

M25 junction 10/A3 Wisley interchange TR010030 8.3 Statement of Common Ground with Environment Agency

Regulation 5(2)(q)
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Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009



Infrastructure Planning

Planning Act 2008

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

M25 junction 10/A3 Wisley interchange

The M25 junction 10/A3 Wisley interchange Development Consent Order 2020

8.3 STATEMENT OF COMMON GROUND WITH ENVIRONMENT AGENCY

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STATEMENT OF COMMON GROUND

This Statement of Common Ground has been prepared and agreed by (1) Highways England Company Limited and (2) the Environment Agency.

Signed

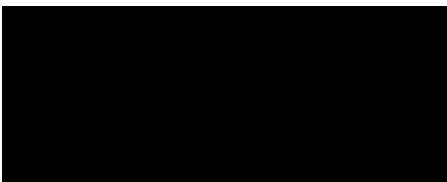


Jonathan Wade

**Project Manager
on behalf of Highways England**

Date: 28 April 2020

Signed



Clark Gordon

**Strategic Planning Specialist, Strategic Planning & Engagement (Thames)
on behalf of The Environment Agency**

Date: 22 April 2020

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1. Introduction

1.1. Purpose of this document

- 1.1.1 This Statement of Common Ground ("SoCG") has been prepared in respect of the proposed M25 junction 10/A3 Wisley interchange improvement scheme ("the Application") made by Highways England Company Limited ("Highways England") to the Secretary of State for Transport ("Secretary of State") for a Development Consent Order ("the Order") under section 37 of the Planning Act 2008 ("PA 2008").
- 1.1.2 The SoCG has been prepared in accordance with the guidance published by the Department of Communities and Local Government.¹
- 1.1.3 This SoCG does not seek to replicate information which is available elsewhere within the Application documents. All documents are available in the deposit locations and/or the Planning Inspectorate website.
- 1.1.4 The SoCG has been produced to confirm to the Examining Authority where agreement has been reached between the parties to it, and where agreement has not been reached. SoCGs are an established means in the planning process of allowing all parties to identify and so focus on specific issues that may need to be addressed during the examination.
- 1.1.5 The SoCG covers the final position as agreed with the Environment Agency (EA) as at 1 May 2020 and supersedes that submitted at Deadline 5 [REP5-004]. Although the SoCG relates to the DCO examination period only, it is acknowledged that there will be a need for further agreement between the parties during detailed design and the execution of works.

1.2. Parties to this Statement of Common Ground

- 1.2.1 This SoCG has been prepared by (1) Highways England as the Applicant and (2) Environment Agency.
- 1.2.2 Highways England became the Government-owned Strategic Highways Company on 1 April 2015. It is the highway authority in England for the strategic road network and has the necessary powers and duties to operate, manage, maintain and enhance the network. Regulatory powers remain with the Secretary of State. The legislation establishing Highways England made provision for all legal rights and obligations of the Highways Agency, including in respect of the Application, to be conferred upon or assumed by Highways England.
- 1.2.3 The Environment Agency is an executive non-departmental public body, sponsored by the Department for Environment, Food and Rural Affairs (Defra) with the stated purpose 'to protect or enhance the environment, taken as a whole'. Within England it is responsible for:

¹ Department for Communities and Local Government Planning Act 2008: Guidance for the examination of applications for development consent (2015)

- regulating major industry and waste;
- treatment of contaminated land;
- water quality and resources;
- fisheries;
- some inland river, estuary and harbour navigations;
- conservation and ecology; and
- managing the risk of flooding from main rivers, reservoirs, estuaries and the sea.

1.3. Terminology

- 1.3.1 In the tables in the Issues chapter of this SoCG, “Not Agreed” indicates a final position, and “Under discussion” where these points will be the subject of on-going discussion wherever possible to resolve, or refine, the extent of disagreement between the parties. “Agreed” indicates where the issue has been resolved.
- 1.3.2 It can be taken that any matters not specifically referred to in the Issues chapter of this SoCG are not of material interest or relevance to Environment Agency, and therefore have not been the subject of any discussions between the parties. As such, those matters can be read as agreed, only to the extent that they are either not of material interest or relevance to Environment Agency.

2. Record of Engagement

2.1.1 A summary of the meetings and correspondence that has been taken place between Highways England and Environment Agency in relation to the Application is outlined in table 2.1.

Table 2.1: Record of Engagement

Date	Form of correspondence	Key topics discussed and key outcomes (the topics should align with the Issues tables)
19.12.17	Meeting	Stage three meeting to provide an update to the scheme.
09.03.18	Meeting	Discussion regarding Water Framework Directive and impacts and mitigation on Bolder Mere and Stratford Brook.
13.04.18	Meeting	Impacts on Bolder Mere and Stratford Brook.
24.05.18	Letter	EA response to meeting minutes of 13.04.18.
02.08.18	Meeting	Discussion regarding scheme updates, soils and geology including ground investigation phasing, and temporary de-watering requirements.
15.08.18	Meeting	Discussions on water quality, with a particular focus on Phosphorus in Bolder Mere, WFD and Ecology mitigation in relation to watercourse crossings.
28.11.18	Meeting	Discussion on scheme updates, EA interests Protective Provisions, licencing and ground investigations for the DCO application.
12.12.18	Meeting	Discussion on the Statement of Common Ground, method of input and governance.
13.12.18	Targeted Consultation response	Environment Agency provided feedback on the changes made to the Scheme since the Statutory Consultation earlier in the year. This includes their confirmation that the changes to the Scheme will result in a reduced environmental impact including a more limited impact on Bolder Mere lake.
14.12.18	Letter	Receipt of EAs updated 'standard' Protective Provisions. Request for further details on scheme proposals in relation to the requirement for licences and consents.
22.01.19	Meeting	A site visit to assess the mitigation and enhancement measures for Stratford Brook.as a result of the Scheme. A set of mitigation measures were agreed and discussion was had around additional enhancement measures.
22.01.19	Site visit.	A site visit to the Bolder Mere Site of Special Scientific Interest and Special Protection Area to discuss proposed and possible mitigation

Date	Form of correspondence	Key topics discussed and key outcomes (the topics should align with the Issues tables)
		measures. Other stakeholders included RSPB and Surrey Wildlife Trust.
07.02.19	Email	Email from stakeholder engagement team seeking confirmation on status of agreement to disapply certain consents.
14.02.19	Email	Email from EA requesting information originally requested in letter of 14.12.18.
19.02.19	Email	Email from EA responding to other points in Atkins email of 7th February 2019, that did not require further information and reiterating the requirements for further information on certain permits.
22.02.19	Meeting	Discussion on the Water Framework Directive and proposals for mitigation measures.
06.03.19	Letter	Response to WFD and Water Quality Assessment from EA IEP
27.03.19	Letter	EA feedback on meeting notes from 22.01.19 and on mitigation proposals for Stratford Brook and Bolder Mere.
29.03.19	Site visit	To review mitigation proposals for scheme impacts at Stratford Brook.
10.04.19	Meeting	To update on project and programme and to discuss risk assessment methodology for land contamination in respect of DCO application.
18.04.19	Letter	EA response to WFD Assessment Report. EA are concerned with the lack of groundwater information and how the scheme may impact on groundwater resources and sensitive Site of Special Scientific Interest. They request further information (ES chapter 10) to alleviate their concerns and potential objection to the DCO.
26.04.19	Letter	Response to additional targeted consultation.
07.05.19	Meeting	To discuss feedback in letter of 18.04.19 from the EA on the WFD and Water Quality Assessment, specifically in relation to the approach to the risk assessment of potential impacts to ground water quantity in light of available data.
16.05.19	Email	Mitigation strategy and proposed amount for commuted sum to act as fall back if preferred mitigation options for Stratford Brook are not possible. Sent to EA for their consultation.
21.05.19	Email	EA provide clarification on their response to the non-statutory consultation (April/May 2019) in respect of the Stratford Brook flood modeling. They confirm that the modelling demonstrates that the bridge will not have a significant impact on flood risk, and agree with the conclusions of the model

Date	Form of correspondence	Key topics discussed and key outcomes (the topics should align with the Issues tables)
		report but state that the FRA will still need to demonstrate that the bridge will not cause an increase in flood risk, using the model results as evidence'.
22.05.19	Letter	EA response to mitigation strategy for Stratford Brook. They agree commuted sum value for the purpose of application submission, but state a) the 'reasonable cost' of works will need to be justified and b) the commuted sum should not be taken as a cap on expenditure. They also provide some clarifications/corrections for the mitigation strategy.
23.05.19	Letter	EA response ('fall-back position') in relation to A3 drainage discharge to Bolder Mere. They state that if re-routing is not feasible they expect some form of attenuation/pipe treatment/settlement that delivers better treatment than that currently in place.
05.06.19	Email	Updated ES chapters for Water Environment and Drainage (8) and Geology and Soils (10) sent to EA for their review and comment, in respect of approach to assessment of risk to ground water resources and that of contaminated land in absence of GI data.
05.06.19	Email	Summary of s150 consents, licences and permits required or not required for the project sent to EA for their consultation.
06.06.19	Email	Updated WFD report sent to EA for their review.
07.06.19	Email	Response sent to EA comments on the WFD/WQ assessment report.
10.06.19	Letter	EA confirm that they are content with the meeting note of the 07.05.19 and have no comments.
14.06.19	Letter	EA confirm that they are content with the meeting note of the 10.04.19 and have no comments. They provide feedback on the draft DCO requirements Bolder Mere, Stratford Brook and Contaminated Land & groundwater; the permits/licences/consents to be required or to be disapplied and confirm, subject to some amends that they are satisfied with the SoCG.
17.06.19	Letter	EA provide feedback on their review of Chapters (road drainage and the water environment) and 10 (geology and soils). They raise concern about the climate change allowance used in the FRA. They accept the risk assessment undertaken for groundwater and contaminated land based on the absence of GI data.
31.07.19	Meeting	Meeting to update EA on the project including DCO programme and to discuss EA feedback on the

Date	Form of correspondence	Key topics discussed and key outcomes (the topics should align with the Issues tables)
		WFD assessment, chapters 8 and 10 of the ES, water impoundment licence and the SoCG.
24.09.19	Letter	Letter sent to EA providing clarification on a number of issues raised in respect of the FRA and the WFD.
02.10.19	Meeting	With EA Water Resources team relating to requirement for water impoundment licences at Bolder Mere and Manor Pond.
08.10.19	Meeting	Meeting to review the EAs Relevant Representation and to address points raised in the EA comments log. It was agreed to update the comments log and re-issue to EA for their review.
08.10.19	Email	Summary of remaining clarifications re s150 consents, licences and permits required or not required for the project sent to the EA for their confirmation.
17.10.19	Email	EA confirm that unless a highway drain notice has been served specifying that the operation of a highway drain (where that activity might lead to a discharge) is a water discharge activity, then a WDA permit is not required.
31.10.19	Email	EA confirm water impoundment licence not required for proposed works at Bolder Mere provided Highways England do not modify or alter the current outflows or entrance to the culvert. (This would also apply to proposed works for Manor Pond).
12.11.19	Email	EA confirm that they are content with the revised Protective Provisions including the consent to disapply Regulation 12 and the need for a Flood Risk Assessment Permit.
06.01.20	Email	EA confirm that they are content for no changes to be made to Requirement 10 and that they are satisfied that the requirements they requested are provided for through the dDCO.
30.01.20	Email	EA confirm they are content with the proposed amendment to the Consents and Agreement Position Statement (APP-021) in respect of Water Impoundment Licences.
06.02.20	Email	Provision of information to corroborate the use of the FZ2 outline as a substitute for the 1 in 100 + climate change for the FRA in advance of meeting on 07.02.20.
07.02.20	Meeting	To discuss the outstanding issues in the SoCG and those raised in the EAs written representation for Deadline 3. Issue 3.1.8, 3.7.9 and 3.7.11 were agreed. EA requested further information in respect of the FRA (item 3.5.6).

Date	Form of correspondence	Key topics discussed and key outcomes (the topics should align with the Issues tables)
14.02.20	Email	Provision of further evidence to the EA to support the use of Flood Zone 2 in the FRA.
02.03.20	Email	EA respond to further evidence provided in which they question the use of Flood Zone 2 as being suitable and request further detail than the technical note provides.
04.03.20	Email	Provision of further clarification in terms of use of Flood Zone 2 and the design standard for the Scheme and request to discuss issue in a meeting
05.03.20	Meeting	Meeting to discuss outstanding issues with regards to FRA and Flood Zone 2 in which EA agree on all outstanding points in respect of the FRA. EA to confirm if the Scheme should be mitigating for loss of floodplain in the 1 in 100 flood event including the Upper End climate change allowance and whether the wording of the draft DCO ensured that any works in the floodplain would trigger the requirement for a PP approval application.
19.03.20	Email	EA confirm that they now consider all flood risk issues resolved, subject to appropriate and relevant updates being made to the submitted FRA as previously discussed. They also confirm that they are satisfied with the control they have through the PPs.
03.04.20	Letter (Written Representation)	EA state in their WR to PINS for Deadline 6 that they will confirm whether they consider all flood risk matters under their remit to be resolved once they have reviewed the updated FRA.
22.04.20	Email	EA confirm that they are content with proposed updates to the SoCG.
23.04.20	Email	Updated FRA is shared with the EA for review prior to end of examination.

2.1.2 It is agreed that this is an accurate account of the key meetings and consultation undertaken between (1) Highways England and (2) Environment Agency in relation to the issues addressed in this SoCG.

3. Issues

3.1. Water Framework Directive (WFD)

	Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
3.1.1	WFD	Scheme impacts (Groundwater resources & SSSI)	The Environment Agency (EA) are concerned with the lack of groundwater information and how the scheme may impact on groundwater resources and sensitive Site of Special Scientific Interest (SSSI) sites in the locality of the scheme.	Site investigation and risk assessment will be provided/undertaken under Requirement 13 of the dDCO. The EA have confirmed their agreement with this approach in their letter of 17 June 2019 (A.35) and at a meeting on 08 October 2019 (A.40)	Agreed
3.1.2	WFD	Assessment and proposed mitigation	Overall, the EA are now satisfied that the WFD Assessment and proposed mitigation packages are acceptable for submission for the Application, whilst noting that further details are to be submitted at later stages as noted throughout the submitted documents. In particular, the EA will be keen to review the Ground Investigation (GI) and Hydrogeological Risk Assessment (HRA), Construction and Environmental Management Plan (CEMP), SPA Management and Monitoring Plan and Register of Environmental Commitments and Actions for the Scheme, which should provide the outstanding details for the issues within the EA's remit	Noted	Agreed

	Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
3.1.3	WFD	WFD status (Stratford Brook and Bolder Mere)	Provided that the embedded mitigation, additional specific mitigation and generic guidance on the principles of WFD compliant design are implemented, the EA are satisfied that the scheme will not result in a deterioration in WFD status or prevent the achievement of good status. The EA are satisfied that the details of the package of measures to mitigate for the impacts on the Stratford Brook and Bolder Mere Lake can be secured through Requirements of the DCO, providing they can be agreed with us at detailed design	Noted	Agreed
3.1.4	WFD	Assessment scope	Overall the EA are pleased with the scope and breadth of the submitted reports, taking into account that further site investigation works need to take place before the mitigation measures can be finalised. The reports are clear and well laid out. The EA agree that Highways England have provided a proportional evidence base for the associated risk, except for groundwater.	Noted. An approach to addressing issues raised by the EA on groundwater was agreed in meeting between EA and Highways England on 07.05.19 (A24). A summary of how these issues have been addressed is presented in points 3.3.8, 3.4.3 and 3.4.4 below.	Agreed
3.1.5	WFD Assessment/Water quality assessment	Screening & scope	The EA agree with what has been scoped in and out. We agree that this scheme poses little to no risk to Drinking Water Protected Area status and is also not likely to impact on Nitrate Vulnerable Zones.	Noted	Agreed
3.1.6	WFD Assessment Comments Log (CL): 028	Stratford Brook Crossing	Paragraph 5.4.3 of the WFD report states that “the bridge deck should run perpendicular to the watercourse (to reduce shading)”. The EA are	The planform of Stratford Brook at the New Stratford Brook Underbridge is shown on Sheet 1 of the Scheme Layout Plans	Agreed

	Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
			<p>concerned that the bridge deck isn't running perpendicular to the watercourse and that this could necessitate the need for bed and bank reinforcement later down the line. Highways England should provide justification for this alignment.</p>	<p>[APP-012]. Structural details for the bridge are provided on page 57 of Engineering Drawings and Section [APP-014]. The bridge crosses a sinuous reach of the brook. Fitting this multi-curve meander shape into the rectangular shape of a bridge is a challenge that has principally been addressed by designing a bridge with a very wide span. The abutments of the span are broadly parallel with the most likely (downstream) progression of the meander under the bridge, lowering the risk of the river making contact with the bridge into the future. The design represents a sensible balance between accommodating the needs of the water environment with the alignment and constructability of the road. The EA were satisfied with this justification for the alignment of this bridge at a meeting on 08 October 2019 (A.39).</p>	
3.1.7	WFD Assessment CL 029	Stratford Brook Crossing	<p>Paragraph 5.4.3 states that "bed and bank protection should only be used where a real risk to life or critical infrastructure is apparent". This should be re-worded – the requirement for bed and bank protection should be avoided through good design, i.e. by aligning the</p>	<p>This is written as generic guidance. There will always be circumstances, particularly in high energy or constrained environments, in which protection cannot be avoided and will be required to protect life and critical infrastructure.</p>	Agreed

	Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
			<p>bridge deck so that it's perpendicular to the watercourse.</p>	<p>Highway's England will review the means by which amendments to the WFD can be made during the DCO process if considered necessary. Suggested rewording to "bed and bank protection should only be used where an erosion hazard cannot be avoided (for instance by relocating an abutment or pier) and a real risk to life or critical infrastructure is apparent". The EA were satisfied with this justification at a meeting on 08 October 2019 (A.39).</p>	
3.1.8	River Wey	Park Barn Farm Replacement Land and Sanway Flood Alleviation Scheme (Proposed mitigation)	<p>The EA note that an area of land identified by the applicant for replacement common land (a portion of the Park Barn Farm Replacement Land parcel) has also been identified by the EA as an area for floodplain compensation for the proposed Sanway Flood Alleviation Scheme (FAS).</p> <p>The EA believe that there may be construction and/or management synergies between us and the land owner/manager, as both the DCO scheme and our FAS scheme are likely to be constructed at similar times.</p> <p>Having reviewed the Statement of Reasons Appendix C: Common land and open space report (AS-002) to more fully understand the objectives of the proposed land use, the EA consider that</p>	<p>In principle, Highways England supports the Environment Agency's aspirations for the western (PBF1) parcel of land at Park Barn to have a dual use as Replacement Land for the Scheme and as floodplain compensation for the Flood Alleviation Scheme (FAS). Highways England also supports proposals to link the two schemes to improve public access in the area.</p> <p>Highways England welcomes further conversations with the Environment Agency project managers on these matters, to explore the practicalities of achieving synergies between the two schemes. In particular,</p>	Agreed.

	Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
			<p>the proposed uses for Sanway FAS (floodplain compensation, creation of wetland habitat, promotion of public access) and the Scheme, do not conflict.</p>	<p>we are keen to clarify how the programming of design and construction of the two schemes allows the synergies to be realised.</p> <p>There are some issues of practicality that will need to be included in ongoing discussions, such as: (1) The Sanway FAS proposals for the area of existing mature woodland within the replacement land. (2) The Sanway FAS proposals for the area of woodland that will remain within private ownership (that is, will not be part of the junction 10 Scheme) adjacent to the river. (3) Highways England's intention to undertake woodland planting on much of this parcel of replacement land for the junction 10 Scheme, and how much this may need to be modified by and/or delayed by its inclusion within the Sanway FAS scheme. (4) The delay to providing public access that may be caused by the Sanway FAS works.</p>	

3.2. Stratford Brook Mitigation Works

	Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
3.2.1	Stratford Brook (RR 3.2) Xref: CL: 017; 018; 019;020; 058	Mitigation measures (timescale for delivery)	The EA require further clarification from the applicant about the timescales for the delivery of Stratford Brook additional mitigation measures	The detail of the construction sequence is in Section 2.7 of the ES [APP- 049], and further work by Highways England suggests that this section will be built in March to September 2021. The feasibility studies will be included in the project programme to be completed in time to inform the detailed design.	Agreed
3.2.2	Stratford Brook	Proposed mitigation measures	<p>Although the EA accept the effect of the Scheme on Stratford Brook to be minor and localised, it is concerned that the proposed embedded mitigation does not adequately address the effect of the Scheme on the brook. The bullets below are a high-level summary of the Agency's concerns:</p> <ul style="list-style-type: none"> • The embedded mitigation comprising a widespan bridge and channel mitigation works do not fully mitigate or compensate for the impact of the new Stratford Brook overbridge on the brook. • The embedded mitigation does not follow advice in Volume 10, section 1, part 9 of HE's Design Manual for Roads and Bridges to 	<p>In addition to the embedded mitigation, the EA and HE have now agreed a strategy for delivering additional mitigation necessary to address the effect of the Scheme on Stratford Brook. This strategy is set out in Appendix F.3 and associated Table 3 in the WFD Assessment Report [APP-045].</p> <p>Requirement 12 (Stratford Brook Environmental Mitigation Area) of the draft DCO [APP-018] has been revised in agreement with the EA to secure mitigation for the effect of the Scheme on Stratford Brook and to address the</p>	Agreed

	Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
			<p>always consider incorporating mitigation for the effects of existing roads when improvements or major maintenance works are planned adjacent to watercourses. On Stratford Brook opportunities exist for improvement to fish and mammal passage through Stratford Brook culvert (North) and Stratford Brook culvert (South) as well as reducing the backwatering effect of and Stratford Brook culvert (North).</p> <ul style="list-style-type: none"> • Agreeing a prioritised list of mitigation measures • Ensuring adequate mitigation is properly secured within the draft DCO <p>Full details of discussions can be found in minutes of meetings dated 9/3/18 (A3), 15/8/18 (A7) & 22/2/19 (A17), record of a site visit of 22/1/19 (A12) and letters of 6/3/19 (A18), 27/3/19 (A19), 29/3/19 (A20), 18/4/19 (A22) and 22/5/19 (A27).</p>	<p>concerns raised by the EA on this matter.</p>	
3.2.3	Stratford Brook Culverts CL:025	LEMP (fish and mammal passage)	<p>The EA would want to ensure the final LEMP includes measures to assess the success of the potential impoundment lowering/fish passage improvement associated with the existing Stratford Brook (South) culvert.</p>	<p>These measures will be included in the final LEMP which will be updated during detailed design stage.</p>	Agreed

	Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
3.2.4	Stratford Brook Culverts CL 026	LEMP (fish and mammal passage)	The objective for 7.8 should also be to improve fish and mammal passage through the existing A3 culverts.	The objective will be updated in the final LEMP to state that Highways England will seek opportunities to implement measures that improve fish and mammal passage.	Agreed
3.2.5	Stratford Brook underbridge CL 056	Mammal ledge	EA note that the plan for the crossing do not show mammal ledges.	These are preliminary design drawings. They will be superseded by detail design drawings that will show mammal ledges. The Scheme is committed to providing the ledges in Section 7.4.38 of the Biodiversity Chapter of the ES [APP-052] and in Appendix F of the WFD assessment [APP-045] as measure SB_c). The measure is also carried through to the Register of Environmental Actions and Commitments for the Scheme, which in turn forms part of the Outline Construction and Environmental Management Plan [APP-134].	Agreed

3.3. Bolder Mere Mitigation Works

	Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
3.3.1	Affected waterbodies	Scheme impacts (findings & proposed mitigation)	<p>The WFD assessment concludes that the scheme won't cause a deterioration in any of the affected waterbodies at a waterbody scale but it does suggest there will be several minor localised effects, including increased shading/modification as a result of river crossings and encroachment of Bolder Mere Lake and the loss of associated marginal habitat.</p> <p>Although localised, these impacts must still be mitigated (or as a last resort compensated for). Where these mitigations (or compensations) are not reflected in the WFD assessment, we would expect them to be detailed in the Ecology (or similar) chapter of the Environmental Statement.</p>	<p>Agreed. The only minor localised adverse effect not addressed through mitigation reported in the WFD assessment is a temporary adverse effect on Bolder Mere (see matrices in Appendix C of the WFD Assessment, APP-045). Chapter 7 - Biodiversity of the ES [APP-052] reports no adverse long-term effects on Bolder Mere during operation of the Scheme. No adverse effects are reported in Chapter 8 – Road Drainage and the water environment [APP-053]. In summary all water body scale and localised effects of the Scheme on the water environment are addressed through mitigation.</p>	Agreed
3.3.2	Bolder Mere	Scheme impacts (loss of bank and open water habitat – justification for scheme)	<p>The widening of the A3 is likely to impact directly on Bolder Mere, including loss of bank and open water habitat. Justification is needed as to why encroachment on Bolder Mere Lake is required and why other options with a lesser effect on the lake have been ruled out.</p>	<p>During development of the Scheme a very wide range of alternative solutions for resolving the traffic problems at junction 10 have been identified, developed and assessed. This process is set out in Chapter 3 (Assessment of Alternatives) of the Environmental Statement [APP-049] and with specific reference to minimising effect on the</p>	Agreed

	Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
				Thames Basin Heaths SPA in Habitat Regulations Assessment Stage 3 record [APP-044].	
3.3.3	Bolder Mere	Scheme impacts (SSSI designation; compensation habitat)	<p>Bolder Mere has been assigned as a WFD waterbody due to the areas SSSI designation. We are therefore open to compensation for the loss of habitat being provided elsewhere on the scheme.</p> <p>We understand that Natural England have advised that further ponds could provide better habitat for the SSSI designation. We would expect to be involved – along with Natural England – in any discussions for proposals on this matter.</p>	<p>Mitigation measures to counteract the impacts on Bolder Mere have been agreed with Natural England (NE) as detailed in M25 junction 10/A3 Wisley interchange (5.4) Water framework directive compliance assessment report. Appendix F: Brief descriptions and concept sketches for additional mitigation (specific) [APP-045]. In line with the best practice of mitigating the effect of a scheme as close to source as practicable, we have been able to agree a package of measures for mitigating the effects on Bolder Mere that are immediately adjacent to the lake. Mitigation for the effects of the scheme on ephemeral headwater ditches does include pond improvements.</p> <p>Natural England agree in principle that the package of embedded and additional specific measures are a) proportionate to the risk of adverse effect of the Scheme on the Bolder Mere SSSI unit and b) have the potential to deliver additional biodiversity</p>	Agreed

	Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
				benefit.(A.23 - meeting with Natural England on 29.04.19)	
3.3.4	Bolder Mere	Scheme impacts (SSSI designation; loss of marginal habitat)	The WFD assessment acknowledges that encroachment into Bolder Mere Lake will also result in the loss of marginal habitat which is known to support a number of species for which the SSSI is designated. We support Natural England's recommendation for further macrophyte and aquatic invertebrate surveys to be carried out around the lake to better understand the distribution and abundance of key species and habitats which will help to inform an appropriate mitigation strategy.	Specialist aquatic ecological surveys have been undertaken to provide aquatic macrophyte and aquatic macro-invertebrate data from Bolder Mere. This data has been used to inform the scope for mitigating and offsetting the effects of encroachment of the A3 into the north east shore of Bolder Mere. This report Bolder Mere: Ecological Survey and Condition Assessment Summary Report (Nov 2018) has been shared with the Environment Agency and can be found in Appendix D.1 of the M25 junction 10/A3 Wisley interchange (5.4) Water Framework Directive Compliance Assessment report [APP-045].	Agreed
3.3.5	Bolder Mere	Scheme impacts (loss of marginal habitat; water quality; disturbance of lake habitat)	Compliance with the WFD status of Bolder Mere appears to be dependent on the implementation of some of the mitigation measures identified. Without these measures, the impacts are predicted to be 'adverse widespread or prolonged effect'. It is therefore critical that the proposed measures are 'firmed up' - working with the EA and Natural England - to ensure that deterioration can be avoided.	Mitigation as detailed in Appendix F of the WFD Assessment [APP-045] has been agreed with Natural England. Natural England agree in principle that the package of embedded and additional specific measures as detailed in M25 junction 10/A3 Wisley interchange (5.4) Water	Agreed

	Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
				<p>Framework Directive Compliance Assessment report. Appendix F: Brief descriptions and concept sketches for additional mitigation (specific) [APP-045] are a) proportionate to the risk of adverse effect of the Scheme on the Bolder Mere SSSI unit and b) have the potential to deliver additional biodiversity benefit. (A.23 meeting with Natural England on 29.04.19)</p> <p>The preliminary design incorporates drainage improvements that redirect road runoff away from Bolder Mere. Instead (treated) runoff will be discharged to a watercourse downstream of the lake. This will reduce the volume of pollutants generated by the A3 entering the lake.</p> <p>However, the key water quality concern for Bolder Mere from the perspective of the WFD is Phosphorus. Appendix F of the WFD assessment demonstrates that a) Phosphorus is very unlikely to be sourced from the road and b) the change in volume of the lake associated with the scheme is also very unlikely to affect the WFD Phosphorus status of the lake. Although neither the existing road or scheme are considered</p>	

	Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
				contributors to the current Phosphorus concentrations in Bolder Mere the mitigation package does still include some measures targeted at managing Phosphorus, to support achievement of WFD targets for the water body. These measures have been developed in consultation with Natural England and Surrey Wildlife Trust (SWT).	
3.3.6	Bolder Mere	Environmental management plan	The EA recommend that an ongoing maintenance plan and/or adaptive environment management plan is produced for Bolder Mere to set out more detailed plans for each mitigation measure and to monitor the effectiveness of the mitigation measures into the future and adapt approaches accordingly if required.	Paragraph 4.7.35 of the WFD assessment starting "Highways England are committed to implementation of additional mitigations..." states that the habitat improvements to the shores of Bolder Mere (BL_b), as described in Appendix F Table 2, will be maintained and monitored for a period of 15 years in accordance with the specification set out in the Thames Basin Heath SPA Management and Monitoring Plan [APP-105].	Agreed
3.3.7	Bolder Mere	WFD status	Opportunities for enhancements should be taken in line with the 25-year Environment Plan and emerging national planning policy. Waterbody enhancements should aim to address waterbody failures. Bolder Mere Lake is currently failing to achieve Good Ecological Potential due to its hydro	Mitigation has been discussed with the EA (and agreed with Natural England) as detailed in the M25 junction 10/A3 Wisley interchange (5.4) Water framework directive compliance assessment report [APP-045].	Agreed

	Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
			<p>morphology and phosphate levels – measures to address these issues should be explored.</p>	<p>Natural England agree in principle that the package of embedded and additional specific measures are a) proportionate to the risk of adverse effect of the Scheme on the Bolder Mere SSSI unit and b) have the potential to deliver additional biodiversity benefit (A.23 meeting 29.04.19).</p> <p>These measures are being implemented with the objective of maintaining and potentially improving the conservation value of Bolder Mere, with a focus on providing for the needs of species identified within the citation for the wetland elements of Ockham and Wisley Commons SSSI, and in particular the Odonata order (dragonflies and damselflies). The measures are based on adult life stages. The measures are based on recommendations from Goldsmith Ecology (2018) and follow extensive consultation with the EA, Natural England and Surrey Wildlife Trust.</p> <p>These are also recorded in the M25 junction 10/A3 Wisley interchange, Outline Construction and Environmental Management Plan [APP-134].</p>	

	Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
				<p>Highways England is committed to the implementation of these measures, or measures generating equivalent environmental benefit.</p> <p>The draft DCO [APP-018] includes a requirement (Requirement 10) which requires Highways England to agree the details of the mitigation measures for works adjoining Stratford Brook with the EA.</p>	
3.3.8	Bolder Mere Xref CL 016;	Scheme impacts (Groundwater flow)	Concern that the new retaining wall as part of the scheme design will impact on groundwater flows and could therefore disrupt one of the main water sources to the lake.	<p>The EA have reviewed the approach to the assessment of impacts on groundwater resources and SSSI as detailed in Chapter 8 (Water and Road Draining) and Chapter 10 (Geology and Soils) of the ES. Information on the approach was also presented at a meeting on 7 May 2019 (A.24).</p> <p>An assessment of groundwater flow direction and groundwater contribution into Bolder Mere will be completed following the ground investigations to be undertaken as part of the Scheme. Design of the sheet pile element will take into account the likely requirements of Bolder Mere for groundwater inflows.</p>	Agreed

	Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
3.3.9	Bolder Mere	Surface water/road drainage (Bolder Mere)	<p>Opportunities should be taken to improve the road drainage from the M25 and A3 as part of the redevelopment. In particular, the EA are keen to see the current drainage outfalls into Bolder Mere Lake altered so that they are not having such a detrimental impact on the water quality of Bolder Mere and surrounding watercourses/ditches.</p> <p>If re-routing the A3 drainage to a watercourse downstream of Bolder Mere is not technically feasible the minimum the EA would expect is some form of attenuation/pipe treatment/settlement that is above what is currently in place to at least offset the impact from the increased traffic movement/larger volume of surface water run-off to the lake.</p>	<p>Mitigation has been discussed with the EA as detailed in the <i>M25 junction 10/A3 Wisley interchange (5.4) Water framework directive compliance assessment report</i>. [APP-045]. This includes a significant upgrade to road drainage that replaces a direct untreated discharge to Bolder Mere with a treated discharge to a watercourse downstream of the lake. The design of the of the drainage solution is dependent on the outcomes of a drainage survey yet to be undertaken. The dDCO [APP-018] includes a requirement (Requirement 10) which requires Highways England to agree the details of the mitigation measures for works within the Bolder Mere mitigation and enhancement area with the EA. The dDCO also includes protective provisions for the benefit of the EA which requires the EA to consent to any works carried out under the dDCO which may affect drainage works.</p>	Agreed
3.3.10	Bolder Mere	Road drainage	<p>In section 4.7.26 of the WFD Assessment, the EA are encouraged by the plans to re-direct road runoff to downstream of the lake as this will help to ensure the salinity WFD element remains at 'High' post-construction and</p>	<p>The impact of the new outfall (reference: PO-J10-006, catchment 35) are reported in the Environmental Statement Chapter 8 Road drainage and the water environment [APP-</p>	Agreed

	Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
			reduce the risk of WFD chemical failures. It is not clear that the impact on water quality at this new discharge location has been included in any of your drainage or water quality assessments; this will need to be assessed	053], paragraphs 8.10.14 and 8.10.18 to 8.10.20. The effect of the outfall during operation of the Scheme, with mitigation in place, is negligible with a neutral significance of effect. Note that this assessment will be reviewed one site specific ground investigation data become available to confirm mitigation measures are appropriate.	
3.3.11	Bolder Mere	Construction impacts	Although only a short-term activity, there is the potential for longer term impacts associated with the suspension of solids/sediments and smothering of lake habitats important to the SSSI designation. This may pose a risk to WFD Total Phosphorus and Phytoplankton status if the retaining wall and bank sediments and associated nutrients are not controlled effectively. Due to the nature of the water environment this impact could last for multiple years after the actual construction phase. A detailed method statement should be produced for this specific element of the scheme to demonstrate how this risk will be reduced and the WFD status protected.	This is addressed within the wider environmental document set, specifically the Outline Construction and Environment Management Plan [APP-134, Section 4.8]. To make sure that this specific issue is picked up and detailed methods of work are developed for construction of the retaining wall at Bolder Mere, Highways England has also included this as a specific item in the Register of Environmental Commitments and Actions (REAC) for the Scheme.	Agreed
3.3.12	Bolder Mere CL: 007	REAC	A construction phase Surface Water Management Plan will be produced to help address the impact and risk of deterioration in surface water quality- it will be important that this includes	The construction phase Surface Water Management Plan will include measures that will ensure that Bolder Mere is not adversely affected by works on	Agreed

	Issue	Sub-section	Environment Agency Comment	Highways England Response	Status
			measures that ensure Bolder Mere does not get impacted by construction at the North Bank of Bolder Mere.	the north bank of the waterbody.	
3.3.13	Bolder Mere CL: 023	REAC and CEMP	Environmental actions relating to fish, biosecurity and a feasibility assessment for non-native invasive species in Bolder Mere should ideally be included in the REAC and outline CEMP, although these are covered in the ES.	This is already committed to in Appendix F.2 [APP-045] of the WFD Assessment and will be included in the CEMP.	Agreed

3.4. Groundwater and Land Contamination

	Topic	Sub-section	Environment Agency Comment	Highways England Response	Status
3.4.1	Ground water (quality) and land contamination CL: 010	GI data	To date there is little information that indicates the redevelopment provides a risk to the secondary aquifers on which it is located. It is noted in the report that additional site investigation work is required to determine groundwater quality and the nature of potentially contaminated sites such as Wisley Airfield. Provided this information is forthcoming the EA does not presently have any concerns with this site from a groundwater quality perspective. EA request the submission of GI assessments/data as soon as is practicable.	Based on the current GI programme, it is anticipated that the interpretative report / GQRA will be provided to the EA at the end of September 2020. Highways England will notify EA in the interim of any issues should they arise.	Agreed
3.4.2	Groundwater	Water Quality Assessment	The Water Quality Assessment Report concludes that the scheme provides a medium level of risk. We accept this in	Noted.	Agreed

	Topic	Sub-section	Environment Agency Comment	Highways England Response	Status
			part because of the nature of the receiving aquifer - mainly the Bagshot Formation. The report does however indicate that mitigation measures and further risk assessment will be required and we would concur with this approach.		
3.4.3	Geology and soils	Ground investigation and quantitative risk assessment	<p>The EA understands from recent discussions that the dewatering works that were proposed for the gas main realignment works are no longer taking place and that techniques that do not involve dewatering will be used, predominantly to avoid impacts on groundwater sensitive habitats in the area. The EA also understands that no borrow pits are proposed in the local area for the scheme. Given the above, the only outstanding issue is that ground investigation works have not yet commenced.</p> <p>If the data collected from the GI is not ready in time for DCO submission, then the ES will need to state that the data and relevant documents would be submitted to the EA for review prior to groundworks.</p>	<p>The EA has reviewed Chapter 10 of the ES [APP-055] (Geology & Soils) and the approach to GI and quantitative risk assessment. This information was also discussed at meetings on the 10 April 2019 (A.20) and the 7 May 2019 (A.24).</p> <p>The dDCO [APP-018] includes a requirement (Requirement 13) which prevents the commencement of intrusive ground works until Highways England has submitted a site investigation and risk assessment to the Secretary of State (in consultation with the Environment Agency) and it has been approved. Information from the scheduled ground investigation, along with quantitative risk assessments undertaken in line with CRL11, will be submitted to the EA for approval at a later stage as part of the detailed design and ahead of any work commencing and will be controlled through the</p>	Agreed

	Topic	Sub-section	Environment Agency Comment	Highways England Response	Status
				protective provisions for the EA's benefit within the dDCO.	
3.4.4	Geology and soils	Piling Risk Assessment	Piling Risk Assessment (PRA): No expected pathways to be created from piling so if a PRA is not deemed necessary then at the least a controlled waters qualitative risk assessment would be submitted.	A PRA will be undertaken at a later stage, once piling design is sufficiently detailed to determine a construction method for the protection of groundwater and that this is secured in the CEMP under Requirement 3 of the dDCO.	Agreed
3.4.5	Geology and soils	Mineral extraction	If mineral extraction is to be carried out then hydrogeological risk assessment may be required.	No mineral extraction will be carried out as part of the Scheme.	Agreed
3.4.6	Pollution & waste (contaminated land/water)	Pollution control (during construction)	All waste produced on-site should be taken to an appropriate authorised treatment or disposal facility.	The waste producer or holder will make appropriate checks that waste carriers hold a licence and facilities receiving waste from the Scheme are authorised to manage it.	Agreed
3.4.7	Pollution & waste	Pollution control (during construction)	All soils and construction, demolition and excavation (CDE) waste should be assessed for hazardous properties.	Construction, demolition and excavation waste arising during construction of the Scheme will be classified and assessed in accordance with the 'Guidance on the classification and assessment of waste (1 st Edition v1.1) – Technical Guidance WM3' and waste legislation.	Agreed

	Topic	Sub-section	Environment Agency Comment	Highways England Response	Status
3.4.8	Pollution & waste	DoWCoP	The EA wants to see any CLAIRE Definition of Waste: Code of Practice (DoWCoP) application in advance	Where a CL:AIRE Materials Management Plan (MMP) is required for the Scheme, Highways England will consult with the EA as required by the CL:AIRE Definition of Waste: Development Industry Code of Practice.	Agreed
3.4.9	Pollution & waste		The re-use and recovery of wastes where appropriate is encouraged.	The reuse and recovery of waste arising from construction of the Scheme will be prioritised, where practicable. A Site Waste Management Plan (SWMP) will be produced under Schedule 2, Requirement 3 (2) (c) (vii) of the draft dDCO [APP-018]. SSWMP will identify waste that can be reused and recovered.	Agreed
3.4.10	Pollution & waste	Pollution control (during construction)	All waste leaving sites should be accompanied by a relevant accurate duty of care or hazardous paperwork.	The waste producer or holder will be required to transport waste in accordance with Duty of Care requirements. This includes producing documentation for the transport of waste – either a waste transfer note or hazardous waste consignment note. These will be kept for a minimum of two and three years, respectively. This information will be recorded as part of the SWMP under Schedule 2, Requirement 3 (2) (c) (vii) of the dDCO.	Agreed

3.5. Flood Risk

	Topic	Sub-section	Environment Agency Comment	Highways England Response	Status
3.5.1	Flood risk CL: 034; 035; 037; 039; 042; 061.	Flood Risk Assessment	The EA can confirm that we consider flood risk issues resolved, subject to appropriate and relevant updates being made to the submitted FRA as previously discussed.	Highways England welcomes EA's confirmation that flood risk issues have been resolved, subject to the requested updates being made to the submitted FRA. The updated FRA has been submitted to the EA on 24 April 2020 and is provided as an addendum to this SoCG, A.55).	Agreed
3.5.2	Flood risk CL: 44, 46, 47, 48, 49, 50 & 54.	Flood Risk Assessment	The EA are further satisfied that some matters raised in their comments log in relation to the FRA have been addressed in the agreed form of protective provisions for the benefit of the EA.	The matters raised relate to requests for information (or confirmation of when the information will be available) that will be part of the detailed design. The EA wanted clarification that they would see the information and have an opportunity to comment on it. It has been clarified that through the proposed Protective Provisions included within the dDCO, detailed design information will be submitted to the EA for their approval. The comments in the log related to this matter are: 44, 46, 47, 48, 49, 50 & 54.	Agreed
3.5.3	Flood risk	Scheme impacts (River Mole & Wey; floodplain; compensatory habitat areas)	At the detailed design stage, the EA would expect to see confirmation that there will be no impacts on floodplain	Noted. This will be confirmed at detailed design phase. Approvals will be obtained for	Agreed

	Topic	Sub-section	Environment Agency Comment	Highways England Response	Status
			storage or flow routes for the proposed compensatory habitat areas adjacent to the River Mole and River Wey. Any works within 8 metres of a main river will require a Flood Risk Activity Permit.	any works within 8m of a main river through the dDCO Protective Provisions. Highways England and the EA have agreed a suitable form of protective provisions for the protection of the EA and the EA has agreed to disapply the need for FRAP.	
3.5.4	Flood risk CL: 033 (xref 043, 045; 055)	FRA (Stratford Brook)	There is reference to upgrading and straightening an existing culvert on the Stratford Brook under the slip road. Confirmation is requested as to whether this has been included as part of the modelling exercise to assess likely impacts.	The culvert is only to be strengthened, not straightened. The FRA para 2.4.13 incorrectly referred to straightening however as confirmed in the same paragraph, the internal dimensions of the culvert will not be affected. No modelling has therefore been carried out.	Agreed
3.5.5	Flood risk (RR) Xref CL: 037; 038; 039	FRA (Climate change)	Of particular concern to the EA following a review of the FRA was a lack of demonstration that appropriate allowances for climate change have been considered, unclear terminology in places and a number of assumptions made without supporting evidence.	The FRA [APP-046] has made appropriate allowances for climate change. Section 8.5.3 of the ES Chapter 8: Road drainage and the water environment [APP-053] incorrectly referenced out of date guidance. The FRA methodology has followed the appropriate current guidance (Flood risk assessments: climate change allowances, EA 2016) and has made an appropriate allowance for climate change. There are therefore no implications for the	Agreed.

	Topic	Sub-section	Environment Agency Comment	Highways England Response	Status
				<p>assessment of effects reported in section 8.10 of Chapter 8 of the Environmental Statement (APP-053). This has been discussed with the EA at the meeting on 8 October 2019 (A.39) and at the meeting on the 7 February 2020 (A47) Following this recent meeting, additional evidence to support the approach was submitted to the EA on 14 February 2020 (A48) .</p> <p>In response to additional queries from the EA (A.49) a meeting was held on 05.03.20 (A51) to provide further clarification to the EA.</p>	
3.5.6	Flood risk (RR) Xref: CL 007;021; 022; 023; 063; 065	REAC	The EA notes that within the Register of Environmental Actions and Commitments (APP-135) that they are proposed to review information related to surface water flood risk or drainage. These matters are not within our remit, so other responsible agencies will need to agree to review these details.	The REAC [APP-135] (as part of the update to the CEMP) will be amended and submitted to the ExA. Matters relating to surface water flood risk or drainage will be reviewed by the local flood authority if the dDCO is granted.	Agreed

3.6. Ecology

	Topic	Sub-section	Environment Agency Comment	Highways England Response	Status
3.6.1	Ecology	Surveys on watercourses (Otter and water voles)	All affected watercourses - including ordinary watercourses - should be assessed for their potential to support otter and water voles and surveyed where appropriate.	Otter and water vole surveys were undertaken in the summer of 2018. No water vole evidence was recorded. The only Otter evidence recorded was a spraint on the River Wey approximately 180 m east of the DCO boundary. The results are reported in the Chapter 7 (Biodiversity) of the ES [APP-052].	Agreed
3.6.2	Ecology	Aquatic invertebrates	The PEIR makes no mention of aquatic invertebrates, in particular white-clawed crayfish, which could be impacted by any physical works to the watercourses, for example river crossings. We do not hold any records of either the invasive American Signal crayfish or the native white-clawed crayfish for the Stratford Brook or other minor watercourses affected by the scheme. However, we do hold records of Signal crayfish in the main river Wey. An assessment should be made as to whether Signal crayfish could migrate between the river Wey and the affected watercourses. If it is concluded that Signal crayfish would not be able to easily migrate upstream - most likely due to the presence of a weir - then the watercourses should be assessed for their potential to support native white-clawed crayfish.	Surveys were undertaken in the summer of 2018. No evidence of white-clawed crayfish or invasive non-native crayfish were recorded in Stratford Brook. In addition, Stratford Brook was assessed as being unsuitable for white-clawed crayfish due to a lack of suitable refuges and levels of pollution. The results are reported in the Chapter 7 (Biodiversity) of the ES [APP-052].	Agreed

3.7. Draft Order, Permits, Licensing and Protective Provisions

	Issue	Sub-section	Environment Agency Comments	Highways England Response	Status
3.7.1	Protective Provisions Xref CL: 053; 057; 059	Draft Order	The EA will need to agree that the Protective Provisions included in the DCO will be sufficient to provide assurance to the EA that they can agree to disapply the requirement for obtaining separate permits and licences that might otherwise be necessary for the construction works and once the scheme is built.	Protective provisions have now been agreed with the Environment Agency.	Agreed
3.7.2	Requirement 12 Xref CL: 017; 018; 019; 020; 060	Draft Order	The EA recommend that Requirement 12 (Schedule 2, Part 1) may need to be amended to ensure it reflects the requirements laid out in other application documents.	Requirement 12 (Stratford Brook Environmental Mitigation Area) of the draft DCO [APP-018] has been revised to address the concerns raised by the EA.	Agreed
3.7.3	Requirement 10 CL: 016	Draft Order (Bolder Mere)	EA request that Requirement 10 (Bolder Mere) include the requirement to provide details of the Ground Investigations and Risk Assessment required for understanding GW flows and the potential impact that the piling works may have on Bolder Mere lake. Although this is mentioned in the REAC (which this requirement references) EA consider that it should also be mentioned specifically in requirement 10 as there could be a risk to WFD compliance if this is not properly addressed. Details of the new	Following further discussions with the EA, the EA is now satisfied that the requested requirements are already adequately secured through the dDCO and therefore consider it unnecessary to duplicate existing provisions/requirements through an amendment to Requirement 10.	Agreed

	Issue	Sub-section	Environment Agency Comments	Highways England Response	Status
			retaining wall should also be a requirement of Requirement 10 to ensure the necessary mitigation measures have been incorporated into the design.		
3.7.4	Requirement 3 CL: 015 (xref: 001)	CEMP	EA request that Requirement 3 (CEMP) includes the requirement to consult with the EA prior to approval to ensure the appropriate mitigation measures are in place to protect receiving watercourses/waterbodies. EA would request that the mechanisms by which EA will be consulted on the CEMP and/or whether EA could be listed in requirement 3 for consultation be confirmed.	An updated CEMP will be produced by the contractor appointed to build the scheme and this will be developed and shared with EA and other parties. Any specified works as defined in Protective Provisions for the protection of the EA in Part 3, Schedule 9 of the dDCO will be subject to EA's approval.	Agreed
3.7.5	Flood Risk	Flood Risk Activity Permits	Any works within 8 metres of a main river will require a Flood Risk Activity Permit.	The EA have approved the draft Protective Provision's, including the disapplication of Regulation 12 in relation to the carrying out of the flood risk activity and the need to obtain a flood risk activity permit (A.42) email of 31.10.2019)	Agreed
3.7.6	Pollution	Water Discharge Activity Environmental Permit	On the basis of the drainage improvements to be included in the scheme, the EA's initial view was that we did not consider that a Water Discharge Environmental Permit would be required. (A8, 28.11.18 meeting) However we have requested further	The EA has confirmed that no Water Discharge Activity Permit (WDA) is required. In their email of 17.10.19 (A.41) the EA state that in line with the EA Guidance on Water	Agreed

	Issue	Sub-section	Environment Agency Comments	Highways England Response	Status
			information (A11, letter dated 14.12.18) in order to make a formal decision on whether or not we can agree to disapply the need for this permit.	Discharge Activities, that highway drainage is not a water discharge activity (assuming a notice, as referenced in section 3.10 of the same guidance has not been served, specifying that the highway drain is a water discharge activity) and that therefore no WDA permit is required.	
3.7.7	Materials & waste	Waste Activity Permit	The EA have confirmed (<i>email dated 19.02.19</i>) that any waste permit which may be required during construction for treating / reuse of any manmade materials, can be applied for at a later date.	It has been agreed with the EA that a Waste Activity Permit will not be needed for the DCO and can be dealt with by the appointed contractor at a later stage if required. (A.7, 28.11.18 meeting)	Agreed
3.7.8	Water environment Xref CL; 012	Water Abstraction Permit	The EA have confirmed (<i>email dated 19.02.19</i>) that any abstraction licence which may be required during construction for groundwater dewatering activities, can be applied for at a later date.	An abstraction licence is not expected to be needed for the Scheme (as discussed in the meeting on 28.11.18, A.7).	Agreed
3.7.9	Water environment	Water Impoundment Licence	The applicant has been in direct contact with a Water Resources Senior Permitting Officer, working in our National Permitting Serviceteam to discuss potential Water Impoundment Licence requirements for works to Boldermere and/or the culvert running under the A3 (close to Boldermere). This is a separate process to planning	The EA have agreed (at a meeting on 07.02.20, A47) that a licence would not be required for Bolder Mere, assuming the Scheme does not modify structures controlling the level of water in the lake.	Agreed

	Issue	Sub-section	Environment Agency Comments	Highways England Response	Status
			<p>and we are unable to agree to disapply Water Impoundment Licences under the Water Resources Act (1991) as part of the DCO. 4.2 Our National Permitting Service have advised that any decision on whether a Water Impoundment Licence will be required will depend on the final, detailed designs of relevant structures.</p> <p>Therefore, at this time we are unable to confirm whether a Licence is required, or whether a Licence would be granted if one is required. The process for determining a Licence can take 4-6 months from the date of application.</p>	<p>Highways England will continue to work with the Environment Agency and Natural England on matters of impoundment. Through sensitive design we will address concerns about the potential impounding effect of other components of the Scheme that affect watercourses, with particular regard for water features of the Ockham and Wisley Commons SSSI.</p>	
3.7.10	Ecology	Fish (removal) licence	<p>The EA understand a licence to move fish may be required for works to Bolder Mere Lake. At present the EA are unsure whether EA's Protective Provisions will be sufficient to remove the requirement for a Permit. Permits are usually obtained by specialist contractors undertaking the specialist fish works.</p>	<p>Fish removal is likely to be a requirement as a result of works at Bolder Mere and as part of the proposed mitigation strategy to improve water and habitat quality in the lake and potentially at Stratford Brook if the proposed construction methodology changes (currently no in-channel working anticipated). The EA have indicated that permits will need to be obtained by the sub-contractor undertaking the</p>	Agreed

	Issue	Sub-section	Environment Agency Comments	Highways England Response	Status
				works at a later date and therefore it is not necessary for the dDCO to disapply this consent.	
3.7.11	Draft Development Consent Order	Article 19 – Discharge of water	<p>This Article provides the undertaker with the right, subject to reasonable consent, to make use of the existing watercourses, sewers and drains. Although it cannot override the requirements of the Environmental Permitting Regulations 2016 for a discharge permit, the clause does not expressly state this. Within a number of DCOs we have an additional clause appears within the Article to clarify this issue, this includes DCOs which are promoted by Highways England such as the A303 Amesbury to Berwick Down (Stone Henge) DCO. The old model DCO clauses (now defunct as a result of the Localism Act 2011) used to include such provision.</p> <p>We request that an additional paragraph is added: (8) “Nothing in this article overrides the requirement for an environmental permit under regulation 12(1)(b) of the Environmental Permitting (England and Wales) Regulations 2016”. This makes the need for a permit, if required, abundantly clear.</p>	<p>The following proposed amendment to Article 19 of the dDCO has been agreed with the EA: “Subject to article 3 paragraph (1)(a) (disapplication of legislative provisions) nothing in this article overrides the requirement for an environmental permit under regulation 12(1)(b) (requirement for environmental permit) of the Environmental Permitting (England and Wales) Regulations 2016”. The agreed wording will be included in Article 19 in the next version of the revised dDCO.</p>	Agreed.

APPENDICES



ITEM	DESCRIPTION & ACTION	DEADLINE	RESPONSIBLE
	issues of concern based on the information provided to date.		
4.0	Ground investigation works are scheduled to be undertaken in the new year, but the results would not be available to inform the ES. As part of the GI a number of global groundwater monitoring boreholes would be installed. █ noted that consent to abstract would be needed for the boreholes.		
5.0	Stratford Brook was noted as the most important watercourse to be affected by the works, but the stretch affected was the least interesting being slow, turbid and choked with Himalayan Balsam. █ and █ queried whether EA had modelling data for the watercourse – █ undertook to check. It was noted that remodelling with new climate change data would be required. The proposed crossing of the Stratford Brook was discussed. █ noted that the EA expect a minimum 8m buffer zone to be provided on both sides of the watercourse, with a larger buffer zone provided where possible. EA would also like improvements made to the Brook.	16 th Jan	█
6.0	Bolder Mere was discussed and █ explained the issues associated with the surrounding SPA. The proposed scheme has an NMU route alongside the A3 which would affect Bolder Mere. As it is a WFD waterbody guidance from EA is required on what mitigation they require. Currently it is classified as 'moderate' quality and there should be no deterioration. A WFD assessment would be required as part of the DCO submission. █ noted that HE Designated Funds may be available for improvements to Bolder Mere		
7.0	█ confirmed that EA were content for licences to be wrapped up as part of the DCO subject to the agreement of EA functional and legal teams.		

A.2. Meeting (09.03.18)



Meeting notes

Project:	M25 J10/A3 Wisley Interchange Improvement		
Subject:	Water Framework Directive		
Date and time:	9 Mar 2018	Meeting no.:	002
Meeting place:	EA Office Wallingford	Minutes by:	██████████
Present:	██████████ ██████████ ██████████ ██████████	Representing:	Environment Agency Environment Agency Atkins Atkins

ITEM	DESCRIPTION & ACTION	RESPONSIBLE
1.0	Introductions and apologies ██████████ (████ and █████) sends apologies	
2.0	Consultation with NE and EA Consultations undertaken so far by Atkins particularly relevant to WFD assessment: <ul style="list-style-type: none"> • ██████████ (Natural England (NE) lake specialist) • ██████████ (NE site officer) • ██████████ (EA Geomorphologist) – informal chat ACTION on █████: send notes on NE meetings through EA Consultation with LLFA (Surrey County Council) <ul style="list-style-type: none"> • Surrey CC are very likely to defer responsibility for decisions on WFD compliance on Ordinary waterbodies to the EA. ACTION on █████: email Surrey CC to confirm that they are happy to defer in this way (we are undertaking the WFD assessment in this way, is that OK?)	████ ████
3.0	WFD Classification elements – how to address these in WFD assessment <ul style="list-style-type: none"> • Effects on Biological, Physico-Chemical and Hydromorphological elements will be addressed explicitly within the WFD assessment <ul style="list-style-type: none"> ○ Effects of Specific Pollutants and Chemical Elements (Priority Substances and Priority Hazardous Substances) will be addressed through the HAWRAT (Highways Agency Water Resource 	

Next meeting:	TBA
Distribution:	All present plus ██████████
Date issued:	File ref: ██████████

NOTE TO RECIPIENTS:
 These meeting notes record Atkins understanding of the meeting and intended actions arising therefrom.
 Your agreement that the notes form a true record of the discussion will be assumed unless adverse comments are received in writing within five days of receipt.

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 EA meeting minutes 090318.docx

ITEM	DESCRIPTION & ACTION	RESPONSIBLE
	<p>Assessment Tool) review being completed as part of the water quality assessment being carried out in the ES Water Chapter¹.</p> <ul style="list-style-type: none"> Note the effect of scheme on WQ is likely to be a betterment (given that the old drainage system from the road is being improved). <p>ACTION: [redacted] to check with [redacted] (EA) that the HAWRAT assessment covers the chemical elements of relevance to Lake Waterbodies.</p>	[redacted]
4.0	<p>Approach to assessing scheme components in WFD assessment</p> <ul style="list-style-type: none"> Group assessment by water body Address scheme components in the following groups <ul style="list-style-type: none"> Scheme components that individually could have impact at waterbody scale (Boldermere and Stratford Brook crossing) to be dealt with individually and in <u>most detail</u>. Scheme components that are unlikely to have impact at waterbody scale, (e.g. culvert at east end of Elm road and NMU crossing of M25), will be addressed individually but assessment kept brief (a precautionary approach) Scheme components that are very unlikely to affect waterbody status, or for which approach to mitigation is generic, (e.g. realignments and crossings of drainage ditches, drainage of road runoff to both surface water and ground water), will be addressed generically. 	
5.0	<p>Boldermere</p> <ul style="list-style-type: none"> Small catchment area, likely that the lake is at least partially dependant on inflows direct from groundwater: two outflows (formal and informal). See map/photos in Appendix A. Scheme proposed to encroach into lake along northern shore. Not certain yet on the extent of the encroachment; design evolving to balance combination of factors, with impact on SSSI / SPA a high priority. However, the proposed scheme would likely encroach into marginal tall fen habitat and very probably open water. Consultation with NE revealed their focus to be: <ul style="list-style-type: none"> Impact on species supported by designated habitats Moving the lake towards a more natural function (hydrological regime and morphology). Improvement of water quality; NE files indicate that road runoff to lake does occur (a high priority would be to address this). Points raised by EA: <ul style="list-style-type: none"> Concerned about runoff from the A3 Consider effects of physical works (change to lake morphology) on water quality (for instance, would reducing the volume of the lake increase concentration of pollutants or would disturbance of lake bed remobilise pollution?) Be aware of Crassula present in the lake. Consider methods to manage this although aware it's difficult. Focus on modification of lake shore to create additional marginal habitat as compensation for loss of marginal habitat along northern shore. 	

¹ Design Manual for Roads and Bridges Vol 11, Section 3 Part 10 HD 45/09 Road Drainage and the Water Environment (2009) explains that the thresholds selected for HAWRAT have been developed with the EA and are consistent with the requirements of the WFD

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Plan Design Enable



ITEM	DESCRIPTION & ACTION	RESPONSIBLE
	<ul style="list-style-type: none"> • Way forward (summary of discussion) <ul style="list-style-type: none"> ○ If the scheme does affect Boldermere, we will need to clearly demonstrate that other options with a lesser effect on Boldermere have been considered, and why an option that affects Boldermere is being taken forward (e.g. avoids damage to other designated habitat, technical feasibility, safety considerations). ○ Mitigation / compensation for effect of the scheme on Boldermere would have to be carried out within the waterbody (i.e. off-site compensation is not permitted under WFD regulations). ○ A "net gain" approach was agreed as a pragmatic way forward to developing a mitigation / compensation package for the effects of the proposed scheme. This does allow for some detrimental effects to the lake, provided that these are balanced by improvements elsewhere. The improvements would need to be judged as providing more benefit than being lost to the detrimental effects. Note that the WFD does not allow for deterioration in any WFD component (e.g. biological, physicochemical, hydromorphology, supporting elements) hence "net gain" (or at least no deterioration) would need to be demonstrated for each of these components. ○ As a principle, mitigation close to the point of impact (the north shore) would be preferred to mitigation further afield. • Survey - Topographic <ul style="list-style-type: none"> ○ Survey of area around the lake and the lake shallows (within wadable depth) proposed. ○ Limited boat survey to establish deep point of lake also specified (meres have a predictable bowl shape, meaning that full bathymetry survey of very limited value). ○ Survey needs to be detailed enough around perimeter to understand profile of lake between woodland finger and lake shallows, particularly for area proposed as lost to scheme. • Survey - Biological <ul style="list-style-type: none"> ○ Proposed detail of survey in notes of meeting with [REDACTED] ○ ACTION: [REDACTED] to send through to EA. ○ These details were discussed and agreed as appropriate to the needs of the investigation. 	
6.0	<p>Stratford Brook bridge crossing</p> <ul style="list-style-type: none"> • Replacement of culvert with open span crossing welcomed by EA • [REDACTED] to visit site and come back with suggestions for potential mitigation / enhancements at site. Discussed at the meeting were: <ul style="list-style-type: none"> ○ Realignment of channel through the proposed crossing and downstream to existing culvert to improve morphology / allow mammal passage. ○ Daylighting to reduce shading ○ "Easy win" modifications to existing culverts to reduce their backwater effects ○ Bat and bird boxes ○ Facilitating mammal passage under bridge • Note – proximate historic landfill may constrain works that can be done in this area. 	
7.0	<p>Permit requirements</p> <ul style="list-style-type: none"> • Probable that all required permits (Flood Risk Activity Permits (FRAPs)) will be wrapped up within the DCO. ○ A FRAP will be required for Stratford Brook. 	

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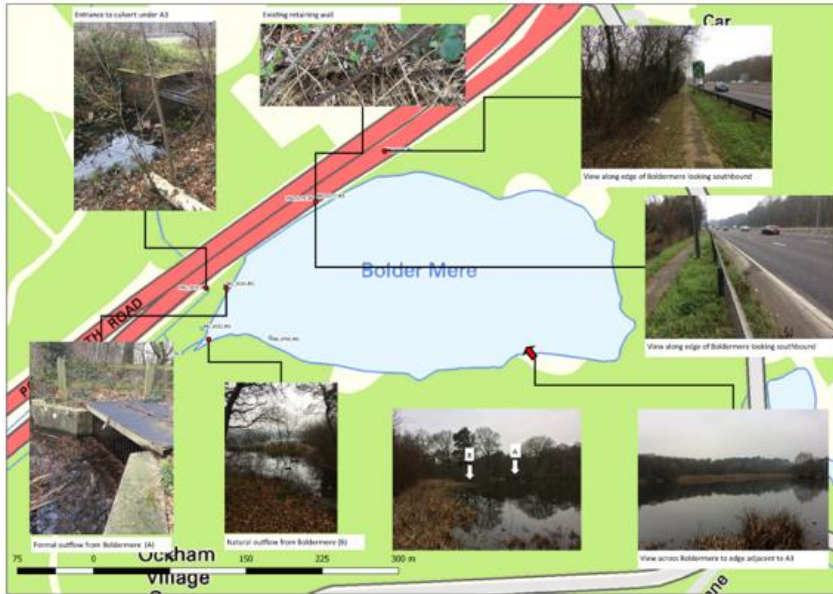
Plan Design Enable

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ITEM	DESCRIPTION & ACTION	RESPONSIBLE
	<ul style="list-style-type: none"> ○ A FRAP would only be required for the habitat compensation areas adjacent to the Wey and Mole if proposed works affected ground levels on the floodplain e.g. wetland creation. ○ Note that FRAP cover both flood risk and environmental aspects. 	
8.0	<p>Operational controls</p> <ul style="list-style-type: none"> • Compound area near Ripley roundabout needs to be set back as far as possible from Stratford Brook. • Pollution control measures need to be implemented during construction for all works in or adjacent to watercourses. • Ensure measures to manage effects on fish of in channel works are in place. 	
9.0	<p>Any other business</p> <p>ACTION: ■■■ to send copy of the WFD assessment completed at PEIR stage of project to ■■■■■</p> <ul style="list-style-type: none"> • Groundwater connectivity with Boldermere <ul style="list-style-type: none"> ACTION: ■■■ to see if groundwater team can provide any insight into this. • Formal mitigation measures HMWB <ul style="list-style-type: none"> ○ Wey – ACTION: ■■■ to put in a formal request to the EA for these measures. ○ Boldermere – the EA will not hold any measures for this HMWB • Plans for water body catchments <ul style="list-style-type: none"> ○ Refer to RBMP and Wey and Mole Catchment Partnerships. Note that Surrey Wildlife Trust is the Host Organisation for these partnerships. • Signal crayfish are known to be present on the Wey. If there is a barrier between the Stratford Brook and the Wey, a white clawed crayfish survey is recommended. ■■■■■ may be able to inform following site visit. ■■■ 	<p>■■■</p> <p>■■■</p> <p>■■■</p> <p>■■■</p> <p>■■■</p> <p>■■■</p>

Meeting notes

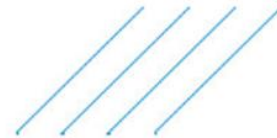
Appendix A



NOTE TO RECIPIENTS:
These meeting notes record Atkins understanding of the meeting and intended actions arising therefrom.
Your agreement that the notes form a true record of the discussion will be assumed unless adverse comments are received in writing within five days of receipt.

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A.3. Meeting (13.04.18)



Meeting Notes

Project:	M25 junction 10 / A3 Wisley interchange improvement scheme		
Subject:	Flood Risk		
Meeting place:	EA Wallingford	Meeting no:	
Date and time:	13 April 2018	Minutes by:	██████████
Present:	██████████	Representing:	EA EA Atkins

ITEM	DESCRIPTION AND ACTION	DEADLINE	RESPONSIBLE
1.	<p>Health & Safety</p> <p>██████████ highlighted the need to check vehicle road worthiness prior to setting off on journey.</p> <p>██████████ highlighted the risk of cycling/walking through flood water. Even if the path is well known to the user, there may be hidden hazards under the water presenting significant risk to life. ██████████ gave the example of erosion of towpaths next to watercourses which would lead to people falling into flooded watercourses.</p>		
2.	<p>Stratford Brook</p> <p>██████████ presented the modelling approach for Stratford Brook.</p> <p>The model is built as a Flood Modeller 1D only flood model. The topographic data used is the 2005 channel survey provided by the EA for this project and the latest lidar data.</p> <p>The inflow hydrology has been defined using the standard FEH approach.</p>		

Next meeting:

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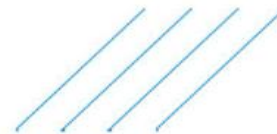
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NOTE TO RECIPIENTS:

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ea meeting fra 13 apr 2018



ITEM	DESCRIPTION AND ACTION	DEADLINE	RESPONSIBLE
	<p>Simulations have been run for the 1 in 25, 1 in 75, 1 in 100 and 1 in 100CC flood events.</p> <p>█ suggested we should obtain some check survey of the brook to validate the 2005 survey data. Unless we can provide a robust justification for using the old survey data.</p>	15/06/18	█ - Atkins
3.	<p>Bolder Mere Lake</p> <p>During the production of the FRA the review of the EA's reservoir inundation mapping showed that there is a flood extent associated with failure of Bolder Mere. The extent inundates a section of the A3 adjacent to the lake.</p> <p>█ queried whether the EA had any knowledge of the lake being classified as an impounding structure. EA unaware but █ will check.</p> <p>Atkins to review the topography around the SW corner of the lake to identify if there is any impoundment. On the basis of the outcome of this the FRA will be duly updated.</p>	<p>31/05/18</p> <p>15/06/18</p>	<p>█ - EA</p> <p>█ - Atkins</p>
4.	<p>Buxton Wood footbridge</p> <p>EA confirmed that the current model results in this area will be updated soon as a new version of the Lower Wey model will be issued in the coming months. Until that is issued we can continue to use the data from the current model. If the new model is issued prior to submission for the DCO we may need to update the findings of the FRA.</p>		
5.	<p>AOB</p> <p>EA highlighted the area proposed for habitat creation is within the River Model floodplain therefore flooding must be considered within the proposals, however if the proposals do not include changing ground levels, there should be no issue.</p>		

A.4. Letter (24.05.18)

creating a better place

 Environment
Agency

██████████
Atkins
Western House Block C
Peterborough Business Park
Lynch Wood
Peterborough
PE2 6FZ

Our ref: WA/2017/123763/03-L02
Your ref: ea meeting fra 13 apr 2018 (002)
Date: 24 May 2018

Dear ██████████,

M25 Junction 10 / A3 – Wisley Interchange – review of minutes and actions from flood risk meeting on 13 April 2018.

Thank you for sending the minutes from our 13 April flood risk meeting to us on 14 May.

There is only one minor point that we raised that has not been captured in the meeting minutes. We advised that if there are any structures (e.g. in-channel structures in watercourses) that are to be removed (e.g. for Water Framework Directive purposes), such removals will need to be reflected in any Flood Risk Assessment.

There was an action for us to provide more information about the reservoir flood risk associated with Bolder Mere:

I have confirmed with my colleague ██████████ (Reservoirs Act Coordinator - South East) that Bolder Mere is classified as a 'large raised reservoir' under the relevant legislation. The owner/operator of the reservoir is Surrey Wildlife Trust, who have appointed a Supervising Engineer for the reservoir – ██████████. It has a capacity of 65,000m³ and is currently classified as a 'Category D' (lower risk) reservoir.

We would strongly advise you to contact Surrey Wildlife Trust and the Supervising Engineer for Bolder Mere to ensure that they are aware of the proposals for the reservoir. There is a risk that the development adjacent to and of the reservoir itself may lead to a change in the risk category class, which may require (potentially substantial) changes to be made to the reservoir to ensure it can continue to operate safely – this should be discussed with the Supervising Engineer. The on-site and off-site plans should also be reviewed and updated if necessary.

I have informed our Reservoir Safety team of the proposals. If you have any further general queries for us about the proposals, our Reservoir Safety team can be contacted directly via reservoirs@environment-agency.gov.uk.

Please could you send us a copy of the final minutes with our one addition included.

We look forward to next being consulted with your hydraulic model produced for the Stratford Brook, as discussed at our meeting in April.

Cont/d..

If you have any queries about this response, please do not hesitate to contact me.

Yours sincerely,

[Redacted]
Strategic Planning Specialist

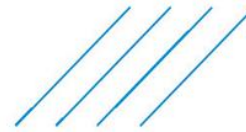
Direct dial [Redacted]
E-mail [Redacted]

cc [Redacted] - Atkins

End

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A.5. Meeting (02.08.18)

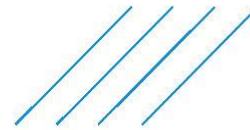


Meeting notes

Project:	M25 junction 10 / A3 Wisley Interchange Scheme		
Subject:	Environment Agency – Contaminated Land and Hydrogeology		
Meeting place:	Environment Agency, Red Kite House, Howbery Park, Wallingford, OXON, OX10 8BD	Meeting no:	1
Date and time:	2 Aug 2018 11:00	Minutes by:	Atkins
Attendees:	██████████ ██████████ ██████████ ██████████	Representing:	Environment Agency Atkins

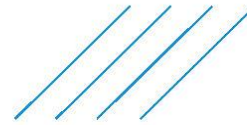
ITEM	DESCRIPTION	ACTIONS
1.	<p><u>Safety moment</u></p> <p>Highways England: Fire on verge of motorway. Spark flew as a result of a burst tire which set fire to dry crops in adjacent agricultural field. Luckily, the farmer was irrigating a field nearby and used the equipment to put the fire out.</p>	To be aware of surroundings and be conscious of potential, indirect hazards of vehicle failures.
2.	<p><u>Introduction</u></p> <p>Discussion of the scheme and the current design stage (past stage 2) and is imminently (mid-August) expected to be fixed at stage 3.</p> <p>It has been confirmed that a gas pipe requires re-routing due to limited space available for land take parallel to the eastern side of the A3. It has been proposed that the gas pipe is tunnelled beneath the A3 to the south of Boulder Mere at around 5 - 6 m bgl. Groundwater is expected to be around 6 m bgl. If dewatering is required, it could potentially impact the ecological receptors to the west of the A3.</p> <p>Suggestion made by design team to use land west of Buxton Wood as an additional borrow pit to those already confirmed. Issues with this proposed location include alluvium (if present) and potential impacts to surface water and groundwater. This proposed borrow pit location has not been confirmed by design team.</p>	<p>To provide the stage 3 fixed design to ██████ and ██████ once available.</p> <p>Waiting on further information from design team regarding the new proposed borrow pit location.</p>

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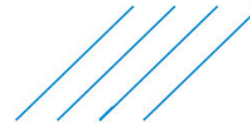
ITEM	DESCRIPTION	ACTIONS
3.	<p><u>Land contamination input into the Environmental Statement</u></p> <p>a) <u>Ground Investigation phasing</u></p> <p>A phased approach to GI has been suggested. The areas of significance with regards to contaminated land/environmental receptors to undergo GI first. i.e. proposed locations of borrow pits, land of proposed pipe diversion, historical landfill and Wisley Airfield. As all the GI will not be completed prior to DCO submission, these locations are crucial and should be assessed for DCO.</p> <p>GI to confirm depth of groundwater, monitor ground gas and groundwater with attention to historical landfills and other identified sources of potential contamination.</p> <p>b) <u>DCO conditions</u></p> <p>Proposed submission is September/October 2018.</p> <p>GI data provided within the ES (as much as possible or to a satisfactory level) to cover key areas relative to geo-enviro effects.</p> <p>If the data collected from the GI is not ready in time for DCO submission then the ES will state that the data and relevant documents would be submitted to the Environment Agency for review prior to groundworks.</p> <p>Information required regarding drainage and proposed drainage, as poor infiltration and heavily used road expected to produce contaminated run-off. SUD design/attenuation ponds etc to be detailed.</p> <p>Piling Risk Assessment: No expected pathways to be created from piling so if a PRA is not deemed necessary then at the least a controlled waters qualitative risk assessment would be submitted.</p> <p>ES G&S chapter to include info on the reason for the nearby environmentally sensitive designations i.e. if its terrestrial then any dewatering is unlikely to impact.</p> <p>Be aware of public participation of the scheme so include as much detail as possible in the ES.</p> <p>If mineral extraction to be carried out then hydrogeological risk assessment may be required.</p> <p>Confirm groundwater abstraction rate and demonstrate it will not affect ecological receptor.</p>	<p>█: Double check other services beneath the scheme.</p> <p>█/EA?: Revisit details for licence application requirements as still unsure if exempt.</p> <p>█: Has any data for Wisley Airfield been utilised?</p> <p>█: Check Wisley RHS groundwater abstraction data</p> <p>█: Advise project management team with the phased approach to the GI for DCO submission.</p> <p>█: Liaise with other teams – develop reasons for ecological designation and drainage.</p>

Contains sensitive information



ITEM	DESCRIPTION	ACTIONS
4.	<p><u>Temporary de-watering requirements</u></p> <p>a) <u>Contractors proposals</u></p> <p>For the diversion of the gas pipe: If groundwater is at < 6 m bgl, preferred method suggested by contractor is to use cofferdam, pipe jacking (10x20x20) and localised dewatering and discharge from sump pump into same stratum. Can only cofferdam entrance and exit and the centre would remain unknown so might not be ideal.</p> <p>█ happy for any localised groundwater abstracted to be discharged back via soakage however due to the relatively impermeable Bagshot beds a soakage test might be required as surface water runoff may have a higher impact.</p> <p>Currently awaiting Skanska's construction method statement which will detail groundwater management method.</p> <p>Pump testing may be required based on the proposed dewatering method (if groundwater is higher than ~7 m bgl).</p> <p>b) <u>Section 32 consent timeline</u></p> <p>For dewatering: Exemption of licence (dewatering for construction) application if the works are less than 6 months and not effecting ecological receptors within 250 m. where the abstraction is within 500 m then dewatering volume limit to decrease from 100 m³ a day to 50 m³ a day.</p> <p>Turnaround time for application after submission is 3-4 weeks. If the dewatering is limited then the licence is not required and only a soakaway licence needs obtaining.</p>	<p>█ Research groundwater flow direction</p> <p>█ Research Bagshot soakaway testing in vicinity</p> <p>█ If test pumping is required then liaise with Craig and Steve.</p>
5.	<p><u>Scheme re-design summary</u></p> <p>Confirmed proposed pipe diversion south of Boulder Mere.</p> <p>Possible design proposal for additional borrow pit west of Buxton Wood.</p>	
6.	<p><u>AOB</u></p>	None

A.6. Meeting (15.08.18)



Meeting Notes

Project:	M25-J10, Ecology, Water Quality and Water Framework Directive		
Subject:	Consultation Meeting with Environment Agency		
Meeting place:		Meeting no:	
Date and time:	15 August 2018 - 10:30-14:00	Minutes by:	
Present:	<p>██████████</p> <p>██████████</p> <p>██████████</p> <p>██████████</p> <p>██████████</p> <p>██████████</p>	Representing:	EA - Planning EA - Fisheries & Biodiversity EA Lake Specialist, Water Quality EA, Water Quality HE, Environment Advisor Atkins, Water Lead & Water Quality Atkins, Aquatic Ecology Atkins, WFD

ITEM	DESCRIPTION AND ACTION	DEADLINE	RESPONSIBLE
1.	Introductions and Apologies Apologies from ██████████ (Atkins, Terrestrial Ecology) and ██████████ (Atkins, Aquatic Ecology)		<responsible>
2.	Impacts of proposed scheme on minor water bodies <ul style="list-style-type: none"> WFD currently focusses on impact of scheme on Boldermere and Stratford Brook. Feedback from EA (EA long form letter, comment EA-E-30) asking for confirmation that potential impacts on smaller features would be considered and, where appropriate, addressed (probably through ██████████). 		Action ██████████ - share survey and any proposed actions coming out of survey with EA (e.g. whether the Boldermere receiving water course realignment is an

Next meeting:

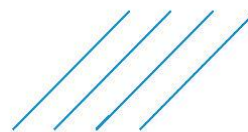
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Date issued:	16 August 2018	File Ref:	
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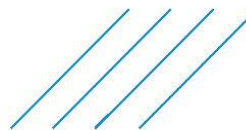
NOTE TO RECIPIENTS:
 These meeting notes record Atkins understanding of the meeting and intended actions arising therefrom. Your agreement that the notes form a true record of the discussion will be assumed unless adverse comments are received in writing within five days of receipt.



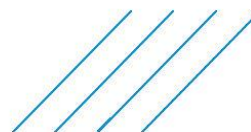
Member of the SNC-Lavalin Group



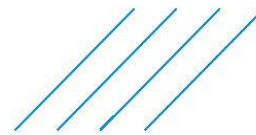
ITEM	DESCRIPTION AND ACTION	DEADLINE	RESPONSIBLE
	<ul style="list-style-type: none"> Atkins confirmed that reconnaissance surveys were programmed for water features that had been identified as potentially affected by the scheme in the WFD assessment, but not taken forward. The purpose of these surveys is to establish the ecological value of water features, the likely impact of the scheme and hence determine appropriate mitigation. The features being surveyed shown in Map 1 below. 		<p>opportunity to improve the morphology of this channel)</p>
3.	<p>Boldermere – water quality</p> <p>Phosphorous</p> <p>Boldermere is currently failing against WFD objectives for Phosphorous and Phytoplankton. As Competent Authority for the WFD, EA are therefore very keen that the scheme should not cause deterioration in P.</p> <p>There was consensus during discussions that the road network was unlikely to be a key source of P in Boldermere. However, it was agreed that Atkins should undertake a literature search to support this collective professional opinion, to provide evidence to support statements in the WFD assessment and [redacted] that there is limited opportunity to address the P failure in Boldermere through the scheme. Action [redacted]</p> <p>EA ([redacted]) have undertaken some provisional work to identify likely sources of P in the lake. Potential sources include septic tanks serving local houses. As part of this work the EA have requested monitoring on these streams.</p> <p>Other Pollutants besides P</p> <p>P currently drives failure of Boldermere against WFD objectives because P concentration in the lake is monitored. However, the project needs to make a sensible assessment of how the scheme contributes to potential failures (or improvements) against other WFD chemical targets.</p> <p>The current design of the proposed scheme redirects road runoff (previously passed to the lake) direct to the ditch taking the outflow from the lake (i.e. road runoff bypasses the lake). Assuming drainage network surveys confirm this design is feasible, it will be implemented as part of the scheme. In this case a logical written argument demonstrating improvement to WQ of Boldermere can be presented, supported by output from HAWRAT assessment. Action [redacted]</p> <p>If the drainage network surveys establish that direct discharge to Boldermere cannot be avoided, the Atkins team will re-open discussion with the Agency about mitigation measures (and associated evidence base) necessary to ensure,</p>		<p>Action [redacted]</p> <p>Action [redacted]</p>



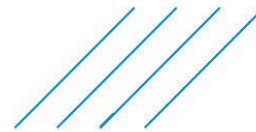
ITEM	DESCRIPTION AND ACTION	DEADLINE	RESPONSIBLE
	<ul style="list-style-type: none"> ○ Carp. Evident in a range of sizes estimated from 40 cm to as large as 85 cm (the latter a dead fish in excess of 15 kg). ○ Turkish crayfish also observed. Burrowing activity not likely to be an issue but may well act to constrain and disturb aquatic invertebrate community. ● Along the southern shore the natural hydrosere is generally good and not likely to benefit from disruption e.g. mechanical excavation works. ● A3 shoreline only significant concentration of Phragmites. <p>The current proposals to mitigate for encroachment of the scheme into Boldermere are as follows:</p> <ul style="list-style-type: none"> ● A3 shore – recreate the marginal habitat lost to scheme by replicating the existing habitat at the face of the new retaining wall. Conceptually this would be shifting the existing margins of the lake 10m into the lake (how practical this concept is will need to be developed through the design process). Action Atkins to integrate habitat mitigation works into the design of the retaining wall. Action ■ ● Southern shore – ■■■■■ advises that the Boldermere SSSI unit would benefit from development and implementation of a management plan for vegetation along the southern shore. This plan would aim to improve the marginal habitat upon which the invertebrate species for which the SSSI is designated are dependent. It is proposed to develop this plan in partnership with Surrey Wildlife Trust (owners of the site). The habitat improvements could form part of the SPA enhancement package works associated with the scheme. Potential features of the plan discussed at the meeting included: <ul style="list-style-type: none"> ○ Woodland management to reduce shading of the lake, thus increasing light to generate the marginal macrophyte communities required for various stages of the lifecycle of target invertebrates [Note reduced shading should be concentrated at the top of the natural hydrosere - the "drier" ■■■■ areas being less favoured by Crassula 		<p>Action ■</p> <p>■</p>



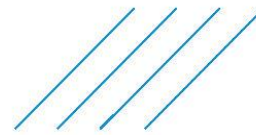
ITEM	DESCRIPTION AND ACTION	DEADLINE	RESPONSIBLE
	<p>and allowing natural colonisation of low vegetation towards the lake edge.]</p> <ul style="list-style-type: none"> ○ Physical modification of other ponds / wetland features to create additional habitat favoured by target invertebrates [note that excavation of the margins of Boldermere is not favoured because of the potential spread of Crassula and other invasives and potential unintended damage to the lake margin]. Any works would need to be agreed with SWT (and NE), who have been heavily involved in the development of mitigation, compensation and enhancement measures thus far. ○ Netting programme to reduce carp population within the lake – agreed within the meeting to be a worthwhile means of encouraging the return of the fish population of the lake to its more natural state (clearwater sliver species). Action EA (█) to provide data on the number of fish captured/removed from an earlier fish removal attempt. • Action █ – engage with SWT to develop a management plan / works schedule for creation of compensatory habitat on southern shore of Boldermere and new open water habitat elsewhere within the SPA. • Action █ – confirm invitation for Environment Agency to next Compensatory Habitat development session with SWT and other partners. Invitation to be sent to █ and he will then distribute to the relevant staff within the Agency. • There was a consensus in the meeting that the small reduction in lake volume associated with encroachment of A3 is unlikely to affect P concentration or hydromorphology of lake. However, this still needs to be demonstrated <ul style="list-style-type: none"> ○ P Concentration – mass balance based on existing concentrations and proposed reduced volume (check against WFD objectives and EQRs to confirm no risk of forcing a change in element status) Action █. ○ Hydromorphology – simple routing calculation to demonstrate minimal change in peak outflow resulting from reduced storage Action █. 		<p>Action EA (█) to provide data on the number of fish captured/removed from an earlier fish removal attempt.</p> <p>Action █</p> <p>Action █ [already done]</p> <p>Action █</p>



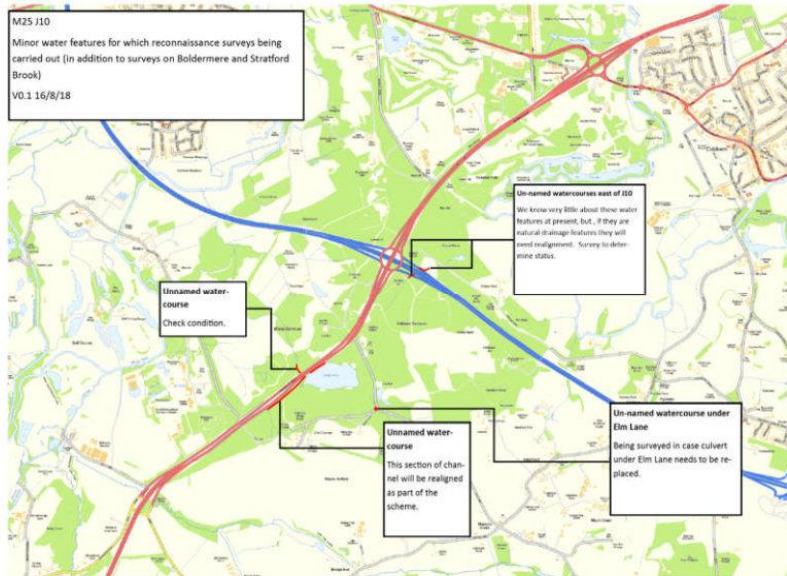
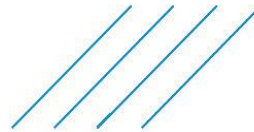
ITEM	DESCRIPTION AND ACTION	DEADLINE	RESPONSIBLE
	<ul style="list-style-type: none"> • Consenting requirements for works on Boldermere <ul style="list-style-type: none"> ○ Boldermere not main river or ordinary watercourse, hence not need for FRAP ○ Any works to move or manage fish will need consent from EA ○ Discharge of any water generated by dewatering of temporary works will need to be undertaken in accordance with regulations <p>Action [redacted] – to pass this information onto Consents Management Person on Project</p>		<p>Action [redacted]</p>
5.	<p>Stratford Brook Stratford Brook South Culvert</p> <p>The current proposal for strengthening this culvert is to construct a new independent bridge deck over the existing culvert. Under this scenario, the existing culvert will no longer be load bearing. It is probable that the base of the existing culvert has no structural function and is not reinforced. Hence, an initial assessment suggests it may be possible to break out the base of the existing culvert (or a channel say 1 ½ to 2m wide in the middle of the culvert base) to reduce the impounding effect of this structure on the upstream watercourse.</p> <p>Action [redacted] – to register the environmental benefit of breaking out the base of the culvert with Structures Team ([redacted], Atkins).</p> <p>Action [redacted] – to determine whether an additional modelling run needs to be completed to account for absence of base of this culvert in Flood Risk Assessment ([redacted], Atkins)</p> <p>Wisely Lane Bridge Full span wide structure well received by Agency.</p> <p>Mammal Passage Existing culverts under the A3 and its slip roads as well as the new bridge proposed by the scheme under the Wisely Lane Extension present a barrier to mammal movement along the Stratford Brook. The project team and Agency have very little data with which to assess the importance of the Brook as corridor for movement of mammals (e.g. otter water vole). Best practice would be to install a mammal shelf on Wisely Lane Bridge as part of implementation of a new crossing.</p>		<p>Action [redacted]</p>



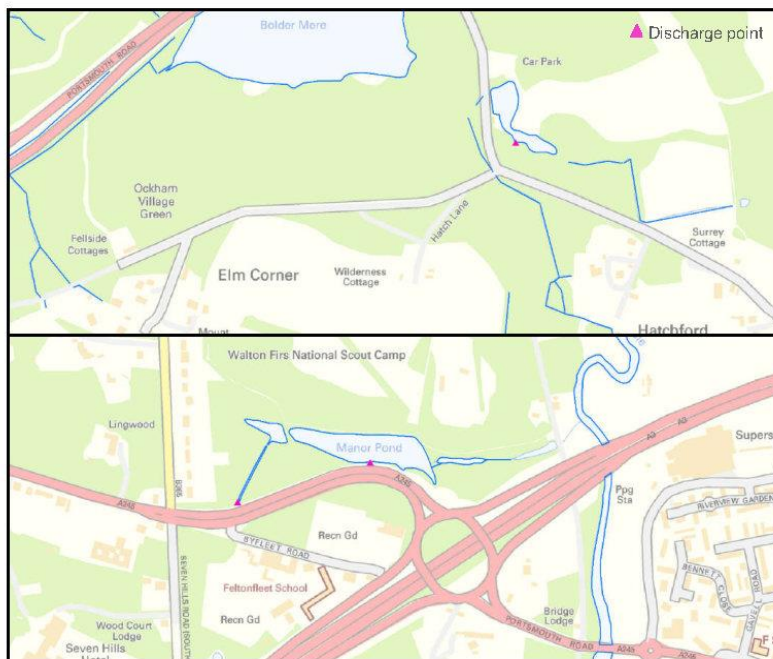
ITEM	DESCRIPTION AND ACTION	DEADLINE	RESPONSIBLE
	<p>The Agency would welcome the construction of mammal shelves within the existing culverts under the A3 and slip roads.</p> <p>Action ■■■ – investigate feasibility of mammal shelves under A3 culverts and how to register need for mammal shelf on Wisely Lane Bridge with structures team</p> <p>Channel improvements downstream of A3 crossing</p> <p>The channel downstream of the A3 crossing is straight and of uniform cross section. It is also heavily shaded. Potential that simple restoration works within this reach could significantly improve this habitat.</p> <p>Including these restoration works as part of the scheme are likely to be viewed as an enhancement by the wider project team.</p> <p>Action ■■■ – explore opportunities for funding restoration of this section of channel as part of the scheme.</p> <p>White Clawed Crayfish Survey</p> <p>It was agreed by Agency and Atkins that survey for white clawed crayfish on Stratford Brook in vicinity of the A3 crossing would not be necessary PROVIDED that inspection for white clawed crayfish was carried out immediately prior to all works in channel. A Precautionary Method of Working statement for inspection (and local relocation from outside the footprint of any works) would be needed.</p>		<p>Action ■■■</p> <p>Action ■■■</p>
6.	<p>Drainage Strategy</p> <p>The scheme is adapting an existing road drainage network, rather than creating a new one. This existing drainage network discharges to some existing ponds / lakes (see map 2 below)</p> <p>Reconfiguring the existing road drainage network to direct runoff to (flowing) ditches would be difficult. The Atkins team propose to continue the discharge to the ponds (except for Boldermere), but will ensure that the discharge rates generated by the new scheme do not increase above the baseline condition and that the quality of discharge is maintained or improved.</p> <p>The potential impact of the road drainage on the water environment will be assessed using guidance from the Design Manual for Roads and Bridges (DMRB). The guidance (HD 45/09 (DMRB, Volume 11, Section 3, Part 10)) states that road discharges must not be made into lakes, ponds or canals. Where road drainage will</p>		<responsible>



ITEM	DESCRIPTION AND ACTION	DEADLINE	RESPONSIBLE
	continue to discharge into ponds / lakes there will be non-compliance with the DMRB		
7.	<p>Qualitative nature of WFD assessment</p> <p>Feedback from the EA on the WFD assessment included a comment that future versions of the document should be more quantitative. Future versions of the assessment (and [REDACTED]) will provide more quantitative assessment on matters of water quality through presentation of results of a HAWRAT assessment for management of runoff from roads. See earlier suggestions in these notes for provision of simple evidence base for effect of change in Boldermere lake volume of P concentration and outflows.</p>		
8.	<p>AoB</p> <p>In meeting of 2/8/18 EA ([REDACTED]) and Atkins ([REDACTED]) discussed the need to locate a source for a substantial volume of gravel for use in construction of the scheme. A site on the Wey floodplain was mentioned by Atkins as a potential source</p> <p>Action [REDACTED] - feedback to [REDACTED] that the regulations governing gravel extraction on the floodplain are stringent, and that, if this or other sites are being seriously considered by the project early consultation with the EA is strongly recommended to ensure regulatory requirements are properly addressed and accounted for in the project programme</p>		Action [REDACTED]

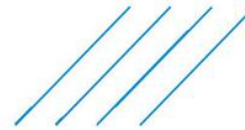


Map 1



Map 2

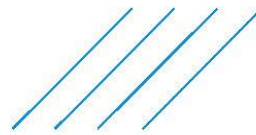
A.7. Meeting (28.11.18)



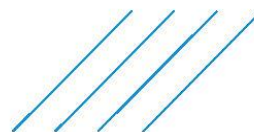
Agenda

Project:	M25 Junction 10/Wisley Interchange		
Subject:	Environment Agency – 28.11.18		
Meeting place:	DEFRA, Nobel House, 17 Smith Square, London, SW1P 3JR	Meeting no:	
Date and time:	28 November 2018 15:30	Minutes by:	██████████
Attendees:	██████████ ██████████ ██████████ ██████████	Representing:	Environment Agency Atkins Atkins Atkins Atkins

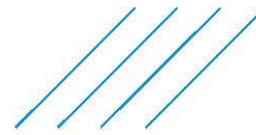
ITEM	DESCRIPTION	RESPONSIBLE
1.	Welcome and introductions	All
2.	Health and safety moment	All
3.	<p>Scheme updates</p> <p>████ confirmed that the targeted consultation documents were received.</p> <p>████ provided an update to the changes of the scheme, following feedback from the Statutory Consultation undertaken at the beginning of the year. These included reducing the size of the J10 roundabout, removing some of the over-bridges and adjusting the Non-Motorised User (NMU) routes and access roads, including changes to the access route at Painshill Park.</p> <p>One of the focus points looked at the impacts at Bolder Mere and work was undertaken to minimise the amount of widening required. The route will now be relocated on the west side of the A3.</p> <p>████ commented that the changes are positive for Bolder Mere and for the scheme in general and had no significant comments to make.</p> <p>████ explained that the scheme now includes information on construction compounds.</p> <p>Running parallel to the review of stakeholder feedback, cost estimates were being reviewed and an exercise was carried out to assess where money could be saved. This resulted in Design Fix 3 which is likely to be taken forward at the Development Consent Order (DCO) application.</p>	



4. Discussion on Environment Agency (EA) assets
- █ confirmed that he did not consider that there would be too much of an impact on EA interests. █ queried the extra construction material required and the requirement for a borrow pit, as recently discussed with the EA. █ confirmed that at this stage this is not an option and that construction materials will be imported from a rail head at Woking
- █ highlighted that the EA is reviewing the impacts to Stratford Brook and will provide comments on this shortly.
- █ explained that although still in the scheme design, the flood storage area will be removed following feedback from the EA. There had been uncertainty on whether this was required previously and was included until confirmation that by EA that it was not required.
- █ referred to discussions taking place between the EA and █ regarding the proposals at Bolder Mere. █ confirmed that the engagement is going well and was content with the proposed approach.
- █ highlighted ground investigations (GI) and asked for further confirmation that the EA is content that GIs are not required for the DCO submission. █ confirmed that this is the case.
- █ said that █ at the EA does not believe that this approach is ideal but █, the EA contaminated land specialist who manages the Thames area (within which the majority of the scheme falls), is satisfied. █ indicated that with regards to J10 █ has differed to █ to make the decision.
- █ explained that the perspective is that there is a low risk of land contamination.
- █ said that due to the presence of the Special Protection Area (SPA) and the requirements to produce a Habitats Regulation Assessment for a DCO submission, all impacts need to be quantified, this is not possible until a GI is completed. As GI data is not available a constraint will be included so that ground water levels outside of the red line boundary will not be affected. Discussions have taken place with the contractors about how work can be undertaken around this.
- There was a discussion on prioritising areas for GIs. █ explained that it is possible that priority areas will be removed as the GI works need to get started and this will be done on land that is accessible and/or access has been granted. If possible, the GI works will commence at Ockham. Contractors have already done walkovers and some of areas are not freely accessible and will require clearance.
- █ said that as long as the EA has some assurance in the application then that will be acceptable. █ explained that wording has been prepared that effectively says that the GI works will go into the order. The wording states that the appropriate risk assessments will be undertaken in line with CRL11 and that these will be submitted to the EA and relevant local authority ahead of any work commencing. These will also be written into the DCO requirements.
- █ requested that the EA be sent the wording for review.
- █ added that under the current programme the GI reports will not be completed until 2020 after the Examination.



ITEM	DESCRIPTION	RESPONSIBLE
	<p>asked if the EA would like to see the Environmental Statement ahead of submission. stated that this is not necessary. If Highways England wished for input the EA is happy to review but there would be a charge for time and resources.</p>	
5.	<p>Consents and licenses updates</p> <p>confirmed that Flood Risk Activity Permits can be included in the DCO. said that protected provisions will be prepared for the</p> <p>referred to the deemed approval given under the East-West rail scheme - the EA is pushing back against Network Rail on this and believe it should now be deemed refusal.</p> <p>explained that 'deemed approval' after two months for the GI has been included in the wording.</p> <p>explained the wording in the template Protective Provisions is for 'deemed approval'.</p> <p>did not consider that a Water Discharge Environmental Permit will be required as the scheme is not polluting with pollution prevention measures.</p> <p>explained that the EA planned for drainage improvements and knows that these will be included in the scheme. On this basis it was agreed a Water Discharge Environmental Permit will not be required.</p> <p>The Waste Activity Permit and Water Abstraction Permit were discussed. It was agreed that these will not be needed for the DCO and can be dealt with by the contractor at a later stage.</p> <p>noted that abstraction licensing is about to move into Environmental Permitting Regulations.</p> <p>confirmed that unless EA is changing limits, the scheme will be within these.</p> <p>asked if a Water Impoundment Licence will be required or if works can be tied up in the DCO application. A replacement retaining wall by the A3 at Bolder Mere and works to the existing earth dam at Bolder Mere would be required. confirmed that this could be included as part of the DCO</p> <p>asked if there is a need for a Ground Water Activity Permit to discharge water from a soakaway into ground water. Until the GI works are undertaken it is not known if this will be required.</p> <p>ACTION: to check if a Ground Water Activity Permit is required.</p> <p>asked if a licence is required to move carp out of a pond at Bolder Mere and relocate.</p> <p>ACTION: to check if a license is required and advise.</p>	



ITEM	DESCRIPTION	RESPONSIBLE
6.	<p>Protective Provisions</p> <p>█ explained that where consents can be included in the DCO, Protective Provisions are to be offered, It is important that the EA is satisfied with the text. No work would be started before the relevant details are shared with the EA. A request was made that the EA provide comments to the protected provisions by 07 December as this is when a draft version of the DCO will be submitted to PINs for review.</p> <p>ACTION: █ to share a word copy of the template Protective Provisions wording with the EA via email.</p> <p>ACTION: █ to review and discuss with legal advisors</p>	█
7.	<p>AOB</p> <p>█ provided information on the Statement of Common Ground schedule – █ will prepare a draft version of the SoCG and share with █ ahead of the meeting scheduled for 12.12.18.</p> <p>█ referred to the Cost Recovery Agreement. The EA has approximately thirty hours left on J10.</p> <p>ACTION: █ to send across updated costs and timings.</p>	All

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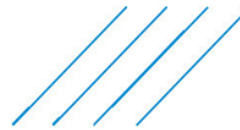
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A.8. Meeting (12.12.18)

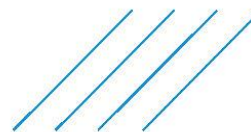


Meeting Notes

Project:	M25 J10 / Wisley Interchange Scheme		
Subject:	Environment Agency meeting notes – 12.12.18		
Meeting place:	Telephone meeting	Meeting no:	
Date and time:	12.12.18	Minutes by:	██████████
Present:	██████████ ██████████ ██████████	Representing:	Environment Agency Atkins CJ Associates (for Atkins)

ITEM	DESCRIPTION	RESPONSIBLE
1.	Welcome and introductions	All
2.	Health and safety moment	All
3.	Statement of Common Ground aims and objectives ██████ talked through the aims for the Statement of Common Ground (SoCG) and what we hope to achieve and when.	██████
4.	Timeline ██████ confirmed that the Development Consent Order submission is planned in early 2019 so over the next few months it is hoped that the issues and concerns identified will be resolved or marked as 'disagreed' prior to this.	██████
5.	Environment Agency governance ██████ confirmed that this will be signed off by him or the planning team leader. Anything that is legal will have to go to the legal team – it can be quite difficult to get a quick response from them.	██████
6.	Environment Agency SoCG experience ██████ confirmed that he has been involved with SoCGs before.	██████

NOTE TO RECIPIENTS:
 These meeting notes record SNC-Lavalin understanding of the meeting and intended actions arising therefrom. Your agreement that the notes form a true record of the discussion will be assumed unless adverse comments are received in writing within five days of receipt.



ITEM	DESCRIPTION	RESPONSIBLE
7.	<p>Key Environment Agency issues</p> <p>Ecology – although there has been a resolution to what is going on in terms of mitigation and there has been agreement on Scheme mitigation there need to be further details. The EA needs to provide Atkins with recommendations that have been discussed on net gain delivery of Stanford Brook.</p> <p>Flood Risk – the EA is happy with everything that has been submitted to date and all that is needed is around the detail.</p> <p>Ground Investigations – As these have not started provisions will be required in the DCO that works will be undertaken satisfactorily.</p> <p>Water Framework Directive and water quality, particularly around Bolder Mere – detail is required about the water quality assessments. [REDACTED] explained that there have been some issues with the smaller water courses.</p>	[REDACTED]
8.	AOB	All

A.9. Targeted Consultation Response (13.12.18)

creating a better place



██████████
Stakeholder Engagement Team
Highways England
M25 J10 / A3 Wisley Interchange

Our ref: WA/2018/125963/01-L01

Date: 13 December 2018

Dear ██████████,

M25 J10 / A3 Wisley Interchange - Targeted Non-Statutory Consultation - November 2018

Thank you for consulting us with the revised plans following changes to the scheme.

We are pleased to see that many of the changes will result in a reduced environmental impact compared to the previous proposals, including a more limited impact on Boldermere lake through the re-design of the scheme.

We do not believe that any of the changes proposed in this consultation raise any new issues to those that we have been discussing during the pre-application process, and set out again below for clarity.

Flood risk

We note that 'Key Change 5' states that a new flood compensation area was to be provided for the Stratford Brook. However, we understand from further discussions since the consultation was released that this compensation area is no longer required. This will need to be sufficiently demonstrated in the Flood Risk Assessment accompanying the Development Consent Order (DCO) application.

Additionally, the plans show areas that have been highlighted for habitat compensation adjacent to both the River Wey and the River Mole. It is unclear whether these compensation areas are simply land to be opened to the public, or whether any habitat enhancement works are planned. In flood risk terms, we would like to stress that no loss of floodplain storage should result from any works in the floodplain on these sites, which could include land raising or the storage of materials. Any works within 8 metres of a main river will require a Flood Risk Activity Permit from us.

Ecology

In the introduction to the consultation brochure, one of the environmental design objectives for the scheme is to "*avoid, reduce, mitigate and/or compensate for any significant adverse effects or substantial harm...*". We believe you should be stronger with your message and commit to achieving a biodiversity net gain for the scheme.


We are currently liaising with Atkins for potential net gain schemes on the Stratford Brook through the Environment Designated Fund. We also note in the consultation brochure that you are also providing a 'green bridge' over the A3, which appears to be an enhancement project rather than mitigation, which could also contribute towards the scheme's overall net gain.

We would strongly support this commitment to achieving net gain in support of the government's ambitions for new development as set out in the 25 Year Environment Plan.

Cont/d..

A.10. Letter (14.12.18)

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Environment Agency

██████████
C J Associates
26 Upper Brook Street
London
W1K 7QE

Our ref: WA/2018/125863/01-L01
Date: 14 December 2018

Dear ██████████

Follow-up to initial legal meeting for M25 J10 / A3 Wisley Interchange – Meeting date: 28 November 2018

Thank you for your time at our meeting at Nobel House, London on 28 November to discuss updates to the M25 J10 project and to begin discussions on the legal matters for the Development Consent Order (DCO) application.

Firstly, we would like to confirm that we received your copy of the draft Protective Provisions, which was sent to us by ██████████ on 3 December. As I mentioned in a recent call to you, our legal team have now produced a set of 'standard' EA Protective Provisions (PPs) and I have attached these to the e-mail with this letter. These updated PPs reflect recent updates to legislation (e.g. Environmental Permitting Regulations) and we would expect these updated PPs to be used as the basis for the PPs to be included in your DCO application.

At the meeting, we discussed some of the other licences/consents (beyond Flood Risk Activity Permits) that may be required for the scheme:

Impoundment licence: We understand that this is for impoundment works on the weir structure on Boldermere lake. I have spoken to my colleagues in our Integrated Environment Planning team who would deal with applications for these licences, and they have confirmed that without further details of the exact proposals, they are unable to confirm whether a licence would be required but have stated that one is likely to be required.

We would appreciate if you could send us further details of the impoundment proposals, so that we can review these and determine whether a separate licence application will be required, or whether our PPs will be sufficient to address our concerns.

Further details about impoundment licensing can be found on the gov.uk website at: <https://www.gov.uk/business/environmental-management-water-impound-store-water>.

Discharge consent: We understand from the meeting that you are unsure whether a discharge consent will be required for discharging road runoff drainage to groundwater and/or surface water. Firstly, please be advised that discharge consenting now falls under the Environmental Permitting Regulations.

Again, it would be helpful if you could send us further details of the proposals for groundwater/surface water discharge, so that we can determine whether an

Cont/d..

A.11. Site Visit (22.01.19)



Meeting Notes

Project:	M25-J10 Scheme		
Subject:	Measures to mitigate the effects of the scheme and provide enhancement on Stratford Brook		
Author:	[REDACTED]		
Date:	22/01/2019 1215-1300	Project No.:	5158141
Attendance	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]	Representing:	Environment Agency Atkins Atkins Atkins Environment Agency Atkins Atkins

1. Purpose of meeting

A new bridge over the Stratford Brook and its floodplain is proposed to accommodate a new access to Wisley Lane. The December 2018 version of the WFD assessment for the scheme records the effects of this proposed structure on the water environment as follows:

"The structure is expected to have minor localised adverse effects on a) the macrophyte and phytobenthos quality element (shading reducing photosynthetic activity); b) the macroinvertebrate quality element (loss of habitat resulting from reduction in / loss of aquatic and riparian vegetation) and c) the hydromorphological quality element (simplification of riparian zone associated with shading and footprint of structure)." [section 4.7].

ES assessment of impact is as follows:

In the absence of mitigation, the ES assessment will report the potential for significant effects on the ecological and morphological function of the watercourse. This is due to the placement of a new crossing structure over a section of the watercourse which currently exhibits good watercourse and riparian habitat complexity (within the context of the wider watercourse). Effects relate to loss of riparian trees and concomitant reduction in habitat connectivity and the effects of deck shading on in-channel aquatic communities.

This new bridge to accommodate access to Wisley Lane is immediately upstream of the A3 Wisley interchange. Existing structures accommodate Stratford Brook as it flows beneath the interchange. Road strengthening works are required on one of these structures (the 'Stratford Brook South' culvert that supports the southern slip road over the brook). No works are proposed as part of the scheme on the other structure (a culvert carrying the brook beneath the main A3 and southern slip road).

This note records the outcome of a discussion on measures necessary to mitigate the residual effects of the bridge accommodating the new access to Wisley Lane, and the potential for enhancements to the water environment within the confines of the Scheme boundary that could be incorporated into the Scheme.

2. Outcome of discussion

It was agreed that the following mitigations would be implemented as part of the scheme:-

- Mitigation embedded into the design of the bridge accommodating the new access to Wisley Lane. This will be a wide-span structure that retains the existing natural plan and cross-sectional form of the watercourse.
- Replanting of riparian trees that will be lost because of ground clearance works required for construction of the new crossing structure, reinforcement of Stratford Brook south culvert and access to watercourse/riparian restoration areas.
- Provision of a mammal shelf under the new access to Wisley Lane to accommodate movement of mammals underneath this new structure. This mitigation is only required if passage cannot be achieved on dry land under the bridge during the 100-year climate change flood event.
- Tree and scrub clearance within the riparian zone of the brook and red line boundary of the scheme upstream of the A3 crossing to improve light conditions within the channel, potentially increasing marginal and in-channel aquatic vegetation and in turn increasing habitat variability for macroinvertebrates and fish. Such works would need to be undertaken in a way that serves the interests of the both the river and the Stratford Brook section of Wisley Airfield SNCI.
- Watercourse physical habitat restoration, namely the creation of backwater habitats and addition of large wood features, to improve physical habitat complexity and provide refuge for aquatic species.

The Environment Agency would prefer to see additional measures to mitigate the effect of the bridge accommodating the new access to Wisley Lane and would encourage Highways England to provide environmental enhancement as part of the scheme. Highways England view is that the above measures are probably appropriate to mitigate the effect of the scheme; however, they are prepared to incorporate further measures provided these generate sustainable benefit to the water environment at reasonable and affordable cost. The principal barrier to determining whether additional measures can be implemented as part of the scheme is technical information on the form, dimensions and material composition of existing structures. Hence it was agreed that, once this information become available as during detailed design of the scheme, a feasibility investigation would be undertaken by Highways England into the measures bulleted below, and the outcome of this study would inform a final agreement on the mitigation / enhancement measure package.

- Removal/modification of the sill within the Stratford Brook South Culvert to remove flow impoundment and facilitate fish passage.
- Retrofitting a mammal pass solution within the Stratford Brook South Culvert.
- Modifications to the culvert passing between the A3 and the northern slip road to improve fish and mammal passage.
- Management of the invasive non-native species Himalayan balsam (*Impatiens glandulifera*) along the reach.

A.12. Meeting (22.01.19)



Meeting Notes

Project:	M25-J10 Scheme		
Subject:	Notes on Boldermere Site Meeting		
Author:	[REDACTED]		
Date:	22/01/2019 1300 to 1600	Project No.:	.
Distribution:	[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] cc [REDACTED] [REDACTED] [REDACTED] [REDACTED]	Representing:	Surrey Wildlife Trust Surrey Wildlife Trust Environment Agency County Recorder, Odonata Atkins Atkins Atkins Natural England Environment Agency Atkins Atkins

1. Purpose of meeting

To review proposed options for mitigating and offsetting the effects of encroachment of the A3 into the NW shore of Boldermere. These options are set out in Section 6 of the Ecological Survey and Condition Assessment report produced by Goldsmith Ecology (November 2018, Appendix A).

2. Outcome of meeting

Considered in conjunction with the amendments (section 3 below), it was agreed by those in attendance that Section 6 of the Ecological Survey and Condition Assessment report produced by Goldsmith Ecology sets out an appropriate scope for mitigating and offsetting the effects of encroachment of the A3 into the NW shore of Boldermere. All recognised that further detail on these measures would need to be developed during future design phases of the project.

Additional actions coming out of the meeting are presented in section 4 of these notes.

3. Amendments

Area 8 works; northern shore

Any works within Area 8 on the northern shore should be undertaken in a manner that maintains a barrier to site users, in so much that easy access for visitors to the lake shore is not facilitated and that the overhanging branches (at the lake scale) are maintained at the prescribed % cover for favourable condition. It was noted that the overhanging branches also provide shelter and screening for wildfowl using the lake.

Area 8 works; south-east corner (board-walk area)

Noted that this was one of the best stands of alder carr present on site and that the understory, dominated by *Carex* spp., had high intrinsic ecological value. Tree works within this area should be avoided as to not compromise existing habitat structure.

Area 8 works; eastern shore

Opportunities to roll back the existing *Phragmites* reedbed through the reduction of shading checks caused by the presence of mature trees (oak and birch) were discussed. It was thought that the reedbed was unlikely to extend landward much beyond its present limit due to drier ground conditions. Tree works within this area are therefore not advisable.

Area 6

A small number of self-seeded Rhododendron (approximately 6No. plants) were observed in the area during the walkover. Agreed that these should be removed and/or treated to prevent further establishment. These works are in addition to the management for this area identified in the Ecological Survey and Condition Assessment report (Appendix A).

Area 4 works

Although there was evidence of recent management, many small saplings (mainly birch) were becoming established in the *Molinia* heath within the area. Noted that the samplings were currently of a size that could be dug up from the area. Also, noted by SWT that the fringe of birch on the landward side of the heath area were encroaching and that these could be removed (to increase the size of the open area) without affecting lake screening.

Noted that dead wood on ground is a valuable habitat resource. Some or all cleared trees should be retained as dead wood in the area (e.g. as stacks, hibernacula or just felled trees in situ).

Management of invasive non-native species (INNS)

The Ecological Survey and Condition Assessment report (Appendix A) sets out actions for management of INNS. Mitigation / offsetting for the effects of encroachment of the A3 into the NW shore of Boldermere should contribute to these actions as follows:-

- A management programme to reduce/remove the existing carp (and bream, if present) population(s) in Boldermere. Carp are noted as a potential constraining factor on lake habitat function through their effects on clear water habitat function.
- A feasibility assessment of the likely effectiveness of implementing a management plan for the following invasive non-native species known to be present in Boldermere: narrow-clawed crayfish (*Astacus leptodactylus*); New Zealand pigmyweed (*Crassula helmsii*) and Nuttall's waterweed (*Elodea nuttallii*). This assessment will inform how SWT could address these species over the long term.

4. Additional actions

Screening between A3 and Boldermere

Request from SWT that formal screening between road and lake should be provided as part of the M25-J10 scheme by HE along the NW shore of Boldermere. The reduction in traffic noise generated by this screening would improve the habitat potential of Boldermere, and in particular the translocated reed bed. **Atkins (██████████) agreed to pass this request back to HE.** Atkins also confirmed that willow would be replanted between the new reedbeds and the re-aligned road as part of the mitigation works along the NW shore (see section 6.1. of the Ecological Survey and Condition Assessment report for details) i.e. if formal screening could not be justified as part of the scheme the replanted willows would, in time, create a screen.

Enhancement of water features on Replacement Land and in Enhancement Areas

Brief descriptions and concept sketches of measures to mitigate for the effect of the scheme on minor watercourses (e.g. road side drains) are set out in Appendix F of the WFD assessment for the scheme (copy in Appendix B of these notes). These sketches can be up-issued in future revisions of the WFD assessment and will be developed further as necessary during detailed design. Contributions / ideas from SWT on these designs would be welcome. **Action: [REDACTED] (by 22/2/19 if possible - to include in up-issue of WFD assessment)**

Appendices

Appendix A - Boldermere Ecological Survey and Condition Assessment report_Final.pdf

Appendix B - Additional Mitigation (originally App F of Dec 18 WFD Assessment)

Appendix C – Map of replacement, compensation and enhancement land

A.13. Email (07.02.19)

From: [REDACTED]
Sent: 07 February 2019 11:51
To: [REDACTED] >
Cc: [REDACTED]; [REDACTED]
[REDACTED] >
Subject: M25 j10 / Wisley interchange improvement scheme - s150 consents

Hi [REDACTED]

Thanks for your time on the phone just now. As mentioned we have a request regarding the S150 consents as detailed below.

Further to the meeting held 28th November 2018 (with minutes approved by the EA in December 2018) we would be grateful to receive a formal written response from you on a number of points discussed at the meeting as follows, in order to support our DCO application:

It was agreed that two consents could be disappled under s150 of the Planning Act 2008 and included within the DCO with your consent:

- 1) Flood Risk Permit for works affecting Stratford Brook including a new bridge, changes to structure of the existing culvert; and
- 2) Water Impoundment License for works on the Bolder Mere retaining wall and works to the existing earth dam at Bolder Mere

It was also agreed at the meeting that:

- 3) a Discharge Consent (road drainage) will not be required for the scheme as the scheme is not polluting and will have pollution prevention measures in place but it was agreed that drainage improvements sought by the EA will be included in the scheme.

Thirdly it was agreed that the following could be dealt with at a later date by the contractor if required i.e. outside of the DCO application:

- 4) an Abstraction License if required, although it is not anticipated at this stage as it is not anticipated that works will extend below the water table however this will be confirmed during the Ground Investigation, if any abstraction is required during works this is likely to have a flow below the 20m³ threshold per day; and
- 5) any Waste Permit which may be required in future for treating / reuse of any manmade materials during construction (such as crushing rubble).

Lastly, there remains an outstanding query on:

6) whether or not a Groundwater Activity Permit is needed to discharge road drainage during operation from a soakaway into the groundwater and the November 2018 meeting minutes indicate the you were going to look into this and confirm back to us.

It would be much appreciated if you could provide a formal written response, by letter, at the earliest opportunity, to confirm the current understood position as outlined above is correct and explicitly confirm the consents that can be disappled under s150 of the Planning Act 2008 for inclusion in the DCO.

If there is any further information that you require from me please do not hesitate to contact me.

Kind regards

██████

██████████

Stakeholder Engagement Team

Tel: ██████████

Atkins – South East Roads Investment Programme

Working on behalf of Highways England

Highways England Customer Contact Centre
0300 123 5000
www.highways.gov.uk

A.14. Email (14.02.19)

From: [REDACTED]
Sent: Thursday, 14 February, 2019 3:28 PM
To: [REDACTED] >
Cc: [REDACTED]
<[REDACTED]>
Subject: RE: M25 j10 / Wisley interchange improvement scheme - s150 consents

Hi [REDACTED]

Apologies for the delay in responding to your e-mail below.

In my December response to the meeting in November (re-attached for reference), we requested further details of the proposed impoundments and discharges to confirm permitting requirements and whether the PPs would offer sufficient protection. I cannot recall that we have been provided this additional information.

Kind regards,

[REDACTED]
Strategic Planning Specialist, Strategic Planning & Engagement (Thames)
Environment Agency | Red Kite House, Howbery Park, Wallingford, Oxon, OX10
8BD

[REDACTED]
External: [REDACTED] | Mobile: [REDACTED]

A.15. Email (19.02.19)

From: [REDACTED]
Sent: 19 February 2019 12:04
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: M25 j10 / Wisley interchange improvement scheme - s150 consents

Dear [REDACTED]

In response to your queries below and following my e-mail to you dated 14 February requesting further information on some of the matters below.

- 1) **Flood Risk Activity Permit/s (FRAP/s):** We agree that the FRAP/s for the proposed works can be disapplied and included within the DCO, as long as our standard Protective Provisions (PPs) that we have provided to you previously are going to be used. If you are proposing any changes to our PPs, we may need to review this approval for disapplication.
- 2) **Water Impoundment Licence:** We have requested further details of the proposed Boldermere impoundment to confirm whether we are happy to disapply this licence.
- 3) **Discharge Consent (road drainage):** We have requested further details of the proposed discharge. Although we acknowledge that there should be an overall improvement in the drainage regime post-development, discharges to surface water now fall under the Environmental Permitting Regulations, so such a consent may need to be disapplied or applied for.
- 4) **Abstraction Licence:** We agree that this could be dealt with at a later date (if required).
- 5) **Waste Permits:** Although I do not believe we discussed these Permits at our November 2018 meeting, we agree that these could be dealt with at a later date if they are required.
- 6) **Groundwater Activity Permit:** As with the Discharge Consent above, we have requested further details of the proposed groundwater discharge of road drainage.
- 7) **Fish (removal) Licence:** At our November meeting we also discussed the need for a fish (removal) licence. In our response to you dated 14 December, we stated that any fish (removal) licence should be applied for by any specialist contractors undertaking these works for you. It will take 10-20 days for consent.

I trust that this is sufficient for now. We look forward to receiving further information about points 2, 3 and 6 above.

If you have any further queries in the meantime, please do not hesitate to contact me, or we can discuss these matters at our meeting this Friday.

Kind regards,

[REDACTED]
Strategic Planning Specialist, Strategic Planning & Engagement (Thames)
Environment Agency | Red Kite House, Howbery Park, Wallingford, Oxon, OX10 8BD

External: [REDACTED] | Mobile: [REDACTED]

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Speak to us early about environmental issues and opportunities - We can provide a free pre-application advice note or for more detailed advice / meetings / reviews we can provide a project manager to coordinate specialist advice / meetings which costs £100 per hour (plus VAT). For more information email us at planning_THM@environment-agency.gov.uk

A.16. Meeting (22.02.19)

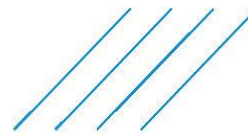


Meeting Notes

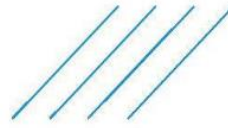
Project:	M25 J10 / Wisley Interchange Scheme		
Subject:	Environment Agency meeting – 22.02.19		
Meeting place:	Telephone meeting	Meeting no:	
Date and time:	22.02.19, 11am	Minutes by:	██████████
Present:	██████████ ██████████ ██████████	Representing:	Environment Agency Environment Agency Atkins Atkins CJ Associates (for Atkins)

ITEM	DESCRIPTION	RESPONSIBLE
1.	Welcome and introductions	All
2.	Health and safety moment ██████ and ██████ were recently involved with an incident, whereby a dog hid under their car whilst out on site and they were not aware as they pulled away. The dog is fine but was injured. People should be aware of what could be under their car before pulling away.	All

NOTE TO RECIPIENTS:
 These meeting notes record SNC-Lavalin understanding of the meeting and intended actions arising therefrom. They represent SNC-Lavalin's view of the discussion and do not constitute an official record of the meeting. If you have any comments on these notes please contact [redacted] in writing within five days of receipt.
 See meeting minutes 22/02/19.docx



ITEM	DESCRIPTION	RESPONSIBLE
3.	<p>Screening and scoping of Water Framework Directive assessment</p> <p>█ confirmed that the Water Framework Directive (WFD) assessment has been received and is being reviewed by the Environment Agency (EA).</p> <p>ACTION: The EA will provide comments on the WFD assessment by 13.03.19.</p> <p>█ explained that a version of the Environmental Statement (ES) and WFD assessment is almost complete and will be submitted along with the Development Consent Order (DCO). The Planning Inspectorate (PINs) has provided feedback and asked that the EA and Atkins reach a common understanding on a) the scheme elements that have been screened into the assessment and b) the scope of the assessment.</p> <p>A precautionary approach to screening and scoping has been adopted by Atkins (on behalf of Highways England) and is set out in paragraphs 3.3.7 and 3.3.14 of the WFD assessment. PINs specifically requested an agreement for scoping out Nitrate Vulnerable Zones and Surface Water Safeguard Zones from the assessment (probably because Atkins specifically state this in paragraph 3.3.13).</p> <p>█ highlighted what has and has not been scoped within the WSP assessment. █ queried article 4.7 which he does not think has been discussed. █ explained that work is being undertaken under the assumption that article 4.7 is not required - it can be demonstrated that compensation has been implemented.</p> <p>█ said that the screening process (in terms of water features) is detailed within the technical appendix. There is overlap on what is considered within the WFD and ES.</p>	



4. **Bolder Mere and Stratford Brook measures of mitigation**
- Feedback was provided by [REDACTED] on Stratford Brook.
- [REDACTED] said that following a site visit of 22.01.19 [REDACTED] at Natural England has said that, overall, he is cautiously optimistic that an agreement can be reached on the mitigation and enhancement proposals. [REDACTED] said that in general the EA will be guided by Natural England and SWT on the deciding any proportionate mitigation for this site.
- [REDACTED] explained that [REDACTED] was keen that two additional items are added to the proposals:
- tree works can be undertaken around the Alder Carr area in the south-east corner of the lake, as this area is a good wet woodland habitat.
 - the undertaking of a feasibility assessment to increase the diversity of the macrophytes. The works that are proposed on the southern shore will improve the marginal macrophytes which are currently constrained in this area by the encroachment of scrub and the shade from nearby trees. There is also an issue with invasive waterweed, of which part of the feasibility assessment will look at practical management of this plant.
- Atkins is positive that an agreement can be reached to incorporate these requirements and establish common ground.
- There was a discussion on road runoff from the A3 into the downstream stretch of Bolder Mere. Currently, there is a direct discharge into Bolder Mere from the road which has raised concern. There is no detailed drainage survey and the critical elevations on culverts are unknown so it is unclear if the proposed drainage system will work. Runoff from the road will be collected and piped along the front of Bolder Mere and treated if possible and returned to the river downstream. To protect this there is a condition in the DCO that that works cannot proceed on this stretch of the road until a drainage solution has been signed off with the EA. This has been added in case during the future evolution of the design it is realised that these proposals are not possible.
- ACTION:** Atkins to share the draft conditions with the EA when they are available.
- [REDACTED] confirmed that [REDACTED] will provide further information early next week.
- Stratford Brook**
- [REDACTED] explained that in the notes from the meeting of 22.01.19 there are disagreements on what constitutes adequate mitigation for the river crossing. Atkins propose that the river restoration measures (set out in Figure A at the end of this document and provided for clarity but not presented at the meeting) are proportionate mitigation measures specifically targeted to ameliorate the effects of the bridge on the water environment. [REDACTED] said that although enhancements are welcomed some of them might only have temporary benefits and details on management plans are required. The EA would prefer to see improvements to the fish passages at the south culvert under the slip road rather than the creation and improvement of habitats, as this would have bigger

Contains *sensitive* information



impacts. ■ explained that the concerns about fish passage are understood but the key point is that the structure itself will not be impeding. ■ recognised this but said that ■ is concerned that the bridge will sterilise this stretch of Strafford Brook. Further information on ■ concerns would be useful. ■ talked about the possibility of making the bridge structure smaller. Although it is difficult to change the design plans at this stage if ■ feels that there is little difference between the bridge proposed and a smaller one in terms of impacts then this can be reviewed.

ACTION: ■ to share ■ comments.

There is also concern that the feasibility study will show that certain mitigation is not possible. ■ explained that at this stage it is not known if mitigation measures will be feasible, therefore they cannot be committed to prior to the relevant surveys. If none of the mitigation measure prove feasible then only the works in Figure A will be implemented. ■ confirmed that the feasibility assessment will not be done prior to DCO submission.

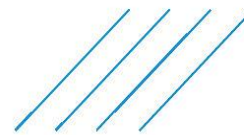
The following work is required to reach an agreement:

- Atkins will research how the works in Figure A can be maintained in order to extend their effective life. **ACTION:** ■ [Post meeting note: maintenance of these works can be incorporated in the management programme for the SPA area being developed as part of the Scheme; this will likely run for five years; beyond then a commuted sum with the landowner or Surrey Wildlife Trust (SWT) can be agreed for longer term management]
- The EA will propose what mitigation would be considered proportionate and appropriate for the effect of the bridge, should the feasibility assessment conclude that none of the proposals in the meeting note are feasible. **ACTION:** ■
- Both the EA and Atkins will consider whether mitigation works on replacement and enhancement land (as shown in Appendix F of the December 2018 version of the WFD assessment) should be counted as mitigation for effect of the bridge on Bolder Mere. (**ACTION:** ■ and ■).
- Further information is needed on the wording of a condition on the DCO that secures an undefined mitigation package. **ACTION:** ■
- ■ to organise a teleconference between Atkins and ■ **ACTION:** ■

Ephemeral headwater ditches

The WFD assessment and the ES both refer to the effects of the Scheme on ephemeral headwater ditches. There are a number of small drainage channels, often dry, that will either be realigned or potentially lost to the Scheme. These modifications are minor enough a) not to cause deterioration at waterbody scale and b) to only be considered to have site scale effect in the Environmental Assessment process. However, they still form part of the water environment, and hence their modification warrants consideration in the WS / ES process.

■ said that EA's interest in these is limited as they are not key rivers and there are not likely to be any objections or comments



ITEM	DESCRIPTION	RESPONSIBLE
	<p>on mitigation proposals. However, the EA encourages improvements where improvements can be made.</p> <p>█ pointed to appendix F which provides details on mitigation and enhancement proposals.</p> <p>It was explained that SWT is also providing feedback on the proposals for mitigation for dragonflies and damselflies.</p> <p>Ground water (Chobham Bagshots Beds water body)</p> <p>It was explained that Ground Investigation information is not currently available for the Scheme. █ said that the EA understands that this will come but there are small worries about this. At present the WFD assessment presents an argument that the effects that the scheme is likely to have on the Chobham Bagshot Beds water body can be readily mitigated by minor modifications to design. The EA believes that this is a pragmatic and appropriate approach.</p> <p>Section 150 (disapplying permits and consents)</p> <p>█ confirmed that the Flood Risk Activity Permits can be disappplied.</p> <p>█ queried the works on the Section 150 queries. ACTION: █ to follow up.</p> <p>█ confirmed that the only licence required is for fish removal.</p> <p>█ confirmed that an abstraction licence can be dealt with at a later date. An application will need to be made when the works are to be undertaken.</p>	
5.	<p>█ asked if █ is happy to put new monthly meeting slots in the diary for the next six months. █ agreed that this is fine. █ highlighted that there are about 15 hours of EA time left under the current Planning Performance Agreement.</p>	
6.	<p>█ confirmed that a discussion has taken place with Surrey County Council at which they said that they would follow the EAs' lead. █ confirmed that with regards to the ditches in WFD terms █ will review the document as a whole. None of those ditches would be WFD watercourses. Some of them might be owned by Highways England and the others would fall within the local flood authority. It was suggested that the wildlife trusts might have an interest as well.</p>	

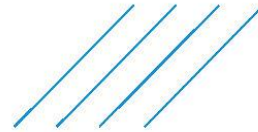
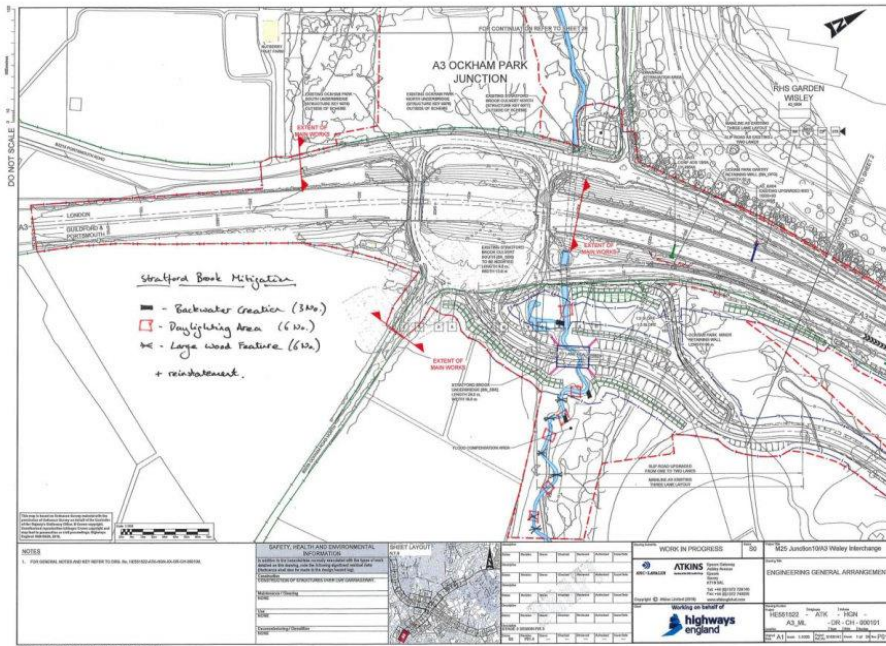



Figure A – River Restoration measures embedded into M25J10 design as of Feb 19



A.17. Letter (06.03.19)

creating a better place



Date: 06/03/2019

Documents seen:


- M25 junction 10/A3 Wisley interchange TR010030 5.4 Water framework directive assessment report- Volume 5 Feb 2019
- Atkins Road drainage water quality assessment 21/02/2019

Comments:

Overall a good the approach recommended by the EA as used for the HS2 project. The WFD assessment which considers the two key objectives of the directive: future objective status and no deterioration in status. Below are a few thoughts/outstanding issues:

- **3.3 screening and scoping:** Agree with what has been scoped in and out. Have spoken to [REDACTED] (DRWPA Lead) and she's happy this scheme poses little to no risk to DRWPA status. Also not likely to impact NVZs.
- Elm Lane Ditch** appears to be impacted by WY1 which has been incorporated into the WFD assessment for the River Wey waterbody. However it also appears to form part of Boldermere Lake's upstream catchment. Therefore it would be sensible to include this as part of the WFD assessment and consideration of potential impacts on the lake. Particularly the potential water quality risk associated with construction run-off and how this might reach the lake through current drainage pathways and how this would be mitigated.
- Groundwater Bagshot Beds**
There is currently a shortfall in the understanding of the GW flows and processes and the potential impact the piling works may have on the groundwater body as well as the GWDTEs (Boldermere). This could impact lake levels which might compromise WFD and Natural England SSSI objectives. Therefore at present may be a risk to WFD compliance. Likely need to be assessed further to demonstrate WFD compliance.
Note to Clark- I'm not sure how involved GW team have been in this consultation?
- Stratford Brook-** Having discussed the morphological impact with [REDACTED] agree that minor localized is an appropriate categorization of the risk for the Stratford brook. Their report acknowledges that the additional mitigation being considered for the scheme is not yet sufficiently developed to confidently conclude it will mitigate the minor localized adverse effects residual to the embedded design. It will be important going forward that they can 'firm up' some of these mitigation measures that can offset the morphological impact associated with the bridge. The key morphological impact from the new bridge appears to be associated with the loss of riparian habitat below the open span bridge. Extra info in red box below on riparian habitat and hydromorphological status.

Cont'd.



Structure of riparian zone forms part of the Hydromorphology quality element of river waterbodies. Definition: The abundance and diversity of plants present at the wetted edges of the channel, on the banks and bank top, including their complexity of structure.

We would be concerned with:

1. the direct or indirect loss of vegetation in the riparian zone
2. changes to the range of plant species present
3. changes to the structure of vegetation cover along the river length

The current Reasons for Not Achieving Good status in Stratford Brook can be linked to morphological pressures. Invertebrates are failing due to physical modification. According to our ecologists in A&R the channel is straightened with very little habitat diversity. Over deepened in places, narrow channel results in marginal plants overgrowing the channel resulting in heavy shading and little in-channel macrophytes. Some of the mitigation measures proposed have the potential to offset the impact from the bridge crossing and also help mitigate some of the current pressures. A suitable combination of mitigation measures outlined in F.2.2 of appendix F should be used to offset the scheme impacts and maintain WFD status. **Note to [REDACTED] FBG are probably best placed to determine if the current measures are sufficient enough to offset the morphological/biological impact and I know discussion are ongoing to iron these measures out, but the ones that have been suggested appear to be sensible.**

-Boldermere

4.7.26 it is encouraging to see the plans to re-direct road runoff to downstream of the lake as this may ensure the salinity WFD element remains at High post construction and reduced the risk of WFD chemical failures. It isn't clear if the impact on water quality at this new discharge location has been included in any of the drainage/WQ assessments (**I may have missed this**). This should be included if not done so. Also in terms of lake levels and groundwater/surface water inputs it would be good to see if changing the surface water inputs into the lake would have an impact on lake levels (potentially not as it is suggested the lake is supported by groundwater levels). This concern could be addressed with the further hydrological/groundwater assessments that still need to be done (see Groundwater Bagshot Beds section above).

Boldermere lake WFD assessment appears to have overlooked to some extent the potential impact from the actual construction phase and work involved in moving the retaining wall and associated earth works. Although only a short term activity there is a potential there for longer term impacts associated with the suspension of solids/sediments and smothering of lake habitats important to the SSSI designation. This may pose a risk to WFD Total Phosphorus and phytoplankton status if the retaining wall and bank sediments and associated nutrients are not controlled effectively. Due to the nature of the water environment this impact could last for multiple years after the actual construction phase. There should be a detailed method statement for this specific element of the scheme to demonstrate how this risk will be reduced and WFD status protected.

Compliance with the WFD status of Boldmere appears to be dependent on the implementation of some of the mitigation measures identified. Without these measures, the impacts are predicted to be 'adverse widespread or prolonged effect'. Boldermere is currently failing WFD due to the Total Phosphorus and Phytoplankton which are closely linked. For example, the removal of carp

from the lake which is proposed has the potential to help address the WFD failure as their foraging activates re-suspend sediments which could contain Phosphorus. Therefore the proposed eradication of carp could have a positive impact on WFD status and restore more natural nutrient cycling processes. It is important that the proposed measures are 'firmed up' working with the EA and NE to ensure deterioration can be avoided. It would be useful to have an **Ongoing maintenance plan/Adaptive environment management plan** for Boldermere to set out more detailed plans for each mitigation measure and to monitor the effectiveness of the mitigation measures into the future and adapt approaches accordingly if required. Because WFD compliance is somewhat dependent on these measures this will be important and it should be demonstrated how effective these have been. The ongoing maintenance plan will answer questions around how long the mitigation measures will occur for (i.e. how many years following construction will carp removal occur for?)

Note to [REDACTED] FBG are probably best placed to determine if the current measures are sufficient enough to offset the morphological/biological impact and I know discussion are ongoing to iron these measures out, but the ones that have been suggested appear to be sensible.

In the hydromorphological assessment in appendix c, they have listed river Hydro-morphological quality elements: 'Hydrological Regime (e.g. quantity and dynamics of flow and connection to groundwater) and Morphology (e.g. river continuity, river depth and width variation, structure and substrate of river bed, and structure of riparian zone)'. It is important that they have identified the correct quality elements for lake hydromorphology and assessed accordingly against those rather than river quality elements. **Note to [REDACTED] [REDACTED] may have these?**

In terms of the hydromorphological status of the lake there appears to be no change other than the actual size of the lake (loss of open water habitat). The D.2 Technical note on WFD Compliance for Boldermere by Atkins demonstrates that the morphological changes to the lake (i.e. reduction in overall size) isn't likely to have much of an impact on Total Phosphorus concentrations. The north shore habitat is proposed to be translocated and this is more value ecologically. Hydromorphology is only a 'supporting element' for WFD which means that if all other elements were at High status and Hydromorph wasn't the waterbody would still be classified as Good status. Therefore it boils down to if the hydromorphological changes from the scheme will prevent the other elements such as inverts and macrophytes achieving the future WFD objective status/favourable conditions. There will essentially be, post-construction, a slightly smaller but potentially a better quality lake assuming the proposed mitigation measures are in place. Ultimately if Natural England are satisfied that the SSSI favourable conditions and macrophytes/invert associated with its designation will not be compromised by hydromorphological changes to the lake than this should be sufficient.

-Mole and Wey

The outstanding minor localized adverse impact is as a result of a very small proportion of the total number of road discharges. At a WFD waterbody/catchment scale, there isn't likely to be a deterioration in water quality as a result of the drainage which is to minor watercourses (non WFD) and drainage ditches.

-General

Any impoundment or dewatering and associated discharge activities could require a licence/discharge permit from the environment agency. It is therefore recommended to consult the relevant sections of the .gov website at the earliest possible stage to determine if a licence/effluent permit is required.

Overall following discussion with [REDACTED] who has been involved in major WFD assessments we agreed they have gathered a proportional evidence base for the associated risk


(potentially not for GW at present). [REDACTED] didn't feel that it would need to go down the article 4.7 route for the rivers as the impacts are likely to be localized and not on a WFD waterbody scale. It is less clear for Lakes and seems to be much more dependent on these mitigation measures being agreed. I haven't been able to discuss with [REDACTED] as she has been away but it would be useful to get her view as a lakes specialist as to whether the proposed measures sufficiently offset any risk to WFD status particularly the lake hydromorphology element as I believe part of the WFD status for lake hydromorphology is the actual size of the lake which is going to be directly impacted.

End

4

A.18. Letter (27.03.19)

creating a better place



Atkins Ltd
1 Oasis Park
Stanton Harcourt Road
Eynsham
Witney
OX29 4AH

Our ref: WA/2017/123763/08-L01
Your ref: 5158141
Date: 27 March 2019

Dear [REDACTED],

Stratford Brook & Boldermere site visits and discussions re: ecological mitigation & net gain proposals - 22 January 2019 for M25 Junction 10 / A3 Wisley Interchange junction improvement proposals.

Thank you for sending through the notes from the site visits to Boldermere and Stratford Brook on 22 January, which we received on 6 February. I apologise for the delay in sending our comments to you on these matters, which is due to our ongoing internal discussions about the proposed mitigation measures, particularly for the Stratford Brook.

We thank you for your continued engagement with us on these issues. We felt that it would be useful to set out our current position in advance of our second site visit meeting this Friday, 29 March.

Our greatest concerns are still about the proposed mitigation measures for the Stratford Brook, which we have provided detailed comments about below. Following our most recent meeting, you have questioned the importance of improving fish passage on the Stratford Brook as there are barriers downstream on the Wey. This is irrelevant - we have a strategy for improving fish passage on the Wey and ultimately we will always seek improvements to fish passage when works are being carried out to or within the vicinity of an impounding structure.

Comments on Stratford Brook proposed mitigation measures

You note in the meeting notes that the WFD assessment for the scheme states that the new bridge structure over the Stratford Brook will *"have minor localized adverse effects..."*. We request that it is also noted that the new structure will exacerbate the impact of the existing culverts which have had a significant impact on the Stratford Brook.

The notes also state that the Environmental Statement assessment of impact states the following in relation to riparian trees: *"Effects relate to loss of riparian trees and concomitant reduction in habitat connectivity and the effects of deck shading on in-channel aquatic communities."* Loss of riparian trees will also result in the loss of root structure within the bank which provides an important habitat for fish and invertebrates. The bridge will effectively sterilise this section of watercourse, which in combination with the existing impounding effect, will create a featureless, shallow environment. Reducing the impounding effect of the downstream structure will help to restore the channel's morphology and thereby reduce the impact of the new bridge.

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The remainder of our comments relate to section 2 of the notes (outcome of discussion) and specifically the proposed mitigation measures for the Stratford Brook.

Although we welcome all of the proposed measures, we feel that they do not fully mitigate or compensate for the impact of the new structure. In order to fully compensate, the same area of habitat would need to be created elsewhere which would include an equivalent sized bridge/culvert being removed. Unfortunately there is limited opportunity to achieve this within the vicinity of the scheme and therefore we require additional measures in order to ensure biodiversity net gain. Reducing the impounding effect of the downstream structure would help to mitigate some of the effects of the new bridge. Although the new bridge will result in the loss of macrophytes and root structure within the banks, removing the impounding effect will help to restore a more natural channel morphology. Artificial features could also be introduced into the channel under the bridge to mimic natural refuge.

With regards to the tree and scrub clearance within the riparian zone of the brook and the red line boundary of the scheme upstream of the A3, this is welcomed but as discussed at our meeting, will only have a temporary positive impact.

With regard to the proposed backwater, we are not averse to the creation of backwaters but we would question its benefit if the impeding structure downstream is not removed. The main limiting factor to a healthy fish population in this instance is the presence of the impounding structure downstream that is preventing fish from migrating upstream. Backwaters also aren't necessarily appropriate for high gradient streams. This is also a temporary measure as backwaters do silt up over time. In addition, there is limited opportunity to improve the in-channel habitat of the Stratford Brook within the red line boundary. Our preference would be for the removal/modification of the Stratford Brook South Culvert sill over the creation of backwater habitats and in-channel habitat improvements as this will have a much more significant and longer lasting positive impact. It is our view that these additional measures are essential compensation and will help to mitigate the impacts of the existing Highways England structures which have had a significant impact on the Stratford Brook.

The sentence in the notes which states *"The Environment Agency would prefer to see additional measures to mitigate the effect of the bridge accommodating the new access to Wisely Lane and would encourage Highways England to provide environmental enhancement as part of the scheme."* does not sufficiently reflect our requirements. We would like this sentence to be changed to: *"The Environment Agency would ~~prefer to see~~ require additional measures to mitigate the effect of the bridge accommodating the new access to Wisely Lane and ~~would encourage~~ require Highways England to provide environmental enhancement as part of the scheme."*

We maintain concerns that the feasibility studies for works on the Stratford Brook are to be completed after Development Consent Order (DCO) approval. It is not clear to us how, if essential mitigation measures are found to be non-viable, any works would be acceptable. We would not wish to find ourselves in a position where the scheme is approved, but appropriate mitigation measures cannot be implemented, leading to a detrimental impact on the Stratford Brook. It is not clear to us why such feasibility studies cannot be undertaken in advance of the application. We need to have a level of surety at the application stage. Unfortunately, based on the current information available to us, we are likely to raise an objection at the application stage, given that we cannot be certain that appropriate mitigation will be delivered as part of the scheme.

In relation to the potential removal/modification of the sill on the Stratford Brook South Culvert, if this is not feasible for technical reasons, a fish easement should be installed instead. We are currently working with the Wey Landscape Partnership (hosted by Surrey Wildlife Trust) to develop and deliver the Wey FWD (Fish Passage and Wetland Delivery) project. This project aims to improve fish passage and tackle other reasons for WFD failures throughout the Wey Catchment. We will be delivering fish passes at two structures downstream of the Stratford Brook in the next couple of years, thereby re-connecting the Thames to the Wey. The Stratford Brook South Culvert does not currently comply with Highways England best practice (Volume 4, section 2, part 7 of the Design Manual for Roads and Bridges) which states that culverts should accommodate wildlife and fish migration. Significant works are being carried out within the vicinity of this structure and therefore the opportunity to reverse the impacts of this structure should be sought, as it is unlikely that road improvement works will be happening again in this area for a potentially significant amount of time.

We are concerned that mammal passage solutions through the Stratford Brook South Culvert and the culvert passing between the A3 and northern slip road are only included as 'potential' mitigations, subject to further feasibility studies. These works should be carried out as essential mitigation because these existing structures do not comply with Highways England best practice for culvert design. In addition, Volume 10, section 1, part 9 of HE's Design Manual for Roads and Bridges requires mitigation for the effects of existing roads to always be considered when improvements or major maintenance works are planned adjacent to the watercourses. This includes in areas where otter populations can be expected to spread during the lifetime of the improvements. Although otters are relatively sparse in the Wey catchment, we have evidence that their range is expanding in adjoining catchments and we recently had a report of a dead otter (suspected road kill) at the top of the Wey Catchment.

The second to last bullet point in the notes which reads: *"Modifications to the culvert passing between the A3 and the northern slip road to improve fish and mammal passage."*, should be changed to read: *"Modifications to the culvert passing between the A3 and the northern slip road to improve water depths for fish passage and improve mammal passage at high order events (if possible a 100 year climate change event)." Please note that this could be achieved through a single design.*

Ordinary watercourse / ephemeral ditches proposed mitigation measures

Please note that we still have a remit on these types of watercourse under the Water Framework Directive. We previously discussed providing compensation for the loss of open channel through delivering enhancements elsewhere on other watercourses. We would still support this, but want to ensure that you still intend to mitigate through good design as well. This would involve employing best practice in line with Highways England Design Manual for Roads and Bridges and the guidance previously supplied by Francesca. For instance, we would expect the invert of any culverts to be set well below bed level and dressed with gravels. Culverts should also incorporate mammal passage where appropriate and be designed to minimise the size of the headwalls.

Some of the enhancements outlined in Appendix B are proposed for what appear to be small ditches and ephemeral watercourses. It is not clear whether these are to compensate for impacts elsewhere on other ordinary watercourses but if so, we would expect these enhancements to be delivered at locations where they can provide more ecological benefit.

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Additional mitigation measures listed in 'Appendix F'

Paragraph F.1.1.5 lists mitigation measures proposed for Boldermere. However, this list does not include the diversion of road drainage from the A3, which we understand has now been confirmed. We would expect this to be included within the package of mitigation measures.

In relation to the mitigation measures for Chatley Wood Pond in the Mole catchment (paragraph F.2.3.1), opportunities for creating and/or enhancing wetland habitat should be explored at Chatley Wood Replacement Land where in close proximity to River Mole.

Similarly to the above, Opportunities for creating and/or enhancing wetland habitat should be explored at Park Barn Farm Replacement Land where in close proximity to River Wey. This area does not seem to have been included within the proposed mitigation measures, so there is no paragraph reference but would fit into section F.2.4.

We trust that you will find these comments useful in advance of our site visit meeting on 29 March and as you further develop your mitigation measures in advance of the DCO submission.

Our comments are based on our available records and the information as submitted to us. Please note that any views expressed in this response by the Environment Agency, are a response to a pre-application enquiry only and do not represent our final views in relation to any future planning application made in relation to this site. We reserve the right to change our position in relation to any such application. You should seek your own expert advice in relation to technical matters relevant to any planning application before submission.

If you have any queries about this response, please do not hesitate to contact me.

Yours sincerely,

[Redacted]
Strategic Planning Specialist


Direct dial [Redacted]
E-mail [Redacted]

cc [Redacted] – Atkins
[Redacted] – Atkins
[Redacted] – Atkins
[Redacted] – Atkins

End

A.19. Site visit (29.03.19)

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Project: M25 J10 / A3 Wisley Interchange Improvements
Subject: Stratford Brook site visit meeting – proposed mitigations

Meeting Date/Time: 29 March 2019 – 14:00 – 16:30

Notes By: [REDACTED]

Attendees: [REDACTED] – Environment Agency
[REDACTED] – Environment Agency
[REDACTED] – Environment Agency
[REDACTED] – Atkins
[REDACTED] – Atkins
[REDACTED] – Atkins

Meeting notes:

- Atkins would like a clear steer on EA requirements if fish passage improvement works through A3 South culvert cannot be carried out.
- Atkins/Highways England (HE) are committed to carry out feasibility studies (as per previous correspondence) for Stratford Brook mitigation works. There is an issue of disagreement over what needs to happen if culvert works are found to be not feasible or prohibitively expensive.
- Atkins explained that there is still some uncertainty regarding the feasibility of discharging A3 road drainage away from Boldermere – and that this will be confirmed at detailed design stage following Development Consent Order (DCO) approval. Again, Atkins would like a steer from EA about the fall-back position if these drainage works prove to be not feasible or prohibitively expensive.
- **ACTION:** EA to clarify.
- [REDACTED] noted that an EA concern is about 'surety' of works taking place. [REDACTED] noted that DCO requirements should provide a level of surety for these issues.
- [REDACTED] noted that Atkins/HE are happy to take a steer from us on the range of options to be considered as part of their feasibility studies.
- [REDACTED] confirmed that feasibility studies (and detailed design) will not begin until after DCO approval.
- [REDACTED] ran through the mitigations that have been currently proposed by Atkins, including tree works, creation of a new backwaters and large wood addition. [REDACTED] advised that as per previous EA comments, whilst these works were generally supported, they do not provide sufficient mitigation for the proposed works. If it was a choice between improving fish and mammal passage through the existing culverts and the currently

Cont/d..

proposed mitigations, the EA would prefer the former.

- We discussed potential other options if culvert works are not feasible:

- [REDACTED] noted that as a last resort, we could accept the enhancement/restoration of a length of watercourse (equivalent to the length affected by the new bridge) downstream of the two A3 culverts.

- [REDACTED] advised that partial removal of the culvert sill would be preferable before enhancement/restoration.

- [REDACTED] further advised that if no removal of the sill was feasible, we would prefer to see improved connectivity through the culvert (e.g. through the use of baffles), again prior to enhancement/restoration.

- [REDACTED] asked what we would be happy with if flood risk teams advised that sill works were not feasible from a flood risk perspective? [REDACTED] feels that this is unlikely to be an issue.

- [REDACTED] advised that ultimately he feels there will be something that we can agree to through the feasibility work.

- [REDACTED] again queried what our position would be if no options were found to be possible through feasibility work? [REDACTED] reiterated that an enhancement/restoration of an equivalent length of watercourse downstream of the A3 culverts (not upstream) could be acceptable.

- [REDACTED] noted that such works may not be possible downstream of the A3 culverts, unless through working with the landowner, because this stretch is not included within the red-line boundary for the scheme.

- [REDACTED] noted that as a very final fallback position, we may accept a commuted sum payment to carry out enhancement/restoration works on an equivalent section of watercourse.

- Therefore, the preferred order of mitigations for the EA are:

1. Full mammal & fish passage improvement works to existing A3 culverts.
2. Partial removal / notching of concrete sill in A3 South culvert.
3. Improved connectivity (e.g. through use of baffles) through A3 South culvert.
4. Enhancement/restoration of length of watercourse equivalent to new bridge width downstream of A3 culverts.
5. Commuted sum.

- [REDACTED] asked why EA had not requested equivalent culvert works to developer of Wisley Airfield development. [REDACTED] confirmed that the red-line boundary of the airfield application included the Stratford Brook (as a SANG) and extended to the A3 South culvert. The new bridge over the Stratford Brook was also included as part of that application. [REDACTED] was unsure who had dealt with this application in the EA and therefore unsure on what EA had or had not requested as part of the application.

- [REDACTED] noted that the new bridge will also provide an access to Wisley Airfield if the development ever goes ahead.

- **ACTION:** [REDACTED] to review EA comments on Wisley Airfield planning application and clarify EA position/requests.

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A.20. Meeting (10.04.19)



Meeting Notes

Project: M25-J10/A3 Wisley Interchange Scheme		
Subject: Project update (Programme; Draft DCO requirements; Draft ES chapters 8 & 10; Consents; Statement of Common Ground)		
Author: [REDACTED]		
Date: 10/04/2019 2.00-4.00pm	Project No.: <project no>	
Attendee: [REDACTED]	Representing: Environment Agency Highways England Atkins Atkins Atkins Atkins Atkins Atkins	
ITEM	DESCRIPTION	RESPONSIBLE
1.	Welcome and introductions [REDACTED] welcomed all to the meeting and introductions were given. [REDACTED] noted that she had forwarded the draft DCO requirements relevant to the Environment Agency (EA) this morning for their review. [REDACTED] noted that he had received them and forwarded to the legal team.	
2.	Project and Programme update [REDACTED] gave an update on the project, highlighting the statutory consultation which took place February/March 2018 and changes to elements of the scheme that were re-designed during April to August as a result of feedback received. The changes to the design were moderate and as such a further targeted non-statutory consultation took place in Nov/December 2018. As a result, further revisions to the design were incorporated in March this year and Highways England are currently out for a further round of consultation. [REDACTED] noted that this has put back the timing of the DCO submission. [REDACTED] stated that he had reviewed the consultation documentation and didn't expect any major concerns. [REDACTED] confirmed that the project had recently obtained endorsement from Highways England Investment Decision Committee and agreement to the budget for the project's development. [REDACTED] confirmed that Highways England had appointed a contractor to deliver the ground investigation works (Osbourne) in January this year. He confirmed that a drainage and gas mains survey would also form part of the package of works to be delivered. [REDACTED] asked when these would be starting. [REDACTED] confirmed that would start after the Easter break (22 April).	

█ talked through the high-level programme "M25 Jct 10 / A3 Wisley Interchange Project - Summary Programme Rev 3.0 dated 20/02/2019". A copy was provided to █. █ confirmed that the DCO submission was expected at the end of May, with the possibility that it might be put back to June. In line with the programme a DCO decision is expected at the end of September 2020 (end of Highways England stage 4). Construction due to start Spring 2021.

█ stated that Highways England had appointed multiple Delivery Integrated Partners (DIP) to deliver project across England. The DIP who would be delivering the M25 J10 scheme was Balfour Beatty, using Atkins as their design consultant and the consortium being known as Balfour Beatty Atkins (BBA). The consortium will take over management of the project sometime between August and October 2019.

█ stated that BBA were keen to look at what works could be done ahead of construction preparation or ahead of DCO award (advanced works and statutory diversions) and that the feasibility of this was currently being assessed. █ asked whether these would be undertaken under permitted development of separate planning applications. █ stated that he couldn't confirm this at present.

█ referred to the Smart Motorway Programme (SMP) M25 Junction 10-16 running in parallel with Junction 10 construction works. █ asked if an application had been submitted for these works.

ACTION: █ to provide █ with contact details for the Project Manager.

Post meeting note (PMN): Contact details provided to █ on 11.04.19

█ Email: █

Tel █

3.

Draft DCO Requirements

█ stated that he had sent the draft requirements through to the EA legal team to comment. He confirmed that legal had reviewed them briefly and found them generally to be acceptable subject to two items – keen to define what is meant by 'intrusive ground works to avoid any later disagreements about what this constitutes. █ questioned specifically what element of ground works a potential concern were. █ stated that he was unable to elaborate and that on legal matters it was preferable for direct liaison between Highways England and EA legal teams. █ added that a definition could be added to the requirements to be clear, based on feedback from EA as to what they might be looking for here.

█ stated that the second item was *in reference to* paragraph 3 (4) in relation to statement 'cease construction activity in the vicinity of that contamination', what is meant in terms of 'vicinity' needs clarification. █ stated that EA legal had suggested wording 'cease construction in all areas that would reasonably be regarded as at risk from contamination' for example. █ added that the wording 'in vicinity' was *fairly standard*. █ added that these were provisional comments.

ACTION: EA legal team to feedback formally to Highways England legal (BDP Pitmans) regarding the draft DCO requirements.

█ referred to the latest version of the EA Protective Provisions (April 2019). █ confirmed that track changes directly onto the Provisions would be helpful and sent directly to the EA legal team. █ asked what had driven further changes to the PPs. █ confirmed that DeFRA have



recently produced a standard set of PPs that they want to be used on all DCOs. [redacted] emphasised that Atkins were keen to ensure that the requirements addressed matters to the satisfaction of the EA as they relate to any uncertainty in relation to the GI and the proposals so that the EA are comfortable with what will be put forward in the DCO application.

[redacted] asked whether there was anything else EA were expecting to see in relation to the requirements as they relate to the EAs remit. [redacted] said that the only other issue for the EA on the project is the Stratford Brook enhancement works. [redacted] stated the concerns related to the feasibility study and the results of these in relation to what mitigation could be implemented. [redacted] asked [redacted] whether following the site visit (29.03.19) the EA were more confident that mitigation could be delivered as a result of the study. [redacted] confirmed that they were more confident. [redacted] stated that this was the hierarchy of mitigations set out in the meeting note of the site visit.

[redacted] questioned whether the scheme's red line boundary excluded an area of the SB between the A3 south culvert and the new proposed bridge and whether this was where the backwater works was going to be. [redacted] clarified that this work was planned upstream of the new bridge. [redacted] confirmed that he was happy with the RLB therefore, as long as there is adequate space allowed for the back water works and assuming there are no works planned between the slip road culvert and the new bridge. [redacted] confirmed there were no works planned in this location. [redacted] added that this land was not within the RLB and therefore there was no provision for works in this area.

[redacted] emphasised that in terms of the DCO requirements it would be important to have sufficient scope within the wording to cover any uncertainty in the mitigation proposed as a result of the feasibility study. [redacted] confirmed that the study was part of the mitigation proposals contained with the WFD and would not take place until after the DCO application.

4. **Draft ES Chapter 8: Road Drainage and Water Environment**

[redacted] stated that the project had completed an assessment of where highway runoff is discharged to surface and ground water (GW), stating that most of the highway runoff discharges to ground water.

[redacted] confirmed that the project had followed DMRB guidance and undertaken a method C assessment which had highlighted a medium risk to GW quality. She stated that therefore the project will have to undertake a more detailed risk assessment once the GI data was available. The more detailed risk assessment will determine the need for and nature of the mitigation required to protect groundwater

[redacted] referred to the Water Framework Directive (WFD) and Water Quality (WQ) Technical Note that has been sent to [redacted] for EA comment. [redacted] confirmed that the EA are due to respond by the 16 April. [redacted] has already sent comments from the IEP team, but he stated that these are draft and subject to further consultation.

[redacted] confirmed that he had discussed the issue of risk to GW with the EA GW land contamination team and confirmed that they had not indicated any concerns on the GW risk given it is not principal concern. He added



that some of the comments from IEP team about GW modelling not being understood will be superseded by comments from [REDACTED]

A discussion was had regarding the approach adopted in the ES to dealing with uncertainties surrounding the absence of GI data at this stage. A 'likely' reasonable worst-case methodology was outlined, and it was agreed that Atkins would issue copies of the draft chapters to the EA so that they could confirm their agreement that our approach to dealing with these uncertainties was robust.

[REDACTED] stated that the EA have always understood from the beginning GI was going to be available after the DCO. He confirmed that the EA were happy with the risk that that presented based on what we expect could be the GW risks and the geology and aqua flow that are in that location. On that risk-based approach the EA were happy to take that approach. He added that had this been on a chalk principle aquaphor EA would not have accepted but given what is known about the location, current drainage situation and nature of development the EA are happy to take that risk. He added that the project will have to think about how this is presented in the ES.

[REDACTED] referred to the current A3 discharges into Bolder Mere and noted that the proposed mitigations (as to whether it will be possible to re-route the road drainage to surface water discharge downstream of Bolder Mere) have been included as a feasibility study. [REDACTED] stated that EA were under the impression that that was more of a certainty. [REDACTED] confirmed that it is still subject to a feasibility study as it is dependent on drainage surveys. [REDACTED] stated that it is a very unlikely that the proposed mitigation would not be feasible. [REDACTED] confirmed that he has an action from the site visit (29.03.19) to state what the EA position would be should it be not possible.

[REDACTED] stated that with the GI Highways England was prioritising with the contractor features around Bolder Mere with the expectation that data could be provided in the earlier stages of GI to feed into the DCO examination. [REDACTED] confirmed that the drainage survey is part of the package.

i. Draft ES Chapter 10: Geology and soils

[REDACTED] stated that it is understood that the EA are content with the assessment approach detailed in the PEIR and the absence of GI data. However, in correspondence dated 24th October 2018, the EA have stipulated that the DCO application will need to provide **sufficient** information about the critical and very high-risk areas identified as part of the scheme. [REDACTED] stated that we do not consider there to be any critical or high-risk areas in relation to Geology and soils. [REDACTED] stated that the project would like confirmation of agreement by the EA that the PEIR / ES Chapter provides the level of information required **and also** confirmation of agreement of the assessment approach and the absence of GI data. [REDACTED] confirmed that [REDACTED] would need to comment.

[REDACTED] asked whether we are planning to share draft ES chapters. [REDACTED] stated they would welcome review of them. The standard turnaround for consultation is 21 days.

ACTION: [REDACTED] to send draft ES chapter 10 to EA with covering email requesting confirmation that the chapter provides **sufficient** information



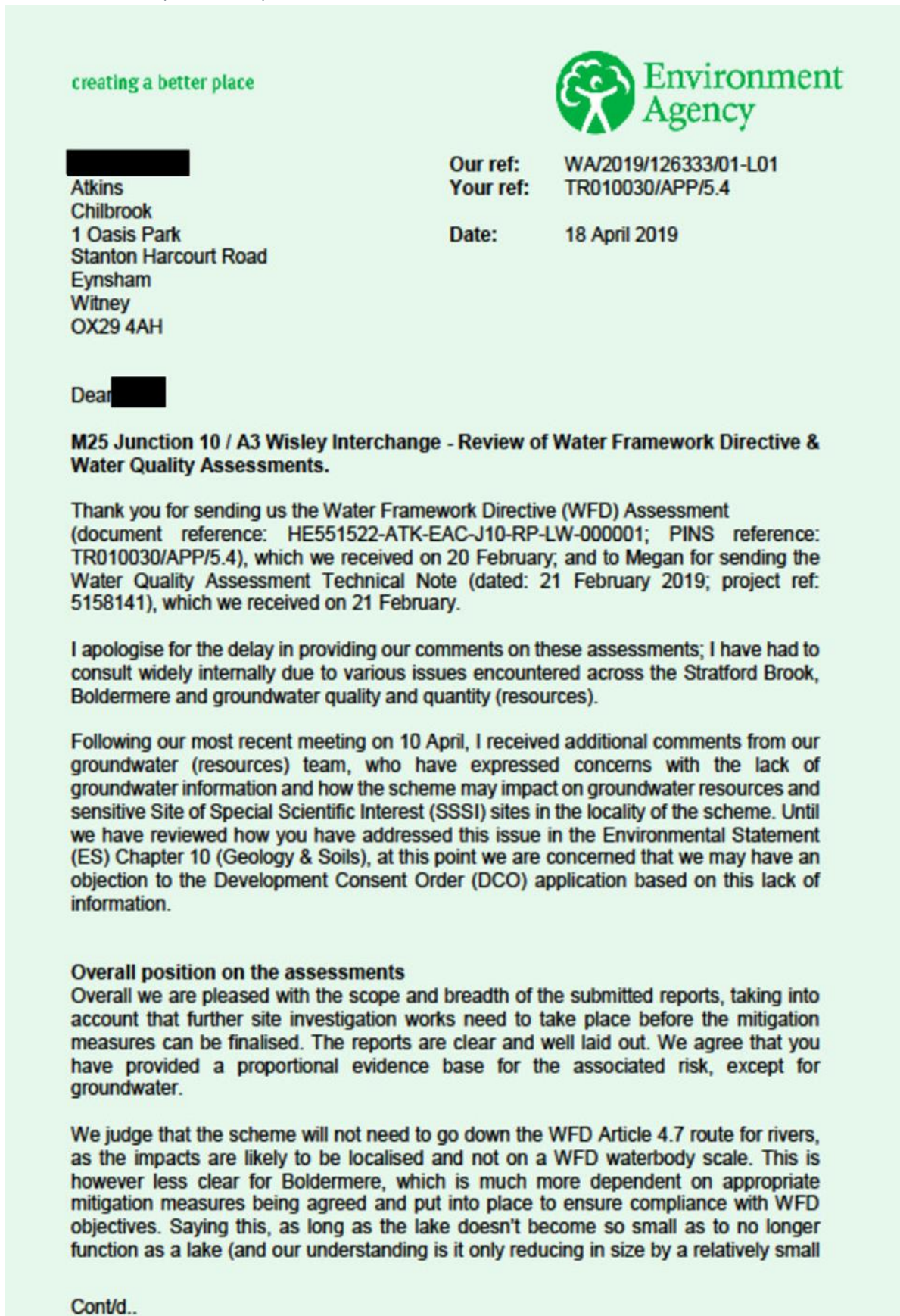
	<p>and confirmation of agreement of the assessment approach and the absence of GI data.</p> <p>ACTION: Chapter 10 to be sent to [redacted] by 16.04.18. Chapter 8 (including flood risk) to be sent prior to its updating with feedback on the WQ technical note (to be sent 12.04.19) PMN Chapters sent on 05.06.19</p>	
6.	<p>Consents (Ground Water Activity Permit)</p> <p>[redacted] acknowledged that Atkins are due to send information requested by EA on a number of issues to do with s150 consents.</p> <p>A discussion was had regarding the need for a Ground Water Activity (GWA) Permit. [redacted] stated that a constraint has been included in the ES which states that no active dewatering will be undertaken as this cannot be quantified and therefore the impact to ecological receptors cannot be assessed. The DCO therefore includes a restriction on any active dewatering.</p> <p>[redacted] stated that if you don't disapply a licence/permit within the DCO, but this is then subsequently needed, an application will need to be made through the normal permitting process, unless an exemption applies. [redacted] stated that any assessment in this respect would need to ensure that it was compliant with Regulations and that any applications would be assessed on their merits.</p> <p>[redacted] referred to the list of consents that has been requested to enable the EA to determine what will need to be covered under PPs or in the schedules. He confirmed that internal colleagues will need to review this and confirm whether they are happy for consents to be disappplied or whether permits will be required.</p> <p>[redacted] added that without the GI data the project is unable to prove that any discharges to ground would not be at a concentration's higher than Drinking Water Standards and therefore the GWA permit could not be included at this point. [redacted] confirmed that if the EA could not be certain in this regard, they would not disapply it.</p> <p>[redacted] stated that if EA are provided with the full list of all the consents and licences that the project is expecting or likely to be required – this can then be clarified by legal -whether some can be disappplied.</p> <p>ACTION: Atkins to send list of consents/licences to EA by 18.04.19 PMN: Sent on 06.06.19</p>	
7.	<p>Statement of Common Ground</p> <p>[redacted] confirmed that a draft of the SoCG is underway. The aim is for a draft to be submitted with the DCO application. She confirmed that it will need to be updated in light of on-going discussions. Given these outstanding issues the timing of sending over to EA will need to be reviewed.</p> <p>[redacted] stated that the project is keen to submit the SoCG with the DCO application, but this will be the position at the time of submission, which are likely to change throughout the examination period.</p> <p>[redacted] stated that he might be able to tun the SoCG around faster than the standard 21 days given he is the main consultee.</p> <p>ACTION: [redacted] to confirm timeline for consultation on SoCG by EA.</p>	
8.	<p>Next steps/AOB</p> <p>[redacted] referred to the need for future meetings. [redacted] confirmed next one is scheduled for 08 May. This will be reviewed one week prior.</p>	



9. **Actions:**
1. EA legal team to feedback formally to Highways England legal (BDP Pitmans) regarding the draft DCO requirements. **PMN: Received on 10.06.19**
 2. Atkins to send list of consents/licences to EA (by 26.04.19). **PMN: sent to EA on 05.06.19**
 3. Atkins to confirm timeline for consultation on SoCG by EA (by 18.04.19)
 4. Atkins to send draft ES chapter 8 including flood risk) prior to its updating with feedback on the WQ technical note **PMN: Sent on 05.06.19**
 5. Atkins to send draft ES chapter 10 to EA with covering email requesting confirmation that the chapter provides sufficient information and confirmation of agreement of the assessment approach and the absence of GI data. **PMN: Sent on 05.06.19**
 6. [redacted] to send SMP details to [redacted] **PMN: Sent on 11.04.19.**

□

A.21. Letter (18.04.19)



amount), the habitat features around the edge and lake bed morphology are more important to the lake function and we acknowledge that these are being taken into consideration through the proposed mitigation.

As noted in the introduction to this letter, we have serious concerns from a groundwater resources perspective – our detailed comments on this matter are on pages 5 and 6 of this response.

WFD Assessment – screening & scoping

We agree with what has been scoped in and out. We agree that this scheme poses little to no risk to Drinking Water Protected Area (DrWPA) status, and is also not likely to impact on Nitrate Vulnerable Zones (NVZs).

Biodiversity net gain

We are concerned that the scheme's objectives no longer include a commitment to achieving biodiversity net gain, which we understood through our pre-application engagement would be committed to. We would like confirmation of whether the scheme will provide an overall net biodiversity gain.

Stratford Brook

We agree that 'minor localised' is an appropriate categorisation of the risk for the Stratford Brook. The report acknowledges that the additional mitigation being considered for the scheme is not yet sufficiently developed to confidently conclude it will mitigate the minor localised adverse effects residual to the embedded design. It will be critical going forward that you can 'firm up' these mitigation measures at the earliest opportunity to offset the morphological impact associated with the bridge, as we have discussed with you separately at our site visit meetings, most recently on 29 March. Our position remains that the proposed 'embedded mitigation' will not be sufficient to mitigate the impacts on their own.

The key morphological impact from the new bridge appears to be associated with the loss of riparian habitat below the open span bridge. The information below provides additional context on riparian habitat and hydromorphological status:

Structure of riparian zone forms part of the Hydromorphology quality element of river waterbodies. Definition: The abundance and diversity of plants present at the wetted edges of the channel, on the banks and bank top, including their complexity of structure.

We would be concerned with:

- 1. the direct or indirect loss of vegetation in the riparian zone*
- 2. changes to the range of plant species present*
- 3. changes to the structure of vegetation cover along the river length*

The current 'Reasons for Not Achieving Good' (RNAG) status on the Stratford Brook can be linked to morphological pressures. Invertebrates are failing due to physical modification. The main factor impacting on the morphology of the channel upstream of the A3 is the presence of the impounding structure associated with the A3 slip road culvert. This structure is currently impounding 100-200m of habitat upstream of the A3

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and preventing fish from migrating upstream. The structure also exacerbates the impact of the new Stratford Brook crossing, as in addition to the loss of vegetation structure within the channel, there will also be an absence of morphological features that would otherwise provide refuge for fish.

Some of the mitigation measures proposed have the potential to offset the impact from the bridge crossing and also help mitigate some of the current pressures, but we have already separately provided our advice that additional mitigation measures to address the impacts of the existing A3 slip road culvert should be included where feasible.

Overall therefore, we agree that the new Stratford Brook crossing and strengthening works to the A3 slip road culvert will not prevent the achievement of WFD Good Ecological Status (GES). However, it must be acknowledged that the scheme presents a significant opportunity to reverse the detrimental impacts of an existing Highways England asset and achieve WFD objectives by restoring 100-200m of natural channel morphology and opening up a significant reach of watercourse to fish, an opportunity which is unlikely to be available again for some decades given the scope of works proposed to the junction.

Boldermere Lake

In section 4.7.26 of the WFD Assessment, we are encouraged by the plans to re-direct road runoff to downstream of the lake as this will help to ensure the salinity WFD element remains at 'High' post-construction and reduce the risk of WFD chemical failures. It is not clear that the impact on water quality at this new discharge location has been included in any of your drainage or water quality assessments; this will need to be assessed.

Also, in terms of lake levels and groundwater/surface water inputs it would be good to see if changing the surface water inputs into the lake would have an impact on lake levels, although we acknowledge that this is potentially not the case as it is suggested that the lake is supported by groundwater levels. This concern could be addressed with the further hydrological/groundwater assessments that still need to be completed.

The Boldermere Lake WFD assessment appears to have overlooked to some extent the potential impact from the actual construction phase and work involved in moving the retaining wall and associated earth works. Although only a short term activity, there is the potential for longer term impacts associated with the suspension of solids/sediments and smothering of lake habitats important to the SSSI designation. This may pose a risk to WFD Total Phosphorus and Phytoplankton status if the retaining wall and bank sediments and associated nutrients are not controlled effectively. Due to the nature of the water environment this impact could last for multiple years after the actual construction phase. You should produce a detailed method statement for this specific element of the scheme to demonstrate how this risk will be reduced and the WFD status protected.

Compliance with the WFD status of Boldmere appears to be dependent on the implementation of some of the mitigation measures identified. Without these measures, the impacts are predicted to be 'adverse widespread or prolonged effect'. Boldermere is currently failing WFD due to the Total Phosphorus and Phytoplankton, which are closely linked. For example, the proposed removal of carp from the lake has the potential to help address the WFD failure because their foraging activities re-suspend sediments that could contain Phosphorus. Therefore the proposed eradication of carp could have a positive impact on WFD status and restore more natural nutrient-cycling processes. It is therefore critical that the proposed measures are 'firmed up' - working with us and Natural England - to ensure that deterioration can be avoided. We recommend that an **ongoing maintenance plan and/or adaptive environment management plan** is produced for

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Boldermere to set out more detailed plans for each mitigation measure and to monitor the effectiveness of the mitigation measures into the future and adapt approaches accordingly if required. Because WFD compliance is somewhat dependent on these measures, it will be important to demonstrate how effective they have been. The ongoing maintenance plan can clarify how long the mitigation measures should occur for, for example how many years following construction carp removal should carry on.

In the hydromorphological assessment in Appendix C, please note that you have listed river hydromorphology quality elements: Hydrological Regime (e.g. quantity and dynamics of flow and connection to groundwater) and Morphology (e.g. river continuity, river depth and width variation, structure and substrate of river bed, and structure of riparian zone). You should amend this to identify the correct quality elements for lake hydromorphology and assess accordingly against those rather than river quality elements.

In terms of the hydromorphological status of the lake there appears to be no change other than the actual size of the lake (loss of open water habitat). The D.2 Technical Note on WFD Compliance for Boldermere demonstrates that the morphological changes to the lake (i.e. reduction in overall size) isn't likely to have much of an impact on Total Phosphorus concentrations. The north shore habitat is proposed to be translocated and this is more ecologically valuable. Hydromorphology is only a 'supporting element' for WFD which means that if all other elements were at 'High' status and Hydromorphology wasn't, the waterbody would still be classified as 'Good' status. Therefore it boils down to whether the hydromorphological changes from the scheme will prevent the other elements such as invertebrates and macrophytes achieving the future WFD objective status/favourable conditions. There will essentially be, post-construction, a slightly smaller but potentially better quality lake - assuming the proposed mitigation measures are in place. Ultimately if Natural England are satisfied that the SSSI favourable conditions and macrophytes/invertebrates associated with its designation will not be compromised by hydromorphological changes to the lake then this should be sufficient.

Mole & Wey

The only minor localised adverse impact is a result of a very small proportion of the total number of road discharges. At a WFD waterbody/catchment scale, we agree that there is unlikely to be a deterioration in water quality as a result of the drainage to minor watercourses (non-WFD) and drainage ditches.

Elm Lane Ditch

This appears to be impacted by WY1, which has been incorporated into the WFD assessment for the River Wey waterbody. However, it also appears to form part of Boldermere Lake's upstream catchment. Therefore it would be sensible to include this as part of the WFD assessment and consider the potential impacts on the lake. In particular the potential water quality risk associated with construction run-off, how this might reach the lake through current drainage pathways and how this would be mitigated.

Ordinary watercourses

The scheme will result in the culverting and realignment of several ordinary watercourses within both the Wey and Mole catchments. We agree with the conclusion that this will result in a minor localised impact (worst case scenario) and support the generic guidance on the principles of WFD compliant design outlined in section 5.4. However, we advise that the following guidance is also included within section 5.4 to ensure these impacts are

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fully mitigated:

- The loss of open channel should be compensated for by providing an equivalent length (or greater) of new open channel habitat or a significant reach of enhanced open channel habitat.
- Opportunities to improve an existing culvert should be sought where culverts are being extended/replaced.
- Mammal fencing should be used to guide mammals into culverts where mammal ledges are being provided
- Re-aligning a watercourse should take preference over culverting.
- Where bed and bank reinforcement is required, compensation should be provided by enhancing an equivalent (or greater) length of riparian habitat.
- Generic guidance on the principles of WFD compliant design for outfalls and SuDS should be provided, for example providing natural surface water discharge routes rather than concrete outfalls that result in the loss of natural bank.

Section 4.7.18 states that preliminary designs involve ephemeral ditches being replaced by more formal drainage infrastructure or realigned, but that no mitigation measures have been embedded into the design. Instead mitigation is proposed in the form of enhancement of water features on replacement land and enhancement areas. We are not clear why you have taken this approach. You should in the first instance seek to take opportunities to restore these channels to a more natural state - for example by realigning - where possible. Where this is not possible, we support the statement that 'the scale/quality mix of these possible enhancements will need to be at least commensurate with that of the impact'.

Groundwater quality

We have reviewed the documents from a groundwater quality perspective and they are satisfactory to the point they have reached, albeit additional information will need to be provided in due course. The WFD Assessment indicates a number of times that further site investigation will be undertaken, in particular to establish groundwater flow direction.

Similarly with the Water Quality Assessment, it concludes the scheme provides a medium level of risk. We accept this in part because of the nature of the receiving aquifer - mainly the Bagshot Formation. The report does however indicate that mitigation measures and further risk assessment will be required and we would concur with this approach.

Groundwater resources

There is currently a shortfall in the understanding of the groundwater flows and processes and the potential impact that piling works may have on the groundwater body as well as the Groundwater Dependent Terrestrial Ecosystems (GWDTEs) – Boldermere in this case. Ultimately, the works could impact lake levels which might compromise WFD and Natural England SSSI objectives for the lake. There is therefore at present a risk to WFD compliance. Further assessment of this is therefore of critical importance.

Paragraph 4.3.9 of the WFD Assessment gives a wide range of groundwater depths (0.2 – 16.0 metres below ground level) compared to the variable depths of the proposed scheme components which have the potential to impact on the quantitative status of the groundwater body. We note that this paragraph also references ES Chapter 10 for a "detailed discussion" on groundwater levels, which we have not yet had the opportunity to review.

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Paragraph 4.7.32 confirms that the additional mitigation being considered for the scheme is not yet sufficiently developed to confidently conclude it will mitigate the minor localised adverse effects residual to the embedded design. The final set of measures need to be developed based on the results of the detailed ground investigations to be undertaken to assess the baseline groundwater levels and flow direction. These measures to be developed during the detailed design stage should ensure that the proposed scheme components do not form a barrier to groundwater flow and do not adversely affect groundwater contribution into Boldermere.

Therefore overall, due to the lack of data to determine the groundwater levels and flow direction, it is currently not possible to assess the impact of the proposed scheme on groundwater resources and on the quantitative status of the groundwater body. This fact is addressed in WFD Assessment and a comprehensive site-specific ground investigation is proposed as additional specific measure (CB_a Ground investigations and design alteration of piling and retaining walls). Upon completion of the ground investigations, it would be possible to assess the impacts of the proposed scheme on groundwater resources.

Given this, we are concerned by the presence of Boldermere and the Ockham and Wisley Commons SSSI, which are critical in the quantitative assessment of groundwater status. Currently, the available data is not enough to assess the impacts of the scheme on such dependent features. Further detailed investigation is critical at this point. Any comments on the effectiveness of the proposed measures could only be made after the baseline conditions (groundwater levels and flow directions) are known. Only after the baseline is established will it be possible to design the scheme components affecting groundwater resources.

Therefore, based on the information that we have seen to date, on hydrogeological grounds we may have an objection to the scheme until the proper baseline groundwater conditions are known. Once we have this information, we would be in a position to assess the effectiveness of the proposed measures. Currently there is no solid evidence to conclude if the scheme is acceptable or not. In short, we need to see a Hydrogeological Risk Assessment, which is stated will be undertaken once ground investigation is completed. However, we make this statement on the basis that we have not yet reviewed ES Chapter 10, which may go some way to allaying our concerns on this matter.

Impoundments and/or dewatering

Any impoundment and/or dewatering and associated discharge activities could require a licence/discharge Permit from us. Please note that from 1 January 2018, the licensing exemption on dewatering is no longer valid. Therefore, an application has to be submitted to us for an abstraction licence to carry out dewatering activities.

We therefore recommended you consult the relevant sections of the gov.uk website at the earliest possible stage to determine if a licence or Permit is required.

Final comments

Our comments are based on our available records and the information as submitted to us.

Please note that the views expressed in this response by us are a response to a pre-application enquiry only and do not represent our final view in relation to any future planning application made in relation to this site. We reserve the right to change our

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position in relation to any such application. You should seek your own expert advice in relation to technical matters relevant to any planning application before submission.

If you have any queries about the matters raised in this response, please do not hesitate to contact me.

Yours sincerely,

[Redacted]
Strategic Planning Specialist

Direct dial [Redacted]
E-mail [Redacted]

cc [Redacted] – Atkins
[Redacted] – CJ Associates (Atkins)
[Redacted] – Atkins
[Redacted] – Atkins

End

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A.22. Letter (26.04.19)

creating a better place



FREEPOST
M25 junction 10 / A3 Wisley Interchange
(via e-mail)

Our ref: WA/2018/125963/02-L01
Date: 26 April 2019

Dear Sir/Madam,

M25 junction 10/A3 Wisley Interchange improvement scheme

Pre-application consultation

Additional non-statutory targeted consultation

Section 42 Planning Act 2008

Thank you for consulting us on the above targeted non-statutory consultation.

Our only comment on this consultation is in relation to the removal of the previously proposed flood compensation area for the new bridge over the Stratford Brook.

We have looked through all of our previous pre-application correspondence and whilst we have been notified verbally that the review of the Stratford Brook model has demonstrated that the flood compensation for the new bridge is no longer required, we have not yet been provided any evidence to this effect. We are therefore not currently in a position to confirm that flood compensation is no longer required until we have seen such evidence.

We need to see a detailed Flood Risk Assessment (FRA) that clearly demonstrates that there will be no increase in flood risk.

We note in the 'Key Design Changes' that the proposed compensation area for the Stratford Brook is "no longer required" and that this has "been agreed with the EA". We have no issue with the principle of the compensation area being removed, but only on the understanding that the new bridge and road works do not lead to a loss of floodplain storage. Only a detailed assessment within an FRA will establish whether your plans lead to any loss of floodplain storage. Any loss of floodplain storage will need to be compensated for on a level for level basis up to the 1 in 100 plus 35% flood level. Therefore, it might be slightly premature to make statements about flood compensation for the Stratford Brook not being required.

We look forward to reviewing a detailed FRA in due course, or as part of the Development Consent Order application.

If you have any queries about this response, please do not hesitate to contact me.

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Yours faithfully,

[REDACTED]
Strategic Planning Specialist

Direct dial **[REDACTED]**
[REDACTED]

cc **[REDACTED]** CJ Associates
[REDACTED] - Atkins
[REDACTED] - Atkins

End

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A.23. Natural England Meeting (29.04.19)

Meeting Notes

Project:	M25-J10/A3 Wisley Interchange Scheme		
Subject:	Project update (Programme; Draft DCO requirements; Statement of Common Ground)		
Author:	[REDACTED]		
Date:	29/04/2019 2.00-4.00pm	Project No.:	<project no>
Attendance	Representing: Natural England Highways England Atkins Atkins Atkins		

ITEM	DESCRIPTION	RESPONSIBLE
1.	Welcome and introductions [REDACTED] welcomed all to the meeting and introductions were given.	
2.	Project and Programme update [REDACTED] gave an update on the project, highlighting the statutory consultation which took place February/March 2018 and changes to elements of the scheme that were re-designed during April to August as a result of feedback received. [REDACTED] added that the changes to the design were moderate and as such a further targeted non-statutory consultation took place in Nov/December 2018. As a result, further revisions to the design were incorporated in March this year and Highways England are currently out for a further round of consultation. [REDACTED] outlined the DCO programme noting that the target date for DCO submission is 04 June. Following this there will be a 28 day acceptance period followed by a three-month pre-examination period to September which is preparation for the examination itself. The DCO examination will take six months to March 2020 with award expected September 2020. [REDACTED] referred to Balfour Beatty as being the appointed Regional Delivery Partners for M25 J10 and that work at present is at package as opposed to scheme level (due diligence and cash flow forecast activities). He confirmed that detailed design and planning will take place alongside the DCO process. Balfour Beatty will take over the management of the scheme at some point during Stage 4. [REDACTED] confirmed that Atkins are the technical consultants that will take forward detailed design. [REDACTED] asked what input will be needed from Natural England after DCO submission. [REDACTED] stated that this was unclear at present. [REDACTED] added that this is referred to in the draft DCO requirements and there will be discussion with NE required. [REDACTED] stated that as NE have stated they are	

broadly in agreement with everything that Highways England are proposing that therefore there won't be any issues that PINS will need to come to NE for or to resolve.

A discussion was had in relation to the Statements of Common Grounds (SoCGs) that are being put in place with all statutory environmental bodies and the need to record both points of agreement and disagreement/in-discussion. ■ agreed that Highways England will need to be clear about what might be expected of stakeholders and when during the DCO process.

Construction preparation will take approximately 4-5 months following DCO. In terms of land to be acquired for the scheme, replacement land acquisition and site compounds will be prioritised. Construction is due to start March 2021 for 2.5 years.

■ referred to Balfour Beatty (appointed Regional Delivery Partner) keen to look at environmental work (tree felling for example outside of bird nesting period) and statutory service diversions (BT e.g.) as part of advanced works (post award of DCO).

■ referred to ground investigation (GI) works which are due to commence this week. Osborne are the appointed contractors. The work includes a drainage and gas survey. Information gathered will feed into the design and planning – some aspects of GI are required during examination, for example in relation to works at Bolder Mere.

■ referred to the Smart Motorway Programme (SMP), another scheme to turn J10 and 16 into a smart motorway. M25 J10 project will be undertaking the works on J10 on behalf of SMP to keep it in one package.

ACTION: ■ to send e-copy of programme to NE. PMN: Sent on 31.05.19

3. **Draft DCO Requirements**

■ asked how this fits into the broader DCO document. He confirmed that NE colleagues had some comments. ■ confirmed that ■ was pleased with how the SPA elements had been covered. He added that there will be a need to get started on the compensatory habitat creation before the authorised development starts.

A question was raised in relation to whether there should be a specific reference to net gain for biodiversity. ■ commented that ostensibly as a result of the works some of the SPA qualifying species would be improved but that the loss of 02.hectares of ancient woodland and up to 9 veteran trees (minimum 2) and some SPA, meant that the projects position in relation to the definition of 'net gain' could be contentious. When looking at the scheme as a whole due to the irreplaceable habitats, this opens Highways England to challenge. ■ advised that he would seek advice from ■ as to how to address the issue. **PMN: NE provided advice and confirmed they are content with the proposed approach to net gain for biodiversity (22.05.19)**

■■■ referred to point 17 in the draft requirements which states after the completion of the authorised development a scheme of restoration and landscaping will be agreed. ■■■ questioned whether this was how this was normally done in the planning system. ■■■ confirmed that there is a high-level proposal and plan in place and this will be agreed in the detailed design phase. ■■■ referred to a technical note which precedes the management plan of the proposed restoration and landscaping works (planting) and outlines the principles. This is being agreed at present in consultation with Surrey County Council and Surrey Wildlife Trust.

A discussion was had about the land management plan (which will follow on from the technical note). ■■■ confirmed there will be two, one for the SPA and one general plan.

■■■ referred to the SPA compensation land needing to be in place prior to the start of works and the need to get this on MAGIC. ■■■ to email ■■■ about this to give confidence with regards to the HRA. ■■■ confirmed that there is not the expectation from NE that the habitats will be established, but that the process will be started (i.e. tree planting taking place).

A discussion was had regarding the feasibility of the Cockrow green bridge due to lack of funding. Designated funds have been allocated for the feasibility study and the design and no more funding can be obtained at present. ■■■ referred to the drawings that showed a wide green strip to the east side of the roadway (10 metres) which has been considered inadequate by SWT who are requesting 50 or 25 metres width which would extend into common land and SPA. PINS are aware that proposals are not included in the DCO submission, but Highways England are supportive of a proposal should it be feasible.

ACTION: Natural England (■■■■■■■■■■) to advise the project on net biodiversity gain issue. PMN: Completed 22.05.19

ACTION: Highways England to share the land management technical note with Natural England for their review (subject to internal review).

ACTION: ■■■ to email ■■■ regarding SPA compensation land and getting this on MAGIC. PMN: Completed.

4. **Habitats Regulation Assessment (HRA)**

■W confirmed that comments received from NE and from Highways England do not contradict each other and ■■■ is working to incorporate the comments. ■■■ confirmed that he will send an excel document with the changes incorporated to ■■■.

ACTION: ■■■ to send summary of response to NE comments on the HRA. PMN: Sent on 10.05.19. NE response received on 16.05.19

■■■ referred to the point of the Heathrow Expansion. He confirmed that on agreement with the Highways England transport planning group, the Heathrow Expansion has not been included in the forecast model. DfT have not provided any information on what the strategy will be, only that

stating it will not result in any additional traffic demands. ■■■ commented that this is widely seen as an unrealistic expectation.

ACTION: ■■■ to send ■■■ an explanation re the Heathrow Expansion and the rationale for the decision. The response to NE comments on the HRA to include position on Heathrow Expansion.

A discussion was had in relation to IROPI and the unprecedented nature of the project in this respect. ■■■ confirmed that the HRA explains adequately why IROPI has been needed and therefore Highways England should not be concerned. ■■■ confirmed that feedback from Highways England does not change the case for IROPI.

5. **Water Framework Directive Assessment – Bolder Mere mitigation proposals.**

■■■ outlined what the project is proposing for Bolder Mere in terms of mitigation and what the project is proposing from a water environment perspective for mitigation in the replacement and enhancement areas.

■■■ stated that he had sent ■■■ an outline of proposed mitigation for Bolder Mere based on the Goldsmith Ecology report re good management practice and confirmed that the preliminary design does include an element to re-direct road runoff that is currently discharging to Bolder Mere via treatment into the ditch downstream. ■■■ confirmed that he was very pleased with this aspect. ■■■ confirmed that the type of treatment couldn't be confirmed at present but would be better understood during detailed design.

■■■ referred to NEs earlier request to include some rotational management of the Alder, Birch and Willow woodland in the south east shore of Bolder Mere. ■■■ confirmed that this was included in Appendix F of the WFD report as an area marked as 'habitat 10'. ■■■ explained that they had identified the low-lying areas SE of Bolder Mere as areas for rotational management of these species. ■■■ confirmed this was the area he was referring to and reiterated that the management should target reduced shading on the lake shore and encouraging more development of the marsh and mire habitat whilst not destroying another useful habitat (boggy alder woodland). He added that it was about reducing the height of canopy maintaining it on rotation as more of sort of a scrub edge habitat but doing this light touch with a coppicing regime every 10 years or so. ■■■ confirmed that he will check the Management Plan to see if this is included.

■■■ asked if ■■■ was comfortable with what the project is proposing for Bolder Mere. ■■■ confirmed that yes he agreed the package of mitigation was proportionate to the loss and added that the package will enhance the habitat.

A discussion was had about ephemeral drainage ditches impacted by the scheme (moved or subsumed within the scheme). ■■■ outlined a primary mitigation will be to make the ditches (within the replacement and enhancement areas) as natural as possible when they are relocated dependent on their location. For Chatley Wood Pond the proposals was to excavate the pond so that during wetter periods of the year it will be an open water habitat. ■■■ noted that there seems to be a historical decline in the open water resource on the site of this pond and in the wider area and therefore recreating this wetland interesting and redistributing across the

	<p>chapter re SSSI and LNR. PMN: Completed. Response received on 22.05.19</p> <p>Points raised: Location of construction compounds (additional targeted consultation response): ■■■ stated that the Cockrow compound is for the bridge construction and will be buffered from the heathland to prevent effects on qualifying species. Line items on SoCG to be rationalised into one and to reference general issue raised by NE.</p> <p>Points raised: Ancient woodland loss: Feedback from NE on net gain to inform position on ancient woodland loss. ■■■ stated that this should be referenced and that NE and the project have worked hard to reduce the loss. ACTION: to include reference in the SoCG to efforts to reduce the loss of Ancient Woodland. PMN: Completed.</p>	
7.	<p>Next steps/AOB</p> <p>■■■ referred to the DCO and uncertainty around whether there will be any additional requirements imposed as a result of the DCO and the need to update the SoCG in light of this.</p> <p>■■■ referred to land acquisition. ■■■ stated that replacement land and principal site compounds are being prioritised in this respect and discussions have commenced.</p> <p>■■■ stated that we would be hoping to have a signed copy of the SoCG by 13.05.19.</p> <p>DCO draft requirements. ■■■ confirmed they will respond in writing on their comments.</p>	
8.	<p>Actions:</p> <ol style="list-style-type: none"> ■■■ to send e-copy of programme to NE: PMN: Completed. Natural England (■■■) to advise the project on net biodiversity gain issue. PMN: Completed. Highways England to share the land management technical note with Natural England for their review (subject to internal review). ■■■ to email ■■■ regarding SPA compensation land and getting this on MAGIC. PMN: Completed. ■■■ to send summary of response to NE comments on the HRA. PMN: Completed. ■■■ to send ■■■ an explanation re the Heathrow Expansion and the rationale for the decision. The response to NE comments on the HRA to include position on Heathrow Expansion. PMN: Completed. ■■■ to share text with ■■■ on proposals for drainage ditch mitigation (including sketches). Atkins to update SoCG and send to NE for review/approval for sign by 13.05.19. PMN: Completed. Sent on 31.05.19 ■■■ to confirm whether a SoCG with RSPB will be required. PMN: Completed. ■■■ to send extracts of ES chapter re SSSI and LNR. PMN: Completed. SoCG to include reference in the SoCG to efforts to reduce the loss of Ancient Woodland. PMN: Completed. ■■■ to provide feedback in writing on the draft DCO requirements. PMN: Completed. 	<p>Atkins (■■■) NE (■■■)</p> <p>Highways England (■■■) Atkins (■■■) Atkins (■■■) Atkins (■■■)</p> <p>Atkins (■■■)</p> <p>Atkins (■■■) Atkins (■■■) Atkins (■■■)</p> <p>NE</p>

A.24. Meeting (07.05.19)



Meeting Notes



Project:	M25-J10/A3 Wisley Interchange Scheme		
Subject:	Water Framework Directive Assessment – Groundwater Quantity		
Author:	[REDACTED]		
Date:	07/05/2019 10.00-11.00 am	Project No.:	<project no>
Attendees	[REDACTED]		Representing: Environment Agency Environment Agency Atkins Atkins Atkins (By phone) Atkins (By phone) Atkins (By phone) Atkins

ITEM	DESCRIPTION	RESPONSIBLE
1.	<p>Meeting objectives and expectations</p> <p>[REDACTED] outlined the objective of the meeting which is to respond to a concern raised in a letter dated 18/4/19 from the Environment Agency (EA) in which they provide feedback on the Water Framework Directive (WFD) assessment for the scheme. In the letter, the EA raised concerns following a review by their groundwater (GW) resources team, about the lack of GW information and how the scheme may impact on GW resources and sensitive SSSI sites in the locality of the scheme. The EA state in their letter of the 18/04/19 that until they have reviewed how Atkins/Highways England have addressed this issue in the Environmental Statement (ES) (Chapter 10), at this point they are concerned that they may have an objection to the DCO based on this lack of information. :</p> <p>[REDACTED] explained that although Ground Investigation (GI) data is being collected, this is not going to be available until after the DCO is submitted. Therefore Atkins/Highways England will need to prepare the ES and WFD assessment with the information currently available.</p> <p>The aim of the meeting is to agree with the EA a suitable conservative methodology for assessing the effect of the scheme on GW bodies and SSSI features (and appropriate mitigation). The methodology should be built around a "reasonable worst case" for a) GW flows and b) the effect of the scheme on those flows.</p> <p>a</p> <p>[REDACTED] noted that [REDACTED] had not been involved in the pre-application discussions to date.</p> <p>[REDACTED] outlined the agenda items which included updating [REDACTED] on the project to date to provide some context.</p>	



<p>2.</p>	<p>Scheme context</p> <p>█ gave an overview of the scheme (slide 4).</p> <p>█ referred to the additional road and overbridge that will run into RHS Wisley. The overbridge will be piled but this is not extensive. She referred to Bolder Mere (BM) and the widening of the A3, moving the existing retaining wall adjacent to █. There is another retaining wall the other side of the A3 to █ to restrict the land take and protect a badger set. The roundabout is being elongated on one side to reduce congestion and reduce land take. The works extend along the M25 due to widening and impact on bridges. There will be a new local access road for the Girl Guides, north of Redhill on the west side of the A3 and a local access road to the east side of the A3.</p> <p>█ emphasised that although the area of the scheme is large, works are discreet and ground works are not extensive.</p>	
<p>3.</p>	<p>Current groundwater conceptual understanding</p> <p>█ outlined the WFD GW features (slide 5) in the area of the scheme, including Chobham Bagshot Beds GW body, Ockham and Wisley Commons SSSI, which includes BM lake. She highlighted various features of the works that relate to these, particularly around BM.</p> <p>█ outlined the bedrock and superficial geology of the area (slide 6).</p> <p>█ summarised the existing GW information, available from previous ground investigations in the area. She stated that part of the reason for taking the reasonable worst-case approach is the lack of available GW data. █ referred to two previous GIs undertaken south of the works area on Wisley airfield. She stated that this data is highly limited, consisting of a single round of manual dips from May 2014, with one additional dip in 2012. Using this data a highly indicative GW flow direction can be estimated (slide 7 and 8) from May 2014. █ asked what the conditions were like at this time. █ stated it is the summer after the GW flooding in Jan/Feb 2014.</p> <p>█ referred to the GW flow direction indicated on the slide (8) as fitting with the topography and the surface water catchments. This needs to be confirmed by the GI and was emphasised as indicative only at this stage.</p> <p>█ referred to BM and the existing and planned retaining walls. She added that not much is known about the structure of the existing retaining wall (conditions below ground) as there are no records, except for its length of 175 m. There is also a lack of information about GW levels in this location. She confirmed that the project had accounted for this in the approach to mitigation, based on a worst-case scenario. The existing retaining wall is proposed to be replaced with a new retaining wall slightly further into the lake, the location of which has been discussed previously with the Agency.</p> <p>The preliminary design extends the new retaining wall to 228 metres in length and will have an approximate retained height of 1.5 metres. This might change once more detailed topographical data is available. A retained height of 1.5 m would mean a depth below ground of approximately 3 m (based on rule of thumb). █ confirmed that the GI has started, with ground clearance happening at present and GIs starting within days.</p>	<p> </p>



4. **Proposed long-term approach**
- outlined the proposed long-term approach (slide 10). She stated that in line with other aspects of the ES (contaminated land risk and other WFD elements) the intention is to undertake the GI during the DCO process. After the GI is completed, a hydrogeological risk assessment will be undertaken, including a piling assessment and conceptual understanding of GW flow direction. This will provide the GW information which is then used to update the design and either roll back in terms of worst-case scenario or implement the mitigation measures identified.
- confirmed construction will not start until the result of assessment have been agreed.
- added that control measures have been included within the DCO, so that no intrusive construction works can be undertaken until GI data is obtained and all appropriate assessments have been completed.
- stated that we would be looking for EA agreement on this approach.
- confirmed that she was content that this was a suitable approach.
5. **Proposed mitigation**
- outlined the worst-case scenario in terms of proposed mitigation which is what we will be designing for (GW flow and levels).
- She highlighted the worst-case scenario as the GW flow direction indicated by the arrow on slide 11, as being perpendicular to the existing retaining wall, in a north west to south east direction. In this direction, the retaining wall would be a barrier to GW flow through the aquifer and into BM.
- highlighted that, if the GW flow direction is south east (SE) to north west (NW) (opposite to worst case), the existing retaining wall may be keeping water in BM by being a barrier to flow. In this scenario, if the existing retaining wall is removed, we could be releasing water from BM lake.
- confirmed therefore that the project is aware of the different scenarios depending on the direction of the GW flow. ■ asked if the plan was to put in the new retaining wall before taking the existing one out. ■ confirmed that this was correct.
- outlined the design mitigation for the worst-case scenario (GW flow direction NW to SE) as being King Sheet Piling®. The advantage for GW is that only some of the sheet piles extend the full depth below ground, the retaining wall would therefore not impede GW flow. She confirmed that this approach had been used in the same situation on the East West Rail Phase 1 project to address the EA's concerns that sheet piling would be a barrier to GW flow, and also used by Highways England on other schemes.
- confirmed that we were looking to agree the approach with EA and to determine whether the EA are content with the mitigation measures. ■ stated that the approach made sense.
- added that GI had been prioritised for BM and that it is our aim to make this available during DCO examination. ■ asked what the extent of the GI was. ■ confirmed it was close to 600 boreholes in total across the scheme area. ■ pointed out the planned location of the boreholes around BM (triangulated around the Lake) to understand GW flow. ■ stated the BM discharges from BM and flows under the A3 into a marsh

area – she added that if this is what surface water is doing that GW is likely to be similar.

█ referred to the draft ES chapters and █ confirmed that we will be releasing the drafts of Chapters 8 and 10 following this meeting. EA will then provide formal feedback on the approach. █ confirmed the existing GW level data will be included in Chapter 8 as opposed to Chapter 10 (referenced between the chapters).

█ asked if EA felt they had received enough information (once having reviewed the draft ES chapters) to clarify whether the EA are content with the proposed approach based on the worst-case scenario, to address the concerns expressed in their response to the WFD and the potential for an objection to the scheme on this basis. █ stated that they would need to look at the ES chapters but based on information presented the approach made sense and she was content with the worst-case scenario and that the mitigation refers to the worst case.

Discussion was had regarding the WFD and need to address other comments received. It was agreed that the WFD would be updated to respond to comments received on 18/04/19 and sent back to EA for comment. █ added that the key conclusions of the WFD will be in Chapter 8 of the ES. █ stated that it would be useful to have a summary of changes made to the WFD as a result of EA feedback.

█ clarified two elements of discussion around the scheme regarding GW – that at this stage we need to present a worst case that we are designing against and then satisfying the EA that there is flexibility within the mitigation to be able to deal with the worst case. █ agreed. He added that from a planning perspective they would not want a scheme that was approved but then there is no viable solution to mitigate the impact. EA need to be satisfied that mitigation is possible.

█ further clarified – there is the worst case where the flow is coming across the A3 and into BM, and a much more likely alternative where water is flowing from BM towards the A3. █ added that if the water was going from BM towards the A3 (NW) and concern was about losing water, then standard sheet piling should be used. █ added it is about having flexibility with regards to the permeability of the piling which King Sheet piling® does.

█ added that █ had referred to species in BM (SSSI) and whether they were sensitive to water quality and hence potentially impacted by proposals. His suggestion was for GW quality monitoring. JG confirmed that this would be picked up by ecology. █ added that GW quality monitoring is included as part of the GI. A question was raised regarding surface water quality monitoring. █ confirmed that this would be included.

█ asked how many rounds of baseline GW monitoring would be done and whether it will be undertaken for dry and wet conditions. █ confirmed that there would be 3 rounds to inform the risk assessments. If as a result of these assessments there is a need for more monitoring following this to inform design, this will be undertaken. █ stated that her question related to concerns around seasonal changes in GW flow. █ confirmed this would be considered in the risk assessments. Additional monitoring would be targeted.



referred to EA feedback on the WFD and reference to impacts on during construction phase and the request for more details on this noted that this information is usually presented in the Construction Environmental Management Plan (CEMP) and that it would be preferable for this information to be presented in the CEMP as opposed to the WFD Assessment Report to avoid duplication.

6. **Next steps/AOB**

highlighted the need for feedback on the ES chapters and approach by Highways England SGAR date if possible (28 May). stated that he will respond as soon as possible.

outlined the outstanding actions for Atkins to send over to EA for their review and comment:

1. Draft ES Chapters 8 and 10
2. Comments on EA response to the WFD
3. Statement of Common Ground
4. Letter regarding s150 consents and licences
5. Draft meeting note form 10.04.19

A.25. Email (21.05.19)

From: [REDACTED]
Sent: 16 May 2019 20:15
To: [REDACTED]
Cc: [REDACTED]
<[REDACTED]>
Subject: M25 J10 Scheme - Stratford Brook Mitigation Strategy and Commuted Sum

Hi [REDACTED]

Please find attached two files.

- The spreadsheet is a cost estimate for channel restoration works to a 100m reach of the Stratford Brook. It uses rates in an EA costing spreadsheet (Environment Agency, 2015a), and is based on some conservative assumptions (e.g. 100 m of restoration, multiple measures, fully enabling activities). The sum is £116k. More detail in "Intro" tab.
- Updated text explaining our agreed approach to identifying an appropriate mix of mitigation measures for Stratford Brook.

Following our telephone call today, please could you let me know your views of the sum that comes out of the costing tool? Also does the text adequately represent our agreed approach? If you were able to respond in the next few day, that would be much appreciated.

Regards

[REDACTED]

Ref

Environment Agency, 2015a. Long term costing tool for flood and coastal risk management. [online] Bristol: Environment Agency (Published 2015) Available at:
<https://www.gov.uk/government/publications/long-term-costing-tool-for-flood-and-coastal-risk-management> [Accessed 16 May 2019]. – the spreadsheet is in the zip file.

[REDACTED], MSc, MPhil, MCIWEM, CGeog (geomorph)
Principal Geomorphologist, Water Management Consultancy
UK & Europe
Engineering, Design and Project Management
Tel: +[REDACTED]9 Mob: +[REDACTED]

Atkins, member of the SNC-Lavalin Group
Oasis Business Park, Eynsham, OX29 4AH

A.26. Email (21.05.19)

[REDACTED]

From: [REDACTED]
Sent: 21 May 2019 16:50
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: EA response - M25 J10 Targeted non-statutory consultation

Dear [REDACTED],

Thank you for your e-mail regarding our comments on the recent non-statutory consultation in relation to the requirement for floodplain compensation on the Stratford Brook.

I confirm that we agree that the Stratford Brook model that we have reviewed demonstrates that the bridge will not have a significant impact on flood risk, and we also agree with the conclusions of the model report, which includes that compensation is not required.

However, it will still be important to demonstrate within the FRA submitted with the application that the bridge will not cause an increase in flood risk, using the model results as evidence. As we have previously stated, it is important that the FRA – although a technical document – can be easily read by a ‘lay person’ to understand these conclusions. We would be happy to review the FRA (or the section relevant to this matter) prior to submission of the application if so desired.

If you have any further queries on this matter, please do not hesitate to contact me.

Kind regards,

[REDACTED]
Strategic Planning Specialist, Strategic Planning & Engagement (Thames)
Environment Agency | Red Kite House, Howbery Park, Wallingford, Oxon, OX10 8BD

[REDACTED]



Creating a better place
for people and wildlife

Speak to us early about environmental issues and opportunities - We can provide a free pre-application advice note or for more detailed advice / meetings / reviews we can provide a project manager to coordinate specialist advice / meetings which costs £100 per hour (plus VAT). For more information email us at planning_THM@environment-agency.gov.uk

From: [REDACTED]
Sent: 16 May 2019 17:49
To: [REDACTED]
Cc: [REDACTED]
Subject: FW: EA response - M25 J10 Targeted non-statutory consultation

Dear [REDACTED]

Thank you for your response to our additional targeted consultation. We just wanted to check with you in regards to your comment that no evidence has been provided to demonstrate that the flood compensation for the new bridge at Stratford Brook is no longer required.

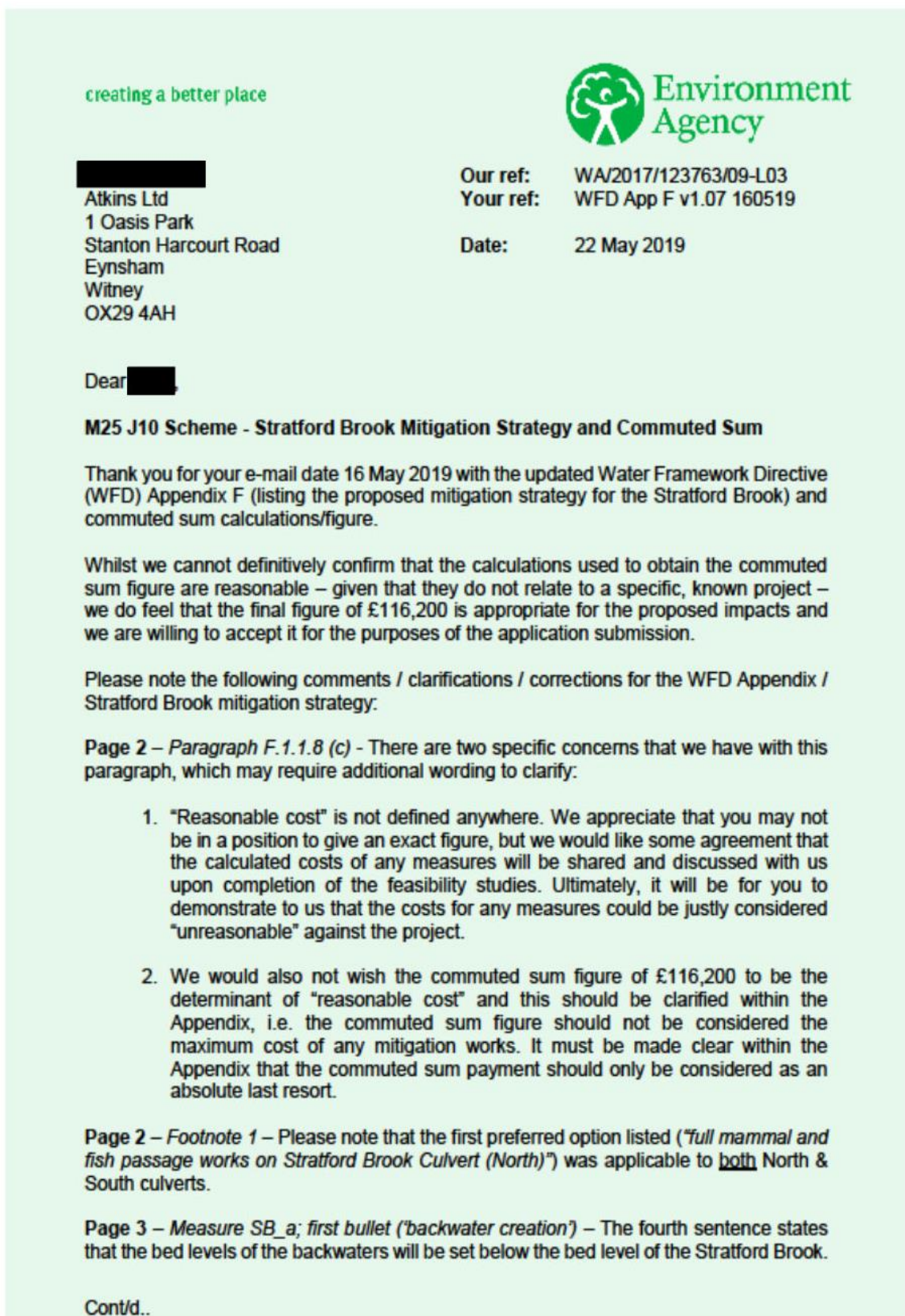
The flood modelling carried out for the Stratford Brook has been signed off by the Environment Agency. In the attached response you confirm *"This review finds that the modelling work completed to date is sufficient to support the conclusions of the report and provide an appropriate level of risk assessment for the proposed works."* The conclusions of the modelling, and reported in the technical note, is that no floodplain compensation is required. The evidence provided in the Flood Risk Assessment to demonstrate the removal of the floodplain is a copy of the details that have already been subject to the EA review.

Grateful if you could confirm, in light of the above, whether your response in the targeted consultation still stands.

Many thanks

[REDACTED]

A.27. Letter (22.05.19)



We are concerned that such design lead to fish becoming trapped in the backwater during low flow events. The backwaters must be designed to allow fish to escape as levels recede, and we would expect to see this confirmed as part of the detailed design of the backwaters.

Pages 3/4 – Measure SB_a – On our previous site visit we also agreed that the additional of coarse gravels in relevant areas would be included in these proposals.


Page 4 – Measure SB_c – The 'Purpose' description is not correct. A mammal shelf would mitigate for the impact that the new Underbridge could have on mammal passage at high flows.

Page 4 – Measure SB_d – The 'Additional mitigation (specific)' and 'Purpose' descriptions appear to have been copied from measure SB_c and are not relevant to the proposed mitigations. In terms of the purpose of these measures, removing or modifying the sill would improve 100-200m of upstream habitat that could compensate for the residual effects of Stratford Brook. The other measures would mitigate the impacts of the existing Highways England structures in accordance with Highways England guidance for new developments.

Page 4 – Measure SB_d – Below the second bullet point (sill removal/modification), a new bullet point should be added to assess improving fish passage through the use of e.g. baffles (as listed in footnote 1 at the bottom of page 2).

If you have any queries about these comments, please do not hesitate to contact me.

Yours sincerely,


Strategic Planning Specialist

Direct dial 
E-mail 

End

2

A.28. Letter (23.05.19)

creating a better place



Atkins Ltd
1 Oasis Park
Stanton Harcourt Road
Eynsham
Witney
OX29 4AH

Our ref: WA/2017/123763/09-L04
Date: 23 May 2019

Dear [REDACTED]

M25 J10 scheme - Environment Agency 'fall back' position for A3 drainage discharge to Boldermere.

Our final outstanding action from the Stratford Brook site visit on 29 March was for us to confirm our 'fall back' position (expectations) for the A3 drainage discharging to Boldermere lake. This was requested for the unlikely event that further surveys show that the preferred option to re-route the A3 drainage to a watercourse downstream of Boldermere is not technically feasible. I apologise for the delay in providing you with our position on this matter.

In summary, the minimum that we would expect if re-routing was not feasible would be some form of attenuation/pipe treatment/settlement that is above what is currently in place to at least offset the impact from the increased traffic movement/larger volume of surface water run-off to the lake.

It is beyond our remit to advise on specific mitigation measures, which will need to be informed by your drainage water quality impact assessment. If this assessment doesn't provide sufficient detail specific to the outfall, you may need to undertake further assessment specifically for the outfall to understand the risk to Environmental Quality Standards (EQS) compliance and the resultant mitigation required. We note that your Water Framework Directive (WFD) assessment suggests that *"DF3 design intends highway runoff to be captured in pipe, mechanically treated and discharged to minor watercourse downstream of Boldermere"* - so it may be that the mechanically treated element itself is sufficient.

Our preferred option remains that the drainage is re-routed away from Boldermere, and any claim of infeasibility will have to be demonstrated to us with sufficient evidence. The proposed re-routing of the road drainage was presented in the WFD assessment as having a potentially 'minor localised beneficial effect' that would help to offset some of the impacts that will occur to the morphology and riparian habitat of the lake as a result of the development proposals.

Whilst you are not proposing to create a new outfall to the lake, the nature of the development and what it results in - increased traffic movement and increased impermeable surface area draining to the lake - could result in an increase in harmful substances being discharged into the lake, such as lead, copper, zinc and hydrocarbons.

Cont/d..

Under the WFD, Specific Pollutants and Priority Hazardous Substances/Priority Substances are part of certain national monitoring programmes in waterbodies that have been identified as a risk. Although these aren't currently sampled for in Boldermere, it is still important that the project doesn't result in a deterioration in these substances beyond EQS concentrations - particularly because this is a SSSI site. It is worth noting that Salinity is currently assessed in the lake and forms part of the WFD status and this could be associated with road runoff (addition of salt on the roads over winter).

For the overall waterbody WFD status, the achievement of good chemical status (essentially, meeting the standards for WFD priority substances) is just as important as the achievement of good ecological status. Good status overall cannot be achieved otherwise.

We look forward to receiving confirmation of the proposed drainage scheme following further survey work.

If you have any queries about this response, please do not hesitate to contact me.

Yours sincerely,

██████████
Strategic Planning Specialist

Direct dial ██████████
██

cc ██████████ CJ Associates
██████████ – Atkins

A.29. Email (05.06.19)

██████████

From: ██████████
Sent: 05 June 2019 18:50
To: ██████████ ██████████
Cc: ██████████ ██████████ ██████████ ██████████ ██████████ ██████████ ██████████
Subject: M25 J10 Response re: Consents

Dear ██████████

Further to the correspondence between yourself and ██████████ of CJ Associates (acting as part of the stakeholder engagement team for Highways England) including your letter of 14th December 2018 and email of 14th February 2019, we have set out below responses to the points in your email of 19th February 2019 using the same numbering (and incorporating the comments in your letter of 14th December 2018) to: address your requests for further information, where required; to set out our current understanding of the position for each permit/licence based on our previous discussions; and to highlight the next steps.

Response to EA re Consents

Previous discussions considered in this response are as follows:

- 28th November 2018 meeting to discuss numerous points and including an agenda item on permits / disapplication of permits
- 14th December 2018 letter from EA sending draft Protective Provisions and requesting further information about certain permits
- 7th February 2019 email from ██████████ stakeholder engagement team for Highways England seeking confirmation on status of agreement to disapply certain consents
- 14th February 2019 email from ██████████ at EA requesting further information as requested in December letter
- 15th February 2019 email from ██████████ stakeholder engagement team for Highways England to ██████████ at the EA seeking a response on other items in the email of 7th February 2019 that did not require further information
- 19th February 2019 email from ██████████ at EA responding to other points in our email of 7th February 2019, that did not require further information and reiterating the requirements for further information on certain permits
- 4th April 2019 Meeting with EA, Atkins and stakeholder engagement team for Highways England to discuss numerous points and including an agenda item on permits / disapplication of permits.

Item 1. Flood Risk Activity Permit/s (FRAP/s):

Your view as illustrated in the 28th November 2018 meeting minutes:

“██████████ (EA) confirmed that Flood Risk Activity Permits can be included in the DCO. ██████████ (Atkins) said that protective provisions will be prepared for this.”

You have confirmed in your email of 19th February 2019 as follows:

A.30. Email (05.06.19)

[REDACTED]

From: [REDACTED]
Sent: 05 June 2019 13:03
To: [REDACTED]
Cc: [REDACTED]
Subject: M25 J10 - ES Chapters 8 & 10
Attachments: HE551522-ATK-EWE-RP-LW-000009 - M25 J10 ES Chapter 8 Road Drainage & the Water Environment CLEAN.pdf; HE551522-ATK-EGT-RP-LC-000001 - M25 J10 ES Chapter 10 Geology & Soils CLEAN.pdf

Dear [REDACTED]

In [REDACTED] absence, please find attached for your review:

- ES Chapter 8: Road drainage and the water environment
- ES Chapter 10: Geology and soils

Our apologies for not being able to send these to you on Friday as Ruth mentioned in her email to you last week. However, we would be grateful for your comments at the earliest, although we appreciate the 21 days usually required for reviews, but with the DCO due to be submitted on 14 June, it would be appreciated if you could give an indication of when you would be able to provide your feedback.

Please let me know if you have any questions at this time and I will endeavour to assist in Ruth's absence.

Many thanks in advance.

Kind regards

[REDACTED]

[REDACTED]

Principal Consultant - Stakeholder Engagement

Tel: [REDACTED]

DD: [REDACTED]

Atkins – South East Roads Investment Programme

Working on behalf of Highways England

Highways England Customer Contact Centre
0300 123 5000
www.highways.gov.uk

"We agree that the FRAP/s for the proposed works can be disapplied and included within the DCO, as long as our standard Protective Provisions (PPs) that we have provided to you previously are going to be used. If you are proposing any changes to our PPs, we may need to review this approval for disapplication."

Under the Environmental Permitting (England and Wales) Regulations 2016 as amended, a Flood Risk Activity Permit is required from the Environment Agency for any works in, under or over a main river, within 8m of a non-tidal main river or for any works that interfere with the course of a main river, including the construction of an outfall to a main river.

Stratford Brook, which passes beneath the A3 just to the north of the Ockham Park junction, is classified as a main river and any works within 8m of this watercourse will therefore require a flood risk activity permit. As such, Highways England is seeking to disapply the requirement to obtain this permit under section 150 of the Planning Act 2008 (on the basis that this consent is a 'prescribed consent' for the purposes of section 150) in the DCO for the Scheme, and in place agree protective provisions with the Environment Agency to provide suitable assurance to the Agency.

Status: Disapplication of regulation 12 of the Environmental Permitting Regs as it relates to a flood risk activity has been agreed subject to the EA standard Protective Provisions.

Next Step: For Highway England to continue discussions with the EA regarding the Protective Provisions with a view to reaching agreement on matters by the examination stage. The DCO application will be submitted on the basis of these negotiations continuing.

Item 2. Water Impoundment Licence:

Your view as illustrated in the 28th November 2018 meeting minutes:

██████████ asked if a Water Impoundment Licence will be required or if works can be tied up in the DCO application. A replacement retaining wall by the A3 at Bolder Mere and works to the existing earth dam at Bolder Mere would be required. ██████████ confirmed that this could be included as part of the DCO."

You have commented in your letter of 14th December 2018 the following:

"We understand that this is for impoundment works on the weir structure at Bolder Mere Lake. I have spoken to my colleagues in our Integrated Environment Planning team who would deal with applications for these licences, and they have confirmed that without further details of the exact proposals, they are unable to confirm whether a licence would be required but have stated that one is likely to be required.

We would appreciate if you could send us further details of the impoundment proposals, so that we can review these and determine whether a separate licence application will be required, or whether our PPs will be sufficient to address our concerns."

You have further requested in your email of 19th February 2019 the following:

"We have requested further details of the proposed Bolder Mere impoundment to confirm whether we are happy to disapply this licence."

We respond as follows:

The design of the proposed scheme includes construction of new retaining walls at Bolder Mere and at Manor Pond, with encroachment into both waterbodies, to accommodate widening of the A3 and A245 respectively, together with an extension to the culvert at Bolder Mere. Bolder Mere is also noted to be located within the Ockham and Wisley Commons SSSI and as such does not meet the requirements of the low risk impoundment checklist as set out in the Environment Agency's Guidance: 'Water management: abstract or impound water', dated 24th April 2019. We understand that impoundments licences are therefore likely to be needed for the Scheme because it involves the construction of retaining walls that encroach into inland waters. We are therefore seeking to disapply the requirement to obtain such licences and to obtain your agreement to do so through s150 of the Planning Act 2008. We trust that suitable protective provisions can be agreed, to provide you with sufficient assurance such that we are able to disapply the requirement to obtain licences. We would be grateful if you could confirm whether you are satisfied with this approach and whether the standard provisions you have already provided to us address these matters to your satisfaction. Please let us know if you require any specific design information to enable you to confirm your position on this, as we could provide a GA and a cross-section at Bolder Mere.

Status: We understand that impoundment licences are likely to be required based on the preliminary designs and are therefore seeking to disapply the requirement under section 25 of the Water Resources Act 1991, with your agreement.

Next Step: EA to confirm agreement to disapply section 25 and whether any further additional protective provisions need to be agreed in exchange.

Item 3. Water Discharge Activity Permit (road drainage):

Your view as illustrated in the 28th November 2018 meeting minutes:

██████████ (Atkins) did not consider that a Water Discharge Activity Environmental Permit will be required as the scheme is not polluting with pollution prevention measures in place.

██████████ (EA) explained that the EA pushed for drainage improvements and knows that these will be included in the scheme. On this basis it was agreed a Water Discharge Environmental Permit will not be required."

You have commented in your letter of 14th December 2018 the following:

"We understand from the meeting that you are unsure whether a discharge consent will be required for discharging road runoff drainage to groundwater and/or surface water. Firstly, please be advised that discharge consenting now falls under the Environmental Permitting Regulations.

Again, it would be helpful if you could send us further details of the proposal for groundwater/surface water discharge, so that we can determine whether an Environmental Permit would be required, or whether our PPs will be sufficient to address our concerns."

You have further requested in your email of 19th February 2019 the following:

"We have requested further details of the proposed discharge. Although we acknowledge that there should be an overall improvement in the drainage regime post-development, discharges to surface water now fall under the Environmental Permitting Regulations, so such a consent may need to be disappplied or applied for."

We respond as follows:

As you will be aware, The EA Guidance "Discharges to surface water and groundwater: environmental permits", dated 16th October 2018 states that:

“You do not need an environmental permit to discharge uncontaminated water collected from public roads and small parking areas (that has been through a maintained oil separator or sustainable urban drainage system) to surface water”.

The Scheme has used SuDS to provide mitigation for both the quality and attenuation of highway run-off. Ponds have been incorporated into the drainage design as attenuation measures, but they also provide water quality treatment. Where space is limited the provision of ponds as narrow linear assets or expanded swales (referred to as attenuation ditches) also provide attenuation and water quality treatment.

Where highway run-off discharges to a watercourse, the DMRB Method A surface water quality tests were undertaken to inform the risk assessment (Chapter 8 of the ES). With the incorporation of SuDS in the design the results show that the Scheme will not give rise to any significant adverse effects on the water quality of watercourses receiving highway run-off. Further details on the results of the DMRB Method A tests can be found in Chapter 8 (Road Drainage and the Water Environment) of the Environmental Statement. A copy of the draft ES chapter 8 is included with this letter.

In line with the Memorandum of Understanding between the Highways Agency (now Highways England) and the Environment Agency (Annex 1 – Water Environment) dated March 2011, and the Environment Agency’s ‘Guidance on Discharges to surface water and groundwater: environmental permits’, dated 16th October 2018, our view is that a water discharge activity permit will not be required because the Scheme makes provision for the use of oil separators and/or SuDS.

Further, at this time we do not anticipate that any dewatering (of surface water to surface water) activities will be required for construction. Should this change, any dewatering that may be required that could consequently need a water discharge activity permit to discharge any abstracted water would mainly be covered, if needed, by the exemption for discharging clean water for less than three consecutive months (as noted in Environment Agency Guidance: “Temporary dewatering from excavations to surface water” dated 16th July 2018). That exemption could be applied in conjunction with the abstraction licence exemption for abstractions of surface water to prevent interference with engineering works where it lasts less than 6 consecutive months (as noted in Environment Agency Guidance: “Temporary dewatering from excavations to surface water” dated 16th July 2018 and regulation 6 of the Water Abstraction and Impounding (Exemptions) Regulations 2017). A water discharge activity permit may however be needed for discharging surface water from Bolder Mere back into Bolder Mere^[1] as this is within the Ockham and Wisley Commons SSSI and we would welcome your views on this. Please note that at this time, we do not envisage this will be required as the preferred construction method design does not require dewatering. If the position changes regarding abstraction and discharge of surface waters in areas outside the SSSI in the future then water discharge activity permits will be sought by the contractor for those areas, outside of the DCO process.

We would be grateful if you could confirm your agreement with this.

Status: We do not believe a water discharge activity permit will be required for highways drainage but it may be required as part of dewatering activities as noted above.

Next Step: EA to confirm agreement that a water discharge activity permit will not be required for the highway run-off discharge forming part of the Scheme and to provide feedback (to be noted in SoCG) as to whether there are any particular concerns that we should be aware of should a contractor subsequently identify a need for dewatering at a later stage (that results in a requirement for the discharge of any extracted surface water back to surface water), notably to assure examination that this need not be an impediment to the implementation of the Scheme once consented

Item 4. Abstraction Licence:

Your view as illustrated in the 28th November 2018 meeting minutes:

"The Waste Activity Permit and Water Abstraction Permit were discussed. It was agreed that these will not be needed for the DCO and can be dealt with by the contractor at a later stage.

██████████ noted that abstraction licensing is about to move into Environmental Permitting Regulations.

██████████ confirmed that unless EA is changing limits, the scheme will be within these."

You have confirmed in your email of 19th February 2019 the following:

"We agree that this could be dealt with at a later date (if required)."

Status: It is not anticipated that this licence will be needed because it is not expected that the construction works will need to abstract more than 20 cubic metres per day, which is the abstraction limit prescribed in the Water Resources Act 1991 (or for any dewatering of surface waters that may be required to accommodate construction works, the abstraction will meet the conditions of the surface water abstraction exemption as noted in regulation 6 of the Water Abstraction and Impounding (Exemptions) Regulations 2017) . It has been agreed that if a licence is needed in the future, this will be applied for separately (by the contractor) outside of the DCO process.

Next Step: Record the agreed position within the Statement of Common Ground (SoCG) with the EA and to seek EA's view on whether there are likely to be any difficulties in obtaining such a licence in the future should a need be identified at the construction stage.

Item 5. Waste Activity Permits:

Your view as illustrated in the 28th November 2018 meeting minutes:

"The Waste Activity Permit and Water Abstraction Permit were discussed. It was agreed that these will not be needed for the DCO and can be dealt with by the contractor at a later stage."

You have further requested in your email of 19th February 2019 the following:

"Although I do not believe we discussed these Permits at our November 2018 meeting, we agree that these could be dealt with at a later date if they are required."

Status: It is not possible to determine whether there is likely to be a need to store excavated materials for reuse in sufficient quantities to exceed the relevant limits or durations stipulated in the Waste (England and Wales) Regulations 2011 as amended or to store waste under an exemption as listed in Schedule 3 of the Environmental Permitting (England and Wales) Regulations 2016 as amended. In addition, at this stage it is not known whether there will be a need to treat any manmade materials on the site, such as crushing rubble. It has therefore been agreed that if a need for a waste activity permit is identified in the future, that this will be applied for separately (by the contractor) outside of the DCO process. We do not therefore seek to disapply this type of permit.

Next Step: Record the agreed position within the SoCG and to seek EA view on whether there are likely to be any difficulties in obtaining such a permit in the future should a need be identified at the construction stage.

Item 6. Groundwater Activity Permit:

Your view as illustrated in the 28th November 2018 meeting minutes:

██████████ asked if there is a need for a Ground Water Activity Permit to discharge water from a soakaway into ground water. Until the GI works are undertaken it is not known if this will be required.

ACTION: ██████████ to check if a Ground Water Activity Permit is required."

You have commented in your letter of 14th December 2018 the following:

"We understand from the meeting that you are unsure whether a discharge consent will be required for discharging road runoff drainage to groundwater and/or surface water. Firstly, please be advised that discharge consenting now falls under the Environmental Permitting Regulations.

Again, it would be helpful if you could send us further details of the proposal for groundwater/surface water discharge, so that we can determine whether an Environmental Permit would be required, or whether our PPs will be sufficient to address our concerns."

You have further requested in your email of 19th February 2019 the following:

"As with the Discharge Consent above, we have requested further details of the proposed groundwater discharge of road drainage."

We respond as follows:

As part of the development where there will be discharge of road run-off to ground, the drainage design includes soakaways and infiltration trenches to provide attenuation and water quality treatment. In determining the need for a ground water activity permit for the Scheme, we are guided by two key documents:

1. Firstly, the Memorandum of Understanding between the Highways Agency (now Highways England) and the Environment Agency (Annex 1 – Water Environment) dated March 2011 ('MoU 2011'). This states that a permit from the EA is not required to discharge highway run-off to groundwater, in line with relevant legislation: section 100 of the Highways Act 1980 and the Environmental Permitting Regulations (England and Wales) 2010 (as amended).
2. Secondly, the EA's 'Approach to Groundwater Protection' Guidance dated February 2018 version 1.2, which states that 'some discharges to ground (such as clean roof drainage or highway drainage) may not require permits'. The guidance lists a number of Regulatory Position Statements, setting out which activities can be carried out without a permit. Position Statement G13 is of particular relevance and indicates that suitably designed infiltration SuDS used for surface run-off from roads are a suitable mechanism of discharging to ground provided that the conditions of the G13 Regulatory Position Statement are met, including a requirement that the discharge does not pose an unacceptable risk of pollution to groundwater.

Based on these documents, we therefore understand that a Groundwater Activity Permit will not be required provided it can be demonstrated that the requirements of G13 will be met.

The M25 J10 development is not located within any Drinking Water Protected Area or Source Protection Zone and the discharge from the soakaways will consist of rainwater run-off from the highway, through suitably designed pollution prevention controls (including the use of SuDS where appropriate). Where highway run-off discharges to ground or ephemeral watercourses, DMRB Method C effects of routine run-off on groundwater tests were undertaken and recorded in Chapter 8 (Road Drainage and the Water Environment) of the Environmental Statement. With the incorporation of SuDS in the design the assessment contained in the environmental statement concludes that the Scheme would not give rise to any significant adverse effects on groundwater quality. The final extent of mitigation measures can be rationalised in the light of data from the impending site specific ground investigation., Highways England is content that the

Environmental Statement has identified the likely significant effects of the Scheme on the water environment and that all necessary mitigation has been provided for. Further details on the results of the DMRB Method C tests can be found in Chapter 8 (Road Drainage and the Water Environment) of the Environmental Statement. We therefore conclude that on this basis the Scheme will meet the requirements in the G13 Position Statement and that a groundwater activity permit will not be required. We would welcome your confirmation of this.

As previously discussed with you, the DCO has been drafted to include a requirement precluding any intrusive ground works from being undertaken until a site investigation and risk assessment has been approved by the Secretary of State. In the event that detailed ground investigations indicate the presence of contamination we understand that a groundwater activity permit may need to be obtained and an appropriate remediation strategy and other mitigation measures agreed under the DCO requirements process. As we have previously agreed that the risk of this situation occurring is low, we assume that this matter is better dealt with outside of the DCO rather than seeking to disapply the requirement as a matter of general principle. We would welcome your view on this and whether you envisage any particular concerns about the likelihood of such a permit being granted should this situation arise. You will be aware that the ground investigations have now commenced on site and we hope that it will be possible to provide some results in time to inform the examination of the DCO.

Please confirm whether this approach is acceptable to you.

Status: We do not believe this permit is required for the reasons set out above but acknowledge that there is a low risk that following detailed ground investigations, the need for a permit may subsequently be identified. We hope to be better placed to consider this further during the course of the examination process as the Ground Investigation is concluded.

Next Step: Please confirm your agreement to our position above and indicate whether you have any particular concerns about the likelihood of such a permit being granted should the need arise in the light of ground investigations and risk assessments that will be undertaken at the implementation stage.

Item 7 Fish (removal) Permit:

Your view as illustrated in the 28th November 2018 meeting minutes:

██████████ asked if a licence is required to move carp out of a pond at Bolder Mere and relocate.

ACTION: ██████████ to check if a license is required and advise."

You have commented in your letter of 14th December 2018 the following:

"We understand that a Permit to move fish (under section 27A of the Salmon and Freshwater Fisheries Act 1975) may be required for your works in the Bolder Mere lake. A colleague in our fisheries team is unsure whether our PPs will be sufficient to remove the requirement for a fish (removal) Permit. He also noted that such a Permit usually only takes 10-20 days to obtain consent and that these Permits are usually obtained by any specialist contractors that you may employ to undertake the specialist fish works within Bolder Mere as part of the scheme."

You have further stated in your email of 19th February 2019 the following:

"At our November meeting we also discussed the need for a fish (removal) licence. In our response to you dated 14 December, we stated that any fish (removal) licence should be applied for by any specialist contractors undertaking these works for you. It will take 10-20 days for consent."

We respond as follows:

In addition to the above points raised, in your letter of the 14th December you also raised the issue of a fish (removal) permit in respect of works at Bolder Mere.

Construction works at Bolder Mere (associated with the advancement of the retaining wall along the A3 alignment into the water body) are likely to require fish removal activities to exclude fish from the construction zone along the northern section of the water body. Prior to construction of the new retaining wall fish will be captured by methods other than rod and line (e.g. electric fishing, netting) and placed within the same water body in an area not affected by the works. The working area within Bolder Mere will first be segregated through the placement of exclusion stop nets to prevent fish from re-entering the working area prior to the works. This approach negates the requirement to either permanently, or temporarily, translocate fish from Bolder Mere as part of this activity. The stop nets would be removed after completion of the works.

Should there be a requirement to construct a coffer dam/s within the working area so that dewatering can be undertaken to facilitate construction of the new retaining wall, it is assumed that most fish will have already been removed and excluded from the area. However, since fish removal methods are rarely 100% effective a secondary fish removal programme would be implemented prior to dewatering and a watching brief be in place to manage the capture and movement of any remaining fish during the dewatering process.

At present, no in-channel working is anticipated to facilitate construction works along the Stratford Brook (associated with the new Stratford Brook overbridge crossing/refurbishment of the existing culvert), however, there remains the potential for dewatering activities should changes to the proposed construction methodology be required. In this instance, fish would be captured by methods other than rod and line (typically electric fishing in a watercourse of this physical character) and placed within the same watercourse upstream of the affective area. The section of watercourse upstream of the working area is considered to provide the best habitat for fish and therefore the most suitable receptor site. The working area within Stratford Brook would be temporarily segregated through the placement of exclusion stop nets across the channel (upstream and downstream of the working area) to prevent fish from re-entering. This approach negates the requirement to either permanently, or temporarily, translocate fish from the Stratford Brook as part of this activity. Again, a watching brief would be in place to manage the capture and movement of any remain fish during dewatering activities.

As discussed previously, a permit will be needed for the programmed carp and bream removal from Bolder Mere as part of the proposed mitigation strategy to improve water and habitat quality in the lake. Carp and bream that are captured will be permanently removed from the lake. At this stage it is assumed that they will be humanely destroyed, so a translocation licence is not required. All other non-invasive fish species will be returned to the lake unharmed.

We would anticipate that permits would normally be obtained as you state in your letter, by the sub-contractor undertaking the works. Please can you confirm that in light of the further information above (and inclusion of activities affecting fish at Stratford Brook), you still agree with this approach.

Status: It has previously been agreed that permits can be readily obtained by a specialist contractor separately, outside of the DCO process. Further information has now been supplied and includes information relating to Stratford Brook and we understand that the previous position and agreement stands.

Next Step: Please re-confirm your agreement to this approach and that you do not anticipate there to be any significant issues that might affect the granting of such permits etc at a later stage.

We would be grateful to hear from you with confirmation / comments on the above position in relation to each consent identified above and next steps for each permit identified, at your earliest opportunity.

Summary

The table below sets out the list of relevant EA permits/licences to the M25 J10 development and our intention to disapply the requirement to obtain these under s150 of the Planning Act 2008, or not.

Permit/Consent/License Type	Disapply under s150 of Planning Act 2008 or not
Flood Risk Activity Permit(s)	Yes
Water Impoundment Licences(s)	Yes
Water Discharge Activity Permit(s)	No – not required for highway drainage. May be required for discharge of abstracted surface water (as part of any dewatering activities at Bolder Mere) back to surface water, if dewatering activities are identified as being required by the contractor.
Abstraction Licence(s)	No – will obtain permit separately if required
Waste Activity Permit	No – will obtain permit separately if required
Groundwater Activity Permit(s)	No – not required
Fish (removal) Permit	Not a prescribed consent under s150 Planning Act 2008 – this consent can be obtained by HE's contractor separately if required.

We look forward to hearing from you at your earliest opportunity with your views on the various permits/licences considered herein and the associated next steps, and where relevant, your agreement to disapply those permits/licences which we are seeking to disapply under s150 of the Planning Act 2008.

Yours sincerely on behalf of [REDACTED]

[REDACTED]

[REDACTED]

Principal Consultant - Stakeholder Engagement

Tel: [REDACTED]

DD: [REDACTED]

Atkins – South East Roads Investment Programme

Working on behalf of Highways England

Highways England Customer Contact Centre
 0300 123 5000
www.highways.gov.uk

ⁱⁱⁱ to segregate water from construction area temporarily though we anticipate that this would be simply pumping and returning the water to the same watercourse, without any other interference and with suitable pollution protection measures implemented into the method statement to mitigate against suspended solids

A.32. Email (07.06.19)

From: [REDACTED]
Sent: 07 June 2019 19:33
To: [REDACTED]
Cc: [REDACTED]
Subject: M25J10 - WFD assessment comments log
Attachments: WFD Assessment EA Comments Log 190607.xlsx

Dear [REDACTED]

Please find attached a log showing how we have edited the M25 J28 WFD assessment in response to comments from the EA team.

For clarity this sets out how comments have been addressed in the latest version of the WFD Assessment issued to EA in PDF form on 5th June 2019 and in Word form (main document and Appendix F) on 6th June 2019. EA comments come from letters from [REDACTED] to [REDACTED] dated

27th March Stratford Brook and Boldermere site visits
27th March Review of minutes from 22nd Feb 2019
18th April Review of Water Framework Directive and Water Quality Assessments
22nd May Stratford Brook Mitigation Strategy and Commuted Sum

Please feel free to give me a call if anything is not clear

Best regards

[REDACTED]

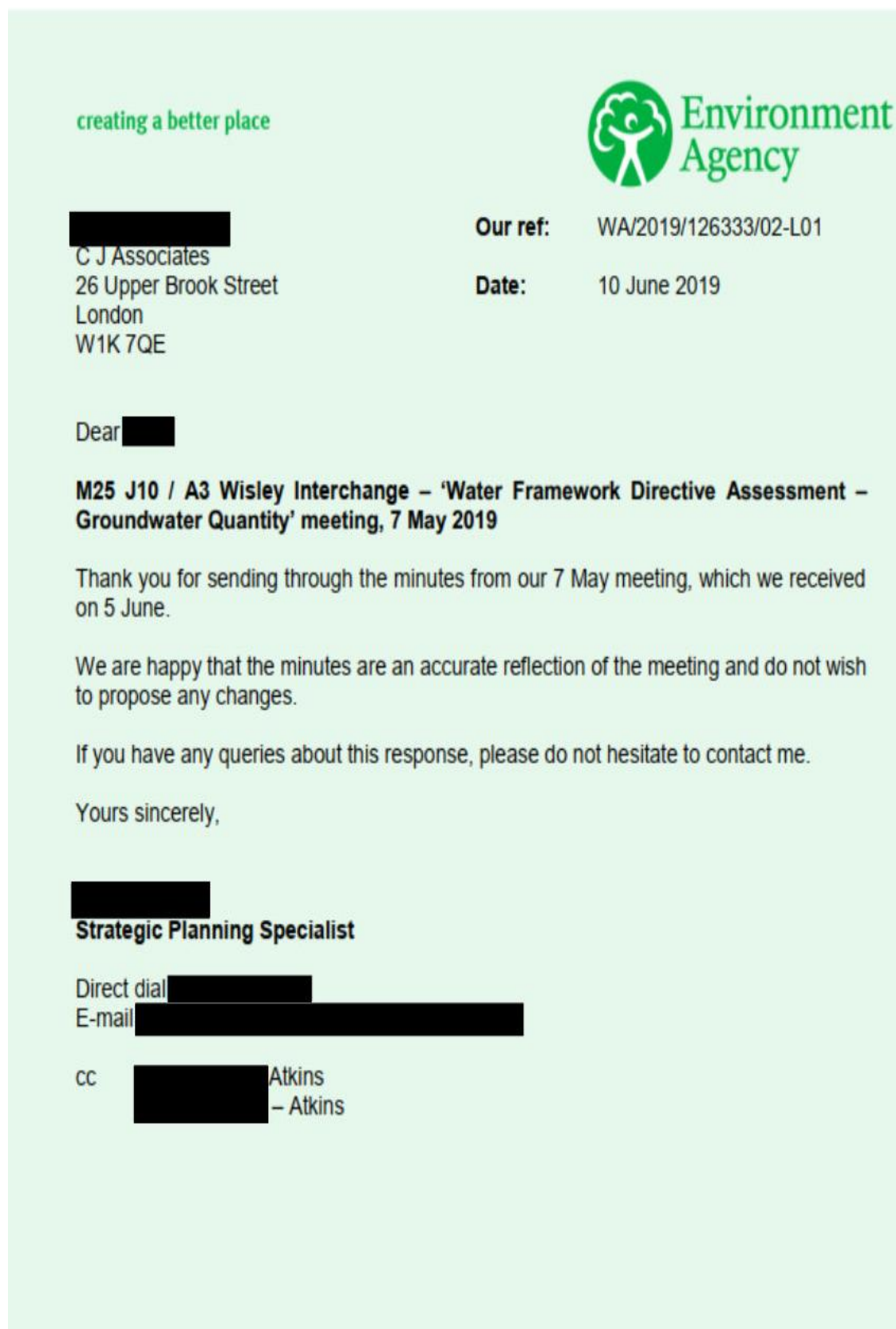
[REDACTED], MSc, MPhil, MCIWEM, CGeog (geomorph)
Principal Geomorphologist, Water Management Consultancy
UK & Europe
Engineering, Design and Project Management
Tel: [REDACTED] Mob: [REDACTED]

Atkins, member of the SNC-Lavalin Group
Oasis Business Park, Eynsham, OX29 4AH

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A.33. Letter (10.06.19)



A.34. Letter (14.06.19)

creating a better place

 Environment
Agency

██████████
CJ Associates
26 Upper Brook Street
London
W1K 7QE

Our ref: WA/2018/125863/04-L01

Date: 14 June 2019

Dear ██████████

M25 J10 / A3 Wisley Interchange improvement scheme – meeting 10 April 2019: review of meeting minutes; review of DCO Requirements for Bolder Mere, Stratford Brook and Contaminated Land & groundwater; review of Permits / consents / licences required and/or to be disapplied; review of Statement of Common Ground.

Prior and further to our meeting of 10 April 2019, thank you for sending us:

- The Development Consent Order (DCO) Requirements for Bolder Mere, Stratford Brook and Contaminated Land & groundwater (received 10 April).
- The minutes from the meeting (received 5 June).
- The list of Environment Agency (EA) Permits/consents/licences required and/or to be disapplied (received 6 June).
- The Statement of Common Ground between Highways England (HE) and the EA (received 12 June).

Please see below for our comments on these matters. Please note that our comments on the 'Permits/consents/licences required and/or to be disapplied' are provisional and subject to further review and comment by our legal team.

Review of meeting minutes

We are satisfied that the minutes are an accurate reflection of the meeting, except for the dates ("PMN") referenced in sections 5, 6 & 9(2)(4)(5), which are incorrect (i.e. the submission dates of documents by you to us).

Review of DCO Requirements for Bolder Mere, Stratford Brook and Contaminated Land & groundwater

Our only issue of concern relates to the Requirement for *Contaminated Land and groundwater*, paragraph 2(b) which states that "...*carrying out of the authorised development does not make worse any adverse conditions or risks associated with such existing sources of contamination...*". This does not comply with the normal context of a planning development, whereby after development the site should not fall back into contaminated land regime as defined by Part 2A of the Environmental Protection Act 1990. Although this is unlikely to apply to this development, if gross contamination was discovered during the course of works, we would expect you to remediate it and not just

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leave it saying you have not made the situation worse.

We have no concerns with the Requirements for Bolder Mere and Stratford Brook, with the caveat that they reference other documents that we have not yet had the opportunity to review.

Review of Permits/consents/licences required and/or to be disapplied

As noted in the introduction to this response, these comments are provisional and subject to further review by our legal team. These comments have been sent to you early as requested and details are subject to change.

We have listed our comments on the Permits/consents/licences in the same order that they were sent to us:

1. Flood Risk Activity Permits (FRAP): We confirm our agreement to disapply FRAP, subject to our acceptance of the final Protective Provisions.
2. Water Impoundment Licence: We cannot agree to disapply a Water Impoundment Licence, and you will need to apply for a licence separately. It is current EA policy that we will not agree to the disapplication of s.25 Water Resources Act 1991. We advise that it may take up to 4 months for the application process; the licence will need to go to Natural England for comments (due to the Site of Special Scientific Interest (SSSI) designation) and may need to be advertised. We recommend sending an application to our National Permitting Service as soon as possible.
3. Water Discharge Activity Permit: We agree that the Regulatory Position Statement for *Temporary dewatering from excavations to surface water* (<https://www.gov.uk/government/publications/temporary-dewatering-from-excavations-to-surface-water/temporary-dewatering-from-excavations-to-surface-water>) does not apply. It is therefore likely that a Water Discharge Activity Permit would be required for dewatering activities required within Boldermere (or within 500m of the SSSI), should this prove to be necessary.
4. Abstraction Licence: We note that a licence should not be required, but will be applied for by contractor if necessary. We cannot pre-judge any licence application, but assuming that any abstracted water will be returned to the same catchment (i.e. non-consumptive), this could be relatively low risk, subject to some possible restrictions, especially in relation to protection of sensitive areas (i.e. the Thames Basin Heath Special Protection Area and SSSIs).

You should refer to the Wey Catchment Abstraction Licensing Strategy (<https://www.gov.uk/government/publications/wey-catchment-abstraction-licensing-strategy>), which states that: *"Applications for new non-consumptive abstraction licences or those with net environmental benefit may be permitted, but may be subject to restrictions to protect local features and any bypassed reach. Restrictions will be determined on a case-by-case basis and applications will be subject to the normal licence determination process."* (paragraph 3.1.2) **and** *"All applications for abstraction licences will be assessed in relation to their direct and indirect impacts on protected areas. If an abstraction is deemed to potentially impact a protected area, the licence (if granted) may be conditioned with local, site specific restrictions to ensure the protected area is not impacted. These conditions may be more restrictive than the strategy outlined throughout this document."* (paragraph 3.5).

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5. Waste Activity Permit: We note that a Permit should not be required, but will be applied for by contractor if necessary. We cannot pre-judge any Permit application.
6. Groundwater Activity Permit: Your e-mail (dated 6 June) states that the development is not in a Drinking Water Protected Area (DrWPA). However, the development site is partially in the Wey catchment DrWPA (GB106039017630) and within a DrWPA Surface Water Safeguard Zone (GB106039017630), we therefore assume you are just referring to groundwater DrWPAs? We agree that if any activity meets requirements of HE/EA Position Statement & Groundwater Protection Position Statement G13 then a Permit will not be required. We cannot pre-judge any Permit application.
7. Fish (removal) Permit: We agree with the approach for any specialist sub-contractor to apply for Permit/s as required. We cannot pre-judge any Permit application.

Review of Statement of Common Ground (SoCG)

Overall, the SoCG is a good reflection of our current position with you. I would suggest the minor changes below before it is signed. As of sending this letter I am not in the office to be able to sign the document and return to you and will not be in a position to do so until Wednesday 19 June. I recommend that the changes outlined below are made and I will be happy to sign the document and return to you on 19 June for submission to the inspector.

All of the changes relate to the 'Issues Table':

Boldermere ('Enhancements (Biodiversity net gain & waterbody recovery)') – pages 19-21: HE response, last sentence notes Requirement 12 relating to agreeing works on Stratford Brook – I believe this should read Requirement 10 for Bolder Mere works. Text needs amending.

WFD Assessment ('Ephemeral & headwater ditches') – page 24: EA comment "...not **key** rivers..." should be amended to "...not **main** rivers...".

Mole Water Body ('Proposed mitigation') – page 23: I would suggest this is 'agreed'.

Geology and soils ('Mineral extraction') – page 26: I would suggest this is 'agreed'.

Water Environment ('Water Impoundment Licence') – pages 30-32: This will need to be 'Not agreed' as per comments above.

Ecology ('Fish (removal) Permit') – pages 32-33: I would suggest this is 'agreed'.

I believe that this completes all of the outstanding actions from our 10 April meeting. We will provide further updated comments on the Permits/consents/licences once it has been reviewed by our legal team, should they have any further comments (or changes) to make to my comments above.

I will await an updated SoCG from you, which I will sign and return as soon as possible following receipt.

We look forward to being formally consulted on the DCO application in due course.

Our comments are based on our available records and the information as submitted to us. Please note that any views expressed in this response by the Environment Agency, are a response to a pre-application enquiry only and do not represent our final views in relation to any future planning application made in relation to this site. We reserve the right to change our position in relation to any such application. You should seek your own expert advice in relation to technical matters relevant to any planning application before submission.

Thank you for your thorough pre-application engagement with us on this scheme. If you have any queries about the matters raised in this response, please do not hesitate to contact me.


Yours sincerely,


Strategic Planning Specialist

Direct dial 
E-mail 

A.35. Letter (17.06.19)

creating a better place



Our ref: WA/2017/123763/10-L01
Your ref: TR10030
Date: 17 June 2019

██████████
CJ Associates
26 Upper Brook Street
London
W1K 7QE

Dear ██████,

M25 J10 / A3 Wisley Interchange improvement scheme - review of Environmental Statement chapters 8 (road drainage and the water environment) and 10 (geology and soils).

Thank you for consulting us with the draft Environmental Statement (ES) chapters 8 (road drainage and the water environment) and 10 (geology and soils) (reference: TR010030/APP/6.3; revision: 0; dated: June 2019), which we received on 5 June.

Please note that our comments are made on the basis that we have not had the opportunity to review the accompanying appendices or any accompanying documents (such as the Flood Risk Assessment), so we cannot definitively state that the conclusions of the ES chapters are reasonable and correct.

Based on the information that we have reviewed, the ES chapters appear to be of an acceptable level of detail and we largely agree with the conclusions laid out. However, there are some concerns with some of the flood risk sections, which we have noted below.

Flood risk

Unfortunately, due to the absence of our flood risk lead during the consultation period, we have not had the opportunity to review all of the flood risk sections by a flood risk specialist. The comments below are from a brief review of the flood risk sections myself. As noted in the introduction, we are unable to state that the flood risk conclusions of the ES chapter 8 are reasonable or correct without seeing the underlying Flood Risk Assessment (FRA).

We would like to point out some obvious errors:

- Paragraph 8.5.3 states that the FRA has been carried out in accordance with the *Technical Guidance to the National Planning Policy Framework (NPPF) (DCLG, 2014)* – however this document was withdrawn in March 2014 and replaced by the Flood risk and coastal change section of the Planning Practice Guidance. This reference should be updated in the ES (and FRA if required).
- Paragraph 8.5.3 also states that the FRA was carried out in accordance with the *Environment Agency's 'Climate change allowances for planners' NPPF supporting guidance (EA, 2013)*. This too has been superseded by 'Flood risk assessments: climate change allowances' published in 2016. This would raise **serious concerns** if the existing fluvial climate change allowance figure of 20% has been used in the FRA. We would expect you to assess against the Higher Central (35%) and Upper

Cont/d..

End (70%) allowances for the '2080s' epoch in the Thames River Basin District. This reference to the incorrect climate change allowances document, and any calculations used, must be corrected in the ES and FRA.

- Similarly to above, paragraph 8.9.21 refers to fluvial flood risk and the use of a 20% climate change allowance (which would be the existing allowance for fluvial flood risk). However, I believe the use of this figure in this paragraph refers to *peak rainfall intensity*, in which case the figure may be acceptable. You should refer to *Table 2* in the 'Flood risk assessments: climate change allowances' for details of which figures to assess for peak rainfall intensity and confirm with the Lead Local Flood Authority (LLFA) (Surrey County Council) who will review the FRA for surface water flood risk issues.

- As above, paragraph 8.9.22 refers to a climate change allowance figure of 20% for surface water. You should refer to the relevant table in the 'Flood risk assessments: climate change allowances' section to ensure you have assessed the correct figures and confirm with the LLFA that they are happy with your approach.

Groundwater and contaminated land

We have reviewed both chapters 8 and 10 from the perspective of groundwater quality. We note in comments such as in paragraph 10.5.17 that ground investigation (GI) will be undertaken this year. Therefore risk assessment information supplied in tables such as 10.1 are only considered as a preliminary risk assessment. Likewise the Design Manual for Roads and Bridges (DMRB) Method C used in Table 8.18 would be considered a risk screening tool by us. Therefore following the ground investigation it is possible that further Detailed Quantitative Risk Assessments (DQRAs) could be required that would refine the conceptual model and any proposed mitigation measures. We were not supplied with appendix 10.2 so we have assumed the site investigation will be comprehensive for both soils and groundwater, enabling satisfactory DQRAs to be carried out as highlighted in section 10.5.18. Obviously if unforeseen contamination is discovered during the GI, this could lead to additional rounds of investigation for both soils and groundwater being required.

Having set out the caveat above we accept from the information gained to date from desk study, the nature of the surrounding land and the existing groundwater quality do not indicate that the proposed development is likely to pose any high or unacceptable risks. Likewise the nature of the receiving aquifers are not highly sensitive. Therefore, given suitable mitigation measures such as oil interceptors, they should be acceptable for infiltration drainage where required.

From a groundwater quantity perspective, the information provided in the ES (and WFD Assessment that we have reviewed separately) acknowledges the current lack of data to determine the groundwater levels and flow direction and assures the necessity to complete a comprehensive site-specific GI. Design, mitigation and enhancement measures presented are based on the two realistic worst-case scenarios, which is a conservative and safe approach, as the groundwater flow direction in this area is not currently known. We acknowledge that the data/information to be collected with GI will feed into hydrogeological risk assessment, followed by a review of the design and appropriate mitigation measures.

Our comments are based on our available records and the information as submitted to us. Please note that any views expressed in this response by the Environment Agency,

Cont/d..

2

A.36. Meeting (31.07.19)



Meeting Notes

Project:	M25 Junction 10/A3 Wisley interchange		
Subject:	Environment Agency project update		
Meeting place:	DEFRA Nobel House, 17 Smith Square, Westminster, London SW1P 3JR	Meeting no:	
Date and time:	31 July 2019 3-5pm	Minutes by:	██████████
Present:	██████████ ██████████ ██████████ ██████████ ██████████ ██████████ ██████████ ██████████ ██████████	Representing:	Environment Agency Environment Agency Environment Agency Environment Agency Highways England Atkins Atkins Atkins Balfour Beatty Atkins

Next meeting:

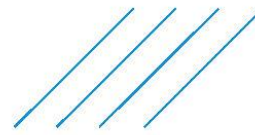
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Date issued:	08 August 2019	File Ref:	
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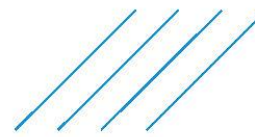
NOTE TO RECIPIENTS:
 These meeting notes record Atkins understanding of the meeting and intended actions arising therefrom.
 Your agreement that the notes form a true record of the discussion will be assumed unless adverse comments are received in writing within five days of receipt.



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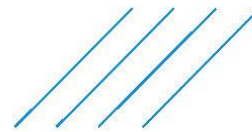
ITEM	DESCRIPTION AND ACTION	DEADLINE	RESPONSIBLE
1.	<p>Project & Programme update</p> <p>█ gave an update on the programme, including that relating to the DCO. He confirmed that notices were issued on the 26 July and that 6 September was the deadline for receipt of representations. He added that the pre-examination period would be 3-4 months.</p> <p>He confirmed that the Preliminary meeting was due to take place from 17 October onwards up to 17 November.</p> <p>█ referred to Balfour Beatty as the main contractors for the project working with Atkins as a consortium. They had completed due diligence exercise on the scope and project documents and early stages of cash flow forecast and are expected to be appointed early October and will take the lead from then.</p> <p>█ referred to the ground investigation work as now on-going with one quarter of the bore holes completed to date. █ confirmed that these had mostly been undertaken on common land to date and some on the M25 and A3 during night possessions.</p> <p>█ referred to the SoCGs submitted with the DCO including that for EA and thanked █ for efforts to get this done.</p> <p>█ confirmed that there was no change on programme – █ has copy. Commencement of works Spring 2021 2.5 years construction.</p> <p>█ thanked the team for engagement during pre-app stage and commented that it was helpful to be so advanced and on top of the issues at this stage. █ stated that he is on leave for the next 2 weeks but that the DCO documents are being reviewed by the EA specialists and a response will be provided by 06 September.</p>	<deadline>	<responsible>



2. EA feedback: WFD Assessment	<deadline>	<responsible>
<p>█ stated that there were two changes to the WFD assessment that the EA team will not be aware of.</p> <p>Firstly, he confirmed that term 'Biodiversity Net Gain' (BNG) had been replaced in favour of 'Biodiversity Benefit'. █ stated that BNG has a very specific meaning and metrics for terrestrial ecology; whilst in the WFD the term had been used to represent a professional judgement that the package of works for a water feature a) mitigated for the effect of the scheme and b) also provided enhancement. To avoid any confusion the alternative term 'Biodiversity Benefit' had been used instead of BNG. █ emphasised that there is no change in intent, but it is more about using appropriate terms.</p> <p>█ asked if we have used any calculation to show what benefits there are. █ confirmed no, but that Atkins had made a statement against each water feature affected and that this statement is based on professional judgement rather than a calculation of loss or gain. █ referred to a revised metric being developed by DEFRA for biodiversity to be used when net gain is mandatory for Town and Country (T&C) developments. █ confirmed that this had been launched by DEFRA recently and this is called 'biodiversity metric' and will be used when net gain is mandatory for T&C planning developments. He added that it is more extensive than the previous metric as it includes linear habitats, hedgerows and water courses. He confirmed that the EA are pushing for measurable net gain with all developments but that they are aware that this is not mandatory and EA are aware that NSIPs often compulsorily purchase land and this impacts on the achievability of net gain.</p> <p>█ emphasised that in respect of 'net gain' the most important element of the scheme will be negotiation with regards to the Stratford Brook enhancements this will be key for EA. █ stated we have defined the framework for the strategy for this but there is some way to go to determining what exactly will be done.</p> <p>Secondly █ referred to the commuted sum for Stratford Brook mitigation as being included in the version of the WFD that EA had reviewed. █ stated that legal had advised that the sum be removed, but that the process to arrive at this sum had been useful. █ emphasised that the</p>		



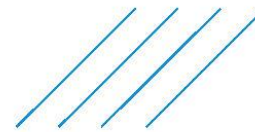
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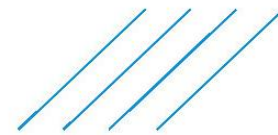
ITEM	DESCRIPTION AND ACTION	DEADLINE	RESPONSIBLE
	<p>intention remained. ■■■ added that EA internal deliberations also noted the issues with applying a figure when costs are currently unknown. He stated that a more precise calculation could be arrived at based on the actual compensation to be provided once that had been agreed.</p> <p>■■■ asked if this would be in the Statement of Common Ground (SoCG). ■■■ confirmed that the strategy and the commitment to a commuted sum was outlined in the SoCG.</p> <p>■■■ stated that any changes to the documents would have to be submitted as a technical note or addendum as alterations to the submitted DCO documents could not be made.</p> <p>■■■ stated that the drafts of the documents have just been circulated to the specialists for review. ■■■ said that he will liaise with Atkins if there are any questions. ■■■ referred to the comments log submitted to EA responding to EA comments on the WFD. ■■■ stated that if there were any queries that come out of the review, ■■■ will contact ■■■ to discuss prior to formal submission of the response to PINS.</p> <p>■■■ commented that they would want to see documents such as the CEMP and SPA Management and Monitoring plan. ■■■ confirmed these are appended to the ES. ■■■ referred to the potential issue of sediment from construction having potentially a long-term effect on the Bolder Mere (BM) lake. ■■■ stated that the CEMP is draft at present and the final one will be submitted later. ■■■ confirmed that the management plan for the SPA includes a lot of detail about proposals for mitigation during construction phase. The CEMP refers to recommendations in the WFD as having to be followed through.</p>		



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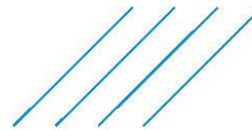
ITEM	DESCRIPTION AND ACTION	DEADLINE	RESPONSIBLE
3.	<p>EA feedback: ES Chapters 8 & 10 & update on Ground Investigation work</p> <p>█ stated that in relation to the issue regarding lack of GI, the feedback from EA in June seemed to indicate that the EA were satisfied with the approach being adopted.</p> <p>█ referred to the critical issue as being BM retaining wall and the potential impacts on ground water flow. He referred to the April meeting with █ and that she had raised this as a potential objection, but that following the meeting in April and review of the ES chapters, she was satisfied that the use of the retaining solution was appropriate and had allayed these concerns.</p> <p>█ referred to the possibility of drip feeding some of the GI data to the EA during the examination period for some of the higher risk areas. █ stated that the project will share data when it is available. She added that with regards to BM and undertaking bore holes land access is currently an issue and that this is related to clearance of vegetation at BM. She confirmed that GI has started in the north west quadrant.</p> <p>█ referred the approach outlined in the ES based on a 'worst case scenario' in the absence of GI and that the project has demonstrated that there are viable options, dependent on the GI data, that can be determined at detailed design phase. █ asked █ if he had any comments. █ confirmed that in theory and in the absence of GI data there should not be any issues with contamination of BM. He referred to the unlikely potential for contamination at the old airfield. █ in one of the appendices to chapter 10 of the ES there is historical GI data for Wisley airfield. █ confirmed GI would start next week in Wisley He added that the works on site would run into November but were keen to complete before Christmas. █ asked if there were any other areas of priority for GI, in addition to BM. █ stated no, just Wisley airfield.</p>	<deadline>	<responsible>



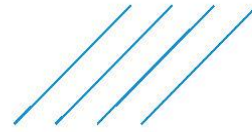
ITEM	DESCRIPTION AND ACTION	DEADLINE	RESPONSIBLE
4.	<p>EA feedback: DCO Requirements; Permits/consents/licences</p> <p>█ referred to the only issue being the water impoundment licence. █ confirmed that application had been received and had made a recommendation to apply for one online.</p> <p>█H stated that changes to retaining wall for BM has implications for the structure that is impounding BM and the form of this will be altered. He confirmed that at the moment there isn't an intention to change the outlet control structures, but this might change. The licence is required because works will be undertaken on the retaining structure.</p> <p>█ stated that in terms of the licence application the EA water resources team have asked for more information but that at present we don't know from a design perspective how much we are going to alter the structure. This will become available at detailed design phase. █ stated that the EA are used to dealing with applications where not all the detail is known. █ stated that the licensing and permits team will be able to discuss this in more detail with Atkins. █ stated that he is happy to talk to those in the permitting team within EA re history of engagement if that is helpful to give background. █ stated that he understood that Atkins want assurance that the licence will be granted if needed.</p>	<deadline>	<responsible>



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ITEM	DESCRIPTION AND ACTION	DEADLINE	RESPONSIBLE
5.	<p>Statement of Common Ground (SoCG)</p> <p>█ stated that the aim will be to update the SoCG based on the process of the EA commenting on the DCO documentation and review of the issues on the SoCG that are currently 'under discussion'.</p> <p>█ confirmed that the timeline for submitting an updated version of the SoCG to PINS is end of October, before commencement of examination.</p> <p>█ confirmed that the EA will respond to DCO by 6 September. █ and █ agreed that the SoCG can then be updated following receipt of EA comments on the documentation which will give an understanding at that point of which issues still remain 'under discussion' and which are 'agreed'.</p> <p>█ confirmed that there will be further opportunities to submit updated SoCGs at points during the examination.</p> <p>█ stated that without wanting to prejudice the EAs response, he did not anticipate that they would be raising any significant issues based on previous discussions and that he anticipated most issues being 'agreed' and that they did not also anticipate appearing at examination.</p> <p>█ confirmed that by the end of August he will have an idea of the response from the EA and that if there are any queries, he will contact the project to discuss, prior to submitting the response to PINS.</p> <p>It was agreed that a meeting wold be held mid-September to review the SoCG with the EA.</p> <p>ACTION: Meeting with EA to be arranged for mid-September to review SoCG.</p>	Mid-Sept	█



ITEM	DESCRIPTION AND ACTION	DEADLINE	RESPONSIBLE
6.	<p>Next steps/AOB</p> <p>■■■ referred to the letters received from EA on the 14 and 17 June and the need to respond to these. ACTION: Highways England to respond to letters received. PMN: Response sent on 25.09.19</p> <p>■■■ asked ■■■ if there were any significant issues. ■■■ responded that from discussions had he did not anticipate any significant issues. He added that GI had been an issue but that in respect of BM they were content with the conservative approach taken in the ES and approach to mitigation was appropriate. And that from a contaminated land perspective there was no concerns or any for flood risk. The Stratford Brook mitigation was an issue, but this has been worked through.</p> <p>■■■ asked about licences - ■■■ stated that aside from impoundment, de-watering was not required. It had been agreed to disapply the FRA permit as covered by the Protective Provisions. The fish removal licence was standard for specialist contractor to make the application (granted within 14 days from point of application).</p>	Mid-Sept	■■■/■■■

A.37. Letter (24.09.19)



Our ref: TR010030

██████████
Strategic Planning Specialist
Environment Agency
Red Kite House
Howbery Park
Wallingford
Oxon OX10 8BD

Jonathan Wade
Highways England
Bridge House
1 Walnut Tree Close
Guildford
Surrey, GU1 4LZ

24 September 2019

Dear ██████████

**M25 junction 10/A3 Wisley interchange improvement scheme
Response to Environment Agency correspondence (letters)**

Ref: WA/2018/125863/04-L01; WA/2019/126333/03-L01; WA/2017/123763/10-L01

Thank you for the above letters which we received from you in June 2019 regarding your feedback on aspects of the M25 junction 10/A3 Wisley interchange improvement scheme that we consulted you on during the pre-application phase of the Scheme's development.

Since receipt of your letters, further discussions have been held at a meeting on the 31 July 2019 which have addressed many of the matters raised in your correspondence. We have also since received your Relevant Representation in respect of the Development Consent Order (DCO) application, which was submitted on the 19 June 2019 and are currently reviewing your comments on the DCO documentation. We look forward to meeting with you in early October to discuss the comments received.

We would like to respond to a number of specific points you raise in your letter dated 17 June 2019 (ref **WA/2017/123763/10-L01**) with regards to the Flood Risk Assessment and also in regards to specific points raised in relation to the Water Framework Directive Assessment in your letter dated 14 June 2019 (Ref: **WA/2019/126333/03-L01**).

Flood Risk

The errors relating to the guidance referenced in paragraph 8.5.3 are errors in the reported references only, the methodology has followed the appropriate current guidance. The fluvial flood modelling has used the Higher Central 35% climate change allowance for the design. The Upper End allowance has also been simulated as a sensitivity test. This is documented in the hydraulic modelling report that accompanied the flood model that the Environment Agency has reviewed.

With respect to the climate change allowances referred to in paragraph 8.9.21, these do relate to the climate change allowances for peak rainfall intensity. The use of 20% is consistent across the RIS schemes and is documented in the respective drainage strategy documents.

Water Framework Directive (WFD)

With regards to Footnote 2 on page 9 of Appendix F, the footnote has not been updated to refer to 'North and South culverts'. However, the feasibility studies will investigate opportunities for mammal and fish passage at both Stratford Brook (north) and Stratford Brook (south) culverts.

We acknowledge the requirement within the DMBR to consider improvements to existing structures and not focus solely on the mitigating the effect of the Scheme. The feasibility studies will consider improvements. However, additional factors, beside environmental benefit (for instance cost) will also influence whether improvements are implemented as part of the Scheme.

With regards to the calculation of the commuted sum, we understand that the commuted sum is a last resort and further negotiation may be needed.

If you have any questions regarding the content of this letter, please do not hesitate to contact me or Ruth Heatherley directly.

We look forward to our continued engagement with you in the development of the scheme.

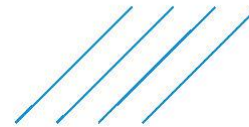
Yours sincerely



Project Manager, Regional Investment Programme (South East)
Highways England



Member of the SNC-Lavalin Group

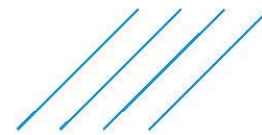


ITEM	DESCRIPTION	ACTION & DEADLINE	RESPON-SIBLE
	<p>suited to Dragon and Damsel flies. Bolder Mere is located approximately 500m to the SE of junction 10.</p> <p>Part of the scheme works near Bolder Mere includes widening of the A3 to provide space to accommodate an extra lane and sight lines for safety purposes. A retaining wall will be constructed which will encroach into Bolder Mere and may also cross into the existing earth dam impoundment to the SE of the lake ('the works') - see plans in Appendix A.</p> <p>Based on the preliminary design, our current thoughts are that this work will not affect the outflows structures from Bolder Mere (marked B and C on the plan in Appendix A) but that it will slightly reduce the volume/capacity of the lake.</p>		
3.	<p><u>Requirement for a Water Impoundment Licence</u></p> <p>█ – stated she had reviewed the documentation we had sent over and drawings and of particular interest to her noted:</p> <ul style="list-style-type: none"> - There are two outflow controls, one natural and one formal. From everything described in Atkins correspondence and draft licence application, it is understood that neither of these outflows will be changed by the works - In particular crest levels or widths of the outflow controls will not be changed by the works <p>█ – It should be noted that the works will slightly reduce the volume of Bolder Mere (though this is in the context of the natural processes which are also reducing the volumes). There therefore could be a negligible increase in water levels during flood events.</p> <p>█ – initial thoughts are that an impoundment licence is not required, but will double check with her colleagues and the legal team to confirm.</p> <p>█ – provided the example of if the watercourse was a river and Highways England were making changes to the banks but not damming up the channel the EA would not require a water impoundment licence. Bolder is different in that it collects water and the works will slightly reduce the storage capacity.</p> <p>█ – The reduced capacity of Bolder Mere after the works would mean it would fill more quickly and overflow more however mass balance calculations undertaken thus far indicate it would be a negligible impact.</p> <p>█ – enquired as to the purpose of water impoundment licences.</p>	<p>Action 2: █ to confirm whether, based on currently available information, an impoundment licence is required for the works at Bolder Mere</p> <p>(post meeting note – would also be useful to confirm the types of changes that would trigger the need for a licence)</p>	

Contains *sensitive* information
 4. Meeting Minutes 02.10.19_final

ATKINS

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ITEM	DESCRIPTION	ACTION & DEADLINE	RESPON-SIBLE
	<p>'low risk impoundment checklist'. ■ will double check this in relation to Bolder Mere.</p> <p>■ – asked for clarification on whether the licence requirements were still dependent on if the watercourse was considered 'discrete' or 'inland' as that appeared to make a difference to when a licence was required in the Water Resources Act 1991 ('WRA 1991').</p> <p>■ – Bolder Mere does have overflows even if these are dry some part of the year so it does supply downstream reaches with water. As Bolder Mere has overflows it is considered as a source of supply and therefore not discrete (the EA would look first at overflows connecting the waterbody to other waterbodies and secondly at whether the waterbodies were in connection with groundwater). Bolder Mere is also connected to the groundwater and is not thought to be lined therefore would be considered inland water not discrete.</p> <p>■ – for inland waters the WRA 1991 states a licence is needed to alter or construct any impounding works.</p> <p>■ – this is where the RPS comes in useful as it makes it clearer. The EA consider alterations that are relevant to be those that affect flow / water levels only. The Water Resources team would therefore only consider the impact (e.g. of extending the culvert if that affected the existing embankment) on impoundment. The Reservoir Safety team would consider any safety implications during high flows separately.</p>		
4.	<p><u>Comments on Draft Water Impoundment Licence</u> None thus far as not deemed to be required.</p>		
5.	<p><u>Supporting Documentation Required</u></p> <p>■ – stated that if a water impoundment licence was needed the following information would be required to support the application (note this would be subject to further consultation with colleagues in geomorphology, fish specialists etc):</p> <ul style="list-style-type: none"> - A hydraulic assessment to show how the works changes would affect water levels and flows and how these changes would impact on designated sites / habitats / species. - The affects on any sites downstream for example the EA mapping system indicates there is an eel migratory route that extends right up into Bolder Mere and this would need to be considered in terms of enabling eels to pass over the impoundment 		

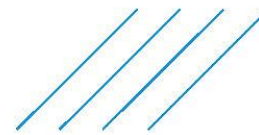
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ATKINS

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ITEM	DESCRIPTION	ACTION & DEADLINE	RESPON-SIBLE
	<ul style="list-style-type: none"> - How the geomorphology might be affected by the works - Drawings - Statement of impacts in relation to the Water Framework Directive <p>█ – For part of the year there is no flow at the outflows. Bolder Mere is very interactive with the groundwater and surface outflows from the lake are ephemeral. The works are not intending to alter the outflows but should detailed design conclude this to be necessary, would need to think carefully about the value / purpose of any fish easement.</p> <p>█ – confirmed that should mitigation be deemed to be required, eels are relatively easy to provide mitigation solutions for. At this point though nothing has flagged and it is all theoretical.</p> <p>█ – Atkins on behalf of Highways England have been in contact with Natural England and the Environment Agency for some time now in relation to the M25 J10 project and have produced an Environmental Statement and Water Framework Directive Assessment for the scheme, of which Bolder Mere is a part of.</p>		
6.	<p><u>Reservoir Act 1975 Requirements</u></p> <p>█ – asked for HE's comments on the EA's position if the widening of the A3 and associated culvert extension encroached to toe of the current earth dam embankment. █ noted we will not know the extent of the works until detailed design (including whether or not they will affect the current embankment).</p> <p>█ -Stated this should be discussed separately with the EA Reservoir Safety team.</p> <p>█ – asked how the reservoir safety fits in with the water impoundment licence requirements.</p> <p>█ – stated they are different permissions assessed on different grounds. It is possible to issue a water impoundment licence before the reservoir safety aspects have been signed off but there is always a risk that the Reservoir Safety team could ask to make changes that may impact the water impoundment licence conditions. Normally therefore the two are dealt with concurrently to improve the efficiency of the liaison between the different teams in the EA.</p> <p>█ – summarised that the EA Water Resources team's role was to protect the users of flows (people and environment) whereas the EA Reservoir Safety team is concerned with safe</p>		

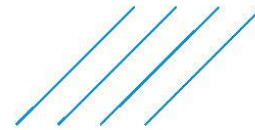
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ITEM	DESCRIPTION	ACTION & DEADLINE	RESPON-SIBLE
	<p>operation of the reservoir including during flood events.</p> <p>█ – Note that if the Reservoir Safety team thought there was something that would impact the water impoundment licence the Water Resources team may hold off issue of the licence, although a licence can be granted with conditions to cover certain changes if appropriate.</p> <p>█ – asked if the EA has an overseeing role i.e. once the panel engineer has signed off on something does the EA oversee that?</p> <p>█ – unsure as that is not her area of expertise but will identify someone in Reservoir Team who can help us.</p>		
7.	<p><u>AOB</u></p> <p><u>Planning</u></p> <p>█ – enquired as to the planning for the scheme and how this was being dealt with.</p> <p>█ – confirmed the project would be consented (if approved) under a Development Consent Order ('DCO') and that that process was underway with a draft DCO having already been submitted and the associated Planning Inspectorate examination due to start next month. All documents submitted for the application are publicly available on the Planning Inspectorate website (link).</p> <p>█ – confirmed that she would need to ensure any comments from the EA on this water impoundment licence get picked up in the DCO process and are suitably covered.</p> <p>POST MEETING NOTE – a Statement of Common Ground between Highways England and the Environment Agency has been prepared and will be updated as necessary. █ EA Liaison for the M25 J10 scheme should be contacted with any concerns / comments you want raising.</p> <p><u>Cost and Programme</u></p> <p>█ - The current application fee for a water impoundment licence is £1500 plus the cost of advertising and a £100 administration fee.</p> <p>█ - The determination period is 4 months.</p> <p>█ – asked what the typical timeframe included i.e. anything in addition to the determination period.</p> <p>█ – confirmed Highways England would apply for the licence and then the EA would need approximately 3 weeks to validate the application then the 4-month determination period kicks in</p>		

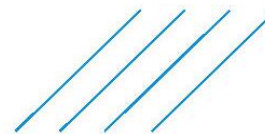
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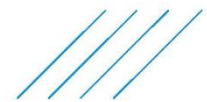


ITEM	DESCRIPTION	ACTION & DEADLINE	RESPON-SIBLE
	<p>which includes advertising the application to the public for their comments for 28 days. The EA would discuss any necessary conditions on the licence with Highways England although they are quite standardised and do not often change much.</p> <p>█ – for the response to this pre-application request it will take approximately 3 to 4 weeks to respond.</p> <p>█ – concluded that Highways England should allow at least 6 months in the programme with a float to cover any complications.</p> <p>█ – Highways England would not be able to start works until they had any required water impoundment licence, particularly works in the water. Peripheral works could potentially start earlier but this would need to be discussed and agreed with the EA first. It would be prudent to wait until the final conditions of the licence were known to ensure compliance. The EA Water Resources team keep applicants informed of any licence conditions required as their need is recognised.</p> <p><u>Manor Pond</u></p> <p>█ – Our current understanding is that the works at Manor Pond are not likely to encroach into the water and Manor Pond is not in the SSSI, therefore the low risk activity of ‘work in the river, parallel and adjacent to the bank that does not significantly narrow the channel, for example installing sheet piling...’ would fit with Manor Pond and a licence should not be needed.</p> <p>█ – explained the works at Manor Pond were further away from the impounding structure and would not encroach the water based on preliminary design.</p> <p>█ – suggested Atkins send her the Manor Pond drawings and she will check them also and include it in her formal response on water impoundment licence requirements.</p> <p>█ – is Manor pond connected to the groundwater and unlined like Bolder Mere:</p> <p>█ – it is fair to assume continuity with the groundwater.</p>	<p>Action 5: █ to send █ GA drawing for Manor Pond</p> <p>Action 6: █ to confirm water impoundment licence requirements for Manor Pond</p>	<p>█</p> <p>█</p>

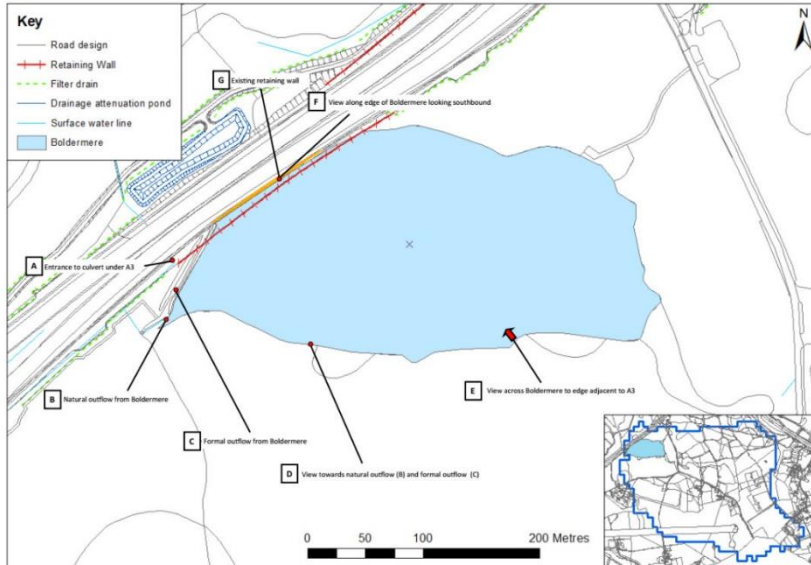
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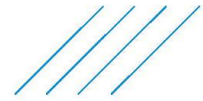


Appendix A



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 4. Meeting Minutes 02.10.19_final

8



A.39. Meeting (08.10.19)

Meeting notes

Project:	M25 junction 10 / A3 Wisley interchange improvement scheme		
Subject:	Project update/EA Relevant Representation		
Date and time:	08 Oct 2019; 2-4pm	Meeting no:	
Meeting place:	GBLNN - Atkins London Nova North, 03-02b 11 Bressenden Place Westminster London SW1E 5BY	Minutes by:	██████████

Present:	██████████ ██████████ ██████████ ██████████ ██████████ ██████████ ██████████ ██████████ ██████████ ██████████	Representing:	Environment Agency Environment Agency Environment Agency Environment Agency Atkins Atkins Atkins Atkins BDB Pitmans Atkins Atkins
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ITEM	DESCRIPTION & ACTION	DEADLINE	RESPONSIBLE
1	Introductions and welcome		██████████
2	██████████ thanked EA for their Relevant Representation (RR) and the comments log. ██████████ stated that Atkins had reviewed the comments log and had sent over draft responses. She confirmed the aim of the meeting was to review the RR and the comments log. She added that if there was time in the meeting, the SoCG would be reviewed.		

Project & Programme Update

██████████ gave an update on the programme. He confirmed that 61 RRs had been submitted and that the project was now in the process of preparing responses. He confirmed that at this stage the project was examining the issues but not issuing responses to Interested Parties at this stage. **Post Meeting Note: Responses to RRs will be submitted to PINS at Deadline 1 and all Statutory Environmental Bodies (SEBs) will receive a response to their RR.** ██████████ confirmed that the Rule 6 letter will be issued next week. **Post Meeting Note. Issued on the 15 October 2019.**

Next meeting:	TBA
Distribution:	As per attendance list
Date issued:	07.11 2019
File ref:	

NOTE TO RECIPIENTS:
 These meeting notes record Atkins understanding of the meeting and intended actions arising therefrom. Your agreement that the notes form a true record of the discussion will be assumed unless adverse comments are received in writing within five days of receipt.

M25J10_EA Meeting notes_FINAL_08.10.19 (003)

[Plan Design Enable](#)

ITEM	DESCRIPTION & ACTION	DEADLINE	RESPONSIBLE
	<p>Examination will commence with the Preliminary Meeting (PM) taking place on 12 November 2019 and will be held in in the Mandalay Hotel, Guildford. In terms of the scheme itself, ■■■ confirmed that the contractor Balfour Beatty (BB) are working on the validation. ■■■ asked when they come on board. ■■■ confirmed that they are Highways England (HE) delivery partner so they are looking at Junction10 over past few months and will come under contract in November and will feed into DCO as required. He confirmed they will be developing detailed design (DD) alongside the DCO process.</p>		
2	<p>EA Relevant Representation and comments log – review/discussion</p> <p>All items in the comments log were addressed line by line.</p> <ul style="list-style-type: none"> • Ref: 001 (JG) CEMP (draft order) <p>■■■ confirmed that the draft CEMP is part of the DCO documents and will be developed by BB. ■■■ stated that the concern here related to EAs request to be consulted on the CEMP. ■■■ referred to the Protective Provisions (PPs) as being quite extensive, she confirmed that the project will be submitting detailed plans to EA for approval and that this would address the need to be consulted. The works will be covered by the PPs and the plans will include drawings, management plans and method statements.</p> • Ref: 007 (JG) – REAC, Bolder Mere <p>■■■ confirmed that this was just a note for EA to ensure that this is included in the Surface Water Management Plan (SWMP). ■■■ confirmed it will be.</p> • Ref: 10 (CH) – Groundwater (quality) & land contamination <p>■■■ confirmed that EA still consider this to be of low risk and that they are satisfied that this is covered through the Requirements. ■■■ confirmed that GI on-going and is currently due to finish in December. ■■■ asked if the data can be submitted straight away. ■■■ confirmed that reporting will be near the end of Examination. ■■■ asked if no data is submitted during Examination whether will this be an issue. ■■■ confirmed no but that it would be helpful for any issues to be identified to the EA as and when they arise. He confirmed that as long as there was nothing significant EA were happy for it to be covered in the Requirements. ■■■ explained that the reporting will take longer because of reporting with Geotech. The programme will report at end of June (draft), but she confirmed that Atkins will have sight of data earlier.</p> • Ref: 12 (SB) Water Abstraction Licence 	All	

ITEM	DESCRIPTION & ACTION	DEADLINE	RESPONSIBLE
	<p>█ stated that this comment related to the need for early engagement should an abstraction licence be required.</p> <ul style="list-style-type: none"> • Ref: 13 (BD): Ground water (resources) <p>█ stated this is just a comment that EA are happy with what's been submitted as part of DCO</p> <ul style="list-style-type: none"> • Ref: 15 (FT): CEMP <p>It was agreed this point is the same as for Ref: 001(CEMP)</p> <ul style="list-style-type: none"> • Ref: 16 (FT): Requirement 10 <p>█ stated that we can add some wording in Requirement 10. She referred to a list of things which can be included for the Secretary of State to consult with the EA on. She noted that HE could propose some suitable wording to address the concern raised by EA and will consider suitable wording for EA's review. She confirmed that proposed changes to Requirement 12 had already been sent. <i>(Post Meeting Note: Sent on 07.10.19)</i></p> <ul style="list-style-type: none"> • Ref: 17 (FT): Stratford Brook (Draft Order) <p>█ asked █ if she had looked at the amendments to Requirement 12. █ confirmed that it covers the issues raised in point 017. █ stated that the main issue was making sure the mitigation details in Work 54 were submitted before Work 33_b starts.</p> <ul style="list-style-type: none"> • Ref: 18 (FT) Stratford Brook (Draft Order) <p>█ confirmed this was about referencing the WFD report but that it should also reference the Landscape and Ecology Management and Monitoring Plan (appended to the ES). She noted that the Requirement references the ES so this should be fine. █ confirmed this was why the plan was not specifically referenced.</p> <p>A discussion was had with regards to the SB mitigation feasibility study. █ confirmed that this is a BBA task and could be added to the programme of works to be undertaken early on in detailed design process. █ added that the WFD report states that a commuted sum will be given if mitigation is proven not to be feasible. █ clarified that reference to a commuted sum has not been included in the DCO or the PPs.</p> <p>█ stated that the Requirement 12 addresses this as well. She questioned whether R12 should reference the LEMMP> OP stated that the LEMMP is appended to the ES and the R12 required mitigation measures to be in accordance with the measures described in the ES which includes LEMMP. LEMMP is also dealt with in Requirement 6.</p> <ul style="list-style-type: none"> • Ref: 19 & 20 (FT) Stratford Brook (Draft order) 		

ITEM	DESCRIPTION & ACTION	DEADLINE	RESPONSIBLE
	<p>█ stated that she couldn't see the comments made in 19 and 20 mentioned in the new Requirement 12. █ stated that the details for these were provided in the PPs and the submission of details for works will be included in the PPs. She confirmed that these works, the bridge design, the mitigation structure and the attenuation pond would be within the specified works and therefore covered in the PPs.</p> <p>Post meeting note: Plans showing the design of proposed road drainage infrastructure affecting Stratford Brook (including outfalls) will be submitted to the Environment Agency for approval in accordance with Protected Provisions set out in Schedule 9 Part 3 of the dDCO (application document APP-018)".</p> <p>Ref: 21 (█) & 22 and 23 REAC & CEMP</p> <p>█ asked whether there is there a reason why these items will be included in the updated CEMP and not the REAC. NW confirmed that the REAC is appended to the CEMP and that items 21-23 will be included in the updated CEMP. █ added that the CEMP must be written in accordance with the commitments made in the REAC. █ stated that the EA will need to ensure that they are happy with the REAC. █ clarified that this pertains to whatever will be certified under Article 44 of the Order when the Order is made.</p> <ul style="list-style-type: none"> • Ref: 24 (█) – Outfalls. <p>█ commented that the EA will often raise the issue of outfalls as they tend to be over engineered and need to be designed as sensitive as possible to the environment.</p> <ul style="list-style-type: none"> • Ref: 25 & 26 (█) - LEMP <p>█ stated that the LEMP and SPA Management Plan are draft at the moment but will be updated during DD stage.</p> <p>Post Meeting Note: The specific measures requested for inclusion in the updated LEMP (referred to in Reference 25 and 26 in the document 'Summary table of EA comments, queries & issues (Relevant Repts stage – Sep 2019)') will be included in the updated LEMP.</p> <ul style="list-style-type: none"> • Ref 27 (█) FRA permits <p>█ stated that this point is just emphasising that the EA will only agree to disapply the FRAPs if everything is as expected.</p> <ul style="list-style-type: none"> • Ref 28 (█) – WFD Assessment (Stratford Brook) <p>█ commented that the main thing here is making sure there is a justification to ensure that the alignment of the bridge has been optimised taking into account the impact on the river corridor. █ referred EA to the relevant plan and the detail of the work span rather than detail of the bridge.</p>		

M25J10_EA Meeting notes_FINAL_08.10.19 (003) 19/05/16

Plan Design Enable

ITEM	DESCRIPTION & ACTION	DEADLINE	RESPONSIBLE
	<p>■■ added that they had problems opening the plan documents due to their size.</p> <p>■■ continued that the bridge is aligned with the corridor, but the river is meandering within the corridor. He added that the direction you would expect it most to move in wouldn't take the river directly towards the bridge. ■■ added that there is not straight bit of river to align the bridge to. ■■ commented that there is potentially a risk if the lowering of the sill at the A3 slip road culvert is feasible, that it could cause more erosion up stream. She added that however, the span of the bridge has been made as wide as possible to minimise this happening. ■■ our principle mitigation here is to make the bridge as wide as we can. ■■ asked what the closest it comes to the bridge (the abutments). ■■ stated that it is about 8-10 metres and the channel itself is 4m. ■■ confirmed that she was content with this.</p> <ul style="list-style-type: none"> • Ref: 29 (■■) – WFD Assessment (Stratford Brook crossing) <p>■■ confirmed that bed and bank protection may be needed at some points but should be avoided if possible. A discussion was had as to how to submit updates to DCO documentation. ■■ stated that this may be done during examination through the submission of an errata but will need further consideration. ■■ commented that for compliance with the order it might be necessary to update the WFD. ■■ stated that in respect of item 029 on the comments log, the purpose would be to inform the engineering teams for detailed design. ■■ added that it is generic guidance and therefore not critical. FT agreed. ■■ added that EA will have opportunity to review plans in any case. ■■ confirmed that if possible future documents will be updated in line with the suggested wording.</p> <p>ACTION: To update if possible, at the point of updating the WFD more generally.</p> <ul style="list-style-type: none"> • Ref: 33 (■■) - FRA <p>■■ acknowledged this is only strengthening works as discussed previously.</p> <ul style="list-style-type: none"> • Ref: 37 (■■) FRA <p>A discussion was had regarding the flood risk classification of the river crossing in respect of how this may be interpreted by a 'lay person'. ■■ asked that by agreeing 35 % as a design level how the river crossing had been classified. Looking at it from an outsider's point of view (at the flood risk classification table), seeing something over a water course it would be classified as 3b. He added that the only structures acceptable in these areas are essential water compatible, with more vulnerable, less vulnerable and highly vulnerable being excluded. ■■ stated that the crossing is classified as essential infrastructure and the interpretation is that it's still designed for 35 % but has been</p>		

ITEM	DESCRIPTION & ACTION	DEADLINE	RESPONSIBLE
	<p>assessed for up to 70%. ■ clarified whether Atkins have assessed 70% and concluded from the assessment that it wasn't required to build over and above the 35% standard due to the insignificant changes up to 70%. ■ confirmed yes. ■ confirmed that this was understandable approach. He recommended a change of wording– given climate change guidance to note that 70% and 35% have been assessed and 35% has been decided to inform design.</p> <p>A discussion was had with regards to Flood Zone (FZ) 2 and 3 in the FRA. ■ requested a summary for clarity to be added to the FRA to explain why FZ2 will capture all of the activities that might fall within the 1 in 100 plus 70% assessment. ■ asked whether there was a concern that the plus 70% might extend beyond FZ2 in certain instances. ■ stated that this is a small concern, but he did not think this would be the case. He added the clarification is just for the avoidance of doubt with regards to any potential enquires from members of the public. ■ added that EA need to be consistent with the advice they are giving to all projects. ■ stated that he would recommend adding evidence to the FRA to confirm that change in flows that are likely to arise from the 1 in 100 plus 70% allowance should be lower than 1 in a 1000 which is the definition of FZ2 therefore FZ2 should encapsulate all activities that would potentially fall under flood risk. ■ agreed that a qualitative explanation along these lines would be appropriate. <i>Post Meeting Note: Letter sent to EA on 29.09.19 to clarify climate change allowance.</i></p> <ul style="list-style-type: none"> • ACTION: to review wording and justify why FZ2 is appropriate. Ref: 38 (■) - FRA <p>■ acknowledged the general point from EA regarding referring to floodplain without referring to what this means. ■ recommended the need only to refer to FZ2 in the FRA for consistency. ■ commented on the drainage measures referred to in the FRA and confirmed that the drainage attenuation point had been removed from the Scheme.</p> <p>ACTION: To include a statement in respect of referring only to FZ2.</p> <p>■ asked about above ground structures and earthworks. – ■ confirmed that there are no significant structures in this location and that earthworks refers to anything above ground.</p> <ul style="list-style-type: none"> • Ref: 39 (■) FRA <p>As above (Ref: 037) with regards to an explanation in respect of what has been assessed in terms of climate change allowance.</p> <ul style="list-style-type: none"> • Ref: 40 (■) – Proposed works <p>■ questioned the meaning of 'proposed works'. ■ suggested that the wording 'proposed works' could be</p>		

ITEM	DESCRIPTION & ACTION	DEADLINE	RESPONSIBLE
	<p>replaced with 'the scheme in this area is having no impact on FZ2 and FZ3 plus appropriate uplift' would be clearer in terms of clarifying no impact in this area.</p> <ul style="list-style-type: none"> <p>Ref: 41 () - FRA</p> <p> asked whether in respect of this point it referred to Stratford Brook slip road and whether this would be at risk of flooding. confirmed yes and that the EA understood it was not at risk, but this point related to additional evidence to clarify the assessment for the lay person.</p> <p>Ref: 42 () - FRA</p> <p> stated there is no detriment mapping included as there as there's no detriment. He confirmed that the Stratford Brook structure is outside of the floodplain. stated that a detriment map could be added to show there is no change. clarified that in respect of EA comments generally the theme seemed to be the need for more supporting evidence to illustrate findings.</p> <p>ACTION: Atkins to consider adding additional evidence e.g. a detriment map, to clarify and in support of findings.</p> <p>Ref: 43 ()- FRA (Stratford Brook culvert)</p> <p>This point has been addressed in point 033. asked whether the strengthening would require the culvert to be made dry and if so how would the flow be maintained. added that this detail has not been worked out yet. and confirmed that EA will be consulted on the detail of the works during detailed design and this is addressed in the PPs (reference to point 001).</p> <p>Ref: 45 () Flood Risk</p> <p>It was agreed that this was addressed by the discussion and response to point Ref: 043.</p> <p>Ref: 46 () – Flood Risk</p> <p> asked whether the embankments have been included in the modelling assessments. confirmed yes.</p> <p> asked if detail such as slopes and compaction is included in CEMP. confirmed this will be in the method statement for the construction. added that EA would want to ensure that bank stability is maintained through construction and to have plan in place for this due the bridge being over a water course. clarified that his comments on this were more applicable to the FRAP application process added that the FRAP has been disapplied and included in the PPs.</p> <p>Ref: 47 () – Flood risk (habitat creation)</p> 		

ITEM	DESCRIPTION & ACTION	DEADLINE	RESPONSIBLE
	<p>█ confirmed these were just comments at this stage to be mindful of the impact of planting on flood flows. █ confirmed that planting areas are marked as a concept at present but that these aspects will be considered at detailed design.</p> <ul style="list-style-type: none"> Ref: 48 (█) – Flood Risk (site compounds) █ referred to FZ3 in certain areas as being quite constrained and therefore there is a need to assess how close the plant (site compound) will get to the bank, irrespective of FZ3 in terms of impact on bank stability. █ stated that it has been confirmed within the FRA that the allowance is 8m clearance between the top of the bank and the site compound. Ref: 49 (█) Flood Risk (temporary works) █ highlighted that this point relates to details later in the development at detailed design. Ref: 50 (█) Flood Risk (ES drainage strategy) █ asked if there are existing outfalls (Stratford Brook) that discharge into the watercourse. █ confirmed that there is construction of new and use of existing outfalls as part of the Scheme. █ added that part of the site survey and the GI being undertaken is to look at outfalls and drainage. Highways England data is quite limited. █ asked whether the project was anticipating an increase in discharge into the watercourse during a storm event as opposed to introducing new drainage. █ confirmed no and that the objective of the drainage design is to improve the existing condition, not make existing drainage worse. █ stated that this can be fed back to drainage team regarding hard engineering of outfalls. Ref: 51 (█) – FRA (ordinary watercourse culverting) █ commented that the LLFA need to be given oversight as to what is happening with culverts. Ref: 52 (█) – Compensation/replacement land █ requested clarification regarding the definition of 'land compensation and replacement'. █ confirmed that compensation land refers to compensation for land taken within the SPA and replacement land refers to common land. █ added that this is a change of designation (environmental) but not a change of use in terms of land use. █ gave an overview of the Sanway Flood Alleviation Scheme (FAS) that is designed to protect households in the Sanway area. █ noted from the plans that there is a proposal for works in the same area as the Scheme and the proposals include opportunities for environmental enhancement. █ confirmed that it is part of the Park Barn replacement land where planting is currently proposed. █ 		

M25J10_EA Meeting notes_FINAL_08.10.19 (003) 19/05/16

[Plan Design Enable](#)

ITEM	DESCRIPTION & ACTION	DEADLINE	RESPONSIBLE
	<p>added that the area has been identified to provide compensatory storage which is required as part of the proposal. ■ confirmed that the proposals have gone for public consultation with finalised designs and are now looking at environmental opportunities. ■ it would be worth understanding whether land lowering in that area will conflict with any J10 proposals in the area. ■ confirmed that it is replacement land for the common land that's being taken not compensation. It is for public access. ■ confirmed that there is possibility for environmental enhancement but there may be conflict here as people will need to use if for recreational purpose. ■ added that the Sanway proposal is looking at a wide range of environmental benefits both socially and to the environment itself, not just wetland. ■ added that Woking Borough Council are a major stakeholder in the proposals and have visions to improve public access between Woking and Byfleet. ■ confirmed that there is a sponsor group involved but it's an EA led project. ■ confirmed that he had been in touch with ■, the lead on the project.</p> <p>Post Meeting Note: The Sanway FAS is currently a proposal only and as such there is no guarantee at this stage that it will be constructed.</p> <p>ACTION: Atkins (MH) to liaise with EA lead ■ via ■ (■).</p> <ul style="list-style-type: none"> • Ref: 53 (■) – Protective Provisions (Draft Order) ■ updated that EA had reviewed the PPs and found the slight alterations acceptable, but that paragraph 27, 1-3 the only push back on this. EA will respond directly to ■ on this. <i>Post Meeting Note: PPs agreed with EA on 31.10.19.</i> • Ref: 58 (■) – Stratford Brook mitigations (time limit on feasibility study) ■, noted that this had been discussed and that a timeline is not available on this at present. ■ added that detailed design will start in November, but the study may be done early on so as to inform the rest of the design. ■, the solution is to have this in the programme. <p>ACTION: Timing of feasibility study to be added to the programme.</p> <p>■ confirmed that there are updates to climate change allowance for peak rainfalls only. Peak river flows won't be until at least next year. ■ confirmed that the new guidance can be found on the UKCPA website (updated on 16 September 2019).</p>		■/■

3 Statement of Common Ground

ITEM	DESCRIPTION & ACTION	DEADLINE	RESPONSIBLE
	<p>A discussion was had in respect of updating the FRA and the DCO process. It was agreed that this could be achieved through updates to the SoCG. Clarifications can be provided through responses to the comments log. ■■■ noted that generally speaking the DCO application documents are not amended unless necessary and at ExA authority's discretion. The DCO process (of responding to Written Representations for example) provides one be the method for responding to issues, in addition to the SoCG. ■■■ stated that he would like it to be recorded in the SoCG that the EA are only the primary regulator for flood risk on main rivers. Ordinary watercourses is the remit of the LLFA. ■■■ added that the PPs will address issues regarding ordinary watercourses (with SCC).</p> <p>Updating of the SoCG was discussed. It was agreed to update the SoCG following an update to the comments log. EA to review the SoCG in the meantime. ■■■ stated that PINS are expecting an updated version of the SoCG by 05 December 2019. Post Meeting Note: Updated SoCGs will need to be submitted to PINS by Deadline 3 (28 January 2020).</p> <p>■■■ referred to the EA letter of 14 June 2019 (Ref WA/2018/12586-04-LO) and a comment about a concern regarding the contaminated land requirement that was not raised in the RR. She asked whether the comment was still relevant. ■■■ referred to the paragraph in a letter which stated <i>'if gross contamination was discovered during the course of works we would expect you to remediate it and not just leave it saying you haven't made it worse'</i>. ■■■ confirmed that ■■■ must be happy with this as he has looked at Requirement 13. ■■■ stated that if it was still something that needed addressing, further down in the Requirement there is a point to cover when in the event of contaminated material being found at any time during the development that's not been assessed, then the undertaker will cease construction in that area and conduct a risk assessment in consultation with the EA. If this determined remediation was necessary, then this would be undertaken. ■■■ agreed and confirmed that this was closed out.</p> <p>In relation to SoCG ■■■ stated that there were two geology and soils points still noted as 'under discussion' (Ground investigation and quantitative risk assessment and piling risk assessment) but now both those points could be agreed and closed out. ■■■ confirmed that now we had Requirement 13 it is probably agreed and that he would review and confirm.</p> <p>■■■ referred to the list of licences in the SoCG and the Water discharge activity environmental permit item is still marked as 'under discussion'. ■■■ stated that our position is that one isn't required. The response from the EA addressed this only in part (in respect of Bolder Mere) but needs closing out in respect of highways drainage. ■■■ stated that the same might apply to the ground water activity</p>		

ITEM	DESCRIPTION & ACTION	DEADLINE	RESPONSIBLE
	<p>permit in terms of the EA have asked for more information regarding ground water/drinking water protected areas.</p> <p>ACTION: Atkins/HE to respond to EA on outstanding question re ground water activity permit.</p> <p>ACTION: EA to complete feedback on Water discharge activity permit – also GWA permit– [redacted] to follow-up.</p> <p><i>Post Meeting Note: Action completed. Confirmation received from EA on the 17 October that a Water Discharge Activity Permit is not required for highways drainage.</i></p> <p>ACTION: EA to review current SoCG and comment where items can be changed to 'agreed'. Atkins to circulate updated comments log.</p> <p><i>Post Meeting Note: Sent on 06.11.19</i></p>		
4	<p>Next Steps/AOB No AOB was raised</p>		All

A.40. Email (08.10.19)

Cc: [REDACTED]

Subject: Meeting 8th October 2019

Hi [REDACTED]

Re the points I just raised in the meeting, below is the information I am seeking clarity on / you wanted clarity on: Water Discharge Activity Permit – Savannah’s email of 5th June 2019 (attached for ease of ref) referred to our view that a WDA permit will not be required for highway run-off discharge to a watercourse and made a separate comment regarding potential for WDA permit for dewatering at Bolder Mere (if required). Your response of 14th June commented on WDA requirements for Bolder Mere but not the highway run-off, which we assume you agree with us on but for completeness please confirm.

Groundwater Activity Permit – You have agreed that ‘if any activity meets the requirements of HE/EA Position Statement and Groundwater Protection Position Statement G13 then a Permit will not be required’ but I believe you wanted clarification from us on our reference to Drinking Water Protected Areas that we were referring to Groundwater DrWPAs – which we were.

Kind regards

[REDACTED]

[REDACTED] MSc, BSc (Hons)
Senior Environmental Permitting Consultant, Infrastructure
UK and Europe
Planning and Environmental Consenting



500 Park Avenue, Aztec West, Almondsbury, Bristol, BS32 4RZ



Company 

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A.41. Email (17.10.19)

[REDACTED]

From: [REDACTED]
Sent: 17 October 2019 17:22
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Meeting 8th October 2019

Hi [REDACTED]

In response to your points below:

Water Discharge Activity Permit: Our [water discharge activity Permitting guidance](#) states in section 3.8 that: *“The following are not water discharge activities:... Discharge from a highway drain, unless a highway drain notice has been served and has taken effect...”*. The “notice” is referenced in section 3.10: *“The regulator can serve a notice specifying that the operation of a highway drain (where that activity might lead to a discharge) is a water discharge activity from the specified date. This means the activity cannot be carried on without being authorised by an environmental permit. Such a notice may be served on a highway authority, or any other person entitled to keep open a drain under Section 100 of the Highways Act 1980. A notice specifies the date from which it takes effect, which will be not less than six months after being served.”*

Therefore, assuming that no such notice has been served on the relevant highway drain, our guidance would indicate that highway drainage is not a WDA and no Permit is required.

Thank you for confirming that you were referring to GW DrWPAs in your previous communications – this is noted.

If you have any further queries, please do not hesitate to contact me.

Kind regards,

[REDACTED]
[REDACTED]
Environment Agency | [REDACTED]

[REDACTED]
[REDACTED]



Speak to us early about environmental issues and opportunities - We can provide a free pre-application advice note or for more detailed advice / meetings / reviews we can provide a project manager to coordinate specialist advice / meetings which costs £100 per hour (plus VAT). For more information email us at planning_THM@environment-agency.gov.uk

[REDACTED]
[REDACTED]
[REDACTED]

A.43. Email (12.11.19)

From: [REDACTED] <[REDACTED]@bv.uk>
Sent: Tuesday, November 12, 2019 6:18 PM
To: [REDACTED] >
Cc: [REDACTED]
Subject: RE: M25 J10A PPs [BDB-BDB1.FID10509429]

Hi [REDACTED]

Sorry for any confusion – it was intended just to reiterate that we can only disapply FRAPs, not the other consents more generally.

I confirm as per previous correspondence with [REDACTED] that no water discharge activity permit is required for highways drainage.

Kind regards,

[REDACTED]
Strategic Planning Specialist, Strategic Planning & Engagement (Thames)
Environment Agency | Red Kite House, Howbery Park, Wallingford, Oxon, OX10 8BD

External: [REDACTED] | Mobile: [REDACTED]



From: [REDACTED]
Sent: 12 November 2019 17:51
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: M25 J10A PPs [BDB-BDB1.FID10509429]

Hi [REDACTED]

Many thanks for the confirmation that the EA are happy to disapply Regulation 12 in relation to the carrying out of the flood risk activity as provided for in Article 3 (1)(a) of the draft DCO.

In your email below, you refer to the water discharge activity permit being required and not being covered by the disapplication.

As we understand from previous correspondence from yourself to [REDACTED] (see attached) , a water discharge activity permit is not required for this scheme and therefore HE have not sought disapplication of Regulation 12 in the draft DCO in this regard.

Contains *sensitive* information

Further to your correspondence with [REDACTED] regarding the draft PPs, please find attached revised/clean copy as agreed.

We would be grateful if you could confirm in writing your acceptance of the revised PPs, including the consent to disapply Regulation 12 and the need for a Flood Risk Assessment Permit.

With many thanks

[REDACTED]
From: [REDACTED]
Sent: 31 October 2019 16:42
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: M25 J10A PPs [BDB-BDB1.FID10509429]

[REDACTED]
Thank you for the confirmation. I am pleased to hear that the draft PPs are now agreed. I will tidy them up and circulate accordingly.

Many thanks again for your assistance with this.

[REDACTED]

BDB PITMANS

[REDACTED] **Senior Associate**
T [REDACTED]
M [REDACTED]
W www.bdbpitmans.com

For and on behalf of BDB Pitmans LLP
50 Broadway London SW1H 0BL

From: [REDACTED]
Sent: 31 October 2019 14:44
To: [REDACTED]
Cc: [REDACTED]
Subject: DCO: M25 J10A PPs

Hi [REDACTED]

Further to our telephone call yesterday I have now had the opportunity discuss HE's suggested amendments to the PPs with [REDACTED] in the light of your further comments. On this basis I can confirm that we are now content to allow the suggested amendments to clause 27(1) – (3).

Kind regards.

[REDACTED]
[REDACTED]
Senior Lawyer

Contains *sensitive* information

Could you please confirm that our initial understanding as set out in the above paragraph is correct. If that is the case, for the sake of clarity, please could you re-confirm the EAs consent to disapplication of Regulation 12 under Article 3 (1)(a) of the draft DCO, without the reference to the water discharge activity permit.

With many thanks in advance.

Kind regards

■■■■

From: ■■■■

Sent: Tuesday, November 12, 2019 4:29 PM

To: ■■■■

Cc: ■■■■

■■■■

Subject: RE: M25 J10A PPs [BDB-BDB1.FID10509429]

Hi ■■■■,

Thank you for sending through the revised protective provisions in line with our previous discussions.

We accept the protective provisions in their current form.

We agree to disapply regulation 12 of the Environmental Permitting Regulations 2016 in respect of the need for a permit for flood risk activity only. Note that our other requirements, such as for a water discharge permit, remain in force.

Kind regards,

■■■■

Strategic Planning Specialist, Strategic Planning & Engagement (Thames)
Environment Agency | Red Kite House, Howbery Park, Wallingford, Oxon, OX10 8BD

■■■■

External: ■■■■ | Mobile: ■■■■



From: ■■■■

Sent: 12 November 2019 11:07

To: ■■■■

Cc: ■■■■

■■■■

Subject: FW: M25 J10A PPs [BDB-BDB1.FID10509429]

Dear ■■■■

Contains *sensitive* information

National Legal Services – FCRM & Planning
Environment Agency | Sapphire East, 550 Streetsbrook Road, Solihull B91
1QT DX 702280 Solihull 3

External : [REDACTED] | Mobile [REDACTED]

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A.44. Email (06.01.20)

From: [REDACTED]
Sent: Monday, January 6, 2020 1:27 PM
To: [REDACTED]
Cc: [REDACTED]
[REDACTED]
[REDACTED]
Subject: RE: M25 J10/A3 - Boldermere GW Flows [BDB-BDB1.FID10509429]

Dear [REDACTED]

Thank you for your e-mail below and apologies for the delay in responding, which was due to the widespread flooding incident in December.

I can confirm that we agree with your proposals below and appreciate the clarification about how the requested details will be provided to us in due course. We therefore do not require any additional changes to Requirement 10.

We will formally confirm this in writing to the Planning Inspectorate as part of our delayed 'deadline 2' response, or our 'deadline 3' comments should we not be able to provide comments for D2 before the D3 deadline.

If you have any further queries on this matter, please do not hesitate to contact me.

Kind regards,

[REDACTED]
Strategic Planning Specialist, Strategic Planning & Engagement (Thames)
Environment Agency | Red Kite House, Howbery Park, Wallingford, Oxon, OX10 8BD

[REDACTED]
External: [REDACTED] | Mobile: [REDACTED]



From: [REDACTED]
Sent: 11 December 2019 17:59
To: [REDACTED]
Cc: [REDACTED]
[REDACTED]
Subject: M25 J10/A3 - Boldermere GW Flows [BDB-BDB1.FID10509429]

Dear [REDACTED]

At our meeting on 8 October we discussed the possibility of making changes to Requirement 10 to address Agency's request to include a requirement to provide details of the Ground Investigations and Risk Assessment required for understanding GW flows and the potential impact that the piling works may have on Boldermere lake. This was also noted in the Agency's recent Written Representation.

Highways England does not object in principle to including the additional changes to Requirement 10 as requested by the Environment Agency. However, given that the requested requirements are already provided for by the dDCO, it seems unnecessary to duplicate existing provisions/requirements.

Highways England has committed to providing the Ground Investigations and Risk assessment in RD1.16 of the REAC (APP-135) stating that in order to prevent adverse effects on groundwater flow, Highways England will ensure an intrusive ground investigation is undertaken to determine the groundwater flow direction and the depth to groundwater. On the basis of these investigations, alterations will be made to the detailed design of the piles or retaining walls, to ensure they do not form a barrier to groundwater flow. Assessment of this impact will be covered within the Piling Risk Assessment. The Piling Risk Assessment will be submitted to the Environment Agency for approval and agreement prior to commencement of the construction phase.

The commitments set out in the REAC are secured through Requirement 3 of the dDCO (APP-018). Requirement 3 states that no part of the authorised development is to commence until a CEMP has been approved by the SoS in consultation with the relevant planning authority (Req 3(1)). The CEMP **must** reflect the commitments made in the REAC and mitigation measures detailed in the ES (Req 3(2)). The Scheme must be constructed in accordance with the approved CEMP (Req 3(3)). Therefore the commitments set out in the REAC are secured.

In addition, the agreed Protective Provisions for the protection of the Environment Agency provide that before beginning to construct any specified work (which includes any work or operation authorised by the DCO as is in, on, under, over or within 8 metres of a drainage work or otherwise likely to... affect the flow ... of... ground water, Highways England must submit to the Agency for their approval details of such works. Any such specified work must not be constructed except in accordance with such plans as approved in writing by the Environment Agency... (para 19 of the Protective Provisions). "Plans" is quite broadly defined and includes sections, drawings, specifications, calculations and method statements.

Therefore, the additional provisions in Requirement 10 are not required in our view. We hope the explanation above provides the Environment Agency with sufficient reassurance that the dDCO includes appropriate mechanisms which secure the need for Highways England to provide the Environment Agency with the details of the Ground Investigations and Risk Assessment and to ensure that the necessary mitigation measures in respect of the retaining wall are incorporated into the design.

If you think it would be helpful, perhaps we can discuss this further over the phone? If so, please let me know when would be a good time. I am around tomorrow and on Friday and in the early part of next week.

Kind regards

[REDACTED]



BDB PITMANS

[REDACTED] Senior Associate

T [REDACTED]

M [REDACTED]

W www.bdbpitmans.com

For and on behalf of BDB Pitmans LLP
50 Broadway London SW1H 0BL



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From: [REDACTED]
Sent: 28 January 2020 12:06
To: [REDACTED]
Cc: [REDACTED]
[REDACTED]
Subject: RE: M25 J10 Water Impoundment Licence

Hi [REDACTED]

Thank you for your email below, and apologies for not getting back to you sooner.

The M25 Junction 28 Scheme is at preliminary design stage. This design doesn't contain the information needed to definitively determine how structures that have potential to impound will do so.

I am optimistic that we will be able to screen out structures as low risk or design out any impoundment effect during future design phases of the project. But for now, I think the best course of action is to hold off making a decision on whether a licence is required until more detail becomes available.

The Scheme documentation includes a "Consents and Agreement Position Statement". This is a live document that tracks consenting requirements. I attach an update to the section on 'Water Impoundment Licences' for your information. Hopefully this accurately summarises the current state of our discussions. Please let me know if there is anything in this text that you would like changed. I also attach a plan showing the location of Scheme components that, at preliminary design stage, we think affect the water environment – a subset of these, as referenced in the Position Statement (e.g. BL1), have the potential to impound.

Thank you for the time that you and your reservoir colleagues have invested in the Scheme to date. Your advice has been invaluable in clarifying the obligations of the Scheme on matters of impoundment and reservoir safety. The opportunity to engage with you early on these matters allows us to integrate your requirements into the design in its early stages of development, hopefully avoiding the pain of making substantial changes once the detailed design has been developed.

We will be back in touch once we are into the early stages of detailed design. We expect this to be sometime later this year.

Best regards

[REDACTED]

Attachments

- Extract from M25 junction 10/A3 Wisley interchange TR010030 3.3 Consents and Agreements Position Statement. Taken on 28/0120 from document with ProjectWise ref HE551522-ATK-EAC-J10-RP-LM-000001
- Appendix B of WFD Statement

A.46. Email (06.02.20)

From: [REDACTED]
Sent: 06 February 2020 15:44
To: [REDACTED]
[REDACTED]
Cc: [REDACTED]
[REDACTED]
Subject: RE: Environment Agency (20023020) Representation for M25 Junction 10/A3 Wisley interchange improvement project (TR010030)

[REDACTED]
Ahead of our call tomorrow I've collated some information to corroborate the use of the FZ2 outline as a substitute for the 1 in 100 + climate change.

Regards
[REDACTED]

The peak flow for the River Wey through the M25 culvert has been taken from the Lower Wey 1D flood model. The flows in the 1D/2D Wey model are very similar however there is instability in the results hydrographs, so the 1D model results have been used.

The peak flows in the 1 in 100 and 1 in 1000 events are $161 \text{ m}^3\text{s}^{-1}$ and $252 \text{ m}^3\text{s}^{-1}$ respectively. The 1 in 100 including a 70% allowance for climate change is $274 \text{ m}^3\text{s}^{-1}$. The 1 in 100 including 70% climate change allowance is higher than the 1 in 1000 peak flow by $22 \text{ m}^3\text{s}^{-1}$. This is a variation of 8%. This variation is considered to be small enough for the use of FZ2 as a substitute for the 1 in 100 + climate change.

The flow through the M25 culvert has been checked and there is >1 m freeboard between the peak 1 in 1000 flood level and the soffit of the M25 culvert over the Wey, and similarly in the 1D/2D model there is a freeboard of approximately 0.5 m within the culverts that take the minor watercourse under the M25 to the north-west of the R Wey crossing. So a small increase in flow will not significantly change the nature of the flow through the culverts, and there would not be a disproportionate increase in level for a small increase in flow.

A.47. Meeting (07.02.20)



Meeting Note

Project:	M25 Junction 10/A3 Wisley Interchange Improvement Scheme		
Subject:	EA Written Representation 'D3'/SoCG outstanding issues		
Meeting place:	Skype Call	Meeting no:	
Date and time:	07 February 2020; 1-2:30pm	Minutes by:	██████████
Present:	██████████ ██████████ ██████████ ██████████ ██████████ ██████████	Representing:	Environment Agency Environment Agency Atkins Atkins Atkins BDB Pitmans Atkins

ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
1.	Introductions and Updates 1.1 █████ outlined the purpose of the meeting to discuss outstanding issues arising from the Statement of Common Ground (SoCG) by reference to the proposed agenda circulated prior to the call. █████ suggested to first discuss agenda item 6 whilst waiting for █████ to join the call.	All
2.	EA Written Representation/Statement of Common Ground outstanding issues 2.1 EA Written Representation/SoCG issues discussed under the headings below.	
3.	Updates to Flood Risk Assessment (FRA)– climate change allowance 3.1 █████ confirmed receipt of documents from █████ which explained the justification for using Flood Zone 2. The Environment Agency (EA) confirmed to █████, this was the information expected. █████ responded to █████, stating he was referring to the email sent on 6 th February 2020.	████

Next meeting:	
Distribution:	All attendees
Date issued:	07 February 2020
File Ref:	

NOTE TO RECIPIENTS:
 These meeting notes record Atkins understanding of the meeting and intended actions arising therefrom. Your agreement that the notes form a true record of the discussion will be assumed unless adverse comments are received in writing within five days of receipt.

Contains *sensitive* information
 07/02/2020 EA M25 J10 Meeting 1



ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
	<p>3.2 ■■■ explained the peak flows going through the culvert in the one in 100 and one in 1000 events, with a 70% allowance for climate change. The EA explained they must maintain a similar position/standard across all projects and questioned where the flows were applied to. ■■■ confirmed this was undertaken at the middle of the site in terms of the Red Line Boundary (RLB). ■■■ stated the 70% allowance is typically applied to the inflow (most upstream node) before being allowed to cascade through the model. He understood it may not have cascaded lineally from this point. ■■■ suggested further, that attenuation means that it is likely to be much less than a 70% increase in flow. The EA suggested Highways England (HE)/Atkins repeat the assessment for the most upstream node, to assess the effects on flow at the mid-point.</p> <p>3.3 ■■■ considered the importance of equating an 8% increase in flow to an increase in level. He stated the effect of the scheme on the smaller surrounding tributaries is minimal and therefore, it is necessary to perform common sense checks. He gave the example, if an 8% increase in flow accrued an 8% increase in level (although this is not linear), this would result in a 300-700ml level increase which is under one foot. HE/Atkins believe therefore, there would be no change in the conclusions in whether the scheme is impacting the flood plain.</p> <p>3.4 The EA agreed with the logic of common sense checking but highlighted the need for this information to be set out in a strong, formal written document which discusses what ■■■ explained regarding why Flood Zone 2 would be appropriate. ■■■ stated performing the assessments in the upper zones would in fact aid the robustness of the document produced. It was suggested this document be made externally available. ■■■ agreed to start this document and it was confirmed that this updated FRA would be the one referred to in the SoCG. ■■■ agreed.</p> <p>3.5 ■■■ asked regarding timings. ■■■ asked for this to be sent by the middle of the week as he is on leave. ■■■ stated an update to the FRA is something still desired by the EA. It was discussed there will be an opportunity at one of the deadlines to add an addendum or some additional wording to the FRA.</p> <p>Action: ■■■ to send flood risk explanation to the EA in the week commencing 10/02/2020.</p>	
4.	<p>Park Barn Farm Replacement Land and Sanway Flood Alleviation Scheme</p> <p>4.1 There is potential for area PBF1 of the Park Barn Farm Replacement Land to yield benefits for both Schemes: as replacement land for the J10 Scheme; as floodplain compensation for the Sanway FAS; and by improving and integrating local public access / improving habitat for both</p>	■■■ ■■■

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 07.02.2020_M25_J10_Meeting_Notes_07.02.2020 -
 EA - Minutes.docx 2



ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
	<p>Schemes. Floodplain compensation would be for infrequent events.</p> <p>4.2 A recent call between EA and Natural England (NE), concluded that NE were supportive of dual use of the land on the above basis.</p> <p>4.3 ■■■ questioned, if HE were not involved in this area, how would the Sanway scheme be undertaken by the EA. ■■■ responded, whilst he does not deal with this personally, landowners are consulted but sometimes compulsory acquisition is necessary. ■■■ stated some land in the current scheme is in the ownership of partners to the scheme.</p> <p>4.4 ■■■ asked whether it is usual for public access to be introduced following this. ■■■ discussed the desire to improve public access and the need to balance this with the desires of local residents. The scale of public access is thus still under consideration. The EA mentioned the recent Environmental Workshop which had been undertaken and how information is currently being collected from this.</p> <p>4.5 ■■■ questioned where the desire to improve access stems from. The EA confirmed there is a wider desire to do more than minimise flood risk to locals but consider other environmental and social solutions which could accompany the scheme.</p> <p>4.6 The EA responded to ■■■, stating the intention for the section of land north of the M25 is compensation for loss of floodplain storage. The EA referred to other colleagues which would be able to provide specific details on this land parcel.</p> <p>Action: ■■■ to act as the first point of contact for the EA on this issue.</p> <p>PMN: The EA have sent through presentations made at the Sanway Workshop and a programme for the next steps.</p> <p>4.7 ■■■ noted, the replacement land is purely a product of the compulsory acquisition process, rather than being related to nature conservation. He referred to how the RHS provided replacement land next to Buxton Woods when they did their extension.</p> <p>It was agreed that all parties are supportive of a dual use for Replacement Land at Park Barn Farm, but there remain constraints on securing this use that will need to be worked through in detailed design.</p> <p>4.8 ■■■ and ■■■ exited the call.</p>	
5.	Water Impoundment Licence	All

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 07.02.2020_M25_J10_Meeting_Notes_07.02.2020 -
 EA - Minutes.docx 3



ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
	<p>5.1 [REDACTED] reported [REDACTED]'s concerns on wording suggested by [REDACTED] on this topic. She has proposed an alternative wording which the EA believe is more appropriate. Without a full pre-application, the EA cannot offer any more certainty or confirmation of agreement. Atkins confirm they will continue to engage with the EA and release a pre-application as soon as possible, but the necessary details are not currently available for the structures in question without the detailed designs that are currently not available.</p> <p>5.2 [REDACTED] joined the call.</p> <p>5.3 The EA reported that resourcing constraints mean they have to focus on pre-applications based on detailed design, it would not be appropriate necessarily to undertake a pre-application before detailed design.</p> <p>5.4 It was confirmed agreement had been achieved on Bolder Mere. The scheme did not affect the control structures of this and therefore a Water Impoundment Licence is not necessary.</p> <p>5.5 [REDACTED] proposed that further information should be collated on the location and scale of the other structures (besides Boldermere) with potential impounding effect. The purpose of this information would be to provide clarity on the likely potential effect of these structures on adjacent watercourses and habitat. This could be used to support further discussions with the ExA, if they should arise. [REDACTED] happy to receive this information, but reiterated need for further detailed information before a pre-application could be usefully submitted for these structures.</p> <p>Action: [REDACTED] to share information as set out in 5.5 above, and where they are located in relation to the SSSI.</p>	
6.	<p>Draft Development Consent Order – Article 19</p> <p>6.1 The following proposed amendment to Article 19 of the dDCO has been agreed with the EA: "Subject to article 3 paragraph (1)(a) (disapplication of legislative provisions) nothing in this article overrides the requirement for an environmental permit under regulation 12(1)(b) (requirement for environmental permit) of the Environmental Permitting (England and Wales) Regulations 2016". The agreed wording will be included in Article 19 in the next version of the revised dDCO.</p>	[REDACTED]
7.	<p>Next steps/AOB</p> <p>7.1 See Meeting Action Tracker below.</p>	All
	<p>Action</p> <p>TR to send flood risk explanation to the EA in the week commencing 10/02/2020.</p>	<p>Complete (Yes/No)</p>

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 07.02.2020_M25_J10_Meeting_Notes_07.02.2020 -
 EA - Minutes.docx 4



- █ to liaise with the EA to discuss the intentions for the land parcel north of the M25.
- █ to provide more information on which structures are being discussed and where they are located in relation to the SSSI.
- █ to forward SoCG wording to █

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07.02.2020_M25_J10_Meeting_Notes_07.02.2020 -
EA - Minutes.docx 5

A.48. Email (14.02.20)

██████████

From: ██████████
Sent: 14 February 2020 10:53
To: ██████████
Cc: ██████████
Subject: RE: Environment Agency (20023020) Representation for M25 Junction 10/A3 Wisley interchange improvement project (TR010030)
Attachments: Technical note - FRA Flood Zone 2.docx

██████,

Following our call last week, please find attached a note providing further evidence to support the use of Flood Zone 2 in the FRA.

Regards
██████

Context

The DMRB states the design standard for the scheme should be based on the Central estimate climate change allowance, but also requires a sensitivity test to test the Upper End estimate. The sensitivity tests would show whether there is a material change in flood risk that would warrant changing the Scheme design to mitigate any new or material changes in flood risk that arise from using the higher climate change allowance.

The design standard used for the Scheme is the 1 in 100 +35% flood event. The 35% uplift is the Higher Central estimate climate change allowance. To inform the design of the Scheme, the Flood Zone 2 extent has been used as a proxy for the 1 in 100 +35% flood outline. This is a conservative estimate as the 1 in 100 +35% flood flow is less than the 1 in 1000 flood flow.

In accordance with the requirements of the DMRB and the Flood Risk assessment: climate change allowances guidance, the flood risk assessment needs to consider the Upper End climate change allowances (100 + 70% uplift).

The Flood Risk Assessment has also used the Flood Zone 2 extent as a proxy for the 1 in 100 +70% climate change. This note provides further evidence to support the use of Flood Zone 2 in the FRA.

Meeting notes

During the meeting on 7 February 2020, the method of comparing the 1 in 100 (70% CC) flows to the 1 in 1000 flows was discussed. The principle was agreed that the appropriate approach for estimating the flows at a point in the river system is to uplift the inflows into the model, rather than simply scale up a flow at a discrete point in the model. It was agreed that if the inflows to the model were scaled up by the climate change allowance, then the routing effects of the channel, river structures and floodplain would attenuate the peak flow, and attenuate the increase in flow. This would mean the 70% uplift to peak flows at the model inflow would gradually decay as the attenuating effect of channel and floodplain took effect. This attenuating effect is likely to be more pronounced in large catchments, like the River Wey.

Analysis

The Lower Wey flood model has been run for the 1 in 100 flood event with the inflow hydrographs increased by 70%. This has been run to estimate the peak river levels near the Scheme for the 1 in 100 +70% event, enabling a comparison to the 1 in 1000 (Flood Zone 2) flood levels. The upstream extent of the Lower Wey model is near Woking, and so there is a significant catchment upstream of the extent of the model. This model will not therefore include the attenuating influence of the catchment upstream of this point. The approach is a conservative one where the increase in levels due to the 70% climate change allowance will be overestimated.

The results from the model runs show that the increase in baseline peak flood levels from the 1 in 1000 event to the 1 in 100 +70% is approximately 160 mm. Figure 1 shows the change in flood extent on the right bank of the River Wey for a 160 mm increase in level above the 1 in 1000 flood levels. The red line is the 1 in 1000 flood level and the blue line is the 1 in 100 +70% flood level. Only the right bank of the River Wey has been shown as this is the part of the floodplain nearest the Scheme and therefore the only place where the proposed Scheme could be influenced by a significant change in the flood extent.

The difference between the 1 in 1000 and the 1 in 100 +70% flood extents is minimal, with no substantive change in the baseline flood extent nor flood risk. The change in flood extent would be expected to be smaller than shown in the figure for the reasons described above.

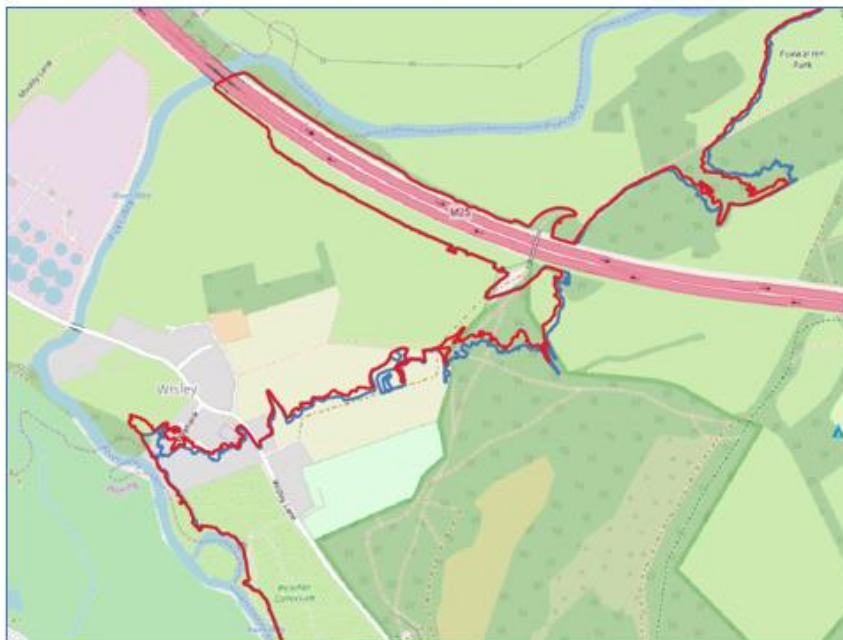


Figure 1 Flood extent sensitivity

Conclusion

A comparison between Flood Zone 2 and the 1 in 100 +70% flood extent has been carried out using a conservative approach that will overestimate the 1 in 100 +70% flood extent. The difference between Flood Zone 2 and the 1 in 100 +70% flood outlines will also be overestimated.

The two flood extents are shown to be comparable, with no material change in the flood extents.

The Flood Risk Assessment used the Flood Zone 2 extent as a substitute for the 1 in 100 +70% flood extent. Since there is no substantial difference between the two flood extents, the conclusions of the FRA remain valid.

A.49. Email (02.03.20)

██████████

From: ██████████ <██████████>
Sent: 02 March 2020 15:28
To: ██████████
Cc: ██████████
Subject: RE: Environment Agency (20023020) Representation for M25 Junction 10/A3 Wisley interchange improvement project (TR010030)

Follow Up Flag: Follow up
Flag Status: Flagged

Hi ██████████,

Thank you for sending through the Flood Zone 2 Technical Note, which we have now reviewed.

It appears from your additional assessment that the level and extent of the 1 in 100 + 70% climate change allowance is *greater* than Flood Zone 2, meaning that Flood Zone 2 is not necessarily suitable as a direct proxy for this flood event.

The Technical Note lacks detail, especially the mapping. We would expect to see higher resolution maps showing the effects of the additional extent of the 1 in 100 + 70% CC on the scheme, including whether areas for works that have been previously 'ruled out' because they were in Flood Zone 1 are still appropriate given this new assessment (i.e. do these areas actually fall in the +cc extent?).

Our flood risk officer ██████████ has raised the following specific queries for which we require responses before we can agree this matter:

- Have any changes to the model been made aside from adding 70% extra to the inflows, for example to maintain stability? We need to be made aware of all changes to the existing model. The model changes should also be confirmed in full. Although we may not need to carry out a full, detailed model review, we need more information about the changes made to the model.
- Have any conclusions or recommendations of the FRA been affected by the findings of the technical note? Your 'conclusions' suggests not, but a level increase of ~16cm is a notable difference and although I'm aware some of the works at risk of flooding, including the bridge, are planned around the Stratford Brook which was modelled separately, you need to confirm this explicitly. As well as works planned around the periphery of Flood Zone 2, works inside this zone should also be considered due to the change in levels described.

We will respond accordingly on this matter for the SoCG and tomorrow's DCO deadline.

PLEASE NOTE: We are currently recovering from a major flooding incident in Thames area and it may take me longer than usual to respond to your e-mail.

Kind regards,

██████████
Strategic Planning Specialist, Strategic Planning & Engagement (Thames)
Environment Agency | Red Kite House, Howbery Park, Wallingford, Oxon, OX10 8BD

External: ██████████ | Mobile: ██████████



A.50. Email (04.03.20)

From: [REDACTED]
Sent: 04 March 2020 13:10
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: Environment Agency (20023020) Representation for M25 Junction 10/A3 Wisley interchange improvement project (TR010030)

Hi [REDACTED],

I'd be grateful if we could discuss this further so that we can clarify the position relating to how flood risk has been assessed for the Scheme.

The issue was around the suitability or otherwise of using the FZ2 extent as a proxy for the 1 in 100 +70% climate change extent. We have discussed this and provided evidence to show that the difference between these two flood extents is not significant – this is in the context of a sensitivity test on a flood extent. If the exercise was simply that, to test the sensitivity of a flood extent on an increase in flow, then the results of this test demonstrate there are no new flow paths that change the character of the flooding in this area, nor any significant increase in flood extent.

There is then the underlying issue of the design standard for the Scheme. The design standard is the 1 in 100 +35% flood event. In accordance with the DMRB and the Flood risk assessment requirements, the 1 in 100 +70% has also been tested. The 1 in 100 +35% flood levels do not interact with the Scheme. The 1 in 100 +70% flood levels do interact with the scheme. The only place where this occurs is the western most approx. 40 m of the embankment on the southern side of the M25 near Buxton Wood Footbridge (for reference, sheet 11 of 31 of the Scheme Layout Plans). The trigger for changing the design to accommodate any potential impacts at the 1 in 100 +70% event needs to be done on the basis of probability and consequence and it's this principle that informs the relevant conclusions of the FRA. It is particularly this point that I would like to discuss to understand how we can come to an agreement on the outstanding issue.

The question from yourself and the second question from [REDACTED] relate to the above. To answer [REDACTED] first question: No changes have been made to the model aside from undertaking an additional sensitivity run by increasing the 1 in 100 peak flow at the upstream boundary by 70%.

Could you let me know when would be suitable for a call, I can most likely make myself available anytime that is convenient for you.

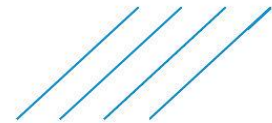
Regards

From: Gordon, Clark <clark.gordon@environment-agency.gov.uk>
Sent: 02 March 2020 15:28
To: Rouse, Tom T <tom.rouse@atkinsglobal.com>
Cc: Huband, Marcus <Marcus.Huband@atkinsglobal.com>; OksanaPRICE <OksanaPRICE@bdbpitmans.com>; Ruth Heatherley <RHeatherley@cjassociates.co.uk>
Subject: RE: Environment Agency (20023020) Representation for M25 Junction 10/A3 Wisley interchange improvement project (TR010030)

Hi Tom,

Thank you for sending through the Flood Zone 2 Technical Note, which we have now reviewed.

A.51. Meeting (05 03 20)



Meeting Notes

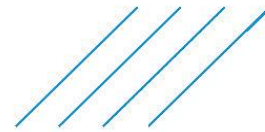
Project:	M25 Junction 10/A3 Wisley Interchange Improvement Scheme		
Subject:	EA Written Representation 'D5' FRA		
Meeting place:	Skype Call	Meeting no:	
Date and time:	05 March 2020; 11-12pm	Minutes by:	██████████
Present:	██████████ ██████████ ██████████	Representing:	Environment Agency Environment Agency Atkins Atkins

ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
1.	<p>Aim of meeting</p> <p>1.1 This meeting was held to discuss the Environment Agency's (EA) most recent communication regarding the outstanding concerns related to the use of Flood Zone 2 to define the flood risk associated with the Scheme in the 1 in 100 +70% flood event.</p> <p>1.2 Specifically, the aim was to clarify points raised by the EA in an email on the 02 March 2020 which raised questions regarding a technical note sent to the EA on the 14 February 2020. The technical note was requested at a meeting with the EA on the 07.02.20 in order to clarify concerns raised by the EA regarding use of Flood Zone 2 as outlined in the EAs written representation submitted for Deadline 3.</p>	
2.	<p>Discussion regarding use of Flood Zone 2 to define the flood risk associated with the Scheme in the 1 in 100 +70% flood event.</p> <p>2.1 █████ clarified that the only location (except Stratford Brook) where the Scheme has the potential to impact floodplain storage is the embankment on the southern side of the M25 near Buxton Wood Footbridge where the westbound on slip is being widened. He confirmed that the Scheme boundary does extend into the FZ2 flood extent in two other locations,</p>	

Next meeting:

Distribution:	All attendees	
Date issued:	03/11/2020	File Ref:

NOTE TO RECIPIENTS:
 These meeting notes record Atkins understanding of the meeting and intended actions arising therefrom. Your agreement that the notes form a true record of the discussion will be assumed unless adverse comments are received in writing within five days of receipt.



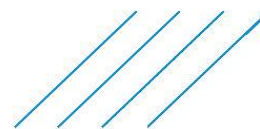
ITEM	DESCRIPTION AND ACTION	RESPONSIBLE
	<p>but these are in land replacement areas, where no earthworks are proposed that could affect floodplain storage.</p> <p>2.2 [REDACTED] agreed that the technical work that has been carried out is satisfactory, and there are no outstanding concerns regarding the technical work. The detailed design will be assessed to confirm the flood risk impacts of the Scheme and this information will be submitted along with the designs as part of the Protective Provision approvals.</p> <p>2.3 The only outstanding issue is one of policy. The EA need to confirm whether they would expect to see floodplain loss mitigated (using compensatory flood storage) where there is only a loss of storage in the 1 in 100 +70% flood event. The EA to confirm their position.</p> <p>2.4 [REDACTED] queried whether there are any suitable locations for floodplain compensation areas if the flood risk analysis at the detailed design stage identifies the need for floodplain mitigation as a result of loss of floodplain near the Buxton Wood Footbridge. [REDACTED] stated that if required, based on topography, there are opportunities for this type of mitigation within the DCO extents upstream and downstream of the M25.</p> <p>2.5 [REDACTED] queried whether there would be a Protective Provision approval for works in the floodplain. It is clear that approvals would be required for works within 8 m of a main river, but there was some uncertainty about works within the floodplain. [REDACTED] will review the DCO wording and discuss with the EA legal team.</p>	
3.	AOB No other business was raised.	
4.		

Action	Complete (Yes/No)
<p>1 EA to confirm whether they would expect to see floodplain loss mitigated (using compensatory flood storage) where there is only a loss of storage in the 1 in 100 +70% flood event. The EA to confirm their position in the context of the published guidance at the time the DCO was submitted.</p> <p>Post meeting note: The EA have confirmed in their letter of 27 March 2020 that the Higher Central climate change allowance can be used as the design standard allowance if it can be demonstrated through further detailed design that this is appropriate and does not increase flood risk to others.</p>	Yes
<p>2 EA to review the wording of the Protective Provisions for the Scheme with EA legal to determine whether it covers the requirement for a Protective Provision approval for works in the floodplain.</p>	Yes

Contains sensitive information

_M25 J10_EA Meeting Notes_05.03.20_FINAL M25_J10_EA Meeting Notes_05.03.20_FINAL

2



Post meeting note: The EA have confirmed in their letter of 27 March 2020 that any works in the floodplain would require protective provision approvals, and therefore they are satisfied that flood risk issues have been resolved for the purposes of the DCO examination.

Contains *sensitive* information

_ M25 J10_EA Meeting Notes_05.03.20_FINAL M25_J10_EA Meeting Notes_05.03.20_FINAL

3

A.52. Email (19.03.20)



From: [Redacted] >
Sent: 19 March 2020 20:25
To: [Redacted]
Cc: [Redacted]
Subject: RE: Meeting note - 05.03.20

Hi [Redacted],

Apologies for not being able to get back to you before yesterday. Hope everyone is looking after themselves!

I can confirm that we consider flood risk issues resolved, subject to appropriate and relevant updates being made to the submitted FRA as previously discussed.

We feel that we do have sufficient control through the Protective Provisions, which are written so that we will be consulted for works in the floodplain (which we would take to be Flood Zones 2 and 3), so any slip road embankment works in Flood Zone 2 would require the submission of further details to us. In principle, we agree with the currently proposed approach to design to the +35% climate change allowance event, rather than a +70% event, as long as it can be demonstrated at detailed design that there are no 'cliff edge' effects between the +35% and +70% events and/or that there is a marked increase to vulnerable receptors at the higher allowance.

We will come back to you separately in due course on the minutes from the call.

If you have any queries in the meantime, please do not hesitate to contact me.

Kind regards,

[Redacted]
Strategic Planning Specialist, Strategic Planning & Engagement (Thames)
Environment Agency | Red Kite House, Howbery Park, Wallingford, Oxon, OX10 8BD

External: [Redacted] | Mobile: [Redacted]



Speak to us early about environmental issues and opportunities - We can provide a free pre-application advice note or for more detailed advice / meetings / reviews we can provide a project manager to coordinate specialist advice / meetings which costs £100 per hour (plus VAT). For more information email us at planning_THM@environment-agency.gov.uk.

From: [Redacted]
Sent: 17 March 2020 09:38
To: [Redacted]
Cc: [Redacted]
Subject: FW: Meeting note - 05.03.20

Hi [REDACTED]

Sorry to chase as I know you are busy, but if you could get back to us on the attached meeting note and the 2 outstanding actions that would be much appreciated.

We have a deadline of tomorrow by which to respond to ExA questions from D5, so if we are able to include your response to our discussion in that deadline that would be ideal.

Many thanks
[REDACTED]

From: [REDACTED]
Sent: Wednesday, March 11, 2020 9:48 AM
To: [REDACTED]
Cc: [REDACTED]
Subject: Meeting note - 05.03.20

Hi [REDACTED] / [REDACTED]

Please find attached meeting note from our discussion on the 05 March. Please let me know if you are happy with these as a record of discussions held.

Also grateful if you can review the meeting note of the 07.02.20.

Many thanks
[REDACTED]

[REDACTED]
Senior Consultant – Stakeholder Engagement

Tel: [REDACTED]
DD: [REDACTED]

Please note my working days are Tuesday to Thursday

Atkins – South East Roads Investment Programme

Working on behalf of Highways England

Highways England Customer Contact Centre
0300 123 5000
www.highways.gov.uk

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A.53. Letter (03.04.20)

creating a better place



The Planning Inspectorate
Temple Quay House
Bristol
BS1 6PN

Project ref: M25 junction 10/A3 Wisley interchange improvement – TR010030

Our ref: WA/2019/126852/07-L01

Your ref: 20023020

Date: 3 April 2020

Dear Sir/Madam,

Application by Highways England for an Order Granting Development Consent for the M25 Junction 10/A3 Wisley interchange improvement project

Please see below our comments for 'deadline 6' submissions for the M25 Junction 10/A3 Wisley interchange improvement project Development Consent Order application.

The Role of the Environment Agency

The Environment Agency has a responsibility for protecting and improving the Environment as well as contributing to sustainable development.

Our work helps to support a greener economy through protecting and improving the natural environment for beneficial uses, working with business to reduce waste and save money, and helping to ensure that the UK economy is ready to cope with climate change. We will facilitate, as appropriate, the development of low carbon sources of energy ensuring people and the environment are properly protected.

We have three main roles:

We are an **environmental regulator** – we take a risk-based approach and target our effort to maintain and improve Environmental standards and to minimize unnecessary burdens on business. We issue a range of permits and consents.

We are an **environmental operator** – we are a national organization that operates locally. We work with people and communities across England to protect and improve the environment in an integrated way. We provide a vital incident response capability.

We are an **environmental advisor** – we compile and assess the best available evidence and use this to report on the state of the environment. We use our own monitoring information and that of others to inform this activity. We provide technical information and advice to national and local governments to support their roles in policy and decision-making.

One of specific functions is as a Flood Risk Management Authority. We have a general supervisory duty relating to specific flood risk management matters in respect of flood risk arising from Main Rivers or the sea.

Environment Agency position

Since we issued our last response on 3 March (REP5-036), we have continued to engage with the applicant's consultants in relation to our outstanding flood risk concerns. Following these discussions, we await the submission of an updated Flood Risk Assessment (FRA) to confirm that the updated assessments we have asked for (plus any changes made to the scheme itself – for example we understand that a slip road is now affected) have not affected the conclusions of

Cont/d..

the FRA. We note that the Examining Authority in further written questions published today have requested an update from the applicant on the submission of an updated FRA.

We will review the FRA when it is submitted and confirm whether flood risk matters within our remit have now been agreed.

Please do not hesitate to contact me if you require any further information. We look forward to continuing to work with the applicant to resolve any ongoing matters contained within our written representation, and to ensure the best environmental outcome for this project.

Yours faithfully,

██████████
Strategic Planning Specialist
Environment Agency, Thames area

End

2

A.54. Email (22.04.20)

From: [REDACTED]
Sent: 22 April 2020 16:55
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: EA SoCG - updates in advance of D8 and submission of final SoCG.

Hi [REDACTED],

Thanks for your e-mail below.

I can confirm that we are happy with the proposed amendments to the SoCG matters as set out below.

Do you know when you will be looking to send through the updated FRA?

PLEASE NOTE: Due to working arrangements for COVID-19, it may take me longer than usual to respond to you.

Kind regards,

[REDACTED]
Environment Agency | [REDACTED]

[REDACTED]
[REDACTED]



1



Speak to us early about environmental issues and opportunities - We can provide a free pre-application advice note or for more detailed advice / meetings / reviews we can provide a project manager to coordinate specialist advice / meetings which costs £100 per hour (plus VAT). For more information email us at planning_THM@environment-agency.gov.uk.

From: [REDACTED]
Sent: 14 April 2020 17:59
To: [REDACTED]
Cc: [REDACTED]
Subject: EA SoCG - updates in advance of D8 and submission of final SoCG.

Dear [REDACTED],

As you will be aware we need to finalise our SoCG with you by Deadline 8 (01 May). The only outstanding issues in the SoCG that are currently 'under discussion' pertain to the FRA. These being 3.5.1, 3.5.2 and 3.5.6. PINS are requesting that all issues are confirmed as either 'agreed' or 'not agreed'.

We are proposing the below amendments to the following items in light of recent discussions, which we would be grateful if you could **review and either approve or provide feedback on by close of 17 April**.

In your D6 submission (attached), you state that the EA will 'review the FRA when it is submitted and confirm whether flood risk matters within our remit have now been agreed'. In your email below you confirm that you consider *all flood risk issues resolved, subject to appropriate and relevant updates being made to the submitted FRA*. Are we correct therefore in assuming that you cannot agree all flood risk issues resolved until you have reviewed the updated FRA?

We are hoping to submit the updated FRA to you by the end of this week. However, the review of the updates to the FRA may not be completed prior to D8 and in time for the finalisation of the SoCG, the wording proposed in the amended SoCG seeks to reflect this possibility.

Once we have your feedback/agreement, we will send you a final copy of the SoCG, with the full appendices for you to sign. Please note the refs 'Axx' refer to the relevant appendices and will be finalised in the final version of the SoCG.

Any questions please do let me know.

Kind regards

2

3.5.1: Suggestion is to delete this item as it is covered by 3.5.2

	Topic	Sub-section	Environment Agency Comment	Highways England Response	Status
3.5.1	Flood risk	Flood Risk Assessment	The EA, overall, agree with the conclusions of the Flood Risk Assessment (FRA) (reference: APP-046) for matters within our remit. We agree that fluvial flood risk issues have been satisfactorily addressed. This follows verbal confirmation at our meeting with the applicant's agents on 8 October 2019 (A.41) and the comments provided by the applicant in the comments log (attached to the Written Representation (REP-1-013)). However, there is one matter outstanding that remains under discussion—see item 3.5.6.	Noted.	Under discussion

3.5.2: Edited in line with the outcome of recent discussions and pending your receipt of the updated FRA

3.5.2-1	Flood risk CL: 034; 035; 037; 039; 042; 061.	Flood Risk Assessment	[The EA can confirm that we consider flood risk issues resolved, subject to appropriate and relevant updates being made to the submitted FRA as previously discussed.] The only outstanding concerns relates to the provision of sufficient information within the FRA as submitted to demonstrate that the conclusions of the FRA are sound. It has taken additional confirmation (whether written or verbally) to confirm some of the FRA issues that were raised in the EA comments log. The EA therefore recommended to the applicant that the FRA should be	{Highways England welcomes EA's confirmation that flood risk issues have been resolved, subject to the requested updates being made to the submitted FRA. The updated FRA has been submitted to the EA [on ...] / [by Deadline 6] and is provided as an addendum to this SoCG at []. *Additional evidence has been provided to the EA through responses to their comments log (that is attached to their Written Representation (REP-1-013)) and verbally at our	Under discussion [Agreed]
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3

	Topic	Sub-section	Environment Agency Comment	Highways England Response	Status
			updated to better demonstrate that the conclusions are sound. Albeit the EA acknowledge that the provision of this additional information will not affect the underlying conclusions of the report.	meeting on 8 October 2019 (A.41). The verbal evidence is also recorded in the minutes of the meeting (A.41). Highways England welcomes the EA's confirmation that the provisions of the additional information will not affect the underlying conclusions of the report. An update to the FRA will be provided as an addendum to the final SoCG to be submitted at Deadline 8. T	

3.5.6: Updated to reflect outcome of recent discussions

3.5.6 5	Flood risk (RR) Xref CL: 037; 038; 039	FRA (Climate change)	Of particular concern to the EA following a review of the FRA was a lack of demonstration that appropriate allowances for climate change have been considered, unclear terminology in places and a number of assumptions made without supporting evidence.	The FRA [APP-046] has made appropriate allowances for climate change. Section 8.5.3 of the ES Chapter 8: Road drainage and the water environment [APP-053] incorrectly referenced out of date guidance. The FRA methodology has followed the appropriate current guidance (Flood risk assessments: climate change allowances, EA 2016) and has made an appropriate allowance for climate change. There are therefore no implications for the assessment of effects reported in section 8.10 of Chapter 8 of the Environmental Statement (APP-053). This has been discussed with the EA at the	Under discussion. Agreed.
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4

				meeting on 8 October (A.41) and at the meeting on the 7 February 2020 (Axx). Following this recent meeting, additional evidence to support the approach was submitted to the EA on 14 February 2020 (Axx). <i>[In response to additional queries from the EA (A.xx) a meeting was held on 05.03.20 (Axx) to provide further clarification to the EA.]</i>	
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[Redacted text]

Atkins – South East Roads Investment Programme

Working on behalf of Highways England

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A.55. Email (24.04.20)

From: [REDACTED]
Sent: 24 April 2020 13:07
To: [REDACTED]
Cc: [REDACTED]
Subject: RE: EA SoCG - updates in advance of D8 and submission of final SoCG.
Attachments: HE551522-ATK-EWE-RP-LW-000003 April 2020 update.docx

Please find attached a draft update to the FRA. The document retains the track changes to show where the report has been updated.

Regards
[REDACTED]

From: [REDACTED]
Sent: 23 April 2020 15:53
To: [REDACTED]@gov.uk
Cc: [REDACTED]
Subject: RE: EA SoCG - updates in advance of D8 and submission of final SoCG.

Many thanks [REDACTED] for confirming.

[REDACTED] is going to send the updated FRA over to you tomorrow. Do you think you will be able to complete the review and confirm whether you are content before the end of the examination on the 12 May?

I will send you a full updated SoCG early next week.

Kind regards
[REDACTED]

From: [REDACTED]
Sent: Wednesday, April 22, 2020 4:55 PM
To: [REDACTED]

1

Cc: [REDACTED]
Subject: RE: EA SoCG - updates in advance of D8 and submission of final SoCG.

Hi [REDACTED]

Thanks for your e-mail below.

I can confirm that we are happy with the proposed amendments to the SoCG matters as set out below.

Do you know when you will be looking to send through the updated FRA?

PLEASE NOTE: Due to working arrangements for COVID-19, it may take me longer than usual to respond to you.

Kind regards,

[REDACTED]
Environment Agency | [REDACTED]



Creating a better place
for people and wildlife



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PROTECT YOURSELF & OTHERS

For the latest guidance:  Environment Agency
- INTRANET.EA.GOV
- NHS.UK/coronavirus
- GOV.UK/coronavirus

2

Speak to us early about environmental issues and opportunities - We can provide a free pre-application advice note or for more detailed advice / meetings / reviews we can provide a project manager to coordinate specialist advice / meetings which costs £100 per hour (plus VAT). For more information email us at planning_THM@environment-agency.gov.uk.

From: [REDACTED]
Sent: 14 April 2020 17:59
To: [REDACTED]
Cc: [REDACTED]
Subject: EA SoCG - updates in advance of D8 and submission of final SoCG.

Dear [REDACTED]

As you will be aware we need to finalise our SoCG with you by Deadline 8 (01 May). The only outstanding issues in the SoCG that are currently 'under discussion' pertain to the FRA. These being 3.5.1, 3.5.2 and 3.5.6. PINS are requesting that all issues are confirmed as either 'agreed' or 'not agreed'.

We are proposing the below amendments to the following items in light of recent discussions, which we would be grateful if you could **review and either approve or provide feedback on by close of 17 April**.

In your D6 submission (attached), you state that the EA will 'review the FRA when it is submitted and confirm whether flood risk matters within our remit have now been agreed'. In your email below you confirm that you consider *all flood risk issues resolved, subject to appropriate and relevant updates being made to the submitted FRA*. Are we correct therefore in assuming that you cannot agree all flood risk issues resolved until you have reviewed the updated FRA?

We are hoping to submit the updated FRA to you by the end of this week. However, the review of the updates to the FRA may not be completed prior to D8 and in time for the finalisation of the SoCG, the wording proposed in the amended SoCG seeks to reflect this possibility.

Once we have your feedback/agreement, we will send you a final copy of the SoCG, with the full appendices for you to sign. Please note the refs 'Axx' refer to the relevant appendices and will be finalised in the final version of the SoCG.

Any questions please do let me know.

Kind regards
 [REDACTED]

3.5.1: Suggestion is to delete this item as it is covered by 3.5.2

3

	Topic	Sub-section	Environment Agency Comment	Highways England Response	Status
3.5.1	Flood risk	Flood Risk Assessment	The EA, overall, agree with the conclusions of the Flood Risk Assessment (FRA) (reference: APP-046) for matters within our remit. We agree that fluvial flood risk issues have been satisfactorily addressed. This follows verbal confirmation at our meeting with the applicant's agents on 8 October 2019 (A.11) and the comments provided by the applicant in the comments log (attached to the Written Representation (REP-1-043)). However, there is one matter outstanding that remains under discussion – see item 3.5.6.	Noted.	Under discussion

3.5.2: Edited in line with the outcome of recent discussions and pending your receipt of the updated FRA

3.5.2-1	Flood risk CL: 034; 035; 037; 039; 042; 061.	Flood Risk Assessment	[The EA can confirm that we consider flood risk issues resolved, subject to appropriate and relevant updates being made to the submitted FRA as previously discussed.] The only outstanding concerns relates to the provision of sufficient information within the FRA as submitted to demonstrate that the conclusions of the FRA are sound. It has taken additional confirmation (whether written or verbally) to confirm some of the FRA issues that were raised in the EA comments log. The EA therefore recommended to the applicant that the FRA should be updated to better demonstrate that the conclusions are sound. Albeit the EA acknowledge that the provision of this	{Highways England welcomes EA's confirmation that flood risk issues have been resolved, subject to the requested updates being made to the submitted FRA. The updated FRA has been submitted to the EA [on...]/ [by Deadline 6] and is provided as an addendum to this SoCG at []. "Additional evidence has been provided to the EA through responses to their comments log (that is attached to their Written Representation ((REP-1-043)) and verbally at our meeting on 8 October 2019 (A.11). The verbal evidence is also recorded in the minutes of the meeting (A.11).	Under discussion [Agreed]
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4

A.56. M25 J10 / A3 Wisley Interchange: Flood Risk Assessment (April 2020 update)



M25 junction 10/A3 Wisley interchange TR010030 5.5 Flood risk assessment

Regulation 5(2)(e)
Planning Act 2008
Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009



Volume 5
June 2019

Infrastructure Planning

Planning Act 2008

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

M25 junction 10/A3 Wisley interchange

The M25 junction 10/A3 Wisley interchange
Development Consent Order 202[x]

5.5 FLOOD RISK ASSESSMENT

Regulation Number:	Regulation 5(2)(a)
Planning Inspectorate Scheme Reference	TR010030
Application Document Reference	TR010030/APP/5.5
Author:	M25 junction 10/A3 Wisley interchange project team, Highways England

Version	Date	Status of Version
Rev 0	June 2019	Development Consent Order application

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Executive Summary

This Flood Risk Assessment (FRA) forms part of the Development Consent Order (DCO) application for the M25 junction 10/A3 Wisley interchange (the Scheme) and has been prepared in accordance with the requirements of Regulation 5(2)(e) of The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009.

The Scheme comprises a series of road improvements proposed by Highways England to address congestion and journey reliability issues at junction 10/A3 of the M25 motorway in Surrey.

This FRA has been completed to provide a quantitative assessment of flood risk and demonstrate that proposed mitigation (where necessary) would achieve an acceptable level of flood risk and would not increase flood risk elsewhere. This FRA has also been completed in line with National Policy Statement for National Networks (NPS NN) and follows the current national planning policy in relation to development and flood risk, namely the National Planning Policy Framework (NPPF). The FRA and NPS NN addresses all sources of flood risk both under current conditions and taking climate change into account.

Environment Agency flood risk mapping and both the Elmbridge and Guildford Strategic Flood Risk Assessments (SFRAs) were used as the main sources of flood risk information to inform the understanding of flood risk within the study area, specifically within the Scheme DCO boundary. This information has been supplemented with detailed hydraulic modelling undertaken specifically for the DCO application both to provide a more robust understanding of flood risk and inform the Scheme design.

Fluvial flood risk arises when watercourses exceed capacity and significant areas at risk are shown by the Environment Agency Flood Zone mapping. This Flood Zone mapping identifies that the majority of the Scheme is within Flood Zone 1 and so not at risk of fluvial flooding. Several areas of the Scheme are however at within Flood Zone 2 and 3. There are also five locations where the M25 and A3 cross ordinary watercourses (those which are not designated main rivers), although the flood risk for these has not been defined by Flood Zone mapping. In the majority of the areas at risk from fluvial flooding there are no proposed works that would impact on flood risk, either through the displacement of flood water or as a result in a constriction of conveyance. The key location of works that could have an impact is in the southern extent of the Scheme where culvert works and a new bridge are proposed over Stratford Brook (main river). However, the proposed works in this area involves measures that prevent an increase in flood risk, as demonstrated through detailed modelling.

The other key source of flood risk requiring consideration is surface water runoff. The existing drainage system manages the current surface water flood risk to the road network and this will be upgraded and supplemented with additional drainage systems (where necessary) to accommodate the Scheme. The drainage system is described in detail within the Drainage Strategy Report (application reference TR010300/APP/6.5/) Appendix 8.1, but in summary will prevent onsite flooding and increased runoff from the site in line with current planning policy requirements. For example, it will prevent onsite flooding during the 1 in 30 (3.3%) rainfall event and more frequent, and prevent runoff from the site above greenfield rates up to the 1 in 100 (1%) annual probability rainfall event, with both scenarios including an allowance for climate change.

Flood risk from all other sources is considered low, although requirements will be included within the Construction Environmental Management Plan (CEMP) to ensure that this risk remains low. These items include consideration of groundwater ingress into excavations; understanding the water transmission infrastructure network in the area; and potential impacts on Bolder Mere.

To summarise, the proposed Scheme would be at an acceptable level of flood risk and would not increase flood risk elsewhere. This conclusion remains true, both now and over the lifetime of the Scheme taking climate change into consideration.

1. Introduction

1.1 Background

- 1.1.1 In December 2014 the Department for Transport (DfT) published its Road Investment Strategy (RIS) for 2015-2020. The RIS sets out the list of schemes that are to be delivered by Highways England over the period covered by the RIS (2015-2020). The RIS identified improvements to the M25 junction 10/A3 Wisley interchange as one of the key investments in the Strategic Road Network (SRN) for the London and south east region.
- 1.1.2 The Scheme provides increased capacity at the M25 roundabout by elongating the existing roundabout, providing additional lanes to provide more circulatory capacity and enabling more traffic to discharge the roundabout whilst providing dedicated free-flowing left turns. For a full description of the Scheme refer to Introduction to the Application (application document TR010300/APP/1.2).
- 1.1.3 The area of development for the alteration works will exceed the limit prescribed in Section 22 (4) (a) of the Planning Act 2008 (as amended) and the Scheme will be developed as two Nationally Significant Infrastructure Projects (NSIPs). This means that a Development Consent Order (DCO) application will need to be made to the Secretary of State under Section 37 of the Planning Act 2008 to seek authorisation to build the Scheme.
- 1.1.4 This Flood Risk Assessment (FRA) is required to demonstrate how the impacts of flood risk both to the Scheme and that can result from the Scheme, have been assessed and mitigated where necessary. This will allow the approval process for the DCO to be followed with a good knowledge as to the risks and potential impacts of the Scheme in relation to flooding.

1.2 Scope

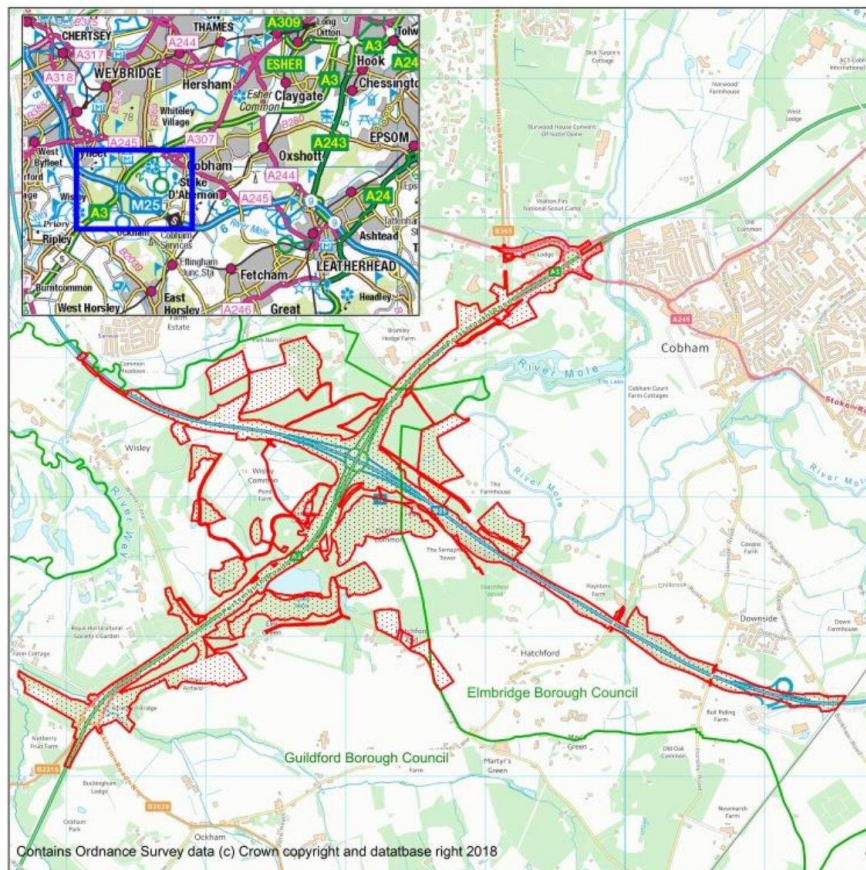
- 1.2.1 This FRA has been completed in line with the National Policy Statement for National Networks (NPS NN) and follows the current planning policy in relation to development and flood risk, namely the National Planning Policy Framework (NPPF) and associated Planning Practice Guidance. This FRA has also been completed in line with the Highways England's Design Manual for Roads and Bridges (DMRB) Volume 11, Section 3 Part 10 Road Drainage and the Water Environment (Highways England et al 2009).
- 1.2.2 Complying with this planning policy and design manual promotes a Scheme that would be at an acceptable level of flood risk, whilst not increasing flood risk both on site and elsewhere, and where possible reducing flood risk overall. This is required for all sources of flood risk and over the life time of the development (i.e. taking into account climate change).
- 1.2.3 This FRA is a quantitative appraisal to demonstrate that the development complies with the above requirements. Therefore, this FRA:
- Defines flood risk to the site;
 - Determines the impact of the development on flood risk;
 - Outlines the proposed mitigation measures; and

- Provides evidence demonstrating that the development is at an acceptable risk of flooding, whilst ensuring the development will not increase flood risk elsewhere.

1.3 Location and Proposed Scheme

- 1.3.1 The M25 junction 10/A3 Wisley interchange lies in the south west quadrant of the M25 London Orbital Motorway. At junction 10, the A3, a key radial route from London to Portsmouth, which crosses the M25 motorway. Just to the north of junction 10 on the A3 is the Painshill junction with the A245. To the south of junction 10 on the A3 is the Ockham junction with the B2039 and B2215. The Scheme is located within the County of Surrey and within the Boroughs of Guildford and Elmbridge.
- 1.3.2 The location of the Scheme and the DCO boundary for the area of works is shown in Figure 1.1. Scheme Layout Plans (application document TR010300/APP/2.8) showing the proposed Scheme are provided within the DCO submission
- 1.3.3 The M25 junctions at this location, in the current configurations restrict traffic flow through the area and a package of measures is required to improve junction performance and safety.
- 1.3.4 The Scheme proposed provides increased capacity at the M25 roundabout by elongating the existing roundabout, providing additional lanes to provide more circulatory capacity and enabling more traffic to discharge the roundabout whilst providing dedicated free-flowing left turns. The elongated roundabout would use the existing bridges under the A3 and new bridges over the M25, with additional lanes and capacity between the traffic signals and dedicated left-turn filters at the traffic signals. Most of the existing roundabout and slip roads would be broken out and removed, with the existing structures over the M25 being demolished.
- 1.3.5 The Scheme includes widening the A3 from Ockham to M25 junction 10 and M25 junction 10 to Painshill from three lanes to four lanes in both directions to improve safety and capacity of the A3. There would also be widening of the A245 to three lanes between the Painshill junction and the B365 Seven Hills Road junction. As the A3 will be widened to four lanes the current access to it from side roads and private properties will need to be closed and alternative arrangements will be put in place to provide access to the road network for the properties affected. Alterations to signage and improvements to drainage are also included in the Scheme. Construction is expected to start in winter 2020.

Figure 1.1: Scheme location plan



1.4 Flood risk policy

- 1.4.1 The NPS NN, NPPF and associated guidance are the key planning policy guidance in relation to flood risk and development to ensure that flood risk is adequately considered as part of development design. The NPS NN is the policy specific for NSIPs and it references much of the policy and guidance from the NPPF.
- 1.4.2 The NPS NN requires a Sequential Test when determining the location of the new development to promote development away from areas at risk of flooding. The Highways England RIS for 2015-2020 identifies the significant need for capacity improvements at this junction and therefore works are required at this location. However, where possible a sequential approach has been taken within the study area for the road improvements, such as when locating balancing ponds and site compounds.
- 1.4.3 The NPPF categorises development type based on vulnerability to flooding. The proposed road scheme falls under these classifications as 'Essential Infrastructure'. This means that the proposed development would be considered

acceptable for construction in Flood Zones 1 and 2, hence areas at risk from fluvial (river) flooding during the 1 in 1000 (0.1%) annual probability event and rarer. This type of development could be proposed within higher risk areas, i.e. Flood Zone 3 (both 3a and 3b) if a passed Exception Test is demonstrated.

- 1.4.4 A passed Exception Test demonstrates that:
1. The development is required for wider benefits that outweigh flood risk; and
 2. That the development is safe from flooding without increasing flood risk elsewhere.
- 1.4.5 This FRA demonstrates point 2 above.

2. Assessment of Flood Risk

2.1 Overview

- 2.1.1 As outlined in the NPS NN and NPPF, flood risk from all sources must be addressed within the FRA to ensure that potential flood risk has been considered during the design of the Scheme. This section provides a list of the data sources used for this assessment and flood risk to and from the development from all sources. This section also outlines mitigation measures, as appropriate, to achieve this requirement.

2.2 Data sources

- 2.2.1 The assessment makes use of readily available information as follows:

- The Environment Agency Flood Zones, surface water mapping and historical flood extents, taken from the Environment Agency data catalogue¹;
- The Elmbridge Strategic Flood Risk Assessment (SFRA) (Elmbridge Borough Council, 2014);
- The Guildford SFRA (Guildford Borough Council, 2015);
- The Surrey County Council (Lead Local Flood Authority, LLFA) Preliminary Flood Risk Assessment (PFRA) (2011);
- The Surrey Local Flood Risk Management Strategy 2017-2032 (2017); and
- Elmbridge Section 19 Flood Investigation Report for the winter 2013/14 event (2015).

Based on the Surrey County Council website², it appears that a Surface Water Management Plan (SWMP) has not been completed either covering or in the vicinity of the Scheme DCO boundary.

This FRA has also been informed by detailed hydraulic modelling as discussed within the Hydraulic Modelling Report prepared to inform the drainage design and the Scheme Drainage Strategy (TR010030/APP/6.5) Appendix 8.1

2.3 Historic flooding

- 2.3.1 Areas that have flooded in the past often indicate areas that are vulnerable to flooding in the future. The Environment Agency publish mapping that indicates areas which have been inundated by water from main rivers in the past. In relation to the Scheme, this mapping shows that predominately the proposed works are outside areas that have experienced fluvial flood risk in the past.
- 2.3.2 The Elmbridge SFRA provides details of past flooding events, although river flooding has been taken from the Environment Agency dataset and therefore indicates the same coverage as above. This SFRA indicates that there have been no incidents of sewer or other flooding as recorded by Elmbridge Borough Council within the DCO boundary.

¹ <http://environment.data.gov.uk/ds/catalogue/index.jsp#/catalogue>

² <https://www.surreycc.gov.uk/people-and-community/emergency-planning-and-community-safety/flooding-advice/more-about-flooding/surface-water-management-plans>

- 2.3.3 The Guildford SFRA shows areas that have flooded in the past as identified by the Environment Agency, (including an event that occurred in 2003) and historic road flooding. None of these events have occurred within the DCO boundary.
- 2.3.4 Within the Elmbridge area a Section 19 Flood Investigation report was completed for the winter 2013/14 flood event (Section 19 Flood Investigation Report, Elmbridge, 2015). This identifies that areas within the Cobham area, at the northern extent of the Scheme suffered flood inundation resulting in a road closure (not affecting the M25 or A3) and internal property flooding. The flooding resulted from overtopping from the River Mole,
- 2.3.5 There are no other Section 19 Flood Investigation reports for areas in close proximity to the Scheme DCO boundary.
- 2.3.6 The Surrey Local Flood Risk Management Strategy identifies wetspots as areas used to describe locations of past flooding, which are prioritised for assessment and remedial works. There are no such wetspots along the M25 or A3 within the DCO boundary.

2.4 Fluvial flood risk

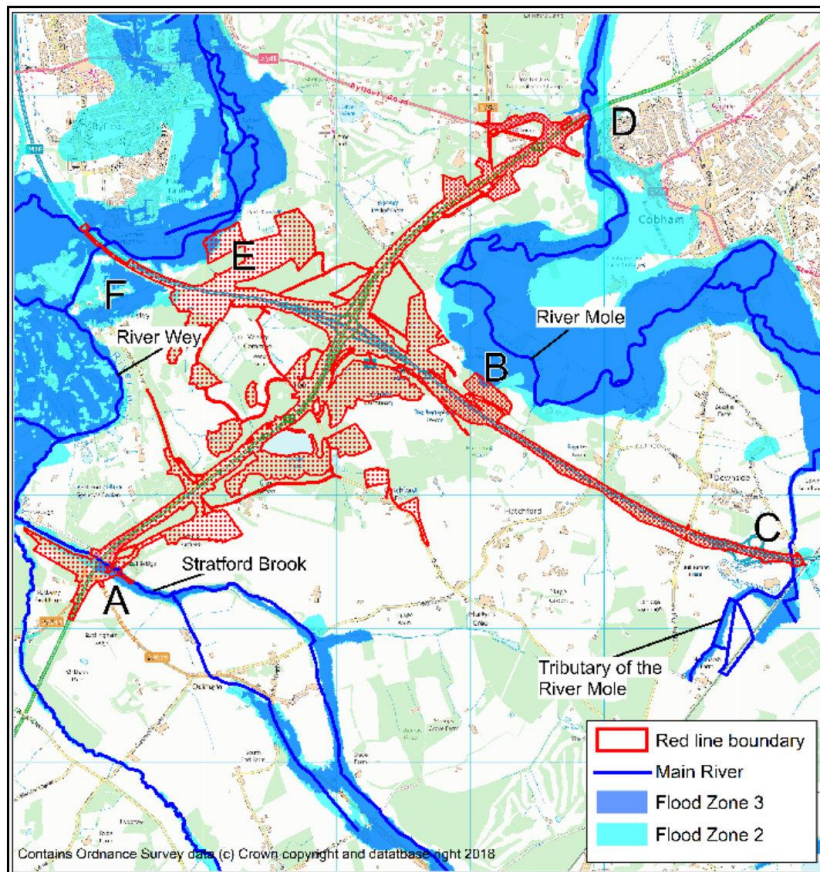
- 2.4.1 Fluvial flood risk occurs when the capacity of a watercourse is exceeded such that water overflows the watercourse channel.

Baseline flood risk

- 2.4.2 In the southern area of the site the Scheme will cross Stratford Brook which is a designated main river (under the permissive and regulatory powers of the Environment Agency) and which is a tributary of the River Wey. At the eastern end of the site the Scheme will cross another main river, albeit this appears to be an unnamed tributary of the River Mole. In addition to these locations where the Scheme will cross main rivers, the River Mole is located in close proximity to the northern extent of the Scheme and the River Wey in the west, both of which are main rivers.
- 2.4.3 In addition to crossing and close proximity to main rivers, within the DCO boundary the M25 also crosses three ordinary watercourses (those which are not main rivers and fall under the regulatory jurisdiction of the Lead Local Flood Authority Surrey County Council) to the east of junction 10. These ordinary watercourses are tributaries of the River Mole. Similarly, the A3 crosses an ordinary watercourse which appears to discharge from Bolder Mere.
- 2.4.4 The initial source of information used to determine fluvial flood risk to a proposed development is the Environment Agency Flood Zone mapping. The Flood Zones are defined as:
- Flood Zone 1 – Areas with a ‘Low Probability’ of flooding and where the annual probability of flooding is lower than 1 in 1000 (0.1%) for either fluvial or tidal flooding. The NPPF imposes no constraints upon the type of development within Flood Zone 1.
 - Flood Zone 2 – Areas with a ‘Medium Probability’ of flooding and where the annual probability of flooding is between 1 in 1000 (0.1%) and 1 in 100 (1%) for fluvial flooding or between 1 in 1000 (0.1%) and 1 in 200 (0.5%) for tidal flooding. The NPPF recommends that Flood Zone 2 is suitable for most types of development with the exception of ‘Highly Vulnerable’ land uses.

- Flood Zone 3 – Areas with a ‘High Probability’ of flooding and where the annual probability of flooding is 1 in 100 (1%) or greater for fluvial flooding or 1 in 200 (0.5%) or greater for tidal flooding. The NPPF recommends that appropriate development is based upon a further classification of Flood Zone 3 into 3a ‘High Probability’ and 3b ‘Functional Floodplain’ (where water has to flow or be stored in times of flood during the 1 in 20, 5%, event).
- 2.4.5 The Environment Agency mapping also indicates areas that benefit from flood defences and areas of floodplain storage, however neither are located within or adjacent to the Scheme.
- 2.4.6 Figure 2.1 shows that the Scheme DCO boundary overlaps with Flood Zone 2 and Flood Zone 3 at six locations, labelled A to F in Figure 2.1. These locations are:
- A: At the southern extent of the Scheme on the A3, at the location of the Stratford Brook crossing, the Scheme crosses both Flood Zones 2 and 3;
 - B: The northern side of the M25 approximately 1 km east of J10;
 - C: At the eastern extent of the Scheme on the M25, at the location of the crossing of the tributary to the River Mole, the Scheme crosses an area of Flood Zone 2 and extends into an area of Flood Zone 3;
 - D: At the northern extent of the Scheme on the A3, a small proportion of the DCO boundary falls within the Flood Zone 2 and 3; and
 - E: The northern side of the M25 approximately 1 km west of J10
 - F: At the western extent of the Scheme, encroachment into the River Wey Flood Zones 2 and 3.

Figure 2.1: Environment Agency Flood Zone mapping and watercourse location plan



Post Scheme impacts

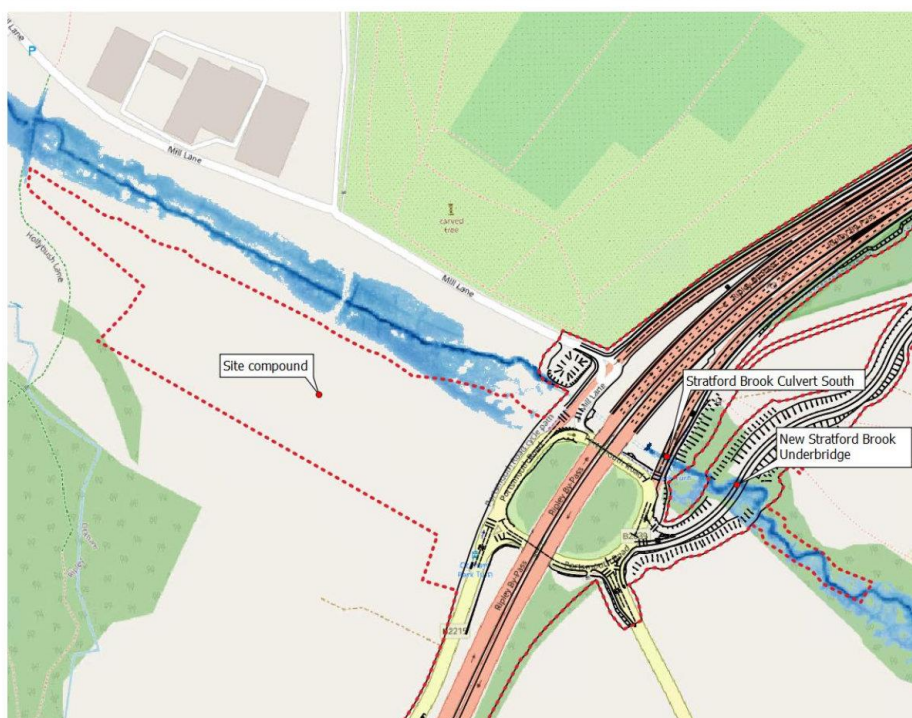
- 2.4.7 Any development that encroaches into Flood Zones 2 or 3 or works to watercourse crossings has the potential to increase fluvial flood risk. This can occur as a result of displacement of flood water when development is located in floodplain or owing to constriction of flood flows at the location of watercourse crossings. Where there is an impact on flood risk, appropriate mitigation is required.
- 2.4.8 The potential impact on flood risk arising from the Scheme must be considered over the life time of the Scheme taking into account climate change. The design standard for the Scheme is the Higher Central climate change allowance (a 35% increase in peak flow).
- 2.4.9 Whilst the Higher Central allowance is the design standard, the Upper End allowance must also be considered to confirm that there are no significant changes in flood risk impact that might warrant including further mitigation.

- 2.4.10 For some parts of the Scheme, Flood Zone 2 has been used as a proxy for the 1 in 100 +70 % flood event. These are locations where for example the works are to the existing carriageway that is set several metres above the adjacent Flood Zone, or where there are no proposals to alter ground levels.
- 2.4.11 For locations where there is a potential impact on floodplain conveyance or storage, flood modelling has been used to define the flood extents for the 1 in 100 flood event for both the Higher Central and Upper End climate change scenarios. This is the case for the Stratford Brook (location A) and the M25 westbound slip road at the western extent of the DCO boundary on the M25 (location F).
- 2.4.12 Details of the flood risk associated with main rivers for each of the six locations outlined above are provided below.

Stratford Brook (Location A)

- 2.4.13 The Scheme near Stratford Brook is illustrated in Figure 2.2. Further detail of the Scheme is shown on sheet 1 of 31 of the Scheme Layout Plans.

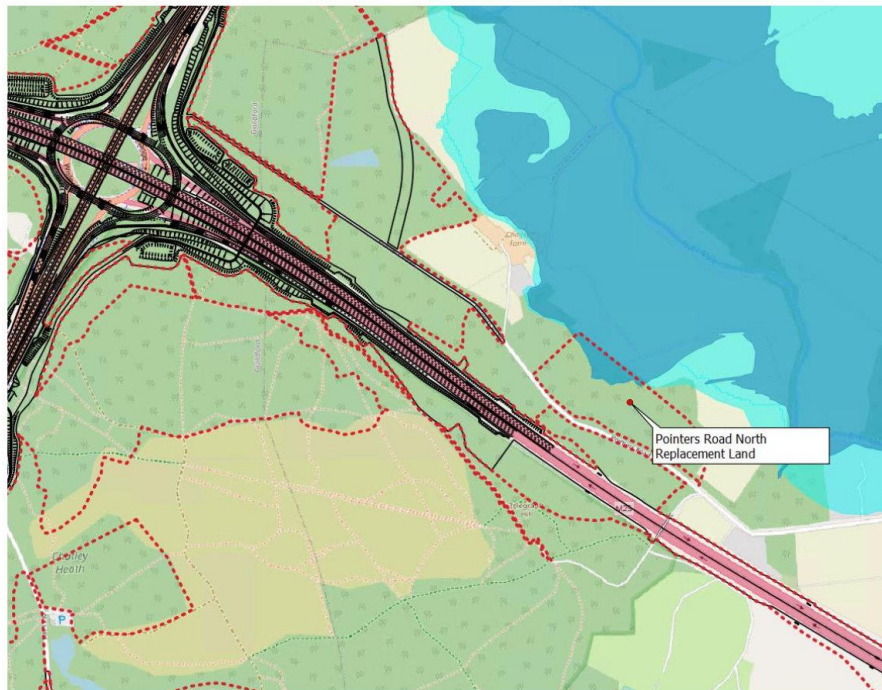
Figure 2.2: Stratford Brook with modelled 1 in 100 +35% flood extent



- 2.4.14 At the southern extent of the Scheme, the A3 crosses Stratford Brook and is located within Flood Zone 2 and 3. The Scheme at this location does not involve works directly to the A3, but rather modifications to an existing slip road and the construction of a new link road (the Wisley Lane diversion).

- 2.4.15 The new link road will require a new crossing of Stratford Brook, and the proposed structure is a clear span bridge of the watercourse and the 1 in 100 (+35% climate change allowance) flood extent. As a result, the bridge will neither act as a constriction on flow nor would the embankments extend into the floodplain, and thus flood risk would not be altered. This has been confirmed through detailed hydraulic modelling of Stratford Brook.
- 2.4.16 The hydraulic modelling included model simulations of the Upper End climate change allowance (+70% increase on peak flow). The results of this simulation showed that there was no change in flood levels. Floodplain compensation is not required for this element of the Scheme. Furthermore, the bridge deck is more than 1.5 m above the flood level for all scenarios tested, resulting in safe and operational use of the road during periods of fluvial flooding along Stratford Brook.
- 2.4.17 The modelling work is described in Hydraulic Modelling Report. The modelling has been reviewed and accepted by the Environment Agency. The correspondence from the Environment Agency confirming this is provided in Appendix A of this document.
- 2.4.18 The proposed works to the slip road will involve upgrade works from one to two lanes to improve traffic flow. To accommodate this upgrade the existing culvert under the slip road conveying Stratford Brook (Stratford Brook Culvert South) will require strengthening. The modifications to strengthen the existing culvert under the slip road will have no impact on internal dimensions of the culvert and therefore it will have no impact on flood risk.
- 2.4.19 The flood modelling of the Stratford Brook will be reassessed as part of the detailed design process and the outputs will be submitted as supporting information to the Environment Agency as part of the Protective Provisions approvals process.
- Eastern section of the Scheme on the M25 (Location B)*
- 2.4.20 The section of the Scheme east of J10 is illustrated in Figure 2.3. Further detail of the Scheme is shown on sheet 14 of 31 of the Scheme Layout Plans.

Figure 2.3: River Mole Flood Zone 2 & 3

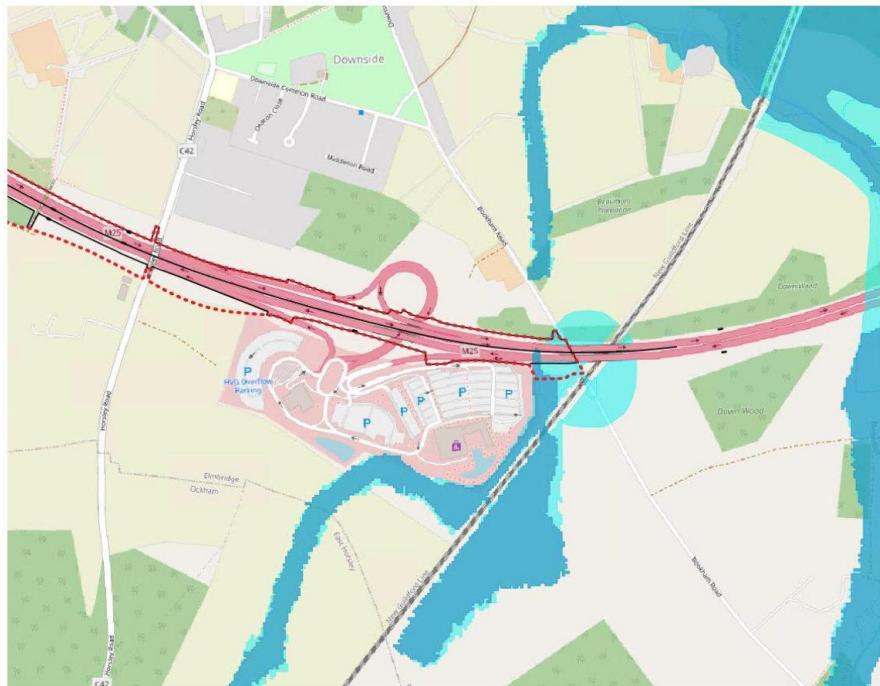


- 2.4.21 The Pointers Road North Replacement Land that is proposed for habitat replacement is partly within Flood Zone 3, however this will not involve any changes to ground levels and will not affect flood risk. The proposal is to plant native species trees and shrubs in this area, further details, including the planting regime, will be determined during the detailed design phase of the Scheme.
- 2.4.22 The ground levels rise steeply between the edge of Flood Zone 2 and the M25. The M25 is some 10 m higher than the flood levels estimated from the extents of Flood Zone 2 (by comparison of the lidar levels at the edge of the flood zone). The existing and proposed M25 will not therefore be at risk from fluvial flooding in the Upper End climate change scenario in this location.

Eastern section of the Scheme on the M25 (Location C)

- 2.4.23 The eastern most section of the Scheme on the M25 is illustrated in Figure 2.4. Further detail of the Scheme is shown on sheet 18 of 31 of the Scheme Layout Plans.

Figure 2.4: Eastern extent of the Scheme with Flood Zones 2 & 3



- 2.4.24 In the eastern area of the Scheme the M25 crosses a main river tributary of the River Mole. However, the works in this area are limited to gantries and signage within the confines of the existing highway. Therefore, the proposed works would be above the existing level of the road, which is approximately 8 m above the Flood Zone 2 level at this location (based on comparison between Lidar data and flood extents), and therefore would neither be at risk from flooding, nor impact on flood risk elsewhere.
- 2.4.25 Given the elevation of the road above the estimated Flood Zone 2 level, the Scheme would not be at risk from fluvial flooding in Upper End climate change scenario in this location.
- Northern section of the Scheme on the A3 (Location D)*
- 2.4.26 Figure 2.5 shows the works proposed for the Scheme and Flood Zone 2 & 3 in this location. Further detail of the Scheme is shown on sheet 8 of 31 of the Scheme Layout Plans.

- 2.4.31 The upstream extent of the Lower Wey model is approximately 10 km upstream of the M25. The attenuating effects of the whole River Wey catchment on the climate change uplifts, will not therefore be represented within this model. Therefore the peak flood levels associated with the climate change events is likely to be overestimated.
- 2.4.32 In Figure 2.6 upstream of the M25 the dark blue flooding is the 1 in 100 +35% flood extent and the light blue flooding is the 1 in 100 +70% flood extent.
- 2.4.33 Downstream of the M25 the flood extents are Flood Zone 2 & 3.

Figure 2.6: Western section of the Scheme on the M25 (Location E & F): Flood extents



- 2.4.34 The 1 in 100 +35% flood extent does not extend as far as Buxton Wood Footbridge and the widening of the M25 to the east of the footbridge does not impact the floodplain.
- 2.4.35 The 1 in 100 +70% flood extent does extend east of Buxton Wood footbridge and the widening of the M25 is within this flood extent. The depths of flooding here are low and the loss of floodplain volume is similarly low, estimated to be less than 100 m³.
- 2.4.36 The flood extent estimates for the 1 in 100 +70% climate change are expected to be an overestimate given the modelling approach adopted, so it is similarly expected that the loss of floodplain is also overestimated.
- 2.4.37 The loss of a small volume of floodplain storage within the wide floodplain of the River Wey in the Upper End climate change scenario does not represent a significant step change in the potential impact of the Scheme in comparison to

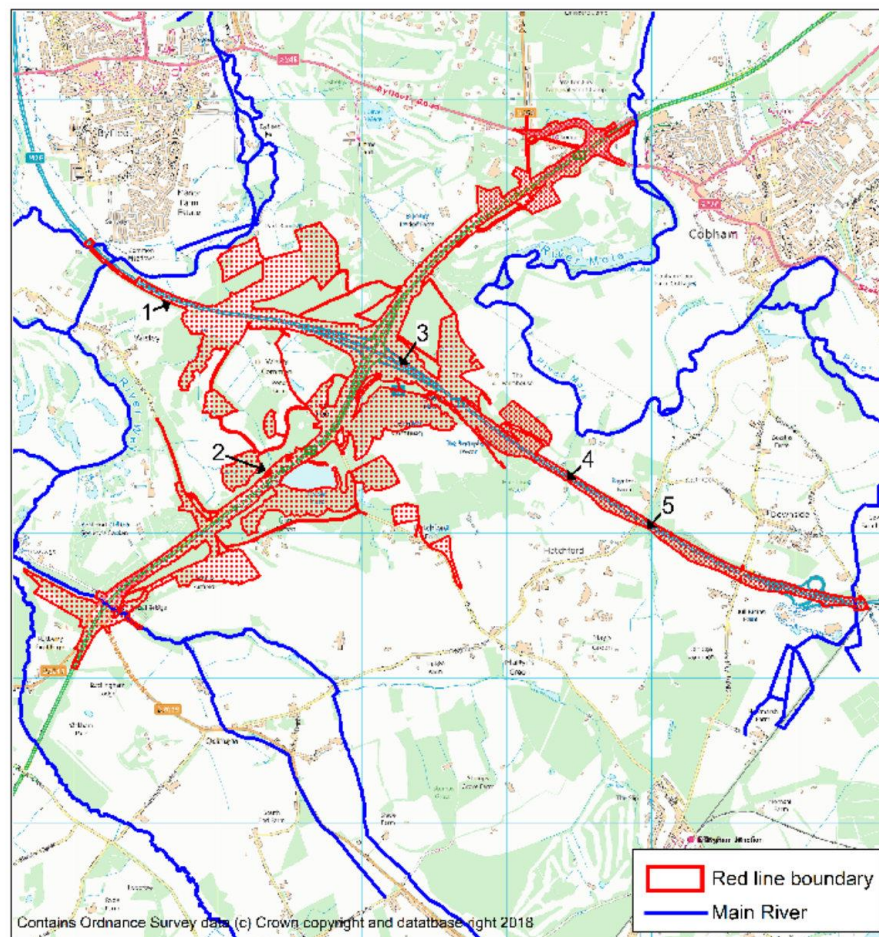
the Higher Central climate change scenario. Therefore, no mitigation is proposed.

- 2.4.38 The flood modelling of the River Wey will be reassessed as part of the detailed design process. This will confirm if there is a flood risk impact that warrants being addressed within the design (either by designing out the source of the impact, or by providing appropriate mitigation). The outputs of the assessment will be submitted as supporting information to the Environment Agency as part of the Protective Provisions approvals process.

Ordinary watercourses

- 2.4.39 The Scheme crosses a number of ordinary watercourses for which Flood Zones have not been defined. The five ordinary watercourses are identified in Figure 2.7.

Figure 2.7: Ordinary watercourses



- 2.4.40 There are five locations are described below.

1. There is an ordinary watercourse that passes under the M25 just west of Buxton Wood footbridge. There are no works proposed that would impact on this ordinary watercourse, nor the River Wey further west i.e. there is no change to these crossing structures
2. Works are required at the road section adjacent at Bolder Mere (designated as a reservoir). The works at this location require an extension to the existing Bolder Mere culvert. Therefore, this culvert will be designed to ensure that there is no impact on flood risk.
3. Immediately to the east of junction 10 the M25 crosses an ordinary watercourse which may provide hydraulic linkage to a pond. The works in this area includes strengthening embankments and if there is a culvert at this location it may require extending. It is proposed that the culvert will have the same dimensions. Given the flood risk at this location and the absence of vulnerable receptors (residential, commercial or industrial properties or critical infrastructure), the proposed Scheme at this location would have no significant impact on flood risk.
4. East of the above location, and immediately east of Hatchford Wood, again the M25 crosses an ordinary watercourse. The proposed works in this area are to the gantry only, i.e. above the existing road. Therefore, there will be no impact to this existing culvert and therefore flood risk will remain unchanged.
5. To the east of Hatchford, the M25 crosses a slightly larger tributary of the River Mole. As above, the proposed works in this area are to the gantry only, i.e. above the existing road. Therefore, there will be no impact to this existing culvert and flood risk will remain unchanged.

Construction impacts

- 2.4.41 As shown in Figure 2.2, there is a small extent of the DCO boundary, within Flood Zone 3 of the Stratford Brook. The DCO boundary here is associated with a construction compound. The DCO boundary is set simply as an offset from the river and the compound will be outside the Flood Zone 3.
- 2.4.42 Therefore, the proposed fluvial flood risk associated with the construction phase of the Scheme is considered minimal and floodplain compensation is not required (compensation would only be required if ground raising was proposed in Flood Zone 3, which is not proposed).
- 2.4.43 The temporary works are shown in the Temporary Works Plans. If any of these works are proposed within Flood Zone 2 and/or within 8 m of main river banks, the works details and associated method statements will be issued as part of the Protective Provisions applications.
- 2.4.44 Any fencing required for the Scheme will be determined during the detailed design phase and agreed with the adjacent land owner. However, it is proposed that any fencing within Flood Zone 2 or 3 will be suitably permeable to prevent displacement or rerouting flood water.
- 2.4.45 To ensure that both the Scheme and construction staff are at an acceptable level of flood risk, and to ensure the construction activities do not impact on fluvial flood risk, the below recommendations will be included in the CEMP by the Principal Contractor. The CEMP is secured by Requirement 3 of the DCO. The recommended actions are:

- The Environment Agency flood warning system will be adopted. A suitable plan should be put in place to ensure effective and safe evacuation of personnel (and plant if safe to do so) from the areas at risk on receipt of a flood warning.
- Site compounds will be located outside Flood Zone 3 and preferably in Flood Zone 1 if possible. Site compounds will also be at least 8 m from the river banks.
- No plant or materials will be stored within Flood Zone 3.

2.5 Surface water flood risk

2.5.1 Surface water flooding occurs when rainfall intensities exceed the infiltration capacity such that water collects on the ground surface. Therefore, there is a greater risk of flooding from this source within urbanised areas where there is a higher proportion of impermeable surfacing.

Baseline flood risk

2.5.2 The Environment Agency publish mapping showing areas at risk from surface water flooding. This data set is based on broad scale mapping, often identifying areas of low lying land which would be vulnerable to surface water accumulation. Figure 2.8 shows the predicted extents of surface water flooding during three event categories:

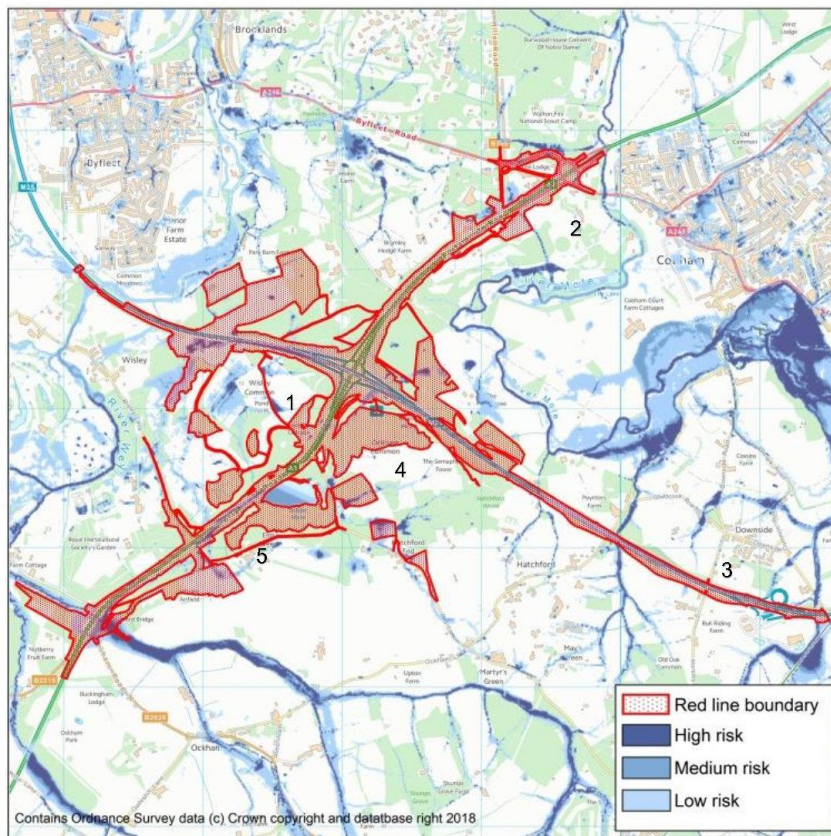
- High risk – At risk during the 1 in 30 (3.3) annual probability event and more frequent.
- Medium risk – At risk during events between the 1 in 30 (3.3) and 1 in 100 (1%) annual probability events.
- Low risk – At risk during events between the 1 in 100 (1%) and 1 in 1000 (0.1%) annual probability events.

2.5.3 Figure 2.8 identifies the areas at risk of surface water flooding throughout the Scheme area as noted below. However, the majority of these high-risk areas are associated with watercourses and are considered as fluvial flood risk, as described in the sub section above. The other areas shown to be at risk are either likely to be associated with isolated depressions in topography and areas along the A3 and M25 which are at a slightly lower elevation than other sections of the road. The notable areas at risk from surface water flooding that are not associated with watercourses are:

1. Surrounding Wisley Common. At this location there appears to be hydraulic connectivity between areas at risk from surface water flooding (ranging from high to low), including a 800 m length of the M25.
2. Northern extent of the Scheme. At this location there are various isolated areas shown to be at risk and these areas are likely to be associated with localised depressions in topography. There also appears to be a flow route to a series of lakes associated with the River Mole. Baseline surface water flood risk is low risk to vulnerable receptors.

3. South of Downside. At this location there are various areas at low risk from surface water flooding, and the location of this suggest a potential overland flow route which is blocked by the existing M25 that may cause backing up. However, there are no properties at risk here. Also at this location a 1 km length of the M25 is identified to be at high risk from surface water flooding, although it is assumed from the lack of flooding incidents on this section that the existing drainage of the road network adequately addresses this risk.
 4. Ockham Common. At this location there are several interconnecting areas at risk (ranging from low to high) of surface water flooding at and around Ockham Common. These appear to be flow routes to Bolder Mere. There are no properties within this area.
 5. A3 adjacent to Bolder Mere. There is a 500 m length of the A3 at this location identified to be at high risk from surface water flooding, although it is assumed that the existing drainage of the road network adequately addressed this risk. This area appears to also be connected with surface water flow paths in the area. There are no properties at risk of flooding in this area.
- 2.5.4 The flood risk in these latter areas are currently managed by the existing road surface water drainage.
- 2.5.5 Although the surface water flood risk within the DCO boundary is considered high, the existing drainage system reduces this risk to an acceptable level along the road network and there are no vulnerable receptors (residential, commercial or industrial properties) identified to be at risk.

Figure 2.8: Environment Agency surface water mapping



Post Scheme impacts

- 2.5.6 Any new development has the potential to impact on ground permeability and therefore surface water flood risk. This is of primary importance where development will increase the impermeable ground coverage within a site, and therefore will require mitigation.
- 2.5.7 The Scheme involves additional roads, access tracks and road widening which will involve an increase in impermeable surfacing.
- 2.5.8 To ensure that the proposed works will not cause an increase in surface water flooding, the surface water drainage system will be upgraded where appropriate and a new system installed for areas of new road/access. The drainage system will be designed in line with current Highways England standards (DMRB) to ensure that runoff from the site does not exceed the greenfield rate up to the 1 in 100 (1%) annual probability event taking into account climate change (the climate change allowance is 20%). The proposed drainage system involves a variety of drainage ditches and attenuation basins. Further details associated with the drainage design are included within the Drainage Strategy Report.

- 2.5.9 Therefore, the proposed drainage design will ensure that the Scheme is at an acceptable risk from surface water flooding and will not increase flood risk elsewhere. This will be true for present day scenarios and over the lifetime of the development taking climate change into account.

Construction impacts

- 2.5.10 Based on the risk identified in the subsection 2.5.1 to 2.5.9 above, it is considered that the risk during the construction phase is low. However, as plant moves around within the DCO boundary, in areas that are currently permeable, there is a risk that the ground will be compacted and the infiltration potential temporarily reduced. Similarly, site compounds have the potential to temporarily increase surface water runoff.
- 2.5.11 Given the nature of the works, these risks are likely to be short term and not extensive. Nevertheless, the CEMP will identify this risk and put in place necessary mitigation to prevent a temporary increase in surface water flood risk on site and elsewhere.

2.6 Groundwater flood risk

- 2.6.1 Groundwater flooding normally occurs where the water table meets the ground surface in low lying areas which are underlain by permeable rock known as aquifers. Groundwater flooding tends to follow long periods of sustained rainfall but can also be caused by local obstructions to groundwater flow (e.g. following the placement of engineering structures or buildings with foundations) or by the rebound of groundwater levels after a decrease in abstraction or dewatering.

Baseline flood risk

- 2.6.2 The Elmbridge SFRA (Elmbridge Borough Council, 2014) identifies areas that are susceptible and at risk of groundwater flooding. This mapping indicates that the areas within the DCO boundary that fall within Elmbridge Borough (north and eastern extents of the Scheme) are at low or very low risk from this source of flooding.
- 2.6.3 The Guildford SFRA (Guildford Borough Council, 2015) covers the western and southern extents of the Scheme and identifies the same level of risk as outlined for the eastern and northern extents of the Scheme above.
- 2.6.4 Based on the groundwater flood risk mapping provided within the SFRAs, which is based on geology for the area, the overall risk of groundwater flooding within the DCO boundary is considered low. This is primarily associated with the risk at and above the existing ground level.

Post Scheme impacts

- 2.6.5 The baseline assessment of groundwater flooding has identified a low risk within the DCO boundary at existing ground level. The road itself and the upgrade works are all above ground level and therefore would be at low risk.
- 2.6.6 However, the new drainage network, specifically the drainage ditches and attenuation features are below ground level. The proposed drainage ditches will be to an approximate depth of 1 m below existing ground levels. Similarly, the attenuation features are unlikely to be at significant depths (details provided in

the drainage strategy). Although the potential for water ingress into these features will need consideration as part of the design, the overall impact/risk of groundwater flooding to the Scheme is considered low.

- 2.6.7 Other development below ground level, such as foundations and sheet piling, has the potential to interrupt groundwater movements that can cause an increased flood risk.

Construction impact

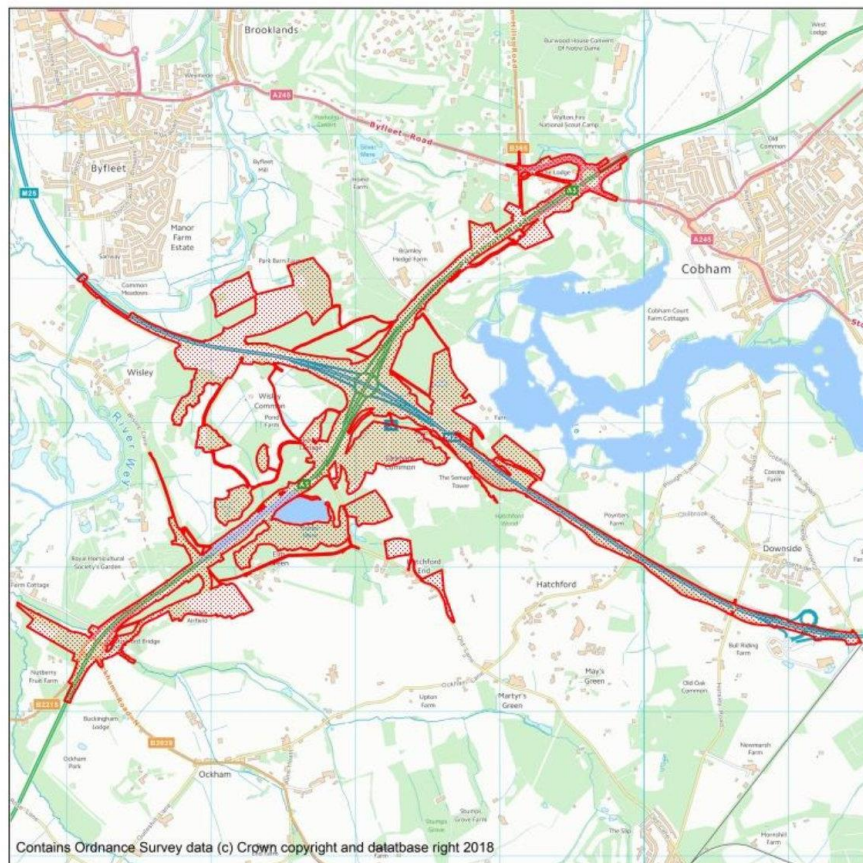
- 2.6.8 As outlined above, development below existing ground levels would be at a slightly higher risk from flooding. Therefore, there is potential that any excavations required for enabling works for the Scheme would be at risk of groundwater ingress. The greater the depth of excavation the more likely for water ingress.
- 2.6.9 This potential for this will be considered, and associated mitigation proposed, as part of the CEMP.

2.7 Other sources of flooding

Reservoir flooding

- 2.7.1 The Environment Agency produce flood risk mapping indicating areas at risk of inundation should a designated reservoir fail, see Figure 2.9. This mapping shows that in the vicinity of the Scheme, reservoir flooding would occur along the floodplain of the River Mole. The only location where this extent is in close proximity to the DCO boundary is the most easterly extent of the site. However, works in this area do not extend into the area at risk.
- 2.7.2 A small section of the A3 (south of Bolder Mere) is also considered to be at risk of inundation from Bolder Mere. Bolder Mere is classified as a category D reservoir. A category D reservoir is one where no loss of life can be foreseen as a result of a breach and very limited additional flood damage would be caused. Although this risk should be considered for any works in this area, the risk is considered low.
- 2.7.3 However, based on the DMRB guidance, the importance of flood risk is also related to the receptors at risk of flooding. The importance of this source of risk is categorised as low as there are no properties at risk.

Figure 2.9: Environment Agency reservoir inundation mapping



Canal flooding

2.7.4 There are no canals located either within the DCO boundary or in adjacent areas. Therefore, it is considered that there is no risk from this source of flooding within the DCO boundary.

Water transmission infrastructure

2.7.5 There is an inherent risk of flooding from water transmission infrastructure, both potable and sewerage, owing to burst or leaking pipes. The risk will be dependent on the location and age of the network in this area. The Elmbridge and Guildford SFRAs indicate that there have been no incidents of sewer flooding within the DCO boundary up to 2015.

2.7.6 Therefore, the existing risk, particularly of significant flooding that would cause disruption, is considered low.

2.7.7 There is potential that proposed works could impact on risk from this source during the construction phase. However, the location of the network will be

established as part of the design phase, and associated requirements to prevent impact on this infrastructure proposed as part of the CEMP.

Other sources of flood risk summary

- 2.7.8 The flood risk from reservoirs, canals and water transmission infrastructure is low. Consideration of these risks, specifically reservoir and water transmission infrastructure will need to be considered as part of the design but following standard construction principles these risks will remain low during the construction and operational phases of the Scheme. Furthermore, this risk is anticipated to remain low over the life time of the development, taking climate change into account.
- 2.7.9 There are no other known sources of flooding that would pose a risk to the Scheme or would be impacted as a result of the works. This remains true for the current situation and over the life time of the development taking climate change into account.

2.8 Flood risk summary

- 2.8.1 A summary of all known sources of flood risk to the Scheme and that could arise from the works is provided in Table 2.1. This table is based on the DMRB categorisations of importance, impact magnitude and significance, which are defined in Chapter 4 of the Environmental Statement (application document TR010030/APP/6.3).

Table 2.1: Flood risk summary based on DMRB categorisation

Source of flood risk	Importance	Impact magnitude taking into account mitigation	Mitigation details	Significance of effect
Fluvial	Low to High	Negligible	Clear span bridge over Stratford Brook therefore no floodplain compensation required. Stratford Brook culvert under the slip road widening element of the Scheme will be altered although there will be no change in flood risk, therefore no floodplain compensation required. Construction actions to mitigate flood risk during the construction phase.	Neutral
Surface water	Low to High	Negligible	As outlined within the drainage strategy.	Neutral
Groundwater	Low	Negligible	Risks to and mitigation for the impact on the drainage system are outlined within the drainage strategy. Consider the potential for water ingress into excavations during the construction phase.	Neutral

Source of flood risk	Importance	Impact magnitude taking into account mitigation	Mitigation details	Significance of effect
Reservoir	Low	Negligible	None	Neutral
Canal	Low	Negligible	None	Neutral
Water transmission infrastructure	Low	Negligible	Standard construction principals.	Neutral

3. Conclusions and recommendations

3.1 Conclusions

- 3.1.1 The conclusions that have been reached from this Flood Risk Assessment are:
- The proposed Scheme is considered as essential infrastructure and based on the principles of current national planning policy (NPS NN and NPPF) would be acceptable for flood risk if a passed Exception Test can be demonstrated.
 - This FRA provides evidence for the second part of the Exception Test, whereby the development would remain safe and not increase flood risk elsewhere, over the life time of the development taking into account climate change.
 - Fluvial flood risk mapping indicates that the greater majority of the Scheme DCO boundary is within Flood Zone 1 i.e. at low risk from fluvial flooding. The northern, eastern and western extents of the Scheme, and areas for land compensation or replacement fall within Flood Zone 2 or 3, but no works that would impact on flood risk are proposed within these areas and flood risk mitigation is not required.
 - The southern extent of the Scheme crosses Stratford Brook and works in this area has the potential to impact on flood risk. Mitigation has been proposed, including a clear span bridge of both the watercourse and the 1 in 100 (+35% climate change allowance) flood extent, to ensure that there is no constriction on flow or displacement of water. This has been confirmed through detailed hydraulic modelling. The culvert conveying Stratford Brook under the slip road will be strengthened, although there will be no impact on internal culvert dimensions and hence on flow conveyance. Therefore, there will be no impact on flood risk associated with Stratford Brook as a result of the Scheme, both under present day conditions and over the lifetime of the Scheme.
 - The road network within the DCO boundary crosses five ordinary watercourses for which Flood Zones have not been defined:
 - The works at three of these locations are for signage only and would not impact on flood risk.
 - At the M25 crossing noted, the flood risk is minor and there are no vulnerable receptors (properties) and therefore the flood risk impact of a potential culvert alteration is considered insignificant.
 - At the A3 crossing there is a potential flood risk impact associated with Bolder Mere, but the design has mitigated this risk.
 - The Scheme, in all locations, does not cause an increase in fluvial flood risk to the existing road, and in locations of new road the construction the road level is above the flood level associated with Flood Zone 2 (and hence an approximation for the 1 in 100 annual probability flood with a 35% allowance for climate change). Therefore, the Scheme would not alter the operation or safety of the road in respect to fluvial flooding.

- Current surface water flood risk mapping shows a high proportion of the area within the DCO boundary as being at risk from surface water flooding. However, the vast majority of this risk is due to watercourses (which is assessed as fluvial flood risk), in localised isolated depressions in topography and along the road network (already managed by the existing drainage network).
- The detailed drainage design will be completed in line with current planning policy requirements and will ensure that the new and upgraded drainage systems will serve to prevent unacceptable surface water flood risk to the Scheme. The drainage design will also present a system that would prevent an unacceptable increase in runoff from the site.
- There are no other sources significant flood risk to the Scheme, however a considerations of groundwater ingress, the impact of water transmission infrastructure and the impact on Bolder Mere will be considered in the CEMP.

3.1.2 In summary, it is concluded that based on current flood risk understanding and the incorporation of flood risk mitigation/considerations (as detailed above) the proposed Scheme at all locations would be at an acceptable level of flood risk (from all sources) and would not increase flood risk elsewhere. This conclusion remains true, both now and over the lifetime of the Scheme taking climate change into consideration.

3.2 Recommendations

- 3.2.1 It is recommended that the proposed Scheme, with the incorporation of flood risk mitigation/considerations (as above) is considered acceptable from a flood risk perspective.
- 3.2.2 The flood risk analysis should be reviewed and updated through the detailed design process and the updated data should be provided as supporting information to the Protective Provision applications where appropriate.

4. References

Elmbridge Borough Council. (2014). *Elmbridge Strategic Flood Risk Assessment. Completed by URS on behalf of Elmbridge Borough Council.*

Guildford Borough Council. (2015). *Guildford Strategic Flood Risk Assessment. Completed by Capita on behalf of Guildford Borough Council.*

Appendices

Appendix A. Environment Agency model review correspondence

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