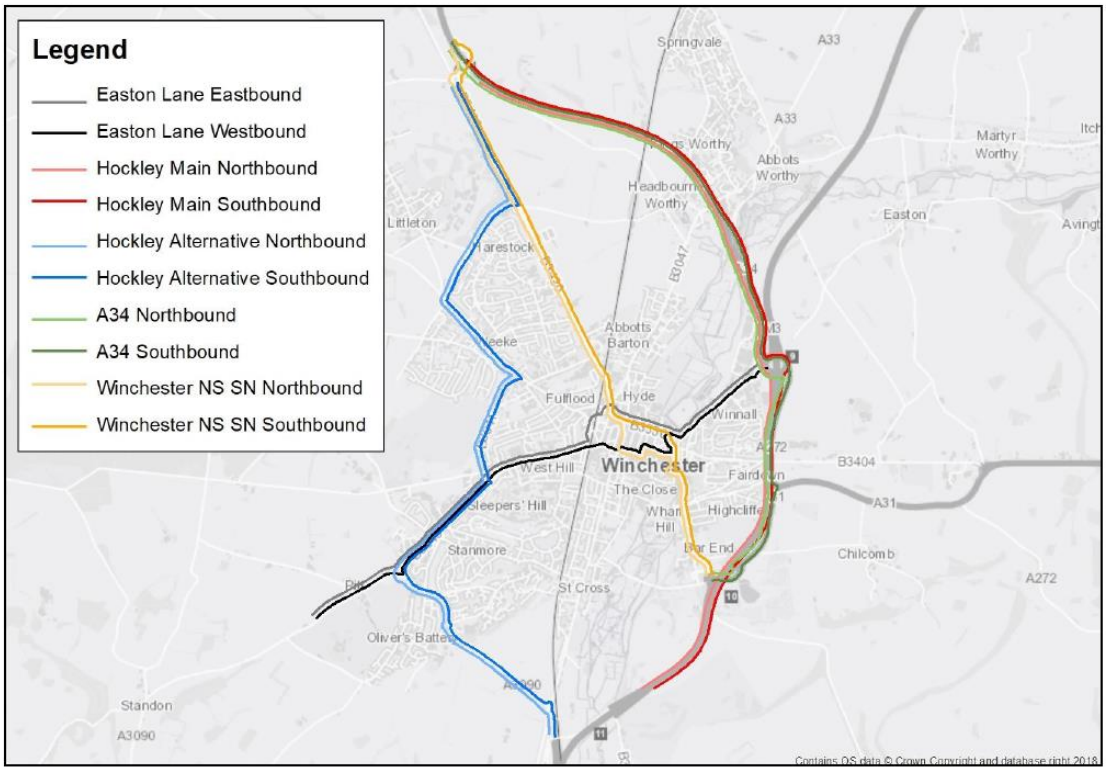


4.7.4 **Figure 4.3** and **Figure 4.4** show that the A34 and the M3 have significant AM and PM peak hours/periods where there are particularly high traffic flows compared to the rest of the day including the interpeak period.

4.7.5 Queues on the northbound diverge (off-slip) of the M3 regularly back onto the mainline carriageway, resulting in delays and safety concerns for both M3 northbound through traffic and traffic seeking to leave the motorway. Such issues are particularly prevalent during peak periods. There are further potential safety concerns on the A34 southbound due to significant queuing which also results in traffic re-routing through the residential suburbs of Winchester.

4.7.6 The observed journey time data sections are shown in **Figure 4.5**.

Figure 4.5 Observed Journey Time Routes



4.7.7 Observed journey times from the 2015 Traffic Master data are shown in **Table 4.1**. This shows on most sections the AM and PM peak periods journey times take longer than the interpeak period indicating congestion during these periods. Some of the largest differences between occur on the Hockley Alternative in the northbound direction and Easton Lane in the Eastbound direction. Hockley Main southbound in the PM peak is also over 2 minutes slower than the AM and IP periods. The A34 northbound is over 2 minutes slower in the AM peak compared to the IP and the A34 southbound is 1.5 minutes slower in the PM peak compared to the IP.

Table 4.1: 2016 Observed Journey Time Data (2015 Traffic Master Data) -Source: PCF Stage 2 (Options Selection) Transport Data Package

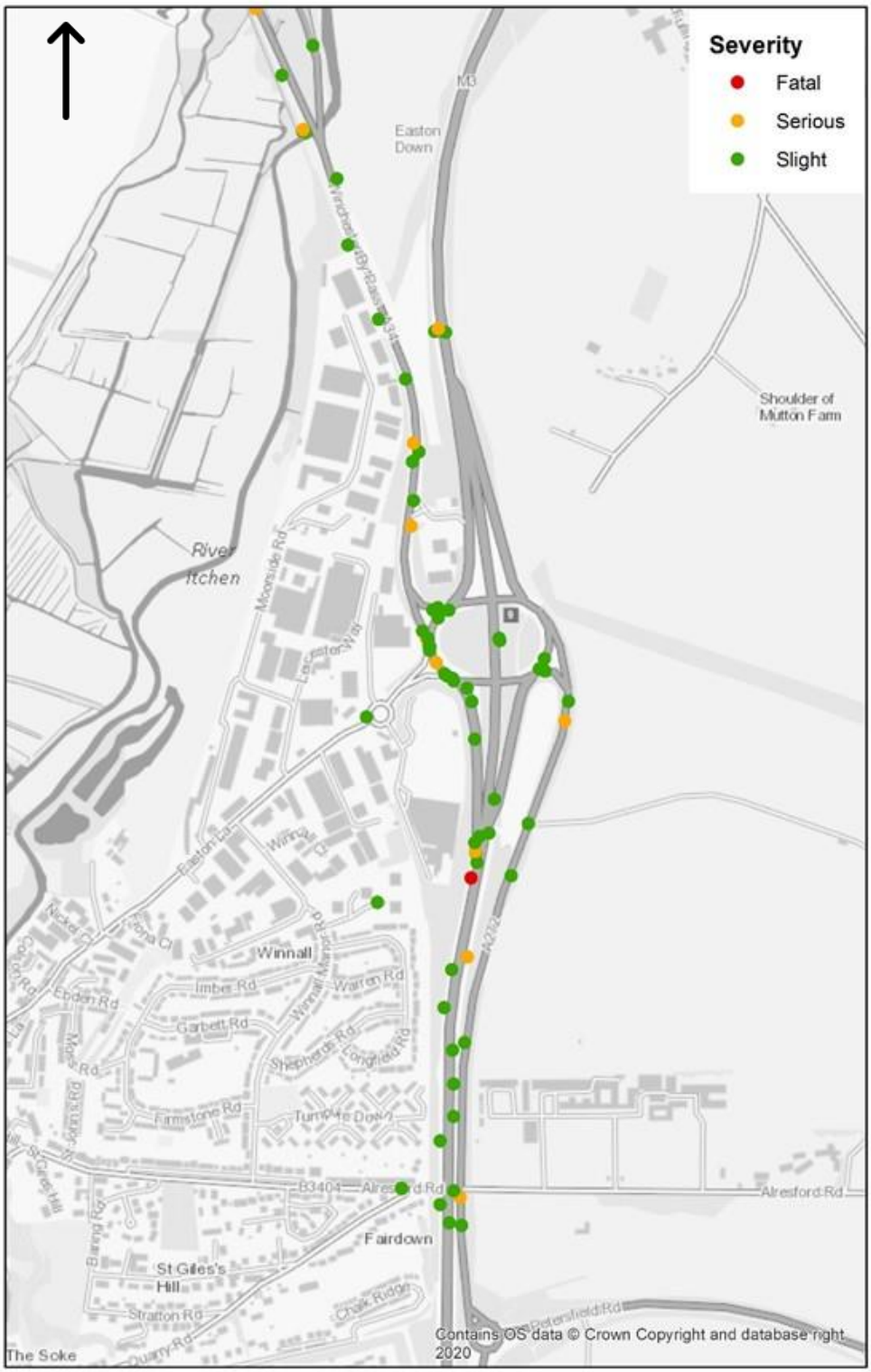
Route name	Direction	Route description	AM mean (min)	IP mean (min)	PM mean (min)
A34	NB	M3 J10 <> A34/A272 via Spitfire Link	10:54	08:24	09:18
A34	SB	A34/A272 <> M3 J10 via Spitfire Link	07:36	07:12	08:48
Easton Lane	EB	South Winchester Golf Club to Easton Lane Roundabout	16:18	14:18	14:42
Easton Lane	WB	Easton Lane Roundabout to South Winchester Golf Club	13:48	14:30	15:18
Hockley Alternative	NB	M3 J11 to A34 A272 through west Winchester	16:42	12:48	14:00
Hockley Alternative	SB	A34 A272 to M3 J11 through west Winchester	15:24	14:06	14:54
Hockley Main	NB	M3 J11 to A34 A272 on M3 and A34	06:30	06:18	06:12
Hockley Main	SB	A34 A272 to M3 J11 on A34 and M3	07:06	07:00	09:18
Winchester NS SN Route	NB	M3 J10 to A34 A272 through city centre	14:36	14:00	14:18
Winchester NS SN Route	SB	A34 A272 to M3 J10 through city centre	12:36	11:54	13:12

Key: NB-northbound, SB-southbound, EB-eastbound, WB-westbound

Road safety

4.7.8 Accident data for the 5-year period between 2015 and 2019 has been interrogated. The accidents within the vicinity of the A34, A33 and the M3 Junction 9 are shown in **Figure 4.6**.

Figure 4.6: Historical Collision Data around the M3 Junction 9 (2015-2019)



4.7.9 The majority of accidents are located around the circulatory of the M3 grade separated roundabout or the merge/diverge locations on the M3. The breakdown of collisions is shown in **Table 4.2**.

Table 4.2: Collision Data by Year (2015-2019)

	2015	2016	2017	2018	2019	Total	Total %
Slight	18	13	14	16	6	67	84%
Serious	2	4	2	1	3	12	15%
Fatal	0	0	1	0	0	1	1%

4.7.10 Out of the 80 collisions there were 106 casualties, 87 casualties were involved in slight collisions, 15 serious collisions and 4 casualties involved in the fatal collision. 16% of collisions were Killed or Seriously Injured (KSI), this indicates at the junction there were mainly slight collisions which could be attributed with side-swipe or shunt collisions due to slowing down for the junction/congestion.

4.7.11 The fatal collision was located on the northbound diverge to the off-slip at Junction 9 where there are a cluster of collisions.

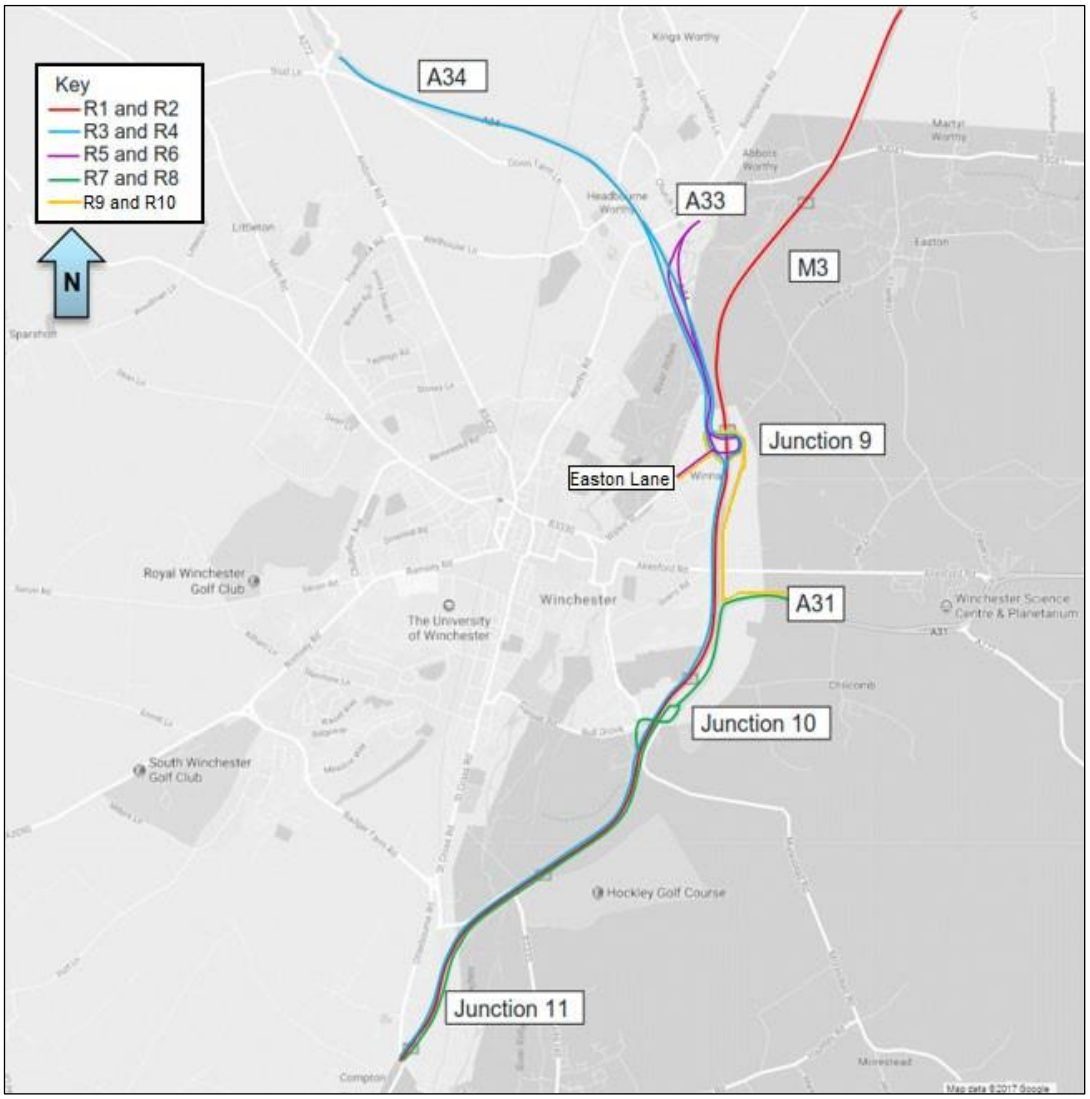
4.7.12 The recorded collisions on the M3 have several factors, including shunt collisions where drivers have not anticipated slowing traffic, loss of control, poor driving conditions leading to aquaplaning, and lane change manoeuvres.

4.8 Future network performance

4.8.1 Analysis of the operational model in the Do-Minimum ('without-scheme') in 2047 showed that there are significant predicted delays above free-flow journey time at Junction 9. The model predicted delays on the Easton Lane approach (from Winchester city centre) of 165 seconds in the AM peak and 90 seconds in the PM peak. On the A34 approach to Junction 9 there was a predicted delay of 30 to 40 seconds in the AM and PM peaks with a predicted queue length of 870m in the PM peak.

4.8.2 **Figure 4.7** shows the route sections used for the analysis of journey times.

Figure 4.7: Operational Model Journey Time Route Sections

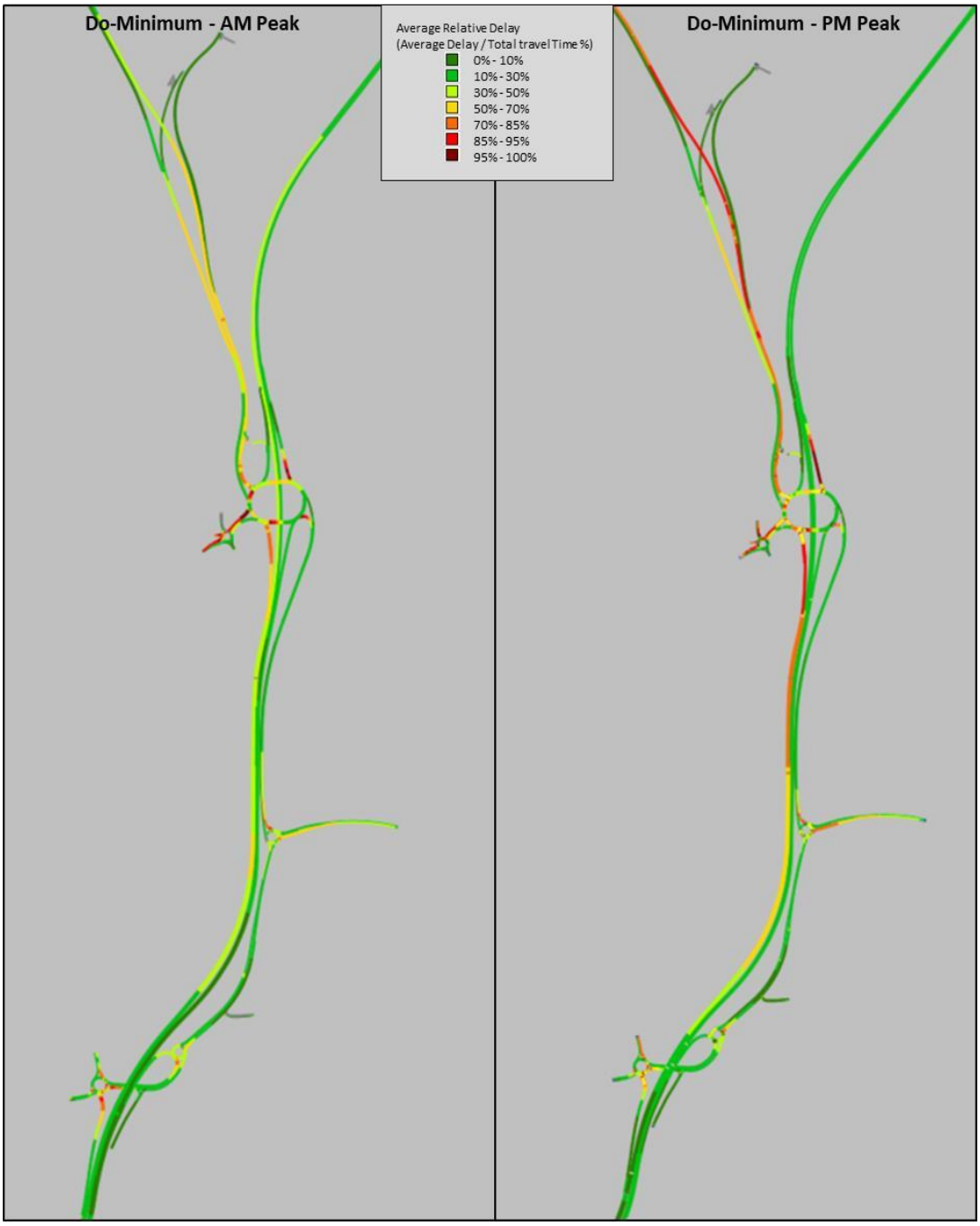


4.8.3 In the AM Peak Easton Lane to the A33 had a predicted journey time increase of over 3 minutes (120% of total travel time) between the 2017 base and the 2047 Do-Minimum. Easton Lane to the A31 had a predicted increase in journey time from 2017 to 2047 of over 2 minutes (50% of total travel time).

4.8.4 In the PM peak Easton Lane to the A33 had a predicted journey time increase of almost 1 minute (circa 33% of travel total time) between the 2017 base and 2047 Do-Minimum. The M3 south to the A34 had a predicted journey time increase of circa 2 minutes (20% of total travel time).

4.8.5 **Figure 4.8** shows the operational model average relative delay for the Do-Minimum. This shows significant relative delays on the A34 southbound approaching Junction 9 of the M3 and the M3 Junction 9 northbound off-slip. For some sections of these, the predicted delay is almost 100% of total travel time. Easton Lane eastbound also shows significant relative delays.

Figure 4.8: 2047 Do-Minimum Average Delay as a Proportion of Free Flow Time



4.8.6 Analysis of the strategic M3 Junction 9 Model Volume Capacity Ratios (V/Cs) in the 2042 Do-Minimum (**Section 4.5** of the **Combined Modelling and Appraisal Report (Document Reference 7.10)**) showed a significant number of links close to Junction 9 predicted to be above 75% which means these are close to theoretical capacity. Including the Easton Lane eastbound arm which was greater than 85% approaching Junction 9 (in the AM and PM peak). Furthermore, the A34 arm southbound at Junction 9 was over 75% in the AM and PM peak, and the M3 Junction 9 northbound off-slip was over 75% in the PM peak period.

4.9 Impact of the Scheme on flows and network performance

4.9.1 From analysis of the strategic M3 Junction 9 Model, there were large increases in flow predicted along the A34 and M3 between Junction 9 and Junction 11 in the northbound direction between the Do-Minimum and Do-Something in 2047. The Scheme reduces predicted delays for A34 traffic by providing a direct connection between the M3 and A34. There are increases in flow in all time periods (up to 860 vehicles in the PM period in 2047) due to the provision of direct slip roads between the M3 and A34.

4.9.2 The Scheme is also predicted to increase the traffic flow on Easton Lane in all periods in all years. The diversion of A34 traffic away from M3 Junction 9 increases the attractiveness of A272 Spitfire Link as an access route to the M3 and Winchester City.

4.9.3 The flows on a number of local roads within Winchester City are predicted to decrease. One reason is that, in the Do-Minimum scenario, traffic routes through Winchester to avoid the delays at Junction 9. The introduction of the Scheme reduces the incentive to avoid the junction with a predicted reduction in traffic flows across the city.

4.9.4 The flow changes between the Do-Minimum and Do-Something scenarios in the 2047 forecast year for the AM and PM peak period are shown in **Figure 4.9** and **Figure 4.10**.

4.9.5 In terms of V/C ratios (**Section 4.5** of the **Combined Modelling and Appraisal Report (Document Reference 7.10)**), these are significantly reduced between the Do-Minimum and Do-Something in 2042. In the AM and PM peak the Easton Lane approach to Junction 9 is less than 60% and 75%, respectively. The M3 Junction 9 off-slip is also less than 60% in the AM and PM Peak. The A33 approach to Junction 9 is less than 20% in both peak periods.

Figure 4.9: Predicted Flows in the Do-Minimum and Do-Something in the AM Peak period, 2047 (NB – Northbound, SB- Southbound)

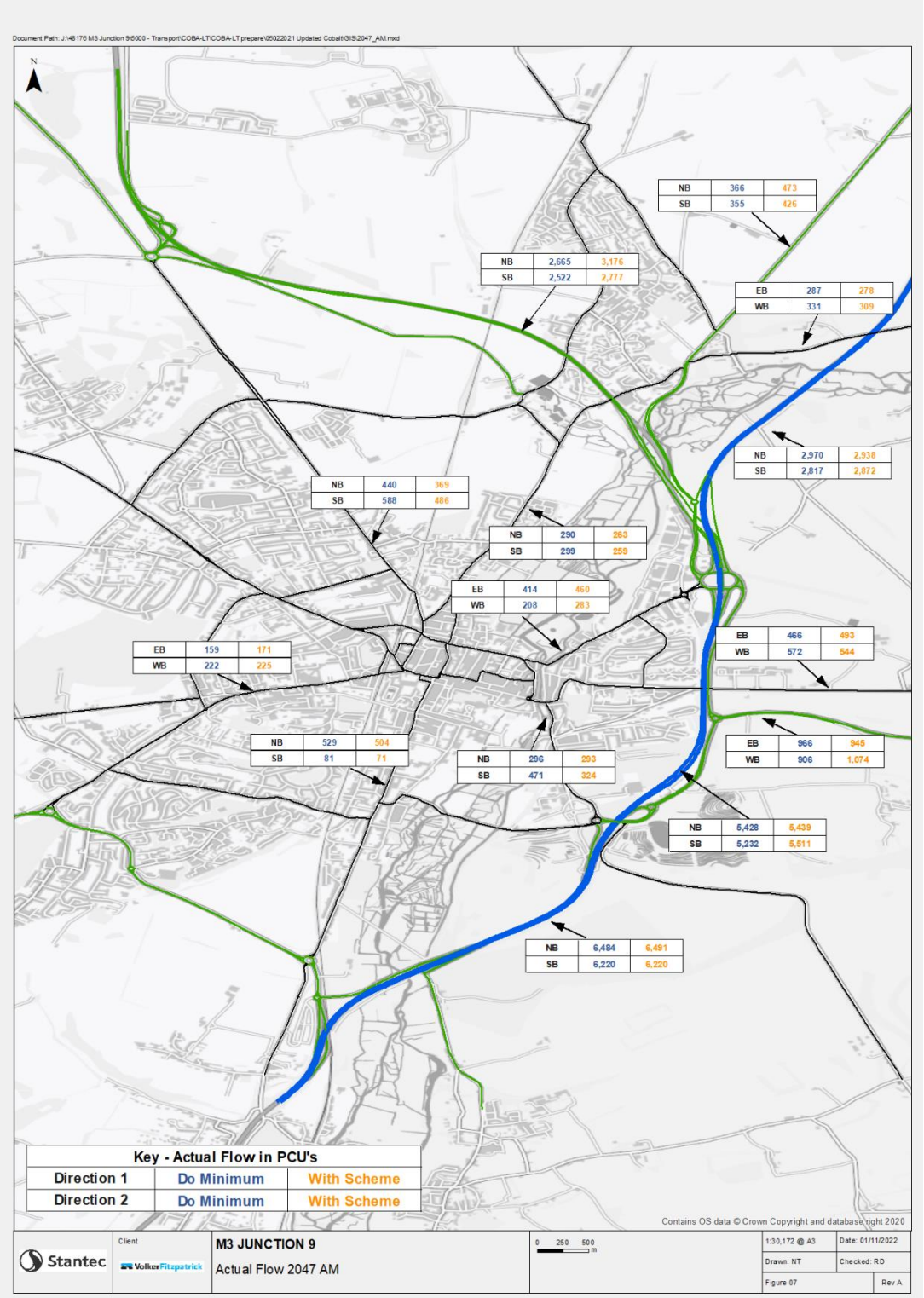
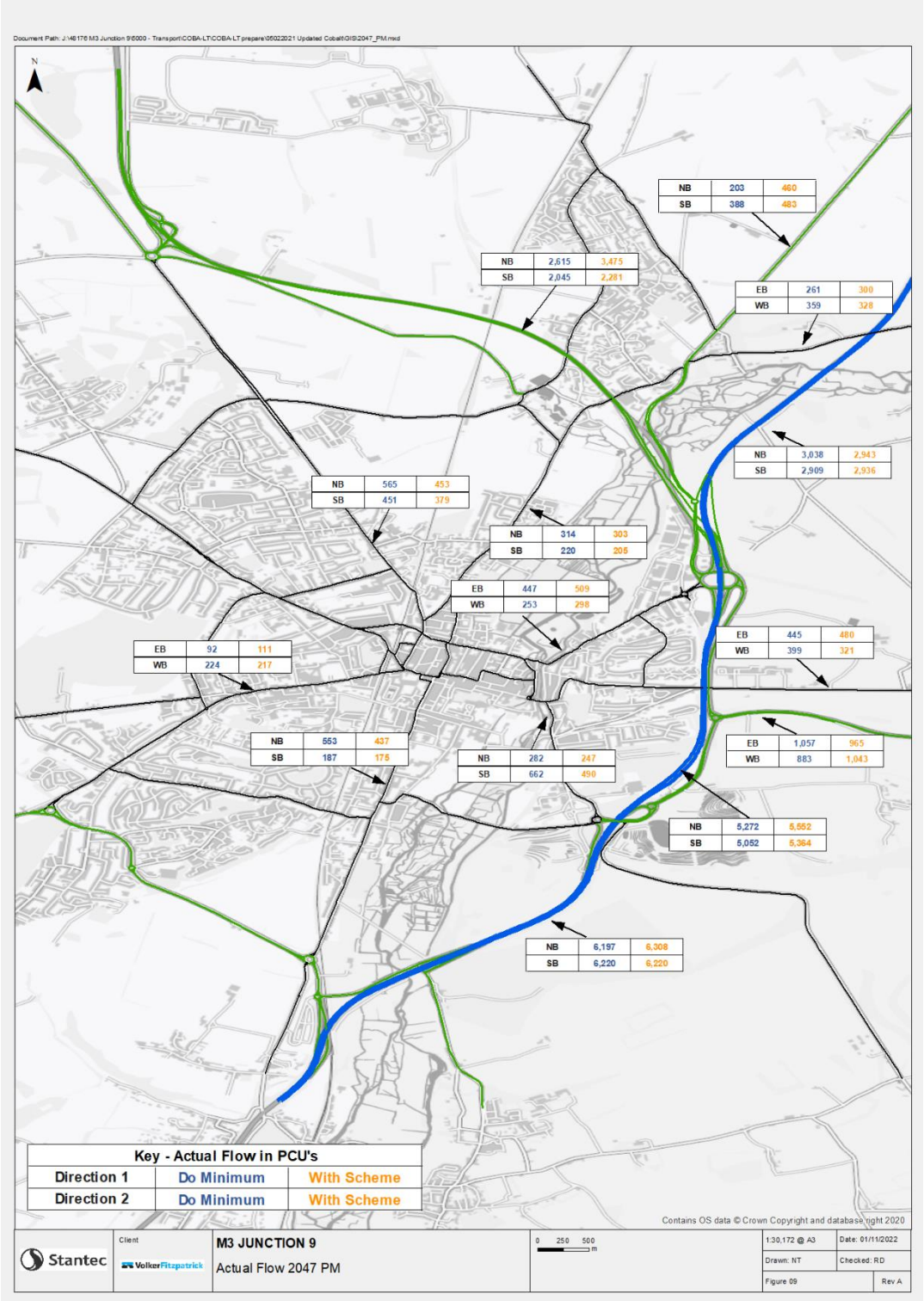


Figure 4.10: Predicted Flows in the Do-Minimum and Do-Something in the PM Peak period, 2047 (NB – Northbound, SB- Southbound)



4.10 Impact of the Scheme on journey times and delays

4.10.1 The impacts of the Scheme ('Do-Something') on journey times and delays were assessed in the future year of 2047 and compared to the 'without Scheme' scenario using the strategic and operational traffic models. The results of this showed journey time reductions on key routes especially in the AM and PM peak periods.

4.10.2 The operational model journey time comparisons for the AM and PM peak period are shown in **Table 4.3** and **Table 4.4.**

4.10.3 In the AM peak period there is a predicted reduction in journey time between the Do-Minimum and Do-Something of almost 4 minutes from Easton Lane to both the A31 and A33. The A31 to Easton Lane has almost a 4-minute predicted reduction in journey time in the PM peak period. There are also predicted journey time reductions on the A34 to M3 southbound routes in the AM and PM peak periods and the reverse route in the PM peak period.

Table 4.3: Operational Model AM Peak Journey Times

Route	Description	2047		
		Do-Minimum (DM) – Without Scheme	Do-Something (DS) – With Scheme	Difference (DS-DM)
R1	M3S to M3N	08:00	09:09	01:09
R2	M3N to M3S	05:58	06:02	00:04
R3	M3S to A34	10:22	10:45	00:23
R4	A34 to M3S	08:23	07:44	-00:39
R5	A33 to Easton Lane	03:43	04:35	00:52
R6	Easton Lane to A33	06:49	03:07	-03:42
R7	A31 to M3S	03:57	03:53	-00:04
R8	M3S to A31	06:10	07:35	01:25
R9	A31 to Easton Lane	03:46	03:05	-00:41
R10	Easton Lane to A31	07:09	03:19	-03:50

Table 4.4: Operational Model PM Peak Journey Times

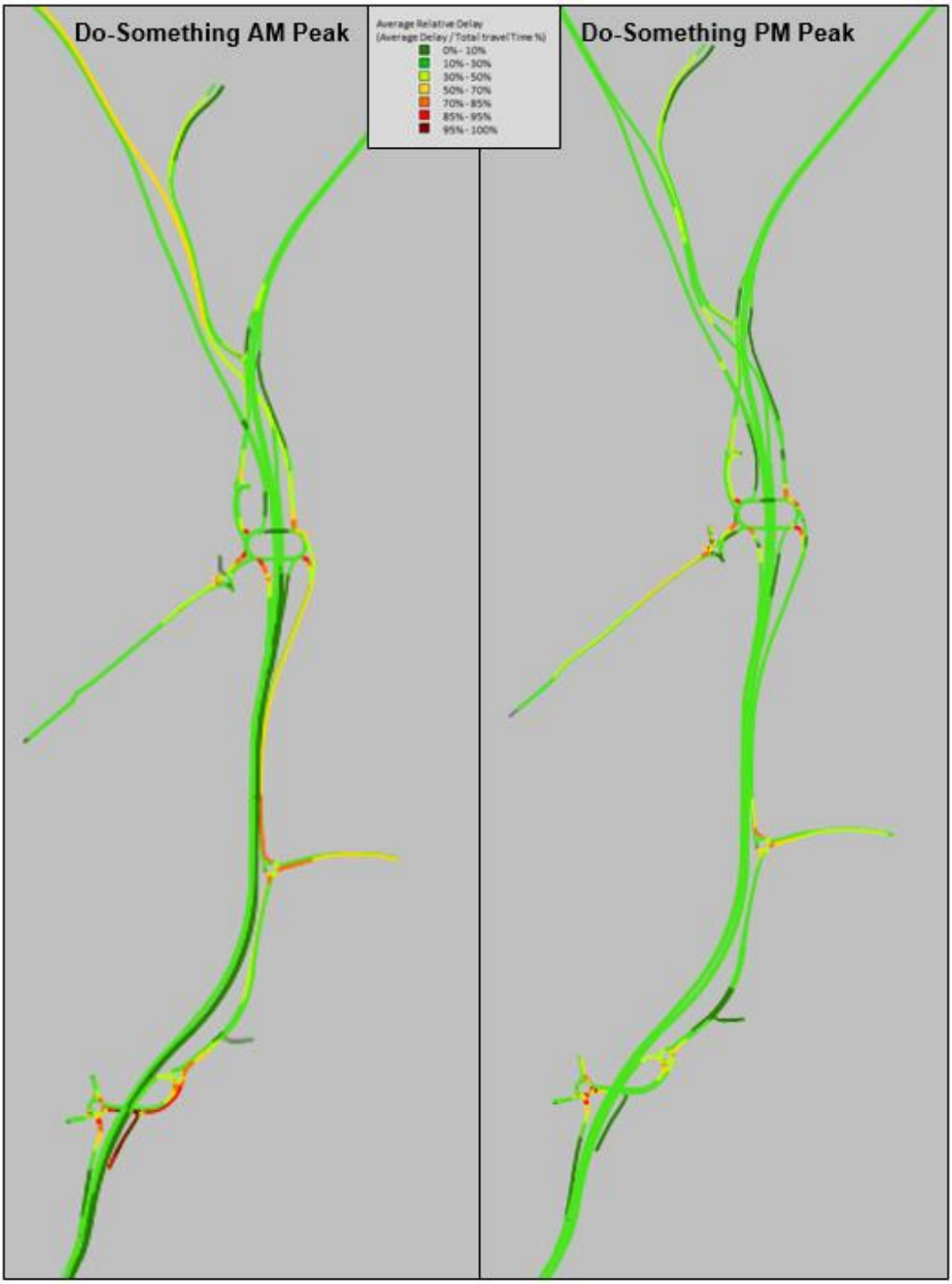
Route	Description	2047		
		Do Minimum (DM) – Without Scheme	Do Something (DS) – With Scheme	Difference (DS-DM)
R1	M3S to M3N	06:13	06:16	00:04
R2	M3N to M3S	06:13	06:38	00:25
R3	M3S to A34	11:02	08:26	-02:35
R4	A34 to M3S	10:50	08:20	-02:31
R5	A33 to Easton Lane	05:03	04:22	-00:41
R6	Easton Lane to A33	03:56	03:21	-00:35
R7	A31 to M3S	05:25	04:12	-01:13
R8	M3S to A31	04:23	04:35	00:12
R9	A31 to Easton Lane	06:35	02:54	-03:41
R10	Easton Lane to A31	06:05	03:38	-02:28

4.10.4 Overall, it can be concluded that the majority of routes show a predicted decrease in journey time with the Scheme in place. This highlights the Scheme being able to accommodate the increased vehicle traffic in the future.

4.10.5 The Scheme improvements are also predicted to reduce queuing and delay at all approach arms to Junction 9, but most significantly at the A33 (old A34) approach, where average queuing in the Do-Minimum 2047 forecast is 0.8km in the PM peak. This predicted queuing is removed with the introduction of the Scheme. **Section 4.5** of the **Combined Modelling and Appraisal Report (Document Reference 7.10)** provides further detail.

4.10.6 **Figure 4.11** shows the Do-Something average relative delay (from the operational model) and this indicates there are significantly lower average relative delays on the slip roads of the M3 Junction 9 compared with the Do-Minimum (as shown in **Figure 4.8)**. The majority are less than 50%.

Figure 4.11: 2047 Do-Something Average Delay as a Proportion of Total Travel Time



4.11 Impact of the Scheme on road safety

4.11.1 The highest proportion of existing accidents occurred in the form of rear shunts, followed by lane changes. The majority of historical accidents happened on the A34 southbound approach and M3 northbound off-slip approach to Junction 9, as well as them being a common reason for accidents on the A272 and Easton

Lane approaches to Junction 9. The rear shunts occurred as a result of the high traffic volumes combined with the stop start conditions caused by the traffic signals.

4.11.2 The Scheme will result in reduced stop-start conditions and reduced lane changing manoeuvres and hence a reduced number of accidents. There will also be a reduction in the number of accidents by reducing queueing and delays.

4.11.3 Accident analysis from the strategic modelling indicates that over a 60-year timeframe the improvements are predicted to save a total of 537 accidents, including 68 Killed or Seriously Injured (KSI) casualties.

4.12 Walking, cycling and horse-Riding

4.12.1 **Figure 2.4 (Existing and New Walking, Cycling and Horse-Riding routes)** of the **ES (Document Reference 6.2)**. provides an overview of the existing and new walking, cycling and horse-riding routes.

4.12.2 In September 2016, Tracsis carried out cycle and pedestrian count surveys at the M3 Junction 9 Roundabout. Counts were carried out for 24 hours on Thursday 8 and Saturday 10 September 2016. Data was collected at each of the sites on the type of user (pedestrian, cyclist, or equestrian) with totals aggregated every fifteen minutes.

4.12.3 Across both days, 256 No. movements were observed across all sites, 67% were cyclists and 33% were pedestrians, with no equestrians recorded. Thursday was the busiest day with 170 No. movements split between 64% cyclists and 36% pedestrians. Saturday was quieter with 86 No. movements split between 74% cyclists and 26% pedestrians.

4.12.4 Around the roundabout on the Thursday, there were clear peaks for pedestrians and cyclists between 08:00-09:00, 12:00-13:00, 14:00-16:00, and 17:00-18:00, broadly in line with the peak commuting, lunchtime trips and school times.

4.12.5 On the Saturday the numbers of pedestrians and cyclists were more evenly spread throughout the day, peaking at around 11:00hrs.

4.12.6 The Scheme provides opportunities for upgraded walking, cycling and horse-riding facilities. The elements incorporated within the Scheme design are detailed below.

4.12.7 Connecting to the existing facility on the western side of Easton Lane, a new alignment would descend beneath the western gyratory roundabout via subways underneath the circulatory carriageway before crossing the M3 on the northern side of the southern road bridge across the motorway.

4.12.8 On the eastern side of the motorway it would descend, and a subway would route beneath the eastern side of the roundabout to connect back to the eastern side of Easton Lane. Future provision for horse-riders is allowed for, who would be required to dismount prior to entering subways and lead horses through.

4.12.9 A shared path (unsegregated combined footpath, cycle track and footway) is also being provided to link the A33 / B3047 junction to Byway R23. The route runs parallel to the west of the A33 with the route to be constructed within the existing verge then transitioning & utilising the existing A33 carriageway which is to be abandoned as part of the Scheme. The existing informal link to the existing PRoW will also be upgraded from its connection to the A33. For the first River Itchen crossing (i.e., most northern), the route follows the existing A33 and is accommodated on the existing bridge deck abandoned carriageway.

4.12.10 For the second river crossing (i.e. most southern), the Scheme includes a new footbridge constructed across the River Itchen, with the route extending south along the east of the new A34 alignment, crossing under the A34 in a new subway which would then utilise the abandoned A34 northbound carriageway leading up to the existing depot junction and towards Byway R23. The new footbridge would be approximately 5m wide.

4.12.11 New pedestrian/cycle subways would be required to accommodate existing and improved provision of these routes in the area. Users would cross under the eastern side of the new roundabout gyratory, while two other subways would cross under the north and south sides of the gyratory roundabout on the western side. These three subways provide a realigned and upgraded route of the existing path from Easton Lane on the west side of the motorway to Easton Lane on the north.

4.12.12 A bridleway (allowing people to walk, cycle and horse-ride along the route) is proposed on the eastern side of the Scheme to link Easton Lane with Long Walk. Such a route would provide a circular leisure path for those using the South Downs National Park with a link to the other paths around Long Walk with their links to local villages.

4.13 Summary

4.13.1 Current issues at M3 Junction 9 include queueing on the Junction 9 slip roads back onto the M3 mainline. There is also considerable variability in the journey times between the IP and the AM and PM peak periods on some routes.

4.13.2 The future year network (2047 DM) shows significant predicted increases in journey times in some locations, in addition to the congestion in the base year. This is particularly prevalent for Easton Lane to the A33 in both the AM and PM peak as well as M3 south to A34 in the PM peak period.

4.13.3 Overall, most routes show a predicted decrease or no change in journey time with the Scheme in place. The Scheme shows significant journey time improvements for some of the most congested road links near M3 Junction 9. This highlights the Scheme being able to accommodate the increased vehicle traffic in the future.

4.13.4 The Scheme also aims to reduce accidents, the COBALT assessment shows that over the 60-year assessment period there will be improvements in safety by a reduction in accidents and related casualties.

4.13.5 Cycle and pedestrian count surveys at the M3 Junction 9 Roundabout have been carried out to provide an indication of the current pedestrian and cycle use. Existing walking, cycling and horse-riding activity near M3 Junction 9 and potential opportunities have been assessed and a list of improvements to existing facilities are being brought forward as part of the Scheme. This includes a new footbridge over the River Itchen and new subways under Junction 9, as well as other facilities to provide improved walking, cycling and horse-riding as a result of statutory consultation feedback on the Scheme design.

5 Economic case overview

5.1 Overview of economic appraisal and methodology used

5.1.1 The economic case outlines the economic, environmental, and social impacts of the Scheme and provides a means of establishing how the Scheme supports its objectives and sub-objectives. The full economic appraisal is provided in the **Combined Modelling and Appraisal Report (Document Reference 7.10)**.

5.1.2 The economic appraisal monetises some impacts in order to estimate the Scheme's economic worth. By comparing the benefits to users against the costs of the Scheme, a Benefit Cost Ratio (BCR) can be derived. Taking into account the BCR and non-monetised benefits the overall Value for Money of the Scheme can be assessed.

5.2 Assessment methodology

5.2.1 The economic assessment uses data extracted from the strategic traffic model to appraise the monetised impacts of the Scheme over a 60-year appraisal period encompassing the three model forecast years (2027, 2042, and 2047).

5.2.2 The economic assessment was carried out using standard procedures and economic parameters as defined by the DfT's Transport Analysis Guidance (TAG) Unit A1. TAG provides information on the role of transport modelling and appraisal for Scheme assessment and A1 specifically provides guidance on Cost Benefit Analysis. The impacts of the Scheme have been categorised into quantified and non-quantified impacts, and **Table 5.1** outlines the assessment methods used.

Table 5.1 Economic Impacts Calculation Methodology

Impacts	Assessment Method	Quantified
Scheme costs	Prepared by the Applicant	✓
Operating and Maintenance costs	Prepared by the Applicant	✓
Transport Economic Efficiency (TEE) – Travel Times and Vehicle Operating Costs (VOC)	Use of version 1.9.17 of Transport Users Benefit Analysis (TUBA) software with TAG 1.18 parameters.	✓
TEE – Travel Times and VOC (during construction and maintenance activities)	Calculated using transport model and TUBA.	✓

Impacts	Assessment Method	Quantified
Journey Time Reliability	Qualitative assessment only.	×
Accidents	COBALT v2.3. Update observed accident rates to include latest accident data. Use of latest available economic parameters.	✓
Greenhouse Gases	From environmental assessment and TAG workbooks.	✓
Noise	From environmental assessment and TAG workbooks.	✓
Air Quality	From environmental assessment and TAG workbooks.	✓
Indirect Taxes	Use of version 1.9.17 of TUBA with TAG 1.18 parameters.	✓
Wider Impacts – Connectivity	Use of Wider Impacts in Transport Appraisal (WITA) software (version 2.2).	✓
Wider Impacts – Structural and Context Specific	Qualitative assessment.	×
Social Impacts	Qualitative assessment.	×

✓ = Quantified × = Not Quantified

5.3 Scheme costs

5.3.1 Scheme construction costs were prepared by the Applicant. **Table 5.2** provides the present value of the construction costs for each category.

Table 5.2: Present Value of Scheme Construction Costs (£, discounted to 2010 in market prices)

Category	Scheme Cost
Preparation	10,405,034
Supervision	3,986,147
Works	88,552,330
Lands	2,078,521
Total	**105,022,033**

Operating and maintenance costs

5.3.2 **Table 5.3** presents the present value of the operating and maintenance costs.

Table 5.3: Present Value of Scheme Operating and Maintenance Costs (£, discounted to 2010 in market prices)

Category	Scheme Cost
Operating and Maintenance	7,688,652

5.4 Economic benefits

5.4.1 **Table 5.4** shows Analysis of Monetised Costs and Benefits (AMCB) of the Scheme which includes economic assessment results from the TUBA, COBALT, environmental, and wider economic benefits analysis. As per TAG all costs and benefits reported in this section are present values in 2010 prices, discounted to 2010.

Table 5.4: Total Benefits (£M, discounted to 2010, in 2010 prices)

Costs/Benefits	Scheme Benefit / Cost	
Noise	-1.34	
Air Quality	4.74	
Greenhouse Gases	~~-14.62~~ -24.11	
Accidents	22.92	
Construction (all purposes, including Indirect Tax Revenues)	-2.69	
User Benefits	Commuting	27.57
	Other	48.50
	Business	71.00
Indirect Tax Revenues	5.66	
Present Value of Benefits (PVB)	~~161.74~~ 152.25	
Costs	Operating and Maintenance	7.69
	Construction	105.02
Present Value of Costs (PVC)	**112.71**	
Net Present Value (NPV)	~~49.03~~ 39.54	
Initial Benefit to Cost Ratio (BCR)	~~1.44~~ 1.35	
Wider Economic Impacts	41.84	
Adjusted BCR	~~1.81~~ 1.72	

User benefits

5.4.2 The results of the User Benefit (Transport Economic Efficiency (TEE)) Assessment undertaken using TUBA are discussed in more detail in **Section 5.5** of the **Combined Modelling and Appraisal Report (Document Reference 7.10)**.

5.4.3 The results of the TEE analysis indicate that the Scheme is forecast to generate user benefits in the order of £152.7M. The greatest benefit relates to travel time savings, amounting to £155.5M, which were predominantly due to the provision of the free-flow movement between the A34 and the M3. An overall vehicle operating costs disbenefit of -£8.3M relates to a slight increase in total travel distance with the Scheme. A positive indirect tax benefit of £5.7M is forecast which is reflective of the overall increase in operating costs and, specifically, fuel tax revenues. A marginal impact on vehicle tolls and user charges was forecast with a disbenefit of -£0.1M.

Construction impacts

5.4.4 The predicted disbenefits during construction are -£2.7M. The construction economic impacts are based on the traffic network operation assessment where the temporary traffic management arrangements increased journey times and congestion in the model area.

Maintenance impacts

5.4.5 Scheme maintenance impacts on user travel times were assumed to be marginal relative to existing infrastructure maintenance requirements over the 60-year appraisal period and, therefore, were not quantified.

Accidents

5.4.6 The accident assessment indicated an overall reduction in accidents with a corresponding benefit of £22.9M over the appraisal period. The assessment predicted overall benefits primarily due to the reduction of traffic within South Winchester. This reduction is because of re-routing of traffic through Junction 9 with the scheme in place, in comparison to traffic routing via Junction 11 through South Winchester without the Scheme. As such the forecast decrease in traffic flows within south Winchester results in a predicted reduction in accidents.

Noise, air quality, and greenhouse gas monetised impacts

5.4.7 The methodology for assessing the noise, air quality and greenhouse gas monetised impacts is presented in **Section 5.5** of **Combined Modelling and Appraisal Report (Document Reference 7.10)**.

5.4.8 The Local Air Quality impacts are positive, and the Scheme provides benefits of +£4.7M, principally due to the reduction of traffic in central Winchester which is densely populated. However, Noise impacts are negative, and the Scheme provides disbenefits of -£1.3M where the overall increase in traffic flows results

in increased noise impacts. Greenhouses Gas impacts are also negative and include a £4.6M disbenefit relating to the construction of the Scheme, and a £~~10.0M~~19.5M disbenefit relating to the operational impact of the Scheme on vehicle emissions.

Wider economic impacts

5.4.9 **Section 5.7** of the **Combined Modelling and Appraisal Report (Document Reference 7.10)** sets out the methodology used for estimating wider economic impacts of the Scheme. The wider economic impacts are calculated using DfT Wider Impacts in Transport Appraisal software and are categorised into three themes which are induced investment impact, employment effects, and productivity impacts. The wider economic impacts indicate benefits of £41.8M.

5.4.10 The quantitative and qualitative analysis confirms that the Scheme directly addresses all of the Applicant's strategic economic objectives and in doing so addresses the strategic objective of the Scheme to "support economic growth" through unlocking development capacity for job, business, and housing creation.

Sensitivity testing results

5.4.11 **Section 5.9** of the **Combined Modelling and Appraisal Report (Document Reference 7.10)** presents detail regarding the economic sensitivity tests that were undertaken. These tests considered the impacts of alternative traffic growth forecasts, and changes in economic parameters. As would be expected, the high growth scenario predicted a higher BCR and the low growth scenario predicted a lower BCR and these were symmetrical relative to the core scenario. The economic parameters test results indicated a relatively minor impact on the Scheme monetised benefits, which did not affect the overall assessment of the value for money.

5.5 Non monetised benefits

Journey time reliability

5.5.1 As detailed in **Section 5.6** of the **Combined Modelling and Appraisal Report (Document Reference 7.10)**, journey time reliability estimates are not required to form a core part of the cost-benefit analysis but can form an additional consideration in value for money assessment. The methodology developed by the Applicant for the assessment of journey time reliability (MyRIAD) primarily applies to mainline improvements and the applications of it to junction improvements are not common. Therefore, only a qualitative assessment was undertaken, and impacts were not monetised for Stage 3b (the DCO application Scheme).

5.5.2 Recurring congestion at approaches to Junction 9 is evident in the base year and Do-Minimum forecast year scenarios and can be deemed to reflect

unpredictable variation in journey time delays due to sensitivities caused by day-to-day demand variations.

5.5.3 The Scheme is expected to improve journey time reliability where it provides more capacity which reduces congestion and journey time delays. This is evident from the forecast journey time savings associated with the Scheme, particularly to/from the Easton Lane gyratory approach at M3 Junction 9. As these routes are shown to be more "free flowing" with the Scheme, it can be expected that journey time reliability along these routes will improve. In addition, there is a predicted reduction in accidents, which will have a positive impact on journey time reliability.

Social impacts

5.5.4 The social impacts of the Scheme cover the human experience of the transport system and its impact on social factors that are not considered as part of economic or environmental impacts. They have been assessed qualitatively in line with Transport Analysis Guidance (TAG) Unit A4.1 – Social Impact Appraisal (May 2022). The following describe the type of social impacts and the impact of the Scheme on them:

- **Accidents** – new transport schemes may result in a change in the risk of personal injury collisions, for both users and non-users of transport. The Scheme is anticipated to alter traffic movements and the volume of traffic on the M3 Junction 9 and some surrounding roads. Overall, the study area will experience a decrease in the total number of collisions and casualties. The greatest benefits are experienced as a consequence of the reduced traffic demand through the junction gyratory. The overall impact is **moderate beneficial**.

- **Security** – transport interventions can impact upon the personal security of transport users or other people. The principal security impacts on road users relate to situations where they are required to leave their vehicle or where they are forced to stop or travel at low speeds. In terms of the Scheme, it is not expected to have an impact on security as the impacts on security of the junction are expected to be minimal. The overall impact is **neutral**.

- **Journey quality** – a measure of the real and perceived physical and social environment experience while travelling. A poor journey quality may dissuade users from using particular modes of transport. Interventions that improve journey quality may lead to a choice of an alternative mode. In terms of the Scheme it will reduce journey times and therefore frustration for drivers. In addition, the Scheme will provide safer travel and reduce fear of accidents for pedestrians and cyclists. The overall impact is **moderate beneficial.**

- **Physical activity** – There is longstanding recognition of the interrelation between transport, the environment and health. Changes to transport infrastructure can affect levels of physical activity. In terms of the Scheme,

the transport model does not include active modes, therefore the impacts on physical activity have not been quantitatively assessed. However, it should be noted that the Scheme does include improving cycle connectivity, especially for the National Cycle Network route 23. This would result in benefits associated with the fitness impact of increased physical activity considered as **moderate beneficial.**

- **Option and non-use values** are assessed when a scheme includes measures that will substantially change the availability of transport services within the study area. In terms of the Scheme, the proposals do not include any improvements directly related to public transport, meaning option values remain unaffected and this is **not assessed**.

- **Accessibility** reflects the range of opportunities and choices people have in connecting with jobs, services and family and friends. The level of access will depend on where people choose to live, where services are located and the availability of 'home delivery' of goods or services. The Scheme does not inherently provide any change in network connectivity or public transport facilities. The overall impact is **neutral.**

- **Severance** – community severance is defined as the separation of residents from facilities and services they use within their community caused by substantial changes in transport infrastructure or by changes in traffic flows. The Scheme is not expected to have an impact on severance. The overall impact is **neutral**.

- **Personal affordability** – the monetary costs of travel can be a major barrier to mobility for certain groups of people. Affordability is likely to decrease as the Scheme increases speed and creates induced demand along the M3, thus leading to an increase in vehicle operating costs along the route. The overall impact is **slight adverse.**

Distributional impact summary

5.5.5 The distributional impacts of the Scheme consider how the impacts of a Scheme vary across different social groups and have been assessed, in accordance with TAG unit A4.2 Distributional Impact Appraisal (May 2020), either quantitatively or qualitatively, for the following:

- **Noise** – impacts are likely to occur where a Scheme results in changes to traffic flows or speeds or where the physical gap between people and traffic is altered. The Scheme includes changes to the network road alignment, traffic flows and speeds. There are no receptors in Income Quintile 1 (most deprived) or Income Quintile 4. For Income quintiles 2 and 3 the Scheme has large adverse impacts on noise levels but for Income Quintile 5, the impacts are moderate beneficial.

- **Air quality** – impacts are likely to occur where a Scheme results in changes to traffic flows or speeds or where the physical gap between people and

traffic is altered. The Scheme includes changes to the network road alignment, traffic flows, and speeds. There are no receptors in Income Quintile 1 (most deprived). For all other Income Quintiles the scheme has beneficial air quality impacts ranging from a slight beneficial impact for Income Quintile 5, a moderate beneficial impact for Income Quintile 3, and large beneficial impacts for Income Quintiles 2 and 4.

- **Accidents** – any change to the road network can affect the number of accidents that occur. Groups that are particularly vulnerable to increases in risk of accidents include children, the elderly, young males and motorcyclists. There is also a strong link between deprivation and road accidents. For the Scheme the number and proportion of accidents on links with a forecast decrease in accident rate was higher than those with a forecast increase in accident rate. Therefore, the accident assessment for most vulnerable groups was assessed **slight beneficial** as percentages were below that of the national average for the influence area.

- **Security** – there are potential personal security impacts from making changes to the transport system and these can raise specific concerns for women, young people, older people, people with disabilities and black and minority ethnic communities. For the Scheme this was screened out as any changes to pedestrian accesses through the Scheme are unlikely to alter perceptions of personal security from current perceptions.

- **Severance** – consideration is given to how groups such as children, people without access to a car, older people, people with disabilities and parents with pushchairs are impacted by severance. These groups often experience longer journey times or are often required to use pedestrian routes that are inappropriate and difficult to use. The Scheme impacts are generally limited to the SRN which will generally not impact pedestrian movements, as segregated pedestrian crossings are being retained so this was scoped out.

- **Accessibility** – public transport accessibility for different groups to access employment, services, and social networks. The Scheme itself is not expected to have changes to public transport services routing, frequencies or timings, or waiting facilities and related public transport accessibility so this was scoped out of the assessment.

- **Personal affordability** – changes in transport costs could have disproportionate effects where there are few or no travel alternatives, especially where income levels preclude car ownership and use. For the Scheme there were generally increases in fuel and non-fuel vehicle operating costs for all vehicles. This did not affect those in the lowest income quintile as there are none of these areas within the impact area. Income Quintile 3 had a moderate adverse affordability impact and Income Quintiles 2 and 4 had a large adverse impact where the share of increase in user charge was greater than population proportion in that quintile. Income Quintile 5 had a slight beneficial impact where the share of user charge decrease was higher than the population proportion in that quintile.

- **User benefits** – User benefits (time and costs impacts) are experienced in certain areas and by certain groups of people. For the Scheme, those in the most income deprived quintile are not affected. For all other income quintiles there are beneficial user benefit impacts, due to journey time benefits. Therefore, the overall impact is **moderate beneficial**.

Environmental Impacts

5.5.6 Non-monetised environmental impacts are also considered in the **ES (Document Reference 6.1).**

5.6 Value for money

5.6.1 Value for money (VfM) has been assessed based on the Scheme costs and benefits reported above and the DfT's Value for Money Framework. This included consideration of monetised and non-monetised impacts. With consideration of user benefits plus the effects of delays during construction, accident benefits, indirect taxation benefits, and monetised environmental impacts, the initial Benefit to Cost Ratio (BCR) is ~~1.44~~1.35. Inclusion of the wider economic impacts gives an adjusted BCR of ~~1.81~~1.72. There are also journey time reliability, environmental, and social and distributional impacts which have not been quantified. Inclusion of all these impacts within the VfM assessment indicates the scheme represents 'Medium' Value for Money.

5.7 Summary

5.7.1 Scheme costs were prepared by the Applicant, including construction, and operating and maintenance, which were rebased to 2010 market prices with a total PVC of £112.7M.

5.7.2 The results of the transport economic analysis indicated that the Scheme is forecast to generate user benefits in the order of £152.7M. The greatest benefit relates to travel time savings, amounting to £155.5M, which are predominantly due to the provision of the free-flow movement between the A34 and the M3.

5.7.3 The accident assessment was undertaken using COBALT with a predicted reduction in accidents and a corresponding benefit of £22.9M.

5.7.4 Construction traffic management impacts are -£2.7M.

5.7.5 Environmental impacts appraisal indicated minor negative impacts for Noise (£1.3M), moderate positive impacts for Local Air Quality (£4.7M) and moderate negative impacts for Greenhouse Gases (£~~-14.6M~~-24.1M).

5.7.6 Social and distributional impacts are presented in **Section 5.5** and the environmental impacts are presented in the **ES (Document Reference 6.1)**.

5.7.7 Journey time reliability was assessed qualitatively and does not form part of the monetised benefits. The Scheme is expected to improve journey time reliability

where it provides more capacity which reduces congestion and journey time delays.

5.7.8 The total PVB (Level 1) is £~~161.7M~~152.3M. The Scheme is predicted to deliver a Net Present Value (NPV) of £~~49.0M~~39.5M, resulting in an Initial BCR of ~~1.44~~1.35.

5.7.9 Inclusion of (Level 2) wider economic impacts, estimated at £41.8M, increased the PVB to £~~203.6M~~194.1M, with an adjusted NPV of £~~90.9M~~81.4M, and an Adjusted BCR of ~~1.81~~1.72. With consideration of all impacts the Scheme represents 'Medium' Value for Money.

5.7.10 Overall, these economic benefits demonstrate that the Scheme complies with the NPS NN in terms of road safety (paragraphs 4.60 – 4.66) and wellbeing and quality of life (paragraphs 4.79 – 4.82) as well as the economic growth aspects throughout the NPS NN and section 6 of the NPPF.

6 Conformity with planning policy and transport plans

6.1 Policy context

6.1.1 This section provides an overview of the Scheme's compliance with national planning policy, local planning policy and infrastructure delivery strategies and plans.

6.1.2 Section 104(2) of the Planning Act 2008 states that, in deciding a DCO application, the SoS must have regard to the following with relevance to the application:

- any relevant NPS.
- any local impact report.
- any matters prescribed in relation to development of the description to which the application relates.
- any other matters which the Secretary of State thinks are both important and relevant to the decision.

6.1.3 Section 104(3) of the Planning Act 2008 states that the SoS must decide the DCO application in accordance with any relevant NPS, except in certain circumstances specified in subsection (4) to (8). The NPS of relevance to the Scheme is the NPS NN which was designated in 2015.

6.1.4 In addition to the NPS NN, there are other planning and transport policy documents that may also be 'important and relevant' matters to which the SoS will have regard. The key national and local planning and transport policy documents are therefore considered in this Section.

6.1.5 In addition, a full assessment of how the Scheme complies with the NPS NN is provided in the **NPS NN Accordance Table (Document Reference 7.2)**.

6.2 National planning and transport policy

National Policy Statement for National Networks

6.2.1 NPS are produced by the relevant Government body and provide policy on specific aspects of national infrastructure clarifying how it:

- contributes to sustainable development.
- takes account of the mitigation of, and adaptation to, climate change.
- demonstrates that objectives have been integrated with other government policies.

- details how actual and projected capacity and demand have been taken into account.
- considers relevant issues in relation to safety or technology.
- looks at circumstances where it would be particularly important to address the adverse impacts of development.

6.2.2 The Government designated the NPS NN in January 2015, setting out the vision and policy specifically for the strategic road and rail network. The NPS NN is the primary basis for decision making for the Scheme.

6.2.3 Under Section 104 of the Planning Act 2008, the SoS must decide an application for a national networks NSIP in accordance with this NPS unless he/she is satisfied that to do so would:

- lead to the UK being in breach of its international obligations (Planning Act 2008 Section 104 (4)).
- lead to the SoS being in breach of any duty imposed on the SoS by or under any enactment (Planning Act 2008 Section 104 (5)).
- be unlawful (Planning Act 2008 Section 104 (6)).
- result in adverse impacts of the development outweighing its benefits (Planning Act 2008 Section 104 (7)).
- be contrary to any other condition prescribed about how the decisions are to be taken (Planning Act 2008 Section 104 (8)).

6.2.4 The Applicant is not aware of any reason why deciding the application in accordance with the NPS NN would lead to the UK being in breach of its international obligations or be contrary to any other condition prescribed for deciding the application.

6.2.5 The Applicant is not aware of any respect in which deciding the application in accordance with the NPS NN would lead to the SoS being in breach of any duty imposed on the SoS under any other enactment or be unlawful. The adverse impacts of the Scheme would not outweigh the benefits, as demonstrated by this document.

6.2.6 The **NPS NN Accordance Table (Document Reference 7.2)** provide a detailed assessment of the Scheme against the NPS NN.

Need

6.2.7 The NPS NN sets out the need for NSIPs on the national road and rail network, with paragraph 2.2 stating that *"there is a critical need to improve the national networks to address road congestion and crowding on railways to provide safe, expeditious and resilient networks that better support social and economic*

activity; and to provide a transport network that is capable of stimulating and supporting economic growth".

6.2.8 Paragraph 2.13 of the NPS NN states that the SRN *"provides critical links between cities, joins up communities, connects our major ports, airports and rail terminals. It provides a vital role in people's journeys, and drives prosperity by supporting new and existing development, encouraging trade and attracting investment. A well-functioning Strategic Road Network is critical in enabling safe and reliable journeys and the movement of goods in support of the national and regional economies."*

6.2.9 Paragraph 2.21 sets out a range of alternatives to major improvements to the network including Maintenance and Asset Management, Demand Management and Modal Shift. However, Paragraph 2.10 states that the Government has *"concluded that at a strategic level there is a compelling need for development of the national networks. The Examining Authority and the Secretary of State should therefore start their assessment of applications for infrastructure covered by this NPS on that basis."*

6.2.10 Paragraph 2.22 states that *"without improving the road network, including its performance, it will be difficult to support further economic development, and this will impede economic growth and reduce people's quality of life."*

6.2.11 The Scheme will create capacity to cope with peak demand and growth on the SRN at this location, with a significant decrease in journey time and ensuring a free flowing, safe, reliable and resilient network. The Scheme also has wider economic benefits of £41.8 million and is expected to stimulate economic activity.

6.2.12 Paragraph 2.23 of the NPS NN states that "*the Government's wider policy to bring forward improvements and enhancements to the existing SRN to address the needs set out earlier. Enhancements to the existing national road network will include:*

- *junction improvements, new slip roads and upgraded technology to address congestion and improve performance and resilience at junctions, which are a major source of congestion;*
- *implementing "smart motorways" to increase capacity and improve performance; and*
- *improvements to trunk roads, in particular dualling of single carriageway strategic trunk roads and additional lanes on existing dual carriageways to increase capacity and to improve performance and resilience."*

6.2.13 M3 Junction 9 is a key transport interchange connecting South Hampshire (facilitating an intensive freight-generating industry) and the wider sub-region, with London via the M3 and with the Midlands and the north of England via the A34 (which also links to the principal east-west A303 and M4 corridors). The M3

is also a key strategic route for freight traffic accessing the Port of Southampton. In addition, Junction 9 is one of the access points to the City of Winchester from the M3 motorway.

6.2.14 The Scheme seeks to reduce congestion by allowing the free-flow of traffic between the M3 northbound and the A34 southbound, thereby enabling the SRN traffic to avoid the junction.

6.2.15 The upgrades to M3 Junction 9 are identified in the Hampshire Local Transport Plan 2011-2031 (2011), RIS2, the *Highways England Delivery Plan 2020-2025* (2020) and the *Highways England Strategic Business Plan 2020-2025* (2020). The Scheme therefore helps to address the compelling need for development of the national networks identified in the NPS NN.

6.2.16 Compliance of the Scheme with the NPS NN strategic objectives is set out in **Table 3.2** of this document.

6.2.17 Paragraph 3.1 of the NPS NN states that *"the need for development of the national networks, and the Government's policy for addressing that need, must be seen in the context of the Government's wider policies on economic performance, environment, safety, technology, sustainable transport and accessibility, as well as journey reliability and the experience of road/rail users."*

Assessment principles

6.2.18 Paragraph 4.2 of the NPS NN sets out that *"subject to the detailed policies and protections in this NPS, and the legal constraints set out in the Planning Act, there is a presumption in favour of granting development consent for national networks NSIPs that fall within the need for infrastructure established in this NPS."*

6.2.19 In considering a Scheme, and weighing its adverse impacts against its benefits, Paragraph 4.3 states that *"the Examining Authority and the Secretary of State should take into account:*

- *its potential benefits, including the facilitation of economic development, including job creation, housing and environmental improvement, and any longer term or wider benefits; and*
- *its potential adverse impacts, including any longer-term and cumulative adverse impacts, as well as any measures to avoid, reduce or compensate for any adverse impacts."*

6.2.20 Paragraph 4.4 states that *"in this context, environmental, safety, social and economic benefits and adverse impacts, should be considered at national, regional and local levels."* In this regard, the Scheme has produced a **Combined Modelling and Appraisal Report (Document Reference 7.10)**, (summary included in **Section 5** of this document) and the **ES (Document Reference 6.1)**.

Generic impacts

6.2.21 Section 5 of the NPS NN provides guidance on decision making relating to impacts on the environment, biodiversity, landscape and the historic environment, among other matters. Section 5 also sets out the policy tests for development in the National Parks. **Table 6.1** below summarises the significant environmental effects during construction and operation as presented in **Chapters 5 to 15** of the **ES (Document Reference 6.1)**.

6.2.22 **Section 7** of this document considers in detail the compliance of the Scheme with the NPS NN in relation to its development within the South Downs National Park. The River Itchen SAC and River Itchen SSSI fall partially within the Application Boundary and a number of other statutory designated sites are within the vicinity of the Scheme. As such, **Section 8** of this document considers in detail the compliance of the Scheme with the NPS NN paragraphs 5.20-5.36 in relation to biodiversity and ecological conservation.

Table 6.1: Summary of significant environmental effects

Topic	Assessment of Significant Environmental Effects	
	Construction	**Operation**
Air Quality (**Chapter 5** of the **ES (Document Reference 6.1)**)	Properties located close to construction activities have the potential to be adversely affected by construction dust, however these effects will be short-term. There will also be changes to traffic flows during the construction phase, however following implementation of measures outlined within the **first iteration Environmental Management Plan (fiEMP) (Document Reference 7.3)**, construction phase effects from dust and emissions are assessed as being **not significant.**	Operational traffic emissions were modelled and indicate that the Scheme results in both predicted increases and decreases in NO_2 concentrations at a number of receptor locations. The majority of decreases were located within Winchester City Centre and increases were located in the area of the M3 and Easton Lane (and adjoining roads) due to predicted increase on traffic flows on these routes. The assessment undertaken demonstrates that there are no locations where NO_2 concentrations exceed the air quality threshold (40 µg/m3) according to the DMRB LA 105 methodology, therefore there will be **no significant effects** as a result of the operation of the Scheme.

Topic	Assessment of Significant Environmental Effects	
	Construction	**Operation**
Cultural Heritage (**Chapter 6** of the **ES (Document Reference 6.1)**)	Construction of the Scheme will not directly affect any designated heritage asset as all of those identified within the 1km study area are located outside of the works area. A number of designated heritage assets were identified as having the potential to be impacted by the construction of the Scheme (impacts to their setting). In addition, a number of non-designated heritage assets were also considered to have the potential to be affected. The assessment has found that there will be no or limited temporary impacts upon these assets during the construction of the Scheme. The assessment identified **a number of neutral and slight adverse effects** to archaeological remains, built heritage, non-designated built heritage assets and historic landscapes during construction of the Scheme. The assessment concluded that, following mitigation, there will be **no significant effects** upon the historic environment from the construction of the Scheme.	The operation of the Scheme would not impact upon any archaeological remains which would have been sufficiently investigated (mitigated) during construction. There would not be any significant impacts upon the setting of any built heritage receptors or historic park and gardens during the operation. Impacts upon the historic landscape would have occurred during the construction phase and as such no further impacts would occur during operation. The assessment identified **a number of neutral and slight adverse effects** to archaeological remains, built heritage, non-designated built heritage assets and historic landscapes during operation of the Scheme. The assessment concluded that, following mitigation, there would be **no significant effects** upon the historic environment from the operation of the Scheme.
Landscape and Visual (**Chapter 7** of the **ES (Document**	The likely significance of effect on landscape and visual amenity, is that the Scheme will have a **moderate adverse** and **significant effect** in the short to medium term (0-15 years).	The likely significance of effect on landscape and visual amenity, is that the Scheme will have a **moderate adverse** and **significant effect** in the short to medium term (0-15 years).

Topic	Assessment of Significant Environmental Effects	
	Construction	**Operation**
Reference 6.1))	This includes during construction and immediately following construction while the proposed mitigation is establishing. Effects are anticipated to be significant principally due to the nature of effects in relation to the designated and sensitive landscape of the South Downs National Park.	This includes during construction and immediately following construction while the proposed mitigation is establishing. Effects are anticipated to be significant principally due to the nature of effects in relation to the designated and sensitive landscape of the South Downs National Park. The predicted significant effects reduce to a **slight adverse and not significant** effect in the long term (15+ years) as landscape mitigation planting successfully establishes to help with landscape integration and to provide visual screening.
Biodiversity (**Chapter 8** of the **ES (Document Reference 6.1)**)	During construction, the assessment identified **a number of residual slight adverse, neutral and slight beneficial effects** to biodiversity receptors. Effects predicted resulted from habitat loss and gain, fragmentation of populations / habitats, disturbance from light, noise and vibration, habitat degradation, accidental pollution events, provision of measures for the treatment of surface water, and species mortality. Following the inclusion of mitigation measures, effects to all designated habitats of importance and protected and notable species identified	During operation, the assessment identified **a number of residual slight adverse, neutral and slight beneficial effects** to biodiversity receptors. Effects predicted were as a result of accidental pollution events, species mortality, operational emissions, and disturbance from lighting and noise. Following the inclusion of mitigation measures, effects to all designated, habitats of importance and protected and notable species identified within the study areas will be **not significant**.

Topic	Assessment of Significant Environmental Effects	
	Construction	**Operation**
	within the study areas will **not be significant**.	
Geology and Soils (**Chapter 9** of the **ES (Document Reference 6.1)**)	During the construction of the Scheme, the assessment concludes that there would be a **slight adverse effect** on human health (construction workers and neighbours), controlled waters (groundwater and surface water), environmentally sensitive sites and the built environment which is **not significant**. Construction of the Scheme will require the temporary loss of BMV agricultural land (6.6ha of Agricultural Land Classification (ALC) Grade 2 land and 5.5ha of Grade 3a). This minor impact combined with the value of the land results in a **temporary large adverse effect** in relation to the Grade 2 land and a **temporary moderate adverse effect** in relation to the Grade 3a land, which is **significant**. The construction of the Scheme will require the permanent acquisition of 18.7ha of Best Most Versatile agricultural land (11.8ha of ALC Grade 2 land and 6.9ha of Grade 3a and 8ha of Grade 3b). Given the permanent nature of the impact and that the loss cannot be mitigated it would constitute a **permanent very**	During the operation of the Scheme, the assessment concludes that there will be a **slight adverse effect** on human health which is **not significant**. There will be no additional effects to soils during operation other than those identified under construction.

Topic	Assessment of Significant Environmental Effects	
	Construction	**Operation**
	large adverse effect in relation to the Grade 2 land and a **permanent large adverse effect** in relation to the Grade 3a land, which is **significant.**	
Material Assets and Waste (**Chapter 10** of the **ES (Document Reference 6.1)**)	During construction, the effect on overall material recovery will be **slight adverse** and **not significant**. The assessment for the use of recycled material records that the worst-case scenario whereby 65,000m^3 of excavated waste is disposed of in landfill achieves a 65% rate of reuse, therefore exceeding the regional target of 26%. This is recorded as a **slight adverse effect** and is **not significant**. The Scheme is a non-minerals development proposed to be located partially within a Mineral Safeguarding Area (MSA). Local policy identifies that highways developments would be exempt from the MSA. However, notwithstanding that, the assessment demonstrates that the potential for sterilisation is very low, and therefore **not significant.** The estimated levels of waste generation would result in a 0.2% reduction in inert landfill void capacity. This presents a	During EIA scoping, it was agreed that, although there would be some material usage during operation, this would be minimal, and any effects would not be significant. As a result, **Chapter 10 (Material Assets and Waste)** of the **ES (Document Reference 6.1)** presents an assessment of impacts upon material assets and waste during the construction phase only.

Topic	Assessment of Significant Environmental Effects	
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	slight adverse effect which is **not significant**. Any hazardous waste encountered during construction will be minimal and managed / treated in line with standard control measures and the Site Waste Management Plan (a draft Site Waste Management Plan has been included within the **fiEMP (Document Reference 7.3**)). The construction stage for hazardous waste is therefore considered to have a **negligible impact** on landfill void capacity, which is **not significant**.	
Noise and Vibration (**Chapter 11** of the **ES (Document Reference 6.1)**)	Noise arising from demolition and construction of the Scheme was assessed to determine the impact on existing receptors. Construction noise and vibration from the Scheme is anticipated to have a **minor to negligible effect** on existing receptors at the majority of receptors and is deemed to be **not significant**. However, some residential areas located close to the Scheme are likely to experience **temporary significant effects** from demolition and construction noise. However, the assessment was undertaken without noise mitigation being implemented. **With no noise**	**Short-term significant beneficial effects** are anticipated at one dwelling based on the magnitude of impact (i.e. minor), sensitivity of dwellings (i.e. high) and exposure to absolute sound levels above the Significant Observed Adverse Effect Level (SOAEL). The dwelling is anticipated to be indirectly related to the Scheme (i.e. they do not result from changes in noise levels from traffic using the Scheme). The effect on the residential dwelling which is indirectly affected by the Scheme, results from a reduction in traffic flows on the surrounding road network, due to the Scheme. In the long-term, these effects are **not considered significant**,

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	mitigation, temporary moderate significant effects are anticipated at a number of residential dwellings and commercial properties. Although, with the inclusion of the mitigation outlined within the **fiEMP (Document Reference 7.3)**, the resultant significance is anticipated to be reduced such that temporary moderate adverse impacts would be **reduced to temporary minor adverse impacts**, and temporary major adverse impacts are likely to be **reduced to temporary moderate adverse impacts**. In the long-term these effects are **not considered significant**, as the impact is short-term only. Noise arising from night-time diversions has been assessed. Based on the anticipated schedule of night-time diversions, **no significant effects** are anticipated.	as the **impact in the long-term is negligible**. **Short-term significant adverse effects** are anticipated at 20 residential dwellings based on the magnitude of impact in the short-term (i.e. minor), sensitivity of dwellings (i.e. high) and exposure to absolute sound levels above the SOAEL. Of these, none are anticipated to be directly related to traffic using the Scheme, and 20 are anticipated to be indirectly related to the Scheme. The residential dwellings indirectly affected by the Scheme result from an increase in traffic flows on the surrounding road network, due to the Scheme. In the long-term, these effects are **not considered significant**, as **the impact in the long-term is negligible**. **Significant beneficial effects** are anticipated at 8 commercial receptors based on the results of the short-term and long-term noise impacts. To summarise, during operation, there would be **significant effects in the short-term** (the year the new junction opens) and **no significant effects in the long-term** (15 years after opening).

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Population and Human Health (**Chapter 12** of the **ES (Document Reference 6.1)**)	In terms of private property and housing, it is anticipated that the temporary impacts during construction activities could result in a discernible change in attributes or environmental quality. It is anticipated that this will result in a **minor adverse impact**, which is identified as a slight level of effect and therefore **not significant**. For community land and asset receptors listed in **Table 12.8** of **Chapter 12 (Population and Human Health)** of the **ES (Document Reference 6.1)**, these are expected to experience **negligible adverse impacts** with regards to temporary changes in journey time reliability, resulting in slight levels of effect for all receptors, which is **not significant**. Overall, with the implementation of traffic management measures, the construction phase would result in **no significant effects** on community land and asset receptors. The majority of businesses within the study area are anticipated to experience minor **impacts**, which are considered to be **not significant**. However, it is anticipated that the Winnall Industrial Estate, Tesco Extra and Keir Highways will experience **significant**	In terms of private property and housing, White House Cottage is anticipated to experience a **slight adverse level of effect**. **No significant effects** are anticipated on community land and assets within the study area. In terms of development land and business during operation of the Scheme, it is anticipated that Winnall Industrial Estate would experience a **moderate significant beneficial effect** during operation. It is anticipated that there will be no severance of land resulting in areas of land with no access, it is therefore considered that there would be **no significant effects** regarding severance effects on agricultural land holdings during operation. Agricultural holdings within the wider 500m study area would experience no loss or alteration of characteristics, features, elements or accessibility during operation, resulting in no change. When combined with their low sensitivity would lead to a **neutral effect**. For walking, cycling and horse-riding routes, there is anticipated to be **beneficial significant effects** on NCN 23, and Winchester

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	effects during construction as there will be changes to journey times and accessibility–. As there is no land allocated for residential development within the study area, **no significant effects** are anticipated on this receptor. In terms of agricultural holdings, it is anticipated that Itchen Down Farm and Winnall Down Farm would have large areas of land permanently impacted by the Scheme, which would result in a **significant effect**. Dairy House and Fulling Mill Estate may experience minor disturbance during the construction phase, but with limited impacts upon the arable land itself, and is therefore not anticipated to compromise the overall viability of the holdings. Agricultural land holdings within the wider 500 m study area will not experience any loss or alteration of characteristics, features or elements during the construction phase (no change) resulting in a **neutral impact** and therefore **no significant effect.** For walking, cycling and horse-riding routes, there is likely to be **significant adverse effects** on the NCN 23 and other local footpaths.	Bridleways 502 and 520. The majority of PRoW are not anticipated to be impacted by the proposals, with no changes to alignment, accessibility or journey times for users of these routes. The Scheme will result in a **positive health outcome** with regard to community, recreational and education facilities; green/ open space; healthcare facilities; transport and connectivity; and safety of the existing affected road network. There is anticipated to be a **neutral health outcome** across the study areas in terms of ambient air quality; ambient noise environment; sources and pathways of potential pollutions; and landscape amenity.

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	This proposed diversion of the NCN 23 and Winchester Bridleway 502 will not limit access to open space. It is anticipated that there will be **negligible adverse to no change** for all other paths and routes that interact with the Application Boundary, including for the South Downs Way and other long-distance footpaths. For PRoW in the wider study area that do not directly interact with the Scheme, it is anticipated that there would typically be **no changes to accessibility or severance** during construction and therefore no temporary or permanent effects. The construction phase of the Scheme is anticipated to result in a **neutral health outcome** for those within the human health study areas as a result of any impacts on community, recreational, and education facilities; green/ open space; healthcare facilities; transport and connectivity; and safety of the existing road network; ambient air quality; sources and pathways of potential pollution; and landscape amenity. **Negative health outcomes** for ambient noise environment are anticipated within St Bartholomew Ward and St Michaels Ward.	
Road Drainage	Following the inclusion of the mitigation, construction	Following the inclusion of the embedded mitigation, the

Topic	Assessment of Significant Environmental Effects	
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and the Water Environment (**Chapter 13** of the **ES (Document Reference 6.1)**)	activities are unlikely to affect the integrity of the water environment and therefore result in a negligible impact to the River Itchen. The receptor has a very high sensitivity and therefore a negligible magnitude impact would result in a **slight temporary adverse effect**. The **slight temporary adverse effect** would not have permanent effects on the River Itchen (in terms of water quality and WFD parameters) and would not undermine the integrity of the River Itchen SAC and therefore the residual effect associated with the construction of the Scheme to the River Itchen is **not significant.** In terms of surface water, the residual effects associated with the construction of the Scheme to the Nun's Walk Stream and River Itchen navigation canal is assessed as a **temporary adverse slight effect** and a **neutral effect** in relation to ordinary watercourses. These effects are **not significant.** In terms of groundwater, the residual effects associated with the construction of the Scheme are assessed as a **temporary adverse slight effect** in relation to the River Itchen chalk groundwater body and a **neutral effect** in relation to the secondary	Scheme is unlikely to affect the integrity of the water environment. No risk has been identified by HEWRAT/DQRA (both acute soluble and chronic sediment related pollutants) and risk of pollution from spillages by HEWRAT has been assessed as less than 0.5%. The receptor has a very high sensitivity and therefore a negligible magnitude impact would result in an **adverse slight effect**. The proposed drainage strategy does represent an improvement in water quality when compared to existing, and therefore the residual effect associated with the operation of the Scheme to the River Itchen is **not significant**. In terms of surface water, the residual effect associated with the operation of the Scheme to the Nun's Walk Stream and River Itchen navigation canal is assessed as an **adverse slight effect** and a **neutral effect** in relation to ordinary watercourses. These effects are **not significant.** In terms of groundwater, the residual effects associated with the operation of the Scheme are assessed as an **adverse slight effect** in relation to the River Itchen chalk groundwater body and a **neutral effect** in relation to

Topic	Assessment of Significant Environmental Effects	
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	aquifer. These effects are **not significant.** Construction activities are unlikely to affect the integrity of the water environment and therefore result in a negligible change to peak flood levels. The receptor has a very high sensitivity due to the vulnerability of the land use and therefore a negligible magnitude impact would result in a **temporary adverse slight effect**. The temporary adverse slight effect would not have permanent effects on flood risk and therefore the residual effect associated with the construction of the Scheme on flood risk is **not significant**.	the secondary aquifier. These effects are **not significant.** Following the inclusion of the mitigation, the Scheme would result in a negligible change to peak flood levels. This Scheme would result in an **adverse slight effect**. The residual effect associated with the Scheme on flood risk is **not significant**. The assessment has considered the potential for future climatic conditions at the Scheme to alter the conclusions identified within this assessment. It is considered that the residual effects identified would not be altered.
Climate (**Chapter 14** of the **ES (Document Reference 6.1)**)	Climate change during construction has been scoped out of the assessment. During construction, the main source of GHG emissions is anticipated to be associated with construction materials embodied carbon, comprising approximately 68.9% of overall construction emissions. Construction emissions as a result of plant equipment use within the work area would also release GHG emissions, through combustion of fuel, and comprise approximately 20.8% of anticipated construction emissions. Land	In terms of greenhouse gas emissions, in comparison to the UK carbon budget, the Scheme is anticipated to comprise 0.002% of the 4th carbon budget and 0.001% of the 5th carbon budget and 0.002% of the 6th carbon budgets. It is considered that the increase in emissions as a result of the Scheme would not have a material impact on the ability of UK Government to meet its carbon budgets, therefore in accordance with the DMRB, there would be **no significant effect**. To build in climate resilience, the drainage system incorporates flood alleviation

Topic	Assessment of Significant Environmental Effects	
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	use is estimated to comprise approximately 5.2% of construction emissions. 1.8% of construction emissions arise as a result of the power required for the welfare facilities. The remaining 2.3% and 1.0% are anticipated to arise from transport of materials and construction waste respectively. In total, it is anticipated that an estimated 37,070 tCO_2e would be emitted during construction.	measures, including the attenuation storage with a capacity to accommodate a 1 in 100-year flow event with a climate change allowance of 40%, the integration of Sustainable Drainage Solutions such as basins swales. New landscaping and planting would create multifunctional habitat corridors within the Scheme and include the creation of new native woodland grassland and scrub. Consideration would be given to drought tolerance and waterlogging species at the detailed design stage. With this mitigation in place, the impact of climate change on the Scheme is considered **not significant**.
Cumulative Effects (**Chapter 15** of the **ES (Document Reference 6.1)**)	Whilst it is noted in **Chapter 15 (Cumulative Effects)** of the **ES (Document Reference 6.1)** that there is potential for cumulative effects on human health during construction with regards to air quality and noise from two 'other developments', the other developments (ID 72 and ID 79), along with the Scheme, would be subject to compliance with local and national policy. Under these policies, they will need to demonstrate minimal impact to air quality and noise levels and it is assumed that best practice measures would be implemented, which would	Both developments ID 72 and ID 79 are anticipated to increase traffic on the local network during operation and therefore have minor impacts on journey time reliability which is **not significant**. The assessment of combined effects did not identify any effects that would result in a greater significance of effect than the individual topic assessments. **No significant** cumulative effects have been identified and no further mitigation measures to those outlined in the individual environmental topic chapters (**Chapters 5-**

Topic	Assessment of Significant Environmental Effects	
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	reduce and mitigate the potential for impacts. As a result, **no cumulative effects** are anticipated on human health during construction. Both developments ID 72 and ID 79 are anticipated to increase traffic on the local network during construction and therefore have minor impacts on journey time reliability which is **not significant**. The assessment of combined effects did not identify any effects that would result in a greater significance of effect than the individual topic assessments. **No significant** cumulative effects have been identified and no further mitigation measures to those outlined in the individual environmental topic chapters (**Chapters 5-14** of the **ES (Document Reference 6.1)**) are proposed.	**14** of the **ES (Document Reference 6.1)**) are proposed.

6.2.23 The **NPS NN Accordance Table (Document Reference 7.2)** and respective chapters of the **ES (Document Reference 6.1)** provide further analysis of these effects relative to the relevant NPS NN policy requirements .

6.2.24 The Scheme incorporates a range of design features and environmental mitigation that have been developed to reduce adverse environmental effects. Environmental design features and mitigation incorporated into the Scheme include the following:

- Implementing an environmental masterplan (**Figure 2.3** the **ES (Document Reference 6.2)**) that incorporates sensitive landscape planting and new habitats.

- A sensitively designed new bridleway for walkers, cyclists and horse-riders on the edge of the South Downs National Park
- Material generated from site excavation works would be reused in the Scheme where possible.
- The design of the new bridge over the River Itchen would be a clear span structure with abutments set back from the river channel. No works would be required within the river channel.
- Low noise road surfacing would be used where new road surfaces are needed.
- Providing drainage ponds and treatment of operational highway runoff. The drainage design also prevents pollution of watercourses by intercepting and treating the road drainage discharges.
- Using non-intrusive temporary construction measures within the River Itchen to clean an existing headwall, and install two new headwalls to serve the operational drainage strategy.
- Retaining existing pavements where possible.
- Using warm rolled asphalt for installation of road surfacing, not hot rolled asphalt (resulting in reduced carbon emissions and energy requirements).

6.2.25 Paragraph 3.4 of the NPS NN states that *"whilst applicants should deliver developments in accordance with Government policy and in an environmentally sensitive way, including considering opportunities to deliver environmental benefits, some adverse local effects of development may remain."*

Residual Significant Adverse Effects

6.2.26 The **ES (Document Reference 6.1)** identifies that no significant adverse effects are likely in relation to air quality; cultural heritage; biodiversity; material assets and waste; road drainage and the water environment; and climate.

6.2.27 Significant adverse effects in relation to population and human health are likely during the construction of the Scheme only. However, it should be noted that likely significant beneficial effects are identified in relation to population and human health during the operation of the Scheme.

6.2.28 Significant adverse effects are identified in relation to geology and soils both during construction and operation of the Scheme as the permanent acquisition of 18.7ha of BMV agricultural land is required. Whilst the overall land take of the Scheme has been minimised as far as possible, given the permanent nature of the impact and that the loss cannot be mitigated it would constitute a permanent adverse effect which is significant.

6.2.29 Likely significant adverse effects are identified in relation to noise and vibration and landscape and visual during both the construction and early operation of the Scheme. However, these effects reduce to not significant in the long-term. For landscape and visual, this reduction in effect is due to the successful establishment of landscape mitigation to aid landscape integration and provide visual screening.

6.2.30 Following design and mitigation efforts, some residual significant effects will be unavoidable, though these have been minimised as far as possible. The NPS NN recognises that not all adverse effects are able to be resolved in large scale Schemes and the above residual impacts will therefore be weighed against the longer term and wider benefits of the Scheme.

National Planning Policy Framework (2021)

6.2.31 The NPPF sets out the Government's planning policies for England and how these should be applied strategically in the development plan system and in the management of development.

6.2.32 The overall strategic aims of the NPPF and NPS are consistent.

6.2.33 Paragraph 5 of the NPPF makes clear that it *"does not contain specific policies for nationally significant infrastructure projects. These are determined in accordance with the decision-making framework in the Planning Act 2008 (as amended) and relevant national policy statements for major infrastructure, as well as any other matters that are relevant (which may include the National Planning Policy Framework)."*

6.2.34 The NPPF states that the purpose of the planning system is to contribute to the achievement of sustainable development. In this regard there are three interdependent overarching objectives; economic, social and environmental which need to be pursued in mutually supportive ways with the aim of securing net gains across each.

6.2.35 Paragraph 10 explains that there is a presumption in favour of sustainable development at the heart of the Framework, so that sustainable development is pursued in a positive way.

6.2.36 Section 9 of the NPPF sets out the requirement to consider and promote sustainable transport at the earliest stage of development proposals. Paragraph 104 states that transport proposals should identify opportunities from existing and proposed transport infrastructure, promote walking, cycling and public transport and identify opportunities to avoid and mitigate adverse effects and for environmental net gains.

6.2.37 In compliance with paragraph 104, one of the Scheme objectives is to provide improvements for walkers, cyclists, including connecting the National Cycle Network Route 23 which is severed by the current junction layout. The Scheme will provide significantly enhanced provision for pedestrians, cyclists and horse

riders and the new PRoW network will increase opportunity for active travel. In total an extra 4.8km of PRoW are provided.

6.2.38 Paragraph 152 states that *"the planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure."*

6.2.39 Paragraph 154 states that *"new development should be planned for in ways that avoid increased vulnerability to the range of impacts arising from climate change. When new development is brought forward in areas which are vulnerable, care should be taken to ensure that risks can be managed through suitable adaptation measures, including through the planning of green infrastructure."*

6.2.40 **Chapter 14 (Climate)** of the **ES (Document Reference 6.1)** sets out the potential impacts of the Scheme as well as design, mitigation and enhancement measures to minimise carbon through design and construction. When compared with UK carbon budgets, the Scheme is expected to contribute approximately 0.002% of the UK's 4thcarbon budget and 0.001% of the 5th carbon budget and 0.002% of the 6th carbon budgets. This is considered a small increase in the magnitude of emissions from the Scheme, and it is deemed unlikely that this Scheme, in isolation, would materially affect the UK's ability to meet its carbon budgets.

Road Investment Strategy 1

6.2.41 In December 2014, RIS1 was published by the DfT. RIS1 set out the list of schemes that were to be delivered by the Applicant over the period 2015 to 2020.

6.2.42 RIS1 identified improvements to M3 J9 Winnall Interchange as one of the key investments in the Strategic Road Network (SRN) for the London and South East region.

Road Investment Strategy 2

6.2.43 In April 2020, RIS2 was published by the DfT, which sets out the road investment strategy between April 2020 and March 2025.

6.2.44 The strategy specifies the performance standards the Applicant must meet; lists planned enhancement schemes expected to be built; and states the funding that will made available during RP2, covering the financial years 2020/21 to 2024/25.

6.2.45 RIS2 also sets out a list of schemes to be developed by the Applicant over the period covered by the RIS and a number of specific locations for improvements to the SRN. M3 Junction 9 is identified within the strategy as Committed for RP2

(S23) for *"upgrade to the junction to allow free movement from the A34 to the M3."*

Highways England Strategic Business Plan 2020-2025

6.2.46 The *Highways England Strategic Business Plan 2020-2025* (2020) responds to and aligns with the Government's RIS2. It provides the high-level direction for every part of the Applicant for RP2 (2020 to 2025) and is supported by the *Highways England Delivery Plan 2020-2025* included below.

Highways England Delivery Plan 2020-2025

6.2.47 The *Highways England Delivery Plan 2020-2025* (2020) explains how the Applicant will invest Government funding in the SRN up to 2025 and supports the Highways England Strategic Business Plan included above.

6.2.48 The M3 Junction 9 Scheme is listed within the Regional Investment Programme which is used to deliver enhancement schemes. The Programme states that the Applicant will begin an additional 16 schemes and open 16 for traffic during RP2. M3 Junction 9 is listed as a Scheme for which works are due to start in 2023-24 and which is due to open for traffic in RP3.

6.2.49 Annex B of the Plan sets out the six key performance outcomes agreed with the DfT for RP2:

- improving safety for all.
- providing fast and reliable journeys.
- a well-maintained and resilient network.
- delivering better environmental outcomes.
- meeting the needs of all users.
- achieving efficient delivery.

National Highways Delivery Plan 2022-2023

6.2.50 The *National Highways Delivery Plan 2022-2023* (2022) is an annual update to the *Highways England Delivery Plan 2020-2025* included above. M3 Junction 9 is listed as a Scheme for which works are due to start in 2023-24 and which is due to open for traffic in RP3 (no change to timescales detailed in the *Highways England Delivery Plan 2020-2025*).

National Infrastructure Delivery Plan 2016-2021

6.2.51 The *National Infrastructure Delivery Plan 2016-2021* (NIDP) produced by the Infrastructure and Projects Authority outlines details of £483 billion of

investment in over 600 infrastructure projects and programmes across the UK to 2020-21 and beyond.

6.2.52 The NIDP focuses specifically on nearly £300 billion of infrastructure that will be delivered over the 5 years to 2020-2021.

6.2.53 Chapter 3 of the NIDP sets out how the Government is investing over £15 billion to support the transformation of the SRN, with over 100 major schemes completed or in construction by the end of 2020-21. Ministers have established a clear regulatory framework, setting up investment periods with legally guaranteed funding levels. The first of these, Road Period 1 (RP1), runs from 2015 to 2020. The goals and objectives of RP1 are detailed within RIS1.

National Infrastructure Strategy Plan

6.2.54 HM Treasury, advised by the National Infrastructure Commission, presented the *National Infrastructure Strategy Plan* (NISP) to Parliament in November 2020. The NISP sets out the Government's plans to deliver a radical improvement to the UK's infrastructure system, delivering projects better, greener and faster, underpinned by high levels of government investment.

6.2.55 The document sets out the aims to:

- boost growth and productivity across the whole of the UK, levelling up and strengthening the Union.
- put the UK on the path to meeting its net zero emissions target by 2050.
- support private investment.
- accelerate and improve delivery.

Summary

6.2.56 National policy highlights a critical need for improvement of the national networks and to provide a transport network that is capable of stimulating and supporting economic growth. The Scheme complies with national policy in that it will create capacity to cope with peak demand and growth on the SRN at this location, ensuring a free flowing, safe, reliable and resilient network that will stimulate economic activity.

6.2.57 RIS1 identified improvements to M3 Junction 9 as one of the key investments in the SRN for the London and South East region and RIS2 supports the upgrade of M3 Junction 9 to allow free movement from the A34 to the M3. The Scheme is also identified in the *Highways England Delivery Plan 2020-2025* and the *National Highways Delivery Plan 2022-2023.*

6.2.58 The upgrades to M3 Junction 9 are identified in RIS2, the *Highways England Delivery Plan 2020-2025* (2020), the *Highways England Strategic Business Plan 2020-2025* (2020) and the *National Highways Delivery Plan 2022-2023*

(2022). The Scheme therefore helps to address the compelling need for development of the national networks identified in the NPS NN.

6.3 Sub-regional plans

A Strategic Economic Plan for the Enterprise M3 Area 2018-2030

6.3.1 The Enterprise M3 *A Strategic Economic Plan for the Enterprise M3 Area* suggests that:

"The efficient functioning of this strategic transport network is a priority for businesses, communities and visitors to our area, as well as the UK's economy. These vital arteries and transport hubs connect markets, help people access jobs, enable businesses to connect with each other and their customers, drive international trade and help unlock planned development. The network plays a crucial role in supporting wider economic prosperity and competitiveness."

6.3.2 The Scheme recognises the crucial role the M3 plays in supporting wider economic prosperity and competitiveness, as well as prioritising the efficient functioning of the network, through the development and delivery of works for increasing capacity, enhancing journey time reliability and supporting development in line with Local Plans. The Scheme includes widening of the M3 local to the junction to create four lanes each way and reconfiguring the existing main Junction 9 roundabout to make it more efficient.

Solent Strategic Transport Investment Plan (2016)

6.3.3 The Solent Local Enterprise Partnership's *Solent Strategic Transport Investment Plan* states that:

"The road network is critical for both the national and the local economy. There are currently a number of points of stress on the motorway network which impact on the economic performance including the M3 J9/A34: this is a critical node connecting Solent (especially freight) to production centres and markets in the north and the midlands but a major bottleneck."

6.3.4 The Scheme is specifically mentioned in the Solent Strategic Transport Investment Plan and responds to the need to improve economic performance by generating economic benefits relating to travel time savings due to the provision of the free-flow movement between the A34 and the M3.

6.4 Conformity of the Scheme with local development plans and local transport plans

Relevant local policy context

6.4.1 Local plans do not provide the primary policy basis against which NSIPs are considered but may contain policies which are considered important and relevant to decision making. As a result, this Case for the Scheme briefly considers the extent of relevant local plans and any policies of relevance.

6.4.2 At the local level, the relevant Local Planning Authorities for the Scheme are Hampshire County Council, Winchester City Council and South Downs National Park Authority. Each of these LPAs has an adopted development plan.

6.4.3 **Appendix A** of the report contains a review of Scheme against the policies set out within the following documents:

- Winchester Local–Plan Part 1 - Joint Core Strategy (2013).
- Winchester Local–Plan Part 2 - Development Management and Site Allocations (2017).
- South Downs National Park Local Plan (2019).
- Hampshire Local Transport Plan (2011).
- Hampshire Minerals and Waste Plan (2013).

Winchester Local Plan Part 1 – Joint Core Strategy

6.4.4 The *Winchester Local Plan Part 1 – Joint Core Strategy* (2013) is the long-term strategic plan for development within the Winchester District, and includes the strategic vision, objectives and the key policies needed to achieve sustainable development in Winchester District to 2031. It identifies the amount of development, broad locations for change, growth and protection, including allocating strategic sites.

6.4.5 Relevant policies are listed below:

- Policy DS1 – Development Strategy and Principles –Policy CP11 - Sustainable Low and Zero Carbon Built Development.
- Policy CP13 – High Quality Design.
- Policy CP15 – Green Infrastructure.
- Policy CP16 – Biodiversity.
- Policy CP17 – Flooding, Flood Risk and the Water Environment.
- Policy CP19 – South Downs National Park.
- Policy CP20 – Heritage and Landscape Character.

Winchester Local Plan Part 2 – Development Management and Site Allocations

6.4.6 The *Winchester District Local Plan Part 2 – Development Management and Site Allocations* (2017) incorporates both detailed development management policies and also allocates (non-strategic) sites to meet the objectively assessed

development needs including retail, housing, employment, community, leisure and transport.

6.4.7 Relevant policies are listed below:

- Policy WIN3 – Winchester Town Views and Roofscape.
- Policy DM15 – Local Distinctiveness.
- Policy DM17 – Site Development Principles.
- Policy DM19 – Development and Pollution.
- Policy DM20 – Development and Noise.
- Policy DM21 – Contaminated Land.
- Policy DM23 – Rural Character–Policy DM24 - Special Trees, Important Hedgerows and Ancient Woodlands.
- Policy DM29 – Heritage Assets.

South Downs Local Plan

6.4.8 The *South Downs Local Plan* was adopted in 2019 and considers a range of factors relating to the special qualities of the National Park, setting out policies relating to landscape character, biodiversity and cultural heritage of the National Park, Neighbourhood Plans, local housing and economic needs and the impact of climate change.

6.4.9 Relevant policies are set out below:

- Policy SD1 – Sustainable Development.
- Policy SD2 – Ecosystem Services.
- Policy SD3 – Major Development.
- Policy SD4 – Landscape Character.
- Policy SD5 – Design.
- Policy SD6 – Safeguarding Views.
- Policy SD7 – Relative Tranquillity.
- Policy SD8 – Dark Night Skies.
- Policy SD9 – Biodiversity and Geodiversity.
- Policy SD11 – Trees, Woodland and Hedgerows.

- Policy SD12 – Historic Environment.
- Policy SD13 – Listed Buildings.
- Policy SD15 – Conservation Areas.
- Policy SD16 – Archaeology.
- Policy SD17 – Protection of the Water Environment.
- Policy SD20 – Walking, Cycling and Equestrian Routes.
- Policy SD42 – Infrastructure.
- Policy SD45 – Green Infrastructure.
- Policy SD48 – Climate Change and Sustainable Use of Resources.
- Policy SD49 – Flood Risk Management.
- Policy SD54 – Pollution and Air Quality.
- Policy SD55 – Contaminated Land.

Hampshire Local Transport Plan 2011-2031

6.4.10 The LTP was adopted in 2011 and subject to a minor review in 2013. The LTP sets out a long-term vision for how the transport network of Hampshire will be developed over the 20-year period.

6.4.11 The LTP identifies that the junction of the A34 and M3 at Winnall, which acts as a gateway to the South Hampshire sub-region, presents particular difficulties. The LTP states that as well as capacity problems at this key intersection, there are also significant difficulties for local traffic wishing to join the strategic network at this point, particularly from nearby employment areas. Further increases in traffic may necessitate changes to the layout of the junction to offer increased capacity to reduce congestion at this location.

6.4.12 The LTP identifies the following potential options that could be considered for delivery in support of the highway network:

- Providing a well-maintained, resilient highway network.
- Over the longer-term, work with the Highways Agency to explore scope for affordable and environmentally acceptable solutions to address congestion at Junction 9 of the M3.

6.4.13 Relevant themes and policies from the LTP are listed below.

- Policy Objective 10.

- Policy Objective 12.

6.4.14 The Scheme accords with the LTP by addressing congestion at M3 Junction 9.

Hampshire Minerals and Waste Plan

6.4.15 *The Hampshire Minerals and Waste Plan* was adopted in 2013 and sets out number of policies for how waste development will be managed in Hampshire over the 20-year period.

6.4.16 Relevant policies are listed below:

- Policy 15 – Safeguarding Mineral Resources.

6.4.17 **Appendix A** of the report contains a review of Scheme against the local plan policies set out above.

Neighbourhood plans

6.4.18 There are defined Neighbourhood Plan Areas within the relevant local authorities, but the Scheme is not located within any Neighbourhood Plan Area.

Emerging policy

Winchester District Local Plan 2018 – 2038 (emerging)

6.4.19 The emerging *Winchester District Local Plan 2018 – 2038* is relevant to the Scheme. However, it is at an early stage of the plan making process and there are not yet any policies to assess the Scheme against.

Hampshire Local Transport Plan 4 (emerging)

6.4.20 The LPT4 is anticipated to be adopted in early 2023. Consultation on the Draft LTP4 took place April – June 2022. The Draft LTP4 as a whole is of relevance to the Scheme. A number of the key policies are summarised below.

6.4.21 Draft Policy SI1 (Work with partners to deliver targeted improvements to Hampshire's strategic rail, road and digital infrastructure) supports targeted improvements to the SRN where there is a clear safety, economic, health or wider social case. Draft Policy SI1 also supports new national infrastructure schemes where the environmental impacts have been fully assessed and appropriate mitigation measures specified and states that Hampshire County Council would like schemes provided by national infrastructure providers to achieve a 10% net gain in biodiversity. Draft Policy SI1 identifies M3 Junction 9 as an international gateway and part of the SRN which is a strategic transport infrastructure priority for Hampshire.

6.4.22 This document demonstrates a clear need for the Scheme which is grounded in national, sub-regional and local planning and transport policy.

6.4.23 An EIA has been carried out for the Scheme which is reported in the **ES (Document Reference 6.1)**. This identifies further the likely effects of the Scheme on the environment and sets out mitigation and enhancement measures proposed within the scheme to moderate any detrimental effect.

6.4.24 **Appendix 8.2 (Biodiversity Net Gain Assessment Report)** of the **ES (Document Reference 6.3)** assesses that the Scheme would result in a predicted net gain in biodiversity (+4.14%) and a predicted net gain in hedgerow units (+3.60%). The Scheme would provide a net increase of over 9.6 ha of chalk grassland. The protection and enhancement of chalk grassland habitat is a key theme within the *South Downs Local Plan* (adopted July 2019) and has been a key theme within consultation responses from stakeholders. However, the use of this habitat type suppresses the overall result of the metric, due to risk factors associated with this habitat type. If 'other neutral grassland' was provided in place of chalk grassland then the overall biodiversity net gain score for the Scheme would change from +4.14% to +14.93%. This demonstrates that the Scheme can comfortably deliver over 10% biodiversity net gain. However, whilst a change from chalk grassland to other neutral grassland would be technically feasible, given the wider benefits, which include the provision of habitats for a range of species including priority species of invertebrates and birds and the provision of connectivity between existing areas of chalk grassland in the wider landscape, chalk grassland has been taken forward as being most appropriate habitat for the Scheme.

6.4.25 Draft Policy C2 (Efficient and sustainable movement of goods) supports measures that improve journey time reliability on strategic lorry freight routes, including those which improve access to international ports and airports.

6.4.26 The M3 Junction 9 is a key transport interchange which connects South Hampshire's vital deep water ports of Southampton and Portsmouth and the wider region, facilitating intensive movements of freight cargo. The Scheme will create capacity to cope with peak demand and growth on the SRN at this location, with a significant decrease in journey time and ensuring a free flowing, safe, reliable and resilient network.

Winchester Movement Strategy (2019)

6.4.27 *The City of Winchester Movement Strategy* has been developed in partnership by Hampshire County Council and Winchester City Council. It is a joint policy document that sets out an agreed vision and long-term priorities for travel and transport improvements in Winchester over the next 20-30 years. It also covers, at a high level, plans for how these priorities might be met, including indicative timescales and costings. The M3 is mentioned in the strategy, and it meets with the Strategy by maintaining a functioning route for through journeys to avoid impact on city centre and accommodates wider growth, maintaining function of the strategic network.

6.4.28 The *City of Winchester Movement Strategy* strongly supports enhancing the strategic road network capacity on the M3 to:

- sustaining future growth of the national, regional and local economy.
- improving the resilience of the strategic network.
- reducing through traffic in the city leading to improved air quality.

6.5 Summary

6.5.1 National policy highlights a critical need for improvement of the national networks and to provide a transport network that is capable of stimulating and supporting economic growth.

6.5.2 RIS1 identified improvements to M3 Junction 9 as one of the key investments in the SRN for the London and South East region and RIS2 supports the upgrade of M3 Junction 9 to allow free movement from the A34 to the M3. The Scheme is also identified in the *Highways England Delivery Plan 2020-2025* and the *National Highways Delivery Plan 2022-2023*.

6.5.3 The Scheme complies with national policy in that it will create capacity to cope with peak demand and growth on the SRN at this location, ensuring a free flowing, safe, reliable and resilient network that will stimulate economic activity. The Scheme therefore helps to address the compelling need for development of the national networks identified in the NPS NN.

6.5.4 The Scheme also accords with the Hampshire LTP by addressing congestion at the M3 Junction 9.

6.5.5 The emerging Hampshire LTP4 identifies M3 Junction 9 as an international gateway and part of the SRN which is a strategic transport infrastructure priority for Hampshire. The Scheme accords with the emerging LTP4 by delivering targeted improvements to the SRN and improving journey time reliability at this key transport interchange which facilitates intensive movements of freight cargo.

6.5.6 In line with the EIA Regulations, the **ES (Document Reference 6.1)** has assessed whether there are likely to be significant residual environmental effects (adverse or beneficial) resulting from the construction and operation of the Scheme and recommends appropriate mitigation to reduce effects. Any unavoidable adverse environmental effects which may remain following mitigation are outweighed by the public benefit that will accrue as a result of the Scheme and the Government's commitment to upgrading the SRN.

7 Development proposed within nationally designated areas

7.1 Overview

7.1.1 The Scheme is situated partly within the South Downs National Park. The western extent of the wider South Downs National Park boundary is shown on **Figure 1.3 (Environmental Constraints Plan)** of the **ES (Document Reference 6.2)**. The road elements of the Scheme within the South Downs National Park include the new southbound links between the A34, the M3 southbound and the Junction 9 gyratory, the A33 roundabout and the M3 northbound on-slip and southbound off-slip. The widening of the M3 will occur outside the South Downs National Park.

7.1.2 As such, it is subject to the policies in paragraphs 5.147 to 5.155 of the NPS NN which relate to development proposed within nationally designated areas, such as National Parks.

7.1.3 It is considered that, given the national significance and environmental sensitivity of the South Downs National Park landscape, the case for developing the Scheme within the National Park requires detailed assessment and forms a key consideration in the determination of the DCO Application for the Scheme.

7.1.4 This Section therefore considers in detail the compliance of the Scheme with the NPS NN in relation to its development within the South Downs National Park.

7.2 National Park policy tests within the NPS NN

7.2.1 Paragraph 5.147 of the NPS NN states that *"any statutory undertaker commissioning or undertaking works in relation to, or so as to affect land in a National Park or Areas of Outstanding Natural Beauty (AONB), would need to comply with the respective duties in section 11A of the National Parks and Access to Countryside Act 1949 and section 85 of the Countryside and Rights of Way Act 2000."*

7.2.2 Paragraph 5.150 states that *"great weight should be given to conserving landscape and scenic beauty in nationally designated areas. National Parks, the Broads and Areas of Outstanding Natural Beauty have the highest status of protection in relation to landscape and scenic beauty. Each of these designated areas has specific statutory purposes which help ensure their continued protection and which the Secretary of State has a statutory duty to have regard to in decisions."*

7.2.3 Paragraph 5.151 states that *"the Secretary of State should refuse development consent in these areas except in exceptional circumstances and where it can be demonstrated that it is in the public interest. Consideration of such applications should include an assessment of:*

- *the need for the development, including in terms of any national considerations, and the impact of consenting, or not consenting it, upon the local economy;*

- *the cost of, and scope for, developing elsewhere, outside the designated area, or meeting the need for it in some other way; and*

- *any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated."*

7.2.4 Paragraph 5.152 states that *"there is a strong presumption against any significant road widening or the building of new roads and strategic rail freight interchanges in a National Park, the Broads and Areas of Outstanding Natural Beauty, unless it can be shown there are compelling reasons for the new or enhanced capacity and with any benefits outweighing the costs very significantly. Planning of the SRN should encourage routes that avoid National Parks, the Broads and Areas of Outstanding Natural Beauty."*

7.2.5 Paragraph 5.153 states that *"where consent is given in these areas, the SoS should be satisfied that the applicant has ensured that the project will be carried out to high environmental standards and where possible includes measures to enhance other aspects of the environment. Where necessary, the SoS should consider the imposition of appropriate requirements to ensure these standards are delivered."*

7.2.6 Paragraph 5.154 states that *"the duty to have regard to the purposes of nationally designated areas also applies when considering applications for projects outside the boundaries of these areas which may have impacts within them."* Paragraph 5.155 states that *"the fact that a proposed project will be visible within a designated area should not in itself be a reason for refusing consent."*

7.2.7 In summary, there are three policy tests within the NPS NN relating to development within a National Park, which are the focus of this section:

- Whether there are exceptional circumstances for granting a DCO in the South Downs National Park (NPS NN paragraph 5.151).

- Whether there are compelling reasons for the new or enhanced capacity and whether any benefits very significantly outweigh the costs (NPS NN paragraph 5.152).

- Whether the Scheme will be carried out to high environmental standards, including measures, where possible, to enhance other aspects of the environment (NPS NN paragraph 5.153).

7.3 Exceptional circumstances

7.3.1 This section assesses each of the considerations in NPS NN paragraph 5.151 in turn.

The need for the Scheme

7.3.2 The first bullet point of paragraph 5.151 states that, in considering whether exceptional circumstances exist to consent a development in a nationally designated area, the SoS should consider the need for the development, which includes *"any national considerations, and the impact of consenting, or not consenting it, upon the local economy."*

Existing context

7.3.3 The M3 Junction 9 is a key transport interchange which connects South Hampshire (facilitating an intensive freight generating industry) and the wider region, with London via the M3 and the Midlands/north via the A34 (which also links to the principal east–west A303 corridor).

7.3.4 M3 Junction 9 also serves as one of the primary access points for Winchester City Centre and Winnall. It facilitates intra- and inter-labour market access that is key to the local economy where commuting in and out of Winchester is an important driver of the local economy, where inflows of commuters grossly exceed outflows. When last recorded at the 2011 Census, approximately 56.8% of all jobs in Winchester District were occupied by commuters residing outside the local authority area.

7.3.5 M3 Junction 9 supports the visitor economy by facilitating trips to visitor attractions in Winchester and the Solent from major urban centres. This includes the South Downs National Park, which brings an estimated £465 million in visitor expenditure to the local economy.

7.3.6 It also serves key facilities such as the Tesco Extra on Easton Lane, and key recreational opportunities, including the South Downs National Park.

7.3.7 M3 Junction 9 also directs traffic along the M3 to the M25 London Orbital, linking the Winchester, Southampton, and neighbouring centres to Heathrow Airport Heathrow is the largest airport in the UK, serving 81 million passengers and 1.6 million tonnes of cargo in 2019. Heathrow acts as a major economic driver for the South East, supporting an estimated 77,000 jobs and £3.6 billion in annual GVA.

7.3.8 As a key link on the SRN, a significant volume of traffic uses M3 Junction 9. Approximately 6,000 vehicles pass through the junction per hour during the peak periods. A high proportion of journeys on the Solent to Midlands and M25 to Solent routes are commercial trips with traffic transporting freight to and from the Solent ports.

7.3.9 M3 Junction 9 experiences a high level of congestion and delay with poor journey time reliability. The significant volumes of traffic act as a bottleneck on the local highway network, causing significant delays throughout the day. Northbound and southbound movements between the M3 and the A34 are particularly intensive, with downstream queues on the northbound off-slip of the

M3 often resulting in safety concerns during peak periods. The route strategies evidence base found that this is also partially caused by the high proportion of HGVs travelling between the M27, M3 and A34. As demand for freight grows, existing congestion on the M3 and A34 is likely to worsen. Freight's contribution to congestion is magnified by the physical size of HGVs, slower speeds, longer braking distances, and a disproportionate involvement in critical highway incidents.

7.3.10 Significant volumes of traffic use the grade separated, partially signalised gyratory (approximately 6,000 vehicles per hour during the peak periods) which acts as a bottleneck on the local highway network and causes significant delays throughout the day. Northbound and southbound movements between the M3 and the A34 are particularly intensive, with downstream queues on the northbound off-slip of the M3 often resulting in safety concerns during peak periods.

7.3.11 In 2013, Hampshire County Council identified that infrastructure improvements were necessary to reduce congestion levels and assist with the strategic movement of traffic at Junction 9 of the M3, a key arterial intersection, to make sure that traffic congestion and increased journey times do not compromise the scale of potential future economic growth in the sub-region (Hampshire County Council, 2013a). Following this, the improvement to M3 Junction 9 was included RIS1.

7.3.12 The Scheme is included in the *Solent to Midlands Route Strategy* (Highways England, 2017), which identifies the M3 Junction 9 improvement as a major improvement project as part of this route upgrade. Within this, Junction 9 of the M3 is specifically highlighted as being a location where there is a substantial barrier to connectivity in relation to the South Downs National Park and walking, cycling and horse-riding. Additionally, the Scheme is identified and committed to under RIS2.

Journey times and reliability

7.3.13 To address the issues identified with M3 Junction 9, the Scheme comprises the development and delivery of works for increasing capacity, enhancing journey time reliability and supporting development in line with Local Plans. The Scheme includes widening of the M3 local to the junction to create four lanes each way, reconfiguring the existing main Junction 9 roundabout to make it more efficient, making provision for walkers, cyclists and horse-riders and improving the motorway slip roads.

7.3.14 The impacts of the Scheme ('Do-Something') have also been assessed in 2047. This shows journey time reductions between the 2047 Do-Minimum and the Do-Something in the VISSIM operational model. This is further outlined in **Section 4.9** of this document. The journey time comparisons for the AM and PM peak period are shown in **Table 4.3** and **Table 4.4** of this document.

7.3.15 In the AM peak period there is a predicted reduction in journey time between the Do-Minimum and Do-Something of almost 4 minutes from Easton Lane to both the A31 and A33. The A31 to Easton Lane has almost a 4 minute predicted reduction in journey time in the PM peak period. There are also predicted journey time reductions on the A34 to M3 southbound routes in the AM and PM peak periods and the reverse route in the PM peak period.

7.3.16 The majority of routes show a decrease in journey time with the Scheme in place. This highlights the Scheme as being able to accommodate the increased vehicle traffic in the future.

7.3.17 The proposed improvements are also predicted to reduce queuing and delay at all approach arms to Junction 9, but most significantly at the A33 (old A34) approach, where average queuing in the Do-Minimum 2047 forecast is 0.8km. This predicted queuing is removed with the introduction of the Scheme, contributing towards the exceptional circumstances supporting the granting of consent for the Scheme.

Road safety

7.3.18 The highest proportion of existing accidents occurred in the form of rear shunts, followed by lane changes. The majority of historical accidents happened on the A34 southbound approach and M3 northbound off-slip approach to Junction 9, as well as them being a common reason for accidents on the A272 and Easton Lane approaches to Junction 9. The rear shunts occurred as a result of the high traffic volumes combined with the stop start conditions caused by the traffic signals.

7.3.19 The Scheme will result in reduced stop-start conditions and reduced lane changing manoeuvres and hence a reduced number of accidents. There will also be a reduction in the number of accidents by reducing queueing and delays.

7.3.20 Cost and Benefit to Accidents – Light Touch (COBALT) from the strategic model analysis indicates that over a 60-year timeframe the improvements will save a total of 537 accidents, including 68 Killed or Seriously Injured (KSI) casualties.

National considerations

7.3.21 The aims of the Scheme are directly in line with the Government's policies and illustrate the need for the Scheme on a national level.

7.3.22 The improvement to M3 Junction 9 was also included in the DfT *Road Investment Strategy 2015/16 – 2019/20* (2015) (RIS1) and *Road Investment Strategy 2 2020–2025* (2020) (RIS2).

7.3.23 RIS2 sets out a vision for the SRN comprising:

i. A network that supports the economy.

ii. A greener network.

iii. A safer and more reliable network.

iv. A more integrated network.

v. A smarter network.

7.3.24 If not improved, the existing M3 Junction 9 infrastructure will continue to contribute to growing congestion and poor journey time reliability, road safety and efficiency, resulting in harmful effects to the economy and local communities. The road will therefore continue to fail to align with the Government's strategic vision for the SRN. Delivery of the scheme would meet a need that has been identified and committed to within RIS2 and contribute to achieving the national vision for the SRN.

Economic benefits

7.3.25 An economic appraisal has been undertaken to determine the expected benefits and disbenefits associated with the Scheme. The economic appraisal monetises these impacts in order to estimate the Scheme's economic worth. This is set out in **Section 5** of this document and the **Combined Modelling and Appraisal Report (Document Reference 7.10)**. Key figures are set out below:

- Over the 60-year appraisal period, the Scheme is forecast to generate economic benefits in the order of £~~161.7~~152.3M.
- The greatest benefit relates to user travel time savings, amounting to £155.5M, which were predominantly due to the provision of the free-flow movement between the A34 and the M3.
- The Scheme is forecast to achieve wider economic benefits of £41.8M.
- The accident assessment indicated an overall reduction in accidents with a corresponding benefit of £22.9M over the appraisal period.

Summary – the need for the Scheme

7.3.26 Within this context, it is considered that there is a strong need case for an intervention to address the significant existing congestion and road safety issues on the M3 as well as remove an impediment to strategic economic growth.

Developing elsewhere or meeting the need in some other way

7.3.27 The second bullet point of NPS NN paragraph 5.151 states that, in considering whether exceptional circumstances exist to consent a development in a nationally designated area, the SoS should consider *"the cost of, and scope for, developing elsewhere, outside the designated area, or meeting the need for it in some other way."*

7.3.28 As detailed in **Section 2** of this document and **Chapter 3 (Assessment of Alternatives)** of the **ES (Document Reference 6.1)**, since the identification of the need case in 2013, the Applicant has investigated possible alternative options to address the issues with M3 Junction 9. This has involved the identification, appraisal and evaluation of different options throughout the Applicant's PCF process.

7.3.29 In 2013, Hampshire County Council commissioned a feasibility to examine the strategic case for initial options and estimate the expected performance of potential improvement schemes (Atkins, 2013). The report assessed nine 'packages' that were grouped into three themes. The feasibility study recommended that the option of direct free-flow links from M3 to A34 and remodelling Junction 9 would most likely ease congestion while reducing land take.

7.3.30 The M3 and Junction 9 are either within the South Downs National Park itself or within its setting. The issue the Scheme is looking to alleviate is the congestion at Junction 9 itself and given these significant pieces of existing infrastructure are already located in this context, there is no realistic alternative location in which to carry out the proposed improvement works.

Detrimental effect on the environment, the landscape and recreational opportunities

7.3.31 The third bullet point of paragraph 5.151 states that, in considering whether exceptional circumstances exist to consent a development within a nationally designated area, the SoS should consider *"any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated"*.

7.3.32 The following sections consider the effect of the Scheme on the environment, landscape and recreational opportunities and the extent to which any of these effects have been moderated, including through Scheme design changes.

Effect on the environment and the landscape

7.3.33 An EIA has been carried out for the Scheme which is reported in the **ES (Document Reference 6.1)**. This identifies further the likely effects of the Scheme on the environment and sets out mitigation and enhancement measures proposed within the scheme to moderate any detrimental effect.

7.3.34 **Chapter 16 (Summary)** of the **ES (Document Reference 6.1)** presents a summary of the likely effects on receptors presented in the ES topic chapters as a result of the Scheme during construction and operation. It identifies whether an effect on a receptor is considered to be significant (beneficial or adverse) in terms of EIA and whether monitoring is required of identified significant adverse effects.

7.3.35 The **ES (Document Reference 6.1)** identifies that no significant adverse effects are likely in relation to air quality; cultural heritage; biodiversity; material assets and waste; road drainage and the water environment; and climate change.

7.3.36 Significant adverse effects in relation to population and human health are likely during the construction of the Scheme only. However, likely significant beneficial effects are identified in relation to population and human health during the operation of the Scheme.

7.3.37 Significant adverse effects are identified in relation to geology and soils both during construction and operation of the Scheme as the permanent acquisition of 18.7ha of Best Most Versatile agricultural land. Given the permanent nature of the impact and that the loss cannot be mitigated it would constitute a permanent adverse effect which is significant.

7.3.38 Likely significant adverse effects are identified in relation to noise and vibration both the construction and early operation of the Scheme. However, these effects reduce to not significant in the long-term.

7.3.39 **Chapter 7 (Landscape and Visual)** of the **ES (Document Reference 6.1)** concludes that effects on the South Downs National Park designation and its special qualities will result in Moderate adverse effects which are significant during the construction phase.

7.3.40 This acknowledges that construction activities would result in a series of incongruous activities within a small part of the South Downs National Park on its western boundary, The potential for direct effects on the South Downs National Park is however limited to 0.04% of the total land area of the South Downs National Park (out of 162,226ha), with the potential for short-term and reversible indirect perceptual or experiential effects occurring over a larger, but focused part of the western end of the South Downs National Park. These indirect effects would be experienced over an area from where the existing roads are already visible.

7.3.41 In addition to effects on the designation and special qualities, the assessment concludes that on effects on local landscape character within the South Downs National Park would be Large and Moderate adverse and therefore significant due to the localised direct effects within the Application Boundary with a limited extent of indirect / experiential effects beyond. The assessment concludes that landscape character for land beyond the existing highway estate (all within the South Downs National Park) within the Application Boundary would result in Large adverse and therefore a significant adverse effect. On landscape features, including those within the South Downs National Park, the assessment concludes Moderate adverse significant effects on the landscape features of topography, watercourses, agricultural land and the PRoW network. This acknowledges a series of direct, short-term and reversible effects, within the Application Boundary and its immediate environs.

7.3.42 In relation to the operational phase, **Chapter 7 (Landscape and Visual)** of the **ES (Document Reference 6.1)** concludes that effects on the South Downs National Park designation and its special qualities will result in Moderate adverse and significant effects during the operational phase at year 1. This acknowledges the small scale changes and localised geographical extent where effects occur when considering the designated landscape (0.04% of the total land area of the South Downs National Park). The assessment concludes there would be no discernible change to the Environmental Light Zones or the dark skies of the South Downs National Park within the Application Boundary and its environs.

7.3.43 The assessment acknowledges localised direct effects within the Application Boundary and limited indirect effects beyond on local landscape character will be Moderate adverse and therefore significant at year 1. A Moderate adverse and significant effect on landscape character for the land beyond the existing highway estate (but within the South Downs National Park) within the Application Boundary, is also reported. This acknowledge the medium to long term small scale localised changes and direct effects on the landscape, its feature and character within the Application Boundary and its immediate environs.

7.3.44 By year 15, **Chapter 7 (Landscape and Visual)** of the **ES (Document Reference 6.1)** concludes that the growth of the proposed structural planting would result in no significant effects on any landscape receptors.

7.3.45 The majority of significant adverse effects occur on a short-term basis during construction, with the exception of geology and soils which cannot be mitigated as the Scheme requires permanent land-take, and landscape and visual effects which will occur in the short to medium term. By Year 15 of the Scheme's operation, the significant adverse noise and vibration and landscape and visual effects would be removed entirely. In contrast to this, the majority of the significant beneficial effects occur during the operation of the Scheme, creating permanent benefits. This includes permanent beneficial effects to PRoW; access to employment land at Winnall Industrial Estate; and the wider labour market.

7.3.46 The NPS NN recognises that not all adverse effects are able to be resolved in large scale schemes and the above residual impacts will therefore be weighed against the longer term and wider benefits of the Scheme. The following sections detail the measures that have been incorporated into the Scheme in order to minimise impacts within the South Downs National Park as far as possible.

Moderation of effects on the environment and landscape through the Scheme design and mitigation

7.3.47 Overall, the scheme has been developed to avoid impacts through minimising the footprint and potential for direct impacts within the South Downs National Park.

7.3.48 **Section 5** of the **Design and Access Statement (Document Reference 7.9)** sets out the five high level principles that the Applicant has developed to drive the design of the Scheme. The second design principle relates to a landscape led strategy considering the wider context and respecting the South Downs National Park.

7.3.49 Embedded and essential mitigation measures in relation to landscape and visual impacts are summarised in **Section 7.8** of **Chapter 7 (Landscape and Visual**) of the **ES (Document Reference 6.1)**. These measures comprise:

- Embedded mitigation – measures forming part of the design of the scheme which are fixed and without which the scheme cannot be delivered. They are integrated into a project for the purpose of minimising environmental effects

- Essential mitigation – mitigation critical for the delivery of a project which can be acquired through statutory powers.

7.3.50 The principal objective of landscape mitigation is to integrate the Scheme into the local landscape to minimise adverse landscape and visual impacts with particular regard to further the purposes of the South Downs National Park, notably conserve and enhance the natural beauty, wildlife and cultural heritage of the South Downs National Park and promote opportunities for enjoyment of the special qualities of the South Downs National Park. Mitigation measures incorporated into the design are reported as embedded mitigation. Embedded construction phase and operational mitigation measures in relation to landscape and visual matters are summarised below:

Construction (including site preparation)

- Reuse of excess earth arisings to facilitate landscape mitigation within the Application Boundary.

- Retention of existing vegetation where possible, particularly established/mature woodland habitats, and measures for their protection as detailed in **Appendix 7.5 (Preliminary Aboricultural Impact Assessment)** of the **ES (Document Reference 6.3)**.

- Use of underpasses where possible rather than elevated overpasses to reduce visual impact of the Scheme.

- Retention of existing pavements where possible to reduce the extent of construction activities.

Operation

- Modifications to topography and landform: use of cuttings and false cuttings – to minimise visibility of the Scheme and where possible reduce visibility compared to the existing highways arrangement.

- Re-profiling of existing landform to create sympathetic features and reinforce existing characteristics whilst balancing visual screening requirements.

- Creation of areas of species-rich grassland with chalk grassland characteristics in locations on the west side of the M3 alignment including adjacent to proposed woodland / scrubland, where agricultural land is being lost, and on highway estate verges.

- Creation of new areas of chalk grassland (east of the M3 corridor) on lower slopes of the South Downs adjacent to the highway corridor in areas undergoing land reprofiling, and areas of chalk grassland creation on the lower open downland slopes within the South Downs National Park, to maximise biodiversity benefit, and to be responsive to the location.

- Beyond the permanent land-take boundary, reversion to arable agriculture to minimise long-term visibility of Scheme gained material.

- Improvements to existing PRoWs with culverted and bridge crossings under/over the highways and the reconfigured gyratory roundabout. These include a bridleway (for walkers, cyclists and horse-riders) along the eastern side of the Scheme between Easton Lane and Long Walk, a footway and cycleway (NCN 23) for the route through the gyratory and a combined path for walkers and cyclists along the western side of the Scheme between Kings Worthy and Winnall. These have been incorporated into the Scheme to address issues identified in published landscape character assessments relating to severance/separation between Winchester and the South Downs National Park.

- The carriageway and junctions would not be illuminated. The M3 and A34 underpasses would be lit to a 50% of full daytime lighting level, however the exit portals of the underpasses would be unlit during the day and night-time environment.

- The gantry-mounted signage would be lit. This lighting is required for safety in accordance with Design Manual for Roads and Bridges, CD 365 Portal and cantilever signs/signals gantries. Illumination of gantry-mounted signage is designed to limit direct upward light and consider the Obtrusive Light parameters Environmental Lighting Zone E2 (gantry locations) and E1a/b (receptor locations within the South Downs National Park).

7.3.51 The Scheme avoids introduction of tall bridge structures or elevated embankments and instead the Scheme is positioned within cutting with structures and associated headwalls set within the landform at as low an elevation as possible. Views of the Scheme from the designated landscape have been considered with the aim where possible to minimise any adverse effects.

7.3.52 The landscape strategy aims to reinforce and enhance (where appropriate) existing defined key characteristics of the receiving South Downs National Park

landscape and its setting with reference to the defined Landscape Character Areas (LCA) (LCA G5: Itchen Valley Sides and LCA A5: East Winchester Downs, and LCA F5: Itchen Floodplain).

7.3.53 The earthwork strategy has been developed to minimise impacts on topography, positively respond to the characteristics of the landscape (including landscape pattern, features and perceived tranquillity) whilst providing a balance to material cut and fill. Sympathetically designed earthwork which reflect the existing landform provide opportunity to utilise site gained chalk material as the basis for new creation of chalk grassland.

7.3.54 The dark night skies of the South Downs National Park have also been considered and proposals have minimised the use of lighting, with this limited to the underpasses , and gantry mounted signage on gantries GADS003, and GADS004 (accordance with Design Manual for Roads and Bridges, CD 365 Portal and cantilever signs/signals gantries).

7.3.55 **Table 7.1** identifies how the Scheme design positively responds to the seven defined special qualities of the South Downs National Park, thus supporting public understanding and enjoyment of the designated landscape.

Table 7.1: Design Response to the Special Qualities of the South Downs National Park

Criteria	Summary of Design Response
Diverse, inspirational landscapes and breath-taking views	The design proposals minimise visibility of the highway (due to position at a low elevation), and proposals for topography and earthworks remodelling on the eastern side of the M3 the Scheme reinforce the existing characteristic of the open downland landscape. This together with woodland planting adjacent to the highway and within the Itchen valley promotes views away from the highway to the surrounding South Downs National Park, and Winchester townscape skyline.
A rich variety of wildlife and habitats including rare and internationally important species	Minimising land take within the South Downs National Park, and minimising impacts upon the designated SAC and SSSI sites, through considered surface water drainage attenuation features. Maximising areas for the creation of chalk grassland on the open downlands, with a combination of species rich grassland with chalk grassland characteristics and woodland / scrubland within the Itchen Valley to reinforce the characteristics of this landscape and support ecological connectivity. The Scheme

Criteria	Summary of Design Response
	proposals achieve a positive biodiversity net gain which will support the variety of wildlife and habitats within the South Downs National Park.
Tranquil and unspoilt places	Maximising retention of tress and vegetation along the Itchen Valley (where tranquillity is most defined in the Application Boundary) and improving the perception of this characteristic through the landform remodelling on the eastern side of the Scheme adjacent to and within the South Downs National Park to provide screening of the highway. Minimising new lighting, this is used only when required for safety
An environment shaped by centuries of farming and embracing new enterprise	Minimising impacts on the most versatile farmland through a reduction in the Application Boundary, and furthermore through returning temporary acquired agricultural land once the Scheme is operational.
Great opportunities for recreational activities and learning experiences	The walking, cycling and horse-riding facilities around and within the Scheme will be retained and upgraded. This includes: ▪ NCN Route 23, with a widened 4m underpass and 3m route either side of the M3 Junction 9 gyratory. ▪ A new minimum 3m wide (increasing to 4m) shared path (an unsegregated combined footpath, cycle track and footway) for the western side of the Scheme is proposed to link the A33 / B3047 Junction to Tesco situated on Easton Lane. ▪ An additional 3m wide bridleway is proposed on the eastern side of the Scheme to link Easton Lane with Long Walk for walkers, cyclists and horse-riders. The provision of new routes increases opportunities for recreational experiences with access from Winchester to the South Downs National Park, whilst the design of these

Criteria	Summary of Design Response
	routes provides for an improved user experience.
Well-conserved historical features and a rich cultural heritage	The design respects the setting of historical assets whilst reinforcing relationships with heritage where achievable. This includes provision of views to Winchester from the newly created chalk grassland downland slopes within the South Downs National Park.

Design changes following 2021 statutory consultation

7.3.56 Whilst all comments were noted and have been responded to (see the **Consultation Report (Document Reference 5.1)**), comments received from South Downs National Park Authority and Natural England were considered to result in the need to revisit key aspects of the design of the Scheme.

7.3.57 Comments from the South Downs National Park Authority related to concerns regarding (at the time of the PEIR (Stantec, 2021)) the proposed reprofiled earthworks and undulating chalk grassland screening feature along the eastern flank of the M3 between Easton Lane and Long Walk. The South Downs National Park Authority considered that the design would interrupt and truncate views to the higher ground to the east, and Natural England considered that the Scheme could be much more ambitious in providing landscape enhancements.

7.3.58 Accordingly, the design of the earthworks between Easton Land and Long Walk was revisited and redesigned to create a more sympathetic feature and reinforce the existing characteristics of the South Downs National Park whilst balancing visual screening requirements. This design was progressed in consultation with South Downs National Park Authority who confirmed they were generally content with the progress the design was showing to respond to some of the concerns, specifically changes to landform and topography.

Areas for excess spoil management

7.3.59 The South Downs National Park Authority's response to the 2021 statutory consultation expressed concern about the potential location of the areas for excess spoil management within the South Downs National Park.

7.3.60 As outlined in **Chapter 3 (Assessment of Alternatives)** of the **ES (Document Reference 6.1)**, in 2020 it was identified that, in order to prevent the need to export excess spoil off site (which considering the initially approximated volume of 200,000m3 excess material would likely result in 750,000 additional HGV movements, producing approximately 108 additional tonnes of CO2), the use of deposition areas was proposed.

7.3.61 In redesigning the earthworks between Easton Land and Long Walk to respond to the South Down National Park's comments to the 2021 statutory consultation**–**, it was calculated that the excess spoil predicted to be raised during the construction phase would be sufficient to construct the new earthworks. This, in turn, prevented the need for the areas of search for excess spoil deposition which resulted in a reduction in the Application Boundary, reduced visual and acoustic intrusion into the South Downs National Park as well as the need to affect less BMV agricultural land.

7.3.62 The Scheme has responded to concerns raised by South Downs National Park Authority during the consultation process by removing the need for excess spoil deposition areas within the South Downs National Park.

Construction compounds

7.3.63 The South Downs National Park Authority's response to the 2021 statutory consultation expressed concern about the proposed location for construction compounds and in particular the central construction compounds' location within the South Downs National Park.

7.3.64 As outlined in **Chapter 3 (Assessment of Alternatives)** of the **ES (Document Reference 6.1)**, in 2020 it was also identified that additional areas (to the northern (satellite) construction compound) were potentially needed in order to facilitate the construction of the Scheme.

7.3.65 An initial desk-based exercise was undertaken in summer 2020 to identify areas potentially suitable for alternative main compound locations. An initial area of search for land parcels of five hectares was selected, as it was considered such an area was of a sufficient size to enable cabins, car parking and storage areas to be accommodated. This initial selection identified seven different potentially viable land parcels as shown in **Inset 3.9** of **Chapter 3 (Assessment of Alternatives)** of the **ES (Document Reference 6.1)**. These seven potential options were compared using the following criteria:

- Viability of access
- Existing utility provision to connect into
- Avoidance of key utility diversions
- Minimising impact for vegetation clearance
- Impact to overland drainage flows
- Interaction with areas prone to flooding
- Interaction with key ecological designations
- Interaction with the South Downs National Park

7.3.66 This resulted in two options for the main construction compound (Areas A and B), one of which is within the South Downs National Park (Area A).

7.3.67 It was also determined that three ancillary compounds would be necessary to facilitate development, two within the existing gyratory roundabout (on the east and west side of the motorway alignment) and one located adjacent to the A33/A34.

7.3.68 Both the options for the main construction compound, and the three ancillary compound locations were included within the 2021 statutory consultation.

7.3.69 It should be noted that a combination of main compound and the ancillary compounds would be required to facilitate the construction of the Scheme, for example it would not be possible for construction to take place without one of the two main compound options.

7.3.70 Following the 2021 statutory consultation, further work was undertaken to consider the potential impacts of the two options for the Main Construction Compound. This further work was predominantly in relation to carbon emissions given the heightened focus over time in relation to climate change. The further work predicted CO_2 emissions over the construction period associated with travelling to the site from the main construction compound locations of 0.6 tonnes with Area A compared with 135 tonnes of CO2 emissions with Area B. The lesser distance also reduces congestion on the surrounding local road network and the local communities and has associated cost and time savings. The further work contributed to confirming a preferred main construction compound at Area A.

7.3.71 Further work was undertaken after statutory consultation to reduce the impact of the main construction compound through examining location, size and configuration options. The exercise was principally landscape led and resulted in:

- The footprint being reduced within the South Downs National Park through more detailed work to understand the main construction compound requirements.
- Further considering the visibility of the compound which included moving the compound north of a tree line and retaining the majority of that tree line to aid screening.
- The addition of advanced planting to screen the haul road to the main construction compound from the Spitfire Link from the wider South Downs National Park thereby enhancing the area during construction and in the longer term.

7.3.72 This resulted in a revised site compound with a revised position that also allowed planting, including advanced planting, to take place between the main site compound area and the gyratory.

Recreational opportunities

7.3.73 The walking, cycling and horse-riding facilities around and within the Scheme are to be upgraded and would retain the current provisions and introduce new routes and connections providing greater access to the South Downs National Park from Winchester. This includes an improvement to the National Cycle Network (NCN) Route 23.

7.3.74 A number of optioneering exercises were undertaken for three separate proposed walking, cycling and horse-riding routes as part of the Scheme:

- through the gyratory from Easton Lane (west) to Easton Lane (east).
- from the A33/B3047 junction to NCN Route 23.
- a new route to the west of the Scheme parallel to the M3.

7.3.75 **Chapter 3 (Assessment of Alternative)** of the **ES (Document Reference 6.1)** summarises the optioneering work undertaken to identify the preferred routes for each of the three new proposed walking, cycling and horse-riding routes.

7.3.76 On both sides of the gyratory (east and west), the existing walking and cycling route which links both parts of Easton Lane would descend to a subway route provided beneath the gyratory roundabout. The existing provision for horse-riders is being retained, and as part of the Scheme would be improved with a widened 3m route (with 4m wide underpasses), which includes mounting blocks provided either side of the eastern subway to enable rider dismounting for leading horses through to continue the route to the existing bridleway extent (which currently ceases within the existing roundabout). Should a future and separate proposal come forward to lengthen the bridleway provision across the M3, the Scheme facilitates this by including a wider bridge over the M3 for a 3m width route, and space for future mounting block provision either side of the western subway so that horse-riders could dismount after leading horses through the subway.

7.3.77 An additional bridleway is proposed on the eastern side of the Scheme to link Easton Lane with Long Walk for walkers, cyclists and horse riders. Such a route would provide a circular leisure path for those using the South Downs National Park with a link to the other paths around Long Walk with their links to local villages.

7.3.78 For the second river crossing (i.e. most southern), the Scheme includes a new cycle/footbridge to be constructed across the River Itchen, with the route extending south along the east of the new A34 alignment, crossing under the A34 in a new 4m wide subway which would then traverse around new attenuation basins, then progressing to the existing depot junction and towards NCN 23 via a new subway under the northern arm of the gyratory roundabout. The new cycle/footbridge would be approximately 3.5m wide.

7.3.79 Four proposed subways would be required to accommodate existing and improved provision of routes in the area. The two new subways at the gyratory roundabout would cater for existing users of NCN Route 23, one additional subway would link with the western walking and cycling route, while a subway under the A34 northbound catering for the pedestrian/cyclist users of the new route.

7.3.80 A shared path (an unsegregated combined footpath, cycle track and footway) for the western side of the Scheme is proposed to link the A33/ B3047 Junction to Tesco situated on Easton Lane.

7.3.81 **Figure 2.4 (Existing and New Walking, Cycling and Horse-Riding routes)** of the **ES (Document Reference 6.2)** provides an overview of the existing and new walking, cycling and horse-riding routes.

7.3.82 The Scheme includes elements that either help to ensure continued access for pedestrians, cyclists and horse-riders or bring improvements in terms of current accessibility/severance.

Summary - does the Scheme constitute 'exceptional circumstances?

7.3.83 In 2013, Hampshire County Council identified that infrastructure improvements were necessary to reduce congestion levels and assist with the strategic movement of traffic at Junction 9 of the M3, a key arterial intersection, to make sure that traffic congestion and increased journey times do not compromise the scale of potential future economic growth in the sub-region (Hampshire County Council, 2013a). Following this, the improvement to M3 Junction 9 was included RIS1.

7.3.84 The Scheme is included in the *Solent to Midlands Route Strategy* (Highways England, 2017), which identifies the M3 Junction 9 improvement as a major improvement project as part of this route upgrade. Within this, Junction 9 of the M3 is specifically highlighted as being a location where there is a substantial barrier to connectivity in relation to the South Downs National Park and walking, cycling and horse-riding. Additionally, the Scheme is identified and committed to under RIS2.

7.3.85 Paragraph 5.151 of the NPS NN sets out three aspects of the Scheme that the SoS should consider when determining whether there are exceptional circumstances that would support the grant of development consent in the South Downs National Park. These are the need for the development; the cost and scope of alternatives; and the detrimental effect on the environment.

7.3.86 The impacts of the Scheme ('Do-Something') have been assessed in 2047, concluding that the majority of routes show a decrease in journey time with the Scheme in place. This highlights the Scheme as being able to accommodate the increased vehicle traffic in the future.

7.3.87 Significant amounts of predicted queuing are eradicated with the introduction of proposed junction improvements, contributing towards the exceptional circumstances supporting the granting of consent for the Scheme.

7.3.88 There is a strong need case for an intervention to address the significant existing congestion and road safety issues on the M3. While is it recognised that great weight is attached to conserving the South Downs National Park, it is also considered that addressing the existing road safety issues and removing an impediment to strategic economic growth is in the public interest.

7.3.89 If not improved, the existing M3 Junction 9 infrastructure will continue to contribute to growing congestion and poor journey time reliability, road safety and efficiency, resulting in harmful effects to the economy and local communities. The road will therefore continue to fail to align with the Government's strategic vision for the SRN. Delivery of the Scheme would meet a need that has been identified and committed to within RIS2 and contribute to achieving the national vision for the SRN.

7.3.90 An economic appraisal has been undertaken to determine the expected benefits and disbenefits associated with the Scheme. The economic appraisal monetises these impacts in order to estimate the Scheme's economic worth. Key figures are set out below:

- Over the 60-year appraisal period, the Scheme is forecast to generate economic benefits in the order of £~~161.7M~~152.3M.
- The greatest benefit relates to user travel time savings, amounting to £155.5M, which were predominantly due to the provision of the free-flow movement between the A34 and the M3.
- The Scheme is forecast to achieve wider economic benefits of £41.8M.
- The accident assessment indicated an overall reduction in accidents with a corresponding benefit of £22.9M over the appraisal period.

7.3.91 The walking, cycling and horse-riding facilities around and within the Scheme are to be upgraded and would retain the current provisions and introduce new routes and connections providing greater access to the South Downs National Park from Winchester. This includes an improvement to the National Cycle Network (NCN) Route 23.

7.3.92 The M3 and Junction 9 are either within the South Downs National Park itself or within its setting. The issue the Scheme is looking to alleviate is the congestion at Junction 9 itself and given these significant pieces of existing infrastructure are already located in this context, there is no realistic alternative location in which to carry out the proposed improvement works.

7.3.93 A review of the residual significant adverse effects expected to result from the Scheme, as reported in the **ES (Document Reference 6.1)** and summarised in **Table 6.1** of this document, has identified that there are residual adverse

significant effects relating to noise and vibration and population and human health during construction of the Scheme. Residual adverse significant effects relating to geology and soils and landscape and visual have been identified during both the construction and operation of the Scheme, however the operational effect on landscape and visual reduces to not significant in the long-term. However, it can be demonstrated that National Highways has actively sought to avoid or moderate such detrimental effects through the incorporation of appropriate mitigation and through making substantial changes to the scheme design where reductions in adverse effects could be achieved.

7.3.94 It is clear from the above that there is a strong and compelling case outlining the need for the Scheme. When balancing the benefits of the Scheme against the disbenefits, it is considered that the proposed Scheme meets the Exceptional Circumstances test set out in the NPS NN paragraph 5.151.

7.4 Compelling reasons, costs and benefits of development in the National Park

7.4.1 NPS NN paragraph 5.152 states that there is a strong presumption against any significant road widening or the building of new roads in a National Park unless it can be shown there are compelling reasons for the new or enhanced capacity and with any benefits outweighing the costs very significantly. This section assesses the Scheme against the considerations in NPS NN paragraph 5.152.

Do the benefits of the Scheme very significantly outweigh the costs?

Costs of not developing the Scheme

7.4.2 Analysis of the operational model in the Do-Minimum ('without-Scheme') in 2047 showed that there are significant predicted delays above free-flow journey time at Junction 9. The model predicted delays on the Easton Lane approach (from Winchester city centre) of 165 seconds in the AM peak and 90 seconds in the PM peak. On the A34 approach to Junction 9 there was a predicted delay of 30 to 40 seconds in the AM and PM peaks with a predicted queue length of circa 870m in the PM peak. The operational model analysis also showed significant relative delays on the A34 southbound approaching Junction 9 of the M3 and the M3 Junction 9 northbound off-slip. For some sections of these, the predicted delay is almost 100% of total travel time. Easton Lane eastbound also showed significant relative delays.

7.4.3 Analysis of the operational model showed journey times are predicted to increase between the 2017 base and the 2047 Do-Minimum. Easton Lane to the A33 had a predicted journey time increase of over 3 minutes (120% of total travel time) in the AM Peak and almost 1 minute (circa 33% of travel total time) in the PM peak. Easton Lane to the A31 had a predicted increase in journey time of over 2 minutes (50% of total travel time) in the AM Peak. The M3 south to the A34 had a predicted journey time increase of circa 2 minutes (20% of total travel time) in the PM Peak.

Costs of developing the Scheme

7.4.4 There are environmental 'costs' associated with the implementation of the Scheme, and these will need to be significantly outweighed by the benefits in order to make a compelling case for the Scheme.

7.4.5 These 'costs', identified as residual adverse significant effects in the **ES (Document Reference 6.1)**, are outlined below.

7.4.6 Construction effects on:

- The construction of the Scheme would require the permanent acquisition of 18.7ha of Best Most Versatile agricultural land (11.8ha of ALC (Agricultural Land Classification ((ALC)) Grade 2 land and 6.9ha of Grade 3) and 8ha of grade 3b, which will result in a moderate adverse impact. Further details are provided in **Chapter 9 (Geology and Soils)** of the **ES (Document Reference 6.1)**.

- There will be residential dwellings that experience a noise impact during the construction phases, resulting in a moderate adverse impact. Further details are provided in **Chapter 11 (Noise and Vibration)** of the **ES (Document Reference 6.1)**.

- It is anticipated that the Winnall Industrial Estate, Tesco Extra and Keir Highways would experience significant effects during construction due to temporary changes to accessibility of the site in terms of journey time reliability along Easton Lane – the primary access route for the industrial estate. This will impact all users of the employment site and have a very large adverse effect. Further details are provided in **Chapter 12 (Population and Health)** of the **ES (Document Reference 6.1)**.

- In terms of agricultural holdings, it is anticipated that Itchen Down Farm and Winnall Down Farm will have large areas of land permanently impacted by the Scheme, which will result in a significant effect. Further details are provided in **Chapter 12 (Population and Health)** of the **ES (Document Reference 6.1)**.

- For walking, cycling and horse-riding routes, there is likely to be significant adverse effects on the NCN 23 and other local footpaths. The proposed diversion of the NCN 23 and Winchester Bridleway 502 would not limit access to open space. Further details are provided in **Chapter 12 (Population and Health)** of the **ES (Document Reference 6.1)**.

- The Scheme would have a moderate adverse and significant effect on landscape and visual amenity in the short to medium term (0-15 years). This includes during construction and immediately following construction while the proposed mitigation is establishing. Effects are anticipated to be significant due to the effects in the designated and sensitive landscape of the South Downs National Park. However, the predicted significant effects

reduce to a slight adverse and not significant effect in the long term (15+ years) as landscape mitigation planting successfully establishes to help with landscape integration and to provide visual screening. Further details are provided in **Chapter 7 (Landscape and Visual)** of the **ES (Document Reference 6.1)**.

7.4.7 Operational effects on:

- Affordability is likely to decrease as the Scheme increases speed and creates induced demand along the M3, thus leading to an increase in vehicle operating costs along the route.

- During operation, short-term significant adverse noise effects are anticipated at 20 residential properties during the daytime. Of these, none are anticipated to be directly related to traffic using the Scheme, and 20 are anticipated to be indirectly related to the Scheme. Indirectly affected residential properties are anticipated to experience an increase in traffic flows on the surrounding road network, as a result of the Scheme. In the long-term, these effects are not considered significant, as the impact in the long-term is neutral.

- As noted in **paragraph 7.4.10** above, the Scheme would require the permanent acquisition of 18.7ha of Best Most Versatile agricultural land (11.8ha of ALC (Agricultural Land Classification ((ALC)) Grade 2 land and 6.9ha of Grade 3) and 8ha of grade 3b, which will result in a moderate adverse and significant effect. Further details are provided in **Chapter 9 (Geology and Soils)** of the **ES (Document Reference 6.1)**.

- As noted in **paragraph 7.4.10** above, the Scheme would have a moderate adverse and significant effect in the landscape and visual amenity in the short to medium term (0-15 years). This includes immediately following construction while the proposed mitigation is establishing. However, the predicted significant effects reduce to a slight adverse and not significant effect in the long term (15+ years) as landscape mitigation planting successfully establishes to help with landscape integration and to provide visual screening.

Benefits of developing the Scheme

7.4.8 It is considered that the following are the main benefits of the Scheme, that will be balanced against the costs of developing the Scheme, as set out above.

A less congested network:

- A significant reduction in congestion and delays would improve travel times for business users using the M3 and in particular those transiting between the M3 and the A34.

- The Scheme will reduce journey times and therefore frustration for drivers. Overall, all routes show a decrease or no change in journey time with the

Scheme in place. The Scheme shows significant journey time improvements for some of the most congested places at the junction. The Do-Something shows improved journey times from the M3 south to M3 north and the M3 to A34 corridors from the Do-Minimum. This highlights the Scheme being able to accommodate the increased vehicle traffic of the forecast future demand.

- The proposed improvements are also predicted to reduce queuing and delay at all approach arms to Junction 9, but most significantly at the A33 or old A34 approach, where average queuing in the Do-Minimum 2047 forecast is over 2km. This predicted queuing is eradicated with the introduction of the proposed junction improvements.

A safe and serviceable network:

- The Scheme will provide safer travel and reduce fear of accidents for pedestrians and cyclists.

- The Scheme is anticipated to alter traffic movements and the volume of traffic on the M3 Junction 9 and some surrounding roads.

- The study area will experience a decrease in the total number of collisions and casualties with the Scheme. The Scheme will result in reduced stop-start conditions and reduced lane changing manoeuvres and hence a reduced number of accidents. There will also be a reduction in the number of accidents by reducing queueing and delays.

- The accident assessment analysis indicates that over a 60-year timeframe the improvements are predicted to save a total of 537 accidents including 68 Killed or Seriously Injured (KSI) casualties, with a predicted corresponding benefit of £22.9M.

An improved environment:

- The Scheme will provide significantly enhanced walking, cycling and horse-riding provision. A list of improvements to existing facilities are being brought forward as part of the Scheme. This includes a new footbridge over the River Itchen and new subways under Junction 9, improving cycle connectivity, especially for the National Cycle Network route 23 and improvements to the horse-riding provision on the eastern side of the Scheme.

- The Scheme will provide enhanced pollution and run off control compared with the existing situation.

- The Scheme has been designed using PAS 2080 (BSI, 2016) to manage and reduce embodied carbon and has been iteratively updated to refine and improve the proposals in relation to a range of design requirements and criteria, including the consideration of sustainability, material use and construction efficiency.

- The Scheme is anticipated to comprise 0.0024% of the 4th carbon budget and 0.001% of the 5th carbon budget and 0.002% of the 6th carbon budgets. It is considered that the increase in emissions as a result of the Scheme would not have a material impact on the ability of UK Government to meet its carbon budgets, therefore in accordance with the DMRB, there would be no significant effect.

A more accessible and integrated network:

- The Scheme is anticipated to enhance the accessibility of community, recreational, and education facilities due to reduced congestion and greater journey time reliability.

- The Scheme will deliver improvements to the ProW network in the human health study area in terms of accessibility. This will make it easier for the population to access green/open space, including the South Downs National Park.

Supporting economic growth:

- The Scheme is forecast to generate economic benefits in the order of £161.7M152.3M. The greatest benefit relates to user travel time savings, amounting to £155.5M, which were predominantly due to the provision of the free-flow movement between the A34 and the M3.

- The Scheme is forecast to achieve wider economic benefits of £41.8M.

Summary – are there compelling reasons for the Scheme and do the benefits outweigh the disbenefits?

7.4.9 There are significant benefits arising as a result of the Scheme. These benefits include improvements to journey times, direct and indirect economic benefits, improvements to highway safety, and improvements to pedestrian and cycle access to and from the South Downs National Park.

7.4.10 When balanced against the limited disbenefits of the Scheme, it is considered that there are compelling reasons for the Scheme and that these benefits outweigh the disbenefits.

7.5 High environmental standards and measures to enhance

7.5.1 NPS NN Paragraph 5.153 states that "*where consent is given in these areas, the SoS should be satisfied that the Applicant has ensured that the project will be carried out to high environmental standards and where possible includes measures to enhance other aspects of the environment.*"

7.5.2 This section assesses the Scheme against the considerations in NPS NN paragraph 5.153.

High environmental standards

7.5.3 As well as being partially located in the South Downs National Park, the River Itchen SAC and SSSI are located partially within the Application Boundary. A number of other designations sites are located within the vicinity of the Application Boundary (ecological designations are discussed further in **Section 8** of this document). The Applicant recognises that the existing environment is of high quality, value and sensitivity.

7.5.4 The Scheme incorporates a range of design features and environmental mitigation that have been developed to reduce adverse environmental effects. Environmental design features and mitigation incorporated into the Scheme include:

- Implementing an environmental masterplan (**Figure 2.3** (**Environmental Masterplan**) of the **ES (Document Reference 6.2)**) that incorporates sensitive landscape planting and new habitats.
- A sensitively designed new bridleway for walkers, cyclists and horse-riders on the edge of the South Downs National Park.
- Material generated from site excavation works would be reused in the Scheme where possible.
- The design of the new bridge over the River Itchen would be a clear span structure with abutments set back from the river channel. No works would be required within the river channel.
- Low noise road surfacing would be used where new road surfaces are needed.
- Providing drainage ponds and treatment of operational highway runoff. The drainage design also prevents pollution of watercourses by intercepting and treating the road drainage discharges.
- Using non-intrusive temporary construction measures within the River Itchen to clean an existing headwall, and install two new headwalls to serve the operational drainage strategy.
- Retaining existing pavements where possible.
- Using warm rolled asphalt for installation of road surfacing, not hot rolled asphalt (resulting in reduced carbon emissions and energy requirements).

7.5.5 Further environmental topic specific mitigation is also outlined in **Chapters 5 to 14** of the **ES (Document Reference 6.1)**.

7.5.6 A **fiEMP (Document Reference 7.3)** has been developed, which includes all Scheme specific mitigation measures and commitments identified through the assessment process to control, reduce and minimise environmental effects. The

mitigation, measures and commitments are outlined within a Register of Environmental Actions and Commitments (REAC) within the **fiEMP (Document Reference 7.3)**. Prior to the commencement of construction, the Environmental Management Plan would be refined by the Principal Contractor, in line with DMRB LA 120 Environmental Management Plans.

7.5.7 As detailed in **Section 4.2** of the **Design and Access Statement (DAS) (Document Reference 7.9)**, in addition to policy and design requirements / standards, the overarching design rationale for the Scheme has been driven by the following six points, the majority of which relate to environmental factors:

- Safety and improving user experience.
- South Downs National Park, in terms of seeking to conserve and enhance the natural beauty, wildlife and cultural heritage of the area, and promote access, recreation and understanding of the designation and its special qualities.
- Respect the historic townscape of Winchester.
- Avoid and where necessary minimise harm to the River Itchen SAC / SSSI.
- Balance materials use on site, minimising import and export of earthwork outside of the Application Boundary.
- Improving walking, cycling and horse riding access.

7.5.8 **Table 7.1** of this document identifies how the Scheme design positively responds to the seven defined special qualities of the South Downs National Park. The dark night skies of the South Downs National Park have also been considered and proposals have minimised the usage of lighting with this limited to the underpasses (excluding approaches).

7.5.9 The Scheme design has responded to the environmental constraints presented by statutory and non-statutory designations and receptors. Assessment of these is detailed within the **ES (Document Reference 6.1)**, and these have contributed to the design narrative as set out in **Chapter 5** of the **DAS (Document Reference 7.9)**.

7.5.10 It is considered that the information above, together with the detailed information contained in other application documents, such as the **ES (Document Reference 6.1)**, the **fiEMP (Document Reference 7.3**) and the **DAS (Document Reference 7.9)**, demonstrate that the Scheme would be carried out to high environmental standards.

Measures to enhance other aspects of the environment

7.5.11 The following measures are considered to be ways in the which the Scheme will enhance aspects of the environment.

Ecology and biodiversity

7.5.12 Opportunity for maximising biodiversity benefit has been provided for with the use of scrub planting throughout the Scheme and species rich grasslands (including chalk grassland). The **Outline Landscape and Ecological Management Plan (OLEMP)**, within **Appendix 7.6** of the **ES (Document Reference 6.3)** sets out the proposed species lists for the landscape elements proposed.

7.5.13 Habitat provision set out on **Figure 2.3 (Environmental Masterplan)** of the **ES (Document Reference 6.2)** would enhance connectivity for wildlife within the Scheme. New areas of woodland and scrub towards the north of the Scheme, mostly located adjacent to exiting habitats, would enhance connectivity for bats and dormice and other wildlife.

7.5.14 Wildlife fencing will ensure species are protected from road traffic which will be an improvement over the existing situation and green infrastructure links will be enhanced.

7.5.15 The landscape strategy includes the use of native species of local provenance, to reflect the character of the local landscape, however the selected species mix will be as diverse as reasonably practicable to ensure resilience against potential future diseases and climate change whilst providing functional habitat for wildlife present in the local area.

7.5.16 To the east of the M3/A34 Southbound highway alignment an area of farmland which is predominately arable will utilise site gained chalk material to produce a circa 100m wide area of chalk grassland. The material placement has been designed to fit with the natural topography within the South Downs National Park, and when viewed from the surrounding landscape would be viewed as a natural feature. The creation of the chalk grassland which is a priority habitat would create landscape scale enhancement and biodiversity benefits which contribute to the aspirations of the South Downs National Park and the East Winchester Downs LCA.

7.5.17 The Scheme would positively contribute to the special qualities of the South Downs National Park, by providing for a rich variety of wildlife and habitats including rare and internationally important species and positively responding to the aspiration to restore and create additional chalk grassland within the South Downs National Park.

Landscape

7.5.18 The landscape strategy aims to reinforce and enhance (where appropriate) existing defined key characteristics of the receiving South Downs National Park landscape and its setting with reference to the defined Landscape Character Areas (LCA) (LCA G5: Itchen Valley Sides and LCA A5: East Winchester Downs, and LCA F5: Itchen Floodplain).

7.5.19 The creation of new scrub / woodland on the slopes of the proposed highway embankment / cutting slopes aids visual screening of the Scheme. This approach strengthens the perception of the large open skies and distant panoramic views focusing views to the open rolling downland landscape and away from the highway network.

7.5.20 The earthworks strategy has evolved to minimise impacts on topography, positively respond to the characteristics of the landscape (including landscape pattern, features and perceived tranquillity) whilst providing a balance to material cut and fill. Sympathetically designed earthwork which reflect the existing landform provide opportunity to utilise site gained chalk material as the basis for new areas of chalk grassland.

7.5.21 The requirement for chalk spoil deposition, generated during construction of the Scheme, on agricultural land within wider areas of the South Downs National Park has been minimised. This is a landscape scale enhancement measure which responds to the objectives of the National Park and positively reinforces and enhances a key characteristic of the South Downs National Park through creation of priority chalk grassland habitat. The Scheme design also minimises agricultural severance to existing land parcels.

7.5.22 The proposed A34 northbound structure results in the carriageway being slightly elevated from the existing ground level, however the use of retaining walls maximises opportunity for woodland and scrub planting within the internal island to maximise visual screening.

Drainage

7.5.23 The Scheme includes provision of a road drainage scheme that would capture pollutants within road runoff and remove pollutants before the treated runoff is discharged. The Scheme would provide a betterment on the existing road drainage system and improve the quality of water discharged into the River Itchen. The drainage strategy is set out in **Appendix 13.1 (Drainage Strategy Report)** of the **ES (Document Reference 6.3)**.

Accessibility

7.5.24 The Scheme results in increased accessibility via the new walking, cycling and horse-riding routes. The provision of new routes increases opportunities for recreational experiences with access from Winchester to the South Downs National Park, whilst the design of these routes provides for an improved user experience.

Summary – is the Scheme carried out to high environmental standards and does it include measures to enhance the environment?

7.5.25 The Applicant recognises that the location of the part of the Scheme within an area designated as National Park, a SAC and SSSI means that the existing environment is of high quality, value and sensitivity.

7.5.26 The Scheme design has responded to the environmental constraints presented by statutory and non-statutory designations and receptors, including the South Downs National Park. The Scheme design incorporates a range of design features and environmental mitigation measures that have been developed to reduce adverse environmental effects. It is concluded therefore that the Applicant can demonstrate that the Scheme would be carried out to high environmental standards required by NPS NN paragraph 5.153.

7.5.27 This section has also set out the measures that the Applicant has designed into the Scheme to enhance other aspects of the environment. These go further than providing mitigation for the effects of the Scheme and would actually enhance the environment beyond the existing baseline. This includes ecological enhancements through habitat creation and wildlife fencing, including the creation of priority chalk grassland habitat within the South Downs National Park; betterment on the existing road drainage system; and increased accessibility via the new walking, cycling and horse-riding routes. It is concluded therefore that the Applicant can demonstrate that the Scheme would enhance the environment in accordance with NPS NN paragraph 5.153.

7.6 Summary – does the scheme comply with NPS NN policy for development within a National Park?

7.6.1 The Applicant has considered the key NPS NN policy tests relating to development in a National Park. In conclusion, the Applicant considers that there are exceptional circumstances for the grant of consent for the Scheme within the South Downs National Park; there are compelling reasons for the Scheme and the benefits of the Scheme significantly outweigh its costs; and the Scheme will be carried out to high environmental standards and provide environmental enhancements.

8 Biodiversity and ecological conservation

8.1 Overview

8.1.1 The River Itchen Special Area of Conservation (SAC) is located (in part) beneath the existing alignment of the existing A34, the A33 and the M3 and lies partially within the Application Boundary.

8.1.2 The River Itchen Site of Special Scientific Interest (SSSI) falls partially within the Application Boundary where the M3, A34 and A433 road bridges cross the River Itchen. The SSSI also forms part of the western boundary of the Scheme.

8.1.3 A number of other statutory designated sites are within the vicinity of the Scheme including the St Catherine's Hill SSSI which is located approximately 500m south of the Application Boundary. The statutory designated sites are shown on **Figure 1.3 (Environmental Constraints Plan)** of the **ES (Document Reference 6.2)**.

8.1.4 The Winnall Moors Nature Reserve is located to the west of the Scheme, and west of the Winnall Industrial Estate. At its northern extent, the reserve boundary lies parallel to the Application Boundary along the existing alignment of the A34, however the Nature Reserve boundary does not interact with the Application Boundary.

8.1.5 This Section considers in detail the compliance of the Scheme with NPS NN paragraph 5.20-5.36 in relation to biodiversity and ecological conservation.

8.2 General principles of assessment and decision making within the NPS NN

8.2.1 NPS NN paragraph 5.20 states that "*Government policy for the natural environment is set out in the Natural Environment White Paper (NEWP). The NEWP sets out a vision of moving progressively from net biodiversity loss to net gain, by supporting healthy, well-functioning ecosystems and establishing more coherent ecological networks that are more resilient to current and future pressures. Geological conservation relates to the sites that are designated for their geology and/or their geomorphological importance.*"

8.2.2 In terms of the Applicant's assessment, paragraph 5.22 of the NPS NN states *"where the project is subject to EIA the applicant should ensure that the environmental statement clearly sets out any likely significant effects on internationally, nationally and locally designated sites of ecological or geological conservation importance (including those outside England) on protected species and on habitats and other species identified as being of principal importance for the conservation of biodiversity and that the statement considers the full range of potential impacts on ecosystems."*

8.2.3 Paragraph 5.23 of the NPS NN states that "t*he applicant should show how the project has taken advantage of opportunities to conserve and enhance biodiversity and geological conservation interests."*

8.2.4 In terms of decision making, paragraph 5.25 of the NPS NN states *"as a general principle, and subject to the specific policies below, development should avoid significant harm to biodiversity and geological conservation interests, including through mitigation and consideration of reasonable alternatives. The applicant may also wish to make use of biodiversity offsetting in devising compensation proposals to counteract any impacts on biodiversity which cannot be avoided or mitigated. Where significant harm cannot be avoided or mitigated, as a last resort, appropriate compensation measures should be sought*."

8.2.5 In accordance with NPS NN paragraph 5.22, **Chapter 8 (Biodiversity)** of the **ES (Document Reference 6.1)** clearly reports on the likely significant effects of the construction and operation of the Scheme on biodiversity, including on designated sites, protected species and habitats and other species identified as being of principal importance for the conservation of biodiversity. The assessment considers the assessments undertaken for other environmental topic areas which may also impact on ecosystems, including **Chapter 5 (Air Quality)**, **Chapter 7 (Landscape and Visual), Chapter 9 (Geology and Soils), Chapter 11 (Noise and Vibration), Chapter 13 (Road Drainage and the Water Environment), Chapter 14 (Climate) and Chapter 15 (Cumulative Effects)** of the **ES (Document Reference 6.1)**.

8.2.6 In accordance with NPS NN paragraph 5.23, **Section 8.8** of **Chapter 8 (Biodiversity)** of the **ES (Document Reference 6.1)** presents how the Scheme has taken advantage of opportunities to avoid impacts to biodiversity receptors, and to enhance biodiversity. Measures in relation to sites of geological importance are assessed within **Chapter 9 (Geology and Soils)** of the **ES (Document Reference 6.1)**. As an example, the current design has been subject to review and options appraisal to enable potential effects to important biodiversity receptors to be avoided where possible. This has resulted in:

- the chosen route of the western walking and cycling route (see **Chapter 3 (Assessment of Alternatives)** of the **ES (Document Reference 6.1)**) being located wholly outside the River Itchen SAC and SSSI, other than the proposed new foot/cycle bridge which spans these designated areas.

- The proposed new foot/cycle bridge over the River Itchen SAC/SSSI would be a clear span structure, with no piers within the river channel. In addition, the abutments would be set back from the riverbank, outside of the SAC and SSSI.

8.2.7 The design of the new foot/cycle bridge, with abutments set back from River Itchen would allow passage of wildlife, in particular otter, to be maintained along the riverbank during operation. The bridge deck also follows the same horizontal alignment as the existing adjacent road bridges (Itchen Bridge and Kingsworthy Bridge), to make certain it does not present an additional blockage to animals such as bats commuting along the River Itchen.

8.2.8 In accordance with NPS NN paragraph 5.25, **Section 8.8** of **Chapter 8 (Biodiversity)** of the **ES (Document Reference 6.1)** confirms that the

mitigation hierarchy has been embedded within the assessment process, whereby the design has sought to avoid adverse impacts in the first instance through an iterative approach to design, e.g. informing alignment to avoid sensitive receptors where possible (see **Chapter 3 (Assessment of Alternatives)** of the **ES (Document Reference 6.1)**). In areas where avoidance is not possible, measures have been included to prevent or reduce potentially significant negative effects. As a last resort, measures to compensate negative effects have also been included, e.g. habitat creation to offset impacts associated with habitat loss and fragmentation where these cannot be avoided.

8.2.9 It is considered that the Scheme is compliant with paragraphs 5.22 to 5.25 of the NPS NN.

8.3 Effects on designated sites, species and habitats

8.3.1 NPS NN paragraph 5.26 states "*in taking decisions, the Secretary of State should ensure that appropriate weight is attached to designated sites of international, national and local importance, protected species, habitats and other species of principal importance for the conservation of biodiversity, and to biodiversity and geological interests within the wider environment.*"

8.3.2 Paragraphs 5.27 to 5.35 of the NPS NN identify specific considerations for particular designations. These are considered in turn below, with the exception of paragraph 30 which relates to Marine Conservation Zones and is therefore not relevant to this Scheme.

8.3.3 The term 'study area' is referenced in the following sections**. Section 8.5** of **Chapter 8 (Biodiversity)** of the **ES (Document Reference 6.1)** explains that, due to differing zones of influence over which ecological features may be subject to impacts and subsequent effects, both during construction and operation, a range of study areas has been used for the assessment. Due to potential operational effects from exhaust emissions from vehicles, the study area for designated areas has been extended to include all areas within 200m of the Air Quality Affected Road Network (ARN) (defined in LA 105: Air Quality (National Highways, 2019) and reported in **Section 5.5** of **Chapter 5 (Air Quality)** of the **ES (Document Reference 6.1)**.

International sites

8.3.4 NPS NN paragraph 5.27 states that "*the most important sites for biodiversity are those identified through international conventions and European Directives. The Habitats Regulations provide statutory protection for European sites (see also paragraphs 4.22 to 4.25). The National Planning Policy Framework states that the following wildlife sites should have the same protection as European sites:*

- *potential Special Protection Areas and possible Special Areas of Conservation;*

- *listed or proposed Ramsar sites; and*
- *sites identified, or required, as compensatory measures for adverse effects on European sites, potential Special Protection Areas, possible Special Areas of Conservation and listed or proposed Ramsar sites."*

8.3.5 There are two internationally designated sites within the study area for the Scheme. Each of these internationally designated sites is discussed in turn below.

8.3.6 None of the below sites were identified for inclusion in the assessment:

- possible Special Areas of Conservation (pSACs).
- potential Special Protection Areas (pSPAs).
- listed or proposed Ramsar sites.
- sites identified, or required, as compensatory measures for adverse effects on these sites, pSPAs, pSACs and listed or proposed Ramsar sites, were identified for inclusion in the assessment.

River Itchen SAC

8.3.7 The River Itchen SAC is located (in part) beneath the existing alignment of the existing A34, the A33 and the M3 and lies partially within the Application Boundary.

8.3.8 During construction, **Section 8.9** of **Chapter 8 (Biodiversity)** of the **ES (Document Reference 6.1)** concludes that, following the inclusion of the mitigation outlined in **Section 8.8**, all identified potential impacts from construction activities would result in no change (no observable impact) or negligible impacts (being temporary with no effect on the integrity or key characteristics) to the River Itchen SAC.

8.3.9 During operation, **Section 8.9** of **Chapter 8 (Biodiversity)** of the **ES (Document Reference 6.1)** concludes that no direct impacts are anticipated on the River Itchen SAC. Indirect effects could arise through habitat degradation impacts during operation which are considered further in the following paragraphs.

8.3.10 Air quality modelling set out in **Chapter 5 (Air Quality) of the ES (Document Reference 6.1)** and the associated ecological assessment of potential effects in **Appendix 8.3 (Assessment of Operational Air Quality Impacts on Biodiversity)** of the **ES (Document Reference 6.3)** shows the localised changes in air quality from the Scheme would result in no appreciable change (no observable impact) to the River Itchen SAC.

8.3.11 There is potential for indirect impacts from pollution events such as traffic collisions with an associated reduction in water quality with subsequent effects

to qualifying habitats and species. The mitigation measures set out in **Appendix 13.1 (Drainage Strategy Report)** of the **ES (Document Reference 6.3)** for managing surface water runoff from the road, which includes provision of measures for treatment of surface water, would avoid adverse operational impacts, and are likely to be an improvement compared to the existing situation. The inclusion of the mitigation would result in a negligible beneficial impact to the River Itchen SAC, resulting in a 'Slight' beneficial effect.

8.3.12 A Habitats Regulations Assessment of potential effects to the River Itchen SAC, which is presented in the **Habitats Regulations Assessment (Document Reference 7.5)**, concludes that once standard avoidance and mitigation measures are applied, no adverse effects on the River Itchen SAC are anticipated as a result of the Scheme alone, or in-combination with other projects or plans.

Mottisfont Bats SAC

8.3.13 Mottisfont Bats SAC lies approximately 16km to the west of the Scheme.

8.3.14 During construction, **Section 8.9** of **Chapter 8 (Biodiversity)** of the **ES (Document Reference 6.1)** concludes that, given the distance and absence of impact pathways, there would be no change to this SAC, resulting in a 'Neutral' effect.

8.3.15 During operation, **Section 8.9** states that there would be no direct impacts. In addition, the Scheme is located over 8.5km from a 7.5km buffer zone around the SAC considered to be most important to barbastelle bats for which the SAC is designated. As such there would be no indirect effects to the SAC e.g. from collision of bats with vehicles.

8.3.16 A Habitats Regulations Assessment of potential effects to Mottisfont Bats SAC which is presented in the **Habitats Regulations Assessment (Document Reference 7.5)** concludes that no likely significant effects on the qualifying species for which the Mottisfont Bats SAC is designated are anticipated as a result of the Scheme, alone or 'in-combination' with other Plans or Projects.

Sites of Special Scientific Interest

8.3.17 NPS NN paragraph 5.28 states that *"many Sites of Special Scientific Interest (SSSIs) are also designated as sites of international importance and will be protected accordingly. Those which are not should also be given a high degree of protection."*

8.3.18 Paragraph 5.29 states "*where a proposed development on land within or outside a SSSI is likely to have an adverse effect on an SSSI (either individually or in combination with other developments), development consent should not normally be granted. Where an adverse effect on the site's notified special interest features is likely, an exception should be made only where the benefits of the development at this site clearly outweigh both the impacts that it is likely*

to have on the features of the site that make it of special scientific interest, and any broader impacts on the national network of SSSIs. The Secretary of State should ensure that the applicant's proposals to mitigate the harmful aspects of the development and, where possible, to ensure the conservation and enhancement of the site's biodiversity or geological interest, are acceptable. Where necessary, requirements and/or planning obligations should be used to ensure these proposals are delivered."

8.3.19 There is one SSSI partially within the Application Boundary, one SSSI approximately 500m away from the Application Boundary and five SSSIs beyond the 2km study area from the Scheme, but within 200m of the ARN. The impact of the Scheme on each of these SSSIs is discussed below.

River Itchen SSSI

8.3.20 The River Itchen is also a SSSI and falls partially within the Application Boundary where the M3, A34 and A433 road bridges cross the River Itchen. The SSSI also forms part of the western boundary of the Scheme. The Winnall Moors Nature Reserve covers part of the River Itchen SSSI and is assessed alongside the SSSI within **Chapter 8 (Biodiversity)** of the **ES (Document Reference 6.1)** and below.

8.3.21 Construction works have potential to result in short-term temporary impacts from increased pollutants such as silt and dust, and as such, a reduction in water quality, which could result in degradation of SSSI habitats adjacent to the Scheme. However, a package of pollution prevention measures, designed to avoid increased pollution during construction have been set out in the **fiEMP (Document Reference 7.3)**.

8.3.22 There is potential for indirect impacts to the SSSI as a result of changes to groundwater flows as a result of excavation and piling. As set out in **Chapter 13 (Road Drainage and the Water Environment)** of the **ES (Document Reference 6.1),** following mitigation secured through the **fiEMP (Document Reference 7.3)**, there would no measurable change to groundwater receptors resulting in a negligible impact.

8.3.23 During construction, **Section 8.9** of **Chapter 8 (Biodiversity)** of the **ES (Document Reference 6.1)** concludes that, following the inclusion of the mitigation outlined in **Section 8.8**, all identified potential impacts from construction activities would result in no change (no observable impact) or negligible impacts (being temporary with no effect on the integrity or key characteristics) to the River Itchen SSSI.

8.3.24 The majority of the River Itchen SSSI is a component of the River Itchen SAC and the operational impacts relevant to the SSSI are the same as those described for the SAC.

8.3.25 The River Itchen SSSI is also designated for additional areas of terrestrial habitats (fen meadow, flood pasture and swamp habitats), and water voles that

do not form part of the River Itchen SAC. During operation, **Section 8.9** of **Chapter 8 (Biodiversity)** of the **ES (Document Reference 6.1)** concludes that there is potential for habitat degradation associated with a reduction in water quality from pollution events such as traffic collisions. The mitigation measures set out in **Appendix 13.1 (Drainage Strategy Report)** of the **ES (Document Reference 6.3)** for managing surface water runoff from the road, which includes provision of measures for treatment of surface water, would avoid adverse operational impacts, and are likely to be an improvement compared to the existing situation. The inclusion of the mitigation would result in no change to the River Itchen SSSI.

8.3.26 The air quality modelling presented in **Chapter 5 (Air Quality)** of the **ES (Document Reference 6.1)** and described in **Appendix 8.3 (Assessment of Air Quality Effects to Biodiversity Receptors**) of the **ES (Document Reference 6.3)** demonstrates that where there are increases in pollutants, these are below the relevant screening thresholds, and therefore effects from changes in emissions from the Scheme will be not significant to the River Itchen SSSI.

8.3.27 **Chapter 8 (Biodiversity)** of the **ES (Document Reference 6.1)** concludes that, following the inclusion of mitigation, the construction and operation of the Scheme would result in no change (no observable impact) or negligible impacts (being temporary with no effect on the integrity or key characteristics) to the River Itchen SSSI.

St Catherine's Hill SSSI

8.3.28 St Catherine's Hill SSSI is located approximately 500m south of the Application Boundary.

8.3.29 During construction, no direct or indirect impacts on the St Catherine's Hill SSSI are anticipated, due to the distance and physical separation from the Scheme. As such there would be no change (no observable impact) to the St Catherine's Hill SSSI.

8.3.30 During operation, the air quality modelling of the Scheme presented in **Chapter 5 (Air Quality)** of the **ES (Document Reference 6.1)** and interpreted in **Appendix 8.3 (Assessment of Operational Air Quality Impacts on Biodiversity)** of the **ES (Document Reference 6.3)** demonstrates that increases in nitrogen at the boundary of the St Catherine's Hill SSSI are well below the level at which a theoretical reduction in species diversity might occur. As such, effects from changes in emissions SSSI from the Scheme to St Catherine's Hill SSSI will be not significant.

River Test SSSI

8.3.31 The River Test SSSI is beyond the 2km study area from the Scheme, but within 200m of the ARN.

8.3.32 During operation, the air quality modelling presented in **Chapter 5 (Air Quality)** of the **ES (Document Reference 6.1)** and described in **Appendix 8.3 (Assessment of Operational Air Quality Impacts on Biodiversity)** of the **ES (Document Reference 6.3)** shows that at the boundary of the River Test SSSI adjacent to the road, increases in nitrogen levels are 1.2% above the existing baseline. However, the only SSSI habitat in this location is the river, which is not sensitive to increases in nitrogen. At locations where non-river habitats occur, increases in nitrogen are below the 1% threshold. Effects from changes in emissions from the Scheme will be not significant to the River Test SSSI.

Highclere Park SSSI

8.3.33 The Highclere Park SSSI is beyond the 2km study area from the Scheme, but within 200m of the ARN.

8.3.34 During operation, the air quality modelling presented in **Chapter 5 (Air Quality)** of the **ES** (Document Reference 6.1) and described in **Appendix 8.3 (Assessment of Operational Air Quality Impacts on Biodiversity)** of the **ES** (Document Reference 6.3) shows that, where there are increases in pollutants at the Highclere Park SSSI, these are below the relevant screening thresholds, would not result in a reduction in species richness, and therefore effects from changes in emissions from the Scheme will be not significant to Highclere Park SSSI.

Cheesefoot Head SSSI

8.3.35 The Cheesefoot Head SSSI is beyond the 2km study area from the Scheme, but within 200m of the ARN.

8.3.36 During operation, the air quality modelling of the Scheme presented in **Chapter 5 (Air Quality)** of the **ES (Document Reference 6.1)** and interpreted in **Appendix 8.3 (Assessment of Operational Air Quality Impacts on Biodiversity)** of the **ES (Document Reference 6.3)** demonstrates that increases in nitrogen at the boundary of the Cheesefoot Head SSSI are well below the level at which a theoretical reduction in species diversity might occur. As such, effects from changes in emissions SSSI from the Scheme to Cheesefoot Head SSSI will be not significant.

Burghclere Beacon SSSI

8.3.37 The Burghclere Beacon SSSI is beyond the 2km study area from the Scheme, but within 200m of the ARN.

8.3.38 **Chapter 8 (Biodiversity)** of the **ES (Document Reference 6.1)** states that localised changes in air quality from the Scheme to Burghclere Beacon SSSI were below the relevant screening thresholds and were scoped out of further assessment. Therefore, there would be no adverse effect on the SSSI.

Summary - Sites of Special Scientific Interest

8.3.39 No observable impacts are anticipated to the St Catherine's Hill SSSI during construction of the Scheme. Localised changes in air quality from the Scheme to Burghclere Beacon SSSI were below the relevant screening thresholds and were scoped out of further assessment

8.3.40 During operation, at St Catherine's Hill SSSI, Cheesefoot Head SSSI, River Test SSSI, Highclere Park SSSI, increases in nitrogen are below the relevant screening threshold where sensitive habitats are present, or if above the thresholds further ecological assessment of potential effects to habitats has indicated there is unlikely to be loss of species diversity and therefore effects are not significant.

8.3.41 Following the inclusion of mitigation, during construction and operation of the Scheme, there would be no change or negligible impacts to the River Itchen SSSI.

Regional and local sites

8.3.42 In terms of regional and local sites of biodiversity and geological interest (which include Local Geological Sites, Local Nature Reserves and Local Wildlife Sites and Nature Improvement Areas), NPS NN paragraph 5.31 states that *"the Secretary of State should give due consideration to such regional or local designations. However, given the need for new infrastructure, these designations should not be used in themselves to refuse development consent."*

8.3.43 There are 26 Sites of Importance for Nature Conservation (SINC) and two Road Verge of Ecological Importance (RVEI) within a 2km radius of the Scheme. Details of these are presented in the **Appendix 8.1y (Biodiversity Desk Study Report)** of the **ES (Document Reference 6.3)**.

8.3.44 Easton Down SINC lies partially within the Application Boundary. All other non-statutory designated areas within 2km of the Scheme fall outside the Application Boundary.

8.3.45 In addition to the non-statutory designated areas above, the Winnall Moors Nature Reserve falls within the 2km search area. This reserve, managed by the Hampshire and Isle of White Wildlife Trust, is adjacent to the Scheme outside the Application Boundary. The reserve covers part of the River Itchen SSSI and is assessed alongside the SSSI.

8.3.46 Easton Down SINC would be fenced and protected at all times from construction activity resulting in no direct impacts from habitat loss or fragmentation. All other non-statutory designated areas fall outside the Application Boundary, and there would therefore be no direct impacts from habitat loss.

8.3.47 **Section 8.9** of **Chapter 8 (Biodiversity)** of the **ES (Document Reference 6.1)** states that there is potential for habitat degradation within the Easton Down SINC from indirect construction impacts such as dust. Other non-designated

areas in proximity to the Scheme also have potential to be impacted by pollutants during construction such as dust. Measures to control dust and other pollutants during construction are set out in the **fiEMP (Document Reference 7.3)**. Following the inclusion of the mitigation outlined in **Section 8.8** of **Chapter 8 (Biodiversity)** of the **ES (Document Reference 6.1)**, construction activities would result in no change to the Easton Down SINC or other non-statutory designated areas.

8.3.48 The main potential for operational impacts to nearby non-statutory areas would be through habitat degradation as a result of a reduction in air quality. Air quality modelling **(Chapter 5 (Air Quality)** of the **ES (Document Reference 6.1)** and described in **Appendix 8.3 (Assessment of Operational Air Quality Impacts on Biodiversity)** of the **ES (Document Reference 6.3)**) shows that the localised changes in air quality from the Scheme to Great Moorlands Copse Complex SINC and Ancient Woodland (AWL), Freespace Hicknor Hill SINC, Great Pen Wood SINC and AWL, Magdalen Hill Down SINC, Northend Copse SINC and AWL, Powells Grove Copse SINC and AWL, and A31 Petersfield Road SINC and RVEI would result in long-term temporary negligible impacts. Effects are assessed as temporary due to the continuing switch to electric vehicles and associated reduction in emissions.

8.3.49 Operational impacts from air quality to all other non-statutory designated areas would result in no change (no observable impact) to these designated areas.

Irreplaceable habitats including ancient woodland and veteran trees

8.3.50 NPS NN paragraph 5.32 states that "*the Secretary of State should not grant development consent for any development that would result in the loss or deterioration of irreplaceable habitats including ancient woodland and the loss of aged or veteran trees found outside ancient woodland, unless the national need for and benefits of the development, in that location, clearly outweigh the loss. Aged or veteran trees found outside ancient woodland are also particularly valuable for biodiversity and their loss should be avoided. Where such trees would be affected by development proposals, the applicant should set out proposals for their conservation or, where their loss is unavoidable, the reasons for this.*"

8.3.51 No irreplaceable habitats such as ancient woodland or veteran trees are present within the Application Boundary. A number of parcels of ancient woodland have been identified on the ancient woodland inventory within 2km of the Scheme. Further parcels of ancient woodland are present beyond the 2km study area, but within 200m of the ARN.

8.3.52 **Chapter 8 (Biodiversity)** of the **ES (Document Reference 6.1)** concludes that there would be no irreplaceable habitats that would be affected during the construction of the Scheme.

8.3.53 During operation, **Chapter 5 (Air Quality)** of the **ES (Document Reference 6.1)** and **Appendix 8.3 (Assessment of Operational Air Quality Impacts on**

Biodiversity) of the **ES (Document Reference 6.3)** shows the effects from localised changes in air quality from the Scheme to the ancient woodlands within 200m of the ARN would result in no appreciable change (no observable impact).

8.3.54 The Scheme would not result in the loss or deterioration of irreplaceable habitats and therefore complies with the requirements of NPS NN paragraph 5.32.

Biodiversity within and around developments

8.3.55 NPS NN paragraph 5.33 states that the SoS should consider whether the applicant has maximised opportunities for building in beneficial biodiversity or geological features as part of good design. Requirements or planning obligations may be used by the SoS, where appropriate, in order to ensure that such beneficial features are delivered.

8.3.56 The Scheme design has been ecologically informed, such that 'embedded avoidance and mitigation measures' for ecology were contained within the Scheme design as it evolved. These measures include the selection of less damaging options for the shared path (unsegregated combined footpath, cycle track and footway) adjacent to the A34, avoidance of permanent structures in the River Itchen, and an ecologically informed Environmental Masterplan (**Figure 2.3** of the **ES (Document Reference 6.2)**) providing habitats of ecological value which are appropriate for the local environment.

8.3.57 Habitat provision set out on **Figure 2.3 (Environmental Masterplan)** of the **ES (Document Reference 6.2)**) would enhance connectivity for wildlife within the Scheme. New areas of woodland and scrub towards the north of the Scheme, mostly located adjacent to exiting habitats, would enhance connectivity for bats and dormice and other wildlife. The provision of substantial areas of chalk grassland, woodland and scrub along the eastern boundary of the Scheme would improve connectivity for a range of wildlife including bats, dormice, and terrestrial invertebrates in a north-south direction.

8.3.58 **Appendix 8.2 (Biodiversity Net Gain Assessment Report)** of the **ES (Document Reference 6.3)** assesses that the Scheme would result in a predicted net gain in biodiversity (+4.14%) and a predicted net gain in hedgerow units (+3.60%).

8.3.59 The Scheme would provide a net increase of over 9.6 ha of chalk grassland, which is appropriate to the local area. The protection and enhancement of this habitat is a key theme within the *South Downs Local Plan* (adopted July 2019) and has been a key theme within consultation responses from stakeholders. However, the use of this habitat type suppresses the overall result of the metric, due to risk factors associated with this habitat type. For example, if 'other neutral grassland' was provided in place of chalk grassland then the overall biodiversity net gain score for the Scheme would change from +4.14% to +14.93%. This demonstrates that the Scheme can comfortably deliver over 10%

biodiversity net gain. However, whilst a change from chalk grassland to other neutral grassland would be technically feasible, given the wider benefits, which include the provision of habitats for a range of species including priority species of invertebrates and birds and the provision of connectivity between existing areas of chalk grassland in the wider landscape, chalk grassland has been taken forward as being most appropriate habitat for the Scheme.

8.3.60 In summary, the Applicant has maximised opportunities for building in beneficial biodiversity features into the Scheme, in accordance with NPS NN paragraph 5.33.

Protection of other habitats and species

8.3.61 NPS NN paragraph 5.35 states that "*the Secretary of State should ensure that applicants have taken measures to ensure these species and habitats are protected from the adverse effects of development. Where appropriate, requirements or planning obligations may be used in order to deliver this protection. The Secretary of State should refuse consent where harm to the habitats or species and their habitats would result, unless the benefits of the development (including need) clearly outweigh that harm*."

8.3.62 Nine Habitats of Principle Importance (HPI) were identified within the 2km study area, of which only lowland calcareous grassland, lowland mixed deciduous woodland, rivers, hedgerows and wet woodland occur within the Application Boundary and are presented on **Figure 8.4 (Non-Statutory Designated Areas)** of the **ES (Document Reference 6.2)**.

8.3.63 Habitats within the Application Boundary which would be lost during construction include those within the existing highway boundary, as well as habitat within adjacent farmland. **Section 9** of **Chapter 8 (Biodiversity)** of the **ES (Document Reference 6.1)** states that the initial loss of habitats is likely to result in a short-term temporary moderate adverse impact to habitats of up to County importance, which is not significant. The assessment confirms that there would be no loss of internationally or nationally important habitats. In the medium-term, as the habitats develop this would contribute to improving the local natural environment, supporting nationally and locally important wildlife, and by improving local ecological networks that are more resilient to current and future pressures.

8.3.64 As shown on **Figure 2.3 (Environmental Masterplan)** of the **ES (Document Reference 6.2)**, there would be approximately 36ha of new habitats, including chalk grassland (9.6ha), species rich grassland (8.09ha), native broadleaved woodland (10.10ha), scrub (5.88ha). Overall, there would be an increase of approximately 18ha of semi-natural habitats within the Application Boundary. In addition, a 2.87ha retained area of grassland would be enhanced.

8.3.65 Taking into account the overall increase in area of habitats of ecological value, and the improvements in connectivity across ecological networks, impacts through habitat gains would result in a moderate beneficial impact to habitats.

8.3.66 Environmental mitigation and enhancement measures and required monitoring proposed to be implemented during construction are detailed in the **fiEMP (Document Reference 7.3)**, through which, these measures will be secured. As the design develops towards the construction phase, the second iteration Environmental Management Plan (siEMP) would need to be prepared in accordance with the **fiEMP (Document Reference 7.3)**. The siEMP would be implemented and is secured through a Requirement in Schedule 2 of the **draft DCO (Document Reference 3.1)**. As detailed within a REAC within the **fiEMP (Document Reference 7.3)**, due to the mobility of species and potential for changes in habitats, to make certain the ecological baseline is up-to-date, baseline ecological surveys would be updated prior to construction.

8.3.67 During operation of the Scheme, essential mitigation in relation to important biodiversity receptors would include the management and monitoring of habitat creation and enhancement measures. Further details are provided within **Appendix 7.6 (OLEMP) of the ES (Document Reference 6.3)**, with a full LEMP secured through a DCO Requirement in agreement with statutory consultees.

8.3.68 To compensate for the loss of a main badger sett, an artificial badger sett would be provided. A licence under the Protection of Badgers Act 1992 would be obtained to legally allow closure of the existing sett and would include full details of appropriate mitigation strategies. All works affecting badgers shall be undertaken in accordance with the licencing requirements and standing advice from Natural England.

8.3.69 To compensate for the loss of hazel dormice habitat (woodland, scrub and hedgerow) within the Application Boundary, the landscape planting has provided compensatory planting to enable a net increase in dormouse habitat within the Application Boundary in the long term, and to maintain connectivity across the wider landscape. A European Protected Species licence would be obtained to legally allow clearance of dormouse habitat. The licence would require full details of appropriate mitigation strategies.

8.3.70 An Ecological Clerk of Works (ECoW) would be present on site during key periods of the construction phase. The ECoW would be required to make certain that all committed mitigation measures are adhered to.

8.3.71 The licenses and measures detailed above are considered sufficient to protect other habitats and species identified through assessment work, in accordance with paragraph 5.35 of the NPS NN.

8.4 Mitigation measures

8.4.1 NPS NN paragraph 5.36 states that "*Applicants should include appropriate mitigation measures as an integral part of their proposed development, including identifying where and how these will be secured…"*

8.4.2 **Section 8.8** of the **Chapter 8 (Biodiversity)** of the **ES (Document Reference 6.1)** sets out design, mitigation and enhancement measures to be delivered through the Scheme. The mitigation hierarchy has been embedded within the EIA process, whereby the design has sought to avoid adverse impacts in the first instance through an iterative approach to design. In areas where avoidance is not possible, measures have been included to prevent or reduce potentially significant negative effects. As a last resort, measures to compensate negative effects have also been included. These avoidance, mitigation and compensation measures have been designed with regard to industry best practice.

8.4.3 As detailed in the previous section, a **fiEMP (Document Reference 7.3)** has been developed. This includes (within a Register of Environmental Actions and Commitments) all Scheme specific mitigation measures and commitments identified through the assessment process to control, reduce and minimise environmental effects. Prior to the commencement of construction, the siEMP would need to be prepared in accordance with the **fiEMP (Document Reference 7.3)**. The siEMP would be implemented and is secured through a Requirement in Schedule 2 of the **draft DCO (Document Reference 3.1).**

8.4.4 It is considered that the Scheme is compliant with paragraph 5.36 of the NPS NN.

8.5 Summary – does the Scheme comply with the NPS NN in relation to biodiversity and ecological conservation.

8.5.1 This section has demonstrated how the Scheme complies with the key NPS NN policy tests in relation to biodiversity and ecological conservation, through mitigation, compensation and enhancement measures.

8.5.2 The Scheme design has been subject to review and options appraisal to enable potential effects to important biodiversity receptors to be avoided where possible. The Scheme design has been ecologically informed, such that 'embedded avoidance and mitigation measures' for ecology were contained within the Scheme design as it evolved. These measures include the selection of less damaging of options for the shared path (unsegregated combined footpath, cycle track and footway) adjacent to the A34, avoidance of permanent structures in the River Itchen, and an ecologically informed Environmental Masterplan (**Figure 2.3** of the **ES (Document Reference 6.2)**) providing habitats of ecological value (chalk grassland) which are appropriate for the local environment. In the long-term there will be ecological benefits associated with the implementation of this mitigation and enhancement.

8.5.3 The proposed habitat provision would enhance connectivity for wildlife within the Scheme and the Scheme would result in a predicted net gain in biodiversity (+4.14%) and a predicted net gain in hedgerow units (+3.60%).

9 Conclusions

9.1 Overview

9.1.1 This document sets out the policy context against which the Scheme should be determined by the Secretary of State. It demonstrates a clear need for the Scheme which is grounded in national, sub-regional and local planning and transport policy.

9.1.2 The NPS NN, NIDP and the RIS set out a strong case for delivery of national networks that meet the country's long-term network needs, by reducing delays, improving journey time reliability, improving safety and supporting economic growth.

9.2 Need and Scheme objectives

9.2.1 M3 Junction 9 currently experiences a high level of congestion and delay with poor journey time reliability.

9.2.2 Projected development of the region's ports is anticipated to substantially increase heavy goods vehicle (HGV) movements and as demand for freight grows, existing congestion on the M3 and A34 is likely to worsen.

9.2.3 Safety on the existing route is also currently an issue and a high accident rate has been an unfortunate effect. During the period 2015-2019 there were 80 collisions with 106 casualties.

9.2.4 The upgrades to M3 Junction 9 are identified in the LTP (2011), RIS2, the *Highways England Delivery Plan 2020-2025* (2020) and the *Highways England Strategic Business Plan 2020-2025* (2020).

9.2.5 The emerging Hampshire LTP4 identifies M3 Junction 9 as an international gateway and part of the SRN which is a strategic transport infrastructure priority for Hampshire.

9.2.6 There is a need case for the Scheme in order to address the significant existing congestion and road safety issues on the M3. While it is recognised that great weight is attached to conserving the South Downs National Park, it is also considered that addressing the existing road safety issues and removing an impediment to strategic economic growth is in the public interest and further supports the need for the Scheme.

9.2.7 The Scheme performs well when assessed against the Scheme objectives detailed in **Table 3.1** of this document.

9.3 Alternatives, the Scheme and its benefits

9.3.1 A wide ranging and detailed optioneering process, involving extensive study and consultation, has considered reasonable alternatives, ultimately resulting in the

announcement of the preferred route in July 2018 of Option 14, which proposed free-flowing road links between the M3 and the A34 both northbound and southbound, as well as upgrading the current footpath through Junction 9 to become part of the National Cycle Network.

9.3.2 The M3 and Junction 9 are either within the South Downs National Park itself or within its setting. The issue the Scheme is looking to alleviate is the congestion at Junction 9 itself and, given these significant pieces of existing infrastructure are already located in this context, there is no realistic alternative location in which to carry out the proposed improvement works.

9.3.3 The Scheme has been developed further since the PRA, taking on board feedback from non-statutory and statutory engagement that followed in order to develop the design of the Scheme that is now set out within the DCO application. This is considered to the best option to meet the Scheme's defined objectives, and the delivery of a comprehensive set of benefits.

9.3.4 Transportation benefits include a significant reduction in congestion and delays, journey time improvements for some of the most congested places at Junction 9, a reduction in accidents and improved walking, cycling and horse-riding facilities providing greater access to the South Downs National Park from Winchester.

9.3.5 The Scheme is anticipated to generate economic benefits. The greatest benefit relates to user travel time savings, amounting to £155.5M, which are predominantly due to the provision of the free-flow movement between the A34 and the M3. With consideration of user benefits plus the effects of delays during construction, accident benefits, indirect taxation benefits, and monetised environmental impacts the total present value of benefits is £~~161.7M~~152.3M. The Scheme is also forecast to generate wider economic benefits of £41.8M.

9.3.6 Value for money has been assessed based on the Scheme costs and benefits and the DfT's Value for Money Framework. This included consideration of monetised and non-monetised impacts. The initial Benefit to Cost Ratio (BCR) is ~~1.44~~1.35. Inclusion of wider economic impacts gives an adjusted BCR of ~~1.81~~1.72, which represents 'Medium' Value for Money.

9.4 Scheme conformity with the NPS NN

9.4.1 National policy highlights a critical need for improvement of the national networks and to provide a transport network that is capable of stimulating and supporting economic growth. The Scheme complies with national policy in that it will create capacity to cope with peak demand and growth on the SRN at this location, ensuring a free flowing, safe, reliable and resilient network that will stimulate economic activity. The Scheme therefore helps to address the compelling need for development of the national networks identified in the NPS NN.

9.4.2 The **NPS NN Accordance Table (Document Reference 7.2)** demonstrate the Scheme's conformity with the NPS NN.

9.4.3 In considering a Scheme, and weighing its adverse impacts against its benefits, paragraph 4.3 of the NPS NN states that the SoS should take into account:

- its potential benefits, including the facilitation of economic development, including job creation, housing and environmental improvement, and any longer term or wider benefits; and
- its potential adverse impacts, including any longer-term and cumulative adverse impacts, as well as any measures to avoid, reduce or compensate for any adverse impacts.

9.4.4 Overall, it is considered that the public benefits of the Scheme are clear and significantly outweigh the impacts, as demonstrated throughout this Case for the Scheme.

9.5 Environmental impacts

9.5.1 The **ES (Document Reference 6.1)** has identified that there are residual adverse significant effects relating to population and human health during construction and adverse significant effects relating to geology and soils, noise and vibration, and landscape and visual during both the construction and operation of the Scheme. However, it can be demonstrated that National Highways has actively sought to avoid or moderate such detrimental effects through the incorporation of appropriate mitigation and through making substantial changes to the Scheme design where reductions in adverse effects could be achieved.

9.5.2 The significant adverse effects in relation to geology and soils relate to the permanent acquisition of BMV agricultural land. This loss cannot be mitigated and would therefore constitute a permanent significant adverse effect.

9.5.3 The likely significant adverse effects identified in relation to noise and vibration and landscape and visual during both the construction and early operation of the Scheme. However, these effects reduce to not significant in the long-term.

9.5.4 The Scheme design has responded to the environmental constraints presented by statutory and non-statutory designations and receptors, including the South Downs National Park. The Scheme design incorporates a range of design features and environmental mitigation that have been developed to reduce adverse environmental effects in relation to the South Downs National Park, as shown in **Section 7** of this document. The Applicant considers that there are exceptional circumstances for the grant of consent for the Scheme within the South Downs National Park; there are compelling reasons for the Scheme and the benefits of the Scheme significantly outweigh its costs; and the Scheme will be carried out to high environmental standards and provide environmental enhancements.

9.5.5 The River Itchen SAC and SSSI lie partially within the Application Boundary and there are a number of other statutory designated sites within the vicinity of the Scheme. However, no significant negative impacts on biodiversity or ecology have been predicted as a result of the Scheme.

9.5.6 The Scheme incorporates a range of design features and environmental mitigation that have been developed to reduce adverse environmental effects as far as possible.

9.5.7 **Section 8** of this document demonstrates how the Scheme complies with the key NPS NN policy tests in relation to biodiversity and ecological conservation, through mitigation, compensation and enhancement measures. Measures have been designed into the Scheme to enhance other aspects of the environment. These go further than providing mitigation for the effects of the Scheme and would actually enhance the environment beyond the existing baseline and deliver a net gain in biodiversity.

9.6 Delivery of Government Policy and Plans

9.6.1 RIS1 identified improvements to M3 Junction 9 as one of the key investments in the SRN for the London and South East region and RIS2 supports the upgrade of M3 Junction 9 to allow free movement from the A34 to the M3. The Scheme is also identified in the *Highways England Delivery Plan 2020-2025 and the National Highways Delivery Plan 2022-2023*.

9.6.2 The Scheme is included in the *Solent to Midlands Route Strategy* (Highways England, 2017), which identifies the M3 Junction 9 improvement as a major improvement project as part of this route upgrade. Within this, Junction 9 of the M3 is specifically highlighted as being a location where there is a substantial barrier to connectivity in relation to the South Downs National Park and walking, cycling and horse-riding.

9.7 Local planning and transport policy

9.7.1 The Scheme is considered to be in accordance with both local and sub-regional planning and transport policy, as assessed in **Appendix A**. In particular, the Scheme is considered to accord with Policy SD3 of the *South Downs Local Plan* (2019), as demonstrated in **Table A.1** of **Appendix A.**

9.8 Planning balance

9.8.1 The Scheme will deliver extensive benefits including a reduction in congestion and delays; improving journey times; economic benefits; safety improvements; improvements to visual amenity and landscape character over the long-term; wildlife and green infrastructure enhancements; enhanced pollution and run-off control; and enhanced provision for pedestrians, cyclists and horse riders.

9.8.2 The Scheme incorporates a range of design features and environmental mitigation that have been developed to minimise potential negative environmental effects as far as possible. Measures have also been designed

into the Scheme which go further than providing mitigation for the effects of the Scheme and would actually enhance the environment beyond the existing baseline.

9.8.3 The Applicant considers that the benefits of the Scheme significantly and demonstrably outweigh any harm predicted. Section 104(3) of the Planning Act 2008 states that the SoS must decide the DCO application in accordance with any relevant NPS, except in certain circumstances specified in subsection (4) to (8).

9.8.4 As required by Section 104(7) of the Planning Act 2008, the benefits of the Scheme must be weighed against any adverse impacts identified in the **ES (Document Reference 6.1)**. This document demonstrates that any unavoidable adverse environmental effects which may remain following mitigation are outweighed by the public benefit that will accrue as a result of the Scheme and the Government's commitment to upgrading the SRN.

9.8.5 The Scheme complies with the NPS NN and has had regard to all other important and relevant matters which need to be taken into consideration, including the relevant adopted local development plans and the NPPF.

Appendix A Local Policy Assessment

Table A.1: National Park Local Policy Review

Policy Document	Policy Reference	Assessment
Winchester District Local Plan Part 1 – Joint Core Strategy (2013)	Policy CP19 – South Downs National Park	Policy CP19 states that *"new development should be in keeping with the context and the setting of the landscape and settlements of the South Downs National Park"* and states *"development within and adjoining the South Downs National Park which would have a significant detrimental impact to the rural character and setting of settlements and the landscape should not be permitted unless it can be demonstrated that the proposal is of overriding national importance, or its impact can be mitigated."* Part of the Scheme is to be developed in the South Downs National Park. Likely significant adverse effects are identified in relation to landscape and visual during both the construction and early operation of the Scheme. However, this effect reduces to slight adverse and not significant in the long-term as landscape mitigation planting successfully establishes to aid landscape integration and provide visual screening. By Year 15 of the Scheme's operation, the significant adverse landscape and visual effects would be removed entirely. In contrast to this, the majority of the significant beneficial effects occur during the operation of the Scheme, creating permanent benefits. This includes permanent beneficial effects to PRoW. The landscape strategy aims to reinforce and enhance (where appropriate) existing defined key characteristics of the receiving South Downs National Park landscape and its setting with reference to the defined Landscape Character Areas (LCA) (LCA

Policy Document	Policy Reference	Assessment
		G5: Itchen Valley Sides and LCA A5: East Winchester Downs, and LCA F5: Itchen Floodplain). The Scheme design has responded to the environmental constraints presented by statutory and non-statutory designations and receptors, including the South Downs National Park. The Scheme design incorporates a range of design features and environmental mitigation that have been developed to reduce adverse environmental effects. The Applicant has designed measures into the Scheme to enhance other aspects of the environment. These go further than providing mitigation for the effects of the Scheme and would actually enhance the environment beyond the existing baseline. This includes ecological enhancements through habitat creation and wildlife fencing and the creation of priority chalk grassland habitat within the South Downs National Park.
South Downs National Park Local Plan (2019)	Policy SD1 – Sustainable Development Policy SD3 – Major Development Policy SD4 – Landscape Character	Part of the Scheme is to be developed in the South Downs National Park. Policy SD1 does not support development which would *"fail to conserve the landscape, natural beauty, wildlife and cultural heritage of the National Park unless, exceptionally:* *a) The benefits of the proposals demonstrably outweigh the great weight to be attached to those interests; and* *b) There is substantial compliance with other relevant policies in the development plan."*

Policy Document	Policy Reference	Assessment
		Policy SD4 permits development proposals providing that they conserve and enhance landscape character. Policy SD3 states that: 1. *In determining what constitutes major development the National Park Authority will consider whether the development, including temporary events should they be deemed to constitute development, by reason of its scale, character or nature, has the potential to have a significant adverse impact on the natural beauty, wildlife or cultural heritage of, or recreational opportunities provided by, the National Park. The potential for significant adverse impact on the National Park will include the consideration of both the impact of cumulative development and the individual characteristics of each proposal and its context.* 2. *Planning permission will be refused for major developments in the National Park except in exceptional circumstances, and where it can be demonstrated they are in the public interest. Consideration of such applications should include an assessment of:* *a) The need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy;* *b) The cost of, and scope for, developing elsewhere outside the designated area, or meeting the need for it in some other way; and* *c) Any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.* 3. *If it is considered that exceptional circumstances exist and development would be in the public interest, all opportunities to conserve and enhance the special*

Policy Document	Policy Reference	Assessment
		qualities should be sought. Development proposals should be sustainable as measured against the following factors: − Zero Carbon − Zero Waste − Sustainable Transport − Sustainable Materials − Sustainable Water − Land Use and Wildlife − Culture and Community − Health and Wellbeing." In relation to Policy SD1 and Policy SD4, the landscape strategy aims to reinforce and enhance (where appropriate) existing defined key characteristics of the receiving South Downs National Park landscape and its setting with reference to the defined Landscape Character Areas (LCA) (LCA G5: Itchen Valley Sides and LCA A5: East Winchester Downs, and LCA F5: Itchen Floodplain). Policy SD4 is discussed in **Table A.4** below. In relation to SD3 point 1, an EIA has been carried out for the Scheme which is reported in the **ES (Document Reference 6.1)**. This identifies the likely effects of the Scheme on the environment during construction and operation and whether an effect on a receptor is considered to be significant (beneficial or adverse). It also sets out mitigation and enhancement measures proposed within the Scheme to moderate any detrimental effect and whether monitoring is required of identified significant adverse effects. The **ES (Document Reference 6.1)** identifies that no significant adverse effects are likely in relation to air quality; cultural heritage; biodiversity; material assets and waste; road drainage and the water environment; and climate. Significant adverse effects in relation to noise and vibration and population and human health are likely during the construction of the scheme only. However, likely significant

Policy Document	Policy Reference	Assessment
		beneficial effects are identified in relation to population and human health during the operation of the Scheme. Significant adverse effects are identified in relation to geology and soils both during construction and operation of the Scheme as the permanent acquisition of 18.7ha of BMV agricultural land. Given the permanent nature of the impact and that the loss cannot be mitigated it would constitute a **permanent very large adverse effect** in relation to the Grade 2 land and a **permanent large adverse effect** in relation to the Grade 3a land, which is **significant.** Likely significant adverse effects are identified in relation to landscape and visual during both the construction and early operation of the Scheme. However, this effect reduces to slight adverse and not significant in the long-term as landscape mitigation planting successfully establishes to aid landscape integration and provide visual screening. The NPS NN recognises that not all impacts are able to be resolved in large scale Schemes and the above residual impacts will therefore be weighed against the longer term and wider benefits of the Scheme**.** The majority of significant adverse effects occur on a short-term basis during construction, with the exception of geology and soils which cannot be mitigated as the Scheme requires permanent land-take, and landscape and visual effects which will occur in the short to medium term. By Year 15 of the Scheme's operation, the significant adverse landscape and visual effects would be removed entirely. In contrast to this, the majority of the significant beneficial effects occur during the operation of the Scheme, creating permanent benefits. This includes permanent beneficial effects to PRoW; access to employment land at Winnall Industrial Estate; and the wider labour market.

Policy Document	Policy Reference	Assessment
		In terms of recreational opportunities, the walking, cycling and horse-riding facilities around and within the Scheme are to be upgraded and would retain the current provisions and introduce new routes and connections, providing greater access to the South Downs National Park from Winchester. This includes an improvement to the National Cycle Network (NCN) Route 23. The Scheme includes elements that either help to ensure continued access for pedestrians, cyclists and horse-riders or bring improvements in terms of current accessibility/severance. Policy SD3 point 2 is consistent with the policy tests set out in NPS NN paragraph 5.151. The Scheme is assessed against each of these considerations in **Section 7.3** of this document and so the assessment is not repeated here. To summarise, it is considered that the Scheme is in the public interest and that exceptional circumstances exist for the development of part of the Scheme in the South Downs National Park. In relation to Policy SD3 point 3, **Table 7.1** identifies how the Scheme design positively responds to the seven defined special qualities of the South Downs National Park, thus supporting public understanding and enjoyment of the designated landscape. As detailed in **Section 5.6** of the **DAS (Document Reference 7.9)**, the Scheme seeks to be multi-functional, and resilient, minimising waste and the use of new material. The proposal maximises use of site gained materials to minimise impacts on import and export, instead using these in a positive way to reinforce character and identity. Sustainable design is a fundamental consideration of the Scheme. Where appropriate, materials would be locally sourced, reclaimed, recycled, or minimise carbon impact.

Policy Document	Policy Reference	Assessment
		The Scheme will provide enhanced pollution and run off control compared with the existing situation. The Scheme aims to avoid, and where not possible, minimise impacts on biodiversity, with the commitment of achieving no net loss with potential opportunities for improving biodiversity where possible. Due to the lifespan of the proposals the Scheme design considers potential change from future climate change, including designing in appropriate water attenuation features for extreme events, specifying durable materials, and including a diverse soft landscape species for resilience. The Scheme includes elements that either help to ensure continued access for pedestrians, cyclists and horse-riders or bring improvements in terms of current accessibility/severance.

Table A.2: Air Quality Local Policy Review

Policy Document	Policy Reference	Assessment
Hampshire Local Transport Plan (2011)	Policy Objective 10 – local air quality and national carbon targets	Policy Objective 10 requires transport measures to contribute to achieving local targets for improving air quality where possible and affordable. An air quality assessment has been undertaken in accordance with the methodology detailed in DMRB LA 105 (Highways England, 2019), to consider the impacts of the construction and operation of the Scheme. The assessment has determined the significance of air quality effects (**Section 5.9** of **Chapter 5 (Air Quality)** of the **ES (Document Reference 6.1)**) and the risk of non-compliance with the Air Quality Regulations (**Section 5.8**). **Chapter 5 (Air Quality)** of the **ES (Document Reference 6.1)** assessed the construction phase effects from dust and emissions as negligible following the implementation of measures within the **fiEMP (Document Reference 7.3)**. Therefore, there would be no significant effects on air quality as a result of the construction of the Scheme. In terms of operational traffic emissions, the assessment undertaken demonstrates that there are no locations where NO_2 concentrations exceed the air quality threshold (40 µg/m3). according to the DMRB LA 105 methodology, therefore there would be no significant effects as a result of the Scheme. The **Combined Modelling and Appraisal Report (Document Reference 7.10) (Document Reference 7.10)** concludes that the Local Air Quality impacts are positive, and the Scheme provides benefits of +£4.7M, principally due to the reduction of traffic in central Winchester, which is densely populated.

Policy Document	Policy Reference	Assessment
Winchester District Local Plan Part 1 – Joint Core Strategy (2013)	Policy DS1 – Development Strategy and Principles	Policy DS1 states that, in delivering the District's housing, employment and community requirements, development proposals will be expected to demonstrate conformity with a number of principles, which include addressing the impact on air quality. An air quality assessment has been undertaken in accordance with the methodology detailed in DMRB LA 105 (Highways England, 2019), to consider the impacts of the construction and operation of the Scheme. The assessment has determined the significance of air quality effects (**Section 5.9** of **Chapter 5 (Air Quality)** of the **ES (Document Reference 6.1)** and the risk of non-compliance with the Air Quality Regulations (**Section 5.8**). Air quality modelling has been undertaken to determine existing air quality conditions at the time of opening both without (Do-Minimum scenario) and with the Scheme (Do-Something scenario), as presented in **Section 5.8** of **Chapter 5 (Air Quality)** of the **ES (Document Reference 6.1)**. The air quality effects of the construction and operation of the Scheme, taking account of the impact of road traffic generated by the Scheme are described in **Section 5.9** of **Chapter 5 (Air Quality)** of the **ES (Document Reference 6.1)**. **Section 5.8** of **Chapter 5 (Air Quality)** of the **ES (Document Reference 6.1)** outlines the associated mitigation measures required. **Chapter 5 (Air Quality)** of the **ES (Document Reference 6.1)** assessed the construction phase effects from dust and emissions as negligible following the implementation of measures within the **fiEMP (Document Reference 7.3)**. Therefore, there would be no significant effects on air quality as a result of the construction of the Scheme. In terms of operational traffic emissions, the assessment undertaken demonstrates that there are no locations where NO_2 concentrations exceed the air quality threshold (40 µg/m3). according to the DMRB LA 105 methodology, therefore

Policy Document	Policy Reference	Assessment
		there would be no significant effects as a result of the Scheme.
Winchester District Local Plan Part 2 – Development Management and Site Allocations (2017)	Policy DM17 – Site Development Principles	Policy DM17 states that new development, alterations and changes of use should be satisfactory in terms of their impact, both on and off site. Development which accords with the Development Plan will be permitted where it meets a number of principles. One of these principles is to not cause unacceptable levels of pollution to neighbours by means of noise, smell, dust or other pollution. Policy DM19 is consistent with Policy DM17 and requires a detailed assessment to be conducted where there is potential for adverse impacts to occur. An air quality assessment has been undertaken in accordance with the methodology detailed in DMRB LA 105 (Highways England, 2019), to consider the impacts of the construction and operation of the Scheme. The assessment has determined the significance of air quality effects (**Section 5.9** of **Chapter 5 (Air Quality)** of the **ES (Document Reference 6.1)**) and the risk of non-compliance with the Air Quality Regulations (**Section 5.8** of **Chapter 5 (Air Quality)** of the **ES (Document Reference 6.1)**). **Chapter 5 (Air Quality)** of the **ES (Document Reference 6.1)** assessed the construction phase effects from dust and emissions as negligible following the implementation of measures within the **fiEMP (Document Reference 7.3)**. Therefore, there would be no significant effects on air quality as a result of the construction of the Scheme. In terms of operational traffic emissions, the assessment undertaken demonstrates that there are no locations where NO_2 concentrations exceed the air quality threshold (40 µg/m3). according to the DMRB LA 105 methodology, therefore there would be no significant effects as a result of the Scheme.

Policy Document	Policy Reference	Assessment
South Downs National Park Local Plan (2019)	Policy SD2 – Ecosystem Services Policy SD5 – Design Policy SD42 – Infrastructure Policy SD54 – Pollution and Air Quality	Policy SD2 permits development proposals where *"they have an overall positive impact on the ability of the natural environment to contribute goods and services."* The policy states that this will be achieved through the use of high quality design, and by delivering all opportunities to achieve a number of benefits, including reducing levels of pollution. Policy SD5 lists a number of design principles that proposals should adopt, where appropriate. One of the design principles is to have regard to avoiding harmful impact upon, or from, any surrounding uses and amenities. Policy SD42 states that "*Development proposals for new, improved or supporting infrastructure will only be permitted where:* a) *It represents the least environmentally harmful option reasonably available, also having regard to the operational requirements and technical limitations of the proposed infrastructure…"* Policy SD54 states that "*development proposals will be permitted provided that levels of air, noise, vibration, light, water, odour or other pollutants do not have a significant negative affect on people and the natural environment now or in the foreseeable future, taking into account cumulative impacts and any mitigation…* *…4. Development proposals will be permitted where they follow best practice methods to reduce levels of dust and other pollutants arising during a development from demolition through to completion."* An air quality assessment has been undertaken in accordance with the methodology detailed in DMRB LA 105 (Highways England, 2019), to consider the impacts of the construction and operation of the Scheme. The assessment has determined the significance of air quality effects (**Section 5.9** of **Chapter 5 (Air Quality)** of the **ES (Document Reference 6.1)**) and the risk of non-compliance with the Air Quality

Policy Document	Policy Reference	Assessment
		Regulations (**Section 5.8**). **Chapter 5 (Air Quality)** of the **ES (Document Reference 6.1)** assessed the construction phase effects from dust and emissions as negligible following the implementation of measures within the **fiEMP (Document Reference 7.3)**. Therefore, there would be no significant effects on air quality as a result of the construction of the Scheme. In terms of operational traffic emissions, the assessment undertaken demonstrates that there are no locations where NO_2 concentrations exceed the air quality threshold (40 µg/m3). according to the DMRB LA 105 methodology, therefore there would be no significant effects as a result of the Scheme. In relation to Policy SD54, in accordance with the 2020 Scoping Opinion, air quality has been scoped out of the cumulative assessment and is therefore not considered in **Chapter 15 (Cumulative Effects)** of the **ES (Document Reference 6.1)**.

Table A.3: Cultural Heritage Local Policy Review

Policy Document	Policy Reference	Assessment
Winchester District Local Plan Part 1 – Joint Core Strategy (2013)	Policy DS1 – Development Strategy and Principles Policy CP20 – Heritage and Landscape Character	Policy DS1 states that, in delivering the District's housing, employment and community requirements, development proposals will be expected to demonstrate conformity with a number of principles, which include maintaining and enhancing the importance of heritage assets and achieving high standards of design and sensitivity to cultural heritage. Policy CP20 seeks to conserve and enhance the historic environment and supports new development which recognises, protects and enhances the District's landscape and heritage assets and their settings. An assessment of the value/ sensitivity (significance) of heritage assets has been carried out in accordance with criteria set out in **Table 6.2** of **Chapter 6 (Cultural Heritage)** of the **ES (Document Reference 6.1)** and using professional judgement. Desk-based research and a programme of archaeological evaluation consisting of geophysical surveys and trial trenching has been carried out to identify non-designated heritage assets that might be affected by the Scheme. No remains have been found that are of such high value that they would warrant consideration against policies for designated heritage assets. A number of designated heritage assets were identified as having the potential to be impacted upon by the Scheme (impacts to their setting). In addition, a number of non-designated heritage assets were also considered to have the potential to receive effects. This assessment has found that there would be no or limited temporary impacts upon these assets during the construction of the Scheme.

Policy Document	Policy Reference	Assessment
		The assessment concluded that, following mitigation, there will be no significant effects upon the historic environment from the construction of the Scheme. The operation of the Scheme would not impact upon any archaeological remains which would have been sufficiently investigated (mitigated) during construction. There would not be any significant impacts upon the setting of any built heritage receptors or historic park and gardens during the operation. Impacts upon the historic landscape would have occurred during the construction phase and as such no further impacts would occur during operation. The assessment concluded that, following mitigation, there will be no significant effects upon the historic environment from the operation of the Scheme. An outline mitigation strategy has been prepared and reflects the views of the cultural heritage stakeholders expressed in the cultural heritage workshops and subsequent correspondence. This is presented in **Appendix 6.8 (Archaeology and Heritage Outline Mitigation Strategy)** of the **ES (Document Reference 6.3).**
Winchester District Local Plan Part 2 – Development Management and Site Allocations (2017)	Policy DM17 – Site Development Principles Policy DM23 – Rural Character Policy DM26 – Archaeology Policy DM29 – Heritage Assets	Policy DM17 states that new development, alterations and changes of use should be satisfactory in terms of their impact, both on and off site. Development which accords with the Development Plan will be permitted where it meets a number of principles. One of these principles is to not cause unacceptable effects on heritage assets. Policy DM23 supports development outside the settlement boundaries providing it does not have an unacceptable effect on the rural character of the area. Intrusion should be minimised, including the effect on heritage assets. Policy DM26 states that *"where there is evidence that heritage assets above or below ground and their settings are known or suspected to exist, but their extent*

Policy Document	Policy Reference	Assessment
		and significance is unknown, planning applications should incorporate sufficient information to define the significance and extent of such assets, as far as reasonably practicable." Policy DM29 confirms that works which would cause an unacceptable level of harm to the special interest of heritage assets or their setting, will only be permissible in exceptional circumstances, or in the case of higher grade heritage assets in wholly exceptional circumstances. An assessment of the value/ sensitivity (significance) of heritage assets has been carried out in accordance with criteria set out in **Table 6.2** of **Chapter 6 (Cultural Heritage)** of the **ES (Document Reference 6.1)** and using professional judgement. Desk-based research and a programme of archaeological evaluation consisting of geophysical surveys and trial trenching has been carried out to identify non-designated heritage assets that might be affected by the Scheme. No remains have been found that are of such high value that they would warrant consideration against policies for designated heritage assets. As detailed earlier in **Table A.3**, **Chapter 6 (Cultural Heritage)** of the **ES (Document Reference 6.1)** concludes that, following mitigation, there will be no significant effects upon the historic environment from the construction of operation of the Scheme.
South Downs National Park Local Plan (2019)	Policy SD1 – Sustainable development Policy SD12 – Historic Environment	Policy SD1 does not support development which would "*fail to conserve the landscape, natural beauty, wildlife and cultural heritage of the National Park unless, exceptionally:*

Policy Document	Policy Reference	Assessment
	Policy SD13 – Listed Buildings Policy SD15 – Conservation Areas Policy SD16 – Archaeology Policy SD42 – Infrastructure	*a) The benefits of the proposals demonstrably outweigh the great weight to be attached to those interests; and* *b) There is substantial compliance with other relevant policies in the development plan."* Policy SD12 requires development proposals to conserve and enhance the historic environment, including through the safeguarding of heritage assets and their setting. Policy SD13, Policy SD15 and Policy SD16 specifically relate to development proposals affecting listed buildings, Conservation Areas, and archaeology respectively. Policy SD42 is relevant to cultural heritage, the policy text is included in **Table A.3** and not repeated here. An assessment of the value/ sensitivity (significance) of heritage assets has been carried out in accordance with criteria set out in **Table 6.2** of **Chapter 6 (Cultural Heritage)** of the **ES (Document Reference 6.1)** and using professional judgement. Desk-based research and a programme of archaeological evaluation consisting of geophysical surveys and trial trenching has been carried out to identify non-designated heritage assets that might be affected by the Scheme. No remains have been found that are of such high value that they would warrant consideration against policies for designated heritage assets. An outline mitigation strategy agreed with cultural heritage stakeholders is set out in **Appendix 6.8 (Archaeology and Heritage Outline Mitigation Strategy**) of **the ES**

Policy Document	Policy Reference	Assessment
		(Document Reference 6.3) and discussed in **Section 6.9** of **Chapter 6 (Cultural Heritage)** of the ES **(Document Reference 6.1)** As detailed earlier in **Table A.3**, **Chapter 6 (Cultural Heritage)** of the **ES (Document Reference 6.1)** concludes that, following mitigation, there will be no significant effects upon the historic environment from the construction of operation of the Scheme.

Table A.4: Landscape and Visual Policy Review

Policy Document	Policy Reference	Assessment
Winchester District Local Plan Part 1 – Joint Core Strategy (2013)	Policy DS1 – Development Strategy and Principles Policy CP13 – High Quality Design Policy CP19 – South Downs National Park Policy CP20 – Heritage and Landscape Character	Policy DS1 states that, in delivering the District's housing, employment and community requirements, development proposals will be expected to demonstrate conformity with a number of principles, which include maintaining and enhancing the importance of landscape assets and achieving high standards of design and sensitivity to character and setting. Policy CP13 expects all proposals for new development to demonstrate that the accompanying landscape framework has been developed to enhance both the natural and built environment. Policy CP19 states that new development should be in keeping with the context and the setting of the landscape and settlements of the South Downs National Park. Policy CP20 states that the Local Planning Authority will support new development which recognises, protects and enhances the District's distinctive landscape and heritage assets and their settings. Particular emphasis should be given to conserving: ▪ recognised built form and designed or natural landscapes that include features and elements of natural beauty, cultural or historic importance; ▪ local distinctiveness, especially in terms of characteristic materials, trees, built form and layout, tranquillity, sense of place and setting. The sensitive location of the Scheme means that the design of the Scheme has been led by the need to minimise landscape impacts, particularly those experienced within the South Downs National Park and its setting area. Further details are provided at **Chapter 2 (The Scheme and Its Surroundings)** of the **ES (Document Reference 6.1),** the **Environmental Masterplan** (**Figure 2.3** of the **ES (Document**

Policy Document	Policy Reference	Assessment
		Reference 6.2)) and **Section 7.9** of **Chapter 7 (Landscape and Visual)** of the **ES** (**Document Reference 6.1**). The development of the design for the Scheme has considered The Road to Good Design (Highways England, 2018), which requires road networks to "reflect in its design the beauty of the natural, built and historic environment through which it passes, and enhancing it where possible". The **DAS (Document Reference 7.9)** provides information on how the design has responded to its context. Potential residual effects on landscape character/setting (including tranquillity) and visual amenity (including potential light pollution) within the South Downs National Park, its setting area and the wider landscape that surrounds Winchester are considered as part of **Sections 7.7** and **7.9** of **Chapter 7 (Landscape and Visual)** of the **ES (Document Reference 6.1)** and **Appendices 7.5** and **7.6** of the **ES (Document Reference 6.3).** In line with best practice, in assessing the value, susceptibility and sensitivity of landscape and visual receptors, the assessment of both the baseline and likely significant effects of the Scheme considers the type of development, its location and its landscape setting – see **Section 7.9** of **Chapter 7 (Landscape and Visual)** of the **ES (Document Reference 6.1)**. **Chapter 7 (Landscape and Visual)** of the **ES (Document Reference 6.1)** identifies likely significant adverse effects in relation to landscape and visual during both the construction and early operation of the Scheme. Overall the assessment concludes that effects on the South Downs National Park and its special qualities will result in Moderate adverse and effects which are significant during the construction phase and operation phase at Year 1. This acknowledges that construction activities will result in a series of incongruous

Policy Document	Policy Reference	Assessment
		activities within a small part of the South Downs National Park on its western boundary introduction of further infrastructure and removal of vegetation, resulting in the potential for a series of short to medium term localised effects, within the Application Boundary and its immediate environs. However, these effects reduce to not significant in the long-term. This reduction in effect is due to the successful establishment of landscape mitigation to aid landscape integration and provide visual screening (discussed further below). By Year 15 of the Scheme's operation, the significant adverse in relation to landscape and visual effects will be removed entirely. This acknowledges that there would be no discernible change to the Environmental Light Zones or the dark skies of the South Downs National Park within the Application Boundary and its environs. **Chapter 7 (Landscape and Visual)** of the **ES (Document Reference 6.1)** also notes that refinement to the Scheme design during the detailed design stage could mitigate the reported effects further. **Table 7.1** of this document identifies how the Scheme design positively responds to the seven defined special qualities of the South Downs National Park, thus supporting public understanding and enjoyment of the designated landscape. The Scheme includes embedded and essential landscape and visual mitigation measures that have been designed to be in keeping with existing landscape character, whilst both minimising any landscape and visual impacts that would arise from the Scheme and providing landscape and biodiversity enhancements through the creation of new woodlands, chalk grassland, and other ecologically valuable and locally appropriate habitats.

Policy Document	Policy Reference	Assessment
		The landscape strategy aims to reinforce and enhance (where appropriate) existing defined key characteristics of the receiving South Downs National Park landscape and its setting with reference to the defined Landscape Character Areas (LCA) (LCA G5: Itchen Valley Sides and LCA A5: East Winchester Downs, and LCA F5: Itchen Floodplain). The creation of new scrub / woodland on the slopes of the proposed highway embankment / cutting slopes aids visual screening of the Scheme. This approach strengthens the perception of the large open skies and distant panoramic views focusing views to the open rolling downland landscape and away from the highway network. The earthworks strategy has evolved to minimise impacts on topography, positively respond to the characteristics of the landscape (including landscape pattern, features and perceived tranquillity) whilst providing a balance to material cut and fill. Sympathetically designed earthwork which reflect the existing landform provide opportunity to utilise site gained chalk material as the basis for new creation of chalk grassland. The requirement for chalk spoil deposition, generated during construction of the Scheme, on agricultural land within wider areas of the South Downs National Park has been minimised. This has been used positively to reinforce landscape characteristics and enhance the South Downs National Park through creation of priority chalk grassland habitat. The Scheme design also minimises agricultural severance to existing land parcels. In landscape and visual terms, the extent of chalk grassland creation on the eastern slopes goes beyond the provision of mitigation for the effects of the Scheme and provides landscape enhancement. It positively responds to the location within the South Downs National Park and its setting and the identified environmental

Policy Document	Policy Reference	Assessment
		opportunities for this area. It does not provide a visual screening function, but it does however aid landscape integration of the Scheme with the surrounding landscape and supports biodiversity. The areas of chalk grassland are identified in **Figure 2.3 (Environmental Masterplan)** of the **ES (Document Reference 6.2)**. Furthermore, in landscape and visual terms the provision of improved walkers, cyclists and horse-riders links to the South Downs National Park goes beyond the provision of mitigation for landscape and visual effects of the Scheme and provides landscape enhancement. It positively responds to the location within the South Downs National Park, the aims of the designation (promoting access and recreation), and the identified environmental opportunities for this area. The design solutions for the bridleway on the eastern slopes provides a well-considered user route which reinforces the special qualities of the South Downs National Park, whilst minimising visibility of the highway and overall achieving a varied visual experience for future users. The placement within an area of Chalk grassland also positively responds to and provides opportunity for users to experience a feature which reinforces the landscape character of the open downlands. The area of the Walking, cycling and horse-riding route and chalk grassland are identified on the **Figure 2.3 (Environmental Masterplan)** of the **ES (Document Reference 6.2)**.
Winchester District Local Plan Part 2 – Development Management and Site Allocations (2017)	Policy WIN3 – Winchester Town Views and Roofscape Policy DM15 – Local Distinctiveness Policy DM17 – Site Development Principles	Policy WIN3 states *"development within and around Winchester Town which accords with the Development Plan will be permitted, provided:* *i. views that are integral to local character and distinctiveness are maintained, in particular views of treed skylines which connect Winchester with its setting;* *ii. important views and vistas to and from the key historic features shown on the Policies Map (and listed below) are protected…"*

Policy Document	Policy Reference	Assessment
	Policy DM23 – Rural character	Policy DM15 requires development to respect the qualities, features and characteristics that contribute to the distinctiveness of the local area. Policy DM17 states that new development should be satisfactory in terms of their impact, both on and off site. Development which accords with the Development Plan will be permitted where it meets a number of principles. One of these principles is to not cause unacceptable effects on landscape characteristics. Policy DM23 supports development outside the settlement boundaries providing it does not have an unacceptable effect on the rural character of the area. The study area for the assessment of the Scheme in terms of landscape and visual effects has been informed through consultation with stakeholders, visibility analysis and site survey (see **Section 7.5** of **Chapter 7 (Landscape and Visual)** of the **ES (Document Reference 6.1)**) As agreed through the consultation process with Winchester County Council, a number of the representative view locations used for the assessment of effects on visual amenity are within the defined settlement boundary for Winchester in order than potential impacts on views and skylines within the city can be properly assessed. In relation to Policy DM15 and Policy DM23, likely significant effects, landscape and visual mitigation and enhancement has been discussed in detail in response to the policies in the *Winchester Local Plan Part 1 - Core Strategy (2013)* above and are therefore not repeated here.
South Downs National Park	Policy SD4 – Landscape character Policy SD5 – Design	Policy SD4 states that "*where development proposals are within designed landscapes, or the setting of designed landscapes, (including historic parkscapes and those on the Historic England Register of Historic Parks and Gardens) they should be based on a demonstrable understanding of the design principles of the landscape and*

Policy Document	Policy Reference	Assessment
Local Plan (2019)	Policy SD6 – Safeguarding Views Policy SD7 – Relative Tranquillity Policy SD8 – Dark Night Skies Policy SD42 – Infrastructure	*should be complementary to it."* Policy SD5 is consistent with Policy SD4 in terms of landscape. Policy SD5 lists a number of design principles that proposals should adopt, where appropriate. One of the design principles is to integrate with, respect and sympathetically complement the landscape character by ensuring development proposals are demonstrably informed by an assessment of the landscape context. Policy SD6 states *"development proposals will only be permitted where they preserve the visual integrity, identity and scenic quality of the National Park."* Policy SD7 requires development proposals to conserve and enhance relative tranquillity. Policy SD8 requires development proposals to: conserve and enhance the intrinsic quality of dark night skies and the integrity of the Dark Sky Core shown on the Policies Map; to take all opportunities to reduce light pollution; and to include lighting which meets or exceeds the level of protection appropriate to the environmental zone shown on the Policies Map and set out in the corresponding table in the Local Plan. Policy SD42 is relevant to landscape, the policy text is included in **Table A.3** and not repeated here. View locations to be used for the assessment of effects on visual amenity have been agreed with the South Downs National Park Authority and Winchester County Council through the consultation process to ensure that effects on noted important views in the vicinity of the Scheme, including those identified in Chapter 2 of *South*

Policy Document	Policy Reference	Assessment
		Downs National Park: View Characterisation and Analysis (South Downs National Park Authority/LUC, 2015) as set out below, are properly assessed. Viewpoints within the study area from the South Downs National Park: View Characterisation and Analysis (South Downs National Park Authority/LUC, 2015): ▪ St Swithun's Way within the Itchen Valley (SDNPA VP62/LVIA VP3) ▪ St Catherine's Hill (SDNPA VP15/LVIA VP9) The viewpoint at Cheesefoot Head which is marked on OS mapping and was included in the South Downs National Park Authority analysis lies just on the edge of the 3km study area. The inclusion of this view was not specifically requested by the South Downs National Park Authority, and it has not therefore been included in the assessment. In relation to Policy SD4 – SD6, likely significant effects, landscape and visual mitigation and enhancement has been discussed in detail in response to the policies in the *Winchester Local Plan Part 1 - Core Strategy* (2013) above and are therefore not repeated here. In relation to Policy SD7, tranquillity has been assessed in **Chapter 7 (Landscape and Visual)** of the **ES (Document Reference 6.1)** and levels of relative tranquillity are identified on **Figure 7.3.3 (Landscape and Visual: Tranquillity**) of the **ES (Document Reference 6.2)**. During construction, in relation to the South Downs National Park, the assessment identifies effects on opportunities to experience the special qualities of breath taking views, tranquillity and recreational access due to the creation/ realignment of roads and reconfiguration of the existing gyratory roundabout, and to the local PRoW network, In relation to the PRoW network and local connectivity, the assessment

Policy Document	Policy Reference	Assessment
		identifies medium-scale short-term and reversible effects on tranquillity of routes crossing land within or close to the Application Boundary, particularly where these are close to construction activities, and on connectivity between Winchester and the South Downs National Park. In relation to Policy SD8, the advice provided in the South Downs National Park Authority's *Dark Skies Technical Advice Note* (SDNPA, 2021) has been considered in the landscape and visual assessment of the Scheme. The methodology used for assessment is detailed in **Appendix 7.1 (Landscape and Visual Methodology)** of the **ES (Document Reference 6.3)**. Considered design means that the Scheme contains limited fixed lighting – see **Chapter 2 (The Scheme and Its Surroundings**) of the **ES (Document Reference 6.1)** for further details). However, the limited fixed lighting that is present, combined with head and taillights on moving vehicles using the operational Scheme means that the Scheme has potential to give rise to light pollution. This is considered as part of this **Chapter 7 (Landscape and Visual)** of the **ES (Document Reference 6.1)** (see **Sections 7.8 and 7.10)** and **Appendices 7.5** and **7.6** of the **ES (Document Reference 6.3)**.

Table A.5: Biodiversity Local Policy Review

Policy Document	Policy Reference	Assessment
Winchester District Local Plan Part 1 – Joint Core Strategy (2013)	Policy DS1 – Development Strategy and Principles Policy CP13 – High Quality Design Policy CP15 – Green Infrastructure Policy CP16 – Biodiversity	Policy DS1 states that, in delivering the District's housing, employment and community requirements, development proposals will be expected to demonstrate conformity with a number of principles, which include addressing the impact on green infrastructure. Policy CP13 expects all proposals for new development to demonstrate that the accompanying landscape framework has been developed to enhance both the natural and built environment and maximise the potential to improve local biodiversity. Policy CP15 states "*the Local Planning Authority will support development proposals which:* ▪ *maintain, protect and enhance the function or the integrity of the existing green infrastructure network identified at a District and sub regional level, including strategic blue and green corridors and spaces, as illustrated on Map 9 particularly where the proposal allows for the enhancement of GI both on-site and in the immediate area;* ▪ *provide a net gain of well managed, multifunctional green infrastructure, in accordance with the categories and standards specified in Policy CP7 and appropriate for the scale of development, through on-site provision which:* - *addresses deficits in local green infrastructure provision where appropriate;* - *integrates with the green network/grid identified at the District and sub-regional level (as illustrated on Map 9);*

Policy Document	Policy Reference	Assessment
		- *provides a high quality public realm for the local community;* - *encourages public access to and within the natural environment where appropriate;* - *allows for adaptation to climate change;* - *is well planned to allow cost effective ongoing management of the GI;* - *links areas of biodiversity;* - *is provided at the earliest feasible stage."* Policy CP16 states that "*the Local Planning Authority will support development which maintains, protects and enhances biodiversity across the District, delivering a net gain in biodiversity, and has regard to the following:* ▪ *protecting sites of international, European, and national importance, and local nature conservation sites, from inappropriate development.* ▪ *supporting habitats that are important to maintain the integrity of National Site Network.* ▪ *new development will be required to show how biodiversity can be retained, protected and enhanced through its design and implementation, for example by designing for wildlife, delivering BAP targets and enhancing Biodiversity Opportunity Areas.*

Policy Document	Policy Reference	Assessment
		▪ *new development will be required to avoid adverse impacts, or if unavoidable ensure that impacts are appropriately mitigated, with compensation measures used only as a last resort. Development proposals will only be supported if the benefits of the development clearly outweigh the harm to the habitat and/or species.* ▪ *maintaining a District wide network of local wildlife sites and corridors to support the integrity of the biodiversity network, prevent fragmentation, and enable biodiversity to respond and adapt to the impacts of climate change.* ▪ *supporting and contributing to the targets set out in the District's Biodiversity Action Plan (BAP) for priority habitats and species.* ▪ *maintaining a District wide network of local wildlife sites and corridors to support the integrity of the biodiversity network, prevent fragmentation, and enable biodiversity to respond and adapt to the impacts of climate change.* ▪ *supporting and contributing to the targets set out in the District's Biodiversity Action Plan (BAP) for priority habitats and species.* *Planning proposals that have the potential to affect priority habitats and/or species or sites of geological importance will be required to take account of evidence and relevant assessments or surveys."* **Chapter 8 (Biodiversity)** of the **ES (Document Reference 6.1)** clearly sets out any likely significant effects on internationally, nationally and locally designated areas of ecological importance, on protected species and on habitats and other species identified as being of principal importance for the conservation of biodiversity. The assessment considers the full range of potential impacts on ecosystems.

Policy Document	Policy Reference	Assessment
		Designated areas of geological importance are assessed within **Chapter 9 (Geology and Soils) of** the **ES (Document Reference 6.1)**. **Chapter 8** of this document also summarises the conclusion of the **ES (Document Reference 6.1)** in terms of biodiversity. No significant negative impacts on biodiversity or ecology have been predicted as a result of the Scheme. The Scheme design has been ecologically informed, such that 'embedded avoidance and mitigation measures' for ecology were contained within the Scheme design as it evolved. These measures include the selection of less damaging of options for the shared path (unsegregated combined footpath, cycle track and footway) adjacent to the A34, avoidance of permanent structures in the River Itchen, and an ecologically informed **Environmental Masterplan** (**Figure 2.3** of the **ES (Document Reference 6.2)**) providing habitats of ecological value which are appropriate for the local environment. As set out in **Chapter 8 (Biodiversity)** of the **ES (Document Reference 6.1)**, the design includes substantial areas of new habitats of ecological value which are appropriate to the local area, including chalk grassland and woodland, with the aim of maximising biodiversity outputs from the Scheme in accordance with the Applicant's performance targets. Stakeholders including South Downs National Park Authority have been consulted on the design of the habitat compensation and enhancement package to make certain it is appropriate to the surrounding landscape and habitats, and future climatic conditions. Habitat provision set out on **Figure 2.3 (Environmental Masterplan)** of the **ES (Document Reference 6.2)**) would enhance connectivity for wildlife within the

Policy Document	Policy Reference	Assessment
		Scheme. New areas of woodland and scrub towards the north of the Scheme, mostly located adjacent to exiting habitats, would enhance connectivity for bats and dormice and other wildlife. The provision of substantial areas of chalk grassland, woodland and scrub along the eastern boundary of the Scheme would improve connectivity for a range of wildlife including bats, dormice, and terrestrial invertebrates in a north-south direction. **Appendix 8.2 (Biodiversity Net Gain Assessment Report** of the **ES (Document Reference 6.3)** assesses that the Scheme would result in a predicted net gain in biodiversity (+4.14%) and a predicted net gain in hedgerow units (+3.60%). The Scheme would provide a net increase of over 9.6 ha of chalk grassland, which is appropriate to the local area. The protection and enhancement of this habitat is a key theme within the *South Downs Local Plan* (adopted July 2019) and has been a key theme within consultation responses from stakeholders. However, the use of this habitat type suppresses the overall result of the metric, due to risk factors associated with this habitat type. For example, if 'other neutral grassland' was provided in place of chalk grassland then the overall biodiversity net gain score for the Scheme would change from +4.14% to +14.93%. This demonstrates that the Scheme can comfortably deliver over 10% biodiversity net gain. However, whilst a change from chalk grassland to other neutral grassland would be technically feasible, given the wider benefits, chalk grassland has been taken forward as being most appropriate habitat for the Scheme.
Winchester District Local Plan Part 2 – Development	Policy DM24 – Special Trees, Important Hedgerows and Ancient Woodlands	Policy DM24 states *"development should not result in the loss or deterioration of ancient woodlands, important hedgerows, special trees, distinctive ground flora and the space required to support them in the long term."*

Policy Document	Policy Reference	Assessment
Management and Site Allocations (2017)		No irreplaceable habitats such as ancient woodland or veteran trees are present within the Application Boundary. A number of parcels of ancient woodland have been identified on the ancient woodland inventory within 2km of the Scheme. Further parcels of ancient woodland are present beyond the 2km study area, but within 200m of the ARN. During construction, **Chapter 8 (Biodiversity)** of the **ES (Document Reference 6.1)** concludes that there would be no significant effects to irreplaceable habitats, such as ancient woodland or veteran trees. During operation, **Chapter 5 (Air Quality**) of the ES **(Document Reference 6.1)** and **Appendix 8.3** (**Assessment of Operational Air Quality Impacts on Biodiversity**) of the **ES** (**Document Reference 6.3)** shows the localised changes in air quality from the Scheme to the ancient woodlands would result in no appreciable change (no observable impact). There would therefore be no significant effects on irreplaceable habitats as a result of the Scheme. Construction Phase mitigation measures of relevance to tree protection are set out in **Sections 7.8** of **Chapter 7 (Landscape and Visual)** of the **ES (Document Reference 6.1).** Operational phase mitigation and enhancement measures include new tree and woodland planting (as well as the creation of other habitats such as chalk grassland), resulting in valuable biodiversity resources for the future – see **Section 7.8** of **Chapter 7 (Landscape and Visual)** of the **ES (Document Reference 6.1), Chapter 2 (The Proposed Scheme)** of the **ES (Document Reference 6.1)**, and

Policy Document	Policy Reference	Assessment
		Environmental Masterplan (**Figure 2.3** (**Environmental Masterplan**) of the **ES (Document Reference 6.2)**).
South Downs National Park Local Plan (2019)	Policy SD2 – Ecosystem Services Policy SD5 – Design Policy SD9 – Biodiversity and Geodiversity Policy SD11 – Trees, Woodland and Hedgerows	Policy SD2 permits development proposals where "they have an overall positive impact on the ability of the natural environment to contribute goods and services." The policy states that this will be achieved through the use of high quality design, and by delivering all opportunities to achieve a number of benefits, including protecting and providing more, better and joined up natural habitats. Policy SD5 lists a number of design principles that proposals should adopt, where appropriate. The design principles include: achieving high quality routes for people and wildlife, taking opportunities to connect GI; and incorporating hard and soft landscape treatment which takes opportunities to connect to the wider landscape, enhances GI and is consistent with local character. Policy SD9 states that *"development proposals will be permitted where they conserve and enhance biodiversity and geodiversity, giving particular regard to ecological networks and areas with high potential for priority habitat restoration or creation. Prior to determination, up-to-date ecological information should be provided which demonstrates that development proposals:* *a) Retain, protect and enhance features of biodiversity and geological interest (including supporting habitat and commuting routes through the site and taking due account of any use by migratory species) and ensure appropriate and long-term management of those features;* *b) Identify and incorporate opportunities for net gains in biodiversity;*

Policy Document	Policy Reference	Assessment
		c) Contribute to the restoration and enhancement of existing habitats, the creation of wildlife habitats and the creation of linkages between sites to create and enhance local and regional ecological networks; *d) Protect and support recovery of rare, notable and priority species;* *e) Seek to eradicate or control any invasive non-native species present on site;* *f) Contribute to the protection, management and enhancement of biodiversity and geodiversity, for example by supporting the delivery of GI and Biodiversity Action Plan targets and enhance Biodiversity Opportunity Areas (BOA); and* *g) Comply with the mitigation hierarchy as set out in national policy."* Policy SD9 applies the following hierarchy of site designation when considering development proposals: internationally protected sites; nationally protected sites; irreplaceable habitats; locally protected sites. Outside of designated sites, proposals should identify and incorporate opportunities to conserve, restore and recreate priority habitats and ecological networks and to deliver on the aims and objectives of the relevant biodiversity strategies where possible. Policy SD11 relates to the conservation and enhancement of trees, hedgerows and woodlands. Policy SD42 is relevant to biodiversity, the policy text is included in **Table A.3** and not repeated here. In relation to Policy SD2, Policy SD5, Policy SD9 and SD42 biodiversity, geodiversity and landscaping are fully discussed in detail in response to the policies

Policy Document	Policy Reference	Assessment
		in the Winchester Local Plan Part 1 - Core Strategy (2013) above and are therefore not repeated here. In relation to Policy SD11, trees and woodland are fully discussed in response to the policies in the *Winchester Local Plan Part 2 – Development Management and Site Allocations* (2017) above and are therefore not repeated here.

Table A.6: Geology and Soils Local Policy Review

Policy Document	Policy Reference	Assessment
Winchester District Local Plan Part 1 – Joint Core Strategy (2013)	Policy CP17 – Flooding, Flood Risk and the Water Environment	Policy CP17 states that the Local Planning Authority will support development which meets a number of criteria relating to flooding, flood risk and the water environment. This includes ensuring that development does not cause unacceptable deterioration to water quality or have an unacceptable impact on water quantity (including drinking water supplies) by protecting surface water and groundwater through suitable pollution prevention measures. Assessment on the potential risks to drinking water supplies from existing contamination has been undertaken and is presented within the **Ground Investigations Report (Document Reference 7.11)**. Further assessment has also been undertaken as part of the Hydrogeological Risk Assessment (HgRA)included in **Appendix 13.2 (Hydrogeological Risk Assessment)** of the **ES (Document Reference 6.3).** The M3 Junction 9 would result in the loss of some BMV land to facilitate the construction of the development. The removal of agricultural land is supported by NE and South Downs National Park Authority as it is not in keeping with the key features of the South Downs National Park.
Winchester District Local Plan Part 2 – Development Management	Policy DM17 – Site Development Principles Policy DM19 – Development and Pollution	Policy DM17 states that new development, alterations and changes of use should be satisfactory in terms of their impact, both on and off site. Development which accords with the Development Plan will be permitted where it meets a number of principles. One of these principles is to not cause unacceptable levels of pollution to neighbours by means of noise, smell, dust or other pollution. Policy DM19 is consistent with Policy DM17 and requires a detailed assessment

Policy Document	Policy Reference	Assessment
and Site Allocations (2017)	Policy DM21 – Contaminated Land	to be conducted where there is potential for adverse impacts to occur. Policy DM21 states *"The development of land which is known or suspected to be contaminated, or which is likely to be affected by contamination in the vicinity, will only be permitted where it accords with the Development Plan and there will be no unacceptable impacts on human health, groundwater and surface water, or the wider environment, and:* *i. the full nature and extent of contamination is established;* *ii. appropriate remedial measures are included to prevent risk to future users of the site, the surrounding area and the environment (including water supplies and aquifers);* *iii. all site investigations, risk assessment, remediation and associated works are carried out to current industry best practice guidelines.* *Assessments should accompany planning applications."* The **ES (Document Reference 6.1)** is informed by a **Ground Investigation Report (Document Reference 7.11)** that contains a Tier 2 quantitative risk assessment. This risk assessment uses site specific information to identify pollutant linkages (on a source-pathway-receptor basis) and potential remediation options. This is based on the premise of being suitable for use and addresses whether the development is an acceptable use of the land from a contamination perspective.
South Downs National Park Local Plan (2019)	Policy SD2 – Ecosystem Services Policy SD9 – Biodiversity and Geodiversity	Policy SD2 permits development proposals where *"they have an overall positive impact on the ability of the natural environment to contribute goods and services."* The policy states that this will be achieved through the use of high quality design, and by delivering all opportunities to achieve a number of benefits, including to conserve and

Policy Document	Policy Reference	Assessment
	Policy SD42 – Infrastructure Policy SD55 – Contaminated Land	enhance soils, use soils sustainably and protect best and most versatile agricultural land. Policy SD9 states that "*development proposals will be permitted where they conserve and enhance biodiversity and geodiversity*." Policy SD42 is relevant to geology and soils, the policy text is included in **Table A.3** and not repeated here. Policy SD55 states that "*development proposals for sites with either known or suspected contamination or the potential to contaminate land either on site or in the vicinity, will require the submission of robust evidence regarding investigations and remedial measures sufficient to ensure that any unacceptable risk to human health or the health of the environment is removed prior to development proceeding."* **Chapter 9 (Geology and Soils)** of **the ES (Document Reference 6.1)** assesses the likely effects of the Scheme on geology and soils during construction and operation. Significant adverse effects are identified both during construction and operation of the Scheme due to the permanent acquisition of 18.7ha of Best Most Versatile agricultural land. Whilst the overall land take of the Scheme has been minimised as far as possible, given the permanent nature of the impact and that the loss cannot be mitigated it would constitute a permanent adverse effect which is significant. Given the location of the existing junction, there is no option to avoid impact to adjacent agricultural land to facilitate the development. Where possible, agricultural land affected is being reinstated after the temporary works have been completed.

Policy Document	Policy Reference	Assessment
		A Controlled Waters Risk Assessment relating to existing contamination has been undertaken and is reported in the **Ground Investigation Report (Document Reference 7.11)**. This has been used to inform the impact assessment in **Chapter 9 (Geology and Soils)** of the **ES (Document Reference 6.1)**. Separately, a HgRA, including a groundwater impact assessment in relation to the proposed drainage scheme, has been undertaken. The findings of the HgRA have been used to inform the impacts in both **Chapter 9 (Geology and Soils)** and **Chapter 13 (Road Drainage and the Water Environment)** of the **ES (Document Reference 6.1)**. During the operation of the Scheme, the assessment concludes that there would be a slight adverse effect on human health which is not significant. The **Ground Investigations Report (Document Reference 7.11)** contains a Tier 2 quantitative risk assessment. This risk assessment uses site specific information to identify pollutant linkages (on a source-pathway-receptor basis) and potential remediation options. This is based on the premise of being suitable for use and addresses whether the development is an acceptable use of the land from a contamination perspective.

Table A.7: Material Assets and Waste Local Policy Review

Policy Document	Policy Reference	Assessment
Hampshire Minerals and Waste Plan (2013)	Policy 15 – Safeguarding mineral resources	Policy 15 states that development without the prior extraction of mineral resources in the Mineral Safeguarding Area may be permitted if: a. it can be demonstrated that the sterilisation of mineral resources will not occur; or b. it would be inappropriate to extract mineral resources at that location, with regards to the other policies in the Plan; or c. the development would not pose a serious hindrance to mineral development in the vicinity; or d. the merits of the development outweigh the safeguarding of the mineral. **Appendix 10.1 (Mineral Safeguarding Area Assessment)** of the **ES (Document Reference 6.3)** identifies that the potential for sterilisation is very low. Much of the Mineral Safeguarding Area affected by the Scheme lies adjacent to the existing strategic highway network; these areas are likely already devoid of mineral or would be inappropriate to work. Small areas within the Application Boundary, but outside of the highway land, lie within the South Downs National Park. Policy dictates that any working of mineral resources in these areas would only be in exceptional circumstances.
South Downs National Park	Policy SD5 – Design	Policy SD5 states that the following design principles should be adopted: *"Provide high quality, secure, accessible, and where possible, integrated storage for general and recycling waste, heating fuel, and transport related equipment"*

Policy Document	Policy Reference	Assessment
Local Plan (2019)		The principles of the waste hierarchy will be followed, ensuring that waste will firstly be minimised, before consideration of reuse, recycling and recovery, with disposal through landfill as the last resort. To enable this there will be on site material segregation and storage managed by the Principal Contractor.

Table A.8: Noise and Vibration Local Policy Review

Policy Document	Policy Reference	Assessment
Winchester District Local Plan Part 1 – Joint Core Strategy (2013)	Policy DS1 – Development Strategy and Principles	Policy DS1 states that, in delivering the District's housing, employment and community requirements, development proposals will be expected to demonstrate conformity with a number of principles, which contributing to individual and community wellbeing, health and safety and social inclusivity. **Chapter 11 (Noise and Vibration)** of the **ES (Document Reference 6.1)** assesses the likely significant effects of the Scheme during construction and operation in terms of noise and vibration. It states that likely significant adverse effects are identified in relation to noise and vibration during both the construction and early operation of the Scheme. However, these effects reduce to not significant in the long-term. During construction, with no noise mitigation, temporary moderate significant effects are anticipated at a number of residential dwellings and commercial properties. Although, with the inclusion of the mitigation outlined within the **fiEMP (Document Reference 7.3)**, the resultant significance is anticipated to be reduced such that temporary moderate adverse impacts would be reduced to temporary minor adverse impacts, and temporary major adverse impacts are likely to be reduced to temporary moderate adverse impacts. To summarise, during operation, there would be significant effects in the short-term (the year the new junction opens) and no significant effects in the long-term (15 years after opening).
Winchester District Local Plan Part 2 – Development Management and Site	Policy DM19 – Development and Pollution Policy DM20 – Development and Noise	Policy DM19 states that new development, alterations and changes of use should be satisfactory in terms of their impact, both on and off site. Development which accords with the Development Plan will be permitted where it meets a number of principles. One of these principles is to not cause unacceptable levels of pollution to neighbours by means of noise, smell, dust or other pollution. Policy DM20 is consistent with Policy DM19 and requires a detailed assessment to be conducted where there is potential for adverse impacts to occur.

Policy Document	Policy Reference	Assessment
Allocations (2017)		Policy DM20 states that development which generates noise pollution or is sensitive to it will only be permitted where it accords with the Development Plan and does not have an unacceptable impact on human health or quality of life. The policy further states that noise generating or noise sensitive development should include an assessment to demonstrate how it prevents, or minimises to an acceptable level, all adverse noise impacts. Assessment of these impacts should have regard to the advice contained within the Department for Environment Food and Rural Affairs (DEFRA) Noise Policy Statement for England (NPSE), March 2010, or its recognised replacement. Finally, the policy states that development will not be permitted where levels above the Significant Observed Adverse Effect Level (SOAEL) exist, and mitigation measures have not been proposed that will reduce impacts to as near to the Lowest Observed Effect Level (LOAEL) as is reasonably possible. Mitigation measures should not render the design and amenity spaces unacceptable. **Table 11.3** of **Chapter 11 (Noise and Vibration)** of the **ES (Document Reference 6.1)** sets out the effect levels of construction noise against the SOAEL thresholds. To reduce noise impact associated with the demolition and construction works, the following practices would be followed, as included within the **fiEMP (Document Reference 7.3):** • Appropriate operational hours • Working methods to ensure quiet working, including the selection of

Policy Document	Policy Reference	Assessment
		suitably quiet plant and appropriate working hours for excessive noise generating activities • Restriction of number of plant items in use at any one time • Locating noisy plant and equipment at a suitable distance away from noise and vibration sensitive receptors • Frequent maintenance of plant and equipment • Where practical, carry out loading and unloading activities at a suitable distance away from residential dwellings • Closing of compressor, generator and engine compartment doors when in use or idling • Careful lowering of materials/equipment and the minimisation of drop heights • Installation of close board fencing around the main works compound **Chapter 11 (Noise and Vibration)** of the **ES (Document Reference 6.1)** assesses the likely significant effects of the Scheme during construction and operation in terms of noise and vibration. It states that likely significant adverse effects are identified in relation to noise and vibration during both the construction and early operation of the Scheme. However, these effects reduce to not significant in the long-term. During construction, with no noise mitigation, temporary moderate significant effects are anticipated at a number of residential dwellings and commercial properties. Although, with the inclusion of the mitigation outlined within the **fiEMP (Document Reference 7.3)**, the resultant significance is anticipated to be reduced such that temporary moderate adverse impacts would be reduced to temporary minor adverse impacts, and temporary major adverse impacts are likely to be reduced to temporary moderate adverse impacts. To summarise, during operation, there

Policy Document	Policy Reference	Assessment
		would be significant effects in the short-term (the year the new junction opens) and no significant effects in the long-term (15 years after opening).
South Downs National Park Local Plan (2019)	Policy SD54 – Pollution and Air Quality	Policy SD54 states that *"development proposals will be permitted provided that levels of air, noise, vibration, light, water, odour or other pollutants do not have a significant negative affect on people and the natural environment now or in the foreseeable future, taking into account cumulative impacts and any mitigation."* In relation to Policy SD54, in accordance with the 2020 Scoping Opinion, noise has been scoped out of the cumulative assessment and is therefore not considered in **Chapter 15 (Cumulative Effects**) of the **ES (Document Reference 6.1)**. Likely significant effects and mitigation in terms of noise and vibration has been discussed in detail in response to the policies in the *Winchester Local Plan Part 2 - Development Management and Site Allocations* (2017) above and are therefore not repeated here.

Table A.9: Population and Human Health Local Policy Review

Policy Document	Policy Reference	Assessment
Hampshire Local Transport Plan (2011)	Policy Objective 10 Policy Objective 12	Policy Objective 10 sets out the objective to contribute to achieving local targets for improving air quality and national carbon targets through transport measures, where possible and affordable. Policy Objective 12 sets out the objective to invest in sustainable transport measures, including walking and cycling infrastructure, principally in urban areas, to provide a healthy alternative to the car for local short journeys to work, local services or schools; and work with health authorities to ensure that transport policy supports local ambitions for health and well-being. An assessment of the likely effects of the Scheme on walking, cycling, and horse-riding routes is contained within **Section 12.9** of **Chapter 12 (Population and Human Health)** of the **ES (Document Reference 6.1)**. The Scheme incorporates new and improved walking, cycling and horse-riding provision, as described in **Section 4.12** of this document. The Scheme provides a new Public Right of Way (PRoW) link between Easton Lane and Long Walk of approximate length of 1.4km connecting Bridleway 253/502/1 with restricted byway 128/19/1 and footpaths 128/20/1, 128/52/1, 128/21/1 and 128/22/2. The Scheme also provides a new link between the new shared footway/cycleway between Kings Worthy and Winnall to footpath 111/749/1 adjacent to the River Itchen.

Policy Document	Policy Reference	Assessment
Winchester District Local Plan Part 1 – Joint Core Strategy (2013)	Policy DS1 – Development Strategy and Principles Policy CP19 – South Downs National Park	Policy DS1 states that, in delivering the District's housing, employment and community requirements, development proposals will be expected to demonstrate conformity with a number of principles, which include contributing to individual and community wellbeing, health and safety and social inclusivity. The likely effects of the Scheme on population and human health are assessed in **Chapter 12 (Population and Human Health)** of the **ES (Document Reference 6.1).** This identifies that significant adverse effects in relation to population and human health are likely during the construction of the Scheme only. However, it should be noted that likely significant beneficial effects are identified in relation to population and human health during the operation of the Scheme. The construction phase of the Scheme would result in a neutral health outcome for those within the human health study areas as a result of any impacts on community, recreational, and education facilities; green/ open space; healthcare facilities; transport and connectivity; and safety of the existing road network. **Negative health outcomes** for ambient noise environment are anticipated within St Bartholomew Ward and St Michaels Ward. During operation, the Scheme will result in a positive health outcome with regards to community, recreational and education facilities; green/ open space; healthcare facilities; and transport and connectivity. There is anticipated to be a neutral health outcome across the study areas in terms of ambient air quality; ambient noise environment; sources and pathways of potential pollutions and landscape amenity during operation of the Scheme.
Winchester District Local	Policy WIN1 – Winchester Town	Policy WIN1 aims to encourage economic prosperity in Winchester Town Centre. This area is located within the land use and development study area defined in **Section**

Policy Document	Policy Reference	Assessment
Plan Part 2 – Development Management and Site Allocations (2017)	Policy DM19 – Development and Pollution Policy DM20 – Development and Noise	**12.5** of **Chapter 12 (Population and Human Health)** of the **ES (Document Reference 6.1).** An assessment of the Scheme's likely effects on development land and business in the town centre is contained in **Section 12.9** of **Chapter 12 (Population and Human Health)** of the **ES (Document Reference 6.1).** In relation to Policy DM19 and Policy DM20, the impacts on human health of potential pollution and noise generated by the Scheme are considered in **Section 12.9** of **Chapter 12 (Population and Human Health)** of the **ES (Document Reference 6.1).** Likely significant adverse effects are identified in relation to noise and vibration during both the construction and early operation of the Scheme. However, these effects reduce to not significant in the long-term. Significant adverse effects in relation to population and human health are likely during the construction of the Scheme only. It is considered that the construction phase of the Scheme would result in a neutral health outcome for those within the human health study areas as a result of any impacts on community, recreational, and education facilities; green/ open space; healthcare facilities; transport and connectivity; and safety of the existing road network. **Negative health outcomes** for ambient noise environment are anticipated within St Bartholomew Ward and St Michaels Ward. The Scheme will result in a result in a positive health outcome with regards to community, recreational and education facilities; green/ open space; healthcare facilities; and transport and connectivity during the operational phase. There is anticipated to be a neutral health outcome across the study areas in terms of ambient air quality; ambient noise environment; sources and pathways of potential pollutions and landscape amenity during operation of the scheme.

Policy Document	Policy Reference	Assessment
South Downs National Park Local Plan (2019)	Policy SD1 – Sustainable Development Policy SD2 – Ecosystem Services Policy SD19 – Transport and Accessibility Policy SD20 – Walking, Cycling and Equestrian Routes	Policy SD1 notes the importance of fostering the economic and social wellbeing of the local communities within the National Park as considered within **Section 12.7** and **Section 12.9** of **Chapter 12 (Population and Human Health)** of the **ES (Document Reference 6.1)**. Policy SD2 permits development proposals where *"they have an overall positive impact on the ability of the natural environment to contribute goods and services."* The policy states that this will be achieved through the use of high quality design, and by delivering all opportunities to achieve a number of benefits, including improving opportunities for peoples' health and wellbeing and providing opportunities for access to the natural and cultural resources which contribute to the special qualities. Policy SD19 notes that development proposals must demonstrate continued safe and efficient operation of strategic and local road networks. Policy SD20 supports development proposals that contribute to a network of attractive and functional non-motorised travel routes, with appropriate signage, throughout the National Park. The likely effects of the Scheme on walking, cycling and horse-riding routes in relation to Policy SD20 are considered in **Section 12.9** of **Chapter 12 (Population and Human Health)** of the **ES (Document Reference 6.1).** The Scheme results in increased accessibility via the new walking, cycling and horse-riding routes. The provision of new routes increases opportunities for recreational experiences with access from Winchester to the South Downs National Park, whilst the design of these routes provides for an improved user experience.

Table A.10: Road Drainage and the Water Environment Local Policy Review

Policy Document	Policy Reference	Assessment
Winchester District Local Plan Part 1 – Joint Core Strategy (2013)	Policy CP17 – Flooding, Flood Risk and the Water Environment	Policy CP17 states that "*The Local Planning Authority will support development which meets all the following criteria:-* ▪ *avoids flood risk to people and property by:* ▪ *applying a Sequential Test to the location, and the Exception Test if required, and applying the sequential approach at the site level60;* ▪ *managing flood risk from new development to ensure risk is not increased elsewhere and that opportunities to reduce the causes and impacts of flooding within the District through development are taken;* ▪ *safeguarding land and designated structures and features from development that is required for current and future flood management;* ▪ *including sustainable water management systems such as Sustainable Drainage Systems (SuDS) which should be designed to meet the relevant standards so as to gain approval by the SuDS Approval Body;* ▪ *does not cause unacceptable deterioration to water quality or have an unacceptable impact on water quantity (including drinking water supplies) by:-* ▪ *protecting surface water and groundwater through suitable pollution prevention measures;* ▪ *using opportunities to improve water quality where possible;*

Policy Document	Policy Reference	Assessment
		▪ *optimising water efficiency;* ▪ *is located at a sufficient distance from existing wastewater treatment works to allow adequate odour dispersion, or takes appropriate odour control measures;* ▪ *ensures that water supply, surface water drainage and wastewater infrastructure to service new development are provided and connect to the nearest point of adequate capacity.* *The Local Planning Authority will support the development or expansion of water supply, surface water drainage and wastewater treatment facilities where they are needed to serve existing or new development or in the interests of securing long term supply, provided that the need for such facilities is consistent with other policies such as the development strategy, flood risk, contamination and protection of the natural and built environment."* Policy SD1 states that, in delivering the District's housing, employment and community requirements, development proposals will be expected to demonstrate conformity with a number of principles, which include addressing the impact on flooding issues and the water environment. **Chapter 13 (Road Drainage and Water Environment)** of the **ES (Document Reference 6.1)** confirms that the proposed scheme is suitable and appropriate in terms of flood risk. The **FRA (Document Reference 7.4)** includes hydraulic modelling confirming that the proposed scheme does not cause any increase in floodplain extents and flood depths. The majority of the scheme is located in Flood Zone 1. The proposed River Itchen crossing is located in Flood Zone 3; however

Policy Document	Policy Reference	Assessment
		mitigation measures have been proposed to ensure the bridge is not affected by flooding. The Environment Agency has reviewed and subsequently approved the **FRA (Document Reference 7.4)**. Mitigation measures have been proposed to ensure the Scheme does not increase fluvial flood risk. The Scheme includes the provision of a new bridge (footway and cycleway) over the River Itchen. Hydraulic modelling has been undertaken to understand the impact on fluvial flood risk. The modelling showed that the Scheme has a negligible impact upon fluvial flood risk. The bridge has been designed to ensure sufficient freeboard is provided over the 1 in 200 year + H++ modelled flood level. The **FRA (Document Reference 7.4)** has assessed fluvial, surface water, sewer and infrastructure failure flood risk and risk of flooding from reservoir. The Drainage Strategy will discharge runoff to ground, and to the river at long-term storage rates (2 l/s/ha) with attenuation provided within extended detention basins and oversized pipes. It is considered that there would eb no increase in the risk of flooding (from any source) to or from the Scheme and it therefore meets the requirements of the Exception Test. **Chapter 13 (Road Drainage and Water Environment)** of the **ES (Document Reference 6.1)**, the **FRA (Document Reference 7.4)** and the **Drainage Strategy Report** in **ES Appendix 13.1 (Document Reference 6.3)** detail the volumes and peak flow rates and demonstrate how they would not be increased. It also details the SuDS components that have been incorporated into the design. The **FRA (Document Reference 7.4)** states that the EA 'flood risk from surface water' map indicate that localised sections of the M3 carriageway is classified as at 'Low' surface water flood risk (1 in 1000 Annual Probability). This is specifically

Policy Document	Policy Reference	Assessment
		located at M3 Junction 9 and is very localised. There are also very minor and localised areas of 'Medium' (1 in 100 Annual Probability) and 'High' surface water flood risk (1 in 30 Annual Probability) located at Junction 9 on the M3 carriageway. Within the wider Application Boundary there are localised and minor areas classified as at 'High' risk of surface water flooding. These are not located in areas where any changes in ground levels will be proposed.
Winchester District Local Plan Part 2 – Development Management and Site Allocations (2017)	Policy DM17 – Site Development Principles	Policy DM17 states that new development, alterations and changes of use should be satisfactory in terms of their impact, both on and off site. Development which accords with the Development Plan will be permitted where it meets a number of principles. One of these principles is to include adequate provision for surface water drainage. In relation to Policy DM17, surface water drainage is discussed in detail in response to the policies in the Winchester Local Plan Part 1 - Core Strategy (2013) above and is therefore not repeated here.
South Downs National Park Local Plan (2019)	Policy SD2 – Ecosystem Services Policy SD17 – Protection of the Water Environment Policy SD49 – Flood Risk Management Policy SD54 – Pollution and Air Quality	Policy SD2 permits development proposals where *"they have an overall positive impact on the ability of the natural environment to contribute goods and services."* The policy states that this will be achieved through the use of high quality design, and by delivering all opportunities to achieve a number of benefits, including managing and mitigating the risk of flooding. Policy SD17 states that development proposals must incorporate measures to eliminate risk of pollution to groundwater, surface water and watercourse corridor features which would harm their ecological and/or chemical status. Policy SD49 states that:

Policy Document	Policy Reference	Assessment
		"*1. Development proposals will be permitted that seek to reduce the impact and extent of all types of flooding through:* *a) Steering development away from areas of flood risk as identified by the EA and the SFRA and directing development to Flood Zone 1, wherever possible. Development in areas of flood risk will, where relevant, be required to meet the national Sequential and Exception Tests;* *b) Not increasing the risk of flooding elsewhere and, wherever possible, reducing overall flood risk;* *c) Flood protection, mitigation and adaptation measures necessary and appropriate to the specific requirements of the proposal, the development site and other areas potentially impacted; and* *d) Ensuring that the integrity of coastal and river flood defences are not undermined.* *2. Development proposals should, where required by national policy and guidance, be accompanied by a site specific Flood Risk Assessment (FRA).* *3. Proposed flood protection, mitigation and adaptation measures should be supported with a management schedule, the identification of the body responsible for maintenance, and evidence of funding and maintenance in perpetuity."* Policy SD54 states that "*Development proposals will be permitted provided that levels of air, noise, vibration, light, water, odour or other pollutants do not have a*

Policy Document	Policy Reference	Assessment
		significant negative affect on people and the natural environment now or in the foreseeable future, taking into account cumulative impacts and any mitigation... *4. Development proposals will be permitted where they follow best practice methods to reduce levels of dust and other pollutants arising during a development from demolition through to completion."* In relation to Policy SD2 and Policy SD49, flood risk is discussed in detail in response to the policies in the *Winchester Local Plan Part 1 - Core Strategy* (2013) above and is therefore not repeated here. In relation to Policy SD17 and Policy SD54, pollution control measures are outlined in **fiEMP (Document Reference 7.3)**, **Appendix 13.1 (Stage 3 Drainage Strategy Report) of the ES (Document Reference 6.3)** and in the design, mitigation and enhancement measures in **Chapter 13 (Road Drainage and Water Environment)** of the **ES (Document Reference 6.1)**. It is also considered throughout the Assessment of likely significant effects in **Section 13.9** of **Chapter 13 (Road Drainage and Water Environment)** of the **ES (Document Reference 6.1)**. Such measures have been prepared in consultation with the Environment Agency. **Chapter 13 (Road Drainage and Water Environment)** of the **ES (Document Reference 6.1)** has not identified any significant adverse effects on surface water and groundwater receptors during construction or operation of the Scheme subject to the mitigation measures included in the **fiEMP (Document Reference 7.3)**.

Table A.11: Climate Local Policy Review

Policy Document	Policy Reference	Assessment
Hampshire Local Transport Plan (2011)	Policy Objective 10	Policy Objective 10 of out the target to contribute to achieving local targets for improving air quality and national carbon targets through transport measures, where possible and affordable. **Chapter 14 (Climate)** of the **ES (Document Reference 6.1)** states that the Scheme is expected to contribute approximately 0.0024% of the UK's 4thcarbon budget and 0.001% of the 5th carbon budget and 0.002% 6th carbon budgets. . This is considered a small increase in the magnitude of emissions from the Scheme, and it is deemed unlikely that this Scheme, in isolation, would materially affect the UK's ability to meet its carbon budgets. Therefore, the Scheme is not anticipated to give rise to a significant effect on climate, in line with the position set out within Section 5.18 of the NPS NN and the DMRB LA 114 Climate (National Highways, 2021).
Winchester District Local Plan Part 1 – Joint Core Strategy (2013)	Policy DS1 – Development Strategy and Principles Policy CP11 - Sustainable Low and Zero Carbon Built Development Policy CP13 – High Quality Design	Policy DS1 states that, in delivering the District's housing, employment and community requirements, development proposals will be expected to demonstrate conformity with a number of principles, which include addressing the impact on climate change. Policy CP11 states that developments should achieve the lowest level of carbon emissions and water consumption which is practical and viable. Policy CP13 states that new development should demonstrate that measures to minimise carbon emissions and reduce impact on climate change form an integral part of the design solutions. **Chapter 14 (Climate)** of the **ES (Document Reference 6.1)** assesses the greenhouse gas emissions associated with the Scheme, including from road user

Policy Document	Policy Reference	Assessment
		(transport) emissions. The uptake of EVs and EU standard vehicles is considered in the context of national strategies, such as the Transport Decarbonisation Plan 2021. The Scheme seeks to facilitate and encourage active travel and sustainable forms of transport. The Scheme is enhancing the National Cycle Network (NCN) 23 through the gyratory, enhancing the footway along the west of the Scheme through the provision of a footway and cycleway, and adding a new bridleway link to the east of the Scheme connecting Long Walk and Easton Lane. The provision of a high quality and accessible pedestrian and cyclist routes will encourage and enable travel by low-carbon, sustainable modes. During construction, the main source of GHG emissions is anticipated to be associated with construction materials embodied carbon, comprising approximately 68.9% of overall construction emissions. Construction emissions as a result of plant equipment use within the work area would also release GHG emissions, through combustion of fuel, and comprise approximately 20.8% of anticipated construction emissions. Land use is estimated to comprise approximately 5.2% of construction emissions. 1.8% of construction emissions arise as a result of the power required for the welfare facilities. The remaining 2.3% and 1.0% are anticipated to arise from transport of materials and construction waste respectively. In total, it is anticipated that an estimated 37,070 tCO_2e would be emitted during construction. During operation, in terms of greenhouse gas emissions, in comparison to the UK carbon budget, the Scheme is anticipated to comprise0.0024% of the UK's 4thcarbon budget and 0.001% of the 5th carbon budget and 0.002% of the 6th carbon budgets. . It is considered that the increase in emissions as a result of the Scheme would not have a material impact on the ability of UK Government to meet its carbon budgets, therefore in accordance with the DMRB, there would be no significant effect.

Policy Document	Policy Reference	Assessment
		Climate change during construction has been scoped out of the assessment. **Chapter 14 (Climate)** of the **ES (Document Reference 6.1)** considers the Schemes vulnerability and resilience to climate change during operation. To build in climate resilience, the drainage system incorporates flood alleviation measures, including the attenuation storage with a capacity to accommodate a 1 in 100-year flow event with a climate change allowance of 40%, the integration of Sustainable Drainage Solutions such as basins swales. New landscaping and planting would create multifunctional habitat corridors within the Scheme and include the creation of new native woodland grassland and scrub. Consideration would be given to drought tolerance and waterlogging species at the detailed design stage. During operation, **Chapter 14 (Climate)** of the **ES (Document Reference 6.1)** states that, with this mitigation in place, the impact of climate change on the Scheme is considered not significant **Section 14.16** of **Chapter 14 (Climate)** of the **ES (Document Reference 6.1)** presents the essential mitigation measures that have been incorporated into the Scheme's design. At the construction stage, the Scheme will continue to be designed in accordance with the British Standards and DMRB guidance outlined in **Section 14.16** of **Chapter 14 (Climate)** of the **ES (Document Reference 6.1)**, for example, at the detailed design stage foundation design and soil conditions and ground water levels will be considered and constructed in accordance with UK standards. Wind loading will be included in accordance with BS EN 1991-1-4:2005. In terms of Essential Mitigation during operation, the Scheme's planting specifications will be provided at detailed design stage as secured through a requirement within Schedule 2 of the **draft DCO (Document Reference 3.1)**.

Policy Document	Policy Reference	Assessment
		The soft landscape planting strategy for the Scheme should follow a contextual approach with regards to native species selection and pattern and be appropriate to its locality. Species with enhanced attributes to drought tolerance and waterlogging will be considered and incorporated where practicable to increase resilience to climate change.
South Downs National Park Local Plan (2019)	Policy SD2 – Ecosystem Services Policy SD45 – Green Infrastructure Policy SD48 – Climate Change and Sustainable Use of Resources	Policy SD2 permits development proposals where *"they have an overall positive impact on the ability of the natural environment to contribute goods and services."* The policy states that this will be achieved through the use of high quality design, and by delivering all opportunities to achieve a number of benefits, including improving the National Park's resilience to, and mitigation of, climate change. Policy SD45 states that green Infrastructure must contribute to maximising opportunities to mitigate, adapt and improve resilience to climate change. In relation to Policy SD2 and SD45, likely effects, mitigation, adaptation and resilience to climate change are discussed in detail in response to the policies in the *Winchester Local Plan Part 1 - Core Strategy* (2013) above and are therefore not repeated here. Policy SD48 states that *"All development proposals, including retrofitting, will be required to demonstrate, proportionately, how the development addresses climate change mitigation and adaptation through the on-site use of zero and/or low carbon technologies, sustainable design and construction, and low carbon materials."* Sustainable design is a fundamental consideration of the Scheme. Due to the lifespan of the proposals, the Scheme design considers potential change from future Climate Change, including designing in appropriate water attenuation features for

Policy Document	Policy Reference	Assessment
		extreme events, specifying durable materials, and including a diverse soft landscape species for resilience. Further details are provided within **Chapter 5** of the **DAS (Document Reference 7.9).**