

SOUTH EAST WATER

WRITTEN REPRESENTATION

HIGHWAYS ENGLAND'S RESPONSE

1. INTRODUCTION

- 1.1 *South East Water would like to thank the Planning Inspectorate for giving us the opportunity to make a written representation with regard to the M4 (Junctions 3 to 12) Smart Motorway Development Consent Order Application, reference TR010019.*

2. SUMMARY

- 2.1 *This letter is a written representation for submission to the Planning Inspectorate of South East Water's outstanding concerns with regard to the M4 (Junctions 3 to 12) Smart Motorway Development Consent Order Application following a dialogue from 2014 to 2015 (referred to in this letter as the Scheme) between South East Water and both the Planning Inspectorate and Highways England (formerly the Highways Agency).*

- 2.2 *Four key points are stated on which South East Water have had previous correspondence and within which South East Water require and request further information within this Examination phase:*

- i. *Point 1: The addition of 'the impacts of the proposal on water resources' to the list of Primary Issues.*
- ii. *Point 2: The Examining Authority's first written questions and requests for information – Issued 11 September 2015 as referenced in the Rule 8 letter.*
 - *South East Water respond to questions 4.5.2 and 9.20 (i), (ii) and (iii) posed by the Planning Inspectorate and identify sections of South East Water's written representation that respond to these questions and attach maps identifying both groundwater source protection zones and the location of South East Water's sites in the vicinity of the Scheme as part of this response*
- iii. *Point 3: The letter sent through to South East Water 28th September 2015 from Highways England responding to South East Water's letter dated 18 December 2014 (South East Water Ref: 514451-PIN-00-ZZ-DB-C0-323999).*
 - *South East Water will not be in a position to comment on whether not we are satisfied that the Scheme has considered all potential risks to groundwater and surface water and mitigated against them accordingly or to make a statement regarding whether our outstanding concerns have been addressed until we have received the Hydrogeological Risk Assessment and drainage scheme method statements including pollution protection measures for groundwater and surface water respectively from Highways England.*
- iv. *Point 4: The draft protective provisions sent through to South East Water for consideration from DLA Piper on behalf of Highways England.*

- *The draft protective provisions are currently under review by South East Water's legal team. Once our legal team have assessed if we consider the existing draft protective provisions to be sufficient a response will be submitted to DLA Piper asking for these to be adapted as appropriate.*

Highways England's Comment

- 2.2.1 Highways England's detailed comments on the four points noted in this summary section are provided below.
- 2.3 *South East Water would like to further take this opportunity to bring to the Planning Inspectorate's attention a scheme that is planned to expand our Keleher Water Treatment Works Site which may give rise to access issues if coincident with the onset of the Scheme. DLA Piper on behalf of Highways England have agreed to send through the construction traffic management plan inclusive of contact details to facilitate dialogue between South East Water and the Highways Agency in the case that construction works coincide.*

Highways England's Comment

- 2.3.1 It is correct that Highways England has agreed to provide to South East Water a copy of the final Construction Traffic Management Plant ("CTMP") once it has been approved pursuant to requirement 18 at Schedule 2 to the DCO.
- 2.4 *South East Water reiterate that our primary concern is the protection of surface and groundwater resources that we abstract and subsequently treat for public water supply. Whilst South East Water support the overall objectives of the scheme to relieve congestion and improve journey times between junctions 3 to 12 of the M4, we remain concerned about the impacts the proposals could have on water resources which we rely on in order to supply public drinking water.*

Highways England's Comment

- 2.4.1 Highways England notes this summary of South East Water's concerns, and has responded in detail below.
- 3. DIALOGUE TO DATE**
- 3.1 *South East Water would like to begin by outlining our dialogue to date between both the Planning Inspectorate and Highways England.*
- 3.2 *South East Water and the Planning Inspectorate:*

- *South East Water sent a letter to Karen Jones (EIA and Land Rights Advisor on behalf of the Secretary of State) dated 8th August 2014 (South East Water Ref: 140808_TR010019_2649167) responding to notification of the scoping consultation for an application by the Highways Agency for an order granting Development Consent for M4 Junctions 3 to 12: Smart Motorway and raising our initial concerns with regard to the impact the proposals could have on water resources that we rely upon in order to supply drinking water.*
- *South East Water submitted a Relevant Representation (reference 149) on the Planning Inspectorate website 24th June 2015 which stated "The development impinges on source protection zones for public water supply. South East Water provided a letter (18th Dec 2014) outlining our main concerns. South East Water*

may wish to attend at the examination process, or speak. Our concerns require a direct response in the first instance. Which South East Water have yet to receive. South East Water would like the opportunity to re-submit our concerns as soon as possible".

- *South East Water received the Rule 6 letter - Notification of Preliminary Meeting.*
- *South East Water attended the preliminary Meeting held on Thursday 3rd September 2015 at the Desborough Suite, Maidenhead Town Hall and expressed the opinion that impacts on water resources should be added to the list of Preliminary Issues listed in Annex B of the Rule 6 letter. Wendy Burden (Examining Officer) confirmed that 'all relevant and important matters would be examined, and reiterated that the list of principal issues was neither comprehensive nor exclusive. Written Representations suggesting an expansion of the list of principal issues would be considered'.*
- *South East Water received the Rule 8 letter - Infrastructure Planning Examination Procedure - Rules 2010 from Wendy Burden (Examining Authority) via email 11th September 2015 referencing the first round of written questions, including questions directed at South East Water, and stating a deadline of 8th October for written representations from interested parties including evidence on any matters concerning the application and answers to the first round of written questions. South East Water herewith include the requested written representation, evidence on matters concerning the application that are relevant to South East Water's interests and answers to the first round of written questions within the 'Written Representation' section of this letter.*

3.3 *South East Water and Highways England (formerly the Highways Agency):*

- *South East Water sent a letter to (Lynne Stinson – Project Manager MP Smart Motorways Programme) 18th December 2014 (South East Water Ref: 514451-PIN-00-ZZ-DB-C0-323999) commenting on the scoping consultation and outlining outstanding concerns with regard to the impact the proposals could have on some of our water resources that we rely upon in order to supply drinking water.*
- *28th May 2015 Highways England sent Section 56 Notice of acceptance of a planning application for a development consent order for the M4 Junctions 3 to 12 Smart Motorway (notification that the application for M4 Smart Motorway development consent order submitted to the Secretary of State 27 April 2015 had been accepted for examination by the Planning Inspectorate) and included with the notification letter a map showing a location of the proposed development and a copy of the Environmental Statement.*
- *DLA Piper representing Highways England wrote to South East Water 16th June 2015 in order to request that the two parties enter into a dialogue to discuss "particular matters in respect of the Scheme, which may affect in its capacity as a statutory undertaker in relation to water and sewerage pipelines and the provision of related utility services, and which may or will require agreement in advance of the close of the examination of the Application" and proposed to "enter into an interface agreement/protective provisions for the benefit of South East Water Limited within the development consent order ("DCO") for the Scheme to ensure the protection of South East Water Limited's undertaking during the construction and*

operation of the scheme" and attached draft protective provisions for review and comment.

- *DLA Piper representing Highways England wrote to South East Water again 28th July 2015 'to progress negotiations and resolve any objections in relation to the proposed protective provisions'.*
- *South East Water met with Emma Harling-Phillips from DLA Piper representing Highways England 16th September 2015 to request a direct response to the letter sent to Lynne Stinson 18th December 2014, to discuss the M4 Junctions 3 to 12 Smart Motorway Development Consent Order Application and the potential impacts/risks of the application to water resources and South East Water's adjacent sites in addition to the draft protective provisions and any outstanding areas of concern.*
- *South East Water emailed through to Emma Harling-Phillips at DLA Piper plans detailing the location of South East Water's abstraction boreholes in the vicinity of the Scheme, noting that our Bray Gravels Site and Beenhams Heath Site correspond to Map 19 and Map 14 in the Environmental Statement respectively, and groundwater level data from Borehole 1 at our Bray Gravels site (the only long term groundwater level data set held by South East Water in the vicinity of Monkey Island Lane as specifically requested by DLA Piper's environmental team to support their response to our 18th December 2014 letter).*
- *South East Water received a direct response to their letter sent 18th December 2014 from Lynne Stinson at the Highways England 28th September 2015. This letter responded to South East Water's concerns via reference to the Environmental Statement for the scheme, by providing additional information with regard to the progress of the design phase of the scheme and ongoing investigations supporting the application for the Scheme as well as providing direct responses to South East Water's specific concerns.*

Highways England's Comment

- 3.3.1 Highways England confirms that the above is an accurate reflection of its contact with South East Water. However, it notes that the letter South East Water sent to Karen Jones, responding to notification of the scoping consultation, is dated 12th September 2014 not 8th August 2014 (South East Water Ref: 140808_TR010019_2649167). Also, it notes that it has no record of receiving the letter dated 18 December 2014, which was sent in response to the s.42 consultation under the Planning Act 2008.
- 3.3.2 Highways England has additionally been in contact with South East Water through land referencing and survey access communication, consultation letters relating to Section 42 and Section 47 of the Planning Act 2008. Letters were also sent to South East Water from the appointed District Valuer acting on behalf of Highways England on 8 June 2015, and again on 29 July 2015 to progress the acquisition of necessary interests by agreement. A list of these additional communications is provided in the table below.

Date	Form of Contact	Summary
11 March 2013	Outgoing letter from Highways Agency to South East Water	Request for information on Buried Services and apparatus.

Date	Form of Contact	Summary
10 March 2014	Invitation to attend a Public Information Exhibition, to be held on 18 March 2014	Public Information Exhibition as part of initial stakeholder engagement and information exercise. Did not attend.
02 May 2014	Letter from Highways Agency requesting completion of land ownership questionnaire	Requesting land interest details for identified areas of land which may be affected by the Scheme. No response received.
17 October 2014	Letter from Highways Agency requesting completion of land ownership confirmation questionnaire	Questionnaire to obtain confirmation that the details previously provided regarding the Scheme are still valid and to offer the opportunity to provide any updates.
30 October 2014	Response from South East Water regarding land ownership confirmation questionnaire	Completed questionnaire for land ownership details for South East Water.
10 November 2014	Planning Act 2008 Section 42: Notice of statutory pre-application consultation period	Notification of the formal pre-application consultation between 10 November and 21 December 2014 about the Scheme in accordance with Section 42 of the Planning Act 2008.
10 November 2014	Planning Act 2008 Section 47 Notification Letter	Details of the pre-application consultation to be held between 10 November and 21 December 2014.
24 November 2014	Outgoing phone call to from Highways Agency Land Referencing team to South East Water	Follow up enquiries regarding South East Water's land ownership confirmation response.
24 November 2014	Incoming phone call from South East Water to Highways Agency Land Referencing team	Response to follow up enquiry initial phone call, regarding queries relating to land ownership confirmation response.
24 November 2014	Incoming phone call from South East Water	Phone call requesting a copy of the land ownership confirmation questionnaire as there was no record of who completed the original.
24 November 2014	Email from Highways Agency attaching a copy of land ownership confirmation questionnaire	Copy of land ownership confirmation questionnaire sent as requested.
24 November 2014	Incoming phone call from South East Water to Highways Agency Land Referencing team	Conversation regarding follow up enquiry questions.
25 November 2015	Outgoing phone call to South East Water from Highways Agency Land Referencing team	Voice mail left requesting a call back to discuss further follow up enquires for the confirmation questionnaire.
19 February 2015	Letter from Highways Agency requesting completion of land ownership confirmation questionnaire	Questionnaire to obtain confirmation that the details previously provided regarding the Scheme are still valid and to offer the opportunity to provide any updates.

Date	Form of Contact	Summary
25 February 2015	Letter from Highways Agency requesting completion of land ownership confirmation questionnaire sent to Major Land Owners	Questionnaire to obtain confirmation that the details previously provided regarding the Scheme are still valid and to offer the opportunity to provide any updates.
25 February 2015	Copy letter from Highways Agency requesting completion of land ownership confirmation questionnaire sent to contact at South East Water that had provided information previously	Questionnaire to obtain confirmation that the details previously provided regarding the Scheme are still valid and to offer the opportunity to provide any updates.
27 February 2015	Response to request for land ownership confirmation questionnaire	Completed questionnaire for land ownership details for South East Water.
27 February 2015	Outgoing email to South East Water regarding confirmation questionnaire	Email following up confirmation questionnaire response requesting additional information.
03 March 2015	Outgoing email to South East Water regarding confirmation questionnaire	Follow up email regarding request for additional information.
03 March 2015	Incoming email from South East Water regarding confirmation questionnaire	Email stating that the information they sent is believed to be correct, but they will look into the queries listed in email dated 27 February 2015.
03 March 2015	Outgoing email to South East Water regarding confirmation questionnaire	Follow up email regarding request for additional information.
09 March 2015	Outgoing email to South East Water regarding confirmation questionnaire	Voice mail left requesting a call back to discuss follow up enquires for the confirmation questionnaire.
10 March 2015	Incoming email from South East Water regarding confirmation questionnaire	Response to the follow up enquiry sent in email dated 3 March 2015.
10 March 2015	Outgoing email to South East Water regarding confirmation questionnaire	Email sent acknowledging receipt of details provided and a request for additional information.
01 May 2015	Outgoing email to South East Water	Survey Access request for the ecology team to carry out non-invasive surveys.
11 May 2015	Outgoing email to South East Water	Follow up request for ecology survey access.
11 May 2015	Outgoing phone call to South East Water	Follow up request for ecology survey access.
12 May 2015	Incoming email from South East Water to Highways England	An email response agreeing to survey access for the ecology team.
12 May 2015	Outgoing email to South East Water	Requesting contact details for the ecology team in order to carry our surveys.
12 May 2015	Incoming email from South East Water	Email providing point of contact details for access in order to carry out surveys.

Date	Form of Contact	Summary
12 May 2015	Incoming email from South East Water	Additional contact details for the ecology team.
28 May 2015	Planning Act 2008 Section 56: Notice of acceptance of an application for a development consent order	Notification of acceptance of application together with details of land which South Bucks District Council have an interest.
08 June 2015	Outgoing Letter from Highways England to South East Water	Letter from District Valuer: Property Negotiation.
16 June 2015	Outgoing Letter from Highways England to South East Water	Letter from DLA Piper: Protective Provisions Letter.
28 July 2015	Outgoing Letter from Highways England to South East Water	Letter from DLA Piper: Protective Provisions letter: follow up.
29 July 2015	Outgoing Letter from Highways England to South East Water	Letter from District Valuer: Property Negotiation: Follow Up.
9 September 2015	Outgoing phone call to South East Water	Call from South East Water to DLA Piper: requested Protective Provisions letter of 16 June 2015 to be resent (DLA resent on the same day).
16 September 2015	Meeting with South East Water	Meeting with DLA Piper to discuss South East Water's concerns and to discuss protective provisions.
16 September 2015	Incoming email from South East Water	Follow up email to DLA Piper from meeting 16 September regarding meeting actions.
17 September 2015	Incoming email from South East Water	Email to DLA Piper providing groundwater data requested by Highways England.
28 September 2015	Highways England email response to South East Water letter dated 12 September 2014 to Karen Jones	Regarding the potential impact of the scheme on Groundwater Protection Zones in the Bray area.
22 October 2015	South East Water email response to Highways England letter dated 28 September 2015	Regarding the potential impact of the scheme on Groundwater Protection Zones in the Bray area.

4. WRITTEN REPRESENTATION

4.1 *This written representation will address South East Water's outstanding concerns on four key points as listed below:*

4.1.1 *Point 1: The addition of 'the impacts of the proposal on water resources' to the list of primary issues.*

4.1.2 *Point 2: The Examining Authority's first written questions and requests for information – Issued 11th September 2015 as referenced in the Rule 8 letter.*

4.1.3 *Point 3: The letter sent through to South East Water 28th September 2015 from Highways England responding to South East Water's letter dated 18th December 2014 (South East Water Ref: 514451-PIN-00-ZZ-DB-C0-323999)*

4.1.4 *Point 4: The draft protective provisions sent through to South East Water for consideration from DLA Piper on behalf of Highways England.*

4.2 *South East Water's written representation is as below:*

Point 1: The addition of 'the impacts on water resources' to the list of Primary Issues

4.3 *South East Water would like to request that the Planning Inspectorate add 'the impacts on water resources' to the list of Principle Issues given our specific interest in the protection of surface and groundwater resources at, and adjacent to, the site of the proposed development which we abstract and treat for public water supply.*

Highways England's Comment

4.3.1 Highways England notes that the assessment of principal issues, which was provided in Annex B to the Rule 6 letter dated 7 August 2015 is a matter for the Examining Authority. Highways England also notes the Examining Authority's comments at the Preliminary Meeting that the list of principal issues was not intended to be exhaustive and consequently, Highways England is of the view that South East Water's representation does not require an amendment to that list.

Point 2: The Examining Authority's first written questions and requests for information – Issued 11 September 2015 as referenced in the Rule 8 letter

Planning Inspectorate Question 4.5.2

4.4 *Classified under Section 4 Environment and sub-section Section 4.5 Geology and Soils, this question is not directed at South East Water but as the question is relevant to our interests an answer is here provided.*

4.5 ***Planning Inspectorate Question 4.5.2 - Chapter 10 APP-150 identifies no significant residual impact from the project on groundwater resources during either construction of operation. Are the conclusions agreed with statutory consultees?***

4.6 ***South East Water Response to Question 4.5.2 - See Point 3 within the 'Written Representation' section of this letter.***

Highways England's Comment

4.6.1 Highways England's comments are provided in response to Point 3, of the Written Representation, below.

Planning Inspectorate Question 9.20 (i), (ii) and (iii)

4.7 *This question is directed at South East Water specifically.*

4.8 ***Planning Inspectorate Question 9.20 - SEW express concern that the development impinges on source protection zones (SPZ) for public water supply RR-149.***

4.9 ***Planning Inspectorate Question 9.20 (i) - Can SEW provide an update on any progress in terms of the applicant's engagement in response to the concerns raised in SEW's letter dated 18 December 2014?***

- 4.10 ***South East Water Response to Question 9.20 (i) - See 'Dialogue To Date' section between South East Water and the Highways Agency and Point 3 within the 'Written Representation' section of this letter.***

Highways England's Comment

- 4.10.1 Highways England's comments are provided in response to the 'Dialogue To Date' section, of the Written Representation, above and in response to Point 3, of the Written Representation, below.
- 4.11 ***Planning Inspectorate Question 9.20 (ii) - Can SEW provide a map(s) identifying the SPZs referred to in its RR?***
- 4.12 ***South East Water Response to Question 9.20 (ii) – Maps are attached (PDF File 'South East Water's Response to Planning Inspectorate Question 9.20 (ii) - EA SPZ Maps and SEW Site Locations') with Figure 1 locating South East Water's Water Treatment Works (note that the location of South East Water's abstraction boreholes are not identified and these locations can be provided on request) and Figure 2 identifying the groundwater source protection zones (SPZs) as identified by the Environment Agency and as retrieved from the Environment Agency's 'What's in your backyard?' website available via the following link:***

<http://apps.environment-agency.gov.uk/wiyby/37833.aspx>

Highways England's Comment

- 4.12.1 Highways England acknowledge the receipt of these maps and will use them to inform decisions regarding any part of the detailed design that may have an impact on groundwater conditions throughout this area.
- 4.13 ***Planning Inspectorate Question 9.20 (iii) Are any changes to the dDCO sought by SEW in order to protect the SPZs referred to in its RR?***
- 4.14 ***South East Water Response to Question 9.20 (iii) - As per Point 3 – South East Water is not currently in the position to comment on whether changes to the Development Consent Order are required.***

Highways England's Comment

- 4.14.1 Highways England's comments are provided in response to Point 3, of the Written Representation, below. Highways England will continue to engage with South East Water in relation to any comments it may have on the draft DCO throughout the course of the Examination.

Point 3: The letter sent through to South East Water 28th September 2015 from Highways England responding to South East Water's letter dated 18th December 2014 (South East Water Ref: 514451-PIN-00-ZZ-DB-C0-323999)

With regard to groundwater:

- 4.15 ***South East Water acknowledge that our concerns to date have been qualitatively considered within the Scheme's Environmental Statement although until appropriate data with respect to the ground and groundwater conditions has been collected and analysed to support a quantitative Hydrogeological Risk Assessment (HRA) South East Water's position has not changed since our letter dated 18th December 2014 (South East Water***

Ref: 514451-PIN-00-ZZ-DB-C0-323999). Our outstanding concerns and request for information to date, outside of the receipt of the Environmental Statement, as stated within this letter are:

- *The proposal includes construction activities in a designated Groundwater Protection Zone and has significant potential risk to public water supplies from our Bray Gravels site, and potentially our nearby Beenhams Heath site. These risks needs to be properly considered and adequately addressed both within the environmental impact assessment and wider project planning. We would welcome a separate Hydrogeological Impact Assessment to be made available for consultation prior to granting of the work.*
- *There is a high risk that the proposed construction works would increase turbidity in the groundwater at the Bray Gravels site to the point it falls outside the tolerances of our water treatment works and so fails the standards set for drinking water by our regulators, the Drinking Water Inspectorate. This could prevent us from supplying customer's drinking water from this key site, one of our largest groundwater sources.*

Highways England's Comment

- 4.15.1 Highways England confirms that a separate Hydrogeological Risk Assessment ("HRA") is to be undertaken, which will be completed and provided to the Examining Authority by the end of the Examination, in order to quantitatively assess the potential impacts of construction activities associated with the M4 J3-12 Smart Motorway scheme (the "Scheme"), on groundwater protection zones at South East Water's Thames Bray and Beenhams Heath Sites.
- 4.15.2 Based on available historical information, the risks have been properly considered and addressed within chapter 10 of the ES, and the magnitude of the impacts, following implementation of mitigation measures, assessed to be generally neutral. To date a Hydrogeological Risk Assessment, to confirm this conclusion, has not been possible due to a lack of data in respect of the ground and groundwater conditions. Now that the contractor for the Scheme has been appointed, this is shortly to be remedied by undertaking some targeted ground investigation in key areas, like Bray Gravels / Monkey Island, to determine the ground and groundwater conditions. Once in receipt of the ground investigation data a Hydrogeological Risk Assessment will be undertaken. It is anticipated that this work will be completed by the end of the Examination.
- 4.15.3 Highways England confirms receipt of groundwater level data of the Bray Gravels Site from SEW, which will be used to inform the Hydrogeological Risk Assessment.
- 4.15.4 Highways England confirms that the risks have been properly considered and adequately addressed as part of the EIA. The concerns of South East Water were brought into the assessment of the impacts on groundwater and public water supply within Chapter 10 Geology and Soils and Chapter 15 Road Drainage and the Water Environment of the Environmental Statement (Application Document Reference 6.1).
- 4.15.5 Reference should be made to paragraphs 10.4.7, 10.5.4 and 10.5.5 and Tables 10.9, 10.10 and 10.11 in Chapter 10 which address the impacts on groundwater in general, and in particular the impacts on the Groundwater Protection Zones. Reference should also be made to paragraphs 15.1, 15.2.1, 15.2.4, 15.4.39,

15.4.40 to 15.4.48 in Chapter 15 which address the impacts on water quality as a result of changes to the surface water drainage.

- 4.15.6 Proposed works in the vicinity of the Beenham's Heath site comprise the installation of one new gantry which is very likely to be on piled foundations. It is thus considered that the risk of causing increased turbidity in the groundwater at this site is very low. In the area of Bray Gravels / Monkey Island however, the proposed construction activities are much more extensive comprising several new gantries, two Emergency Refuge Areas, embankment widening and the construction of a new overbridge. The details of such construction operations, such as piling for the gantries and the new overbridge, excavation of soft ground below newly widened embankments and excavation below the water table all have potential to cause migration of contaminants (suspended solids and chemical contaminants from landfill materials), which may affect groundwater quality and in particular affect public water drinking supplies. With the exception of the new bridge foundations at Bray Gravels / Monkey Island, the construction of the new side road and other earthworks will be above existing ground level thus minimising the extent of excavation and the consequential impact of disturbing the ground leading to increased turbidity of the groundwater. It is understood that water is abstracted from the boreholes in the northern and southern Bray Gravel well fields from depths of around 10 to 15m. Excavation depths (other than for the bridge foundations) are expected to be less than 2m deep and contained within the cohesive alluvium which is believed to cap the gravels in this location. Excavations will be kept to as shallow a depth as possible, and above the groundwater table, in order to mitigate the risk of causing turbidity within the groundwater. With such mitigation measures in place the risk of causing increased turbidity of the groundwater is considered to be very low. Therefore it is not considered likely that construction works would increase turbidity in the groundwater at the Bray Gravels site to the point that water fails the standards set for drinking water by the Drinking Water Inspectorate
- 4.15.7 As groundwater within the area is anticipated to be high, piled foundations are proposed for the bridge. Piled foundations will cause least disturbance to the ground below the bridge and will negate the need for dewatering. Appropriate measures such as the use of full permanent casings during piling works will reduce/mitigate any effect where such operations are not able to be eliminated. Careful management of construction site drainage (e.g. sediment traps) will also mitigate against the attendant risks.
- 4.15.8 Further ground investigation will continue within the Order limits during the detailed design phase. Boreholes are also planned at sites where groundwater resources have been identified as highly sensitive, such that detailed hydrogeological assessments can be undertaken to further determine and mitigate any potential impacts from migration of suspended solids/contaminants.
- 4.15.9 It is extremely unlikely that water quality standards will not be met as appropriate mitigation measures, as mentioned above, would be implemented to prevent this.
- 4.16 *South East Water are pleased to learn that Highways England Appointed are now arranging for a targeted ground investigation to be undertaken in key areas to determine the ground and groundwater conditions and that the work and HRA will be completed by December 2015.*

Highways England's Comment

- 4.16.1 The details of the ground investigation required to assist in the compilation of the Hydrogeological Risk Assessment (“HRA”) are currently being determined. Although it is proposed to complete any ground investigation as soon as possible in order to compile the HRA by the end of the Examination, whether this date can be achieved depends on timely completion of the associated geotechnical investigation and the need to access 3rd party land.
- 4.17 *At this stage South East Water request that Highways England notify them of the dates when the ground investigations will commence and that the HRA is sent through for review once complete. Only on receipt of the HRA will South East Water will be in a position to comment on whether or not we are satisfied that the Scheme has considered all potential risks to groundwater and mitigated against them accordingly and that our outstanding concerns as stated above have been addressed.*

Highways England's Comment

- 4.17.1 Highways England agrees to keep South East Water fully informed as the HRA and ground investigation progress. As noted above, it is hoped that Highways England will be in a position to provide the HRA by December 2015.

With regard to surface water:

- 4.18 *South East Water are pleased to learn that method statements will be prepared including details of pollution protection measures and that discharge consents will be requested from all relevant water authorities before commencement of drainage works where required when drainage systems are to be relocated. South East Water would like to reiterate our concerns that:*
- *Relocation of surface water drainage from the M4 at this location could potentially increase the risk of water quality contamination at the site.*
 - *Our abstractions at Beenhams Heath between Junction 9 and 10 may also be impacted if surface water drainage is modified.*

Highways England's Comment

- 4.18.1 The fundamental principle of the drainage design for the Scheme is not to relocate existing surface water collection drainage carrier pipes or outfalls and it is not anticipated that any relocation of this infrastructure would be required. The new drainage systems referred to in paragraph 1.3.7 of the Drainage Strategy Report (Application Document Reference 7-5) are the central reserve gully collector systems and not carrier pipe systems.
- 4.18.2 Following the detailed design phase, should it be necessary to relocate surface water carrier pipes or create new outfalls in this location then the risk of water quality contamination will be managed and mitigated by employing best practice pollution prevention measures during construction of the works, as detailed in paragraph 15.4.39 of the Environmental Statement (Application Document Reference 6-1) and paragraphs 5.7.2 to 5.7.9 and 14.3.1 of the updated CEMP to be submitted at Deadline III, which also includes details of pollution incident control and monitoring protocols. In addition, to ensure that there is no risk of pollution associated with the operational phase of the Scheme, Highways England

will submit consent requests to the relevant water authorities for approval, prior to commencement of any drainage works, as acknowledged in the representation.

4.18.3 As stated in the response to paragraph 4.15 above, no modifications to collection drainage carrier pipes or outfalls are anticipated, but if at the detailed design stage of the Scheme this should prove to be necessary, mitigation measures to prevent the risk of water quality contamination, for example, settlement and treatment of highway runoff prior to discharge to the receiving waterbody, will be put in place to prevent any impact on the abstractions at Beenhams Heath. This mitigation strategy will be informed by the results of an HRA that is to be carried out to quantitatively assess the potential impacts of construction activities on the abstraction site at Beenhams Heath and site specific mitigation measures will be added to any future updates of the CEMP.

4.19 *South East Water request sight of the method statements relating to the Drainage Strategy and details of discharge consent applications as they progress in order to satisfy us prior to the onset of construction that there will be no detrimental effect on adjacent surface water courses.*

Highways England's Comment

4.19.1 Highways England confirms that draft drainage consent applications and method statements outlining proposed pollution prevention techniques will be submitted to South East Water and other relevant water authorities for their approval prior to commencement of any construction activities that could have the potential to impact water quality.

4.20 *South East Water will prepare a response to Highways England over the coming weeks outlining South East Water's current position with regard to our concerns relating to the impact of the Scheme on groundwater and surface water in advance of the receipt of the HRA in December 2015 following intrusive ground investigation work and in advance of the receipt of method statements detailing pollution protection measures and details of discharge consent applications.*

Highways England's Comment

4.20.1 Highways England acknowledges the statement above and awaits the receipt of the response from South East Water.

4.20.2 As noted above, it is hoped that Highways England will be in a position to provide the HRA by December 2015. However, this is dependent on the timely completion of the associated geotechnical investigation and the ability to access third party land.

Point 4: The draft protective provisions sent through to South East Water for consideration from DLA Piper on behalf of Highways England

4.21 *The draft protective provisions sent through to South East Water by DLA Piper on behalf of Highways England are currently under review by South East Water's legal team. Once our legal team have assessed if we consider the existing draft protective provisions to be sufficient a response will be submitted to DLA Piper on behalf of Highways England asking for these to be adapted as appropriate.*

Highways England's Comment

- 4.21.1 Highways England's lawyers have been in contact with South East Water in relation to the negotiation of the protective provisions for the benefit of South East Water, which have been provided at Part 1 of Schedule 9 to the DCO. Highways England will continue to engage with South East Water in relation to those protective provisions and awaits the receipt of South East Water's comments.
- 4.22 *South East Water would like to further take this opportunity to bring to the Planning Inspectorate's attention a scheme that is planned to expand our Keleher Water Treatment Works Site and increase output from 45MI/d to 68MI/d by 2020 (the location of this site is identified in Figure 2 within the attached maps (PDF File 'South East Water's Response to Planning Inspectorate Question 9.20 (ii) - EA SPZ Maps and SEW Site Locations'). The construction phase of this project is programmed from 2017 to 2019 and if coincident with the onset of the M4 Smart Motorway scheme may give rise to access issues resulting from increased construction traffic, in particular along Monkey Lane. DLA Piper on behalf of Highways England during their meeting on the 16th September 2016 agreed to send through the construction traffic management plan inclusive of contact details to facilitate dialogue between South East Water and the Highways Agency in the case that construction works coincide.*

Highways England's Comment

- 4.22.1 As noted above, Highways England has agreed to provide to South East Water a copy of the final Construction Traffic Management Plant ("CTMP") once it has been approved pursuant to requirement 18 at Schedule 2 to the DCO.
- 4.23 *South East Water reiterate that our primary concern is the protection of surface and groundwater resources that we abstract and subsequently treat for public water supply. Whilst South East Water support the overall objectives of the scheme to relieve congestion and improve journey times between junctions 3 to 12 of the M4, we remain concerned about the impacts the proposals could have on water resources which we rely on in order to supply public drinking water.*

Highways England's Comment

- 4.23.1 Highways England notes this concern and is of the view that the Scheme will not adversely affect surface and groundwater resources. As stated above in the response to paragraph 4.18, the Drainage Strategy Report outlines measures to maintain existing water quality by augmenting or replacing existing drainage systems where required.
- 4.23.2 In addition, as stated in the response to paragraph 4.15, an HRA is to be carried out to confirm Highways England's assessment, stated above, that the construction works will not adversely impact on the groundwater protection zones in the area.
- 4.24 *South East Water looks forward to an ongoing dialogue with both the Planning Inspectorate and Highways England through this Examination phase of the application and working together with yourselves and the Environment Agency to protect water resources, both groundwater and surface water, to ensure that the public water supply is safe-guarded in the future.*

