

# **M3 Junction 9 Improvement**

Scheme Number: TR010055

8.12 Cover Letter Deadline 4

Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

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Ref: TR010055

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Direct Line: 0300 123 5000 Email: M3Junction9Improvements@ nationalhighways.co.uk 18 August 2023

Dear Ms McKay and Mr Sims,

#### Application Ref: TR010055

Application by National Highways for an Order Granting Development Consent for the M3 Junction 9 Improvement.

#### Applicant's Deadline 4 Submission

This letter has been prepared by the Applicant to accompany the Applicant's submissions to the Examining Authority (ExA) for Deadline 4 of the Examination for the M3 Junction 9 Improvement Scheme. It has been prepared in accordance with the requirements set out by the Examining Authority in the Rule 8 Letter dated 25 May 2023.

A full list of the documents submitted for Deadline 4 are listed in Section 1 of this letter.

Yours sincerely,

Anne-Marie Palmer National Highways



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### 1 Deadline 4 Submissions

#### 1.1 Documents submitted

1.1.1 The table below sets out documents submitted at Deadline 4.

Table 1.1: Documents submitted at Deadline 4

Reference	Document	Revision
1.3	Introduction to the Application (Appendix A Document Tracker)	<del>REP3-001</del> Rev 4
4.1.2	Statement of Reasons Annex B -Status of Negotiations Compulsory Acquisition Schedule	Rev 0
4.1.3	Statement of Reasons Annex C - Schedule of Engagement with Statutory Undertakers	Rev 0
6.1	Chapter 3 (Alternatives)	<del>APP-044</del> Rev 1
6.1	Chapter 5 (Air Quality)	<del>REP2-023</del> Rev 2
6.1	Chapter 9 (Geology and Soils)	<del>APP-050</del> Rev 1
6.1	Chapter 12 (Population and Human Health)	<del>APP-053</del> Rev 1
6.1	Chapter 13 (Road Drainage and the Water Environment)	<del>APP-054</del> Rev 1
6.2	Chapter 12 Population and Human Health - Figures	<del>REP2-03</del> 4 Rev 2
6.3	Appendix 5.3 - Designated Habitats Backgrounds and Operational Phase Results	<del>APP-087</del> Rev 1
6.3	Appendix 8.3 - Assessment of Operational Air Quality Impacts on Biodiversity	<del>APP-132</del> Rev 1
6.3	Appendix 12.1 - Schedule of Population and Human Health Effects	APP-141 Rev 1



Reference	Document	Revision
6.3	Appendix 13.2 - Hydrogeological Risk Assessment	A <del>PP-144 -</del> A <del>PP-145</del> Rev 1
7.3	first iteration Environmental Management Plan	<del>REP3-018</del> Rev 4
7.5	Habitats Regulations Assessment	<del>APP-158</del> Rev 1
7.12.1	Statement of Common Ground with Winchester City Council	<del>REP2-046</del> Rev 1
7.12.4	Statement of Common Ground with the Environment Agency	<del>REP2-047</del> Rev 1
8.5.1	Errata Sheet to Applicant response to Written Question 14.1.10	N/A
8.12	Deadline 4 Cover Letter	N/A
8.13	Applicant written summaries of oral case for Issue Specific Hearing 1 (ISH1)	N/A
8.14	Applicant written summaries of oral case for Issue Specific Hearing 2 (ISH2)	N/A
8.15	Applicant written summaries of oral case for Issue Specific Hearing 3 (ISH3)	N/A
8.16	Applicant Comments on Deadline 3 Submissions	N/A

#### **1.2** Documents not submitted

1.2.1 The Rule 8 Letter sets out the requirement to submit updated NPS Tracker. The National Policy Statement for National Networks Accordance Table (7.2, Rev 2) was submitted at Deadline 2. This document has since been reviewed and no further changes have been identified for Deadline 4. An update has therefore not been undertaken for this deadline. The Applicant is not providing an updated draft Development Consent Order (3.1, Rev 3) at Deadline 4 as there are minimal changes that are needed at this time. The Applicant will provide an updated draft at Deadline 5 once discussions with relevant parties have been progressed.



#### **1.3** Additional late submissions from other parties

- 1.3.1 The ExA exercised its discretion to accept three Additional Submissions from:
  - Hampshire County Council
  - Winchester Friends of the Earth Christopher Gillham
  - Climate Emergency Policy and Planning (CEPP) Dr Andrew Boswell
- 1.3.2 The Applicant has responded within the **Applicant Comments on Deadline 3 Submissions (Document Reference 8.16)** to these submissions.

#### 1.4 Appendix A – Cover Note regarding Hydrogeological Risk Assessment Basin 5

- 1.4.1 Denise Rosewell's Deadline 1 Submission of their Post hearing submissions including written summary of oral submissions at Open Floor Hearing 1 (OFH1) (REP1-035) raised concerns regarding the potential impacts on their borehole located at the Shoulder of Mutton Farm.
- 1.4.2 The Applicant undertook a site visit on the 29 June 2023 and also visited Mrs Rosewell's property as part of the Accompanied Site Inspection with the Examining Authority on 10 July 2023. Following this further assessment work has been undertaken, and a copy of this Appendix has been shared with the Interested Party directly.
- 1.4.3 The following Chapters and Appendix of the **Environmental Statement (6.1-6.3)** have also been updated:
  - Chapter 9 (Geology and Soils) of the Environmental Statement (ES) (6.1, Rev 1)
  - Chapter 13 (Road Drainage and the Water Environment) of the Environmental Statement (ES) (6.1, Rev 1)
  - Appendix 13.2 (Hydrogeological Risk Assessment) of the Environmental Statement (ES) (6.3, Rev 1)



### 2 Issue Specific Hearing 2 (ISH2)

#### 2.1 Summary

2.1.1 At ISH2 a commitment was made for the Applicant to submit a number of documents to the ExA. The majority of these will follow at Deadline 4 as agreed, however the following are contained within this submission at Deadline 3.

#### 2.2 Submissions following ISH2

Table 2.1: Commitments made at ISH2

Commitment at ISH2	Location within Deadline 4 Submission
Traffic and Transport	
Solent Port and HGVs including additional modelling information, underlying assumptions, and the impacts of lengthening of HGVs.	Section 1.2 of Appendix A of Applicant Written Summaries of Oral Case for Issue Specific Hearing 2 (ISH2) (Document Reference 8.14)
Provision of traffic accident data pre 2015 and post 2019.	Section 1.3 of Appendix A of Applicant Written Summaries of Oral Case for Issue Specific Hearing 2 (ISH2) (Document Reference 8.14)
Provision of traffic accident data by node at the M3 Junction 9 gyratory.	Section 1.3 of Appendix A of Applicant Written Summaries of Oral Case for Issue Specific Hearing 2 (ISH2) (Document Reference 8.14)
Provision of traffic modelling data for queueing along A272.	Section 1.4 of Appendix A of Applicant Written Summaries of Oral Case for Issue Specific Hearing 2 (ISH2) (Document Reference 8.14)
Information on Hockley Link and J11.	Section 1.5 of Appendix A of Applicant Written Summaries of Oral Case for Issue Specific Hearing 2 (ISH2) (Document Reference 8.14)
Comparative Journey Times	Section 1.4 of Appendix A of Applicant Written Summaries of



Commitment at ISH2	Location within Deadline 4 Submission	
	Oral Case for Issue Specific Hearing 2 (ISH2) (Document Reference 8.14)	
Road safety		
Further details on the response to the Stage 1 Road Safety Audit.	Applicant Written Summaries of Oral Case for Issue Specific Hearing 2 (ISH2) (Document Reference 8.14)	
Biodiversity		
Explanation of our conclusion of significant effects of Nitrogen deposition on chalk grassland and the existing high baseline.	Applicant Written Summaries of Oral Case for Issue Specific Hearing 2 (ISH2) (Document Reference 8.14)	
Species survey data at the request of the South Downs National Park Authority.	Applicant Written Summaries of Oral Case for Issue Specific Hearing 2 (ISH2) (Document Reference 8.14)	
Air Quality		
Further information regarding in cab (driving) air borne pollutants.	Applicant Written Summaries of Oral Case for Issue Specific Hearing 2 (ISH2) (Document Reference 8.14)	
Noise		
Provision of the Noise and Vibration Management Plan/ Essay Plan.	Appendix L of the first Iteration Management Plan (7.3, Rev 4)	
Further information regarding the low-noise road surfacing	Applicant Written Summaries of Oral Case for Issue Specific Hearing 2 (ISH2) (Document Reference 8.14)	



# 3 Issue Specific Hearing 3

### 3.1 Summary

Table 3.1: Commitments made at ISH3

Commitment at ISH3	Location within Deadline 4 Submission	
Planning and Alternatives		
Response in writing on the relevance of the Stonehenge judgement, and application of common law principles relating to the consideration of alternatives in this case.	Applicant Written Summaries of Oral Case for Issue Specific Hearing 3 (ISH3) (Document Reference 8.15).	
Response in writing on the additional information on the modal alternatives options appraisal.	Applicant Written Summaries of Oral Case for Issue Specific Hearing 3 (ISH3) (Document Reference 8.15).	
Response in writing regarding the M25 to Solent Route Strategy and inclusion of M3 Junction 9 therein.	Applicant Written Summaries of Oral Case for Issue Specific Hearing 3 (ISH3) (Document Reference 8.15).	
Economics		
Response in writing regarding the additional information on the Local Economic Benefits.	Applicant Written Summaries of Oral Case for Issue Specific Hearing 3 (ISH3) (Document Reference 8.15).	
Response in writing to the South Downs National Park Authority on questions relating to the economic appraisal of the Scheme.	Applicant Written Summaries of Oral Case for Issue Specific Hearing 3 (ISH3) (Document Reference 8.15).	
Response in writing to Winchester Friends of the Earth on optimism bias for construction costs, and on the impacts of heat on wildlife from the Scheme.	Applicant Written Summaries of Oral Case for Issue Specific Hearing 3 (ISH3) (Document Reference 8.15).	
Climate and GHG Emissions		



Commitment at ISH3	Location within Deadline 4 Submission
Provision of more detail on the Carbon Budget Delivery Plan and the implication for the Scheme's carbon assessment.	Appendix A of Applicant Comments on Deadline 3 Submissions (Document Reference 8.15).
Response in writing to the Examining Authority's question on the Carbon Management Plan.	Applicant Written Summaries of Oral Case for Issue Specific Hearing 3 (ISH3) (Document Reference 8.15).
Response in writing to Dr A Boswell's points on the Scheme's Greenhouse Gas emissions.	Applicant Written Summaries of Oral Case for Issue Specific Hearing 3 (ISH3) (Document Reference 8.15).
Further Information on the Tyndall Centre Report and its relevance for assessing against local carbon budgets.	Applicant Written Summaries of Oral Case for Issue Specific Hearing 3 (ISH3) (Document Reference 8.15).
Submission of Applicant's response to WQ 14.1.10	Document 8.5.1 Errata Sheet to Applicant Responses to Written Question 14.1.10.



### Appendix A

### Cover Note regarding Hydrogeological Risk Assessment Basin 5



#### Appendix A – Cover Note regarding Hydrogeological Risk Assessment Basin 5

#### Subject: Hydrogeological Risk Assessment Basin 5

BIM Document Reference: HE551511-VFK-EWE-XXXX\_XX-RP-LE-40004

Revision: P01

Date: 18 August 2023

Author: M3 Junction 9 Improvement Team, National Highways

#### 1.1 Introduction

- 1.1.1 The hydrogeological risk assessment (HgRA) undertaken for Stage 3 (Development Consent Order Planning Application) as detailed in Appendix 13.2 (Hydrogeological Risk Assessment) of the ES (6.3, Rev 1) included a groundwater impact assessment for the proposed extended drainage basins (EDB). EDB5 was classified as having a slight degree of impact and was therefore not selected to be taken forward for quantitative modelling. This was based on the fact that it will predominantly receive runoff from rural catchments to the east of the Application Area and therefore was assessed to have a negligible impact magnitude.
- 1.1.2 During the Planning Application examination period, it has been determined that there is a private groundwater abstraction closer to EDB5 than was previously understood. This groundwater abstraction is referred to as the Shoulder of Mutton Farm abstraction. Details of private groundwater abstractions had been obtained from Winchester City Council Appendix 13.2 (Hydrogeological Risk Assessment) of the ES (6.3, Rev 1), but the Shoulder of Mutton Farm abstraction was not included in the list of private abstractions provided by Winchester City Council.
- 1.1.3 Following a site visit undertaken by the Applicant on 29 June 2023, it was ascertained that there are three private abstractions in the vicinity of Mansard House shown on Figure 1.1 below. The Mansard House abstraction had been listed in the dataset provided by Winchester City Council and had been included in Appendix 13.2 (Hydrogeological Risk Assessment) of the ES (6.3, Rev 1). In addition, there is an abstraction to the north northeast of Mansard House which is referred to here as North of Mansfield House abstraction and another abstraction referred to as Shoulder of Mutton Farm abstraction.
- 1.1.4 All three of these abstractions lie to the east of EDB5 and are therefore up hydraulic gradient of it as the groundwater flow direction is to the west or west northwest (see Figure 3.12 in Appendix 13.2 (Hydrogeological Risk Assessment) of the ES (6.3, Rev 1)). However, the Shoulder of Mutton Farm abstraction is located approximately some 90m away from the eastern edge of EDB5 and the abstraction owners have raised concerns over the potential



impact from discharge to ground at EDB5 on the water quality in the abstraction well. The details of their concerns are outlined within Denise Rosewell's Deadline 1 Submission – written summary of oral submissions at Open Floor Hearing 1 (OFH1) (REP1-035).

- 1.1.5 Therefore, a quantitative assessment of the groundwater quality impact at EDB5 has been undertaken using the same methodology as provided in Appendix 13.2 (Hydrogeological Risk Assessment) of the ES (6.3, Rev 1).
- 1.1.6 Section 6.3 in Appendix 13.1 (Drainage Strategy) of the ES, (6.3, Rev 1) states that EDB5 will have a storage volume of 6,785 m<sup>3</sup> and serves 2.3 ha of highway + 76.5 ha of overland (rural) catchment.

#### 1.2 Hydrogeological risk assessment EDB5

- 1.2.1 The HgRA model was run on the same basis as the models for EDB2, 3B and 3C as described in **Appendix 13.2 (Hydrogeological Risk Assessment)** of the **ES (6.3, Rev 1)**.
- 1.2.2 The HEWRAT assessment for EDB5 Appendix 13.1 (Drainage Strategy) of the ES (6.3, Rev 1) (was solely for a groundwater receptor and was therefore qualitative. Therefore, no chronic or acute source term data can be derived from the HEWRAT assessment as was undertaken in Appendix 13.2 (Hydrogeological Risk Assessment) of the ES (6.3, Rev 1) for the EDB2, 3B and 3C assessments.
- 1.2.3 In the absence of source term data, the maximum concentrations applied to EDB2, 3B and 3C in Appendix 13.2 (Hydrogeological Risk Assessment) of the ES (6.3, Rev 1) were considered for road drainage. EDB5 receives from a primarily rural catchment, and it is assumed that the source term determinands are not present within this component. Therefore, the concentrations applied to EDB5 were adjusted according to the weighted average of the highways and rural runoff, with the weighting applied according to the respective areas.



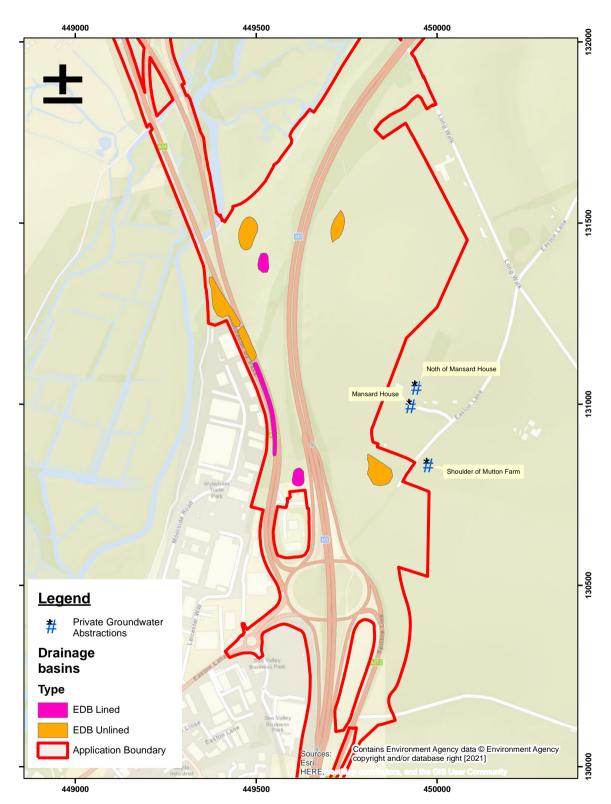


Figure 1.1 Private abstractions in the vicinity of Mansard House

1.2.4 **Paragraph 3.2.2** of **Appendix 13.2 (Hydrogeological Risk Assessment)** of the **ES (6.3, Rev 1)** states that there is no Ground Investigation data in the vicinity of EDB5, but the underlying geology is likely to be Chalk. As the Chalk is likely to be structureless near surface, an infiltration rate based on



structureless chalk as described in Appendix 13.2 (Hydrogeological Risk Assessment) of the ES (6.3, Rev 1) was selected.

- 1.2.5 The geometry of EDB5 (area, width parallel to groundwater flow and corresponding length) were measured from GIS. It is estimated that the depth to groundwater at EDB5 is approximately 14 m.
- 1.2.6 The model predicts that no hazardous substances would be predicted to reach the water table at concentrations in excess of the Target Concentration and that there is no pollution by non-hazardous pollutants within 100 years.
- 1.2.7 The organic hazardous substances (pyrene, fluoranthene, anthracene and phenanthrene) are simulated both sorb<sup>1</sup> to the natural geological strata within the unsaturated zone and degrade<sup>2</sup>. The effect of sorption is to delay or retard the arrival of the contaminant at the receptor; and this retarded travel time provides sufficient time for the contaminant to degrade to negligible concentrations.
- 1.2.8 The non-hazardous pollutant (zinc) is also retarded, and this, combined with dilution at the watertable, results in predicted concentrations significantly below the UK Drinking Water Standard limit.
- 1.2.9 On this basis, it is considered that the risk to the up-hydraulic gradient but nearby private water abstraction at Shoulder of Mutton Farm from road drainage contamination discharging to ground at EDB5 will have a negligible impact magnitude. The other two groundwater abstractions, Mansard House and North of Mansard House are located at a greater distance from EDB5 than the Shoulder of Mutton Farm abstraction and therefore the impact magnitude at these two locations will also be negligible.
- 1.2.10 The Applicant confirms that updates to Chapter 13 (Road Drainage and Water Environment) of the Environmental Statement (ES) (6.1, Rev 1) and Appendix 13.2 (Hydrogeological Risk Assessment) of the ES (6.3, Rev 1) are submitted at Deadline 4 to reflect the above information.

<sup>&</sup>lt;sup>1</sup> Organic contaminants are attracted to organic matter naturally present within the soil and rock and this slows their passage through these strata

<sup>&</sup>lt;sup>2</sup> Organic contaminants often degrade via microbial and other activity.