

A303 Amesbury to Berwick Down

TR010025

8.12 (2) – Consolidated Environmental Mitigation Schedule

Deadline 4

APFP Regulation 5(2)(q)

Planning Act 2008

The Infrastructure Planning (Examination Procedure) Rules 2010

June 2019



Infrastructure Planning

Planning Act 2008

**The Infrastructure Planning (Applications: Prescribed
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A303 Amesbury to Berwick Down

Development Consent Order 20[**]

Consolidated Environmental Mitigation Schedule

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Abbreviation List

Acronym	Description
BPM	Best Practicable Means
CEMP	Construction Environmental Management Plan
CIRIA	Construction Industry Research and Information Association
CRM	Community Relations Manager
DCO	Development Consent Order
DMRB	Design Manual for Roads and Bridges
ES	Environmental Statement
ExA	Examining Authority
HMAG	Heritage Monitoring Advisory Group (comprising Wiltshire Council Archaeology Service, Historic England, National Trust and English Heritage)
LEMP	Landscape and Ecology Management Plan
NMU	Non-Motorised Users
NNR	National Nature Reserve
OEMP	Outline Environmental Management Plan
OLEMP	Outline Landscape and Ecology Management Plan
SAC	Special Area of Conservation
SSSI	Site of Special Scientific Interest
SSWSI	Site Specific Written Scheme of Investigation
SWMP	Site Waste Management Plan
TBM	Tunnel Boring Machine
WAC	Waste Acceptance Criteria
WCAS	Wiltshire Council Archaeology Service
WHS	World Heritage Site

1 Introduction

- 1.1.1 This document is an update to the Consolidated Environmental Mitigation Schedule (CEMS) submitted at Deadline 3[REP3-0].
- 1.1.2 The Deadline 3 CEMS was developed to demonstrate how the mitigation measures identified within the Environmental Statement (ES) and additional mitigation measures that have been agreed through the Examination process to Deadline 3 were secured, with reference to the Deadline 3 versions of the OEMP and DCO. This Deadline 4 CEMS has been updated to include additional mitigation measures and updates that have been agreed through the examination process between Deadline 3 and Deadline 4 and how these are secured, with reference to the Deadline 4 versions of the OEMP and DCO. Within the CEMS, additional measures and updates are shown in red text, with a “Reasons for addition” column included to provide the rationale for amendments.
- 1.1.3 This document is a “live” document and is due to be updated throughout the Examination period. It is proposed that any future updates to the CEMS will be made in red text.

1.2 Environmental mitigation

- 1.2.1 The approach to securing mitigation is set out in paragraphs 2.3.61 - 62 of the ES [APP-040].
- 1.2.2 The mitigation set out in the ES and illustrated in the indicative Environmental Masterplan [APP-059] is secured by Requirements in the draft DCO [APP-020] that the Scheme is to be undertaken in accordance with:
 - a) the OEMP (which includes detailed provision on mitigation of environmental impacts);
 - b) specific mitigation obligations in key topic areas such as archaeology (including an obligation to comply with the Detailed Archaeological Mitigation Strategy), landscaping and drainage; and
 - c) the Scheme design shown on plans submitted with the DCO.
- 1.2.3 Mitigation will also be secured by Highways England placing a contractual responsibility on the main works contractor and subcontractors to:
 - a) comply with the DCO Requirements; and
 - b) subject to (a), deliver each mitigation measure as specified in the ES and Environmental Masterplan, unless the contractor is able to define an alternative measure or measures, approved by Highways England, which achieve the same level of mitigation.

1.3 Guide to Consolidated Environmental Mitigation Schedule

1.3.1 Table 1.1 provides a summary of the scope of each column within this CEMS.

Table 1.1 Explanatory guide to the CEMS

Column	Explanation
Source Reference (Source Ref.)	An identifier which is directly relevant to the mitigation identified within the ES or other documents.
Mitigation / commitment	Summary of the mitigation as identified within the source document. This mitigation was assumed to be in place for the purpose of the environmental impact assessment (EIA) and determination of residual likely significant effects as identified in the ES.
Reference documents	Where the mitigation is referenced or identified within the application documents.
How the action is secured	How the mitigation is secured – either as a direct requirement of the DCO or as a contractual obligation that Highways England (The Authority) will place on the contractor(s) undertaking the work.

2 Consolidated Environmental Mitigation Schedule

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
Air Quality - Construction				
ES Chapter 5, Section 5.8.3 – 5 and Appendix 5.4	CEMP to include a range of best practice construction phase dust mitigation measures required in all works undertaken where there is potential for adverse effects on sensitive receptors. Examples of these measures are provided within ES Appendix 5.4 and are based on industry best practice and those presented by the Institute of Air Quality Management (IAQM) in their guidance on the assessment of dust from demolition and construction sites.	ES Appendix 2.2 OEMP PW-AIR1 and MW-AIR1	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 5, Section 5.8.5– 9 and Appendix 5.4	Locations considered to be at higher dust risk (those with sensitive receptors close to the works i.e. within 200m) would be subject to further standard and site specific mitigation measures, as outlined within ES Appendix 5.4, which provides examples of both standard and further standard measures.	ES Appendix 2.2 OEMP MW-AIR2	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 5, Section 5.8.10	Construction air quality monitoring to be undertaken at locations with higher dust risks.	ES Appendix 2.2 OEMP MW-AIR4	DCO Requirement, Schedule 2, Para. 4	
Air Quality – Operational				
ES Chapter 5, Section 5.8.12	An appropriate mechanical ventilation system, likely based on a longitudinal jet fan strategy, to manage air quality in the tunnel, with a pollution monitoring system in the tunnel to inform the use of the ventilation system.	ES Appendix 2.1 EMS MS-AQ1	Contractual requirement between The Authority and the contractor.	
OEMP – Air Quality	Tunnel Ventilation Strategy to include an appropriate ventilation system during construction of the tunnel.	ES Appendix 2.2 OEMP MW-AIR3	DCO Requirement, Schedule 2, Para. 4	
Cultural Heritage - Construction				
ES Chapter 6, Section 6.8.2	Boring of the tunnel to avoid the ground disturbance associated with a cut-and-cover option.	Work No.1F under Schedule 1 of the Draft DCO	Schedule 1 of the Draft DCO DCO Requirement, Schedule 2, Para. 3	
ES Chapter 6, Section 6.8.4, a) and b)	Measures to avoid or minimise potential physical impacts include: the layout and location of construction compounds to be located outside of the WHS, avoid designated heritage assets and where possible to avoid non-designated assets, exclusion zones and buildings concealed behind existing hedges or earthworks bunds; and temporary road diversions built under a 'no dig' solution wherever possible, with topsoil retained in situ and geotextile laid before road stone and the temporary road surface.	ES Appendix 2.2 OEMP PW- CH1, MW-G28, MW-CH1, MW-CH4, MW-CH5	DCO Requirement, Schedule 2, Para. 4	OEMP amends to ensure all aspects of this measure are specifically secured through DCO Requirement.

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
ES Chapter 6, Section 6.8.4, c)	The approach for haul routes would also be implemented for PMAs and NMUs where agreed with HMAG and WCAS.	Detailed Archaeological Mitigation Strategy (Paras. 4.2.10 and 4.2.11) [REP2-038]	DCO Requirement, Schedule 2, Para. 5	
ES Chapter 6, Section 6.8.5, a)	The scheme design has been developed to reduce the land-take within the WHS.	Works Plans (TR010025 2.5)	Order limits to which land is able to be taken as shown on the Works Plans	
ES Chapter 6, Section 6.8.5, b) i.	The western portal approach road in a retained cutting, with grassed upper slopes and flanking chalk grassland (between the A360 and the portal) created to blend the Scheme into the surrounding landscape. Highway safety fencing to be located towards the foot of the grassed slopes so as to screen it from within the WHS.	ES Appendix 2.2 OEMP D-CH5 (cutting and slope) ES Appendix 2.2 OEMP MW-BIO2 (grassland creation) ES Appendix 2.2 OEMP D-CH14 (fencing)	DCO Requirement, Schedule 2, Para. 4 (OEMP) DCO Requirement, Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan and OLEMP)	
ES Chapter 6, Section 6.8.5, b) ii.	Dry valleys or combes would be used to conceal the road, both within the WHS as well as outside the WHS, (e.g. the main carriageway between the River Till and Longbarrow Junction).	ES Figure 2.5 Environmental Masterplan Works Plans (TR010025 2.5)	DCO Requirement, Schedule 2, Para. 8 DCO Requirement, Schedule 2, Para. 3	
ES Chapter 6, Section 6.8.5, b) iii.	The roundabouts and approach roads to the redesigned Longbarrow Junction would be concealed in false cutting, while Green Bridge Three includes bunds which screen this crossing from the WHS.	Engineering Section Drawings (cross sections) Sheets 5 and 6 (TR010025 2.8) ES Figure 2.5 Environmental Masterplan	DCO Requirement, Schedule 2, Para. 3 DCO Requirement, Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan)	
ES Chapter 6, Section 6.8.5, b) iv.	Re-use of part of the existing dual carriageway between the eastern portal and Countess Roundabout would minimise impacts on the setting of the scheduled Vespasian's Camp and the Grade II* registered park and garden at Amesbury Abbey.	Works Plan Sheets 9 and 10 of 15 (TR010025 2.5)	DCO Requirement, Schedule 2, Para. 3	
ES Chapter 6, Section 6.8.5, c)	The locations of the tunnel portals developed to avoid heritage assets, including a sensitive low-key design, location of western portal moved westwards and eastern portal to be concealed within the landscape.	Works Plan Sheets 6 and 8 of 15 (TR010025 2.5)	DCO Requirement, Schedule 2, Para. 3	

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
ES Chapter 6, Section 6.8.5, d)	The green bridges are designed to reduce their visual impact and to maintain or enhance landscape connectivity. Habitats established on Green Bridges in accordance with the Environmental Masterplan.	ES Appendix 2.2 OEMP MW-BIO2 ES Figure 2.5 Environmental Masterplan	DCO Requirement, Schedule 2, Para. 4 (OEMP) DCO Requirement, Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan)	
ES Chapter 6, Section 6.8.5, d)	Green bridge four has been relocated and lengthened.	ES Appendix 2.2 OEMP D-CH4 ES Appendix 2.1 EMS MS-CH3	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 6, Section 6.8.5, e)	No road lighting of the Scheme during operation except under Green Bridge Four and Countess Roundabout. Existing lighting units at Countess Roundabout replaced to minimise light spill.	ES Appendix 2.2 OEMP D-CH11 and CH12	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 6, Section 6.8.5, f)	Road signage designed for minimal impact: No signs visible above cutting approaches.	ES Appendix 2.2 OEMP D-CH8	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 6, Section 6.8.5, f)	Road signage will have reflective surfaces rather than be lit.	ES Appendix 2.2 OEMP D-CH8	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 6, Section 6.8.5, g)	The redundant A303, west of the existing A303/A360 Longbarrow Junction roundabout and the existing roundabout will be broken up and replaced with chalk grassland and intermittent scrub (in accordance with the Environmental Masterplan) except to the extent it is required to create a new Public Right of Way and/or Private Means of Access.	ES Appendix 2.2 OEMP D-LAN1, MW-BIO2 and D-CH3 ES Figure 2.5 Environmental Masterplan	DCO Requirement, Schedule 2, Para. 4 DCO Requirement, Schedule 2, Para.8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan)	
ES Chapter 6, Section 6.8.5, h)	Decommissioned A303 converted to a restricted by-way, would be reduced in width and comprise a bound surface to integrate into the WHS. The remaining width of the former road would be converted to chalk grassland in accordance with the Environmental Masterplan. The byway would not include hard edging, raised kerbs, surface markings, signage, lighting, benches, litter bins or other such street furniture.	ES Appendix 2.1 EMS MS-CH4 ES Appendix 2.2 OEMP MW-BIO2 (chalk grassland) and D-CH26 (bound surface) ES Figure 2.5 Environmental Masterplan	DCO Requirement, Schedule 2, Para. 4 DCO Requirement, Schedule 2, Para.8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan) DCO Requirement, Schedule 2, Para. 3	

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
ES Chapter 6, Section 6.8.5, j)	The choice of the bound surface colour would be established and agreed between Highways England and Stakeholders.	ES Appendix 2.2 OEMP D-CH14	Consultation with stakeholders on surfacing set out in DCO Requirement, Schedule 2, Para. 4	
ES Chapter 6, Section 6.8.5, k)	The establishment and positive management of the chalk grassland habitat.	ES Appendix 2.2 OEMP MW-LAN1, MW-BIO2 and MW-BIO13. ES Appendix 8.26 (OLEMP) ES Figure 2.5 Environmental Masterplan	DCO Requirement, Schedule 2, Para. 4 DCO Requirement, Schedule 2, Para 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan and OLEMP)	
ES Chapter 6, Section 6.8.6- 9	A programme of archaeological fieldwork and recording would be implemented in respect of archaeological remains, where the majority would be completed during the preliminary works stage.	ES Appendix 2.2 OEMP PW-CH1 – PW-CH4, MW-CH1, MW-CH2, MW-CH5, MW-CH6 Detailed Archaeological Mitigation Strategy [REP2-038]	DCO Requirement, Schedule 2, Para. 4 DCO Requirement, Schedule 2, Para. 5	
ES Chapter 6, Section 6.8.10-11	Prior to start of construction, the preliminary works and main Contractor(s) would prepare a Scheme-wide Heritage Management Plan indicating how the historic environment is to be protected in a consistent and integrated manner.	ES Appendix 2.2 OEMP PW-CH1, MW-CH1, MW-CH2 and MW-CH5	DCO Requirement, Schedule 2, Para. 4	
Heritage Impact Assessment page 22 OEMP – Cultural Heritage	Undertake works in accordance with the Detailed Archaeological Mitigation Strategy, including: Protection measures – temporary fencing to demarcate exclusion zones around heritage assets and archaeological sites. Archaeological fieldwork and recording - A programme of archaeological recording for archaeological remains within the footprint of the Scheme which would be wholly or partially removed during construction. Archaeological mitigation work would include archaeological excavations, recording, reporting, publication, and dissemination to local communities, the wider general public and academics. Outreach and public access to the wider WHS landscape post-Scheme construction – Provision for the public to view archaeological work in progress, where it is safe and practicable to do so.	ES Appendix 2.2 OEMP PW-CH2 and MW-CH2 Detailed Archaeological Mitigation Strategy [REP2-038]	DCO Requirement, Schedule 2, Para. 4 DCO Requirement, Schedule 2, Para. 5	
OEMP – Cultural Heritage	Where potentially sensitive archaeological remains are required to be buried or sealed beneath fill material to ensure they are not disturbed during construction, the main works contractor shall prepare a Method Statement after consultation with HMAG (for	ES Appendix 2.2 OEMP MW-CH5	DCO Requirement, Schedule 2, Para. 4	

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
	sites within the WHS) or WCAS (for sites outside the WHS) and prior to the start of the work.	Detailed Archaeological Mitigation Strategy [REP2-038]	DCO Requirement, Schedule 2, Para. 5	
OEMP – Cultural Heritage	Should any (post-preliminary works) service / utility corridors require excavation, the main works contractor shall avoid significant archaeological remains wherever possible and implement appropriate archaeological mitigation measures in accordance with the Detailed Archaeological Mitigation Strategy where impacts are unavoidable. The main works contractor shall prepare a SSWSI where service utility corridors cross archaeologically sensitive areas.	ES Appendix 2.2 OEMP MW-CH6 Detailed Archaeological Mitigation Strategy [REP2-038]	DCO Requirement, Schedule 2, Para. 4 DCO Requirement, Schedule 2, Para. 5	
ES Chapter 6, Section 6.10.1	The main works contractor shall undertake an appropriate level of monitoring of all heritage assets (designated and non-designated) within and close to the Scheme boundary during the construction programme in accordance with the DAMS.	ES Appendix 2.2 OEMP MW-CH7 and MW-CH1 Detailed Archaeological Mitigation Strategy [REP2-038]	DCO Requirement, Schedule 2, Para 4 DCO Requirement, Schedule 2, Para. 5	
Detailed Archaeological Mitigation Strategy	The main works contractor shall develop a Ground Movement Monitoring Strategy to be approved by the Authority. The strategy will identify heritage assets that are at risk from ground vibration from the tunnel, or from ground surface movement caused by settlement. As part of this strategy, the contractor shall develop contingencies and identify measures to ensure the protection of assets.	Detailed Archaeological Mitigation Strategy [REP2-038] ES Appendix 2.2 OEMP MW-CH8	DCO Requirement, Schedule 2, Para. 5 DCO Requirement, Schedule 2, Para 4	
Stakeholder Engagement	The opening height of the portal entrances to the tunnel shall be no more than that required to satisfy the headroom requirements of Highway Standard TD 27 (DMRB 6.1).	ES Appendix 2.2 OEMP D-CH16	DCO Requirement, Schedule 2, Para 4	
Stakeholder Engagement	The central support wall of the tunnel canopy structures at each end of the tunnel shall be set back from the leading edge of the structure.	ES Appendix 2.2 OEMP D-CH17	DCO Requirement, Schedule 2, Para 4	
Stakeholder Engagement	No portal type gantries shall be used in any part of the Scheme.	ES Appendix 2.2 OEMP D-CH18	DCO Requirement, Schedule 2, Para 4	
Stakeholder Engagement	Wherever the topography requires a variation in retaining wall height, there shall be no steps in the wall height and top of the wall shall follow a smooth alignment.	ES Appendix 2.2 OEMP D-CH19	DCO Requirement, Schedule 2, Para 4	
Stakeholder Engagement	There will be no external lighting on the cutting retaining walls, or the external facades of the tunnel control buildings and tunnel portals within the WHS	ES Appendix 2.2 OEMP D-CH20	DCO Requirement, Schedule 2, Para 4	

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
Stakeholder Engagement	Looking from above, the tops of the cutting retaining walls shall be set parallel to the adjacent carriageway alignment.	ES Appendix 2.2 OEMP D-CH21	DCO Requirement, Schedule 2, Para 4	
Stakeholder Engagement	The tunnel buildings shall be underground so that only the front façades of the tunnel buildings shall be visible.	ES Appendix 2.2 OEMP D-CH22	DCO Requirement, Schedule 2, Para 4	
Stakeholder Engagement	On Green Bridge Four, the finished ground level shall replicate the existing ground levels, subject to the limits of deviation.	ES Appendix 2.2 OEMP D-CH23	DCO Requirement, Schedule 2, Para 4	
Stakeholder Engagement	Boundary fencing and gates in the WHS shall be visually recessive and have a low reflectivity finish. Within the WHS, all fencing above the top of the cuttings shall be post and wire with stock-proof netting, and be consistent with other fencing within the WHS. Within the WHS, gates shall be provided at appropriate points to facilitate access. All gates shall be timber, unless otherwise agreed.	ES Appendix 2.2 OEMP D-CH24	DCO Requirement, Schedule 2, Para 4	
Stakeholder Engagement	The top of new highway boundary fencing within the western cutting shall be no higher than the ground level at the top of the cutting alongside which the fencing runs.	ES Appendix 2.2 OEMP D-CH25	DCO Requirement, Schedule 2, Para 4	
Stakeholder Engagement	Any bound surface on PRoW within the WHS shall be a maximum of 3m in width. The bound surface on the PRoW in the WHS shall be suitably coloured at year one of operation to be visually recessive and sympathetically integrated within the WHS. Trial panels shall be constructed early in the construction period and at least one year in advance of the surface being laid. Prior to the surface being laid, the Authority shall consult with the members of HMAG on the proposed colour of the surface of the PRoW in the WHS, taking into account the results of the trial panels. PRoW/PMA in WHS shall not have raised edgings, surface markings, lighting, benches, litter bins or other such street furniture.	ES Appendix 2.2 OEMP D-CH26	DCO Requirement, Schedule 2, Para 4	
Stakeholder Engagement	Any signage for the new PRoW/PMA shall of low reflectivity, in-keeping with the character of the WHS, and shall be designed and located in such a way as to ensure no adverse impacts on the OUV of the WHS.	ES Appendix 2.2 OEMP D-CH27	DCO Requirement, Schedule 2, Para 4	
Stakeholder Engagement	There shall be no permanent raised earthworks within the WHS other than that required for the construction of the Countess Flyover.	ES Appendix 2.2 OEMP D-CH28	DCO Requirement, Schedule 2, Para 4	

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
Stakeholder Engagement	Traffic signals at Longbarrow junction shall have shrouds or louvres to direct the signals towards the intended user and minimise light spill.	ES Appendix 2.2 OEMP D-CH29	DCO Requirement, Schedule 2, Para 4	
Stakeholder Engagement	Road signs shall be designed and positioned for minimal impact when viewed from the WHS. The posts/settings on which road signs are mounted shall be of low reflectivity. The number of signs shall be the minimum required for the safe operation of the road.	ES Appendix 2.2 OEMP D-CH30	DCO Requirement, Schedule 2, Para 4	
Stakeholder Engagement	Construction haul routes within the WHS shall be within the footprint of the permanent works.	ES Appendix 2.2 OEMP D-CH31	DCO Requirement, Schedule 2, Para 4	Securing mitigation through DCO Requirement following discussions with stakeholders.
Stakeholder Engagement	Construction of the main tunnel bore shall be undertaken using closed face tunnelling techniques.	ES Appendix 2.2 OEMP D-CH32	DCO Requirement, Schedule 2, Para 4	Securing mitigation through DCO Requirement following discussions with stakeholders.
Cultural Heritage-Operation				
ES Chapter 6, Section 6.8.14	Cultural Heritage Asset Management Plans would be produced every four years (as a requirement that is placed on Highways England in their role as a Government body, to undertake regular checks on the heritage assets within their ownership, in order to fulfil their obligations towards the historic environment).	ES Appendix 2.2 OEMP MW-CH2 Detailed Archaeological Mitigation Strategy [REP2-038]	DCO Requirement, Schedule 2, Para. 4 DCO Requirement, Schedule 2, Para. 5	
Landscape and Visual-Construction				
ES Chapter 7, Section 7.8, Table 7.4	Locating the topsoil and construction compound to the east of the existing B3083 and in a relatively low-lying position.	ES Appendix 2.2 OEMP MW-G28	DCO Requirement, Schedule 2, Para. 4	Securing mitigation through DCO Requirement following discussions with stakeholders..
ES Chapter 7, Section 7.8, Table 7.4	Locating the Slurry Treatment Plant to the west of the WHS and main contractor compound and below the ridgeline.	ES Appendix 2.2 OEMP MW-CH4 ES Figure 2.7 Construction Layout	DCO Requirement, Schedule 2, Para. 4	

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
ES Chapter 7, Section 7.8, Table 7.4	Locating the main contractor compound to the west of the WHS and enclosing the main contractor compound with topsoil storage so as to soften views from within the surrounding landscape.	ES Appendix 2.2 OEMP MW-G28	DCO Requirement, Schedule 2, Para. 4	Securing mitigation through DCO Requirement following discussions with stakeholders.
ES Chapter 7, Section 7.8, Table 7.4	Not locating any construction compounds within the WHS.	ES Appendix 2.2 OEMP MW-G28	DCO Requirement, Schedule 2, Para. 4	Securing mitigation through DCO Requirement following discussions with stakeholders.
ES Chapter 7, Section 7.8, Table 7.4	Ensuring soil structures are protected where land would be used temporarily, such as for compounds, haul roads, re-grading areas, etc.	ES Appendix 2.2 OEMP MW-CH5	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 7, Section 7.8, Table 7.4	Locating the topsoil, chalk and contractor compound to the north east of existing services at Countess Roundabout.	ES Appendix 2.2 OEMP MW-G28	DCO Requirement, Schedule 2, Para. 4.	Securing mitigation through DCO Requirement following discussions with stakeholders.
ES Chapter 7, Section 7.8, Table 7.4	Restricting buildings within the main contractor compound to the west of the WHS to one storey in height.	ES Appendix 2.2 OEMP MW-G28	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 7, Section 7.8, Table 7.4	Implementation of the OEMP.	ES Appendix 2.2 OEMP MW-G5	DCO Requirement, Schedule 2, Para. 4	
OEMP – Landscape and Visual	The main works contractor shall prepare a Scheme-wide Landscape and Ecology Management Plan (LEMP), developed in accordance with industry good practise.	ES Appendix 2.2 OEMP MW-LAN1	DCO Requirement, Schedule 2, Para. 4	
OEMP – Landscape and Visual	The main works contractor shall ensure that landscaping works are carried out in accordance with the approved landscaping scheme produced in conformance with Requirement 8 of the DCO.	ES Appendix 2.2 OEMP MW-LAN2	DCO Requirement, Schedule 2, Para. 4 DCO Requirement, Schedule 2, Para. 8.	

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
OEMP – Landscape and Visual	The main works contractor shall prepare an Arboricultural Mitigation Strategy (AMS) to protect those trees retained within and immediately adjacent to the order limit.	ES Appendix 2.2 OEMP MW-LAN3	DCO Requirement, Schedule 2, Para. 4	
OEMP – Landscape and Visual	<p>Landscaping works:</p> <p><i>Planting and seeding</i> In planning planting, seeding, wildflower seeding and other landscape works, the main works contractor shall consider the recommendations of the latest version of industry standards, including Natural England’s Advice on managing, restoring, and creating grassland.</p> <p><i>Early planting</i> The main works contractor shall implement planting / seeding as early as is reasonably practicable (and where there is no conflict with construction activities or other requirements of the Scheme including Stone Curlew mitigation), so as to be more established in advance of the operation of the Scheme. The main works contractor will consider where these measures can be implemented as described and programme them accordingly.</p> <p><i>Maintenance</i> The main works contractor shall undertake appropriate maintenance of planting and seeding works and implementation of management measures, through the construction period as landscape works are completed. The main works contractor shall monitor the progress of these works throughout the construction period. Any failures of landscape planting and seeding will be managed via the specification and works requirements. This will ensure annual replanting and reseeded works are undertaken (as required) to achieve successful establishment of the landscape and ecology mitigation proposals at completion of the construction works and during the agreed defects liability period.</p>	ES Appendix 2.2 OEMP MW-LAN4	DCO Requirement, Schedule 2, Para. 4	
Landscape and Visual-Design and Operation				
ES Chapter 7, Section 7.8.1 – 7.8.8	Landscape mitigation in accordance with the design principles outlined within Section 7.8.1 – 7.8.8 of the Environmental Statement.	ES Appendix 2.2 OEMP PW-LAN2, MW-LAN1 and MW-LAN2, D-LAN to D-LAN3.	DCO Requirement, Schedule 2, Para. 4 DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan and OLEMP)	

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
ES Chapter 7, Section 7.8, Table 7.5	Chalk grassland bunds at the western end of the Scheme, adjacent to the new carriageway, north and south of the alignment between SLAN3 and Green Bridge One. To include intermittent scrub and trees.	ES Figure 2.5 Environmental Masterplan	DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan)	
ES Chapter 7, Section 7.8, Table 7.5	Re-grading of the earthworks and new chalk grassland to the south and east of Parsonage Down NNR.	ES Figure 2.5 Environmental Masterplan	DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan)	
ES Chapter 7, Section 7.8, Table 7.5	Part removal and re-configuration of the existing A303 up to the western edge of Winterbourne Stoke. The road will be reduced in width and the verges seeded with chalk grassland and intermittent scrub.	ES Appendix 2.2 OEMP D-LAN1 and D-CH14. ES Figure 2.5 Environmental Masterplan Work No. 3A Schedule 1 of the Draft DCO Works Plans Sheet 4 of 15 (TR010025-2.5)	DCO Requirement, Schedule 2, Para. 4 DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan) DCO Requirement Schedule 2, Para. 3	
ES Chapter 7, Section 7.8, Table 7.5	Removal of the redundant sections of the B3083 and plant native species woodland block on land between the redundant and realigned B3083, including native hedgerow along the western boundary.	ES Figure 2.5 Environmental Masterplan	DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan) DCO Requirement Schedule 2, Para. 3	
ES Chapter 7, Section 7.8, Table 7.5	Green Bridge Four within the WHS for landscape integration and visual screening.	ES Appendix 2.2 OEMP D-CH4 ES Figure 2.5 Environmental Masterplan Works No. 1D (i) under Schedule 1 of the Draft DCO Works Plans Sheet 6 of 15 (TR010025-2.5)	DCO Requirement, Schedule 2, Para. 4 Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan) Schedule 1 of the Draft DCO DCO Requirement, Schedule 2, Para. 3	

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
ES Chapter 7, Section 7.8, Table 7.5	New woodland planting to the north of Scotland Lodge Farm between Green Bridge One and the realigned B3083 underbridge to integrate the Scheme with existing tree belts.	ES Figure 2.5 Environmental Masterplan ES Appendix 8.26 (OLEMP)	DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan)	
ES Chapter 7, Section 7.8, Table 7.5	Re-grading of landscape earthworks to sympathetically integrate them within the existing rolling landform to the north of Winterbourne Stoke, in combination with false cutting between Green Bridge One and the realigned B3083, as well as rounding off the top of the deep cutting to reflect the natural rolling landform.	ES Figure 2.5 Environmental Masterplan	DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan and OLEMP).	
ES Chapter 7, Section 7.8, Table 7.5	Bund on the B3083 underbridge to connect to the false cutting either side of the bridge for continuation of visual screening.	ES Figure 2.5 Environmental Masterplan	DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan and OLEMP)	
ES Chapter 7, Section 7.8, Table 7.5	False cutting and new native hedgerow along south side of the new A303 between the B3083 underbridge and the River Till viaduct.	ES Figure 2.5 Environmental Masterplan ES Appendix 8.26 (OLEMP)	DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan and OLEMP)	
ES Chapter 7, Section 7.8, Table 7.5	New woodland planting around the River Till Viaduct abutments.	ES Figure 2.5 Environmental Masterplan ES Appendix 8.26 (OLEMP)	DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan and OLEMP)	
ES Chapter 7, Section 7.8, Table 7.5	River Till viaduct with 1.5m environmental barrier along the south side of the viaduct.	ES Appendix 2.2 OEMP D-LAN2	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 7, Section 7.8, Table 7.5	Sympathetic regrading of the earthworks between the River Till viaduct and Longbarrow Junction along the north and south of the new A303, including false cuttings, new native hedgerows to tie in with retained vegetation, return of land to agricultural use and new green bridge (Green Bridge Two).	ES Figure 2.5 Environmental Masterplan Works No. 1C (i) under Schedule 1 of the Draft DCO (Green Bridge 2)	DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan and OLEMP) Schedule 1 of the Draft DCO	

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
			DCO Requirement, Schedule 2, Para. 3	
ES Chapter 7, Section 7.8, Table 7.5	Replacement of existing hedgerow on the western edge of the realigned Byway WST06B, running north-south of Green Bridge Two, as well as along existing field boundary running parallel to the north of the new A303/Green Bridge 2.	ES Figure 2.5 Environmental Masterplan ES Appendix 8.26 (OLEMP)	DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan and OLEMP)	
ES Chapter 7, Section 7.8, Table 7.5	Single variable message signs rather than overhead gantries across the dual carriageway.	ES Appendix 2.2 OEMP D-CH18	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 7, Section 7.8, Table 7.5	Part removal and reconfiguration of existing A303 west of Longbarrow Junction and Green Bridge Three	ES Appendix 2.2 OEMP D-LAN1 Works No. 3A under Schedule 1 of the Draft DCO (reconfiguration of the A303)	DCO Requirement, Schedule 2, Para. 4 DCO Requirement, Schedule 2, Para. 3	
ES Chapter 7, Section 7.8, Table 7.5	Removal of existing A303 between Longbarrow Junction and the WHS, seeded with chalk grassland, including retention or replanting of hedgerow along the northern boundary.	ES Appendix 2.2 OEMP D-CH2 ES Figure 2.5 Environmental Masterplan ES Appendix 8.26 (OLEMP)	DCO Requirement, Schedule 2, Para. 4 (OEMP) DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan and OLEMP)	
ES Chapter 7, Section 7.8, Table 7.5	Woodland planting adjacent to Longbarrow Junction in line with the Environmental Masterplan.	ES Figure 2.5 Environmental Masterplan ES Appendix 8.26 (OLEMP)	DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan and OLEMP)	

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
ES Chapter 7, Section 7.8, Table 7.5	New chalk grassland adjacent to the retained cutting in the western part of the WHS in combination with the rounding off and seeding of the upper one third of the retaining walls.	ES Appendix 8.26 (OLEMP) ES Figure 2.5 Environmental Masterplan Works Plans sheet	DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan and OLEMP)	
ES Chapter 7, Section 7.8, Table 7.5	New chalk grassland to the north of the new A303 between Green Bridge Three and the WHS boundary.	ES Figure 2.5 Environmental Masterplan ES Appendix 8.26 (OLEMP)	DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan and OLEMP)	
ES Chapter 7, Section 7.8, Table 7.5	Native hedgerows adjacent to the Longbarrow junction along the on/ off slip-roads, the A360 north and south links and the downgraded Winterbourne Stoke link. Hedgerows to connect to existing vegetation at tie-ins for landscape integration.	ES Figure 2.5 Environmental Masterplan ES Appendix 8.26 (OLEMP)	DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan and OLEMP)	
ES Chapter 7, Section 7.8, Table 7.5	Re-grading of landscape earthworks to sympathetically integrate them within the existing rolling landform adjacent to Longbarrow Junction, including between Green Bridge Three and the edge of the WHS, and along the A360 south link road.	ES Figure 2.5 Environmental Masterplan	DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan and OLEMP)	
ES Chapter 7, Section 7.8, Table 7.5	Removal of redundant sections of A360 on WHS boundary between the existing Longbarrow roundabout and the A360 tie-in, north and south, including retention or replanting of hedgerow along western boundary of broken out A360.	ES Appendix 2.2 OEMP D-CH3 ES Figure 2.5 Environmental Masterplan ES Appendix 8.26 (OLEMP)	DCO Requirement, Schedule 2, Para. 4 DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan and OLEMP)	
ES Chapter 7, Section 7.8, Table 7.5	Western and eastern portals to be seeded with chalk-grassland.	ES Figure 2.5 Environmental Masterplan ES Appendix 8.26 (OLEMP)	DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan and OLEMP)	

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
ES Chapter 7, Section 7.8, Table 7.5	Breaking out of the redundant A303/ Stonehenge Road within the WHS and chalk grassland seeding.	ES Appendix 2.2 OEMP D-LAN1 ES Figure 2.5 Environmental Masterplan ES Appendix 8.26 (OLEMP)	DCO Requirement, Schedule 2, Para. 4 DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan and OLEMP)	
ES Chapter 7, Section 7.8, Table 7.5	Retained cut at the Nile Clumps to retain these trees.	ES Appendix 2.2 OEMP D-LAN3 Works No 1H (ii) under Schedule 1 of the Draft DCO	DCO Requirement, Schedule 2, Para. 4 DCO Requirement, Schedule 2, Para. 4	
ES Chapter 7, Section 7.8, Table 7.5	Replacement planting around the new drainage basins at Countess Flyover.	ES Figure 2.5 Environmental Masterplan ES Appendix 8.26 (OLEMP)	DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan and OLEMP)	
ES Chapter 7, Section 7.8, Table 7.5	Earthworks and new amenity planting (including semi-mature trees) at Countess Flyover to include earthworks within the centre of the roundabout and at the foot of the retained earth embankment, with low retaining walls, to accommodate all year planting interest.	ES Figure 2.5 Environmental Masterplan ES Appendix 8.26 (OLEMP)	DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan and OLEMP)	
ES Chapter 7, Section 7.8, Table 7.5	New woodland planting around Countess Junction and directly east of Countess Services.	ES Figure 2.5 Environmental Masterplan ES Appendix 8.26 (OLEMP)	DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan and OLEMP)	
ES Chapter 7, Section 7.8, Table 7.5	New chalk grassland and intermittent scrub across the Scheme on the cuttings, embankments, green bridges, cut and cover portal etc., except where alternative landscape treatments are proposed within the Environmental Masterplan.	ES Figure 2.5 Environmental Masterplan ES Appendix 8.26 (OLEMP)	DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan and OLEMP)	

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
Stakeholder engagement	Earthworks shall be rounded at changes in grade and direction to provide a natural appearance and reflect the surrounding topography.	ES Appendix 2.2 OEMP MW-LAN5	DCO Requirement, Schedule 2, Para. 4	
Stakeholder engagement	Consultation with Wiltshire Council on the general external appearance and finishes of the River Till Viaduct.	ES Appendix 2.2 OEMP D-LAN4	DCO Requirement, Schedule 2, Para. 4	
Stakeholder engagement	The non-motorised user crossing of the A360 and the de-trunked A303 at Longbarrow Junction shall be a Pegasus Crossing.	OEMP D-LAN5	DCO Requirement, Schedule 2, Para. 4	Securing mitigation through DCO Requirement following discussions with stakeholders.
Biodiversity - Construction				
ES Chapter 8, Section 8.8.4	North south biodiversity connectivity would be retained by crossings of the Scheme by four green bridges that would form part of an ecological network.	Works Nos. 1A (ii), 1C (ii), 1D (i) and 4 (a) under Schedule 1 of the Draft DCO.	Schedule 1 of the Draft DCO DCO Requirement, Schedule 2, Para. 3	
ES Chapter 8, Section 8.8.5	Green Bridge One and Green Bridge Two include bunds and planting. The hedgerows leading to the underbridge would be enhanced and linked to existing suitable woodland habitat	ES Figure 2.5 Environmental Masterplan ES Appendix 8.26 (OLEMP)	DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan and OLEMP)	
ES Chapter 8, Section 8.8.6	Mitigation to reduce the risk of mortality of birds and bats to be provided by having the Scheme in cutting for much of its length and the provision of false cuttings, typically 2m or more in height, to encourage birds and bats to fly above the height of most vehicles. False cutting extends on both sides of the Scheme from east of the green bridge at Parsonage Down to the B3083 bridge) and continues across the bridge east to where the Scheme would be in cutting before crossing the Till valley.	ES Appendix 2.2 OEMP D-CH5 ES Figure 2.5 Environmental Masterplan Engineering Sections (cross sections) sheets 3 and 4 of 12 (TR010025 2.8)	DCO Requirement, Schedule 2, Para. 4 DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan a) DCO Requirement, Schedule 2, Para. 3	

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
ES Chapter 8, Section 8.8.7	The habitat within the soft estate has been designed to maintain east west connectivity with creation of a range of habitats to maintain a strong ecological network in order to improve connectivity for a range of species. On both sides of the Scheme the soft estate habitats would form a continuous link from the west end to the Till valley. Beyond the Till crossing, the soft estate would extend uninterrupted along the north side of the Scheme to the merge with the A360 near the Stonehenge visitor centre and on the south side to Longbarrow Junction.	ES Appendix 2.2 OEMP MW-BIO2 and MW-LAN1 Figure 2.5 Environmental Masterplan	DCO Requirement, Schedule 2, Para. 4 DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan and OLEMP)	
ES Chapter 8, Section 8.8.8	The design incorporates mammal underpasses that have been located as closely as possible along known [REDACTED].	ES Appendix 2.2 OEMP MW-BIO2	DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan).	
ES Chapter 8, Section 8.8.9	Two bat hibernation features have been incorporated into the design of the Scheme, to compensate for the loss of potential bat roosting features associated with the vegetation clearance and to compensate for the loss of an underpass near the eastern portal, which is an important commuting route for bats.	ES Appendix 2.2 OEMP MW-BIO2	DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan).	
ES Chapter 8, Section 8.8.10	The River Till viaduct to be designed to minimise the shading impact on the sensitive marginal habitat associated with the river corridor. The vegetated banks to be retained during construction, wherever practicable. The locations of the piers and foundations shall be a minimum of 8m outside of the extents of the SAC or SSSI.	ES Appendix 2.2 OEMP D-BIO1 and MW-BIO3	DCO Requirement, Schedule 2, Para. 4 (viaduct design and pier locations)	
ES Chapter 8, Section 8.8.11	Where hedgerows cannot be retained, either during construction or following landscaping activities, these would be replaced or gaps filled where necessary.	ES Appendix 8.26 (OLEMP)	DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes the OLEMP).	
ES Chapter 8, Section 8.8.12	Lighting has only been incorporated into the design of the Scheme where it is essential for safety reasons. The existing lit roundabout at Longbarrow will be removed and the new Longbarrow Junction will be in cutting and unlit. There will be no lighting on the green bridges.	ES Appendix 2.2 OEMP D-CH11 and D-CH12	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 8, Section 8.8.13	The strategy for managing surface water runoff from the road is based on DMRB guidance and includes provision of appropriate measures for treatment to mitigate pollution to likely higher standards than at present.	ES Appendix 2.2 OEMP MW-WAT14 ES Appendix 11.3 Road Drainage Strategy	DCO Requirement, Schedule 2, Para. 10 (which secures road drainage strategy) DCO Requirement, Schedule 2, Para. 4	

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
ES Chapter 8, Section 8.8.14 – 8.8.21	The creation of habitats throughout the Scheme to improve north – south and east – west ecological connectivity.	ES Appendix 2.2 OEMP MW-BIO2	DCO Requirement, Schedule 2, Para. 4 DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan)	
ES Chapter 8, Section 8.8.23 and 24	Prior to the construction phase ecological surveys would be required in order to update the baseline surveys to avoid impacts on protected species during construction.	ES Appendix 2.2 OEMP PW-BIO2 to BIO10	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 8, Section 8.8.25 a	Where necessary fencing will be used to prevent access to retained important habitat	ES Appendix 2.2 MW-COM3	DCO Requirement, Schedule 2, Para 4	
ES Chapter 8, Section 8.8.25 b	Work compound and access tracks will not be located within or adjacent to retained important habitats.	ES Appendix 2.2 OEMP MW- BIO1 ES Figure 2.7 Construction Layout	DCO Requirement, Schedule 2, Para. 4 (protecting habitats) Contractual requirement between The Authority and the contractor (compound layout)	
ES Chapter 8, Section 8.8.25 d	Works near watercourses will be carried out in accordance with Construction Industry Research and Information Association (CIRIA) guidance.	ES Appendix 2.2 OEMP MW-WAT2	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 8, Section 8.8.25 e	Lighting strategies have been designed to reduce light spill on important biodiversity features.	ES Appendix 2.2 OEMP MW-G29 and MW-BIO4	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 8, Section 8.8.25 f	Disturbance to breeding birds will be avoided by avoiding vegetation clearance/structure demolition during the bird breeding season (typically March to August inclusive). Where this is not possible measures necessary to avoid harm to birds and their nests will be implemented.	ES Appendix 2.2 OEMP PW-BIO4, PW-BIO5 and MW-BIO1	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 8, Section 8.8.25 g	Where a stone curlew nest plot will be lost due to construction activities mitigation measures will be put in place in advance, including deterrence measures where required. A replacement plot will be established by agreement in advance of the loss of a plot near Parsonage Down.	ES Appendix 2.2 OEMP PW-BIO5 and MW-BIO8	DCO Requirement, Schedule 2, Para. 4 Replacement plot by agreement with landowner and stakeholders.	

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
OEMP - Biodiversity	An appropriate specialist shall undertake monitoring of stone curlews at the retained breeding plots within 500m of the Scheme boundary (where public access is available / can be arranged) and at the newly created nesting plot, associated with the mitigation defined in the ES (Chapter 8). Where monitoring is undertaken for other purposes appropriate data will be used without duplication of survey.	ES Appendix 2.2 OEMP PW-BIO5 and MW-BIO8	DCO Requirement, Schedule 2, Para. 4	Securing mitigation through DCO Requirement following discussions with stakeholders
OEMP - Biodiversity	In the event that nesting great bustards are found located within the Scheme boundary or within 500m of works, then liaison with the Great Bustard Group will be undertaken. This will aim to identify and agree the specific and appropriate measures to be undertaken in order to avoid disturbance of the nest.	ES Appendix 2.2 OEMP PW-BIO5 and MW-BIO8	DCO Requirement, Schedule 2, Para. 4	Securing mitigation through DCO Requirement following discussions with stakeholders
ES Chapter 8, Section 8.8.25 h	Due to the presence of [REDACTED] within the Scheme footprint, it will be necessary to permanently exclude [REDACTED] licence from Natural England. The setts will need to be closed under licence prior to construction, and outside of the [REDACTED] season (i.e. 1 December until 30 of June).	ES Appendix 2.2 OEMP PW-BIO6	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 8, Section 8.8.25, I and J	Mitigation will be implemented to avoid injury to [REDACTED] and other wildlife present during the works. This will include exclusion measures of [REDACTED] and other vertebrate animals from excavations, and if access cannot be prevented, then provision of means for escape from open excavations will be provided. Exclusion areas and other protection will be used as appropriate around sensitive, protected or notable features including all vegetation to be retained, such as trees, woodland and hedgerows.	ES Appendix 2.2 OEMP PW-BIO10, MW-BIO1 and MW-LAN1 Figure 2.5 Environmental Masterplan	DCO Requirement, Schedule 2, Para. 4 (OEMP) DCO Requirement Schedule 2, Para. 8 (retained vegetation)	
ES Chapter 8, Section 8.8.25 k	Invasive non-native species will be identified prior to works and removed or otherwise managed to prevent their spread.	ES Appendix 2.2 OEMP PW-BIO1 and MW-BIO6	DCO Requirement, Schedule 2, Para. 4 Statutory requirements applying to the contractor	
ES Chapter 8, Section 8.8.25 l	To avoid impacts on fish in the River Till, any piling works will be carried out using low vibration methods and will be excluded from within 8m of the river (as a minimum).	ES Appendix 2.2 OEMP MW-BIO3	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 8, Section 8.8.25 m	The requirement of any Natural England licences and associated working practices will be set out, communicated to staff, implemented and reported.	ES Appendix 2.2 OEMP Table 2.1	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 8, Section 8.8.25 o	Monitoring of protected and notable species and habitats during the construction phase.	ES Appendix 2.2 OEMP MW-BIO1, MW-BIO8, MW-BIO10, and MW-BIO12	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 8, Section 8.8.26	Significant construction impacts to important biodiversity features associated with dust deposition, air pollution, pollution incidents, water quality, light, noise, and vibration would be avoided through implementation of the measures within the OEMP.	ES Appendix 2.2 OEMP PW- AIR1 and MW-AIR1 (dust suppression and air pollution), PW-WAT1, PW-WAT2 and MW-WAT1 – MW-WAT7 (pollution and water quality), MW-G29	DCO Requirement, Schedule 2, Para. 4	

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
		(lighting), PW – NO11, PW-NO13, PW-NO14, MW-NO11, MW-NO13 and MW-NO15 (noise and vibration)		
ES Chapter 8, Section 8.8.27	A permanent Ecological Clerk of Works (ECoW) will be employed for the duration of the construction phase of the Scheme.	ES Appendix 2.2 OEMP Table 2.1	DCO Requirement, Schedule 2, Para. 4	
OEMP - Biodiversity	The preliminary works and main works contractor(s) shall implement the protected species measures identified within the OEMP, as relevant, for great crested newt, reptiles, breeding birds (excluding Schedule 1), Schedule 1 breeding birds, stone curlew, [REDACTED], bats, otters and water voles.	ES Appendix 2.2 OEMP PW-BIO2 – PW-BIO9 and MW-BIO7 – MW-BIO12.	DCO Requirement, Schedule 2, Para. 4	
OEMP - Biodiversity	<p>River Till ecological mitigation:</p> <p><i>Temporary bridge</i> The main works contractor shall ensure that the temporary bridge over the River Till is raised a minimum of 1m above the valley floor with supports located outside of the river channel and at least 8m from the boundary of the River Avon SAC (which includes the River Till). The bridge shall be restricted to a maximum 6m width and shall not be in the same location for a period of more than two years.</p> <p><i>Vegetation</i> The main works contractor shall re-establish any habitats lost as a result of temporary land-take in the River Till valley (chainage 3+800m to 4+300) following construction. Monitoring of vegetation during both the construction and operation phases shall be undertaken by the ECoW (or appropriate specialist), until such time as the habitat has been restored to the satisfaction of the Authority.</p> <p><i>Piling</i> No impact piling shall be used for the construction of both the temporary bridge and the permanent viaduct. Permanent foundation works. There shall be no permanent foundation works within 8m of the boundary of the River Till section of the River Avon SAC.</p> <p><i>Otters</i> The main works contractor shall provide, where reasonably practicable and when water is flowing, allowance for the passage of otters along one or both banks of the River Till within the temporary works arrangements.</p>	ES Appendix 2.2 OEMP MW-BIO3	DCO Requirement, Schedule 2, Para. 4	
Stakeholder Engagement	There shall be no piling works within 8m of the boundary of the River Till section of the River Avon SAC.	ES Appendix 2.2 OEMP D-BIO2	DCO Requirement, Schedule 2, Para. 4	
Stakeholder Engagement	Green bridges shall be designed and delivered having regard to the guidance in the report: Natural England (2015), Commissioned Report NECR181, Green Bridges, Literature Review.	ES Appendix 2.2 OEMP D-BIO3	DCO Requirement, Schedule 2, Para. 4	

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
Biodiversity - Operation				
ES Chapter 8, Section 8.8.29	The creation of chalk grassland between Parsonage Down SSSI and the Scheme to the south to provide connectivity for species to access the new habitats being created as part of the Scheme, as well as provide a buffer zone between the A303 and the SSSI.	ES Appendix 2.2 OEMP MW-BIO2 Figure 2.5 Environmental Masterplan	DCO Requirement, Schedule 2, Para. 4 DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan and OLEMP)	
ES Chapter 8, Section 8.8.30	Habitats created across the Scheme, including green bridges, to provide improved north-south and east-west connectivity for species and to create buffer zones and crossing points between the A303 and sensitive areas.	ES Appendix 2.2 OEMP MW-BIO2 Figure 2.5 Environmental Masterplan	DCO Requirement, Schedule 2, Para. 4 DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan and OLEMP)	
ES Chapter 8, Section 8.8.31 and 8.8.32	To ensure the habitats establishment, further botanical surveys and habitat condition assessments would be undertaken during the operational stage. Specific post-construction monitoring surveys would be undertaken to: <ul style="list-style-type: none"> a) inform the management of habitats and other features of the Scheme; and; b) confirm whether the mitigation is effective. 	ES Appendix 2.2 OEMP MW-BIO13 (botanical monitoring) ES Appendix 2.2 OEMP MW-LAN1 (LEMP)	DCO Requirement, Schedule 2, Para. 4 (botanical monitoring) DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan and OLEMP)	
Noise and Vibration - Construction				
ES Chapter 9, Section 9.8.1 a	Appointment of a Community Relations Manager (CRM) responsible for leading engagement with affected communities.	ES Appendix 2.2 OEMP Table 2.1	DCO Requirement, Schedule 2, Para. 4	

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
ES Chapter 9, Section 9.8.1 b – f	Use of BPM to minimise noise and vibration effects.	ES Appendix 2.2 OEMP PW-NOI1, PW-NOI4, MW-NOI1, MW NOI3 and MW-NOI5	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 9, Section 9.8.1 g	Compliance with standard working hours.	ES Appendix 2.2 OEMP PW-G4, MW-G12 and MW-G13	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 9, Section 9.8.1 h	No start-up or shut down of vibratory plant e.g. rollers or compactors, within 50m of receptors.	ES Appendix 2.2 OEMP PW- NOI4 and MW-NOI5	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 9, Section 9.8.3	Working hours would be restricted to Wiltshire Council's standard working hours of weekdays 07:30 – 18:00 and Saturday 07:30 - 13:00 north of Winterbourne Stoke and north of Amesbury	ES Appendix 2.2 OEMP MW-G12 and MW-G13	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 9, Section 9.8.4	The core working hours for the rest of the Scheme are weekdays 07:00 – 19:00 and Saturday 07:00 – 13:00. Working during these slightly extended daytime hours would only be permitted outside of the two identified sensitive areas at Amesbury and Winterbourne Stoke.	ES Appendix 2.2 OEMP PW-G4, MW-G12 and MW-G13	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 9, Section 9.8.6	There may be a requirement to undertake occasional works on evenings/ weekends/nights, such as to tie the Scheme into existing roads and bridge installations. This would be determined by the contractors once appointed and agreed with Wiltshire Council through the finalised CEMP.	ES Appendix 2.2 OEMP MW-G14	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 9, Section 9.8.7	During the Scheme construction phase appropriate mechanisms to communicate with local residents would be set up to highlight potential periods of disruption (e.g. web-based, newsletters, newspapers, radio announcements etc.).	ES Appendix 2.2 OEMP Table 2.1 and MW-G31	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 9, Section 9.8.9 and 10	The contractors would undertake and report noise and vibration surveys as is necessary to ensure and demonstrate compliance with all noise and vibration commitments and the requirements of the final CEMP.	ES Appendix 2.2 OEMP MW-NOI3 and MW-NOI6	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 9, Section 9.8.11-12	Regular onsite observation surveys and checks/audits would be undertaken to ensure that best practice Best Practicable Means (BPM) are being employed at all times.	ES Appendix 2.2 OEMP MW-NOI3 and MW-NOI6	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 9, Section 9.8.13	Noise and vibration monitoring to be undertaken during the construction phase. Vibration surveys would be undertaken at Stonehenge Cottages commencing when the TBM is approaching the cottages.	ES Appendix 2.2 OEMP PW-NOI4, PW-NOI5, MW-NOI3 and MW-NOI6	DCO Requirement, Schedule 2, Para. 4	
OEMP	Before any works are undertaken outside of core working hours and which comprise noise generating activities, the relevant contractor shall consider submission of an application to the Wiltshire Council (in a format as agreed) for prior consent under Section 61 of the CoPA.	ES Appendix 2.2 OEMP PW-NOI2 and MW-NOI2	DCO Requirement, Schedule 2, Para. 4	
OEMP	The preliminary works contractor(s), as relevant, and main works contractor shall prepare a noise and vibration management plan detailing the management and monitoring processes to be introduced across all construction sites and compounds.	ES Appendix 2.2 OEMP PW-NOI3 and MW-NOI3	DCO Requirement, Schedule 2, Para 4	

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
OEMP	The main works contractor shall have a Noise Insulation and Temporary Rehousing Policy for the Scheme.	ES Appendix 2.2 OEMP MW-NOI4	DCO Requirement, Schedule 2, Para 4	
Noise and Vibration - Operation				
ES Chapter 9, Section 9.8.14 a	The Scheme would minimise operational noise and vibration impacts by selecting a route alignment which takes the road away from residential receptors in Winterbourne Stoke.	Works Plan Sheets 3 and 4 of 15 (2.5)	Order limits to which land is able to be taken as shown on the Works Plans DCO Requirement, Schedule 2, Para 3	
ES Chapter 9, Section 9.8.14 b	Using a vertical alignment which uses a combination of natural landform and 'false cuttings' to integrate the Scheme into the landscape whilst at the same time, enclosing traffic and reducing noise in adjacent areas. In particular false cuttings to the north of Winterbourne Stoke.	Figure 2.5 Environmental Masterplan	DCO Requirement Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan and OLEMP)	
ES Chapter 9, Section 9.8.14 c	Setting the route within a tunnel and deep cutting within the WHS	ES Appendix 2.2 OEMP D-CH5 Works No.1E, 1F and 1G under Schedule 1 of the Draft DCO	DCO Requirement, Schedule 2, Para. 4 Schedule 1 of the Draft DCO DCO Requirement, Schedule 2, Para. 3	
ES Chapter 9, Section 9.8.14 d	Use of a noise absorbent finish at the entrance/exit of the tunnel and Green Bridge Four.	ES Appendix 2.2 OEMP D-NOI6	DCO Requirement, Schedule 2, Para. 4.	
ES Chapter 9, Section 9.8.14 f	The use of a thin surfacing system, which results in lower levels of noise generation than a standard hot rolled asphalt surface.	ES Appendix 2.2 OEMP D-NOI1	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 9, Section 9.8.14 g	Inclusion of 1.8m high absorptive noise barriers between the slip roads on both the north and south side of Countess flyover which conform with the current harmonised Specifications Standard BS EN 14388 (2005) and meet the A3 (DLα 8 to 11 dB) and B3 (DLR>24 dB) standards for sound absorption and airborne sound insulation as specified in BS EN 1793 part 1 and 2 (1998), or equivalent future standards approved by the Authority.	ES Appendix 2.2 OEMP D-NOI2	DCO Requirement, Schedule 2, Para. 4	

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
ES Chapter 9, Section 9.8.14 h	Inclusion of a 1.5m high solid parapet on the south side of the River Till viaduct.	ES Appendix 2.2 OEMP D-LAN2	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 9, Section 9.8.15	The surface finish of the retaining walls at the approaches to the tunnel portals and at Countess flyover (above the earthworks) would be designed to reduce the reflection of noise.	ES Appendix 2.2 OEMP D-NOI5	DCO Requirement, Schedule 2, Para. 4	
Stakeholder engagement	The noise emitted from operational fixed plant located at the tunnel service buildings shall not exceed the existing background level by more than 0 dB(A) at the nearest residential receptors when assessed in accordance with BS 4142: 2014.	ES Appendix 2.2 OEMP D-NOI3	DCO Requirement, Schedule 2, Para. 4	
Stakeholder engagement	Piling at the Countess Junction and the River Till viaduct shall be non-impact piling.	ES Appendix 2.2 OEMP D-NOI4 and MW-BIO3	DCO Requirement, Schedule 2, Para. 4	
Geology and Soils - Construction				
ES Chapter 10, Section 10.8.2	Further ground investigation would be undertaken prior to construction to inform the detailed design. These further studies would enable further consideration of risks from possible historical contamination areas.	ES Appendix 2.2 OEMP PW-GEO1 and PW-GEO2	DCO Requirement, Schedule 2, Para 4 Draft DCO, Schedule 2, Para.7	
ES Chapter 10, Section 10.8.3 and 4	Diversion and protection of the Esso oil pipeline.	Draft DCO, Schedule 11, Part 4.	Draft DCO, Schedule 11, Part 4.	
ES Chapter 10, Section 10.8.6	Construction techniques would be used which minimise the need for dewatering as far as reasonably practical.	ES Appendix 2.2 OEMP MW-WAT8	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 10, Section 10.8.7	To reduce the risk of creating preferential pathways from the surface to the underlying Chalk groundwater body, non-displacement piling methods would be used at Green Bridges Two to Four and those for the Countess Flyovers.	ES Appendix 2.2 OEMP MW-WAT7	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 10, Section 10.8.8	Compliance with relevant standards and legislation and the measures detailed within the OEMP.	ES Appendix 2.2 OEMP PW-G1, MW-G5 and MW-GEO1 – MW-GEO10	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 10, Section 10.8.9	Measures contained within the OEMP are designed to limit the possibility for dispersal and accidental releases of potential contaminants, soil derived dusts and uncontrolled run-off to occur during construction. The OEMP also establishes procedures for dealing with unexpected soil or groundwater contamination that may be encountered.	ES Appendix 2.2 OEMP PW-GEO1 MW-GEO1, MW-GEO2 and MW-GEO6 – MW-GEO8 (potential contaminants and soils management),	DCO Requirement, Schedule 2, Para. 4	

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
		MW-WAT3 – MW-WAT7 (water management)		
ES Chapter 10, Section 10.8.10	Contractors would develop a detailed Construction Environmental Management Plan (CEMP) for their part of the construction works in conjunction with stakeholders to ensure compliance with the environmental requirements set out in the OEMP.	ES Appendix 2.2 OEMP PW-G1 and MW-G5	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 10, Section 10.8.11	Adoption of the Code of Practice for Sustainable Use and Management of Soils on Construction Sites.	ES Appendix 2.2 OEMP MW-GEO3	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 10, Section 10.8.12	Topsoil would need to be removed during construction in order to prevent permanent burial beneath other earthworks. Such soils would be stockpiled and re-used, subject to acceptability, in the general earthworks for the Scheme such as landscaping and noise bunds.	ES Appendix 2.2 OEMP MW-GEO3 and MW-GEO7	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 10, Section 10.8.13	The effects on soil resources would be mitigated by employing high standards of soil handling and management during construction and incorporating the soil handling measures outlined in the DAMS.	ES Appendix 2.2 OEMP MW-GEO3 and MW-GEO7 DAMS	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 10, Section 10.8.14	Topsoil stripped during the construction of the Scheme would be re-used as soon as is practicable and stored in such a way as to minimise structural damage from weathering, construction traffic movements, and multiple handling. This would also minimise the potential for leaching of nutrients from soils.	ES Appendix 2.2 OEMP MW-GEO3 and MW-GEO7	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 10, Section 10.8.15	All materials proposed for re-use would be required to meet risk-based acceptability criteria. Soils would be protected from accidental contamination during storage and transit. Methods of soils handling and storage, including measures to prevent erosion by wind and surface water, would be detailed in method statements that would be prepared prior to the commencement of construction activities.	ES Appendix 2.2 OEMP MW-GEO3 and MW-GEO7	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 10, Section 10.8.16	The re-use of excavated material would be governed by a Materials Management Plan developed in accordance with the CL:AIRE Code of Practice.	ES Appendix 2.2 OEMP MW-GEO7 and MW-MAT2	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 10.8.17	Should the requirement arise for off-site disposal of excavated soils and waste, the material would be characterised to determine firstly whether it is Hazardous or Non-Hazardous waste in accordance with the EA's Technical Guidance WM3. Once this is established the appropriate disposal facility would be determined through Waste Acceptance Criteria (WAC) analysis, as required.	ES Appendix 2.2 OEMP MW-GEO7	DCO Requirement, Schedule 2, Para. 4	
ES Chapter, Section 10.8.18	Potential contamination impacts specific to construction workers during site preparation and construction would be mitigated by the following measures and through working in accordance with CIRIA C741 4th Edition 'Environmental Good Practice On Site'.	ES Appendix 2.2 OEMP MW-GEO1	DCO Requirement, Schedule 2, Para. 4	

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
ES Chapter, Section 10.8.19	The contractor shall prepare and implement a gas monitoring procedure based on the potential for presence of underground gases.	ES Appendix 2.2 OEMP MW-GEO10	DCO Requirement, Schedule 2, Para. 4	
ES Chapter, Section 10.9.11	Construction compounds would include the storage of potentially hazardous substances. Mitigation measures to prevent leakage and release of hazardous substances are set out within the OEMP	ES Appendix 2.2 OEMP MW-GEO8, MW-WAT2 and MW-WAT7	DCO Requirement, Schedule 2, Para. 4	
OEMP – Geology and soils	The main works contractor shall implement control measures for construction activities on or adjacent to the land identified as being affected by contamination.	ES Appendix 2.2 OEMP MW-GEO8	DCO Requirement, Schedule 2, Para. 4	
OEMP – Geology and soils	In the event that contaminated land, including groundwater, is found at any time, which was not previously identified in the environmental statement, Requirement 7 of the DCO is applicable and preliminary works contractor shall follow those provisions.	ES Appendix 2.2 OEMP PW-GEO2	DCO Requirement, Schedule 2, Para. 7	
Geology and soils - Operation				
ES Chapter 10, Sections 10.8.22 and 10.8.23.	The design of the Scheme includes measures that would contain and control any releases of contaminants along the highway and its associated infrastructure such as drainage control. The drainage proposals for the Scheme set out in the drainage strategy include measures to contain and control surface water runoff from the highway. To the west of the proposed tunnel, infiltration basins would be used to store and treat the runoff before discharging to ground. At Countess Roundabout a series of permanently wet linear ponds planted with reeds would be used to attenuate and treat the highway runoff before outfalling to existing ditches which convey the runoff to the River Avon.	ES Appendix 11.3 Road Drainage Strategy	DCO Requirement, Schedule 2 Para. 10.	
OEMP - Geology	During the tunnelling operation, the main works contractor shall ensure that monitoring of naturally occurring radiation is undertaken.	ES Appendix 2.2 OEMP MW-GEO5	DCO Requirement, Schedule 2, Para. 4	
Drainage and Water - Construction				
ES Chapter 11, Sections 11.8.3 a	Selecting a location for the crossing of the River Till that requires the minimum length to span it, minimising any impacts on surface water and groundwater flows and quality, hydromorphology and flood risk.	Works Plans Sheets 3 and 4 of 15 (TR010025-2.5) Work No.1B(i) under Schedule 1 of the Draft DCO		
ES Chapter 11, 11.8.3 b	The location and orientation of the River Till viaduct piers and foundations will be placed as far from the River Till as practically possible and to minimise obstruction of water flows over the floodplain.	ES Appendix 2.2 OEMP MW-WAT6 and D-BIO1	DCO Requirement, Schedule 2, Para. 4	

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
ES Chapter 11, 11.8.3 c	Design for the cutting to the western tunnel portal within the Scheme to be a retained cut for two thirds of its depth, to allow for the inclusion of structures that would reduce the ingress of groundwater that could occur when groundwater levels are high.	ES Appendix 2.2 OEMP D-CH5	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 11, Sections 11.8.3 d-f	The road and the drainage strategy are designed to mitigate pollution to higher standards than at present and minimise the risk of it flood, and causing flooding elsewhere, through the use of attenuation features to detain runoff from all events expected to occur with 1% annual probability or more frequently.	ES Appendix 11.3 Road Drainage Strategy	DCO Requirement, Schedule 2 Para. 10.	
ES Chapter 11, Sections 11.8.3 g	Selecting a route that avoids any new crossing of the River Avon.	Works Plans Sheet 9 of 15 (TR010025-2.5)	DCO Requirement, Schedule 2, Para. 3	
ES Chapter 11, Sections 11.8.3 i	Application of tunnel construction techniques (such as the use of Tunnel Boring Machines) that limit the requirement for dewatering during construction.	ES Appendix 2.2 OEMP MW-WAT8	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 11, Section 11.8.4 a - g	The water environment will be protected during the construction phase via the measures identified within the OEMP for the Scheme.	ES Appendix 2.2 OEMP PW-WAT1, PW-WAT2 and MW-WAT1 – MW-WAT15 inclusive	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 11, Section 11.8.5	A groundwater monitoring plan delivered as part of the OEMP.	ES Appendix 2.2 OEMP MW-WAT10	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 11, Section 11.8.6	The contractor would identify pollution risks (for example in the drainage system) and works will be undertaken in accordance with the wastewater strategy set out in the OEMP.	ES Appendix 2.2 OEMP MW-WAT3	DCO Requirement, Schedule 2, Para. 4 DCO Requirement, Schedule 2, Para. 10	
ES Chapter 11, Section 11.10.2	The OEMP sets out monitoring to be undertaken during the construction stage to ensure that the mitigation measures embedded in the scheme design are appropriately implemented.	MW-WAT15	DCO Requirement, Schedule 2, Para. 4	
Materials and Waste - Construction				
ES Chapter 12, Section 12.7.1 a – c	During the design and construction phases waste arisings would be prevented and designed out where practicable and opportunities to re-use material resources and support the circular economy would be sought.	ES Appendix 2.2 OEMP MW-MAT1 and MW-MAT2	DCO Requirement, Schedule 2, Para. 4	

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
ES Chapter 12, Section 12.7.3	The construction of the Scheme would be subject to measures and procedures defined within a Construction Environmental Management Plan (CEMP). The CEMP would be based on, and incorporate, the requirements of the OEMP. The CEMP would be would include a Site Waste Management Plan (SWMP).	ES Appendix 2.2 OEMP PW-G1, MW-G4 and MW-MAT1	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 12, Section 12.7.4 and 12.7.5	Contractors to adopt good practice in construction waste management. Measures to minimise waste and to reduce the likelihood of any localised impacts of waste on the surrounding environment to be included within a SWMP or MMP.	ES Appendix 2.2 OEMP MW-MAT1MW-MAT2, MW-WAT5 and MW-AIR1	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 12, Section 12.7.6	22% of aggregates should be secondary and recycled aggregates, for those applications where it is technically and economically feasible to substitute these alternative materials for primary aggregates.	ES Appendix 2.2 OEMP MW-MAT4	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 12, Section 12.7.7	A Site Waste Management Plan (SWMP) would be prepared for the Scheme in line with IAN 183/14. The SWMP would include procedures for monitoring the overall construction waste recovery rate and the proportion of secondary and recycled aggregate used in the Scheme, to confirm the assessment of materials impacts.	ES Appendix 2.2 OEMP MW-MAT1 and MW-MAT4	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 12, Section 12.7.8 - 11	The excavated material from the tunnelling operation would be processed as part of the tunnelling works, to produce a material suitable to be used on land to the east of Parsonage Down National Nature Reserve (NNR). This would avoid the adverse environmental effects on people and communities living along the routes to the off-site disposal facilities.	Figure 2.5 Environmental Masterplan	DCO Requirement, Schedule 2, Para. 8 (which, in referencing 'mitigation measures in the ES' includes Environmental Masterplan)	
OEMP - Materials	The main works contractor shall seek to achieve a recovery rate of 70% for construction and demolition waste (excluding excavated soil and stones).	ES Appendix 2.2 OEMP MW-MAT3	DCO Requirement, Schedule 2, Para. 4	
People and Communities - Construction				
ES Chapter 13, Section 13.8.1 a	Agricultural crossing incorporated into a green bridge over the new A303 northwest of Scotland Yard Farm to mitigate severance of Guinness Estate and Little Wishford Farm, Stoford.	Rights of Way and Access Plans (ref. B sheet 3 of 15) TR010025-2.6 ES Appendix 2.2 OEMP MW-COM1	DCO Requirement, Schedule 2, Para. 4 DCO Requirement, Schedule 2, Para. 3	
ES Chapter 13, Section 13.8.1 b	Dedicated agricultural access lane incorporated into B3083 Shrewton Road crossing to mitigate severance of Manor Farm, Winterbourne Stoke.	ES Rights of Way and Access Plans (ref. 7 sheet 3 of 15) TR010025-2.6 ES Appendix 2.2 OEMP MW-COM1	DCO Requirement, Schedule 2, Para. 4 DCO Requirement, Schedule 2, Para. 3	

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
ES Chapter 13, Section 13.8.1 c	Maintenance of agricultural access under River Till Viaduct to mitigate severance of Manor Farm, Winterbourne Stoke.	DCO Schedule 1 ES Appendix 2.2 OEMP MW-COM1	DCO Requirement, Schedule 2, Para. 4.	
ES Chapter 13, Section 13.8.1 d	Agricultural crossing incorporated into a green bridge to the east of the new Longbarrow Junction to mitigate severance of Boreland Farm with Westfield Farm.	DCO Schedule 1 Rights of Way and Access Plans (ref. 16 sheet 5 of 15) TR010025-2.6 ES Appendix 2.2 OEMP MW-COM1	DCO Requirement, Schedule 2, Para. 4 DCO Requirement, Schedule 2, Para. 3	
ES Chapter 13, Section 13.8.1 e	Revised agricultural access provided to mitigate severance for West Amesbury Farm with Park Farm.	DCO Schedule 1 Rights of Way and Access Plans (ref. 27 sheet 8 of 15) TR010025-2.6 ES Appendix 2.2 OEMP MW-COM1	DCO Requirement, Schedule 2, Para. 4 DCO Requirement, Schedule 2, Para. 3	
ES Chapter 13, Section 13.8.3 a	Arrangements for the maintenance of farm and field accesses affected by Construction.	ES Appendix 2.2 OEMP PW-COM1 and MW-COM1	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 13, Section 13.8.3 b	The protection and maintenance of livestock water supply systems, where reasonably practicable.	ES Appendix 2.2 OEMP MW-COM3	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 13, Section 13.8.3 c	The protection of agricultural land adjacent to the construction site, including the provision and maintenance of appropriate stock-proof fencing;	ES Appendix 2.2 OEMP MW-G28 and MW-COM3	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 13, Section 13.8.3 d	The adoption of measures to control the deposition of dust on adjacent agricultural crops.	ES Appendix 2.2 OEMP PW-AIR1 and MW-AIR1	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 13, Section 13.8.3 e	The control of invasive and non-native species and the prevention of the spread of weeds generally from the construction site to adjacent agricultural land. The adoption of measures to prevent, insofar as reasonably practicable, the spread of soil-borne, tree, crop and animal diseases from the construction area.	ES Appendix 2.2 OEMP PW-BIO1, MW-BIO5 and MW-COM2	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 13, Section 13.8.3 f	Liaison and advisory arrangements with affected landowners, occupiers and agents, as appropriate.	ES Appendix 2.2 OEMP Table 2.1, PW-COM1, MW-COM1 and MW-COM3	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 13, Section 13.8.4	Where unrestricted agricultural uses are to be resumed on land disturbed during the construction of the Scheme, good practice techniques in handling, storing and reinstating soils on that land would be adopted.	ES Appendix 2.2 OEMP MW-GEO4 and MW-GEO7	DCO Requirement, Schedule 2, Para. 4	

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
ES Chapter 13, Section 13.8.5 a	New restricted byways on the north and the south side of the new alignment both tying in with PRoW SLAN3, and a new segregated cycleway east from Winterbourne Stoke to the new Longbarrow Junction;	Rights of Way and Access Plans (Refs. A and B sheets 1 - 3 of 15, ref. D sheet 3 of 15 and Ref. Z sheet 4 of 15) TR010025-2.6	DCO Requirement, Schedule 2, Para. 3	
ES Chapter 13, Section 13.8.5 b	Provision of Green Bridges, one of which facilitates the realignment of the existing WSTO6B PRoW and two of which each provide a new NMU route.	Rights of Way and Access Plans (ref. F sheet 4 of 15 TR010025-2.6)	DCO Requirement, Schedule 2, Para. 3	
ES Chapter 13, Section 13.8.5 c	The tunnelling of the A303 and downgrading the current road in that section to a route open to NMUs only and extending to the Stonehenge Visitor Centre to the north and AMES12 to the south.	Rights of Way and Access Plans (refs. I, IA, IB sheet 5 of 15, ref. I and J sheet 6 of 15, ref. J sheets 7 and 8 of 15, refs. U and UA sheet 14 of 15 and refs. IA and V sheet 15 of) TR010025-2.6	DCO Requirement, Schedule 2, Para. 3	
ES Chapter 13, Section 13.8.7 a	The main works contractor shall implement traffic management measures during the construction of the Scheme on all public roads and non-motorised user (NMU) paths. The construction contractor would liaise with Wiltshire Council and the police to agree and implement a Traffic Management Plan.	ES Appendix 2.2 OEMP PW-TRA1 and MW-TRA1 – MW-TRA11	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 13, Section 13.8.7 b	Appropriate mechanisms to communicate with local residents would be set up to highlight potential periods of disruption.	ES Appendix 2.2 OEMP Table 2.1 and MW-G31	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 13, Section 13.8.8	The Scheme would improve safety for all road users, as grade separation would potentially reduce the accident clusters that occur at the existing at-grade roundabouts. For motorised travellers, safety measures include but are not limited to signage and signalling, increased verge width to accommodate highway features such as signs, vehicle restraint systems, communication equipment and laybys; and central reserves providing appropriate visibility.	Works Plans (TR010025 2.5) (Scheme design)	DCO Requirement, Schedule 2, Para. 3 (scheme design) Contractual commitment between The Authority and the contractor (highway features)	
ES Chapter 13, Section 13.8	The Scheme shall be designed to improve safety for all road users in accordance with relevant design standards. Measures may include but are not limited to signage and signaling and increased verge width to accommodate highway features such as signs, vehicle restraint systems, communication equipment and laybys.	Works Plans (TR010025 2.5) (Scheme design)	DCO Requirement, Schedule 2, Para. 3 (scheme design) Contractual commitment between The Authority and the contractor (highway features)	

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
OEMP – People and communities	Where land is to be restored to agriculture the main works contractor shall liaise with the landowner / tenant and set out the detail for restoration on each specific area of farmland. The land restoration will proceed with full consultation between with the landowner/tenant and the main works contractor including inspection of works where applicable and in accordance with requisite site health and safety procedures.	ES Appendix 2.2 OEMP MW-COM4	DCO Requirement, Schedule 2, Para. 4	
OEMP – People and communities	The main works contractor shall undertake inspections of restored agricultural land with the landowner/tenant and Highways England's soils experts (and valuer, if required) to assess the progress of the restoration.	ES Appendix 2.2 OEMP MW-COM5	DCO Requirement, Schedule 2, Para. 4	
Stakeholder engagement	Where an existing private water supply to a farm is adversely and directly affected by the construction of the Scheme, the main works contractor shall, if requested by the farmer or landowner to do so, provide or procure or meet the reasonable cost of the provision of an alternative supply of water (at the contractor's option). Where the supply is affected temporarily by the construction of the Scheme, then the alternative supply need only be supplied for the period during which it is affected. Where a request is made by the farmer or landowner for a permanent supply due to permanent severance of the existing supply caused by the construction of the Scheme, the main works contractor shall, where provision of an alternative means of supply can be demonstrated by the land owner/farmer to be reasonably required for his business, provide or procure or meet the reasonable cost (at the contractor's option) of a permanent means of alternative supply of water.	ES Appendix 2.2 OEMP MW-COM6	DCO Requirement, Schedule 2, Para. 4	
Stakeholder engagement	The main works contractor shall ensure that the existing land drainage system is not compromised as a result of construction. Land drainage systems will be maintained during construction and reinstated on completion. Drainage surveys will be undertaken to establish the existing drainage position including any related farm drainage that may be affected by the Scheme. This will include the design of any land drainage works required during construction, and on the design and timing of any land drainage works required for the subsequent restoration of the land.	ES Appendix 2.2 OEMP MW-COM7	DCO Requirement, Schedule 2, Para. 4	
Stakeholder engagement	Prior to entry to any agricultural business landholding, the main works contractor shall undertake a Record of Condition survey.	ES Appendix 2.2 OEMP MW-COM8	DCO Requirement, Schedule 2, Para. 4	
Climate Change - Construction				
ES Chapter 14, Section 14.8, Table 14.12	The construction contractor will develop and implement a plan to reduce energy consumption and associated carbon emissions.	ES Appendix 2.2 OEMP MW-AIR5	DCO Requirement, Schedule 2, Para. 4	
ES Chapter 14, Section 14.8, Table 14.12	Where practicable, measures will be implemented to manage material resource use during construction. These measures will be outlined within a MMP.	ES Appendix 2.2 OEMP MW-MAT2 and MW-MAT4	DCO Requirement, Schedule 2, Para. 4	

Source Ref.	Mitigation	Reference Documents	How the action is to be secured	Reasons for addition / revision
Climate Change - Operation				
ES Chapter 14, Section 14.8, Table 14.13	The Scheme would be designed to improve its resilience to climate change through a range of design and material specification measures.	Scheme design – DCO Schedule 1	DCO Schedule 2 Requirement 3 Contractual requirement	
ES Chapter 14, Section 14.8, Table 14.13	A range of measures would be in place to improve the resilience of the Scheme to climate change during operation including maintenance plans for drainage systems to allow them to operate effectively and systems in place to assist road users through the installation of appropriate emergency systems being in place, e.g. variable messaging systems (VMS) are specified as part of the design.	ES Appendix 11.3 Road Drainage Strategy DCO Schedule 1 (VMSs)	DCO Requirement, Schedule 2, Para.10	

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