highways england

Volume 3

A303 Stonehenge

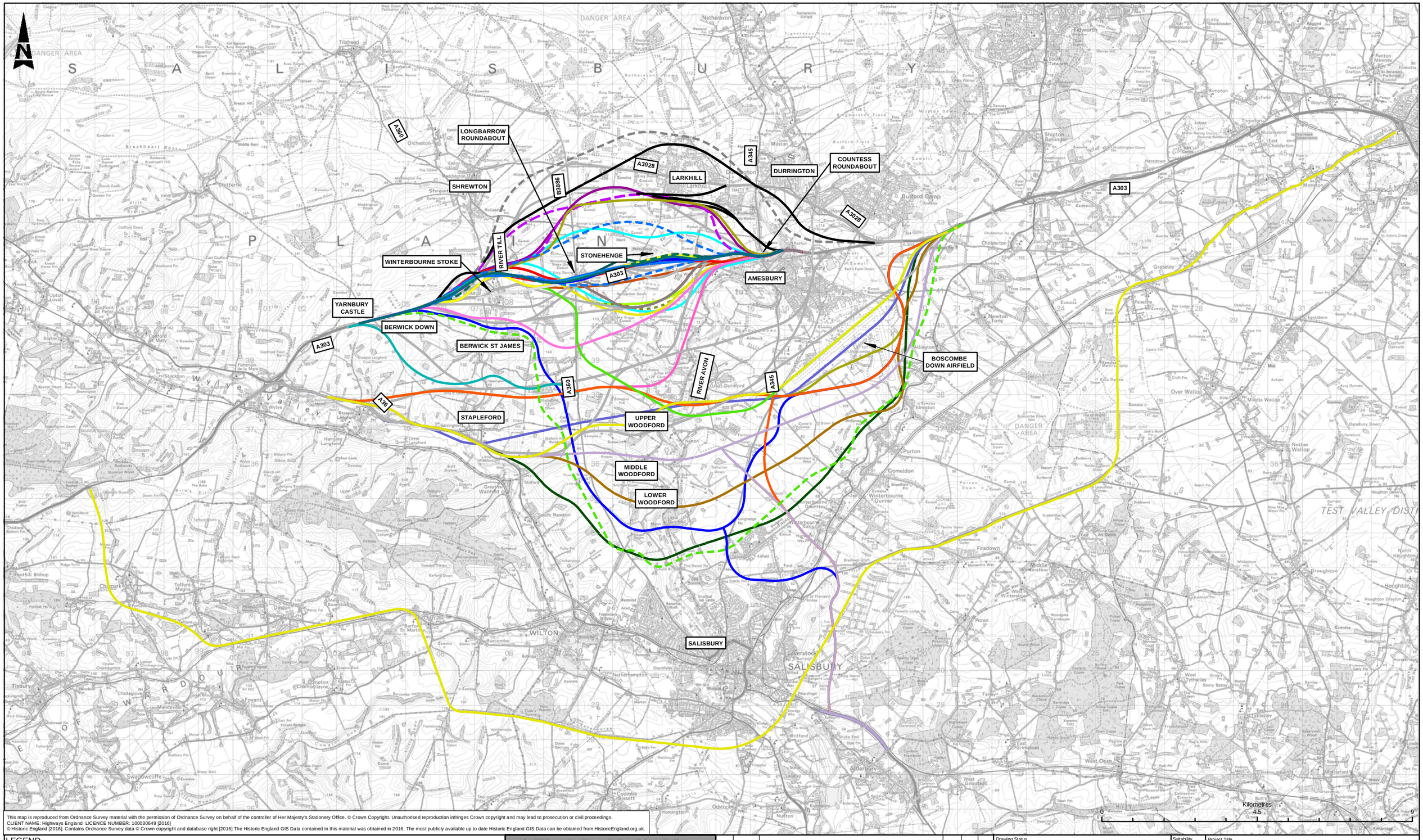
Amesbury to Berwick Down
Technical Appraisal Report

Appendix B
Initial corridors appraisal
(Design Fix A)

Public Consultation 2017

Appendix B Initial corridors appraisal (Design Fix A)

B.1 Historical routes



LEGEND

- 1991_1993 S1
- 1991_1993 S1(B)
- 1991_1993 S1-S1(A)-S1(B)
- 1991_1993 S2-S2(A)
- 1991_1993 S2-S2(B)
- 1991-1993 E1
- 1991_1993 E2
- 1991_1993 E3
- 1991-1993 E4
- 1991_1993 E5
- 1991_1993 E6
- 1991_1993 E7
- 1991_1993 N1
- 1991_1993 N2
- 1991_1993 N4
- 1991_1993 W1
- 1991_1993 W2
- 1991_1993 W4
- 1991_1993 W5
- 1991_1993 W6
- 1994 Purple Route
- 1994 Purple Variant Route
- 1998 Previous Options Considered
- 1999-Winterbourne Stoke Bypass
- 1999-2km Tunnel Cut and Cover
- 2003 Southern Alternative Route
- 2004 Alternative Route 1
- 2004 Alternative Route 2
- 2004 Alternative Route 3
- 2004 Alternative Route 4
- 2004 Alternative Route 7 Case Route
- 2004 Aubrey Alternative AR1 AR5 AR8 AR9
- 2004 Berkley-Matthews Route
- 2004 Jackson Route AR2
- 2004 Lawrence Alternative AR10
- 2006 Alternative Route FNR1
- 2006 Alternative Route FSR1
- 2006 Alternative Route FSR2
- 2006 Alternative Route FSR3
- 2006 Alternative Route NSR1
- 2006 Alternative Route NSR3
- 2006 Alternative Route NSR4
- 2006 Alternative Route NSR5
- 2003 Published Scheme
- 2006 Northern Route
- 2006 Southern Route
- 2015 2.5km Tunnel
- 2015 2.9km Tunnel
- 2015 Andy Rhind-Tutt Alternative
- 2015 Offline Dualling to North
- Option 9
- Option 13
- Option 19
- Option 20

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made in the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommission / Demolition
None

Rev	Date	Description	By	Chk'd	App'd
P04	07/11/16	FINAL ISSUE	FG	GS	SL

Drawing Status: FIT FOR INTERNAL REVIEW AMND COMMENT
Suitability: S3

Client: highways england

Designers: ARUP ATKINS

Project Title: A303 AMESBURY TO BERWICK DOWN

Drawing Title: HISTORICAL ROUTES

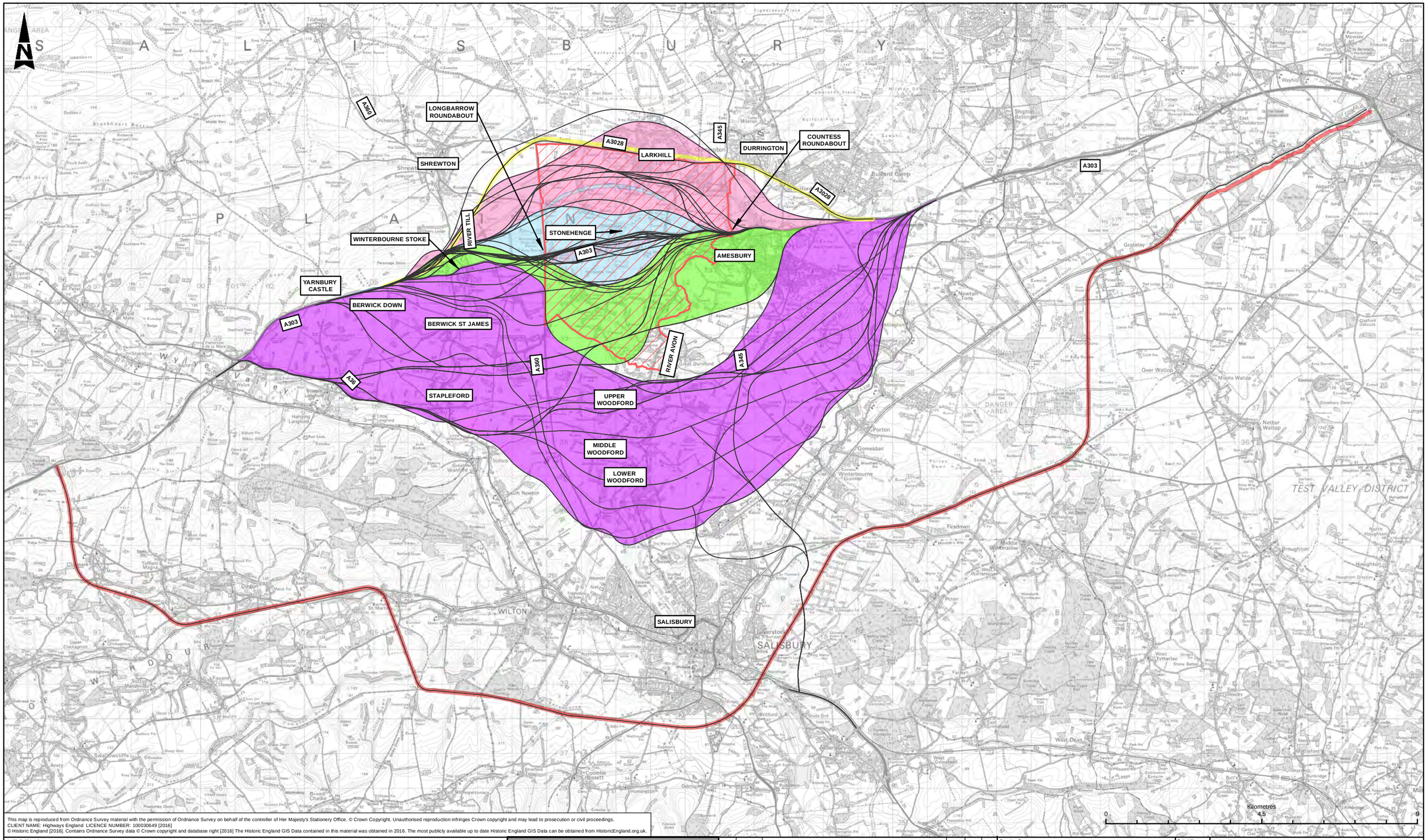
Scale	Designed / Drawn	Checked	Approved	Authorised
1:100,000	FG	GS	SL	SH

Original Size	Date	Date	Date	Date
A3	07/11/16	07/11/16	07/11/16	07/11/16

Drawing Number: Project | Originator | Volume | Location | Type | Role | Number
HE551506-AA-GEN-SWI-DR-CX-000018

Revison: P04

B.2 Corridors identified



LEGEND

- HISTORICAL ROUTES
- CORRIDOR A ROUTE NORTH OF A303 (OUTSIDE WHS)
- CORRIDOR B ROUTES NORTH OF A303 (INSIDE WHS)
- CORRIDOR C AT GRADE ROUTES WITHIN 1.0KM OF A303 (INSIDE WHS)
- CORRIDOR D TUNNEL ROUTES (INSIDE WHS)
- CORRIDOR E ROUTES SOUTH OF A303 (INSIDE WHS)
- CORRIDOR F ROUTES SOUTH OF A303 (OUTSIDE WHS) AND NORTH OF SALISBURY
- CORRIDOR G ROUTE SOUTH OF A303 (OUTSIDE WHS) AND SOUTH OF SALISBURY
- WORLD HERITAGE SITE

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made in the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommission / Demolition
None

Rev	Date	Description	By	Ch'k'd	App'd
P05	27/10/16	FINAL ISSUE	AH	GS	SL

Drawing Status: FIT FOR INTERNAL REVIEW AND COMMENT
Suitability: S3

Client: highways england

Designers: ARUP ATKINS

Project Title: A303 AMESBURY TO BERWICK DOWN

Drawing Title: CORRIDORS IDENTIFIED

Scale	Designed / Drawn	Checked	Approved	Authorised
1:100,000	AH	GS	SL	SH

Original Size	Date	Date	Date	Date
A3	04/11/16	04/11/16	04/11/16	04/11/16

Drawing Number: HE551506-AA-GEN-SWI-DR-CX-000015
(Project | Originator | Volume | Location | Type | Role | Number)

Revision: P05

B.3 Environmental assessment methodology and scoring assessment

Appendix B3: Environmental assessment methodology and scoring

Topic	Strategic policies and aims a) Highways England Licence (HEL) b) Road Investment Strategy (RIS) Performance Specification c) Highways England Delivery Plan (HEDP), d) Highways England Strategic Business Plan (HESBP)	NPSNN – Decision making criteria	Relevant client objectives / requirements	Environmental receptors	Approach to assessment	Indicative rating values		
						Red	Amber	Green
Historic Environment	HEDP: Commits to enacting conservation measures at those identified heritage assets most at risk by end of this Road Period, and reviewing the influence of the network on the setting and condition of the historic environment close to the network, identifying and delivering enhancement opportunities.	Paras 5.128-138	**Cultural heritage:** to contribute to the conservation and enhancement of the World Heritage Site by improving access both within and to the site. **Environment and community:** to contribute to the enhancement of the historic landscape within the World Heritage Site, to improve biodiversity along the Route and to provide a positive legacy to communities adjoining the road.	Stonehenge, Avebury and Associated Sites World Heritage Site (Stonehenge WHS)	Geographical Information Systems (GIS) data and analysis of route corridors, considering the potential harm or benefit to the fabric (including buried archaeology), setting and character of the WHS	Substantial harm to the Outstanding Universal Value (OUV) of the WHS probable.	Less than substantial harm to the OUV of WHS probable.	No harm to; or benefits for, the OUV of the WHS.
				Scheduled Monuments (SMs)	GIS data and analysis of route corridors, considering potential harm or benefit to the fabric and setting of SMs.	Substantial harm to one or more SMs probable.	Less than substantial harm to multiple SMs probable.	No harm to any, or less than substantial harm to a limited number of SMs.
				Designated Assets: Listed Buildings, Conservation Areas and Registered Parks and Gardens	GIS data and analysis of route corridors, considering potential harm or benefit to the fabric and setting of Listed Buildings, Conservation Areas and Registered Parks and Gardens.	Substantial harm to one or more designated assets probable.	Less than substantial harm to multiple designated assets probable.	No harm to, or less than substantial Harm to a limited number, of designated assets probable.
Biodiversity	RIS: - biodiversity is one of 2 Key Performance Indicators (KPIs) identified for Reference Period 1 (RP1); sets an aspiration that the operation, maintenance, and enhancement of the Strategic Road Network (SRN) should move to a position that delivers no net loss of biodiversity. And, in the long term, the Company should deliver a net gain across its broader range of works; KPI: Biodiversity: Delivery of improved biodiversity, as set out in the Company's Biodiversity Action Plan. Target: The Company should publish its Biodiversity Action Plan by 30 June 2015 and report annually on how it has delivered against the Plan to reduce net biodiversity loss on an ongoing annual basis.	Paras 5.24-35	**Environment and community:** to improve biodiversity along the Route. Expansion on headline requirements - • Biodiversity within new landscaping along the Route will ensure a net addition over that existing. • Land no longer forming the public highway within the WHS will be returned to the adjoining landowner. It will be landscaped in accordance with the adjoining land.	International Designation (Special Area of Conservation (SAC) / Special Protection Area (SPA) / Ramsar and candidate SAC / potential SPA / potential Ramsar)	GIS mapping of International and National Designations across the broad study area and analysis of route corridors against these features to determine likely habitat loss, severance or indirect effects. 200m is considered an appropriate buffer distance for considering indirect effects at this stage, and is based on DMRB guidance for assessing air quality effects on protected sites (SSSIs, SACs, SPAs); additionally, whilst effects vary with individual ecological receptors, this distance is likely to cover the majority of other indirect impacts such as (but not limited to) acoustic disturbance, visual disturbance and lighting effects. It is recognised that the reduction in the presence of traffic and possible removal of infrastructure associated with the closure of parts of the existing A303 could result in benefits to species, including those associated with nearby European Sites. However given the lack of detail and certainty around the treatment of any closed section of the A303, and limited up to date information on the distribution of the habitats and species within or in proximity to the site, these benefits cannot be taken	Habitat loss or severance. Potential for significant adverse effects to occur.	Immediately adjacent/ within 200m for air quality and noise reasons or clearly connected hydrologically. Potential for adverse effects to occur.	In excess of 200m from such designations.
				National Designation Sites of Special Scientific Interest (SSSI) / National Nature Reserve (NNR)		Habitat loss or severance. Potential for significant adverse effects to occur.	Immediately adjacent/ within 200m for air quality and noise reasons. Potential for adverse effects to occur.	In excess of 200m from such designations.

Topic	Strategic policies and aims a) Highways England Licence (HEL) b) Road Investment Strategy (RIS) Performance Specification c) Highways England Delivery Plan (HEDP), d) Highways England Strategic Business Plan (HESBP)	NPSNN – Decision making criteria	Relevant client objectives / requirements	Environmental receptors	Approach to assessment	Indicative rating values		
						Red	Amber	Green
	HEDP: Commits to reviewing opportunities for specific measures to contribute to a coherent and resilient ecological network by enabling species to move between core areas, and for contributing to SSSI or core area of high nature conservation value which contain rare or important habitats or ecosystem services.				into account at this stage and will be considered in more detail at subsequent stages in the design process.			
				Ancient Woodland	GIS mapping of Ancient Woodland across broad Stage 1 study area and analysis of route corridors against this resource to determine likely habitat loss, severance or indirect effects. 200m is considered an appropriate buffer distance for considering indirect effects at this stage, based on DMRB guidance for assessing air quality effects on protected sites (SSSIs, SACs, SPAs); additionally, whilst effects vary with individual ecological receptors, this distance is likely to cover the majority of other indirect impacts such as (but not limited to) acoustic disturbance, visual disturbance and lighting effects.	Habitat loss or severance. Potential for significant adverse effects to occur.	Immediately adjacent or within 200m for air quality and noise reasons. Potential for adverse effects to occur.	In excess of 200m from such designations.
Air Quality	HEL:- the Licence holder should have regard to "Seeking to improve the well-being of road users and communities affected by the network" RIS:- reducing the negative impacts on air quality which will support wider Government initiatives targeted at improving air quality	Paras 5.9-13	**Environment and community:** to provide a positive legacy to communities adjoining the road. Expansion on headline requirements - "The existing road will be de-trunked as it passes through Winterbourne Stoke. This will improve noise levels, air quality and the landscape for the residents of the village."	Air Quality Management Areas (AQMAs)	Based on corridor GIS evaluation of AQMAs within 200m of the Scheme the assessment considered: • If the route corridor affects traffic related AQMA within ARN (affected road network) (+/-) • If there are AQMAs within the route corridors (based on an assumption that the corridor introduces a new source into an existing AQMA resulting in an adverse effect).	Materially worsened AQMA position (>1 AQMA or 1 if corridor bisects).	Worsened AQMA position (one AQMA adjacent to corridor).	No change or beneficial AQMA position.
				Sensitive air quality receptors – settlements and designated ecological sites	Based on the corridor GIS evaluation to count sensitive air quality receptors - settlements and ecological sites within each corridor the assessment considered the following to pick up non-AQMA impacts: • If the corridor moves the A303 closer/away from areas of sensitive receptors • The weighting of properties by relative size. NB new developments and settlements are not accounted for in the initial route appraisal.	>10 settlements/ designated sites impacted.	5-10 settlements/ designated sites impacted.	<5 settlements/ designated sites impacted, or clear benefits to receptors (source moves >200m from receptors).

Topic	Strategic policies and aims a) Highways England Licence (HEL) b) Road Investment Strategy (RIS) Performance Specification c) Highways England Delivery Plan (HEDP), d) Highways England Strategic Business Plan (HESBP)	NPSNN – Decision making criteria	Relevant client objectives / requirements	Environmental receptors	Approach to assessment	Indicative rating values		
						Red	Amber	Green
				Unit trip change (as proxy for air quality (AQ) and carbon emissions)	Based on the Unit trip change in emissions as proxy for AQ and carbon that measured the change in vehicle kilometres for an indicative option route through each corridor multiplied by fleet average emission rate. Change in emissions are then ranked by size - RAG % change defined from range and applying expert judgement in order to provide differentiation between corridor scores	Large increase in emissions from route corridor.	Medium increase in emissions from route corridor.	Small or no increase in emissions from route corridor.
				Pollution Climate Model (PCM) links (re UK compliance with EU Limit Values (LVs))	Excluded PCM based criteria at initial sift as very few PCM links in study area, and none currently show exceedances.			
Noise	HEL: - the Licence holder should have regard to "Seeking to improve the well-being of road users and communities affected by the network" RIS: - Noise KPI: Number of Noise Important Areas mitigated. Target: mitigate at least 1,150 Noise Important Areas over RP1.	Paras 5.193 - 5.196	**Environment and community:** to provide a positive legacy to communities adjoining the road. Expansion on headline requirements - • The strategic Route will be redirected so as to reduce its impact on the stone circle, both sight and sound. • The existing road will be de-trunked as it passes through Winterbourne Stoke. This will improve noise levels, air quality and landscape for the residents of the village.	WHS	The assessment of the impact of road traffic noise on the WHS undertaken by reviewing the extent of each route corridor within the WHS boundary, and the extent of any tunnel option as this would remove road traffic noise entirely for the majority of its length. A RAG score is assigned to each option, based on the professional judgment of the scale of the noise reduction predicted.	Negligible reduction in road traffic noise across the whole WHS (qualitative).	Minor reduction in road traffic noise across the whole WHS (qualitative).	Major reduction in road traffic noise across the whole WHS (qualitative).
				Noise climate along the existing A303 corridor	GIS evaluation to identify/count: • The extent of the section of the existing A303 corridor to be detrunked • The sections within the existing A303 corridor expected to experience a reduction of 20% or more in flow • The associated dwellings and/or non-residential sensitive receptors within each route corridor. A RAG score is assigned to each option, based on the professional judgment of the number of dwellings and/or noise sensitive non-residential receptors in the existing A303 corridor that are adjacent to a section expected to experience a reduction of 20% or more in traffic flows.	Number of dwellings and/or noise sensitive non-residential receptors in the existing A303 corridor that are adjacent to a section expected to experience a reduction of 20% or more in traffic flows - Few.	Number of dwellings and/or noise sensitive non-residential receptors in the existing A303 corridor that are adjacent to a section expected to experience a reduction of 20% or more in traffic flows - Some.	Number of dwellings and/or noise sensitive non-residential receptors in the existing A303 corridor that are adjacent to a section expected to experience a reduction of 20% or more in traffic flows - Many.
				Traffic noise impact on communities	GIS evaluation and the assessment of traffic noise impact included: • Identification of all dwellings within each route corridor. • Route corridor area. • Density dwellings within each route corridor.	Density of dwellings in route corridor – High.	Density of dwellings in route corridor – Medium.	Density of dwellings in route corridor – Low.

Topic	Strategic policies and aims a) Highways England Licence (HEL) b) Road Investment Strategy (RIS) Performance Specification c) Highways England Delivery Plan (HEDP), d) Highways England Strategic Business Plan (HESBP)	NPSNN – Decision making criteria	Relevant client objectives / requirements	Environmental receptors	Approach to assessment	Indicative rating values		
						Red	Amber	Green
					A RAG score is assigned to each option, based on the professional judgment of the density of dwellings in route corridor.			
				Noise Climate within Important Areas (IA) (in the DEFRA 2014 Action Plan)	The assessment included: • Identification of all IAs within the route corridors. • Qualitative assessment of how each route corridor affects each of the IAs weighted by size of community. A RAG score is assigned to each option, based on the professional judgment of the number of IAs with weighting for the size of community affected.	Number of IAs improved, with each IA weighted by size of community (qualitative) – None.	Number of IAs improved, with each IA weighted by size of community (qualitative) – Some.	Number of IAs improved, with each IA weighted by size of community (qualitative) – Many.
				Traffic noise impact on sensitive facilities / land-use	GIS evaluation and the assessment of traffic noise impact included: • Identification of all non-residential sensitive facilities / land-use within each route corridor. • Route corridor area. • Density of facilities /land-use within each route corridor. A RAG score is assigned to each option, based on the professional judgment of the density of non-residential sensitive facilities / land-uses in the route corridor.	Density of non-residential sensitive facilities / land-uses in route corridor - High	Density of non-residential sensitive facilities / land-uses in route corridor - Medium	Density of non-residential sensitive facilities / land-uses in route corridor - Low
Landscape	The Licence holder should have regard to "Seeking to improve the well-being of road users and communities affected by the network" HEDP: - commits to reducing visual intrusion to neighbours, and to amending the design of our roads where appropriate, to better address national, regional and local priorities, and to promoting schemes that are better integrated with the surrounding environment at a landscape scale, which also deliver associated ecosystem service benefits. We will do	Paras 5.149-158	**Environment and community:** to contribute to the enhancement of the historic landscape within the WHS, to improve biodiversity along the Route and to provide a positive legacy to communities adjoining the road. Expansion on headline requirements - • The existing road will be de-trunked as it passes through Winterbourne Stoke. This will improve noise levels, air quality and landscape for the residents of the village.	Nationally designated areas (Area of Outstanding Natural Beauty (AONB) and National Parks)	Corridor assessment using GIS mapping of nationally designated landscape areas considering potential for harm to the landscape and scenic quality of nationally designated areas (AONB and National Parks).	The route corridor contains nationally designated landscape areas.	The route corridor has a visual connection to a nationally designated landscape area that lies outside the corridor.	The route corridor does not contain a nationally designated area and has no visual connection to any nationally designated landscape areas.
				Locally valued landscape character of higher landscape or visual sensitivity (outside nationally designated landscape areas)	Corridor assessment using GIS mapping, published landscape character assessments and local development plans considering potential for harm to areas of locally valued landscape character of higher landscape or visual sensitivity outside nationally designated landscape areas.	The route corridor has the potential for significant adverse effects on the locally valued landscape resource of higher	The route corridor has the potential to minimise significant adverse effects on the locally valued landscape	The route corridor avoids adverse significant effects on the locally valued landscape

Topic	Strategic policies and aims a) Highways England Licence (HEL) b) Road Investment Strategy (RIS) Performance Specification c) Highways England Delivery Plan (HEDP), d) Highways England Strategic Business Plan (HESBP)	NPSNN – Decision making criteria	Relevant client objectives / requirements	Environmental receptors	Approach to assessment	Indicative rating values		
						Red	Amber	Green
	this in-line with National Character Area profiles.					landscape or visual sensitivity.	resource of higher landscape or visual sensitivity.	resource of higher landscape or visual sensitivity
				Sensitive visual receptors, including residents and visitors	An assessment of the potential for adverse effects to visual receptors, based on a corridor assessment using GIS mapping.	The route corridor contains a large number of sensitive visual receptors who do not already have views of large highway infrastructure.	The route corridor contains some sensitive visual receptors who do not already have views of large highway infrastructure	The route corridor contains few sensitive receptors who do not already have views of large highway infrastructure.
Water	HEL: - the Licence holder should adapt its network to operate in a changing climate, including assessing, managing and mitigating the potential risks posed by climate change HEDP: Commits to improving resilience to flooding and reducing flood risk to communities adjacent to the network. Activity will focus on addressing all identified high priority flood risk locations recorded in our Drainage Data Management System, and to improving water quality through better environmental protection and specifically improving surface and groundwater quality by addressing priority locations of known pollution	Flood Risk - Paras 5.98-5.109 Water Quality and resources - Paras 5.224-5.227	N/A	Source Protection Zones	Assessment using publically available data showing extent of SPZs, to consider whether SPZs lie within the route corridor and potential for significant adverse effects to occur. Absolute risk scale has been applied to reflect development controls in areas lying within SPZ1, and to a lesser extent SPZ2 and SPZ3. Impacts from certain activities (namely dewatering during tunnel construction) have the potential to adversely impact groundwater at locations outside of the route corridors. Therefore for route corridors which include tunnelling methods the potential impacts on any nearby SPZs have also been considered.	Within SPZ 1 - Potential for significant adverse effects to occur based on current EA policy.	Within SPZ 2 or 3. Potential for adverse effects to occur.	Outside SPZs. Potential for neutral/no effects, although residual risks exist due to chalk aquifer underlying entire study area.
				River Till crossing	Assessment using open source GIS layers (Rivers DRN layer, online flood zone and Water Framework Directive status maps and Priority Habitat Inventory data) consider the likely effect of new design or redesign of existing based on a relative scale and expert judgement. Impacts from certain activities (namely dewatering during tunnel construction) have the potential to adversely impact groundwater at locations outside of the route corridors. Therefore for route corridors which include tunnelling methods the impact on groundwater flows for nearby surface water bodies have also been considered.	New crossings in areas that might be especially sensitive to changes in water quality and flows and/or where the presence of extensive areas of floodplain will need to be crossed.	New crossings in areas that may be less sensitive to changes in water quality and flows and/or where limited extent of designated floodplain are present.	No new river crossings, or where redesigning existing crossings might provide added ecological and other benefits.
				River Avon crossing				

Topic	Strategic policies and aims a) Highways England Licence (HEL) b) Road Investment Strategy (RIS) Performance Specification c) Highways England Delivery Plan (HEDP), d) Highways England Strategic Business Plan (HESBP)	NPSNN – Decision making criteria	Relevant client objectives / requirements	Environmental receptors	Approach to assessment	Indicative rating values		
						Red	Amber	Green
Geology, Soils and Materials	-	Section 5.43-5.45 Waste Management Section 5.173-5.178 - BMVAL	N/A	Prevention of waste	Professional judgement using maps of route corridor, which includes an estimation of arisings based on the distance covered by the corridors and the potential route options (whether they would incorporate a tunnel or not). Eg route options that contain tunnels and/or cover the longest distance are likely to generate more arisings compared to other corridors.	Potential for significant generation of surplus arisings to occur.	Potential for moderate generation of surplus arisings to occur.	Potential for minor generation of surplus arisings to occur.
			N/A	Impact on best and most versatile (BMV) agricultural land	Qualitative assessment based on a study of Google Earth imagery, ALC grades on Magic.gov.uk, topographic maps showing contours and the published 1:250,000 Soil Map of South East England. A RAG score is assigned to each option depending on whether the option is considered likely to result in a neutral, adverse or significant adverse effect based on professional judgement.	Potential for significant adverse effects to occur i.e. large amount of BMV land within the route corridor.	Potential for adverse effects to occur i.e. localised BMV land within the route corridor.	Potential for neutral effects to occur i.e. no BMV land within the route corridor.
			N/A	Current or historical potentially contaminative land uses/previously developed land	Professional judgement using freely available online information (in the absence of GIS) viewed in the context of the corridors. Reference to Environment Agency's 'Industry Profiles' and Environment Agency's R&D Technical Report P5-042/TR/01 'Technical Guidance on Special Sites: MoD Land'. Assumed a 'realistic and worst case' scenario that potentially contaminative land uses identified have resulted in land contamination.	Potential for significant adverse effects to occur i.e. potentially contaminative land uses identified which present significant constraints to the Scheme.	Potential for adverse effects to occur i.e. localised and/or minor potentially contaminative land uses identified within route corridor.	Potential for neutral effects to occur i.e. potentially contaminative land uses absent or very infrequent within the route corridor.
People and Communities	HEL: - the Licence holder should have regard to "Seeking to improve the well-being of road users and communities affected by the network"	Paras 3.17 and 3.22	To contribute to conservation and enhancement of WHS by improving access both within and to the site. To provide a positive legacy to communities adjoining the road.	Public Rights of way (PRoW) within the WHS affected by severance or direct land take	DMRB Stage 1 assessment desk study to determine severance of PRoW using online mapping, previous studies and updated data sets to complete a qualitative assessment sufficient to differentiate between corridors. Route corridors used as the study area for the assessment.	Direct severance of PRoW required. No access to PRoWs within and to the WHS.	No or limited reduction in severance. People are likely to be dissuaded from making trips. Other trips will be made longer or less attractive.	Current access to PRoW and WHS to be maintained, new PRoW created and/or improvements to access to existing PRoWs.
		Paras 3.17 and 3.22		Number of communities affected by severance	DMRB Stage 1 assessment desk study using online mapping and previous studies to complete a qualitative assessment sufficient to differentiate between corridors. Route corridors used as the study area for the assessment.	Potential for additional severance for >3 communities.	Potential for additional severance for 1-3 communities.	Assists in joining up communities and linking PRoWs.

Topic	Strategic policies and aims a) Highways England Licence (HEL) b) Road Investment Strategy (RIS) Performance Specification c) Highways England Delivery Plan (HEDP), d) Highways England Strategic Business Plan (HESBP)	NPSNN – Decision making criteria	Relevant client objectives / requirements	Environmental receptors	Approach to assessment	Indicative rating values		
						Red	Amber	Green
		Paras 3.17 and 3.22		Number of local businesses affected by severance	DMRB Stage 1 assessment desk study using online mapping and previous studies to complete a qualitative assessment sufficient to differentiate between corridors. Route corridors used as the study area for the assessment.	Potential for adverse effects in terms of loss of trade or future viability for >5 businesses	Potential for adverse effects on 1-5 businesses	Potential for neutral or positive effects to occur.

B.4 Client Scheme Requirements

In the table that follows, each client scheme requirement and its sub-requirements were scored against the 5-point scale set out in EAST, and shown in the table below:

Numerical Scoring	Colour Code	Assessment
1		Poor fit against criteria
2		Low fit against criteria
3		Reasonable fit against criteria
4		Good fit against criteria
5		Excellent fit against criteria

Appendix B4: Client Scheme Requirements (CSRs) assessment

B4.1 Corridor A

CSRs	Expansion on headline requirements	Assessment against expansion on headline requirements	Overall assessment
Corridor A **Summary assessment** Corridor A would cause substantial harm to the Outstanding Universal Value (OUV) of the Stonehenge, Avebury and Associated Sites World Heritage Site (WHS) although severance within it would be reduced. The Corridor may adversely affect nationally and internationally designated nature conservation sites which would hinder the provision of increased biodiversity. The Corridor would reduce transport costs, improve regional connectivity, support the visitor economy and provide some journey time savings compared to the existing situation. In particular: a) The proximity of the Corridor to the WHS and the harm it will cause to the setting of the WHS and key assets within the WHS (e.g. Durrington Walls) mean that substantial harm to the OUV of the WHS is probable, and may outweigh benefits associated with the removal of the A303 through the WHS b) There is a high probability that the Corridor would require partial or total removal of a number of Scheduled Monuments and substantially harm the setting of a number of Scheduled Monuments including the internationally important Durrington Walls. Impacts are also identified on listed buildings and the Conservation Area in Bulford c) The Corridor runs through and requires direct land take within a European designated nature conservation site (Salisbury Plain Special Area of Conservation (SAC) / Special Protection Area (SPA)), as well as requiring new crossings over the River Avon SAC d) The Corridor crosses or is located in close proximity to a number of nationally designated nature conservation sites (Sites crossed: River Till Site of Special Scientific Interest (SSSI), River Avon System SSSI and Salisbury Plain SSSI) (Sites in close proximity: Parsonage Down SSSI/ National Nature Reserve) e) The Corridor runs directly through Bulford, Durrington and Larkhill. This would result in substantial impacts on residential populations in terms of visual impact, noise, air quality, disruption and severance Corridor A runs along the northern boundary of the WHS. Realigning Corridor A further north of the WHS may improve some criteria but would worsen others. On balance the overall assessment of the Corridor is unlikely to change and it would continue to perform poorly against a number of environmental criteria. **It is recommended that this Corridor is not taken forward for further consideration.**			
Cultural heritage: To contribute to the conservation and enhancement of the WHS by improving access both within and to the site.	The existing road will be downgraded as it passes through the WHS for use by Non-Motorised Users (NMUs) and for access.	The existing road will be closed to through traffic except NMUs. This will significantly reduce severance, improve connectivity and consequently access within the WHS.	Closure of the existing road will significantly reduce severance, improve connectivity and consequently access within the WHS. It could also result in some benefit to the WHS. However, substantial harm to the OUV of the WHS is probable, and on balance, potential harm to the OUV of the WHS may outweigh the benefits associated with the removal of the A303 through the WHS. The Corridor is assessed as having a low fit with the Client Scheme Requirement.
	The strategic Route will be redirected so as to reduce its impact on the WHS, both sight and sound. The redirected Route will treat archaeological features with sensitivity and will protect the OUV of the WHS. It will seek to minimise any damage to or loss of archaeology.	Although outside the WHS, the proximity of the Corridor to the WHS will cause harm to the setting of the WHS and key assets within the WHS. It is likely to cause substantial harm to Durrington Walls, an asset of international importance and a key part of the WHS Durrington Walls. It would remove other Scheduled Monuments that border the WHS but contribute to its OUV and it would cause substantial harm to the setting and significance of a number of other monuments within and outside the WHS. Substantial harm to the OUV of the WHS is considered probable.	
	Grade separated junctions (GSJ) will be introduced in place of at-grade junctions on the A303 within the length of the scheme, improving access onto and off the A303, with well-designed signing to access the WHS.	To be determined through Route optioneering and detailed design. In the event that GSJs raise the vertical alignment of the A303, this could further impact on the setting of the WHS.	
	Where the road passes through the WHS it will have an iconic identity and be of good design. As far as is practicable and without compromise to safety, the design will seek to accommodate the specific needs of the WHS.	N/A – The Corridor is not located within the WHS, and it is assumed that the existing road will be closed to through traffic.	
	Learning associated with any excavation within the WHS will be ensured, by working sensitively and in close collaboration with key heritage stakeholders	Sensitive working practices and close collaboration with key heritage stakeholders will be adopted throughout the design process. Learning will be shared with key stakeholders and the public.	
Environment and community: To contribute to the enhancement of the historic landscape within the WHS, to improve biodiversity along the Route and to provide a positive legacy to communities adjoining	Land no longer forming the public highway within the WHS will be returned to the adjoining landowner. Where practicable and with the permission of the owner, it will be landscaped in accordance with the adjoining land.	It is assumed that the existing road will be closed to through traffic except NMU. Detailed landscaping will be informed by the environmental assessment and stakeholder consultation.	The closure of the existing road could result in some benefit to the historic landscape within the WHS. However, Corridor A is predicted to cause harm to the setting of the WHS.
	Biodiversity within new landscaping along the Route will ensure a net addition over that the current exists.	Opportunities to enhance biodiversity along the proposed Route, and through the reduction in traffic and possible removal of infrastructure associated with parts of the existing A303, should be maximised where	

CSRs	Expansion on headline requirements	Assessment against expansion on headline requirements	Overall assessment
the road.		feasible. Given the limited information currently available, should this Corridor proceed to the next stage then further investigation will be required to better understand the potential for beneficial effects. The Corridor is likely to impact the Salisbury Plain SPA/SAC (and could require off-site compensation), and the River Avon SAC at two new crossings. It also crosses or is located in close proximity to a number of nationally designated sites. The potential to adversely affect nationally and internationally designated sites has the potential to conflict with the objective of ensuring a net addition in biodiversity.	Whilst opportunities exist to improve biodiversity through the closure and landscaping of the existing A303, Corridor A has the potential to adversely affect nationally and internationally designated nature conservation sites and therefore poses a substantial constraint to ensuring a net addition in biodiversity. The Corridor has the potential to reduce road traffic noise and severance in Winterbourne Stoke. This would need to be weighed against potential adverse effects at a number of settlements that would include Larkhill, Shrewton, south of Durrington and Bulford. The Corridor is assessed as having a poor fit with the Client Scheme Requirement.
	The A303 will bypass Winterbourne Stoke and the existing road will be de-trunked as it passes through the village. This will improve the quality of life for the residents of the village.	The A303 will bypass Winterbourne Stoke and the existing road will be de-trunked as it passes through the village. This has the potential to improve air quality, reduce road traffic noise and severance in the village.	
	Disruption to road users and local residents during the construction of the scheme will be minimised as is reasonably practicable. Also, opportunities for materials re-use will be sought as far as is practicable. Opportunities for mitigating impacts will be actively pursued in close consultation with communities.	There is the potential for disruption on roads and for settlements along and in proximity to the Route. Settlements that would be affected include Larkhill, south of Durrington, Shrewton and Bulford. The application of best practice construction techniques and detailed design will aim to minimise disruption to road users and local residents.	
	Learning and finds during the development of the scheme will be presented to local schools and communities. Presentations will be given to local and regional forums to raise awareness of the scheme, its timing and the potential economic benefits likely to result from an improved road network, as well as employment and supply chain opportunities during construction.	Learning will be shared with key stakeholders and the public.	
	The scheme will aspire to achieve a Civil Engineering Environmental Quality Assessment and Award Scheme (CEEQUAL) rating of excellent.	A project target of CEEQUAL ‘excellent’ will be sought.	
Economic growth: in combination with other schemes on the A303 Route, to enable growth in jobs and housing by providing a free flowing and reliable connection between the East and the South West peninsula.	The road capacity, together with NMU provision, will be increased to dual carriageway all-purpose (D2AP) between Amesbury and Berwick Down, linking with existing dual carriageways to the East and West.	D2AP and NMU provision will be made	Routes in this Corridor will enable free flowing connectivity between the East and the South West peninsula. Routes within this Corridor would have a slightly longer journey than the existing Route. Routes in this Corridor would contribute to the growth of the South West economy by reducing transport costs, improving regional connectivity and supporting the visitor economy. Such economic benefits would need to be weighed against negative economic impacts from any adverse effects on the WHS which is an important economic asset in its own right.
	Grade separated junctions will be introduced to create a road that meets Expressway standards, designed to accommodate foreseeable traffic growth.	Expressway standard will be achieved	
	Grade separation will also assist traffic and NMUs wishing to cross the A303 and so stimulate local economic activity and reduce severance.	Connectivity across the Routes within the Corridor can be achieved	
Transport: to create a high quality	The road will be designed to modern standards and, in addition, to perform as an Expressway.	Routes within this Corridor can be designed to Expressway standard.	Routes within this Corridor would create a high quality Route that

CSRs	Expansion on headline requirements	Assessment against expansion on headline requirements	Overall assessment
Route that resolves current and predicted traffic problems and contributes towards the creation of an Expressway between London and the south west.	The design of the road and connections with the local network will address issues of congestion, resilience and reliability. It will reduce risk of traffic diverting onto local roads.	The risk of traffic diverting into local roads increases with Routes further north	resolves current and predicted traffic problems and contributes towards the creation of an Expressway between London and the south west. Corridor A would generate moderate time savings compared to the existing Route.
	Road safety will be improved to at least the national average for a road of this type.	Routes within this Corridor can be designed to standards and meet national average safety indicators.	

B4.2 Corridor B

CSRs	Expansion on headline requirements	Assessment against expansion on headline requirements	Overall assessment
Corridor B **Summary assessment** Corridor B would sever the WHS, fundamentally altering its character and fabric and causing substantial harm to the OUV of the WHS. The Corridor may adversely affect nationally and internationally designated nature conservation sites which would hinder the provision of increased biodiversity. It may reduce road traffic noise and severance in Winterbourne Stoke. The Corridor would reduce transport costs and improve regional connectivity, although the adverse environmental impacts on the WHS may cause negative economic impacts on the visitor economy. The Corridor would provide some journey time savings compared to the existing situation. **Due to the impact on the WHS it is recommended that this Corridor is not taken forward for further consideration.**			
Cultural heritage: To contribute to the conservation and enhancement of the WHS by improving access both within and to the site.	The existing road will be downgraded as it passes through the WHS for use by NMUs and for access.	The existing road will be closed to through traffic except NMU. This will reduce severance, improve connectivity and consequently access within the WHS to a degree. However, Corridor B would sever the WHS, fundamentally altering its character and fabric and resulting in substantial harm to the OUV of the WHS. Overall any reduction in severance is likely to be limited and consequently improvements to access within the WHS will also be limited.	Corridor B Routes would sever the WHS, fundamentally altering its character and fabric and resulting in substantial harm to the OUV of the WHS. As such, Corridor B is not considered to contribute to the conservation and enhancement of the WHS. The Corridor is assessed as having a poor fit with the Client Scheme Requirement.
	The strategic Route will be redirected so as to reduce its impact on the WHS, both sight and sound. The redirected Route will treat archaeological features with sensitivity and will protect the OUV of the WHS. It will seek to minimise any damage to or loss of archaeology.	Corridor B would sever the WHS, and road traffic noise is likely to affect the northern part of the WHS. The Corridor is predicted to fundamentally alter the character and fabric of the WHS, resulting in substantial harm to the OUV of the WHS.	
	GSJs will be introduced in place of at-grade junctions on the A303 where within the length of the scheme, improving access onto and off the A303, with well-designed signing to access the WHS.	To be determined through Route and detailed design. In the event that GSJs raise the vertical alignment of the A303, this could further impact on the setting of the WHS.	
	Where the road passes through the WHS it will have an iconic identity and be of good design. As far as is practicable and without compromise to safety, the design will seek to accommodate the specific needs of the WHS.	Corridor B severs the WHS, fundamentally altering its character and fabric, and it is unlikely that a Route within this Corridor could accommodate the needs of the WHS or avoid harm to the OUV.	
	Learning associated with any excavation within the WHS will be ensured, by working sensitively and in close collaboration with key heritage stakeholders	Sensitive working practices and close collaboration with key heritage stakeholders will be adopted throughout the design process. Learning will be shared with key stakeholders and the public.	
Environment and community: To contribute to the enhancement of the historic landscape within the WHS, to improve biodiversity along the Route and to provide a positive legacy to communities adjoining the road.	Land no longer forming the public highway within the WHS will be returned to the adjoining landowner. Where practicable and with the permission of the owner, it will be landscaped in accordance with the adjoining land.	It is assumed that the existing road will be closed to through traffic except NMU. Detailed landscaping will be informed by the environmental assessment and stakeholder consultation.	Corridor B would not contribute to the enhancement of the historic landscape within the Stone. Whilst opportunities exist to improve biodiversity through the closure and landscaping of the existing A303, Corridor B has the potential to adversely affect nationally and internationally designated nature conservation sites and therefore poses a substantial constraint to the delivery of a net addition in biodiversity. The Corridor has the potential to reduce road traffic noise and severance in Winterbourne Stoke. This would need to be weighed against potential adverse effects at a number of settlements that
	Biodiversity within new landscaping along the Route will ensure a net addition over that the current exists.	Potential to enhance biodiversity within the proposed Corridor, and through the reduction in traffic and possible removal of infrastructure associated with parts of the existing A303. The Corridor has the potential to impact the Salisbury Plain SAC/SPA, and River Avon SAC (Although it should be noted that there is scope to remove some of the direct impacts on Salisbury Plain SAC/SPA for southernmost Routes within Corridor B). It also crosses or is located in close proximity to a number of nationally designated sites. The potential to adversely affect nationally and internationally designated sites has the potential to conflict with the objective of ensuring a net addition in biodiversity.	
	The A303 will bypass Winterbourne Stoke and the existing road will be de-trunked as it passes through the village. This will improve the quality of life for the residents of the village.	The A303 will bypass Winterbourne Stoke and the existing road will be de-trunked as it passes through the village. This has the potential to improve air quality, reduce road traffic noise and severance in the village.	
	Disruption to road users and local residents during the construction of the scheme will be minimised as is reasonably practicable. Also,	There is the potential for disruption on roads and for settlements along and in proximity to the Route. Settlements that could be affected	

CSRs	Expansion on headline requirements	Assessment against expansion on headline requirements	Overall assessment
	opportunities for materials re-use will be sought as far as is practicable. Opportunities for mitigating impacts will be actively pursued in close consultation with communities.	include Larkhill, Shrewton, south of Durrington and west of Bulford. The application of best practice construction techniques and detailed design will aim to minimise disruption to road users and local residents.	could include Larkhill, Shrewton, south of Durrington and west of Bulford. The Corridor is assessed as having a poor fit with the Client Scheme Requirement.
	Learning and finds during the development of the scheme will be presented to local schools and communities. Presentations will be given to local and regional forums to raise awareness of the scheme, its timing and the potential economic benefits likely to result from an improved road network, as well as employment and supply chain opportunities during construction.	Learning will be shared with key stakeholders and the public.	
	The scheme will aspire to achieve a CEEQUAL rating of excellent.	A project target of CEEQUAL 'excellent' will be sought.	
Economic growth: in combination with other schemes on the Route, to enable growth in jobs and housing by providing a free flowing and reliable connection between the East and the South West peninsula.	The road capacity, together with NMU provision, will be increased to D2AP between Amesbury and Berwick Down, linking with existing dual carriageways to the East and West.	D2AP and NMU provision will be made	Routes in this Corridor will enable free flowing connectivity between the East and the South West peninsula. Routes within this Corridor would have a slightly longer journey than the existing Route. Routes in this Corridor would contribute to the growth of the South West economy by reducing transport costs, improving regional connectivity and supporting the visitor economy. Such economic benefits would need to be weighed against negative economic impacts from any adverse effects on the WHS which is an important economic asset in its own right.
	Grade separated junctions will be introduced to create a road that meets Expressway standards, designed to accommodate foreseeable traffic growth.	Expressway standard will be achieved	
	Grade separation will also assist traffic and NMUs wishing to cross the A303 and so stimulate local economic activity and reduce severance.	Connectivity across the Routes within the Corridor can be achieved	
Transport: to create a high quality Route that resolves current and predicted traffic problems and contributes towards the creation of an Expressway between London and the south west.	The road will be designed to modern standards and, in addition, to perform as an Expressway.	Routes within this Corridor can be designed to Expressway standard.	Routes in this Corridor will create a high quality Expressway link between London and the south west Routes in Corridor B are expected to provide moderately large time savings compared to the existing Route.
	The design of the road and connections with the local network will address issues of congestion, resilience and reliability. It will reduce risk of traffic diverting onto local roads.	The risk of traffic diverting onto local roads is less than with Routes further away from the current A303 Route	
	Road safety will be improved to at least the national average for a road of this type.	Routes within this Corridor can be designed to standards and meet national average safety indicators.	

B4.3 Corridor C

CSRs	Expansion on headline requirements	Assessment against expansion on headline requirements	Overall assessment
Corridor C **Summary assessment** Corridor C would provide an at-grade dual carriageway Route close to the existing A303 Corridor. This would cause substantial harm to the OUV of the WHS and the Corridor offers limited opportunity to reduce severance within the WHS and there would be limited or no benefit in terms of noise. The Corridor would not contribute to the enhancement of the historic landscape within the WHS and may adversely affect nationally and internationally designated nature conservation sites which would hinder the provision of increased biodiversity. It may reduce road traffic noise and severance in Winterbourne Stoke. The Corridor would reduce transport costs and improve regional connectivity, although the adverse environmental impacts on the WHS may cause negative economic impacts on the visitor economy. The Corridor would provide journey time savings compared to the existing situation. **Due to the impact on the WHS it is recommended that this Corridor is not taken forward for further consideration.**			
Cultural heritage: To contribute to the conservation and enhancement of the WHS by improving access both within and to the site.	The existing road will be downgraded as it passes through the WHS for use by NMUs and for access.	In the case of a new dual carriageway in Corridor C, the existing road would be closed to through traffic except NMU. However a new surface level Route within the Corridor would result in a very limited reduction in severance, and consequently very limited improvement to access within the WHS. If an option to upgrade the existing road to dual carriageway, this would not secure the downgrading of the existing road, reduce severance or improve access within the WHS.	Routes within the Corridor would result in substantial harm to the OUV of the WHS. In the case of a new dual carriageway, this would not be outweighed by the benefits of relocating the existing A303. An upgrade of the existing road to dual carriageway, is also predicted to result in substantial harm to the OUV of the WHS. The Corridor presents very limited potential to reduce severance within the WHS and there would be limited or no benefit to the WHS in terms of noise. The Corridor is assessed as having a poor fit with the Client Scheme Requirement.
	The strategic Route will be redirected so as to reduce its impact on the WHS, both sight and sound. The redirected Route will treat archaeological features with sensitivity and will protect the OUV of the WHS. It will seek to minimise any damage to or loss of archaeology.	Construction of a new dual carriageway across the central part of the WHS would sever the WHS, seriously degrade its character and adversely affect the setting and fabric of numerous Scheduled Monuments. This would result in substantial harm to the OUV of the WHS.	
	GSJs will be introduced in place of at-grade junctions on the A303 where within the length of the scheme, improving access onto and off the A303, with well-designed signing to access the WHS.	To be determined through Route and detailed design. In the event that GSJs raise the vertical alignment of the A303, this could further impact on the setting of the WHS.	
	Where the road passes through the WHS it will have an iconic identity and be of good design. As far as is practicable and without compromise to safety, the design will seek to accommodate the specific needs of the WHS.	Corridor C severs the WHS, and has the potential to seriously degrade its character and adversely affect the setting and fabric of numerous Scheduled Monuments and other assets associated with the OUV of the WHS. It is unlikely that an upgrade to the existing A303 or a new Route within this Corridor could accommodate the needs of the WHS or avoid harm to the OUV.	
	Learning associated with any excavation within the WHS will be ensured, by working sensitively and in close collaboration with key heritage stakeholders	Sensitive working practices and close collaboration with key heritage stakeholders will be adopted throughout the design process. Learning will be shared with key stakeholders and the public.	
Environment and community: To contribute to the enhancement of the historic landscape within the WHS, to improve biodiversity along the Route and to provide a positive legacy to communities adjoining the road.	Land no longer forming the public highway within the WHS will be returned to the adjoining landowner. Where practicable and with the permission of the owner, it will be landscaped in accordance with the adjoining land.	Detailed landscaping will be informed by the environmental assessment and stakeholder consultation.	Corridor C would not contribute to the enhancement of the historic landscape within the WHS. Whilst opportunities exist to improve biodiversity through the closure and landscaping of the existing A303, and new landscaping along the Route, Corridor C has the potential to adversely affect nationally and internationally designated nature conservation sites (particularly in the northern part of the Corridor) and therefore poses a constraint to the delivery of a net addition in
	Biodiversity within new landscaping along the Route will ensure a net addition over that the current exists.	For a new dual carriageway in Corridor C - Opportunities to enhance biodiversity within the proposed Corridor, and through the reduction in traffic and possible removal of infrastructure associated with parts of the existing A303, should be maximised where feasible. Given the limited information currently available, should this Corridor proceed to the next stage then further investigation will be required to better understand the potential for beneficial effects. For an upgraded dual carriageway in Corridor C - Opportunities to enhance biodiversity along the proposed Route should be maximised, and the potential for biodiversity enhancements will be determined through the environmental assessment process and in consultation	

CSRs	Expansion on headline requirements	Assessment against expansion on headline requirements	Overall assessment
		with stakeholders. The Corridor has the potential to impact the River Avon SAC where it crosses the SAC in two locations. It also crosses or is located in close proximity to a number of nationally designated sites. The potential to adversely affect nationally and internationally designated sites has the potential to conflict with the objective of ensuring a net addition in biodiversity. Part of the Normanton Down Royal Society for the Protection of Birds (RSPB) reserve is located within the Corridor, whose population of stone curlew may be linked to that of Salisbury Plain Special Protection Area.	biodiversity. The Corridor has the potential to reduce road traffic noise and severance in Winterbourne Stoke. Overall, the Corridor is assessed as having a poor fit with the Client Scheme Requirement.
	The A303 will bypass Winterbourne Stoke and the existing road will be de-trunked as it passes through the village. This will improve the quality of life for the residents of the village.	The A303 will bypass Winterbourne Stoke and the existing road will be de-trunked as it passes through the village. This has the potential to improve air quality, reduce road traffic noise and severance in the village.	
	Disruption to road users and local residents during the construction of the scheme will be minimised as is reasonably practicable. Also, opportunities for materials re-use will be sought as far as is practicable. Opportunities for mitigating impacts will be actively pursued in close consultation with communities.	There is the potential for disruption on roads and for settlements along and in proximity to the Route. There are fewer settlements in proximity to Corridor C when compared with other Corridors, but settlements that could be affected include Larkhill, Normanton and Shrewton. The application of best practice construction techniques and detailed design will aim to minimise disruption to road users and local residents.	
	Learning and finds during the development of the scheme will be presented to local schools and communities. Presentations will be given to local and regional forums to raise awareness of the scheme, its timing and the potential economic benefits likely to result from an improved road network, as well as employment and supply chain opportunities during construction.	Learning will be shared with key stakeholders and the public.	
	The scheme will aspire to achieve a CEEQUAL rating of excellent.	A project target of CEEQUAL ‘excellent’ will be sought.	
Economic growth: in combination with other schemes on the Route, to enable growth in jobs and housing by providing a free flowing and reliable connection between the East and the South West peninsula.	The road capacity, together with NMU provision, will be increased to D2AP between Amesbury and Berwick Down, linking with existing dual carriageways to the East and West.	D2AP and NMU provision will be made	Routes in this Corridor will enable free flowing connectivity between the East and the South West peninsula. Routes within this Corridor would have a similar length longer journey to the existing Route. Routes in Corridor C would provide a more direct Route for east-west travel thereby maximising the potential economic benefits of the A303 Expressway. Such economic benefits would need to be weighed against negative economic impacts from any adverse effects on the WHS which is an important economic asset in its own right.
	Grade separated junctions will be introduced to create a road that meets Expressway standards, designed to accommodate foreseeable traffic growth.	Expressway standard will be achieved	
	Grade separation will also assist traffic and NMUs wishing to cross the A303 and so stimulate local economic activity and reduce severance.	Connectivity across the Routes within the Corridor can be achieved	

CSRs	Expansion on headline requirements	Assessment against expansion on headline requirements	Overall assessment
Transport: to create a high quality Route that resolves current and predicted traffic problems and contributes towards the creation of an Expressway between London and the south west.	The road will be designed to modern standards and, in addition, to perform as an Expressway.	Routes within this Corridor can be designed to Expressway standard.	Routes in this Corridor will create a high quality Expressway link between London and the south west Routes in Corridor C are expected to provide the greatest time savings compared to the existing Route.
	The design of the road and connections with the local network will address issues of congestion, resilience and reliability. It will reduce risk of traffic diverting onto local roads.	The risk of traffic diverting onto local roads is less than with Routes further away from the current A303 Route	
	Road safety will be improved to at least the national average for a road of this type.	Routes within this Corridor can be designed to standards and meet national average safety indicators.	

B4.4 Corridor D

CSRs	Expansion on headline requirements	Assessment against expansion on headline requirements	Overall assessment
Corridor D **Summary assessment** By providing a tunnel, Corridor D may reduce severance and benefit the character of the WHS and the setting of key assets such as Stonehenge. The at-grade elements may cause adverse effects on the character of the WHS but it is considered that substantial harm can be avoided with appropriate design. The Corridor has the potential to contribute to the enhancement of the historic landscape within the WHS although it may adversely affect some nationally and internationally designated nature conservation sites. However, the number of designated sites within or in proximity to the Corridor is small in comparison with other Corridors. It may reduce road traffic noise and severance in Winterbourne Stoke. The Corridor would reduce transport costs, improve regional connectivity, support the visitor economy and provide some journey time savings compared to the existing situation. **This Corridor offers reduced severance and potential to enhance the WHS. It is recommended that Corridor D is taken forward for further consideration.**			
Cultural heritage: To contribute to the conservation and enhancement of the WHS by improving access both within and to the site.	The existing road will be downgraded as it passes through the WHS for use by NMUs and for access.	The existing road between the access Routes tunnel portals would be closed to through traffic except NMU. The removal of a section of the existing A303 would reduce severance and consequently enhance access within the WHS.	The tunnel Route in the Corridor would reduce severance and benefit the character of the WHS and the setting of key assets such as Stonehenge. The remaining at grade elements would have adverse effects on the character of the WHS and affect the fabric and setting of Scheduled Monuments. At this time it is considered that substantial harm to the OUV can be avoided with appropriate design and consequently the potential exists for the benefits to outweigh the harm. However the risk remains that substantial harm to the OUV could occur and that the benefits would not outweigh the harm. It has been assumed that a quality and appropriate design would be implemented and therefore a “reasonable” fit with Client Scheme Requirement has been assumed.
	The strategic Route will be redirected so as to reduce its impact on the WHS, both sight and sound. The redirected Route will treat archaeological features with sensitivity and will protect the OUV of the WHS. It will seek to minimise any damage to or loss of archaeology.	The tunnel Route would likely result in a large reduction in road traffic noise and severance within the WHS, and benefit the character of the WHS and the setting of key assets such as Stonehenge. Tunnel based Routes within the Corridor would still require the construction of portals and lengths of dual carriageway at grade, which would degrade the character of the WHS and affect the fabric and setting of Scheduled Monuments and could affect the OUV. The overall scale of harm will depend on Route chosen, location of portals, length of tunnel etc. At this time it is considered that substantial harm can be avoided with appropriate design, however the risk remains that substantial harm could occur.	
	GSJs will be introduced in place of at-grade junctions on the A303 where within the length of the scheme, improving access onto and off the A303, with well-designed signing to access the WHS.	To be determined through Route and detailed design. In the event that GSJs raise the vertical alignment of the A303, this could further impact on the setting of the WHS.	
	Where the road passes through the WHS it will have an iconic identity and be of good design. As far as is practicable and without compromise to safety, the design will seek to accommodate the specific needs of the WHS.	The tunnelling of a section of the existing A303 presents opportunities to address the needs of the WHS. However, the Corridor would still require the construction of portals and lengths of dual carriageway at grade, and the ability for the design to accommodate the specific needs of the WHS would depend on the Route chosen, location of portals, length of tunnel etc.	
	Learning associated with any excavation within the WHS will be ensured, by working sensitively and in close collaboration with key heritage stakeholders	Sensitive working practices and close collaboration with key heritage stakeholders will be adopted throughout the design process. Learning will be shared with key stakeholders and the public.	
Environment and community: To contribute to the enhancement of the historic landscape within the	Land no longer forming the public highway within the WHS will be returned to the adjoining landowner. Where practicable and with the permission of the owner, it will be landscaped in accordance with the adjoining land.	Detailed landscaping will be informed by the environmental assessment and stakeholder consultation.	Corridor D has the potential to contribute to the enhancement of the historic landscape within the

CSRs	Expansion on headline requirements	Assessment against expansion on headline requirements	Overall assessment
WHS), to improve biodiversity along the Route and to provide a positive legacy to communities adjoining the road.	Biodiversity within new landscaping along the Route will ensure a net addition over that the current exists.	Opportunities to enhance biodiversity within the proposed Corridor, and through the reduction in traffic and possible removal of infrastructure associated with parts of the existing A303, should be maximised where feasible. Given the limited information currently available, should this Corridor proceed to the next stage then further investigation will be required to better understand the potential for beneficial effects. The Corridor has the potential to impact The River Avon SAC and one SSSI. The Corridor is also located in proximity to the Salisbury Plain SAC and Parsonage Down SSSI/NNR. This has the potential to conflict with the objective of ensuring a net addition in biodiversity. Subject to the nature of spoil generated through cuttings or tunnelling activity, there may be potential to reuse material for habitat creation / reinstatement. Further investigation will be required to better understand the potential to deliver benefits should this Corridor proceed to the next stage.	WHS, although this will depend on the Route chosen, location of portals, length of tunnel etc. Opportunities exist to improve biodiversity through the closure and landscaping of a section of the existing A303, and new landscaping along the Route. Corridor D has the potential to adversely affect nationally and internationally designated nature conservation sites, although the number of designated sites within or in proximity to the Corridor, is small in comparison with other Corridors. The Corridor has the potential to reduce road traffic noise and severance in Winterbourne Stoke. Overall, the Corridor is assessed as having a reasonable fit with the Client Scheme Requirement.
	The A303 will bypass Winterbourne Stoke and the existing road will be de-trunked as it passes through the village. This will improve the quality of life for the residents of the village.	The A303 will bypass Winterbourne Stoke and the existing road will be de-trunked as it passes through the village. This has the potential to improve air quality, reduce road traffic noise and severance in the village.	
	Disruption to road users and local residents during the construction of the scheme will be minimised as is reasonably practicable. Also, opportunities for materials re-use will be sought as far as is practicable. Opportunities for mitigating impacts will be actively pursued in close consultation with communities.	There is the potential for disruption on roads and for settlements along and in proximity to the Route, although the number of settlements in the immediate vicinity of this Corridor is limited. The application of best practice construction techniques and detailed design will aim to minimise disruption to road users and local residents.	
	Learning and finds during the development of the scheme will be presented to local schools and communities. Presentations will be given to local and regional forums to raise awareness of the scheme, its timing and the potential economic benefits likely to result from an improved road network, as well as employment and supply chain opportunities during construction.	Learning will be shared with key stakeholders and the public.	
	The scheme will aspire to achieve a CEEQUAL rating of excellent.	A project target of CEEQUAL ‘excellent’ will be sought.	
Economic growth: in combination with other schemes on the Route, to enable growth in jobs and housing by providing a free flowing and reliable connection between the East and the South West peninsula.	The road capacity, together with NMU provision, will be increased to D2AP between Amesbury and Berwick Down, linking with existing dual carriageways to the East and West.	D2AP and NMU provision will be made	Routes in this Corridor will enable free flowing connectivity between the East and the South West peninsula. Routes within this Corridor would have a similar length journey to the existing Route. Corridor D would provide a more direct Route thereby maximising the potential economic benefits of the A303 Expressway. The Corridor would contribute to the growth of the South West economy by reducing transport costs, improving regional
	Grade separated junctions will be introduced to create a road that meets Expressway standards, designed to accommodate foreseeable traffic growth.	Expressway standard will be achieved	
	Grade separation will also assist traffic and NMUs wishing to cross the A303 and so stimulate local economic activity and reduce severance.	Connectivity across the Routes within the Corridor can be achieved	

CSRs	Expansion on headline requirements	Assessment against expansion on headline requirements	Overall assessment
			connectivity and supporting the visitor economy.
Transport: to create a high quality Route that resolves current and predicted traffic problems and contributes towards the creation of an Expressway between London and the south west.	The road will be designed to modern standards and, in addition, to perform as an Expressway.	Routes within this Corridor can be designed to Expressway standard.	Routes in this Corridor will create a high quality Expressway link between London and the south west Routes in Corridor D are expected to provide large time savings compared to the existing Route.
	The design of the road and connections with the local network will address issues of congestion, resilience and reliability. It will reduce risk of traffic diverting onto local roads.	The risk of traffic diverting onto local roads is less than with Routes further away from the current A303 Route	
	Road safety will be improved to at least the national average for a road of this type.	Routes within this Corridor can be designed to standards and meet national average safety indicators.	

B4.5 Corridor E

CSRs	Expansion on headline requirements	Assessment against expansion on headline requirements	Overall assessment
Summary assessment Corridor E presents limited potential to reduce severance within the WHS, causing substantial harm to the OUV of the WHS. The Corridor would not contribute to the enhancement of the historic landscape within the WHS and may adversely affect nationally and internationally designated nature conservation sites which would hinder the provision of increased biodiversity. It may reduce road traffic noise and severance in Winterbourne Stoke although this should be weighed against the potential to increase noise in other settlements within the Corridor. The Corridor would reduce transport costs and improve regional connectivity, although the adverse environmental impacts on the WHS may cause negative economic impacts on the visitor economy. The Corridor would provide some journey time savings compared to the existing situation. **Due to the impact on the WHS it is recommended that this Corridor is not taken forward for further consideration.**			
Cultural heritage: To contribute to the conservation and enhancement of the WHS by improving access both within and to the site.	The existing road will be downgraded as it passes through the WHS for use by NMUs and for access.	The existing road will be closed to through traffic except NMU. This will reduce severance, improve connectivity and consequently access within the WHS to a degree. However, Corridor E would sever the WHS, and overall there would be a limited reduction in severance and consequently limited improvements to access within the WHS.	Routes within the Corridor would result in substantial harm to the OUV of the WHS, which is unlikely to be outweighed by benefits of relocating the existing A303. The Corridor presents limited potential to reduce severance within the WHS and there would be limited or no benefit to the WHS in terms of noise. The Corridor is assessed as having a poor fit with the Client Scheme Requirement.
	The strategic Route will be redirected so as to reduce its impact on the WHS, both sight and sound. The redirected Route will treat archaeological features with sensitivity and will protect the OUV of the WHS. It will seek to minimise any damage to or loss of archaeology.	Corridor E would sever the WHS, fundamentally altering its character and fabric. This would result in substantial harm to the OUV of the WHS, which is unlikely to be outweighed by benefits of removal of existing A303. The Corridor is within the WHS and therefore there is limited or no benefit to the WHS in noise terms.	
	GSJs will be introduced in place of at-grade junctions on the A303 where within the length of the scheme, improving access onto and off the A303, with well-designed signing to access the WHS.	To be determined through Route and detailed design. In the event that GSJs raise the vertical alignment of the A303, this could further impact on the setting of the WHS.	
	Where the road passes through the WHS it will have an iconic identity and be of good design. As far as is practicable and without compromise to safety, the design will seek to accommodate the specific needs of the WHS.	Corridor E severs the WHS, fundamentally altering its character and fabric, and it is unlikely that a Route within this Corridor could accommodate the needs of the WHS or avoid harm to the OUV.	
	Learning associated with any excavation within the WHS will be ensured, by working sensitively and in close collaboration with key heritage stakeholders	Sensitive working practices and close collaboration with key heritage stakeholders will be adopted throughout the design process. Learning will be shared with key stakeholders and the public.	
Environment and community: To contribute to the enhancement of the historic landscape within the WHS, to improve biodiversity along the Route and to provide a positive legacy to communities adjoining the road.	Land no longer forming the public highway within the WHS will be returned to the adjoining landowner. Where practicable and with the permission of the owner, it will be landscaped in accordance with the adjoining land.	It is assumed that the existing road will be closed to through traffic except NMU. Detailed landscaping will be informed by the environmental assessment and stakeholder consultation.	Corridor E would not contribute to the enhancement of the historic landscape within the WHS. Whilst opportunities exist to improve biodiversity through the closure and landscaping of the existing A303, and new landscaping along the Route, Corridor E has the potential to adversely affect nationally and internationally designated nature conservation sites and therefore poses a constraint to the delivery of a net addition in biodiversity. The Corridor has the potential to
	Biodiversity within new landscaping along the Route will ensure a net addition over that the current exists.	Opportunities to enhance biodiversity within the proposed Corridor, and through the reduction in traffic and possible removal of infrastructure associated with parts of the existing A303, should be maximised where feasible. Given the limited information currently available, should this Corridor proceed to the next stage then further investigation will be required to better understand the potential for beneficial effects. The Corridor has the potential to impact on a European designated site where it crosses the River Avon SAC at a number of locations. It also crosses or is located in close proximity to a number of nationally designated sites. The potential to adversely affect nationally and internationally designated sites has the potential to conflict with the	

CSRs	Expansion on headline requirements	Assessment against expansion on headline requirements	Overall assessment
		objective of ensuring a net addition in biodiversity. Furthermore, half of Normanton Down RSPB reserve is located within the Corridor, whose population of stone curlew may be linked to that of Salisbury Plain SPA. Routes within Corridor E located as close to the existing A303 as possible may result in lesser adverse effects, although severance of the RSPB reserve would not be avoided in this event.	reduce road traffic noise and severance in Winterbourne Stoke. This would need to be weighed against potential adverse effects at a number of settlements which could include Amesbury, Steeple Langford, Berwick St James, Winterbourne Stoke, Normanton, and Stapleford. Overall, the Corridor is assessed as having a poor fit with the Client Scheme Requirement.
	The A303 will bypass Winterbourne Stoke and the existing road will be de-trunked as it passes through the village. This will improve the quality of life for the residents of the village.	The A303 will bypass Winterbourne Stoke and the existing road will be de-trunked as it passes through the village. This has the potential to improve air quality, reduce road traffic noise and severance in the village.	
	Disruption to road users and local residents during the construction of the scheme will be minimised as is reasonably practicable. Also, opportunities for materials re-use will be sought as far as is practicable. Opportunities for mitigating impacts will be actively pursued in close consultation with communities.	There is the potential for disruption on roads and for settlements along and in proximity to the Route. Settlements that could be affected include Amesbury, Steeple Langford, Berwick St James, Winterbourne Stoke, Normanton, and Stapleford. The application of best practice construction techniques and detailed design will aim to minimise disruption to road users and local residents.	
	Learning and finds during the development of the scheme will be presented to local schools and communities. Presentations will be given to local and regional forums to raise awareness of the scheme, its timing and the potential economic benefits likely to result from an improved road network, as well as employment and supply chain opportunities during construction.	Learning will be shared with key stakeholders and the public.	
	The scheme will aspire to achieve a CEEQUAL rating of excellent.	A project target of CEEQUAL 'excellent' will be sought.	
Economic growth: in combination with other schemes on the Route, to enable growth in jobs and housing by providing a free flowing and reliable connection between the East and the South West peninsula.	The road capacity, together with NMU provision, will be increased to D2AP between Amesbury and Berwick Down, linking with existing dual carriageways to the East and West.	D2AP and NMU provision will be made	Routes in this Corridor will enable free flowing connectivity between the East and the South West peninsula. Routes within this Corridor would have a slightly longer journey than the existing Route. The Corridor would contribute to the growth of the South West economy by reducing transport costs, improving regional connectivity and supporting the visitor economy. Such economic benefits would need to be weighed against negative economic impacts from any adverse effects on the WHS which is an important economic asset in its own right.
	Grade separated junctions will be introduced to create a road that meets Expressway standards, designed to accommodate foreseeable traffic growth.	Expressway standard will be achieved	
	Grade separation will also assist traffic and NMUs wishing to cross the A303 and so stimulate local economic activity and reduce severance.	Connectivity across the Routes within the Corridor can be achieved	
Transport: to create a high quality Route that resolves current and	The road will be designed to modern standards and, in addition, to perform as an Expressway.	Routes within this Corridor can be designed to Expressway standard.	Routes in this Corridor will create a high quality Expressway link between London and the south
	The design of the road and connections with the local network will	The risk of traffic diverting onto local roads is less than with Routes	

CSRs	Expansion on headline requirements	Assessment against expansion on headline requirements	Overall assessment
predicted traffic problems and contributes towards the creation of an Expressway between London and the south west.	address issues of congestion, resilience and reliability. It will reduce risk of traffic diverting onto local roads.	further away from the current A303 alignment	west Routes in Corridor E are expected to provide moderately large time savings compared to the existing Route.
	Road safety will be improved to at least the national average for a road of this type.	Routes within this Corridor can be designed to standards and meet national average safety indicators.	

B4.6 Corridor F (North)

CSRs	Expansion on headline requirements	Assessment against expansion on headline requirements	Overall assessment
Corridor F (North) **Summary assessment** Corridor F (North) may reduce severance and benefit the character of the WHS and the setting of key assets such as Stonehenge bringing substantial benefits to the WHS. The Corridor has the potential to contribute to the enhancement of the historic landscape within the WHS although it may adversely affect some nationally and internationally designated nature conservation sites, and the length of the Corridor is likely to lead to increased habitat loss compared to other Corridors. It may reduce road traffic noise and severance in Winterbourne Stoke although this should be weighed against the potential to increase noise in other settlements within the Corridor. Economic benefits are likely to be moderate, however the Corridor would provide some journey time savings compared to the existing situation, improve regional connectivity and support the visitor economy. **This Corridor offers reduced severance and potential to enhance the WHS. It is recommended that Corridor F (North) is taken forward for further consideration.**			
Cultural heritage: To contribute to the conservation and enhancement of the WHS by improving access both within and to the site.	The existing road will be downgraded as it passes through the WHS for use by NMUs and for access.	The existing road will be closed to through traffic except NMU. This will reduce severance, improve connectivity and consequently access within the WHS.	Through the closure of the existing A303 within the WHS, Corridor F North has the potential to reduce severance, road traffic noise and benefit the character of the WHS and the setting of key assets such as Stonehenge, this would bring substantial benefits for the WHS. The Corridor is assessed as having a good fit with the Client Scheme Requirement.
	The strategic Route will be redirected so as to reduce its impact on the WHS, both sight and sound. The redirected Route will treat archaeological features with sensitivity and will protect the OUV of the WHS. It will seek to minimise any damage to or loss of archaeology.	The closure of the existing A303 has the potential to reduce severance, road traffic noise and benefit the character of the WHS and the setting of key assets such as Stonehenge, this would bring substantial benefits for the WHS. The northern part of the Corridor lies within 1km of the southern boundary of the WHS and Routes in this area may adversely affect the setting of the WHS. Routes further south in the Corridor may be sufficiently distant from WHS to not result in significant change to setting of WHS and hence harm to OUV.	
	GSJs will be introduced in place of at-grade junctions on the A303 where within the length of the scheme, improving access onto and off the A303, with well-designed signing to access the WHS.	In the event that GSJs raise the vertical alignment of the A303, impacts on the setting of the WHS would depend on the location of junctions to be determined through Routes and detailed design, should this Corridor proceed to the next stage of the process.	
	Where the road passes through the WHS it will have an iconic identity and be of good design. As far as is practicable and without compromise to safety, the design will seek to accommodate the specific needs of the WHS.	The closure of the existing A303 has the potential to respond to the specific needs of the WHS. The Corridor is located outside the WHS. There may be opportunities through determination of the Route and detailed design to respond to the needs of the WHS.	
	Learning associated with any excavation within the WHS will be ensured, by working sensitively and in close collaboration with key heritage stakeholders	Sensitive working practices and close collaboration with key heritage stakeholders will be adopted throughout the design process, and learning will be shared with key stakeholders and the public.	
Environment and community: To contribute to the enhancement of the historic landscape within the WHS, to improve biodiversity along the Route and to provide a positive legacy to communities adjoining the road.	Land no longer forming the public highway within the WHS will be returned to the adjoining landowner. Where practicable and with the permission of the owner, it will be landscaped in accordance with the adjoining land.	Detailed landscaping will be informed by the environmental assessment and stakeholder consultation.	Corridor F North has the potential to contribute to the enhancement of the historic landscape within the WHS through the closure of the existing A303 within the WHS. Whilst opportunities exist to improve biodiversity through landscaping along the Route, and closure and landscaping of the existing A303, Corridor F North has the potential to adversely affect nationally and internationally designated nature conservation sites, and the length of the Corridor means that it has the potential to result in larger
	Biodiversity within new landscaping along the Route will ensure a net addition over that the current exists.	Opportunities to enhance biodiversity within the proposed Corridor, and through the reduction in traffic and possible removal of infrastructure associated with parts of the existing A303, should be maximised where feasible. Given the limited information currently available, should this Corridor proceed to the next stage then further investigation will be required to better understand the potential for beneficial effects. The Corridor has the potential to impact European sites, where it crosses the River Avon SAC in two locations, and the Salisbury Plain SPA/SAC in the north eastern part of the Corridor. It also crosses or is located in close proximity to a number of nationally designated sites. The length of the Corridor is such that it has the potential to result in	

CSRs	Expansion on headline requirements	Assessment against expansion on headline requirements	Overall assessment
		larger areas of habitat loss and potential severance. This combined with the potential to adversely affect nationally and internationally designated sites, has the potential to conflict with the objective of ensuring a net addition in biodiversity.	areas of habitat loss and potential severance. The potential to deliver a net addition in biodiversity is therefore constrained. The Corridor has the potential to reduce road traffic noise and severance in Winterbourne Stoke. This would need to be weighed against potential adverse effects at a number of settlements that could include Berwick St James, Stapleford, Upper Woodford, Middle Woodford, Lower Woodford, High Post, and East of Amesbury. Overall, the Corridor is assessed as having a low fit with the Client Scheme Requirement.
	The A303 will bypass Winterbourne Stoke and the existing road will be de-trunked as it passes through the village. This will improve the quality of life for the residents of the village.	The A303 could bypass Winterbourne Stoke and the existing road may be de-trunked as it passes through the village. This has the potential to improve air quality, reduce road traffic noise and severance in the village.	
	Disruption to road users and local residents during the construction of the scheme will be minimised as is reasonably practicable. Also, opportunities for materials re-use will be sought as far as is practicable. Opportunities for mitigating impacts will be actively pursued in close consultation with communities.	There is the potential for disruption on roads and for settlements along and in proximity to the Route. Settlements that could be affected include Berwick St James, Stapleford, Upper Woodford, Middle Woodford, Lower Woodford, High Post, and East of Amesbury. The application of best practice construction techniques and detailed design will aim to minimise disruption to road users and local residents	
	Learning and finds during the development of the scheme will be presented to local schools and communities. Presentations will be given to local and regional forums to raise awareness of the scheme, its timing and the potential economic benefits likely to result from an improved road network, as well as employment and supply chain opportunities during construction.	Learning will be shared with key stakeholders and the public.	
	The scheme will aspire to achieve a CEEQUAL rating of excellent.	A project target of CEEQUAL 'excellent' will be sought.	
Economic growth: in combination with other schemes on the Route, to enable growth in jobs and housing by providing a free flowing and reliable connection between the East and the South West peninsula.	The road capacity, together with NMU provision, will be increased to D2AP between Amesbury and Berwick Down, linking with existing dual carriageways to the East and West.	D2AP and NMU provision will be made	Routes in this Corridor will enable free flowing connectivity between the East and the South West peninsula. Routes within this Corridor would have a slightly longer journey than the existing Route. The journey time savings for Corridor F (North) are likely to be relatively small but would provide some economic benefits.
	Grade separated junctions will be introduced to create a road that meets Expressway standards, designed to accommodate foreseeable traffic growth.	Expressway standard will be achieved	
	Grade separation will also assist traffic and NMUs wishing to cross the A303 and so stimulate local economic activity and reduce severance.	Connectivity across the Routes within the Corridor can be achieved	
Transport: to create a high quality Route that resolves current and predicted traffic problems and contributes towards the creation of an Expressway between London and the south west.	The road will be designed to modern standards and, in addition, to perform as an Expressway.	Routes within this Corridor can be designed to Expressway standard.	Routes in this Corridor will create a high quality Expressway link between London and the south west Routes in Corridor F (North) would generate moderate time savings compared to the existing Route.
	The design of the road and connections with the local network will address issues of congestion, resilience and reliability. It will reduce risk of traffic diverting onto local roads.	The risk of traffic diverting onto local roads is less than with Routes further away from the current A303 Route	
	Road safety will be improved to at least the national average for a road of this type.	Routes within this Corridor can be designed to standards and meet national average safety indicators.	

B4.7 Corridor F (South)

CSRs	Expansion on headline requirements	Assessment against expansion on headline requirements	Overall assessment
Corridor F (South) **Summary assessment** Corridor F (South) has the potential to reduce severance and benefit the character of the WHS and the setting of key assets such as Stonehenge bringing substantial benefits to the WHS. The Corridor has the potential to contribute to the enhancement of the historic landscape within the WHS although it may adversely affect some nationally and internationally designated nature conservation sites. The length of the Corridor is likely to lead to increased habitat loss compared to other Corridors, thus offering limited opportunity to increase biodiversity. It may reduce road traffic noise and severance in Winterbourne Stoke although this should be weighed against the potential to increase noise in other settlements within the Corridor. The Corridor would reduce transport costs, improve regional connectivity and support the visitor economy. However, economic benefits are likely to be relatively slight. **This Corridor offers reduced severance and potential to enhance the WHS. It is recommended that Corridor F (South) is taken forward for further consideration.**			
Cultural heritage: To contribute to the conservation and enhancement of the WHS by improving access both within and to the site.	The existing road will be downgraded as it passes through the WHS for use by NMUs and for access.	The existing road will be closed to through traffic except NMU. This will reduce severance, improve connectivity and consequently access within the WHS.	Through the closure of the existing A303 within the WHS, Corridor F South has the potential to reduce severance, road traffic noise and benefit the character of the WHS and the setting of key assets such as Stonehenge, this would bring substantial benefits for the WHS. The Corridor is assessed as having a good fit with the Client Scheme Requirement.
	The strategic Route will be redirected so as to reduce its impact on the WHS, both sight and sound. The redirected Route will treat archaeological features with sensitivity and will protect the OUV of the WHS. It will seek to minimise any damage to or loss of archaeology.	The closure of the existing A303 has the potential to reduce severance, road traffic noise and benefit the character of the WHS and the setting of key assets such as Stonehenge, this would bring substantial benefits for the WHS. The distance of the Corridor from the WHS is such that it is unlikely to result in significant change to setting of WHS and hence harm to OUV.	
	GSJs will be introduced in place of at-grade junctions on the A303 where within the length of the scheme, improving access onto and off the A303, with well-designed signing to access the WHS.	There is a low likelihood of GSJs impacting on the setting of the WHS however this would depend on the location of junctions to be determined through Routes and detailed design should this Corridor proceed to the next stage of the process.	
	Where the road passes through the WHS it will have an iconic identity and be of good design. As far as is practicable and without compromise to safety, the design will seek to accommodate the specific needs of the WHS.	The closure of the existing A303 has the potential to respond to the specific needs of the WHS. The Corridor is located outside the WHS. There may be opportunities through determination of the Route and detailed design to respond to the needs of the WHS.	
	Learning associated with any excavation within the WHS will be ensured, by working sensitively and in close collaboration with key heritage stakeholders	The Corridor is unlikely to require excavation within the WHS. Sensitive working practices and close collaboration with key heritage stakeholders will be adopted throughout the design process, and learning will be shared with key stakeholders and the public.	
Environment and community: To contribute to the enhancement of the historic landscape within the WHS, to improve biodiversity along the Route and to provide a positive legacy to communities adjoining the road.	Land no longer forming the public highway within the WHS will be returned to the adjoining landowner. Where practicable and with the permission of the owner, it will be landscaped in accordance with the adjoining land.	Detailed landscaping will be informed by the environmental assessment and stakeholder consultation.	Corridor F South has the potential to contribute to the enhancement of the historic landscape within the WHS through the closure of the existing A303 within the WHS. Whilst opportunities exist to improve biodiversity through landscaping along the Route, and closure and landscaping of the existing A303, Corridor F South has the potential to adversely affect nationally and internationally designated nature conservation sites, and the length of the Corridor means that it has the potential to result in larger areas of habitat loss and potential severance. The potential to
	Biodiversity within new landscaping along the Route will ensure a net addition over that the current exists.	Opportunities to enhance biodiversity within the proposed Corridor, and through the reduction in traffic and possible removal of infrastructure associated with parts of the existing A303, should be maximised where feasible. Given the limited information currently available, should this Corridor proceed to the next stage then further investigation will be required to better understand the potential for beneficial effects. The Corridor has the potential to impact European sites, where it crosses the River Avon SAC at a number of locations. It also crosses or is located in close proximity to a number of nationally designated sites. The length of the Corridor is such that it has the potential to result in larger areas of habitat loss and potential severance. This has the potential to conflict with the objective of ensuring a net addition in biodiversity.	

CSRs	Expansion on headline requirements	Assessment against expansion on headline requirements	Overall assessment
	The A303 will bypass Winterbourne Stoke and the existing road will be de-trunked as it passes through the village. This will improve the quality of life for the residents of the village.	The A303 will bypass Winterbourne Stoke and the existing road would be de-trunked as it passes through the village. This has the potential to improve air quality, reduce road traffic noise and severance in the village.	deliver a net addition in biodiversity is therefore constrained. The Corridor has the potential to reduce road traffic noise and severance in Winterbourne Stoke. This would need to be weighed against potential adverse effects at a large number of settlements that could include Berwick St James, Stapleford, Upper Woodford, Middle Woodford, Lower Woodford, Stoford, High Post, East of Amesbury, Winterbourne Earls, Porton, Great Durnford, Winterbourne Dauntsey, and Allington. Overall, the Corridor is assessed as having a low fit with the Client Scheme Requirement.
	Disruption to road users and local residents during the construction of the scheme will be minimised as is reasonably practicable. Also, opportunities for materials re-use will be sought as far as is practicable. Opportunities for mitigating impacts will be actively pursued in close consultation with communities.	There is the potential for disruption on roads and for settlements along and in proximity to the Route. A high number of settlements could be affected and may include Berwick St James, Stapleford, Upper Woodford, Middle Woodford, Lower Woodford, Stoford, High Post, East of Amesbury, Winterbourne Earls, Porton, Great Durnford, Winterbourne Dauntsey, and Allington. The application of best practice construction techniques and detailed design will aim to minimise disruption to road users and local residents.	
	Learning and finds during the development of the scheme will be presented to local schools and communities. Presentations will be given to local and regional forums to raise awareness of the scheme, its timing and the potential economic benefits likely to result from an improved road network, as well as employment and supply chain opportunities during construction.	Learning will be shared with key stakeholders and the public.	
	The scheme will aspire to achieve a CEEQUAL rating of excellent.	A project target of CEEQUAL ‘excellent’ will be sought.	
Economic growth: in combination with other schemes on the Route, to enable growth in jobs and housing by providing a free flowing and reliable connection between the East and the South West peninsula.	The road capacity, together with NMU provision, will be increased to D2AP between Amesbury and Berwick Down, linking with existing dual carriageways to the East and West.	D2AP and NMU provision will be made	Routes in this Corridor will enable free flowing connectivity between the East and the South West peninsula. Routes within this Corridor would have a slightly longer journey than the existing Route. With Corridor F (South) the economic benefits are likely to be relatively slight.
	Grade separated junctions will be introduced to create a road that meets Expressway standards, designed to accommodate foreseeable traffic growth.	Expressway standard will be achieved	
	Grade separation will also assist traffic and NMUs wishing to cross the A303 and so stimulate local economic activity and reduce severance.	Connectivity across the Routes within the Corridor can be achieved	
Transport: to create a high quality Route that resolves current and predicted traffic problems and contributes towards the creation of an Expressway between London and the south west.	The road will be designed to modern standards and, in addition, to perform as an Expressway.	Routes within this Corridor can be designed to Expressway standard.	Routes in this Corridor will create a high quality Expressway link between London and the south west With Routes in Corridor F (South) there would be a small reduction in travel time compared to the existing Route.
	The design of the road and connections with the local network will address issues of congestion, resilience and reliability. It will reduce risk of traffic diverting onto local roads.	The risk of traffic diverting onto local roads is less than with Routes further away from the current A303 Route	
	Road safety will be improved to at least the national average for a road of this type.	Routes within this Corridor can be designed to standards and meet national average safety indicators.	

B4.8 Corridor G

CSRs	Expansion on headline requirements	Assessment against expansion on headline requirements	Overall assessment
Corridor G **Summary assessment** Corridor G may reduce severance and benefit the character of the WHS and the setting of key assets such as Stonehenge bringing substantial benefits to the WHS. The Corridor may contribute to the enhancement of the historic landscape within the WHS although it may adversely affect some nationally and internationally designated nature conservation sites. The length of the Corridor is likely to lead to substantially increased habitat loss and severance compared to other Corridors, thus offering limited opportunity to increase biodiversity. It may reduce road traffic noise and severance in Winterbourne Stoke although this should be weighed against the potential to increase noise in other settlements within the Corridor. The Corridor would reduce transport costs, improve regional connectivity and support the visitor economy. However, economic benefits are likely to be relatively slight for this Corridor. Whilst this Corridor would offer reduced severance and potential to enhance the WHS it is likely to lead to substantial habitat loss. Journey times are likely to increase giving relatively slight economic benefits. **It is recommended that this Corridor is not taken forward for further consideration.**			
Cultural heritage: To contribute to the conservation and enhancement of the WHS by improving access both within and to the site.	The existing road will be downgraded as it passes through the WHS for use by NMUs and for access.	The existing road will be closed to through traffic except NMU. This will reduce severance, improve connectivity and consequently access within the WHS.	Through the closure of the existing A303 within the WHS, Corridor G has the potential to reduce severance, road traffic noise and benefit the character of the WHS and the setting of key assets such as Stonehenge, this would bring substantial benefits for the WHS. The Corridor is assessed as having a good fit with the Client Scheme Requirement.
	The strategic Route will be redirected so as to reduce its impact on the WHS, both sight and sound. The redirected Route will treat archaeological features with sensitivity and will protect the OUV of the WHS. It will seek to minimise any damage to or loss of archaeology.	The closure of the existing A303 has the potential to reduce severance, road traffic noise and benefit the character of the WHS and the setting of key assets such as Stonehenge, this would bring substantial benefits for the WHS. The distance of the Corridor from the WHS is such that it would not result in significant change to setting of WHS and hence harm to OUV.	
	GSJs will be introduced in place of at-grade junctions on the A303 where within the length of the scheme, improving access onto and off the A303, with well-designed signing to access the WHS.	There is a low likelihood of GSJs impacting on the setting of the WHS however this would depend on the location of junctions to be determined through Routes and detailed design should this Corridor proceed to the next stage of the process.	
	Where the road passes through the WHS it will have an iconic identity and be of good design. As far as is practicable and without compromise to safety, the design will seek to accommodate the specific needs of the WHS.	The closure of the existing A303 has the potential to respond to the specific needs of the WHS.	
	Learning associated with any excavation within the WHS will be ensured, by working sensitively and in close collaboration with key heritage stakeholders	The Corridor is unlikely to require excavation within the WHS. Sensitive working practices and close collaboration with key heritage stakeholders will be adopted throughout the design process, and learning will be shared with key stakeholders and the public.	
Environment and community: To contribute to the enhancement of the historic landscape within the WHS, to improve biodiversity along the Route and to provide a positive legacy to communities adjoining the road.	Land no longer forming the public highway within the WHS will be returned to the adjoining landowner. Where practicable and with the permission of the owner, it will be landscaped in accordance with the adjoining land.	Detailed landscaping will be informed by the environmental assessment and stakeholder consultation.	Corridor G has the potential to contribute to the enhancement of the historic landscape within the WHS through the closure of the existing A303 within the WHS. Whilst opportunities exist to improve biodiversity through landscaping along the Route, Corridor G has the potential to adversely affect numerous nationally and internationally designated nature conservation sites and areas of ancient woodland, and the length of the Corridor means that it has the potential to result in substantially
	Biodiversity within new landscaping along the Route will ensure a net addition over that the current exists.	Opportunities to enhance biodiversity within the proposed Corridor, and through the reduction in traffic and possible removal of infrastructure associated with parts of the existing A303, should be maximised where feasible. Given the limited information currently available, should this Corridor proceed to the next stage then further investigation will be required to better understand the potential for beneficial effects. The Corridor has the potential to impact European sites where it crosses the Salisbury Plain SAC, Porton Down SPA, and River Avon SAC. It is also located in proximity to the Chilmark Quarries Bat SAC, and crosses or is located in close proximity to a number of nationally designated sites and numerous areas of ancient woodland. The length	

CSRs	Expansion on headline requirements	Assessment against expansion on headline requirements	Overall assessment
		of the Corridor is such that it has the potential to result in substantially larger areas of habitat loss and potential severance. This has the potential to conflict with the objective of ensuring a net addition in biodiversity.	larger areas of habitat loss and potential severance. The potential to deliver a net addition in biodiversity is therefore heavily constrained. The Corridor has the potential to reduce road traffic noise and severance in Winterbourne Stoke. This would need to be weighed against potential adverse effects at a large number of settlements that could include Berwick St James, Stapleford, Upper Woodford, Middle Woodford, Lower Woodford, Stoford, High Post, East of Amesbury, Winterbourne Earls, Porton, Great Durnford, Winterbourne Dauntsey, and Allington. Overall, the Corridor is assessed as having a poor fit with the Client Scheme Requirement.
	The A303 will bypass Winterbourne Stoke and the existing road will be de-trunked as it passes through the village. This will improve the quality of life for the residents of the village.	The A303 will bypass Winterbourne Stoke and the existing road would be de-trunked as it passes through the village. This has the potential to improve air quality, reduce road traffic noise and severance in the village.	
	Disruption to road users and local residents during the construction of the scheme will be minimised as is reasonably practicable. Also, opportunities for materials re-use will be sought as far as is practicable. Opportunities for mitigating impacts will be actively pursued in close consultation with communities.	There is the potential for disruption on roads and for settlements along and in proximity to the Route. A high number of settlements could be affected and may include Teffont Magna, Dinton, Barford St Martin, Wilton, Harnham, Milford, Laverstock, Firsdown, Lopcombe corner, Middle Wallop, Grateley, Monxton, and Andover. The application of best practice construction techniques and detailed design will aim to minimise disruption to road users and local residents.	
	Learning and finds during the development of the scheme will be presented to local schools and communities. Presentations will be given to local and regional forums to raise awareness of the scheme, its timing and the potential economic benefits likely to result from an improved road network, as well as employment and supply chain opportunities during construction.	Learning will be shared with key stakeholders and the public.	
	The scheme will aspire to achieve a CEEQUAL rating of excellent.	A project target of CEEQUAL ‘excellent’ will be sought.	
Economic growth: in combination with other schemes on the Route, to enable growth in jobs and housing by providing a free flowing and reliable connection between the East and the South West peninsula.	The road capacity, together with NMU provision, will be increased to D2AP between Amesbury and Berwick Down, linking with existing dual carriageways to the East and West.	D2AP and NMU provision will be made	Routes in this Corridor will enable free flowing connectivity between the East and the South West peninsula. Routes within this Corridor would have a slightly longer journey than the existing Route. The economic benefits are likely to be relatively slight for this Corridor.
	Grade separated junctions will be introduced to create a road that meets Expressway standards, designed to accommodate foreseeable traffic growth.	Expressway standard will be achieved	
	Grade separation will also assist traffic and NMUs wishing to cross the A303 and so stimulate local economic activity and reduce severance.	Connectivity across the Routes within the Corridor can be achieved	
Transport: to create a high quality Route that resolves current and predicted traffic problems and contributes towards the creation of an Expressway between London and the south west.	The road will be designed to modern standards and, in addition, to perform as an Expressway.	Routes within this Corridor can be designed to Expressway standard.	Routes in this Corridor will create a high quality Expressway link between London and the south west. The reduction in journey times with Corridor G are likely to be very small compared to the existing Route.
	The design of the road and connections with the local network will address issues of congestion, resilience and reliability. It will reduce risk of traffic diverting onto local roads.	The risk of traffic diverting onto local roads is less than with Routes further away from the current A303 Route	
	Road safety will be improved to at least the national average for a road of this type.	Routes within this Corridor can be designed to standards and meet national average safety indicators.	

B.5 Environmental NPSNN assessment

Appendix B5: Environmental National Policy Statement for National Networks (NPSNN) assessment

B5.1 Corridor A

Topic: Historic environment				
Environmental receptor	**Assessment of impact**		**Topic assessment**	
Stonehenge, Avebury and Associated Sites World Heritage Sites (WHS)	Although the Corridor is located outside the World Heritage Site (WHS), its proximity will cause harm to the setting of the WHS and key assets within the WHS. It is likely to cause substantial harm to Durrington Walls, an asset of international importance and a key part of the WHS. It would cause the removal of other Scheduled Monuments that, although outside the WHS, contribute to its Outstanding Universal Value (OUV). It would cause substantial harm to the setting and significance of a number of other monuments within and outside the WHS. Substantial harm to the OUV of the WHS is probable. This would outweigh benefits associated with the removal of the A303 through the WHS.		Corridor is likely to cause substantial harm to Durrington walls, an asset of international importance and a key part of the WHS. It would remove other Scheduled Monuments that border the WHS but contribute to its OUV and it would cause substantial harm to the setting and significance of a number of other monuments within and outside the WHS. This would outweigh benefits associated with the removal of the A303 through the WHS. In addition, it would also run through Bulford possibly requiring the demolition and certainly substantially harming the setting of listed buildings, and affecting a Conservation Area. Routes in this Corridor are highly unlikely to achieve consent.	
Scheduled Monuments	High probability that the Corridor would require partial or total removal of a number of Scheduled Monuments, given narrowness and location of Corridor. High probability that a Route within the Corridor would also substantially harm the setting of a number of Scheduled Monuments including the internationally important Durrington Walls.			
Designated assets: Listed buildings, Conservation Areas and Registered Parks and Gardens	High probability of substantial harm and less than substantial harm to listed buildings and the Conservation Area in Bulford due to possible demolition and changes to setting.			

Topic: Biodiversity			
Environmental receptor	**Assessment of impact**		**Topic assessment**
International Designation (Special Area of Conservation (SAC) / Special Protection Area (SPA) / Ramsar and candidate SAC / potential SPA / potential Ramsar)	Corridor crosses, in two locations, Salisbury Plain SAC/SPA, and River Avon SAC		Corridor A would not meet Client Scheme Requirements (CSRs) of improving biodiversity along the Route as it is bringing it closer to / within several designated sites. Would require significant compensation measures due to the direct loss, in two locations, of parts of Salisbury Plain SPA/SAC, and two new crossings over the River Avon SAC. The reduction in the presence of traffic and possible removal of infrastructure associated with the closure of parts of the existing A303 could result in benefits to species, including those associated with nearby European Sites. Given the limited information currently available, should this Corridor proceed to the next stage then further investigation will be required to better understand the potential for beneficial effects.
National Designation (Site of Special Scientific Interest (SSSI) / National Nature Reserve (NNR))	Corridor crosses River Till SSSI, River Avon System SSSI, and Salisbury Plain SSSI. It is also within 200m of Parsonage Down SSSI / NNR		
Ancient woodland	Corridor in excess of 200m from ancient woodland		

Topic: Air quality			
Environmental receptor	**Assessment of impact**		**Topic assessment**
Air quality Management Areas (AQMAs)	There are no AQMAs within 200m of the Corridor options.		Corridor takes traffic closer to four SSSI and three settlements within 200m, Corridor A has the 4th highest increase in emissions.
Sensitive air quality receptors – settlements and designated ecological sites	Corridor bisects or is within 200m of four SSSIs (Parsonage Down, River Till, Salisbury Plain, River Avon System) Some groups of residential receptors affected (specifically Larkhill, Durrington, Bulford) - Total 7 sites.		
Unit trip change (as proxy for air quality and carbon emissions)	Fourth largest increase in emissions.		

Topic: Noise			
Environmental receptor	**Assessment of impact**		**Topic assessment**
WHS	There would be a minor reduction in road traffic noise affecting the WHS. The Corridor is entirely outside the WHS but road traffic noise will still affect the northern part of the WHS and potentially sensitive receptors in this area.		Road traffic noise impacts would affect communities, with limited benefit to the northern part of the WHS. There would be a moderate reduction in road traffic noise affecting the WHS along the existing A303 Corridor, IAs and communities on a stretch of the existing A303.
Noise climate along the existing A303 Corridor	There would be some reduction in road traffic noise affecting Amesbury and Winterbourne Stoke.		
Traffic noise impact on communities	Road traffic noise would impact on many properties at Larkhill, south of Durrington, Shrewton and west of Bulford.		
Noise Climate within Important Areas (IA) (in the DEFRA 2014 Action Plan)	There would be some reduction in noise affecting IAs in Winterbourne Stoke and Amesbury.		
Traffic noise impact on sensitive facilities / land-use	Road traffic noise would impact on Larkhill Primary school (Larkhill), Durrington C of E Junior school(Durrington), Avondale School Independent Day School (Bulford), Durrington Village Hall Pre-school (Bulford), Cross Plain Durrington (Durrington), Stonehenge Vets (Durrington), Avon Valley Practice (Durrington)		

Topic: Landscape			
Environmental receptor	**Assessment of impact**		**Topic assessment**
Nationally designated areas (Area of Outstanding Natural Beauty (AONB) and National Parks)	No national landscape designations, but Corridor is of high landscape value and national importance as the landscape setting for the WHS. No direct adverse impacts on designated landscape areas, but western extent of Corridor will have degree of intervisibility with AONB.		No nationally designated landscapes within route Corridor, but area is assessed as being a high quality landscape at district and county level. High number of potential receptors at Amesbury, Larkhill, Durrington, Shrewton and Winterbourne Stoke. Some opportunity for landscape mitigation but Route brings traffic closer to receptors.
Locally valued landscape character of higher landscape or visual sensitivity (outside nationally designated landscape areas)	District Landscape Character Types and Areas: D: Chalk Downland (D2, D3, D4): High quality landscape international importance for archaeology, with high landscape and visual sensitivity. A: Narrow Chalk River Valley (A1, A2). High quality landscape of high archaeological and historical importance with moderate-high landscape and visual sensitivity. High quality landscape of high District and County value. High overall sensitivity. Potential for adverse impacts on landscape including rural settlements. Traffic reduced in the centre of Winterbourne Stoke. Overall adverse impact.		
Sensitive visual receptors, including residents	High number of potential visual receptors (residents and visitors) with no current view of major highway. High overall sensitivity.		

and visitors				

Topic: Water				
Environmental receptor	**Assessment of impact**		**Topic assessment**	
Source Protection Zone (SPZ)	Entire width of Corridor crosses SPZ 2		Entire Corridor crosses SPZ 2. Corridor would need new crossings over both the River Till and River Avon.	
River Till Crossing	Corridor includes new crossing of winterbourne section of River Till. Floodplain is more limited in extent and this is a winterbourne section; there is a lower likelihood that internationally designated habitats and species (receptors for possible changes in flows and water quality) are present			
River Avon Crossing	Corridor includes new crossing of River Avon and its floodplain. River is perennial at this location; likely that internationally designated habitats and species (receptors for possible changes in flows and water quality) are present			

Topic: Geology, soils and materials		
Environmental receptor	**Assessment of impact**	**Topic assessment**
Prevention of waste	Corridor A has the potential to generate moderate amounts of waste due to the distance covered by the Corridor.	Key Risks: Corridor A has the potential to generate moderate amounts of waste. Various potentially contaminative land uses have been identified which are scheme constraints and are considered to require investigation and assessment to characterise contamination and to identify remediation which may be required prior to construction. There is the potential for localised loss of BMV land. Key Benefits/ Opportunities: A benefit exists in using previously developed land due to the potential of remediation, if required, to improve the land quality if contamination present. An opportunity exists because the Corridor would use areas of mostly poorer quality land with a minority of BMV. Key Assumptions that affect the outcome of the assessment: Where potential contaminative sources have been identified, there is a possible risk to the environment and/or human health. Length of the Route is an approximate indicator of the amount of waste being generated without taking into account typography.
Minimise the loss of BMV agricultural land	Corridor A has mainly very shallow and stony soils over chalk on land that is often steep. There are wet soils on the Avon floodplain. Some BMV land is anticipated but the majority of the land is likely to be poorer than BMV.	
Current or historical potentially contaminative land uses/previously developed land	Corridor A largely follows existing roads in the east and passes through mostly open countryside in the west. Military of Defence (MOD) Larkhill has been identified in the central part of the route Corridor and there are two former petrol filling stations in close proximity to the Route. The western MOD Larkhill artillery range is intersected by the Route. In the overall context of the Corridor extents these are considered unlikely to represent a significant constraint to the scheme but would require intrusive investigation and assessment to characterise contamination which may be present and to identify remediation which may be required prior to construction.	

Topic: People and communities				
Environmental receptor	**Assessment of impact**		**Topic assessment**	
Public Rights of way (PRoW) within the WHS affected by severance or direct land take	Severance within the WHS significantly would be reduced through diversion of trunk road traffic away from the WHS.		There would be increased severance within Larkhill. With construction of modern crossings the change in severance of Larkhill/Durrington/ Bulford from Amesbury would be negligible. Potential for diversion of passing trade away from Amesbury and Winterbourne Stoke. There would be a significant reduction in severance within the WHS and reduced severance within Winterbourne Stoke.	
Number of communities affected by severance	There would be reduced severance of Winterbourne Stoke. There would be an increase in existing severance of Larkhill / Durrington / Bulford from Amesbury when compared to severance caused by the existing A303. However this could be mitigated by construction of modern crossings to the latest design standards. The increased in severance within Larkhill is significant however the severance within Durrington and within Bulford is very limited as the Corridor only passes through the edge of those settlements.			
Number of local businesses affected by severance	Potential for diversion of passing trade away from Amesbury and Winterbourne Stoke - potentially affecting more than five businesses in terms of loss of trade or future viability.			

Summary assessment of Corridor A	
The following risks or potential adverse effects have been identified for Corridor A: a) Heritage - Given proximity to the WHS, and potential harm to the setting of the WHS and key assets within the WHS (e.g. Durrington Walls), substantial harm to the OUV of the WHS is considered probable. The Corridor may also require physical removal of scheduled assets outside of the WHS, and may result in loss of listed buildings or harm to their setting. b) Biodiversity – The Corridor has the potential to impact the Salisbury Plain SPA/SAC, and at two new crossings over the River Avon SAC. The Corridor crosses or is located in close proximity to a number of nationally designated sites. c) Landscape – the Corridor is assessed as being a high quality landscape at district and county level. There are a high number of potential visual receptors at Amesbury, Larkhill, Durrington, Shrewton and Winterbourne Stoke. d) Air quality – The Corridor bisects or is located within 200m of 4 SSSIs and has the potential to affect 3 settlements (Larkhill, Durrington, Burford). e) Noise - Road traffic noise would affect the northern part of the WHS, and communities and sensitive receptors at Larkhill, south of Durrington, Shrewton and west of Bulford. f) Increased community severance of Larkhill. g) Potential for diversion of passing trade away from Amesbury and Winterbourne Stoke. The following benefits / opportunities have been identified for Corridor A: a) Severance within the WHS would be significantly reduced by closure of A303 b) Reduced community severance of Winterbourne Stoke. c) Reduction in road traffic noise affecting Amesbury and Winterbourne Stoke and IAs and communities on a stretch of the existing A303. d) A moderate reduction in road traffic noise affecting the WHS along the existing A303 Corridor. e) Some BMV land is anticipated but the majority of the land is likely to be poorer than BMV. Summary On balance, Corridor A is considered to have an overall environment performance rating of ‘Very Poor’.	

B5.2 Corridor B

Topic: Historic environment				
Environmental receptor	**Assessment of impact**		**Topic assessment**	
WHS	Construction of a new dual carriageway across the northern part of the WHS would sever the WHS, seriously degrade its character and adversely affect the setting and fabric of numerous Scheduled Monuments and other assets associated with the OUV of the WHS. Routes within the Corridor would result in substantial harm to the OUV. This would not be outweighed by the benefits of removing the existing A303.		Routes within the Corridor would sever the WHS, fundamentally altering its character and fabric. Routes in the Corridor would probably require the removal of scheduled assets and would certainly seriously degrade the setting of other scheduled assets. This would not be outweighed by the benefits of removing the existing A303. Routes in this Corridor are highly unlikely to achieve consent and would probably lead to the WHS being de-listed.	
Scheduled Monuments	High probability that any Route would require partial or total removal of a number of Scheduled Monuments, given density of scheduled assets in Corridor area. Any Route would also substantially harm the setting of a number of Scheduled Monuments due to the scale of development in the landscape setting of these monuments.			
Designated Assets: Listed Buildings, Conservation Areas and Registered Parks and Gardens	Less than substantial harm to the setting of a small number of listed buildings, one registered park and garden and one Conservation Area is possible. Harm may be avoided depending on Route within Corridor. Physical impacts can be avoided.			

Topic: Biodiversity			
Environmental receptor	**Assessment of impact**		**Topic assessment**
International Designation (SAC/ SPA/Ramsar and candidate SAC / potential SPA / potential Ramsar)	Corridor crosses, in two locations, Salisbury Plain SAC/SPA, and River Avon SAC.		The northern Routes within Corridor B would not meet CSRs of improving biodiversity along the Route as it is bringing it closer to / within several designated sites. Keeping Routes closer to the existing A303 would have lesser adverse effects as they would be further away from the SPA/SAC. Any Routes in the northern part of the Corridor could require significant compensation measures due to the direct loss, in two locations, of parts of Salisbury Plain SPA/SAC, and two new crossings over the River Avon SAC. There is scope to remove some of the direct impacts on Salisbury Plain SAC/SPA for southernmost Routes within Corridor B. The reduction in the presence of traffic and possible removal of infrastructure associated with the closure of parts of the existing A303 could result in benefits to species, including those associated with nearby European Sites. Given the limited information currently available, should this Corridor proceed to the next stage then further investigation will be required to better understand the potential for beneficial effects.
National Designation (SSSI/NNR)	Crosses River Till SSSI, River Avon System SSSI, Salisbury Plain SSSI, Parsonage Down SSSI/NNR		
Ancient Woodland	Corridor in excess of 200m from ancient woodland		

Topic: Air quality			
Environmental receptor	**Assessment of impact**		**Topic assessment**
AQMAs	There are no AQMAs within 200m of the Corridor options.		Corridor takes traffic closer to four SSSI and two settlements within 200m, Corridor B has the 4th highest increase in emissions.
Sensitive air quality receptors – settlements and designated ecological sites	Bisects or within 200m of four SSSIs (Parsonage Down, River Till, Salisbury Plain, River Avon System) Some groups of residential receptors affected (specifically Larkhill, Durrington) - Total 6 Sites (weighted 8)		
Unit trip change (as proxy for air quality and carbon emissions)	Fourth largest increase in emissions		

Topic: Noise			
Environmental receptor	**Assessment of impact**		**Topic assessment**
WHS	There would be a minor reduction in road traffic impact in the WHS. The Corridor is inside the WHS and road traffic noise would still affect the northern WHS		Road traffic noise would affect communities listed, with limited benefit to the northern part of the WHS. Small reduction in road traffic noise affecting the WHS along the existing A303 Corridor, IAs and communities on a stretch of the existing A303. Key assumptions that affect the outcome of the assessment:- Measures to limit the spread of road traffic noise from A303 to communities to the north and on the northern side of Winterbourne Stoke such as bunds and barriers will be incorporated in the scheme design.
Noise climate along the existing A303 Corridor	There would be some reduction in road traffic noise affecting Amesbury and Winterbourne Stoke		
Traffic noise impact on communities	There would be some reduction in road traffic noise affecting Larkhill, Shrewton, south of Durrington and west of Bulford		
Noise Climate within IA (in the DEFRA 2014 Action Plan)	There would be some reduction in road traffic noise affecting IAs in Winterbourne Stoke and Amesbury		
Traffic noise impact on sensitive facilities / land-use	there would be some road traffic noise impact on Larkhill Primary school (Larkhill), Durrington C of E Junior school(Durrington), Avondale School Independent Day School (Bulford), Durrington Village Hall Pre-school (Bulford), Cross Plain Durrington (Durrington), Stonehenge Vets (Durrington), Avon Valley Practice (Durrington)		

Topic: Landscape		
Environmental receptor	**Assessment of impact**	**Topic assessment**
Nationally designated areas (AONB and National Parks)	No national landscape designations, but Corridor is of high landscape value and national importance as the landscape setting for the WHS. No direct adverse impacts on nationally designated landscape area, but western extent of Corridor will have degree of intervisibility with AONB.	Route Corridor passes through northern part of the WHS, and through / close to / between settlements. No nationally designated landscapes within route Corridor, but area is assessed as being a high quality landscape at district and county level. Impacts for each District Landscape Character Area). High number of potential receptors at Amesbury, Larkhill, Durrington, Shrewton and Winterbourne Stoke. Greater potential visibility of route Corridors and limited opportunity for landscape mitigation dependant on precise Route location.
Locally valued landscape character of higher landscape or visual sensitivity (outside nationally designated landscape areas)	District Landscape Character Types and Areas: D: Chalk Downland (D2, D3, D4): High quality landscape international importance for archaeology, with high landscape and visual sensitivity. A: Narrow Chalk River Valley (A1, A2). High quality landscape of high archaeological and historical importance with moderate-high landscape and visual sensitivity. High quality landscape of high District and County value. High overall sensitivity. Potential for adverse impacts on landscape / streetscape in and around rural settlements. Traffic reduced in the centre of Winterbourne Stoke. Overall Adverse Impact.	
Sensitive visual receptors, including residents and visitors	High number of potential visual receptors (residents and visitors) with no current view of major highway. High overall sensitivity. Adverse Impact.	

Topic: Water		
Environmental receptor	**Assessment of impact**	**Topic assessment**
SPZ	Small part of Corridor crosses SPZ 2. However individual Routes may not.	Although Corridor contains an SPZ 2, a Route could be chosen within the Corridor which avoids it. If the River Avon crossing uses the existing footprint, new ecological and other benefits might be provided.
River Till Crossing	Corridor includes new crossing of winterbourne section of River Till. Floodplain is more limited in extent and this is a winterbourne section; there is a lower likelihood that internationally designated habitats and species (receptors for possible changes in flows and water quality) are present	
River Avon Crossing	Corridor may include new crossing of River Avon and its floodplain, but a Route could be chosen which uses the existing crossing footprint. In this case, crossing could be redesigned to provide new ecological and other benefits. River is perennial at this location; likely that internationally designated habitats and species (receptors for possible changes in flows and water quality) are present	

Topic: Geology, soils and materials			
Environmental receptor	**Assessment of impact**		**Topic assessment**
Prevention of waste	Corridor B has the potential to generate moderate amounts of waste due to the distance covered by the Corridor. Routes in this corridor closer to the existing A303 have the potential to generate less waste than those further away.		Key Risks: Corridor B has the potential to generate moderate amounts of waste. Various potentially contaminative land uses have been identified which are scheme constraints and are considered to require investigation and assessment to characterise contamination and to identify remediation which may be required prior to construction. There is the potential for localised loss of BMV land. Key Benefits/ Opportunities: A benefit exists in using previously developed land due to the potential of remediation, if required, to improve the land quality if contamination present. An opportunity exists because the Corridor would use areas of mostly poorer quality land with a minority of BMV. Key Assumptions that affect the outcome of the assessment: Where potential contaminative sources have been identified, there is a possible risk to the environment and/or human health. Length of the Route is an approximate indicator of the amount of waste being generated without taking into account topography.
Minimise the loss of BMV agricultural land	Corridor B consists mainly of shallow stony soils over chalk, with some better, more moisture retentive soils on some summits and footslopes. Valley sides are steep. The soils of the Avon floodplain are wet. A minority of the land is likely to be of BMV quality.		
Current or historical potentially contaminative land uses/previously developed land	A number of contaminative land uses have been identified in localised areas of the route Corridor including former railway engine sheds, MOD Larkhill which includes heavy weapons artillery ranges, Down Barn historical landfill and an un-delineated area of military waste disposal. In the overall context of the Corridor extents these are considered unlikely to represent significant constraints to the scheme but would require intrusive investigation and assessment to characterise contamination which may be present and to identify remediation which may be required prior to construction.		

Topic: People and communities		
Environmental receptor	**Assessment of impact**	**Topic assessment**

PRoW within the WHS affected by severance or direct land take	There would be limited reduction in severance within the WHS through reduction in traffic on existing A303 and provision of dedicated crossing facilities at the intersection of new Route and bridleways in the northern part of the WHS.		Diversion of passing trade away from Winterbourne Stoke. There would be reduced severance of Winterbourne Stoke. There would be a limited reduction in severance both within the WHS and between Amesbury and residential areas to the north.	
Number of communities affected by severance	There would be reduced severance of Winterbourne Stoke. There would be limited reduction in severance between Amesbury, a local service centre, and residential areas of Larkhill, Durrington and Bulford due to reduction in traffic on existing A303 and provision of dedicated crossing facilities at the intersection of the new Route with existing Public Rights of Way.			
Number of local businesses affected by severance	Potential for diversion of passing trade away from Winterbourne Stoke.			

Summary assessment of Corridor B	
The following risks or potential adverse effects have been identified for Corridor B: a) Heritage – Routes within the Corridor would sever the WHS, fundamentally altering its character and fabric. This would result in substantial harm to the OUV of the WHS. The Corridor may also require the removal of scheduled assets and seriously degrade the setting of other scheduled assets. b) Biodiversity – There is the potential for direct impacts where the Corridor crosses, in two locations, Salisbury Plain SAC/SPA (in the northern part of the Corridor), and River Avon SAC. The Corridor crosses a number of nationally designated sites. c) Landscape – the Corridor is assessed as being a high quality landscape at district and county level. There are a high number of potential visual receptors at Amesbury, Larkhill, Durrington, Shrewton and Winterbourne Stoke. d) Air quality – The Corridor bisects or is within 200m of 4 SSSIs, and there are 2 settlements within 200m (Larkhill, Durrington). e) Noise - Road traffic noise impacts would affect the northern part of the WHS, and communities and sensitive receptors at Larkhill, south of Durrington, Shrewton and west of Bulford. f) Limited reduction in severance both within the WHS and between Amesbury and residential areas to the north. g) Potential for diversion of passing trade away from Winterbourne Stoke. In addition, the following benefits / opportunities have been identified for Corridor B: a) Reduced community severance of Winterbourne Stoke. b) Reduction in road traffic noise affecting Winterbourne Stoke. c) A minority of land is likely to be of BMV quality. Summary On balance, Corridor B is considered to have an overall environment performance rating of ‘Very Poor’.	

B5.3 Corridor C

Topic: Historic environment				
Environmental receptor	**Assessment of impact**		**Topic assessment**	
WHS	Construction of a new dual carriageway across the central part of the WHS would sever the WHS, seriously degrade its character and adversely affect the setting and fabric of numerus Scheduled Monuments and other assets associated with the OUV of the WHS. Routes within the Corridor would result in substantial harm to the OUV. This would not be outweighed by the benefits of removing the existing A303.		Routes within the Corridor would sever the WHS, fundamentally altering its character and fabric. Routes in the Corridor would probably require the removal of scheduled assets and would certainly seriously degrade the setting of other scheduled assets. Routes within the Corridor would not reflect NPSNN and CSRs. Routes in this Corridor are highly unlikely to achieve consent and would probably lead to the WHS being de-listed. Note: Assessment considers both the construction of a new dual carriageway or a widened and upgraded A303 within the Corridor.	
Scheduled Monuments	High probability that any Route would require partial or total removal of a number of Scheduled Monuments, given density of scheduled assets in Corridor area. Any Route would also substantially harm the setting of a number of Scheduled Monuments due to the scale of development in the landscape setting of these monuments			
Designated Assets: Listed Buildings, Conservation Areas and Registered Parks and Gardens	Less than substantial harm to the setting of a small number of listed buildings, one registered park and garden and possibly two Conservation Areas is likely. Physical impacts should be avoidable; but if they occur then a red rating would apply.			

Topic: Biodiversity				
Environmental receptor	**Assessment of impact**		**Topic assessment**	
International Designation (SAC/ SPA/Ramsar and candidate SAC / potential SPA / potential Ramsar)	Crosses River Avon SAC twice		Route Corridor crosses several designated sites of national and international value. Lesser adverse effects are likely for those Routes within the Corridor which are the closest to the existing A303. The northern half of Normanton Down RSPB reserve is within Corridor C, whose population of stone curlew is likely linked to that of Salisbury Plain SPA.	
National Designation (SSSI/NNR)	Crosses River Till SSSI, River Avon System SSSI, and is within 200m of Parsonage Down SSSI/NNR			
Ancient Woodland	Corridor in excess of 200m from ancient woodland			

Topic: Air quality			
Environmental receptor	**Assessment of impact**		**Topic assessment**
AQMAs	There are no AQMAs within 200m of the Corridor options.		Corridor takes traffic closer to three SSSI but no settlements within 200m, Corridor C has the smallest increase in emissions.
Sensitive air quality receptors – settlements and designated ecological sites	Bisects or within 200m of three SSSI (Parsonage Down, River Till, River Avon System) No groups of residential receptors impacted - Total 3 Sites (weighted 3)		
Unit trip change (as proxy for air quality and carbon emissions)	Smallest increase in emissions		

Topic: Noise			
Environmental receptor	**Assessment of impact**		**Topic assessment**
WHS	There would be a negligible reduction in road traffic noise impacts in the WHS. The corridor is inside the WHS and close to the existing A303 Route		There would be a reduction in road traffic noise affecting receptors and the IA in Winterbourne Stoke.
Noise climate along the existing A303 Corridor	There would be some reduction in road traffic noise affecting Winterbourne Stoke		
Traffic noise impact on communities	There would be minor increases in road traffic noise affecting communities such as Larkhill, Normanton and Shrewton		
Noise Climate within IA (in the DEFRA 2014 Action Plan)	There would be some reduction in noise affecting IAs in Winterbourne Stoke		
Traffic noise impact on sensitive facilities / land-use	there would be minor increases in road traffic noise affecting Larkhill Primary school (Larkhill)		

Topic: Landscape				
Environmental receptor	**Assessment of impact**		**Topic assessment**	
Nationally designated areas (AONB and National Parks)	No national landscape designations, but Corridor is of high landscape value and national importance as the landscape setting for the WHS. No direct adverse impacts on nationally designated landscape areas, but western extent of Corridor will have degree of intervisibility with AONB.		Route Corridor passes through WHS, and close to settlements. No nationally designated landscapes within route Corridor, but area is assessed as being a high quality landscape at district and county level (refer to landscape assessment table for RAG impacts for each District Landscape Character Area). High number of potential receptors at Amesbury, Larkhill, Durrington, Shrewton and Winterbourne Stoke. Greater visibility of route Corridors and no opportunity for landscape mitigation planting due to distinctive open character of surrounding landscape.	
Locally valued landscape character of higher landscape or visual sensitivity (outside nationally designated landscape areas)	District Landscape Character Types and Areas: D: Chalk Downland (D2, D3): High quality landscape international importance for archaeology, with high landscape and visual sensitivity. A: Narrow Chalk River Valley (A1, A2). High quality landscape of high archaeological and historical importance with moderate-high landscape and visual sensitivity. High quality landscape of high District and County value. High overall sensitivity. Potential for adverse impacts on landscape. Route Corridor avoids main settlements and takes traffic from centre of Winterbourne Stoke. Adverse Impact.			
Sensitive visual receptors, including residents and visitors	High number of potential visual receptors (residents and visitors) with no current view of major highway. High overall sensitivity. Adverse Impact.			

Topic: Water				
Environmental receptor	**Assessment of impact**		**Topic assessment**	
SPZ	Corridor crosses no SPZs		Corridor crosses no SPZs and uses the existing crossing of the River Avon; redesign could provide additional ecological and other benefits. Main risks likely to be linked to River Till crossing	
River Till Crossing	Corridor includes new crossing of winterbourne section of River Till. Floodplain is more limited in extent and this is a winterbourne section; there is a lower likelihood that internationally designated habitats and species (receptors for possible changes in flows and water quality) are present			
River Avon Crossing	Corridor includes existing river/floodplain crossing that could be redesigned to provide new ecological and other benefits. River is perennial at this location; likely that internationally designated habitats and species (receptors for possible changes in flows and water quality) are present			

Topic: Geology, soils and materials			
Environmental receptor	**Assessment of impact**		**Topic assessment**
Prevention of waste	Corridor C has the potential to generate moderate amounts of waste due to the distance covered by the Corridor. Routes closer to the existing A303 have the potential to generate less waste than those further away.		Key Risks: Corridor C has the potential to generate moderate amounts of waste. Various potentially contaminative land uses have been identified which are scheme constraints and are considered to require investigation and assessment to characterise contamination and to identify remediation which may be required prior to construction. There is the potential for localised loss of BMV land. Key Benefits/ Opportunities: A benefit exists in using previously developed land due to the potential of remediation, if required, to improve the land quality if contamination present. An opportunity exists because the Corridor would use areas of mostly poorer quality land with a minority of BMV. Key Assumptions that affect the outcome of the assessment: Where potential contaminative sources have been identified, there is a possible risk to the environment and/or human health. Length of the Route is an approximate indicator of the amount of waste being generated without taking into account typography.
Minimise the loss of BMV agricultural land	Corridor C consists mainly of shallow stony soils over chalk, with some better, more moisture retentive soils on some summits and footslopes. Valley sides are steep. A minority of the land is likely to be of BMV quality.		
Current or historical potentially contaminative land uses/previously developed land	A former sewage works, infilled quarry and former farmyard with storage tanks have been identified within the Corridor. In the overall context of the Corridor extents these contaminative land uses are unlikely to represent significant constraints to the scheme, but would require intrusive investigation and assessment to characterise contamination which may be present and to identify remediation which may be required prior to construction.		

Topic: People and communities		
Environmental receptor	**Assessment of impact**	**Topic assessment**
PRoW within the WHS affected by severance or direct land take	There would be a very limited reduction in severance within the WHS through provision of dedicated crossing facilities at the intersection of the new Route and public rights of way in the northern part of the WHS	Diversion of passing trade away from Winterbourne Stoke. There would be a very limited reduction in severance within the WHS and between Amesbury, and residential areas to the north. Reduced severance of Winterbourne Stoke.
Number of communities affected by severance	There would be reduced severance of Winterbourne Stoke. There would be limited reduction in severance between Amesbury, a local service centre, and residential areas of Larkhill, Durrington and Bulford to the north through a reduction in traffic on existing A303 and provision of dedicated crossing facilities at the intersection of the new Route with byways	
Number of local businesses affected by severance	Potential for diversion of passing trade away from Winterbourne Stoke	

Summary assessment of Corridor C
The following risks or potential adverse effects have been identified for Corridor C: a) Heritage – Construction of a new dual carriageway across the central part of the WHS would sever the WHS, seriously degrade its character and adversely affect the setting and fabric of numerous Scheduled Monuments. This would result in substantial harm to the OUV of the WHS. There is a high probability that, given density of scheduled assets in Corridor area, any route within the Corridor would require partial or total removal of a number of Scheduled Monuments, and substantially harm the setting of a number of Scheduled Monuments. b) Biodiversity – There is the potential for direct impacts where the Corridor crosses, in two locations, the River Avon SAC. The Corridor crosses or is located in close proximity to a number of nationally designated sites. Part of the Normanton Down RSPB reserve is located within the Corridor, whose population of stone curlew may be linked to that of Salisbury Plain SPA. c) Landscape – the Corridor is assessed as being a high quality landscape at district and county level. There are a high number of potential visual receptors at Amesbury, Larkhill, Durrington, Shrewton and Winterbourne Stoke. Opportunities for landscape mitigation planting are constrained due to the distinctive open character of the landscape. d) Air quality – The Corridor bisects or is within 200m of 3 SSSIs. e) Noise – there would be limited or no benefit to the WHS and minor increases in road traffic noise affecting communities and sensitive receptors such as Larkhill, Normanton and Shrewton. f) There would be a limited reduction in severance both within the WHS and between Amesbury and residential areas of Larkhill, Durrington and Bulford. g) Potential for diversion of passing trade away from Winterbourne Stoke. In addition, the following benefits / opportunities have been identified for Corridor C: a) Reduced community severance of Winterbourne Stoke. b) Noise - Reduction in road traffic noise affecting receptors and the IA in Winterbourne Stoke. c) A minority of land is likely to be of BMV quality. d) Air quality - No groups of residential receptors impacted and smallest increase in emissions based on traffic modelling undertaken to date. Summary On balance, Corridor C is considered to have an overall environment performance rating of ‘Very Poor’.

A.5.1 B5.4 Corridor D

Topic: Historic environment				
Environmental receptor	**Assessment of impact**		**Topic assessment**	
WHS	Construction of dual carriageway approach roads and tunnel portals in the eastern and western areas of the WHS will harm the character of the WHS and will affect the setting of some scheduled assets that contribute to the OUV of the WHS. The removal of the existing A303 would benefit the character of the WHS and the setting of key assets such as Stonehenge. The overall scale of harm will depend on Route chosen, location of portals, length of tunnel etc. At this time it is considered that substantial harm can be avoided with appropriate design and consequently the potential exist for the benefits to outweigh the harm. However the risk remains that substantial harm could occur and that the benefits would not outweigh the harm. It has been assumed that a quality and appropriate design would be implemented. However the risk remains that substantial harm would occur and the rating would then change from Amber to Red.		Tunnel based Routes within the Corridor would reduce the impact of traffic on the WHS, resulting in benefits for the WHS. They would however still require the construction of lengths of dual carriageway and portals which would degrade the character of the WHS as well as affecting the fabric and setting of Scheduled Monuments. Construction at east end would also affect the setting of listed buildings, a registered park and garden and a Conservation Area. Consequently, there remains a consenting risk with the Routes in the Corridor as there may be conflict with NPSNN.	
Scheduled Monuments	High probability that any Route would require partial removal of at least one Scheduled Monument Routes within the Corridor are however likely to substantially harm the significance of a number of Scheduled Monuments at the eastern and western ends of the scheme within and close to the WHS due to changes in their setting			
Designated Assets: Listed Buildings, Conservation Areas and Registered Parks and Gardens	Less than substantial harm to the significance of a small number of listed buildings, and one registered park and garden and one Conservation Area due to changes in their setting is likely. Physical impacts should be avoidable.			

Topic: Biodiversity			
Environmental receptor	**Assessment of impact**		**Topic assessment**
International Designation (SAC/ SPA/Ramsar and candidate SAC / potential SPA / potential Ramsar)	New crossing of River Till SAC , and is within 200m of Salisbury Plain SAC		Route Corridor crosses River Till SAC. No direct loss of other European Sites but is in proximity to Salisbury Plain SAC / Parsonage Down SSSI/NNR. Corridor D also clips the northern tip of Normanton Down RSPB reserve whose population of stone curlew is likely linked to that of Salisbury Plain SPA. Potential for lesser adverse effects for those Routes within the Corridor which are the closest to the existing A303. The reduction in the presence of traffic and possible removal of infrastructure associated with the diversion of parts of the existing A303 into a tunnel could result in benefits to species, including those associated with nearby European Sites. Given the limited information currently available, should this Corridor proceed to the next stage then further investigation will be required to better understand the potential for beneficial effects. Subject to the nature of spoil generated through cuttings or tunnelling activity, there may be potential to reuse material for habitat creation / reinstatement. Further investigation will be required to better understand the potential to deliver benefits should this Corridor proceed to the next stage.
National Designation (SSSI/NNR)	Crosses River Till SSSI, and is within 200m of Parsonage Down SSSI/NNR		
Ancient Woodland	Corridor in excess of 200m from ancient woodland		

Topic: Air quality			
Environmental receptor	**Assessment of impact**		**Topic assessment**
AQMAs	There are no AQMAs within 200m of the Corridor options.		Three SSSI / four settlements within 200m, Corridor D has the smallest increase in emissions.
Sensitive air quality receptors – settlements and designated ecological sites	Bisects or within 200m of three SSSI (Parsonage Down, River Till, River Avon System) Several groups of residential receptors affected (specifically Winterbourne stoke, Berwick St James, Amesbury and Larkhill) - Total 4 sites (weighted 7)		
Unit trip change (as proxy for air quality and carbon emissions)	Smallest increase in emissions		

Topic: Noise			
Environmental receptor	**Assessment of impact**		**Topic assessment**
WHS	There would be a minor reduction in road traffic noise in the WHS. The A303 is mostly in tunnel with at least one portal and new carriageway within the WHS		There would be limited benefit to the WHS in areas around portals and at grade separated junctions. There would be a large reduction in road traffic noise within the WHS and affecting communities on a stretch of the existing A303
Noise climate along the existing A303 Corridor	There would be some reduction in road traffic noise in Winterbourne Stoke		
Traffic noise impact on communities	There would be some road traffic noise impact on a few communities if a northern tunnel Route was used. The portal approach ramp could bring A303 traffic closer to Larkhill		
Noise Climate within IA (in the DEFRA 2014 Action Plan)	There would be some road traffic noise impact on small IA sections in Winterbourne Stoke		
Traffic noise impact on sensitive facilities / land-use	There would be road traffic noise impact on a few receptors.		

Topic: Landscape			
Environmental receptor	**Assessment of impact**		**Topic assessment**
Nationally designated areas (AONB and National Parks)	No national landscape designations, but Corridor is of high landscape value and national importance as the landscape setting for the WHS. Reduction in extent of visible traffic within WHS but addition of structures and portals. No direct adverse impacts on nationally designated landscape areas, but western extent of Corridor will have degree of intervisibility with AONB. Adverse Impact.		Route Corridor passes through WHS, and close to settlements. No nationally designated landscapes within route Corridor, but area is assessed as being a high quality landscape at district and county level (refer to landscape assessment table for RAG impacts for each District Landscape Character Area). High number of potential receptors where route Corridors are "at grade", at Amesbury, Larkhill, Durrington, Shrewton and Winterbourne Stoke. Less potential visibility of route Corridors but portals will be evident. Opportunity for landscape mitigation, but will be dependent on precise route location and portal design.
Locally valued landscape character of higher landscape or visual sensitivity (outside nationally designated landscape areas)	District Landscape Character Types and Areas: D: Chalk Downland (D2, D3): High quality landscape international importance for archaeology, with high landscape and visual sensitivity. A: Narrow Chalk River Valley (A1, A2). High quality landscape of high archaeological and historical importance with moderate-high landscape and visual sensitivity. High quality landscape of high District and County value. High overall sensitivity. Potential for adverse impacts on landscape. Reduction in extent of visible traffic within WHS but addition of portals and structures. Corridor avoids main settlements and takes traffic from centre of Winterbourne Stoke. Adverse Impact.		
Sensitive visual receptors, including residents and visitors	High number of potential visual receptors (residents and visitors) with no current view of major highway. High overall sensitivity. Adverse Impact.		

Topic: Water			
Environmental receptor	**Assessment of impact**		**Topic assessment**
SPZ	Corridor crosses no SPZs		Corridor crosses no SPZs and uses the existing crossing of the River Avon; redesign could provide additional ecological and other benefits. Risks linked to River Till crossing. Largest risk from tunnel construction and operation disrupting groundwater flow and dispersal into the River Avon. However, this may be managed by careful planning and design.
River Till Crossing	Corridor includes new crossing of winterbourne section of River Till. Floodplain is more limited in extent and this is a winterbourne section; there is a lower likelihood that internationally designated habitats and species (receptors for possible changes in flows and water quality) are present		
River Avon Crossing	Corridor includes existing river/floodplain crossing that could be redesigned to provide new ecological and other benefits. River is perennial at this location; likely that internationally designated habitats and species (receptors for possible changes in flows and water quality) are present. A new tunnel may affect the flow of groundwater through the landscape and into the River Avon.		

Topic: Geology, soils and materials			
Environmental receptor	**Assessment of impact**		**Topic assessment**
Prevention of waste	Corridor D has the potential to generate large amounts of waste due to the scheme option being a tunnel. The distance covered by Corridor is shorter compared to other Corridors but is considered a higher risk in waste generation due to the excavation of material for the tunnel.		Key Risks: Corridor D has the potential to generate large amounts of waste. A significant minority of the land is likely to be of BMV quality. Potentially contaminative land uses identified in the area are not considered to represent significant constraints given that the tunnel is at depth and provisional portal locations are located outside these areas. There is the potential for localised loss of BMV land. Key Benefits/ Opportunities: A benefit exists in using previously developed land due to the potential of remediation, if required, to improve the land quality if contamination present. An opportunity exists because the Corridor would use areas of mostly poorer quality land with a minority of BMV. Key Assumptions that affect the outcome of the assessment: Where potential contaminative sources have been identified, there is a possible risk to the environment and/or human health. Length of the Route is an approximate indicator of the amount of waste being generated without taking into account typography. Tunnel portals will be constructed on the WHS. Tunnel is a twin bored with dual carriage way in each tunnel
Minimise the loss of BMV agricultural land	Corridor D consists mainly of shallow stony soils over chalk, with some better, more moisture retentive soils on some summits and footslopes. Valley sides are steep. A minority of the land is likely to be of BMV quality. The tunnel Route will result in only localised disturbance/loss of surface soils.		
Current or historical potentially contaminative land uses/previously developed land	Two former sewage works are located in the route Corridor. In addition there is an unspecified area of MOD waste disposal and an infilled quarry in the route Corridor. Assuming a tunnel within the Corridor is at depth these contaminative land uses are unlikely to represent significant constraints to the scheme. Depending on the location of the portals and the contamination sources in those areas, intrusive investigation and assessment to characterise contamination may be required to identify remediation which may be required prior to construction.		

Topic: People and communities

Environmental receptor	Assessment of impact		Topic assessment	
PRoW within the WHS affected by severance or direct land take	There would be reduced severance within the WHS due to tunnel and dedicated crossings where the at-grade sections of the new road intersect with public rights of way.		Diversion of passing trade away from Winterbourne Stoke. There would be significantly reduced severance within the WHS and in Winterbourne Stoke.	
Number of communities affected by severance	There would be reduced severance for people living and working in Winterbourne Stoke. Reduction in traffic on existing A303 and provision of dedicated crossing facilities at the intersection of the new Route with public rights of way would reduce severance			
Number of local businesses affected by severance	Potential for diversion of passing trade away from Winterbourne Stoke			

Summary assessment of Corridor D	
The following risks or potential adverse effects have been identified for Corridor D: a) Heritage – Tunnel based Routes within the Corridor would still require the construction of lengths of dual carriageway and portals which, depending on location, could degrade the character of the WHS and affect the fabric and setting of Scheduled Monuments. Construction at the east end would also affect the setting of listed buildings, a registered park and garden and a Conservation Area. b) Biodiversity – There is the potential for direct impacts where the Corridor crosses the River Avon SAC and one SSSI. The Corridor is also located in proximity to the Salisbury Plain SAC and Parsonage Down SSSI/NNR.Landscape – the Corridor is assessed as being a high quality landscape at district and county level. There are a high number of potential receptors where route Corridors are "at grade", at Amesbury, Larkhill, Durrington, Shrewton and Winterbourne Stoke. There is less potential visibility of route Corridors but portals will be evident. c) Air quality – The Corridor bisects or is within 200m of three SSSI (Parsonage Down, River Till, River Avon System). Several groups of residential receptors affected (specifically Winterbourne stoke, Berwick St James, Amesbury and Larkhill) d) Potential for diversion of passing trade away from Winterbourne Stoke. e) Corridor D has the potential to generate large amounts of waste from tunnel excavation. The following benefits / opportunities have been identified for Corridor D: a) Heritage - Tunnel based Routes within the Corridor would reduce the impact of traffic on the WHS. b) There would be reduced severance within the WHS and in Winterbourne Stoke. c) Noise – there would be a large reduction in road traffic noise within the WHS and for receptors and the IA in Winterbourne Stoke. d) A minority of land is likely to be of BMV quality, and the tunnel Route will result in more localised disturbance/loss of surface soils. e) Air quality - No groups of residential receptors affected and smallest increase in emissions based on traffic modelling undertaken to date. Summary On balance, Corridor D is considered to have an overall environment performance rating of ‘neutral’.	

B5.5 Corridor E

Topic: Historic environment				
Environmental receptor	**Assessment of impact**		**Topic assessment**	
WHS	Construction of a new dual carriageway across the southern part of the WHS would sever the WHS, seriously degrade its character and adversely affect the setting and fabric of a number of Scheduled Monuments and other assets associated with the OUV of the WHS. Routes within the Corridor would result in substantial harm to the OUV, which is very unlikely to be outweighed by benefits of removal of existing A303.		Routes within the Corridor would sever the WHS, fundamentally altering its character and fabric. Routes in the Corridor would also possibly require the removal of scheduled assets and would probably degrade the setting of other scheduled assets. Routes within the Corridor would not reflect NPSNN and CSRs. Routes in this Corridor are highly unlikely to achieve consent and would probably lead to the WHS being de-listed.	
Scheduled Monuments	Possible that any Route would require partial or total removal of a number of Scheduled Monuments. Any Route would also probably substantially harm the significance of a small number of Scheduled Monuments due to the scale of development in the setting of these monuments.			
Designated Assets: Listed Buildings, Conservation Areas and Registered Parks and Gardens	High probability of substantial harm and less than substantial harm to listed buildings in Amesbury due to demolition and changes to setting. High probability of harm to setting and significance of a registered park and garden and Conservation Area. Also likely to adversely affect the setting and significance of other listed buildings and Conservation Areas in the western half of the Corridor.			

Topic: Biodiversity			
Environmental receptor	**Assessment of impact**		**Topic assessment**
International Designation (SAC/ SPA/Ramsar and candidate SAC / potential SPA / potential Ramsar)	Crosses River Avon SAC several times		Route Corridor E crosses several international and national designated sites. Half of Normanton Down RSPB reserve is within Corridor E, whose population of stone curlew is likely linked to that of Salisbury Plain SPA. Potential for lesser adverse effects for a Route within Corridor E that would be as close to the existing A303 as possible, although severance of the RSPB reserve may not be avoided in this event. The reduction in the presence of traffic and possible removal of infrastructure associated with the closure of parts of the existing A303 could result in benefits to species, including those associated with nearby European Sites. Given the limited information currently available, should this Corridor proceed to the next stage then further investigation will be required to better understand the potential for beneficial effects.
National Designation (SSSI/NNR)	Crosses Steeple Langford Down SSSI, River Till SSSI, River Avon System SSSI. Within 200m of Parsonage Down SSSI/NNR and Yarnbury Castle SSSI		
Ancient Woodland	Corridor in excess of 200m from ancient woodland		

Topic: Air quality			
Environmental receptor	**Assessment of impact**		**Topic assessment**
AQMAs	There are no AQMAs within 200m of the Corridor options.		Four SSSI / six settlements within 200m. Corridor E would have 2nd smallest increase in emissions.
Sensitive air quality receptors – settlements and designated ecological sites	Bisects or within 200m of four SSSI (Parsonage Down, Steeple Langford Down, River Till, River Avon System) Several groups of residential receptors affected (specifically Amesbury, Steeple Langford, Berwick St James, Winterbourne Stoke, Normanton, Stapleford) - Total 10 sites (weighted 12)		
Unit trip change (as proxy for air quality and carbon emissions)	Second smallest increase in emissions.		

Topic: Noise			
Environmental receptor	**Assessment of impact**		**Topic assessment**
WHS	There would be a negligible reduction in road traffic noise impacts in the WHS. The Corridor is within the WHS		There would be limited benefit to the southern part of the WHS, impacts in communities to the west, south and Amesbury. There would be a reduction in road traffic noise affecting the stone circle site and communities on a stretch of the existing A303. Key assumptions that affect the outcome of the assessment:- measures to limit the spread of road traffic noise affecting the adjacent communities can be incorporated within the scheme design.
Noise climate along the existing A303 Corridor	There would be some noise impact on Winterbourne Stoke		
Traffic noise impact on communities	There would be some noise impact on Berwick St James, Stapleford, West Amesbury		
Noise Climate within IA (in the DEFRA 2014 Action Plan)	There would be some noise impact on Small IA sections in Winterbourne Stoke		
Traffic noise impact on sensitive facilities / land-use	There would be some noise impact on Amesbury Dental Care, Barcroft Medical Centre, Pharmacy, St Melor Surgery (All in Amesbury)		

Topic: Landscape		
Environmental receptor	**Assessment of impact**	**Topic assessment**
Nationally designated areas (AONB and National Parks)	National designation Cranborne Chase (CC) and West Wiltshire Downs (WWD) AONB at west end of Corridor. Corridor is considered to be a High Value Landscape of national importance within AONB and as landscape setting for WHS. Potential adverse impact on nationally designated landscape area.	Route Corridor passes through WHS and CC and WWD AONB, and close to settlements. Nationally designated landscape (AONB) within route Corridor, and area is assessed as being a high quality landscape at district and county level (refer to landscape assessment table for RAG impacts for each District Landscape Character Area). High number of potential receptors at Amesbury, Larkhill, Durrington, Shrewton, Winterbourne Stoke, Steeple Langford, Stapleford and Wylye. Greater potential visibility of route Corridors and very limited opportunity for landscape mitigation due to open character of surrounding landscape, but dependent on precise Route location.
Locally valued landscape character of higher landscape or visual sensitivity (outside nationally designated landscape areas)	District Landscape Character Types and Areas: D: Chalk Downland (D2, D3, D4): High quality landscape international importance for archaeology, with high landscape and visual sensitivity. A: Narrow Chalk River Valley (A1, A2): High quality landscape of high archaeological and historical importance with moderate-high landscape and visual sensitivity. B: Broad Chalk River Valley Slopes (B1) and C: Broad Chalk River Valley Floor (C1). High quality landscape in AONB, with moderate-high landscape and visual sensitivity. High quality landscape of high District and County value. High overall sensitivity. Potential for adverse impacts on landscape / streetscape in main settlements (Amesbury). Adverse Impact.	
Sensitive visual receptors, including residents and visitors	High no of potential visual receptors (residents and visitors) with no existing view of major highway. Corridor close to major settlements at east and to villages at west and south-east. High visual sensitivity. Adverse Impact.	

Topic: Water			
Environmental receptor	**Assessment of impact**		**Topic assessment**
SPZ	Corridor crosses no SPZs		Corridor crosses no SPZs and uses the existing crossing of the River Avon; redesign could provide additional ecological and other benefits. Main risks likely to be linked to River Till crossing
River Till Crossing	Majority of Corridor includes new crossing of perennial section of River Till with more extensive and diverse floodplain habitat extent and greater likelihood of presence of aquatic species. Within the Corridor there are some Routes which include only a new crossing at the winterbourne section of the River Till, limited floodplain habitat extent and limited presence of aquatic species.		
River Avon Crossing	Corridor includes existing river/floodplain crossings that could be redesigned to provide new ecological and other benefits. River is perennial at this location; likely that internationally designated habitats and species (receptors for possible changes in flows and water quality) are present		

Topic: Geology, soils and materials				
Environmental receptor	**Assessment of impact**		**Topic assessment**	
Prevention of waste	Corridor E has the potential to generate moderate amounts of waste due to the distance covered by the Corridor. Routes closer to the existing A303 have the potential to generate less waste than those further away.		Corridor E has the potential to generate moderate amounts of waste. There is the potential for localised loss of BMV land. A benefit exists in using previously developed land due to the potential of remediation, if required, to improve the land quality if contamination present. An opportunity exists because the Corridor would use areas of mostly poorer quality land with a minority of BMV. Key Assumptions that affect the outcome of the assessment: Where potential contaminative sources have been identified, there is a possible risk to the environment and/or human health. Length of the Route is an approximate indicator of the amount of waste being generated without taking into account typography.	
Minimise the loss of BMV agricultural land	Corridor E consists mainly of shallow stony soils over chalk, with some better, more moisture retentive soils on some summits and footslopes. Valley sides are steep. The soils of the Avon floodplain are wet. A minority of the land is likely to be of BMV quality.			
Current or historical potentially contaminative land uses/previously developed land	An existing sewage works is present within the route Corridor, to the south-west of Amesbury. This is not considered to represent a significant constraint to the scheme.			

Topic: People and communities				
Environmental receptor	**Assessment of impact**		**Topic assessment**	
PRoW within the WHS affected by severance or direct land take	Reduction in traffic on existing A303 and provision of dedicated crossing facilities at the intersection of the new Route with 2 byways would result in a limited reduction in severance within the WHS		Potential diversion of passing trade away from Winterbourne Stoke. There would be a limited reduction in severance within the WHS and reduced severance in Winterbourne Stoke.	
Number of communities affected by severance	There would be reduced severance of Winterbourne Stoke. There would be severance of several footpaths and byways to the south of Winterbourne Stoke mitigated through provision of dedicated crossing facilities for NMUs			
Number of local businesses affected by severance	Potential for diversion of passing trade away from Winterbourne Stoke			

Summary assessment of Corridor E	
The following risks or potential adverse effects have been identified for Corridor E: a) Heritage – Routes within the Corridor would sever the WHS, fundamentally altering its character and fabric. This would result in substantial harm to the OUV of the WHS, which is unlikely to be outweighed by benefits of removal of existing A303. The Corridor may also require the removal of scheduled assets and degrade the setting of other scheduled assets. b) Biodiversity – There is the potential for direct impacts where the Corridor crosses the River Avon SAC at a number of locations. The Corridor crosses or is located in close proximity to a number of nationally designated sites. Half of Normanton Down RSPB reserve is located within the Corridor, whose population of stone curlew may be linked to that of Salisbury Plain SPA. c) Landscape – The Cranborne Chase and West Wiltshire Downs AONB is located within the western end of Corridor, and there is therefore the potential for an adverse effect on a nationally designated landscape area. The remainder of the Corridor is assessed as being a high quality landscape at district and county level. There are a high number of potential visual receptors at Amesbury, Larkhill, Durrington, Shrewton, Winterbourne Stoke, Steeple Langford, Stapleford and Wylye. There is high potential visibility and opportunities for landscape mitigation are constrained due to the open character of surrounding landscape. d) Air quality – The Corridor bisects or is within 200m of 4 SSSIs. There are several groups of residential receptors potentially affected (Amesbury, Steeple Langford, Berwick St James, Winterbourne Stoke, Normanton, Stapleford). e) Noise – The Corridor is within the WHS and therefore there is limited or no benefit to the WHS in noise terms. Road traffic noise would affect communities and sensitive receptors such as at Berwick St James, Stapleford, West Amesbury. f) There would be limited reduction in severance within the WHS. g) Potential for diversion of passing trade away from Winterbourne Stoke. In addition, the following benefits / opportunities have been identified for Corridor E: a) There would be reduced community severance of Winterbourne Stoke. b) Noise – there would be a reduction in road traffic noise affecting receptors and the IA in Winterbourne Stoke. c) A minority of land is likely to be of BMV quality. Summary On balance, Corridor E is considered to have an overall environment performance rating of ‘Very Poor’.	

B5.6 Corridor F (north)

Topic: Historic environment				
Environmental receptor	**Assessment of impact**		**Topic assessment**	
WHS	No construction within WHS and assumed that A303 is removed. The removal of the existing A303 would benefit the character of the WHS and the setting of key assets such as Stonehenge, this would bring substantial benefits for the WHS. The northern part of the Corridor lies within 1km of the southern boundary of the WHS and Routes in this area may adversely affect the setting of the WHS and some associated monuments, resulting in less than substantial harm, Routes further south in the Corridor may be sufficiently distant from WHS to not result in significant change to setting of WHS and hence harm to OUV. Recorded as green but may be amber dependant on Route		Route would deliver benefits for the WHS and would probably largely avoid significant harm to Scheduled Monuments; but some risk of notable harm remains. There would probably be harm to the setting and significance of listed buildings and Conservation Areas.	
Scheduled Monuments	Possible that any Route within Corridor would require partial removal of a small number of Scheduled Monuments but this should be avoidable. Any Route is also likely to less than substantially harm the significance of a number of Scheduled Monuments due to changes to their settings; it is possible that substantial harm due to changes to the setting of one Scheduled Monument may occur, depending on the chosen Route (this could result in a red rating). It is also possible that a Route within the Corridor could result in less than substantial harm to only a small number of monuments and hence green rating is possible, but has not been assumed.			
Designated Assets: Listed Buildings, Conservation Areas and Registered Parks and Gardens	Possible, but unlikely, that the Route would require the demolition of listed buildings in the Woodford and Wylye Valleys. High probability of less than substantial harm to the significance of listed buildings and Conservation Areas in these valleys due to changes to their setting; some possibility of substantial harm, but not assumed (could be red).			

Topic: Biodiversity			
Environmental receptor	**Assessment of impact**		**Topic assessment**
International Designation (SAC/ SPA/Ramsar and candidate SAC / potential SPA / potential Ramsar)	Clips the southern tip of Salisbury Plain SPA/SAC, crosses the River Avon SAC twice		Route Corridor F North crosses several international and national designated sites. Much longer Corridor compared to existing A303, leading to larger areas of habitat loss and potential severance, in particular for the water environment. All Routes within Corridor F North would lead to crossing the designated sites (i.e. no alternative) except for Salisbury Plain SAC/SPA to the east. The reduction in the presence of traffic and possible removal of infrastructure associated with the closure of parts of the existing A303 could result in benefits to species, including those associated with nearby European Sites. Given the limited information currently available, should this Corridor proceed to the next stage then further investigation will be required to better understand the potential for beneficial effects.
National Designation (SSSI/NNR)	Crosses Salisbury Plain SSSI, River Avon System SSSI, River Till SSSI, Lower Woodford Water Meadows SSSI		
Ancient Woodland	Corridor in excess of 200m from ancient woodland		

Topic: Air quality				
Environmental receptor	**Assessment of impact**		**Topic assessment**	
AQMAs	There are no AQMAs within 200m of the Corridor options.		5 SSSI / 5 settlements within 200m, 3rd greatest increase in emissions	
Sensitive air quality receptors – settlements and designated ecological sites	Bisects or within 200m of five SSSI (River Avon, Parsonage Down, River Till, Lower Woodford Water Meadows, Salisbury Plain). Several groups of residential receptors affected (specifically Amesbury, Berwick St James, Winterbourne Stoke, Middle Woodford, Upper Woodford) - Total 10 Sites.			
Unit trip change (as proxy for air quality and carbon emissions)	Third greatest increase in emissions of all scheme Corridors.			

Topic: Noise				
Environmental receptor	**Assessment of impact**		**Topic assessment**	
WHS	There would be a minor reduction in road traffic noise impacts in the WHS. The corridor is outside the WHS.		Road traffic noise impacts would be introduced affecting the rural communities listed along the option Corridor There would be a reduction in road traffic noise affecting the WHS, IAs and communities on a stretch of the existing A303	
Noise climate along the existing A303 Corridor	There would be some noise impact on Winterbourne Stoke and Amesbury and Salisbury.			
Traffic noise impact on communities	There would be noise impact on Berwick St James, Stapleford, Upper Woodford, Middle Woodford, Lower Woodford, High Post, East of Amesbury.			
Noise Climate within IA (in the DEFRA 2014 Action Plan)	There would be some noise impact on small IA sections in Winterbourne Stoke.			
Impacts on sensitive facilities / land-use	There would be noise impact on Woodford Valley C of E Primary School (Middle Woodford), Amesbury Archer Primary School, Christ the King Roman Catholic Primary School (Amesbury).			

Topic: Landscape (incl. streetscape and urban environment)				
Environmental receptor	**Assessment of impact**		**Topic assessment**	
Nationally designated areas (AONB and National Parks)	No national landscape designations, but Corridor F (north) is considered to be of high landscape value and national importance as the landscape setting for the WHS. No direct adverse impacts on nationally designated landscape areas, but western extent of Corridor will have degree of intervisibility with AONB.		Route Corridor passes south of WHS and close to smaller settlements. Area is assessed as being a high quality landscape at district and county level (refer to landscape assessment table for RAG impacts for each District Landscape Character Area). High number of potential receptors at Amesbury, Shrewton, Winterbourne Stoke and in villages along river valley Corridors. Greater potential visibility of route Corridors and limited opportunity for landscape mitigation due to character of surrounding landscape, but dependant on precise Route location.	
Locally valued landscape character of higher landscape or visual sensitivity (outside nationally designated landscape areas)	District Landscape Character Types and Areas: D: Chalk Downland (D2, D3, D4): High quality landscape international importance for archaeology, with high landscape and visual sensitivity. A: Narrow Chalk River Valley (A1, A2, A3): High quality landscape of high archaeological and historical importance with moderate-high landscape and visual sensitivity. B: Broad Chalk River Valley Slopes (B1): C: Broad Chalk River Valley Floor (C1). High quality landscape with moderate-high landscape and visual sensitivity. High quality landscape of high District and County value. High overall sensitivity. Potential for adverse impacts on landscape and streetscape in main settlements. Adverse Impact.			
Sensitive visual receptors, including residents and visitors	High number of potential visual receptors (residents and visitors) with no existing view of major highway. Corridor close to major settlements to east and south and to villages at west, north and south-east. High visual sensitivity. Adverse Impact.			

Topic: Water			
Environmental receptor	**Assessment of impact**		**Topic assessment**
SPZ	Entire width of Corridor crosses SPZ 2		Entire width of Corridor crosses an SPZ 2. All Routes within Corridor include new crossing of perennial reaches of the River Avon and River Till.
River Till Crossing	Corridor includes new crossing of River Till and its floodplain. River is perennial at this location; likely that internationally designated habitats and species (receptors for possible changes in flows and water quality) are present. Closing A303 around Stonehenge should not affect the River Till; it is assumed that the existing crossing in Winterbourne Stoke would remain open to serve local communities.		
River Avon Crossing	Corridor includes new crossing of the River Avon and its floodplain. River is perennial at this location; likely that internationally designated habitats and species (receptors for possible changes in flows and water quality) are present. Closing A303 around Stonehenge should not affect existing Amesbury River Avon crossing; it is assumed that Countess roundabout would remain open.		

Topic: Geology, soils and materials			
Environmental receptor	**Assessment of impact**		**Topic assessment**
Prevention of waste	Corridor F (north) has the potential to generate moderate amounts of waste due to the distance covered by the Corridor. Shorter routes within the Corridor closer to the existing A303 have the potential to generate less waste than those further away.		Corridor F (north) has the potential to generate moderate amounts of waste. MOD Boscombe Down is present in the east of the Corridor which represents a significant constraint to the project and which would require investigation and assessment to characterise contamination and to identify remediation which may be required prior to construction. There is the potential for localised loss of BMV land. A benefit exists in using previously developed land due to the potential of remediation, if required, to improve the land quality if contamination present. An opportunity exists because the Corridor would use areas of mostly poorer quality land with a minority of BMV. Key Assumptions that affect the outcome of the assessment: Where potential contaminative sources have been identified, there is a possible risk to the environment and/or human health. Length of the Route is an approximate indicator of the amount of waste being generated without taking into account topography.
Minimise the loss of BMV agricultural land	Corridor F (north)consists mainly of shallow stony soils over chalk, with some better, more moisture retentive soils on some summits and foot slopes. Valley sides are steep. The soils of the Avon floodplain are wet. A minority of the land is likely to be of BMV quality.		
Current or historical potentially contaminative land uses/previously developed land	MOD Boscombe Down comprising an airfield and military base spans the majority of the Corridor in the east. This is a contaminative land use which presents potentially significant constraints to the route Corridor in respect of land contamination.		

Topic: People and communities			
Environmental receptor	**Assessment of impact**		**Topic assessment**
PRoW within the WHS affected by severance or direct land take	Severance within the WHS would be significantly reduced through diversion of trunk road traffic away from the WHS.		Diversion of passing trade away from Amesbury and Winterbourne Stoke. There would be reduced severance of Winterbourne Stoke. With mitigation, limited severance of access to Amesbury or Salisbury from nearby villages and National Cycle Route 45. There would be a significant reduction in severance within the WHS.
Number of communities affected by severance	There would be reduced severance of Winterbourne Stoke. There would be reduced severance of access between Amesbury and residential areas to the north but increased severance of access to Amesbury or to Salisbury from several villages located in between these two centres. This adverse effect would be mitigated through provision of dedicated crossing facilities for NMUs. National Cycle Route 45 crosses the Corridor. An opportunity exists to reduce severance experienced by cyclists currently crossing the existing A303 while new severance could be mitigated through provision of a new dedicated crossing where the cycle route intersects with the new road.		
Number of local businesses affected by severance	Potential for diversion of passing trade away from Amesbury and Winterbourne Stoke		

Summary assessment of Corridor F (north)	
Corridor F North The following risks or potential adverse effects have been identified for Corridor F (north): a) Heritage – The northern part of the Corridor lies within 1km of the southern boundary of the WHS and Routes in this area may adversely affect the setting of the WHS and some associated monuments. There is the risk of some notable harm to Scheduled Monuments, and potential for harm to the setting and significance of listed buildings and Conservation Areas. b) Biodiversity – There is the potential for impacts where the Corridor crosses the River Avon in two locations, and the Salisbury Plain SPA/SAC in the north eastern part of the Corridor. The Corridor crosses or is located in proximity to a number of nationally designated sites. The length of the Corridor is such that it has the potential to result in larger areas of habitat loss and potential severance. c) Landscape –The Corridor is assessed as being a high quality landscape at district and county level. There are a high number of potential visual receptors at Amesbury, Shrewton, Winterbourne Stoke and in villages along river valley Corridors. d) Air quality – The Corridor bisects or is located within 200m of 5 SSSIs. There is the potential for effects to residential receptors at Amesbury, Berwick St James, Winterbourne Stoke, Middle Woodford, Upper Woodford. e) Noise –Road traffic noise would affect communities and sensitive receptors such as Berwick St James, Stapleford, Upper Woodford, Middle Woodford, Lower Woodford, High Post, east of Amesbury. f) Potential for increased severance of access to Amesbury or to Salisbury from several villages located in between these two centres. g) Potential for diversion of some passing trade away from Amesbury and Winterbourne Stoke. The following benefits / opportunities have been identified for Corridor F (north): a) The removal of the existing A303 would benefit the character of the WHS and the setting of key assets such as Stonehenge, this would bring substantial benefits for the WHS. b) Severance within the WHS would be significantly reduced through diversion of trunk road traffic away from the WHS. c) There would be a reduction in road traffic noise affecting Amesbury, Winterbourne Stoke and potentially Salisbury, and small sections of IA at Winterbourne Stoke. d) A minority of land is likely to be of BMV quality. e) There would be reduced severance of Winterbourne Stoke, and reduced severance of access between Amesbury and residential areas to the north. Summary On balance, Corridor F (north) is considered to have an overall environment performance rating of 'Neutral'. This represents a balance between the substantial benefits identified for the WHS and receptors at Winterbourne Stoke and Amesbury, with potential for adverse effects on designated nature conservation sites, and potential visual, air quality and noise effects on receptors at numerous settlements in proximity to Route.	

B5.7 Corridor F (south)

Topic: Historic environment				
Environmental receptor	**Assessment of impact**		**Topic assessment**	
WHS	No construction within WHS and assumed that A303 is removed, and Route would deliver benefits for the WHS. Construction to south is likely to be sufficiently distant from WHS to not result in significant change to setting of WHS and hence harm to OUV.		Route would deliver benefits for the WHS and would probably largely avoid significant harm to Scheduled Monuments. There may be harm to the setting and significance of listed buildings and Conservation Areas.	
Scheduled Monuments	Routes within the Corridor are unlikely to require the total removal of any Scheduled Monuments; there is some possibility of partial removal but this should be avoidable. Routes within the Corridor may cause less than substantial harm to the significance of a very limited number of Scheduled Monuments due to changes to their settings.			
Designated Assets: Listed Buildings, Conservation Areas and Registered Parks and Gardens	Possible, but unlikely, that the Route would require the demolition of listed buildings in the Woodford and Wylye Valleys. High probability of less than substantial harm to the significance of listed buildings and Conservation Areas in these valleys due to changes to their setting.			

Topic: Biodiversity				
Environmental receptor	**Assessment of impact**		**Topic assessment**	
International Designation (SAC/ SPA/Ramsar and candidate SAC / potential SPA / potential Ramsar)	Crosses River Avon SAC several times		Route Corridor F South crosses several international and national designated sites. Much longer Corridor compared to existing A303, leading to larger areas of habitat loss and potential severance, in particular for the water environment. Some Routes within Corridor F South could avoid crossing Steeple Langford Down SSSI, Camp Down SSSI and Woodford Water Meadows SSSI The reduction in the presence of traffic and possible removal of infrastructure associated with the closure of parts of the existing A303 could result in benefits to species, including those associated with nearby European Sites. Given the limited information currently available, should this Corridor proceed to the next stage then further investigation will be required to better understand the potential for beneficial effects.	
National Designation (SSSI/NNR)	Crosses Salisbury Plain SSSI, River Avon System SSSI, River Till SSSI, Steeple Langford Down SSSI, Camp Down SSSI, Lower Woodford Water Meadows SSSI. Also within 200m of Yarnbury Castle SSSI			
Ancient Woodland	Corridor in excess of 200m from ancient woodland			

Topic: Air quality			
Environmental receptor	**Assessment of impact**		**Topic assessment**
AQMAs	There are no AQMAs within 200m of the Corridor options.		5 SSSI / 5 settlements within 200m, 2nd largest increase in emissions
Sensitive air quality receptors – settlements and designated ecological sites	Bisects or within 200m of five SSSI (Steeple Langford Down, River Till, River Avon, Lower Woodford Water Meadows, Camp Down) Some small groups of residential receptors affected (specifically Steeple Langford, Berwick St James, Stapleford, Lower Woodford, Little Durnford). - Total 10 Sites		
Unit trip change (as proxy for air quality and carbon emissions)	Second greatest increase in emissions of all scheme Corridors		

Topic: Noise			
Environmental receptor	**Assessment of impact**		**Topic assessment**
WHS	There would be a major reduction in road traffic noise affecting the WHS. The Corridor is entirely outside WHS and remote		Road traffic noise impacts would be introduced affecting the rural communities listed along the option Corridor There would be a reduction in road traffic noise affecting the WHS, IAs and communities on a potentially long section of the existing A303 Low fit with NPSNN based on the results of the five sift tests. Key assumptions that affect the outcome of the assessment: - No detrafficking of Salisbury. However, with detrafficking, communities bypassed and benefits to Important Areas would increase but the overall Neutral result does not change
Noise climate along the existing A303 Corridor	There would be noise impact on Winterbourne Stoke and Amesbury		
Traffic noise impact on communities	There would be noise impact on Berwick St James, Stapleford, Upper Woodford, Middle Woodford, Lower Woodford, Stoford, High Post, east of Amesbury, Winterbourne Earls, Porton, Great Durnford, Winterbourne Dauntsey, Allington		
Noise Climate within IA (in the DEFRA 2014 Action Plan)	There would be noise impact on IA sections in Winterbourne Stoke and Amesbury		
Traffic noise impact on sensitive facilities / land-use	There would be noise impact on Woodford Valley C of E Primary School (Middle Woodford), Amesbury Archer Primary School, Christ the King Roman Catholic Primary School(Amesbury)		

Topic: Landscape		
Environmental receptor	**Assessment of impact**	**Topic assessment**
Nationally designated areas (AONB and National Parks)	National designation Cranborne Chase (CC) and West Wiltshire Downs (WWD) AONB at west end of Corridor. High Value Landscape of national importance within AONB and as landscape setting for WHS. Potential adverse impact on nationally designated landscape area.	Route Corridor passes south of WHS and through CC and WWD AONB at western end, and close to settlements. Nationally designated landscape (AONB) within route Corridor, and area is assessed as being a high quality landscape at district and county level (refer to landscape assessment table for RAG impacts for each District Landscape Character Area). High number of potential receptors at Amesbury, Shrewton, Winterbourne Stoke, Steeple Langford, Stapleford and Wylye, and in villages along river valley Corridors. Greater potential visibility of route Corridors and limited opportunity for landscape mitigation due to character of surrounding landscape, but dependant on precise Route location.
Locally valued landscape character of higher landscape or visual sensitivity (outside nationally designated landscape areas)	District Landscape Character Types and Areas: D: Chalk Downland (D2, D3, D4): High quality landscape international importance for archaeology, with high landscape and visual sensitivity. A: Narrow Chalk River Valley (A1, A2, A3): High quality landscape of high archaeological and historical importance with moderate-high landscape and visual sensitivity. B: Broad Chalk River Valley Slopes (B1): C: Broad Chalk River Valley Floor (C1). High quality landscape in AONB with moderate-high landscape and visual sensitivity. High quality landscape of high District and County value. High overall sensitivity. Potential for adverse impacts on landscape and streetscape in main settlements. Adverse Impact.	
Sensitive visual receptors, including residents and visitors	High number of potential visual receptors (residents and visitors) with no existing view of major highway. Corridor close to major settlements to east and south and to villages at west, north and south-east. High visual sensitivity. Adverse Impact.	

Topic: Water			
Environmental receptor	**Assessment of impact**		**Topic assessment**
SPZ	Majority of Corridor crosses SPZ 1		Majority of Corridor crosses SPZ 1. Although it may be possible for a Route within Corridor that crosses only SPZ 2, overall SPZ score for Corridor is red. All Routes within Corridor include new crossing of the River Avon and the River Till.
River Till Crossing	Corridor includes new crossing of River Till and its floodplain. River is perennial at this location; likely that internationally designated habitats and species (receptors for possible changes in flows and water quality) are present. Closing A303 around Stonehenge should not affect the River Till; it is assumed that the existing crossing in Winterbourne Stoke would remain open to serve local communities.		
River Avon Crossing	Corridor includes new crossing of the River Avon and its floodplain. River is perennial at this location; likely that internationally designated habitats and species (receptors for possible changes in flows and water quality) are present. Closing A303 around Stonehenge should not affect existing Amesbury River Avon crossing; it is assumed that Countess roundabout would remain open to serve local communities.		

Topic: Geology, soils and materials			
Environmental receptor	**Assessment of impact**		**Topic assessment**
Prevention of waste	Corridor F (south) has the potential to generate moderate amounts of waste due to the distance covered by the Corridor. Routes within the Corridor that lie closer to the existing A303 have the potential to generate less waste than those further away.		Corridor F (south) has the potential to generate moderate amounts of waste. MOD Boscombe Down is present in the east of the Corridor which represents a significant constraint to the project and which would require investigation and assessment to characterise contamination and to identify remediation which may be required prior to construction. There is the potential for localised loss of BMV land. A benefit exists in using previously developed land due to the potential of remediation, if required, to improve the land quality if contamination present. An opportunity exists because the Corridor would use areas of mostly poorer quality land with a minority of BMV. Key Assumptions that affect the outcome of the assessment: Where potential contaminative sources have been identified, there is a possible risk to the environment and/or human health. Length of the Route is an approximate indicator of the amount of waste being generated without taking into account typography.
Minimise the loss of BMV agricultural land	Corridor F (south) consists mainly of shallow stony soils over chalk, with some better, more moisture retentive soils on some summits and foot slopes. Valley sides are steep. The soils of the Avon floodplain are wet. A minority of the land is likely to be of BMV quality.		
Current or historical potentially contaminative land uses/previously developed land	MOD Boscombe Down comprising an airfield and military base spans the majority of the Corridor in the east. This is a contaminative land use which presents potentially significant constraints to the route Corridor in respect of land contamination.		

Topic: People and communities			
Environmental receptor	**Assessment of impact**		**Topic assessment**
PRoW within the WHS affected by severance or direct land take	Severance within the WHS would be significantly reduced through diversion of trunk road traffic away from the WHS		Diversion of passing trade away from Amesbury, Winterbourne Stoke and villages between Amesbury and Salisbury. With mitigation, there would be limited severance of access to Amesbury or Salisbury from nearby villages and National Cycle Route 45. There would be a significant reduction in severance within the WHS. There would be reduced severance within Winterbourne Stoke and Amesbury. There is the potential for this Corridor to result in the de-trafficking of Salisbury due to its proximity to that town. In this scenario severance within the urban area would be reduced and but an adverse impact on businesses through removal of passing trade is predicted.
Number of communities affected by severance	There would be reduced severance of Winterbourne Stoke, Amesbury and villages on some approaches to Salisbury. Increased severance of access to Amesbury or to Salisbury from several villages located in between these two centres mitigated through provision of dedicated crossing facilities for NMUs. National Cycle Route 45 crosses the Corridor. An opportunity exists to reduce severance experienced by cyclists currently crossing the existing A303 while new severance could be mitigated through provision of a new dedicated crossing where the cycle route intersects with the new road.		
Number of local businesses affected by severance	Potential for diversion of passing trade away from Amesbury, Winterbourne Stoke and villages between Amesbury and Salisbury		

Summary assessment of Corridor F (south)	
The following risks or potential adverse effects have been identified for Corridor F South: a) Heritage – High probability of less than substantial harm to the significance of listed buildings and Conservation Areas in the Woodford and Wylye Valleys due to changes to their setting. b) Biodiversity – There is the potential for impacts where the Corridor crosses the River Avon SAC in a number of locations. The Corridor crosses or is located in proximity to a number of nationally designated sites. The length of the Corridor is such that it has the potential to result in larger areas of habitat loss and potential severance. c) Landscape – Route Corridor passes south of WHS and through the nationally designated Cranborne Chase and West Wiltshire Downs AONB at west end of Corridor. The remainder of the Corridor is assessed as being a high quality landscape at district and county level. There are a high number of potential visual receptors at Amesbury, Shrewton, Winterbourne Stoke, Steeple Langford, Stapleford and Wylye, and in villages along river valley Corridors. d) Air quality – The Corridor bisects or is located within 200m of 5 SSSIs. There is the potential for effects to residential receptors at Steeple Langford, Berwick St James, Stapleford, Lower Woodford, Little Durnford. e) Noise –Road traffic noise would affect a high number of communities and sensitive receptors such as at Berwick St James, Stapleford, Upper Woodford, Middle Woodford, Lower Woodford, Stoford, High Post, East of Amesbury, Winterbourne Earls, Porton, Great Durnford, Winterbourne Dauntsey, Allington. f) There would be increased severance of access to Amesbury or to Salisbury from several villages located in between these two centres. g) Potential for diversion of some passing trade away from Amesbury, Winterbourne Stoke and villages between Amesbury and Salisbury. h) Majority of Corridor crosses SPZ 1. i) The MOD Boscombe Down airfield and military base spans the majority of the Corridor in the east, presenting a potentially significant constraint in respect of land contamination. The following benefits / opportunities have been identified for Corridor F South: a) The removal of the existing A303 would benefit the character of the WHS and the setting of key assets such as Stonehenge, this would bring substantial benefits for the WHS. b) Severance within the WHS would be significantly reduced through diversion of trunk road traffic away from the WHS. c) There would be a reduction in road traffic noise affecting Amesbury and Winterbourne Stoke and sections of IA at Amesbury and Winterbourne Stoke. d) A minority of land is likely to be of BMV quality. e) There would be reduced severance of Winterbourne Stoke, Amesbury and villages on some approaches to Salisbury. Summary On balance, Corridor F (South) is considered to have an overall environment performance rating of 'Very Poor'.	

B5.8 Corridor G

Topic: Historic environment				
Environmental receptor	**Assessment of impact**		**Topic assessment**	
WHS	No construction within WHS and assumed that A303 is removed and Route would deliver benefits for the WHS. Construction to is sufficiently distant from WHS to not result in a change to setting of WHS hence harm to OUV.		Beneficial for WHS, but would require partial or total loss of Scheduled Monuments elsewhere and some notable impacts on the setting of listed buildings and the setting and character of Conservation Areas. As such, the scheme would be in conflict with NPSNN.	
Scheduled Monuments	Location of Corridor means that it will require the partial or wholescale removal of a number of Scheduled Monuments resulting in substantial harm and substantial harm / less than substantial to others due to changes to their setting			
Designated Assets: Listed Buildings, Conservation Areas and Registered Parks and Gardens	Possible, but unlikely, that any Route within the Corridor would require the demolition of listed buildings. Less than substantial harm to the significance of listed buildings due to changes to their setting is certain, substantial harm is also probable in a small number of cases due to changes to their setting. Route crosses at least one Conservation Area and affect settings of others.			

Topic: Biodiversity				
Environmental receptor	**Assessment of impact**		**Topic assessment**	
International Designation (SAC/ SPA/Ramsar and candidate SAC / potential SPA / potential Ramsar)	Crosses Salisbury Plain SAC, Porton Down SPA, River Avon SAC. Within 200m of Chilmark Quarries Bat SAC.		Longest Corridor affecting the highest number of designations and loss of ancient woodland in three different locations. Unlikely to meet CSRs of improving biodiversity along the Route. Would require significant compensation measures. The reduction in the presence of traffic and possible removal of infrastructure associated with the closure of parts of the existing A303 could result in benefits to species, including those associated with nearby European Sites. Given the limited information currently available, should this Corridor proceed to the next stage then further investigation will be required to better understand the potential	
National Designation (SSSI/NNR)	Crosses Salisbury Plain SSSI, Porton Down SSSI, River Avon System SSSI, Teffont Evias Quarry Lane Cutting SSSI, Burcombe Down SSSI. Within 200m of East Harnham Meadows SSSI, Bracknell Croft SSSI.			
Ancient Woodland	Crosses Baverstock Wood, Hart Coppice, Lower Holt Copse. Within 200m of Fonthill Bushes, Fovant Wood, Little Vinels Copse, Sarsen Wood.			

			for beneficial effects.	

Topic: Air quality				
Environmental receptor	**Assessment of impact**		**Topic assessment**	
AQMAs	There are no AQMAs within 200m of the Corridor options.		10 SSSI / 5 settlements within 200m, greatest increase in emissions. Note that option G could result in detrafficking of Salisbury as the Corridor could provide an effective bypass - available traffic data at this stage cannot reflect this, but for AQ this could be relevant as there are AQMA in central Salisbury which could show an improvement (benefit).	
Sensitive air quality receptors – settlements and designated ecological sites	Bisects or within 200m of ten SSSI (Chilmark Quarries, Teffont Evias Quarry, Dinton Railway Cutting, River Avon System, Burcombe Down, Britford Water Meadows, East Harnham Meadows, Cockey Down, Bracknell Croft, Porton Down) Several groups of residential receptors affected (specifically Andover, Grateley, Salisbury, Barford St Martin, Dinton) - Total 15 Sites			
Unit trip change (as proxy for air quality and carbon emissions)	Greatest increase in emissions of all scheme Corridors			

Topic: Noise				
Environmental receptor	**Assessment of impact**		**Topic assessment**	
WHS	There would be a major reduction in road traffic noise affecting the WHS. The Corridor is entirely outside WHS and remote		Road traffic noise impacts would be introduced affecting residential and non-residential receptors around Salisbury (Harnham, Laverstock and Milford) and the rural communities listed along Corridor. There would be a reduction in road traffic noise affecting the WHS, IAs and communities on a long section of the existing A303. It is assumed that there would be no detrafficking of the A36 through Salisbury. However, with detrafficking the benefits to communities bypassed and IAs would increase but the overall assessment result is unchanged Key assumptions that affect the outcome of the assessment:- It is assumed that measures will be implemented to	
Communities bypassed	There would be some impact on Winterbourne Stoke, Amesbury and Salisbury assuming the A36 is detrafficked.			
Impacts on communities	There would be some impact on Teffont Magna, Dinton, Barford St Martin, Wilton, Harnham, Milford, Laverstock, Firsdown, Lopcombe corner, Middle Wallop, Grateley, Monxton, Andover			
IA	There would be some impact on IAs along and adjacent to the A303 and some in Salisbury			
Impacts on sensitive facilities / land-use	There would be some impact on Leaden Hall School, Harnham C of E Junior School, Salisbury Cathedral School, Chafyn Grove School, St Joseph's Catholic School (Salisbury), John Hanson Community School (Andover). Some clinics and hospitals along the Corridor (a few in Salisbury).			

			minimise residual traffic on the existing A303.	

Topic: Landscape				
Environmental receptor	**Assessment of impact**		**Topic assessment**	
Nationally designated areas (AONB and National Parks)	National designation Cranborne Chase (CC) and West Wiltshire Downs (WWD) AONB at southwest / west end of Corridor. Close to North Wessex Downs AONB at eastern end of Corridor. High Value Landscape of national importance within AONB. Adverse Impact.		Route Corridor passes south of Salisbury and nearly half of Route passes through CC and WWD AONB, and close to villages and small settlements. Very high quality landscape of national importance with high landscape and visual sensitivity. Eastern end of Corridor passes across area described as "remote, tranquil, open, expansive and simple with big skies, clear skylines, some prominent hills and long views which make development intrusive". High quality landscape of regional importance with high landscape and visual sensitivity. Increased number of potential visual receptors, particularly at Andover and Salisbury, and villages along the Vale of Wardour. The Corridor is considered to present a 'poor' fit with NPSNN criteria due to it passing to the far south of the WHS, but through a large section of the CC and WWD AONB. Outside the AONB, the landscape is also rated as high quality at a local level. There will also be a high number of visual receptors. Localised benefits within the WHS with the existing road closed.	
Locally valued landscape character of higher landscape or visual sensitivity (outside nationally designated landscape areas)	District Landscape Character Types and Areas: Wiltshire: - D: Chalk Downland (D1, D5, D8): A: Narrow Chalk River Valley (A4): B; Broad Chalk River Valley Slopes (B2) and C: Broad Chalk River Valley Floor (C2): E; Chalk Escarpments (E2): F: Forest Heath Mosaic (F1): G; Greensand Terrace (G2): H; Greensand Hills (H2): I Rolling Clay Vale (I1). Hampshire: 3B River Valley Floor (Test Valley) and 8D Open Downs (Andover Open Downs). High quality landscapes of high District and County value. High overall sensitivity. Potential for adverse impacts on landscape and streetscape in and close to main settlements. Adverse Impact.			
Sensitive visual receptors, including residents and visitors	High number of potential visual receptors (residents and visitors) with no existing view of major highway. Corridor close to major settlements to east and south and to villages at west, north and south-east. High visual sensitivity. Adverse Impacts.			

Topic: Water		
Environmental receptor	**Assessment of impact**	**Topic assessment**
SPZ	Entire width of Corridor crosses SPZ 1	Entire width of Corridor crosses SPZ 1. Corridor also crosses the entire width of the historically, culturally and ecologically important Britford Water Meadows on the River Avon as well as extending across more than 2km of River Nadder floodplain.
River Till Crossing	Corridor includes a minimum of 2 km of new floodplain crossings on the River Nadder. Floodplain is extensive and may include internationally designated habitats and species (receptors for possible changes in flows and water quality). Closing A303 around Stonehenge should not affect the River Till; it is assumed that the existing crossing in Winterbourne Stoke would remain open to serve local communities.	
River Avon Crossing	Corridor includes extensive new floodplain crossings across historically, culturally and ecologically important floodplain habitats of the River Avon. Perennial River section with known presence of ecological species from previous ecological surveys. Closing A303 around Stonehenge should not affect existing Amesbury River Avon crossing; it is assumed that Countess roundabout would remain open to serve local communities.	

Topic: Geology, soils and materials			
Environmental receptor	**Assessment of impact**		**Topic assessment**
Prevention of waste	Corridor G has the potential to generate large amounts of waste due to the distance covered by the Corridor. This Corridor only includes one potential Route.		Corridor G has the potential to generate large amounts of waste. A significant minority of the land is likely to be of BMV quality. Various potentially contaminative land uses have been identified which are scheme constraints and are considered to require investigation and assessment to characterise contamination and to identify remediation which may be required prior to construction. The generation of waste and contamination sources pose a moderate to high financial risk to the project. There is the potential for localised loss of BMV land. A benefit exists in using previously developed land due to the potential of remediation, if required, to improve the land quality if contamination present. An opportunity exists because the Corridor would use areas of mostly poorer quality land with a minority of BMV. Key Assumptions that affect the outcome of the assessment: Where potential contaminative sources have been identified, there is a possible risk to the environment and/or human health. Length of the Route is an approximate indicator of the amount of waste being generated without taking into account typography.
Minimise the loss of BMV agricultural land	Corridor G consists mainly of shallow stony soils over chalk, with some better, more moisture retentive soils on some summits and footslopes. Valley sides are steep. The soils of the Avon and Wyle floodplains are wet. A minority of the land is likely to be of BMV quality.		
Current or historical potentially contaminative land uses/previously developed land	Gypsy Lane historical landfill (household waste) and a sewage works to the south east of Salisbury are located in the route Corridor. These are not considered to represent significant constraints to the scheme but these areas would require intrusive investigation to characterise contamination which may be present and to identify remediation which may be required prior to construction.		

Topic: People and communities			
Environmental receptor	**Assessment of impact**		**Topic assessment**
PRoW within the WHS affected by severance or direct land take	Severance within the WHS would be significantly reduced through diversion of trunk road traffic away from the WHS		Diversion of passing trade away from Amesbury, Winterbourne Stoke, Salisbury and villages between Amesbury and Salisbury. With mitigation there would be limited severance of public rights of way and National Cycle Route 45. There is the potential for this Corridor to result in the de-trafficking of Salisbury due to its proximity to that town. In this scenario severance within the urban area would be reduced but an adverse impact on businesses through removal of passing trade is predicted. There would be a significant reduction in severance within the WHS and reduced severance of Winterbourne Stoke, Amesbury and Salisbury.
Number of communities affected by severance	There would be reduced severance of Winterbourne Stoke, Amesbury and Salisbury. There would be new severance at the intersection of the new alignment with a large number of public rights of way and with National Cycle Route 45 (in two places) leading to isolation of Salisbury from villages to the south. Impacts would be mitigated through the provision of dedicated crossing facilities.		
Number of local businesses affected by severance	Potential for diversion of passing trade away from Amesbury, from Salisbury and from villages in between these two settlements		

Summary assessment of Corridor G	
Corridor G The following risks or potential adverse effects have been identified for Corridor G: a) Heritage – Potential for substantial harm to a number of Scheduled Monuments, and for notable impacts on the setting of listed buildings and the setting and character of Conservation Areas. b) There is the potential for impacts where the Corridor crosses Salisbury Plain SAC, Porton Down SPA, River Avon SAC and to the Chilmark Quarries Bat SAC located within 200m. The Corridor crosses or is located in proximity to a number of nationally designated sites and numerous areas of ancient woodland. The length of the Corridor is such that it has the potential to result in larger areas of habitat loss and potential severance. c) Landscape – a significant proportion of the Corridor passes through the nationally designated Cranborne Chase and West Wiltshire Downs AONB. Other areas within the Corridor are identified as high quality landscapes of regional importance or district and county level importance. There are a high number of potential visual receptors including at Andover and Salisbury, and villages along the Vale of Wardour. d) Air quality – The Corridor bisects or is located within 200m of 10 SSSIs. There is the potential for effects to residential receptors at Andover, Grateley, Salisbury, Barford St Martin, Dinton. The Corridor exhibits the highest level of predicted emissions. e) Noise – Road traffic noise would affect a high number of communities and sensitive receptors such as at Teffont Magna, Dinton, Barford St Martin, Wilton, Harnham, Milford, Laverstock, Firsdown, Lopcombe corner, Middle Wallop, Grateley, Monxton, Andover. f) There would be new severance at the intersection of the new alignment with a large number of public rights of way and with National Cycle Route 45. g) Potential for diversion of passing trade away from Amesbury, Winterbourne Stoke, Salisbury and villages between Amesbury and Salisbury. h) Entire width of Corridor crosses SPZ 1. i) The potential to generate large amounts of waste due to the distance covered by the Corridor The following benefits / opportunities have been identified for Corridor G: a) The removal of the existing A303 would benefit the character of the WHS and the setting of key assets such as Stonehenge, this would bring substantial benefits for the WHS. b) Severance within the WHS would be significantly reduced through diversion of trunk road traffic away from the WHS. c) There would be a reduction in road traffic noise affecting Winterbourne Stoke, Amesbury and IAs along and adjacent to the A303 and some in Salisbury. d) Further benefits for noise and air quality may arise for receptors in Salisbury were the Corridor to result in de-trafficking of the A36, although this cannot be confirmed on the basis of the data available at this stage. e) A minority of land is likely to be of BMV quality. f) There would be reduced severance of Winterbourne Stoke, Amesbury and Salisbury. Summary On balance, Corridor G is considered to have an overall environment performance rating of ‘Very Poor’.	

B.6 EAST assessment

Appendix B6: Early Assessment and Sifting Tool (EAST) assessment

B6.1 Corridor A

Strategic case			
Criterion	**Assessment**	**Score**	**Overall score**
Scale of impact	This corridor sits outside Stonehenge, Avebury and Associated Sites World Heritage Site (WHS) even though it's a longer Route. The Route's proximity is close to Durrington Walls (Conservation Setting). Route impacts on Military of Defence (MOD) area and severs facilities at Larkhill. However it offer the potential for Economic Growth and transport link between London and southwest north of A303		
Fit with wider transport and government objectives	Criteria aligned with National Policy Statement for National Networks (NPSNN) environmental criteria assessment scores		
Fit with other objectives	a) Harm to the setting of the WHS and key assets within the WHS (e.g. Durrington Walls) - substantial harm to the Outstanding Universal Value (OUV) of the WHS is probable b) Crosses and likely to impact the European designated Salisbury Plain Special Protection Area (SPA) / Special Area of Conservation (SAC) (and Site of Special Scientific Interest (SSSI)) (and could require off-site compensation), and potential to impact the River Avon SAC at two new crossings. Crosses or is located in close proximity to a number of nationally designated sites. c) Potential for disruption and impacts on quality of life for the residents of a number of settlements e.g.: Larkhill, south of Durrington, Shrewton and Bulford		
Key uncertainties	a) Unknown archaeological sites b) Unknown utilities c) Environmental / habitat surveys d) Working space, site compounds, lay down areas e) Use of off-site consolidation and logistics centres f) Site staff access arrangements g) Diversion Routes	This criterion is not scored in EAST	
Degree of consensus over outcomes?	No public consultation taken place as the Corridor was proposed by scheme consultants and rejected before public consultation		

Economic case				
Topic: Economic growth				
Sub-topic	**Criterion**	**Assessment**	**Score**	**Overall score**
Connectivity	What impact does it have on end-to end journey time?	This corridor would deliver a dual carriageway bypass to the north of the existing A303, and would result in savings in end to end journey time (JT) of around 2 mins in AM and inter-peak hours, with 4 mins in the westbound PM peak.		
	Does it have an impact on cost of travel (vehicle operating costs, fares, etc.?)	This corridor would deliver a dual carriageway bypass to the north of the existing A303, and result in a moderate increase (>1000 km) in total network vehicle kms in both the AM and PM peak. It is considered that this would be likely to result in a moderate increase in the cost of travel for users of the Route.		
Reliability	Impact on day-to-day variability in journey times or average minutes of lateness?	This corridor would increase capacity by replacing the existing single carriageway with a dual carriageway. It is considered that this would be likely to reduce journey time variability and therefore decrease average minutes of delay.		
	What will happen to the number of incidents?	a) Most accidents on the existing stretch of the A303 occur at at-grade junctions. This corridor would deliver a new dual carriageway which would be designed to modern safety standards. All junctions would be removed, bypassed or grade separated. b) The dual carriageway would also increase capacity, which is expected to lead to a general improvement in traffic conditions on the Route. It is therefore expected that this corridor would result in a decrease in the rate of traffic incidents. c) However this corridor would deliver a Route moderately longer than the existing route. Any reduction in the accident rate due to improvements in road standards could, therefore, be partially offset by the greater length of the Route.		
Resilience	What impact does this option have on the resilience of our infrastructure?	This corridor would replace the existing single carriageway with a dual carriageway. It is considered that this would be likely to improve resilience by increasing capacity and thereby reducing the scale of the impact arising from traffic incidents.		
Delivery of housing	How will this option facilitate new housing?	There are no housing developments that have been identified as directly dependent on the scheme, so it is considered unlikely that this corridor would directly facilitate new housing locally. However, improvements in traffic conditions along the Route as a result of this corridor would be likely to improve accessibility, including to allocated housing sites. Expected regional growth in housing in the South West peninsula is in the order of 242,000 to year 2031, and it is considered that this corridor has the potential to support housing growth, both in Wiltshire and more widely across the region.		
Wider economic impacts	Does it improve accessibility to key locations?	a) Key locations that could be affected by the Route include the WHS, Solstice Park business park, Porton Down biological research centre, and Boscombe Down airbase. The Wiltshire Core Strategy allocates 10 ha for employment uses at Porton Down, 7 ha at Boscombe Down, and further strategic employment sites in Salisbury and Wilton. b) The Strategic Economic Plan (SEP) published by the Swindon and Wiltshire Local Enterprise Partnership (LEP) highlights opportunities for growth around Porton Down and the military presence on Salisbury Plain. The SEP identifies a South Wiltshire growth zone, with a focus on Salisbury, Porton and the garrison towns (Tidworth, Larkhill, Durrington, Bulford). c) This corridor would improve access to WHS, Solstice Park business park, and the garrison towns of Durrington, Larkhill and Bulford.		
	Does it improve connectivity to central business districts?	This corridor would improve connectivity across the South West region, and between the South West and South East. As stated above, it could also improve accessibility to key locations locally, including Solstice Park as well as the WHS. However it does not connect directly to any central business districts, and therefore no significant impacts are expected in this regard.		
Topic: Carbon emissions				
Sub-topic	**Criterion**	**Assessment**	**Score**	
Activity	a) For non-public transport modes, is the number of vehicle trips expected to change? b) For public transport modes, are service frequencies expected to change? c) Are journey lengths expected to change? d) Does the option shift activity from low to higher occupancy vehicles, including public transport?	a) At the early stage of assessing corridors it is not practical to consider all of the assessment categories shown in EAST under the carbon heading. A simplified assessment which allows comparison between the corridors was undertaken as follows: b) Carbon emissions attributed to a project fall under three categories: Capital carbon (emissions from the construction of the asset); Operational carbon (emissions from the operation and maintenance of the asset); and User carbon (emissions from the end-users of the asset). c) The majority of the whole life carbon of a highway project is in the User carbon, with the capital and operational carbon typically forming a small component of the total. Therefore, User carbon is the primary consideration when determining an overall score for carbon emissions. When comparing different corridors road length was taken as a proxy for User carbon. d) Capital Carbon was determined on the basis of road length together with a high level assessment of the number of structures (Tunnel and bridges). e) For the purposes of the assessment, length is classified as Short, Medium or Long.		
Embedded	Is significant construction work required?			

carbon - currently assumed to be largely traded carbon		f) Corridor A features a Medium length corridor which crosses rivers in two locations, requiring construction of long bridges.		
Carbon	Does the option involve a lower carbon fuel to be used (carbon per litre)?			
Efficiency	a) Are more efficient vehicles (car, goods vehicle, train, bus) to be used? b) Is a change in behaviour expected, not captured above (e.g. eco-driving, speeds)?			
Overall effect on carbon emissions	a) Non-traded - Diesel, petrol and bio-fuel (highway, diesel public transport/freight, electric cars etc.) b) Traded - Electric (aviation, electric powered public transport/freight, electric cars etc.)			
Topic: Socio-distributional impacts and the regions				
Sub-topic	**Criterion**	**Assessment**	**Score**	
Social and distributional impacts	Does the option have an impact on accessibility / affordability / availability / acceptability for vulnerable groups (low income, disabled, the elderly, etc.)?	a) The population of Amesbury and Winterbourne Stoke are likely to benefit from reduced noise, better air quality, reduced severance and fewer accidents as a result of less traffic passing across the north of the village. b) However, user benefits and personal affordability in Amesbury could potentially receive a negative impact, as journey times may be longer and buses may be re-routed. c) In Larkhill and Durrington it is likely that an increase in traffic running through them will result in noise and air quality worsening, accidents increasing and severance increasing on the affected Route network (I.e. on neighbouring roads through the villages). In Larkhill there is quite a high proportion of children who could be disproportionately affected by the increase in noise, which can have a direct impact on children's concentration and cognitive ability. Personal security is likely to not be affected, but any additional lighting along the new Route could have a positive impact on people's perception of safety.		
Regeneration	Does the option have an impact on a targeted regeneration area, if so what is the impact likely to be?	a) Levels of deprivation in south Wiltshire are generally low. However, there are three LSOAs located relatively close to the Route that fall into the 20% most deprived in England. Two of these are at Wilton, and one is in central Salisbury. b) The Salisbury Central Area Regeneration Programme, set out in the Wiltshire Core Strategy, identifies a number of regeneration sites within the city centre. In total these will provide 1,100 dwellings and 5 ha of predominantly B1 employment land. c) This corridor would provide a bypass to the north of the existing A303, and it is therefore not considered likely that it would have a significant impact on accessibility and economic activity in either the targeted regeneration areas in central Salisbury, or on areas of deprivation in Salisbury and Wilton.		
Regional imbalance	If this is a weak region, what is the impact of the option on the region?	The South West region exhibits lower GVA than the UK average. By delivering a new dual carriageway which would increase capacity, reduce journey times and improve reliability on a key strategic Route, it is likely that this corridor could help to support improvements in economic performance relative to the UK average.		
	How will this impact economic growth?	a) By delivering a new dual carriageway which would increase capacity, reduce journey times and improve reliability on a key strategic Route, it is likely that this corridor would enhance the potential for economic growth by improving connectivity between the South West and the South East of England, for strategic journeys as well as local traffic. b) It is considered that improvements in traffic conditions along the Route as a result of this corridor would be likely to reduce costs and improve productivity for business users that rely on the A303 to access suppliers and customers. There could be particular benefits for key transport-dependent sectors, as well as sectors such as agriculture that are particularly important to the South West economy. c) This corridor would also improve access to the South West for visitors, including tourists and holiday traffic as well as business users, improving the visitor experience and supporting the visitor economy.		

Topic: Local environment			
Sub-topic	**Criterion**	**Assessment**	**Score**
Air quality	a) What impact does the option have on air quality? b) Is an Air Quality Management Area (AQMA) being affected?	Environmental factors are assessed comprehensively in the assessment of each corridor against the NPSNN environmental criteria. The score inserted is the overall assessment score from the separate NPSNN environmental criteria assessment	
Noise	a) Does this option reduce absolute disturbance from noise? b) Does it affect a problem area?		
Natural environment, heritage and landscape	a) What is the overall impact on the natural and urban environment? b) If negative then what is the value of the environment affected?		
Streetscape and urban environment			
Topic: Well being			
Sub-topic	**Criterion**	**Assessment**	**Score**
Severance	Does it increase possibility of cross street / corridor connections between neighbourhoods?	Route runs close to the existing developments at Shrewton, Larkhill, Durrington and Bulford and hence will increase the likelihood of severance.	
	Will more or less people be outside the public realm as a result?	Route runs through a mainly rural area and hence there are limited opportunities for significant public realm improvements	
Physical activity	What impact does the option have on physical activity?	Impact on physical activity would be a combination of (a) improved access to the walking/cycling facilities and (b) the impact that the new infrastructure will have on existing walking/cycling routes. The net effect for this corridor is estimated to be neutral	
Injury or Deaths	a) What impact does the option have on the number injured or killed in transport accidents? b) What impact does the option have on the risk of travelling (Killed or Seriously Injured (KSI) per km)?	a) While it is assumed that the new highway infrastructure will be designed to higher standards than existing roads, increases in the length of the overall road network and the number of junctions will tend to increase accidents. The longer the additional carriageway the greater the number of accidents. For this corridor the number of junctions and proximity to existing developments will increase the likelihood. b) The risk of travelling will be linked directly to the experience in the observed accident levels. Hence the assessment parallels the score for the number of injured or killed.	
Crime	What impact does this option have on crime and on people's fear of crime?	a) A first assumption is that this does not relate to motoring offences but other non-traffic crime such as burglary and personal attacks. The effect on crime could therefore occur if there is improved access to areas with a higher crime level. This could either encourage criminals to relocate activities in new areas (because of the better access) or encourage the public to travel to areas (such as town/city centres) which although they have greater attractions also have a greater crime rate. On this basis, the impact of this corridor is likely to be neutral. b) Fear of crime is likely to be linked to crime itself and hence the previous criterion. However a slightly different emphasis would be where the residents fear that the new measure or infrastructure might improve access to their area by criminals. On this basis the corridor would have a neutral impact on the fear of crime.	
Enjoying access to a range of goods, services, people and places?	What impact does it have on end-to-end journey time?	Using output from the traffic model on the change in journey times as a result of the scheme, the score represents the net impact of increased capacity and the directness of the corridor. With each corridor representing an increase in infrastructure, the emphasis will be on the scale of the travel time savings rather than whether it is positive or negative. The score reflects the relatively direct route of the corridor and the benefits to residents of the towns to the north of the area, i.e. Larkhill, Durrington, Bulford and Shrewton.	
	Impact on day-to-day variability in journey times or average minutes of lateness?	The variability of the journey times reflects the increase in the available capacity provided by the new infrastructure, together with the volume of traffic on the new scheme. High levels of traffic on the new scheme would imply lower reliability and conversely lower traffic levels imply higher reliability. The score for the corridor reflects an improvement in journey time reliability with the scheme.	
	Does it have an impact on the cost of travel	For the corridors, the impact on the cost if travel concentrates on the change in vehicle operating costs taking into account the changes in the	

	(vehicle operating costs, fares, etc.)?	length of journeys with the infrastructure. The score reflects the increased distance travelled with the corridor.		
	What will happen to the number of incidents?	The assessment mirrors the approach to measure the impact of accidents. While it is assumed that the new highway infrastructure will be designed to higher standards than existing roads, increases in the length of the overall road network and the number of junctions will tend to increase accidents. The longer the additional carriageway the greater the number of accidents. For this corridor the number of junctions and proximity to existing developments will increase the likelihood.		
	Does the option improve access to key locations (supermarkets, doctors, hospitals, etc.)?	Accessibility to key locations reflects accessibility to towns rather than smaller communities, e.g. access to Amesbury, Andover or Salisbury. The corridor would provide access to the villages to the north of the area including Shrewton, Larkhill, Durrington and Bulford.		
Terrorism	If the option might affect our vulnerability to terrorism then please state in the comments box provided	It is unlikely that the impact of terrorism will be a significant factor between the different schemes. The corridor is assessed as neutral		
Topic: Expected Value for Money (VfM) category				
Criterion		**Assessment**	**Score**	
Expected VfM category		The Treasury defines the following ranges for the value for money: a) <1 poor b) 1 - 1.5 low c) 1.5 - 2 medium d) 2 - 4 high e) >4 very high Using the available VfM values from the Stage 0 work VfM measure for the corridor may be inferred taking into account the length of the scheme (and therefore its costs) and volume of traffic using the scheme (and hence benefits). The benefits are restricted to the core headings excluding wider impacts for which there is no available quantification. The score is assessed from the length of the scheme and the associated scheme costs.		

Managerial case			
Criterion	**Assessment**	**Score**	**Overall score**
Implementation timetable	Government commitment to start in 2020		
Public acceptability	No public consultation has taken place on this corridor.		
Practical feasibility	Road scheme managed by Highways England and delivered through the Development Consent Order (DCO) process.		
What is the quality of the supporting evidence?	Basic information available dating back to 1990's with little supporting evidence available.		
Key risks	a) Environmental / habitat assessment identifies showstoppers b) Unacceptable to key stakeholders c) Change of government policy (2020) d) Economy in recession leading to scheme cancellation	This criterion is not scored in EAST	

Financial case			
Criterion	**Assessment**	**Score**	**Overall score**
Affordability	Would be expected to cost less than the Government commitment to fund scheme of approx. £1.4 bn		
Capital cost (£m)	a) Assumed £26m per km at grade highways b) Assumed over £1 bn for any tunnel option Proportion to length of scheme		
Revenue costs (£m)	Proportion to length of scheme and whether a tunnel is included as part of the scheme		
Cost profile	No accurate estimates of implementation, operation, maintenance and enforcement costs available.	This criterion is not scored in EAST	
Overall cost risk	a) Absence of information in the contract b) Unforeseen site risks a) Impact on landtake		

Commercial case			
Criterion	**Assessment**	**Score**	**Overall score**
Flexibility of option	Some flexibility up to the point of publishing the DCO.		
Where is funding coming from?	Likely to be publicly funded via Central Government, though option of private funds is being explored		
Any income generated? (Y/N)	Unlikely if publicly funded		

B6.2 Corridor B

Strategic case			
Criterion	**Assessment**	**Score**	**Overall score**
Scale of impact	This corridor goes inside the WHS north of A303 and therefore does not meet clients specific requirement for cultural heritage and environmental and community, however it does provide benefit from economic growth and transport perspective.		
Fit with wider transport and government objectives	Criteria aligned with NPSNN environmental criteria assessment scores.		
Fit with other objectives	a) Severance of the WHS, fundamentally altering its character and fabric and resulting in substantial harm to the OUV of the WHS b) Potential to impact the European designated Salisbury Plain SAC/SPA (current corridor shows direct loss), and River Avon SAC (Although it should be noted that there is scope to remove some of the direct impacts on Salisbury Plain SAC/SPA for southernmost Routes within Corridor B). Crosses or is located in close proximity to a number of nationally designated sites. c) Potential for disruption and impacts on quality of life for the residents of a number of settlements e.g.: Larkhill, south of Durrington, Shrewton and Bulford		
Key uncertainties	a) Unknown archaeological sites b) Unknown utilities c) Environmental / habitat surveys d) Working space, site compounds, lay down areas e) Use of off-site consolidation and logistics centres f) Site staff access arrangements g) Diversion Routes	This criterion is not scored in EAST	
Degree of consensus over outcomes?	Some consultation has taken place and an Alternative Route 3 within this corridor was put forward during the statutory process and considered at public inquiry.		

Economic case				
Topic: Economic growth				
Sub-topic	**Criterion**	**Assessment**	**Score**	**Overall score**
Connectivity	What impact does it have on end-to end journey time?	This corridor would deliver a dual carriageway to the north of the existing A303, and would result in savings in end to end JT of around 2 mins in AM and inter-peak hours, with 4 mins in the westbound PM peak.		
	Does it have an impact on cost of travel (vehicle operating costs, fares, etc.?)	This corridor would deliver a dual carriageway bypass to the north of the existing A303, and would result in a moderate increase (>1000 km) in total network vehicle kms in both the AM and PM peak. It is considered that this would be likely to result in a moderate increase in the cost of travel for users of the Route.		
Reliability	Impact on day-to-day variability in journey times or average minutes of lateness?	This corridor would increase capacity by replacing the existing single carriageway with a dual carriageway. It is considered that this would be likely to reduce journey time variability and therefore decrease average minutes of delay.		
	What will happen to the number of incidents?	a) Most accidents on the existing stretch of the A303 occur at at-grade junctions. This corridor would deliver a new dual carriageway which would be designed to modern safety standards. All junctions would be removed, bypassed or grade separated. b) The dual carriageway would also increase capacity, which is expected to lead to a general improvement in traffic conditions on the Route. It is therefore expected that this corridor would result in a decrease in the rate of traffic incidents. c) However this corridor would deliver a Route slightly longer than the existing route. Any reduction in the accident rate due to improvements in road standards could, therefore, be partially offset by the greater length of the Route.		
Resilience	What impact does this option have on the resilience of our infrastructure?	This corridor would replace the existing single carriageway with a dual carriageway. It is considered that this would be likely to improve resilience by increasing capacity and thereby reducing the scale of the impact arising from traffic incidents.		
Delivery of housing	How will this option facilitate new housing?	a) There are no housing developments that have been identified as directly dependent on the scheme, so it is considered unlikely that this corridor would directly facilitate new housing locally. b) However, improvements in traffic conditions along the Route as a result of this corridor would be likely to improve accessibility, including to allocated housing sites. Expected regional growth in housing in the South West peninsula is in the order of 242,000 to year 2031, and it is considered that this corridor has the potential to support housing growth, both in Wiltshire and more widely across the region.		
Wider economic impacts	Does it improve accessibility to key locations?	a) Key locations that could be affected by the Route include the WHS, Solstice Park business park, Porton Down biological research centre, and Boscombe Down airbase. The Wiltshire Core Strategy allocates 10 ha for employment uses at Porton Down, 7 ha at Boscombe Down, and further strategic employment sites in Salisbury and Wilton. b) The SEP published by the Swindon and Wiltshire LEP highlights opportunities for growth around Porton Down and the military presence on Salisbury Plain. The SEP identifies a South Wiltshire growth zone, with a focus on Salisbury, Porton and the garrison towns (Tidworth, Larkhill, Durrington, Bulford).		
	Does it improve connectivity to central business districts?	This corridor would improve connectivity across the South West region, and between the South West and South East. As stated above, it could also improve accessibility to key locations locally, including Solstice Park as well as the WHS. However it does not connect directly to any central business districts, and therefore no significant impacts are expected in this regard.		
Topic: Carbon Emissions				
Sub-topic	**Criterion**	**Assessment**	**Score**	
Activity	a) For non-public transport modes, is the number of vehicle trips expected to change? b) For public transport modes, are service frequencies expected to change? c) Are journey lengths expected to change? d) Does the option shift activity from low to higher occupancy vehicles, including public transport?	a) At the early stage of assessing corridors it is not practical to consider all of the assessment categories shown in EAST under the carbon heading. A simplified assessment which allows comparison between the corridors was undertaken as follows: b) Carbon emissions attributed to a project fall under three categories: Capital carbon (emissions from the construction of the asset); Operational carbon (emissions from the operation and maintenance of the asset); and User carbon (emissions from the end-users of the asset). c) The majority of the whole life carbon of a highway project is in the User carbon, with the capital and operational carbon typically forming a small component of the total. Therefore, User carbon is the primary consideration when determining an overall score for carbon emissions. When comparing different corridors road length was taken as a proxy for User carbon. d) Capital Carbon was determined on the basis of road length together with a high level assessment of the number of structures (tunnel and bridges). e) For the purposes of the assessment, length is classified as Short, Medium or Long. f) Corridor B is a Medium length corridor which crosses rivers in two locations, requiring construction of long bridges.		
Embedded carbon -	Is significant construction work required?			

currently assumed to be largely traded carbon			
Carbon	Does the option involve a lower carbon fuel to be used (carbon per litre)?		
Efficiency	a) Are more efficient vehicles (car, goods vehicle, train, bus) to be used? b) Is a change in behaviour expected, not captured above (e.g. eco-driving, speeds)?		
Overall effect on carbon emissions	a) Non-traded - Diesel, petrol and bio-fuel (highway, diesel public transport/freight, electric cars etc.) b) Traded - Electric (aviation, electric powered public transport/freight, electric cars etc.)		
Topic: Socio-distributional impacts and the regions			
Sub-topic	**Criterion**	**Assessment**	**Score**
Social and distributional impacts	Does the option have an impact on accessibility / affordability / availability / acceptability for vulnerable groups (low income, disabled, the elderly, etc.)?	The population of North Amesbury are likely to benefit from reduced noise, better air quality, reduced severance and accidents as a result of less traffic, as the Route moves further north of the current A303. However, user benefits and personal affordability could potentially receive a negative impact, as journey times may be longer. Additionally, accessibility could be worsened in Amesbury if buses are re-outed and as a consequence incur longer journey times. However, Larkhill and Shrewton accessibility could be improved through more bus Routes. There is a high proportion (compared to the English average) of children in the Larkhill area, which is located within close proximity to the scheme. Therefore it is likely to experience more noise, which can have a direct impact on children's concentration and cognitive ability. The high proportion of children could also receive a negative impact of reduced air quality. Personal security is likely not to be affected, but any additional lighting could have a positive impact.	
Regeneration	Does the option have an impact on a targeted regeneration area, if so what is the impact likely to be?	a) Levels of deprivation in south Wiltshire are generally low. However, there are three LSOAs located relatively close to the Route that fall into the 20% most deprived in England. Two of these are at Wilton, and one is in central Salisbury. b) The Salisbury Central Area Regeneration Programme, set out in the Wiltshire Core Strategy, identifies a number of regeneration sites within the city centre. In total these will provide 1,100 dwellings and 5 ha of predominantly B1 employment land. c) This corridor would provide a bypass to the north of the existing A303, and it is therefore not considered likely that it would have a significant impact on accessibility and economic activity in either the targeted regeneration areas in central Salisbury, or on areas of deprivation in Salisbury and Wilton.	
Regional imbalance	If this is a weak region, what is the impact of the option on the region?	The South West region exhibits lower GVA than the UK average. By delivering a new dual carriageway which would increase capacity, reduce journey times and improve reliability on a key strategic Route, it is likely that this corridor could help to support improvements in economic performance relative to the UK average.	
	How will this impact economic growth?	a) By delivering a new dual carriageway which would increase capacity, reduce journey times and improve reliability on a key strategic Route, it is likely that this corridor would enhance the potential for economic growth by improving connectivity between the South West and the South East of England, for local traffic as well as for strategic journeys. b) It is considered that improvements in traffic conditions along the Route as a result of this corridor would be likely to reduce costs and improve productivity for business users that rely on the A303 to access suppliers and customers. There could be particular benefits for key transport-dependent sectors, as well as sectors such as agriculture that are particularly important to the South West economy. c) This corridor would also improve access to the South West for visitors, including tourists and holiday traffic as well as business users, improving the visitor experience and supporting the visitor economy.	
Topic: Local environment			
Sub-topic	**Criterion**	**Assessment**	**Score**
Air quality	a) What impact does the option have on	Environmental factors are assessed comprehensively in the assessment of each corridor against the NPSNN environmental criteria. The score	

	air quality? b) Is an AQMA being affected?	inserted is the overall assessment score from the separate NPSNN environmental criteria assessment	
Noise	a) Does this option reduce absolute disturbance from noise? b) Does it affect a problem area?		
Natural environment, heritage and landscape	a) What is the overall impact on the natural and urban environment? b) If negative then what is the value of the environment affected?		
Streetscape and urban environment			
Topic: Well being			
Sub-topic	**Criterion**	**Assessment**	**Score**
Severance	Does it increase possibility of cross street / corridor connections between neighbourhoods?	Route does not run close to major developed areas and although new road will create severance the number of persons affected will be small.	
	Will more or less people be outside the public realm as a result?	Route runs through a mainly rural area and hence there are limited opportunities for significant public realm improvements.	
Physical activity	What impact does the option have on physical activity?	Impact on physical activity would be a combination of (a) improved access to the walking/cycling facilities and (b) the impact that the new infrastructure will have on existing walking/cycling routes. The net effect for this corridor is estimated to be neutral	
Injury or deaths	a) What impact does the option have on the number injured or killed in transport accidents? b) What impact does the option have on the risk of travelling (KSI per km)?	a) While it is assumed that the new highway infrastructure will be designed to higher standards than existing roads, increases in the length of the overall road network and the number of junctions will tend to increase accidents. The longer the additional carriageway the greater the number of accidents. For this corridor the number of junctions and distance from existing developments will result in a neutral impact. b) The risk of travelling will be linked directly to the experience in the observed accident levels. Hence the assessment parallels the score for the number of injured or killed.	
Crime	What impact does this option have on crime and on people's fear of crime?	a) A first assumption is that this does not relate to motoring offences but other non-traffic crime such as burglary and personal attacks. The effect on crime could therefore occur if there is improved access to areas with a higher crime level. This could either encourage criminals to relocate activities in new areas (because of the better access) or encourage the public to travel to areas (such as town/city centres) which although they have greater attractions also have a greater crime rate. On this basis, the impact of this corridor is likely to be neutral. b) Fear of crime is likely to be linked to crime itself and hence the previous criterion. However a slightly different emphasis would be where the residents fear that the new measure or infrastructure might improve access to their area by criminals. On this basis the corridor would have a neutral impact on the fear of crime.	
Enjoying access to a range of goods, services, people and places?	What impact does it have on end-to-end journey time?	Using output from the traffic model on the change in journey times as a result of the scheme, the score represents the net impact of increased capacity and the directness of the corridor. With each corridor representing an increase in infrastructure, the emphasis will be on the scale of the travel time savings rather than whether it is positive or negative. The score reflects the relatively direct route of the corridor and the benefits to residents of the towns to the north of the area, i.e. Larkhill, Durrington, Bulford and Shrewton.	
	Impact on day-to-day variability in journey times or average minutes of lateness?	The variability of the journey times reflects the increase in the available capacity provided by the new infrastructure, together with the volume of traffic on the new scheme. High levels of traffic on the new scheme would imply lower reliability and conversely lower traffic levels imply higher reliability. The score for the corridor reflects an improvement in journey time reliability with the scheme.	
	Does it have an impact on the cost of travel (vehicle operating costs, fares, etc.)?	For the corridors, the impact on the cost if travel concentrates on the change in vehicle operating costs taking into account the changes in the length of journeys with the infrastructure. The score reflects the increased distance travelled with the corridor.	
	What will happen to the number of incidents?	The assessment mirrors the approach to measure the impact of accidents. While it is assumed that the new highway infrastructure will be designed to higher standards than existing roads, increases in the length of the overall road network and the number of junctions will tend to increase accidents. The longer the additional carriageway the greater the number of accidents. For this corridor the number of junctions and distance from existing developments will result in a neutral impact.	
	Does the option improve access to key	Accessibility to key locations reflects accessibility to towns rather than smaller communities, e.g. access to Amesbury, Andover or Salisbury. The	

	locations (supermarkets, doctors, hospitals, etc.)?	corridor would provide access to the towns to the north of the area including Shrewton, Larkhill, Durrington and Bulford.		
Terrorism	If the option might affect our vulnerability to terrorism then please state in the comments box provided	It is unlikely that the impact of terrorism will be a significant factor between the different schemes. The corridor is assessed as neutral.		
Topic: Expected VfM category				
Criterion		**Assessment**	**Score**	
Expected VfM category		The Treasury defines the following ranges for the value for money: a) <1 poor b) 1-1.5 low c) 1.5-2 medium d) 2-4 high e) >4 very high Using the available VfM values from the Stage 0 work VfM measure for the corridor may be inferred taking into account the length of the scheme (and therefore its costs) and volume of traffic using the scheme (and hence benefits). The benefits are restricted to the core headings excluding wider impacts for which there is no available quantification. The score is assessed from the length of the scheme and the associated scheme costs.		

Managerial case			
Criterion	**Assessment**	**Score**	**Overall score**
Implementation timetable	Government commitment to start in 2020.		
Public acceptability	There has been some public consultation but further input will be required going forward.		
Practical feasibility	Road scheme managed by Highways England and delivered through the DCO process.		
What is the quality of the supporting evidence?	Basic information available dating back to 1990's with little supporting evidence.		
Key risks	a) Environmental / habitat assessment identifies showstoppers b) Unacceptable to key stakeholders c) Change of government policy (2020) d) Economy in recession leading to scheme cancellation	This criterion is not scored in EAST	

Financial case			
Criterion	**Assessment**	**Score**	**Overall score**
Affordability	Would be expected to cost less than the Government commitment to fund scheme approx. £1.4 bn		
Capital cost (£m)	a) Assumed £26m per km at grade highways b) Assumed over £1bn for any tunnel option c) Proportion to length of scheme		
Revenue costs (£m)	Proportion to length of scheme and whether a tunnel is included as part of the scheme		
Cost Profile	No accurate estimates of implementation, operation, maintenance and enforcement costs available.	This criterion is not scored in EAST	
Overall cost risk	a) Absence of information in the contract b) Unforeseen site risks c) Impact on landtake		

Commercial case			
Criterion	**Assessment**	**Score**	**Overall score**
Flexibility of option	Some flexibility up to the point of publishing the DCO		
Where is funding coming from?	Likely to be funded via Central Government, though option of private funds is being explored		
Any income generated? (Y/N)	Unlikely if publicly funded		

B6.3 Corridor C

Strategic case			
Criterion	**Assessment**	**Score**	**Overall score**
Scale of impact	This corridor goes inside the WHS within 1.5km of A303 at grade and provides benefit from economic and transport perspective but fails to meet the Environmental objectives.		
Fit with wider transport and government objectives	Criteria aligned with NPSNN environmental criteria assessment scores		
Fit with other objectives	a) Severance of the WHS, seriously degrading its character and adversely affecting the setting and fabric of numerous scheduled monuments resulting in substantial harm to the OUV of the WHS b) Potential to impact the River Avon SAC where it crosses the SAC in two locations. Crosses or is located in close proximity to a number of nationally designated sites.		
Key uncertainties	a) Unknown archaeological sites b) Unknown utilities c) Environmental / habitat surveys d) Working space, site compounds, lay down areas e) Use of off-site consolidation and logistics centres f) Site staff access arrangements g) Diversion Routes	This criterion is not scored in EAST	
Degree of consensus over outcomes?	Consultation has been undertaken and a number of Alternative Routes have been put forward during the consultation process.		

Economic case				
Topic: Economic growth				
Sub-topic	**Criterion**	**Assessment**	**Score**	**Overall score**
Connectivity	What impact does it have on end-to end journey time?	This corridor would deliver an at grade dual carriageway within 1 km of the existing A303. It would bypass Winterbourne Stoke, and would result in savings in end to end JT of more than 2 mins in AM and inter-peak hours with 4 mins in the westbound PM peak		
	Does it have an impact on cost of travel (vehicle operating costs, fares, etc.?)	This is an on-line corridor which would deliver an at grade dual carriageway within 1 km of the existing A303. As such, it would result in a small increase (<1000 km) in total network vehicle kms in both the AM and PM peak. It is considered that this would be likely to result in a small increase in the cost of travel for users of the Route.		
Reliability	Impact on day-to-day variability in journey times or average minutes of lateness?	This corridor would increase capacity by replacing the existing single carriageway with a dual carriageway. It is considered that this would be likely to reduce journey time variability and therefore decrease average minutes of delay.		
	What will happen to the number of incidents?	a) Most accidents on the existing stretch of the A303 occur at at-grade junctions. This corridor would deliver a new dual carriageway which would be designed to modern safety standards. All junctions would be removed, bypassed or grade separated. b) The dual carriageway would also increase capacity, which is expected to lead to a general improvement in traffic conditions on the Route. It is therefore expected that this corridor would result in a decrease in the rate of traffic incidents. c) This corridor would deliver a Route of similar length to the existing route. Any reduction in the accident rate due to improvements in road standards would be unaffected by the length of the Route.		
Resilience	What impact does this option have on the resilience of our infrastructure?	This corridor would replace the existing single carriageway with a dual carriageway. It is considered that this would be likely to improve resilience by increasing capacity and thereby reducing the scale of the impact arising from traffic incidents.		
Delivery of housing	How will this option facilitate new housing?	a) There are no housing developments that have been identified as directly dependent on the scheme, so it is considered unlikely that this corridor would directly facilitate new housing locally. b) However, improvements in traffic conditions along the Route as a result of this corridor would be likely to improve accessibility, including to allocated housing sites. Expected regional growth in housing in the South West peninsula is in the order of 242,000 to year 2031, and it is considered that this corridor has the potential to support housing growth, both in Wiltshire and more widely across the region.		
Wider economic impacts	Does it improve accessibility to key locations?	a) Key locations that could be affected by the Route include the WHS, Solstice Park business park, Porton Down biological research centre, and Boscombe Down airbase. The Wiltshire Core Strategy allocates 10 ha for employment uses at Porton Down, 7 ha at Boscombe Down, and further strategic employment sites in Salisbury and Wilton. b) The SEP published by the Swindon and Wiltshire LEP highlights opportunities for growth around Porton Down and the military presence on Salisbury Plain. The SEP identifies a South Wiltshire growth zone, with a focus on Salisbury, Porton and the garrison towns (Tidworth, Larkhill, Durrington, Bulford). c) This corridor would improve accessibility to WHS, Solstice Park business park, and the garrison towns of Durrington, Larkhill and Bulford. However this is an online corridor and improvements are likely to be smaller than other corridors.		
	Does it improve connectivity to central business districts?	This corridor would improve connectivity across the South West region, and between the South West and South East. As stated above, it could also improve accessibility to key locations locally, including Solstice Park as well as the WHS. However it does not connect directly to any central business districts, and therefore no significant impacts are expected in this regard.		
Topic: Carbon emissions				
Sub-topic	**Criterion**	**Assessment**	**Score**	
Activity	a) For non-public transport modes, is the number of vehicle trips expected to change? b) For public transport modes, are service frequencies expected to change? c) Are journey lengths expected to change? d) Does the option shift activity from low to higher occupancy vehicles, including public transport?	a) At the early stage of assessing corridors it is not practical to consider all of the assessment categories shown in EAST under the carbon heading. A simplified assessment which allows comparison between the corridors was undertaken as follows: b) Carbon emissions attributed to a project fall under three categories: Capital carbon (emissions from the construction of the asset); Operational carbon (emissions from the operation and maintenance of the asset); and User carbon (emissions from the end-users of the asset). c) The majority of the whole life carbon of a highway project is in the User carbon, with the capital and operational carbon typically forming a small component of the total. Therefore, User carbon is the primary consideration when determining an overall score for carbon emissions. When comparing different corridors road length was taken as a proxy for User carbon. d) Capital Carbon was determined on the basis of road length together with a high level assessment of the number of structures (Tunnel and bridges).		

Embedded carbon - currently assumed to be largely traded carbon	Is significant construction work required?	e) For the purposes of the assessment, length is classified as Short, Medium or Long. f) Corridor C is a Short length corridor, with no tunnel structures and no major structures (small bridges only)	
Carbon	Does the option involve a lower carbon fuel to be used (carbon per litre)?		
Efficiency	a) Are more efficient vehicles (car, goods vehicle, train, bus) to be used? b) Is a change in behaviour expected, not captured above (e.g. eco-driving, speeds)?		
Overall effect on carbon emissions	a) Non-traded - Diesel, petrol and bio-fuel (highway, diesel public transport/freight, electric cars etc.) b) Traded - Electric (aviation, electric powered public transport/freight, electric cars etc.)		
Topic: Socio-distributional impacts and the regions			
Sub-topic	**Criterion**	**Assessment**	**Score**
Social and distributional impacts	Does the option have an impact on accessibility / affordability / availability / acceptability for vulnerable groups (low income, disabled, the elderly, etc.)?	As the corridor follows the same Route as the current A303, impact will be limited to other settlements within the A303 corridor. There may be negative impacts for some isolated settlements if located in close proximity to the Route, however few people reside adjacent to the current A303 Route, and therefore there will be little impact. Winterbourne Stoke are likely to see the current impact of the A303 displace to the north of the village, where there are fewer residents. This may be beneficial for air quality and noise impacts, and also to reduce severance as a result of traffic being moved out of the village centre. The likelihood of accidents (especially those involving pedestrians) should be reduced as traffic reduces through the village. There may be some public transport re-routing and slightly longer journey times for settlements at either side of the corridor, which could have a slight negative impact on user benefits, personal affordability and accessibility.	
Regeneration	Does the option have an impact on a targeted regeneration area, if so what is the impact likely to be?	a) Levels of deprivation in south Wiltshire are generally low. However, there are three LSOAs located relatively close to the Route that fall into the 20% most deprived in England. Two of these are at Wilton, and one is in central Salisbury. b) The Salisbury Central Area Regeneration Programme, set out in the Wiltshire Core Strategy, identifies a number of regeneration sites within the city centre. In total these will provide 1,100 dwellings and 5 ha of predominantly B1 employment land. c) This is an on-line corridor which would provide a dual carriageway bypass within 1km of the Route of the existing A303, and it is therefore not considered likely that it would have a significant impact on accessibility or economic activity in either the targeted regeneration areas in central Salisbury, or on areas of deprivation in Salisbury and Wilton.	
Regional imbalance	If this is a weak region, what is the impact of the option on the region?	The South West region exhibits lower GVA than the UK average. By delivering a new dual carriageway which would increase capacity, reduce journey times and improve reliability on a key strategic Route, it is likely that this corridor could help to support improvements in economic performance relative to the UK average.	
	How will this impact economic growth?	a) By delivering a new dual carriageway which would increase capacity, reduce journey times and improve reliability on a key strategic Route, it is likely that this corridor would enhance the potential for economic growth by improving connectivity between the South West and the South East of England, for local traffic as well as for strategic journeys. b) It is considered that improvements in traffic conditions along the Route as a result of this corridor would be likely to reduce costs and improve productivity for business users that rely on the A303 to access suppliers and customers. There could be particular benefits for key transport-dependent sectors, as well as sectors such as agriculture that are particularly important to the South West economy. c) This corridor would also improve access to the South West for visitors, including tourists and holiday traffic as well as business users, improving the visitor experience and supporting the visitor economy.	

Topic: Local environment			
Sub-topic	**Criterion**	**Assessment**	**Score**
Air quality	a) What impact does the option have on air quality? b) Is an AQMA being affected?	Environmental factors are assessed comprehensively in the assessment of each corridor against the NPSNN environmental criteria. The score inserted is the overall assessment score from the separate NPSNN environmental criteria assessment	
Noise	a) Does this option reduce absolute disturbance from noise? b) Does it affect a problem area?		
Natural environment, heritage and landscape	a) What is the overall impact on the natural and urban environment? b) If negative then what is the value of the environment affected?		
Streetscape and urban environment			

Topic: Well being			
Sub-topic	**Criterion**	**Assessment**	**Score**
Severance	Does it increase possibility of cross street / corridor connections between neighbourhoods?	Route does not run close to major developed areas and although new road will create severance the number of persons affected will be small	
	Will more or less people be outside the public realm as a result?	Route runs through a mainly rural area and hence there are limited opportunities for significant public realm improvements	
Physical activity	What impact does the option have on physical activity?	Impact on physical activity would be a combination of (a) improved access to the walking/cycling facilities and (b) the impact that the new infrastructure will have on existing walking/cycling routes. The net effect for this corridor is estimated to be neutral	
Injury or deaths	a) What impact does the option have on the number injured or killed in transport accidents? b) What impact does the option have on the risk of travelling (KSI per km)?	a) While it is assumed that the new highway infrastructure will be designed to higher standards than existing roads, increases in the length of the overall road network and the number of junctions will tend to increase accidents. The longer the additional carriageway the greater the number of accidents. For this corridor the short section of new carriageway and the grade-separated junction will reduce accident impacts. b) The risk of travelling will be linked directly to the experience in the observed accident levels. Hence the assessment parallels the score for the number of injured or killed.	
Crime	What impact does this option have on crime and on people's fear of crime?	a) A first assumption is that this does not relate to motoring offences but other non-traffic crime such as burglary and personal attacks. The effect on crime could therefore occur if there is improved access to areas with a higher crime level. This could either encourage criminals to relocate activities in new areas (because of the better access) or encourage the public to travel to areas (such as town/city centres) which although they have greater attractions also have a greater crime rate. On this basis, the impact of this corridor is likely to be neutral. b) Fear of crime is likely to be linked to crime itself and hence the previous criterion. However a slightly different emphasis would be where the residents fear that the new measure or infrastructure might improve access to their area by criminals. On this basis the corridor would have a neutral impact on the fear of crime.	
Enjoying access to a range of goods, services, people and places?	What impact does it have on end-to-end journey time?	Using output from the traffic model on the change in journey times as a result of the scheme, the score represents the net impact of increased capacity and the directness of the corridor. With each corridor representing an increase in infrastructure, the emphasis will be on the scale of the travel time savings rather than whether it is positive or negative. The score reflects the direct route of the corridor.	
	Impact on day-to-day variability in journey times or average minutes of lateness?	The variability of the journey times reflects the increase in the available capacity provided by the new infrastructure, together with the volume of traffic on the new scheme. High levels of traffic on the new scheme would imply lower reliability and conversely lower traffic levels imply higher reliability. The score for the corridor reflects an improvement in journey time reliability with the scheme.	
	Does it have an impact on the cost of travel (vehicle operating costs, fares, etc.)?	For the corridors, the impact on the cost if travel concentrates on the change in vehicle operating costs taking into account the changes in the length of journeys with the infrastructure. The score reflects the direct route travelled with the corridor.	
	What will happen to the number of incidents?	The assessment mirrors the approach to measure the impact of accidents. While it is assumed that the new highway infrastructure will be designed to higher standards than existing roads, increases in the length of the overall road network and the number of junctions will tend to increase accidents. The longer the additional carriageway the greater the number of accidents. For this corridor the short section of new	

		carriageway and the grade-separated junction will reduce accident impacts.		
	Does the option improve access to key locations (supermarkets, doctors, hospitals, etc.)?	Accessibility to key locations reflects accessibility to towns rather than smaller communities, e.g. access to Amesbury, Andover or Salisbury. The corridor receives a neutral because there are no significant relevant locations along the Route.		
Terrorism	If the option might affect our vulnerability to terrorism then please state in the comments box provided	It is unlikely that the impact of terrorism will be a significant factor between the different schemes. The corridor is assessed as neutral		
Topic: Expected VfM category				
Criterion		**Assessment**	**Score**	
Expected VfM category		The Treasury defines the following ranges for the value for money: a) <1 poor b) 1-1.5 low c) 1.5-2 medium d) 2-4 high e) >4 very high Using the available VfM values from the Stage 0 work VfM measure for the corridor may be inferred taking into account the length of the scheme (and therefore its costs) and volume of traffic using the scheme (and hence benefits). The benefits are restricted to the core headings excluding wider impacts for which there is no available quantification. The score is assessed from the length of the scheme and the associated scheme costs.		

Managerial case			
Criterion	**Assessment**	**Score**	**Overall score**
Implementation timetable	Government commitment to start in 2020		
Public acceptability	There has been some public consultation but further input will be required going forward		
Practical feasibility	Road scheme managed by Highways England and delivered through the DCO process		
What is the quality of the supporting evidence?	Basic information available dating back to 1990's with little supporting evidence		
Key risks	a) Environmental / habitat assessment identifies showstoppers b) Unacceptable to key stakeholders c) Change of government policy (2020) d) Economy in recession leading to scheme cancellation	This criterion is not scored in EAST	

Financial case			
Criterion	**Assessment**	**Score**	**Overall score**
Affordability	Would be expected to cost less than the Government commitment to fund scheme of approx. £1.4 bn		
Capital cost (£m)?	a) Assumed £26m per km at grade highways b) Assumed over £1 bn for any tunnel option c) Proportion to length of scheme		
Revenue costs (£m)?	Proportion to length of scheme and whether a tunnel is included as part of the scheme		
Cost profile	No accurate estimates of implementation, operation, maintenance and enforcement costs available.	This criterion is not scored in EAST	
Overall cost risk	a) Absence of information in the contract b) Unforeseen site risks c) Impact on landtake		

Commercial case			
Criterion	**Assessment**	**Score**	**Overall score**
Flexibility of option	Some flexibility up to the point of publishing the DCO		
Where is funding coming from?	Likely to be publicly funded via Central Government, though option of private funds is being explored		
Any income generated? (Y/N)	Unlikely if publicly funded		

B6.4 Corridor D

Strategic case			
Criterion	**Assessment**	**Score**	**Overall score**
Scale of impact	This corridor goes inside the WHS and considers tunnelling options of differing lengths. It addresses all of the client specific requirements to an extent but will have an environmental impact during the construction stage and post-construction.		
Fit with wider transport and government objectives	Criteria aligned with NPSNN environmental criteria assessment scores		
Fit with other objectives	a) The tunnel corridor has the potential to reduce severance and benefit the character of the WHS and the setting of key assets such as Stonehenge. This is weighed against the potential for at grade elements to adversely affect the character of the WHS and affect the fabric and setting of scheduled monuments. At this time it is considered that substantial harm can be avoided with appropriate design, however the risk remains that substantial harm could occur. b) Potential to impact the European designated River Avon SAC and one SSSI. The corridor is also located in proximity to the Salisbury Plain SAC and Parsonage Down SSSI/NNR.		
Key uncertainties	a) Unknown archaeological sites b) Unknown utilities c) Environmental / habitat surveys d) Working space, site compounds, lay down areas e) Use of off-site consolidation and logistics centres f) On-line vs off-line portal construction g) Site staff access arrangements h) Diversion Routes	This criterion is not scored in EAST	
Degree of consensus over outcomes?	Significant consultation has been undertaken for the tunnelling options and a 2.1km tunnelling scheme was previously promoted successfully through PI but was cancelled by the then Government on grounds of affordability.		

Economic case				
Topic: Economic growth				
Sub-topic	**Criterion**	**Assessment**	**Score**	**Overall score**
Connectivity	What impact does it have on end-to end journey time?	This corridor would deliver a dual carriageway in a tunnel within the WHS, and would result in savings in end to end JT of more than 2 mins in AM and inter-peak hours, with 4 mins in the westbound PM peak		
	Does it have an impact on cost of travel (vehicle operating costs, fares, etc.?)	This is an on-line corridor, which would deliver a dual carriageway in a tunnel within the WHS. As such, it would result in a small increase (<1000 km) in total network vehicle kms in both the AM and PM peak. It is considered that this would be likely to result in a small increase in the cost of travel for users of the Route.		
Reliability	Impact on day-to-day variability in journey times or average minutes of lateness?	This corridor would increase capacity by replacing the existing single carriageway with a dual carriageway. It is considered that this would be likely to reduce journey time variability and therefore decrease average minutes of delay.		
	What will happen to the number of incidents?	a) Most accidents on the existing stretch of the A303 occur at at-grade junctions. This corridor would deliver a new dual carriageway which would be designed to modern safety standards. All junctions would be removed, bypassed or grade separated. b) The dual carriageway would also increase capacity, which is expected to lead to a general improvement in traffic conditions on the Route. It is therefore expected that this corridor would result in a decrease in the rate of traffic incidents. c) This corridor would deliver a Route of similar length to the existing route. Any reduction in the accident rate due to improvements in road standards would be unaffected by the length of the Route.		
Resilience	What impact does this option have on the resilience of our infrastructure?	This corridor would replace the existing single carriageway with a dual carriageway. It is considered that this would be likely to improve resilience by increasing capacity and thereby reducing the scale of the impact arising from traffic incidents.		
Delivery of housing	How will this option facilitate new housing?	a) There are no housing developments that have been identified as directly dependent on the scheme, so it is considered unlikely that this corridor would directly facilitate new housing locally. b) However, improvements in traffic conditions along the Route as a result of this corridor would be likely to improve accessibility, including to allocated housing sites. Expected regional growth in housing in the South West peninsula is in the order of 242,000 to year 2031, and it is considered that this corridor has the potential to support housing growth, both in Wiltshire and more widely across the region.		
Wider economic impacts	Does it improve accessibility to key locations?	a) Key locations that could be affected by the Route include the WHS, Solstice Park business park, Porton Down biological research centre, and Boscombe Down airbase. The Wiltshire Core Strategy allocates 10 ha for employment uses at Porton Down, 7 ha at Boscombe Down, and further strategic employment sites in Salisbury and Wilton. b) The SEP published by the Swindon and Wiltshire LEP highlights opportunities for growth around Porton Down and the military presence on Salisbury Plain. The SEP identifies a South Wiltshire growth zone, with a focus on Salisbury, Porton and the garrison towns (Tidworth, Larkhill, Durrington, Bulford). c) This corridor would improve accessibility to WHS, Solstice Park business park, and the garrison towns of Durrington, Larkhill and Bulford. However this is an online corridor and improvements are likely to be smaller than other corridors.		
	Does it improve connectivity to central business districts?	This corridor would improve connectivity across the South West region, and between the South West and South East. As stated above, it could also improve accessibility to key locations locally, including Solstice Park as well as the WHS. However it does not connect directly to any central business districts, and therefore no significant impacts are expected in this regard.		
Topic: Carbon emissions				
Sub-topic	**Criterion**	**Assessment**	**Score**	
Activity	a) For non-public transport modes, is the number of vehicle trips expected to change? b) For public transport modes, are service frequencies expected to change? c) Are journey lengths expected to change? d) Does the option shift activity from low to higher occupancy vehicles, including public transport?	a) At the early stage of assessing corridors it is not practical to consider all of the assessment categories shown in EAST under the carbon heading. A simplified assessment which allows comparison between the corridors was undertaken as follows: b) Carbon emissions attributed to a project fall under three categories: Capital carbon (emissions from the construction of the asset); Operational carbon (emissions from the operation and maintenance of the asset); and User carbon (emissions from the end-users of the asset). c) The majority of the whole life carbon of a highway project is in the User carbon, with the capital and operational carbon typically forming a small component of the total. Therefore, User carbon is the primary consideration when determining an overall score for carbon emissions. When comparing different corridors road length was taken as a proxy for User carbon. d) Capital Carbon was determined on the basis of road length together with a high level assessment of the number of structures (Tunnel and bridges).		

Embedded carbon - currently assumed to be largely traded carbon	Is significant construction work required?	e) For the purposes of the assessment, length is classified as Short, Medium or Long. f) Corridor D is a Short corridor and includes a twin bore tunnel structures but no other major structures (small bridges only).		
Carbon	Does the option involve a lower carbon fuel to be used (carbon per litre)?			
Efficiency	a) Are more efficient vehicles (car, goods vehicle, train, bus) to be used? b) Is a change in behaviour expected, not captured above (e.g. eco-driving, speeds)?			
Overall effect on carbon emissions	a) Non-traded - Diesel, petrol and bio-fuel (highway, diesel public transport/freight, electric cars etc.) b) Traded - Electric (aviation, electric powered public transport/freight, electric cars etc.)			
Topic: Socio-distributional impacts and the regions				
Sub-topic	**Criterion**	**Assessment**	**Score**	
Social and distributional impacts	Does the option have an impact on accessibility / affordability / availability / acceptability for vulnerable groups (low income, disabled, the elderly, etc.)?	This corridor will incorporate a tunnelled Route, and therefore it is likely that there will be little negative impact across the socio-demographic indicators for the surrounding populations, and could potentially result in positive impacts to noise levels, air quality and severance for residents living adjacent to the current A303 route. There may however be localised increases in air pollution and noise levels at the tunnel mouths, near Winterbourne Stoke and North West Amesbury. Changes in accidents, personal security and user benefits are unlikely to result in any impact to the surrounding population or vulnerable groups. There may be some reduction in public transport accessibility where bus stops are removed from along the current A303, though severance should be reduced as traffic is displaced into tunnelled Routes, resulting in pedestrians and other vulnerable road users (such as older people and children) finding it easier to cross roads.		
Regeneration	Does the option have an impact on a targeted regeneration area, if so what is the impact likely to be?	a) Levels of deprivation in south Wiltshire are generally low. However, there are three LSOAs located relatively close to the Route that fall into the 20% most deprived in England. Two of these are at Wilton, and one is in central Salisbury. b) The Salisbury Central Area Regeneration Programme, set out in the Wiltshire Core Strategy, identifies a number of regeneration sites within the city centre. In total these will provide 1,100 dwellings and 5 ha of predominantly B1 employment land. c) This is an on-line corridor which would provide a new, tunnelled dual carriageway along the Route of the existing A303, and it is therefore not considered likely that it would have a significant impact on accessibility or economic activity in either the targeted regeneration areas in central Salisbury, or on areas of deprivation in Salisbury and Wilton.		
Regional imbalance	If this is a weak region, what is the impact of the option on the region?	The South West region exhibits lower GVA than the UK average. By delivering a new dual carriageway which would increase capacity, reduce journey times and improve reliability on a key strategic Route, it is likely that this corridor could help to support improvements in economic performance relative to the UK average.		
	How will this impact economic growth?	a) By delivering a new dual carriageway which would increase capacity, reduce journey times and improve reliability on a key strategic Route, it is likely that this corridor would enhance the potential for economic growth by improving connectivity between the South West and the South East of England, for local traffic as well as for strategic journeys. b) It is considered that improvements in traffic conditions along the Route as a result of this corridor would be likely to reduce costs and improve productivity for business users that rely on the A303 to access suppliers and customers. There could be particular benefits for key transport-dependent sectors, as well as sectors such as agriculture that are particularly important to the South West economy. c) This corridor would also improve access to the South West for visitors, including tourists and holiday traffic as well as business users, improving the visitor experience and supporting the visitor economy.		

Topic: Local environment			
Sub-topic	**Criterion**	**Assessment**	**Score**
Air quality	a) What impact does the option have on air quality? b) Is an AQMA being affected?	Environmental factors are assessed comprehensively in the assessment of each corridor against the NPSNN environmental criteria. The score inserted is the overall assessment score from the separate NPSNN environmental criteria assessment	
Noise	a) Does this option reduce absolute disturbance from noise? b) Does it affect a problem area?		
Natural environment, heritage and landscape	a) What is the overall impact on the natural and urban environment? b) If negative then what is the value of the environment affected?		
Streetscape and urban environment			

Topic: Well being			
Sub-topic	**Criterion**	**Assessment**	**Score**
Severance	Does it increase possibility of cross street / corridor connections between neighbourhoods?	The Route does not run close to major developed areas and the number of persons affected will be small but because the new Route will be in the tunnel there will be reduced severance impact compared with other corridors	
	Will more or less people be outside the public realm as a result?	Although Route runs through a mainly rural area and hence there are limited opportunities for significant public realm improvements, the closure of the existing A303 Route provides the opportunity for some form of public realm works	
Physical activity	What impact does the option have on physical activity?	Impact on physical activity would be a combination of (a) improved access to the walking/cycling facilities and (b) the impact that the new infrastructure will have on existing walking/cycling routes. The net effect for this corridor is estimated to be a slight improvement because the tunnel corridor does not cut as many walking/cycling routes as a surface corridor	
Injury or deaths	a) What impact does the option have on the number injured or killed in transport accidents? b) What impact does the option have on the risk of travelling (KSI per km)?	a) While it is assumed that the new highway infrastructure will be designed to higher standards than existing roads, increases in the length of the overall road network and the number of junctions will tend to increase accidents. The longer the additional carriageway the greater the number of accidents. For this corridor the short section of new carriageway and the grade-separated junction will reduce accident impacts. b) The risk of travelling will be linked directly to the experience in the observed accident levels. Hence the assessment parallels the score for the number of injured or killed.	
Crime	What impact does this option have on crime and on people's fear of crime?	a) A first assumption is that this does not relate to motoring offences but other non-traffic crime such as burglary and personal attacks. The effect on crime could therefore occur if there is improved access to areas with a higher crime level. This could either encourage criminals to relocate activities in new areas (because of the better access) or encourage the public to travel to areas (such as town/city centres) which although they have greater attractions also have a greater crime rate. On this basis, the impact of this corridor is likely to be neutral. b) Fear of crime is likely to be linked to crime itself and hence the previous criterion. However a slightly different emphasis would be where the residents fear that the new measure or infrastructure might improve access to their area by criminals. On this basis the corridor would have a neutral impact on the fear of crime.	
Enjoying access to a range of goods, services, people and places?	What impact does it have on end-to-end journey time?	Using output from the traffic model on the change in journey times as a result of the scheme, the score represents the net impact of increased capacity and the directness of the corridor. With each corridor representing an increase in infrastructure, the emphasis will be on the scale of the travel time savings rather than whether it is positive or negative. The score reflects the direct Route of the corridor.	
	Impact on day-to-day variability in journey times or average minutes of lateness?	The variability of the journey times reflects the increase in the available capacity provided by the new infrastructure, together with the volume of traffic on the new scheme. High levels of traffic on the new scheme would imply lower reliability and conversely lower traffic levels imply higher reliability. The score for the corridor reflects an improvement in journey time reliability with the scheme.	
	Does it have an impact on the cost of travel (vehicle operating costs, fares, etc.)?	For the corridors, the impact on the cost if travel concentrates on the change in vehicle operating costs taking into account the changes in the length of journeys with the infrastructure. The score reflects the direct route travelled with the corridor.	

	What will happen to the number of incidents?	The assessment mirrors the approach to measure the impact of accidents. While it is assumed that the new highway infrastructure will be designed to higher standards than existing roads, increases in the length of the overall road network and the number of junctions will tend to increase accidents. The longer the additional carriageway the greater the number of accidents. For this corridor the short section of new carriageway and the grade-separated junction will reduce accident impacts.		
	Does the option improve access to key locations (supermarkets, doctors, hospitals, etc.)?	Accessibility to key locations reflects accessibility to towns rather than smaller communities, e.g. access to Amesbury, Andover or Salisbury. The corridor receives a neutral because there are no significant relevant locations along the Route.		
Terrorism	If the option might affect our vulnerability to terrorism then please state in the comments box provided	Although it is unlikely that the impact of terrorism will be a significant factor between the different schemes it is assessed that the tunnel corridor might be marginally more susceptible to terrorist acts		
Topic: Expected VfM category				
Criterion		**Assessment**	**Score**	
Expected VfM category		The Treasury defines the following ranges for the value for money: a) <1 poor b) 1-1.5 low c) 1.5-2 medium d) 2-4 high e) >4 very high Using the available VfM values from the Stage 0 work VfM measure for the corridor may be inferred taking into account the length of the scheme (and therefore its costs) and volume of traffic using the scheme (and hence benefits). The benefits are restricted to the core headings excluding wider impacts for which there is no available quantification. The score is assessed from the high scheme construction cost of the tunnel corridor.		

Managerial case			
Criterion	**Assessment**	**Score**	**Overall score**
Implementation timetable	Government commitment to start in 2020		
Public acceptability	The tunnelling option has been through public consultation and has public favour		
Practical feasibility	Road scheme managed by Highways England and delivered through the DCO process		
What is the quality of the supporting evidence?	Environmental statement and detailed information available but 12 years old		
Key risks	a) Environmental / habitat assessment identifies showstoppers b) Unacceptable to key stakeholders c) Change of government policy (2020) d) Economy in recession leading to scheme cancellation	This criterion is not scored in EAST	

Financial case			
Criterion	**Assessment**	**Score**	**Overall score**
Affordability	Would be expected to cost less than the Government commitment to fund scheme of approx. £1.4 bn		
Capital cost (£m)	a) Assumed £26m per km at grade highways b) Assumed over £1 bn for any tunnel option c) Proportion to length of scheme		
Revenue costs (£m)	Proportion to length of scheme and whether a tunnel is included as part of the scheme		
Cost profile	No accurate estimates of implementation, operation, maintenance and enforcement costs available.	This criterion is not scored in EAST	
Overall cost risk	a) Absence of information in the contract b) Unforeseen site risks c) Impact on landtake		

Commercial case			
Criterion	**Assessment**	**Score**	**Overall score**
Flexibility of option	Some flexibility up to the point of publishing the DCO		
Where is funding coming from?	Likely to be publicly funded via Central Government, though option of private funds is being explored		
Any income generated? (Y/N)	Unlikely if publicly funded		

B6.5 Corridor E

Strategic case			
Criterion	**Assessment**	**Score**	
Scale of impact	This Corridor goes inside of the WHS south of the A303 at grade. Setting of the WHS will be impacted and therefore does not meet clients specific requirement for cultural heritage and environmental and community. It alleviates the issue of congestion but creates a longer Route. It could provide benefit from economic growth perspective.		
Fit with wider transport and government objectives	Criteria aligned with NPSNN environmental criteria assessment scores		
Fit with other objectives	a) Severance of the WHS, fundamentally altering its character and fabric resulting in substantial harm to the OUV of the WHS b) Potential to impact on a European designated site where it crosses the River Avon SAC at a number of locations. It also crosses or is located in close proximity to a number of nationally designated sites. c) Potential for disruption and impacts on quality of life for the residents of a number of settlements e.g: Amesbury, Steeple Langford, Berwick St James, Winterbourne Stoke, Normanton, and Stapleford.		
Key uncertainties	a) Unknown archaeological sites b) Unknown utilities c) Environmental / habitat surveys d) Working space, site compounds, lay down areas e) Use of off-site consolidation and logistics centres f) Site staff access arrangements g) Diversion Routes	This criterion is not scored in EAST	
Degree of consensus over outcomes?	Some consultation has taken place and alternative Routes have previously been put forward during the statutory process.		

Economic case				
Topic: Economic growth				
Sub-topic	**Criterion**	**Assessment**	**Score**	**Overall score**
Connectivity	What impact does it have on end-to end journey time?	This corridor would deliver a dual carriageway bypass to the south of the A303, within the WHS, and would result in savings in end to end JT of more than 2 mins in AM and inter-peak hours with 4 mins in westbound PM peak		
	Does it have an impact on cost of travel (vehicle operating costs, fares, etc.?)	This corridor would deliver a dual carriageway bypass to the south of the A303, within the WHS. It would result in a moderate increase (>1000 km) in total network vehicle kms in the AM peak, and a small increase (<1000 km) in total network vehicle kms in the PM peak. It is considered that this would be likely to result in a small increase in the cost of travel for users of the Route.		
Reliability	Impact on day-to-day variability in journey times or average minutes of lateness?	This corridor would increase capacity by replacing the existing single carriageway with a dual carriageway. It is considered that this would be likely to reduce journey time variability and therefore decrease average minutes of delay.		
	What will happen to the number of incidents?	a) Most accidents on the existing stretch of the A303 occur at at-grade junctions. This corridor would deliver a new dual carriageway which would be designed to modern safety standards. All junctions would be removed, bypassed or grade separated. b) The dual carriageway would also increase capacity, which is expected to lead to a general improvement in traffic conditions on the Route. It is therefore expected that this corridor would result in a decrease in the rate of traffic incidents. c) However this corridor would deliver a Route slightly longer than the existing route. Any reduction in the accident rate due to improvements in road standards could, therefore, be partially offset by the greater length of the Route.		
Resilience	What impact does this option have on the resilience of our infrastructure?	This corridor would replace the existing single carriageway with a dual carriageway. It is considered that this would be likely to improve resilience by increasing capacity and thereby reducing the scale of the impact arising from traffic incidents.		
Delivery of housing	How will this option facilitate new housing?	a) There are no housing developments that have been identified as directly dependent on the scheme, so it is considered unlikely that this corridor would directly facilitate new housing locally. b) However, improvements in traffic conditions along the Route as a result of this corridor would be likely to improve accessibility, including to allocated housing sites. Expected regional growth in housing in the South West peninsula is in the order of 242,000 to year 2031, and it is considered that this corridor has the potential to support housing growth, both in Wiltshire and more widely across the region		
Wider economic impacts	Does it improve accessibility to key locations?	a) Key locations that could be affected by the Route include the WHS, Solstice Park business park, Porton Down biological research centre, and Boscombe Down airbase. The Wiltshire Core Strategy allocates 10 ha for employment uses at Porton Down, 7 ha at Boscombe Down, and further strategic employment sites in Salisbury and Wilton. b) The SEP published by the Swindon and Wiltshire LEP highlights opportunities for growth around Porton Down and the military presence on Salisbury Plain. The SEP identifies a South Wiltshire growth zone, with a focus on Salisbury, Porton and the garrison towns (Tidworth, Larkhill, Durrington, Bulford). c) This corridor would improve accessibility to WHS, Solstice Park business park (which fronts the A303), and Boscombe Down airbase.		
	Does it improve connectivity to central business districts?	This corridor would improve connectivity across the South West region, and between the South West and South East. As stated above, it could also improve accessibility to key locations locally, including Solstice Park and Boscombe Down as well as the WHS. However it does not connect directly to any central business districts, and therefore no significant impacts are expected in this regard.		
Topic: Carbon emissions				
Sub-topic	**Criterion**	**Assessment**	**Score**	
Activity	a) For non-public transport modes, is the number of vehicle trips expected to change? b) For public transport modes, are service frequencies expected to change? c) Are journey lengths expected to change? d) Does the option shift activity from low to higher occupancy vehicles, including public transport?	a) At the early stage of assessing corridors it is not practical to consider all of the assessment categories shown in EAST under the carbon heading. A simplified assessment which allows comparison between the corridors was undertaken as follows: b) Carbon emissions attributed to a project fall under three categories: Capital carbon (emissions from the construction of the asset); Operational carbon (emissions from the operation and maintenance of the asset); and User carbon (emissions from the end-users of the asset). c) The majority of the whole life carbon of a highway project is in the User carbon, with the capital and operational carbon typically forming a small component of the total. Therefore, User carbon is the primary consideration when determining an overall score for carbon emissions. When comparing different corridors road length was taken as a proxy for User carbon. d) Capital Carbon was determined on the basis of road length together with a high level assessment of the number of structures (Tunnel and bridges). e) For the purposes of the assessment, length is classified as Short, Medium or Long.		
Embedded	Is significant construction work required?			

carbon - currently assumed to be largely traded carbon		f) Corridor E is a Medium length corridor which crosses rivers in two locations, requiring construction of long bridges		
Carbon	Does the option involve a lower carbon fuel to be used (carbon per litre)?			
Efficiency	a) Are more efficient vehicles (car, goods vehicle, train, bus) to be used? b) Is a change in behaviour expected, not captured above (e.g. eco-driving, speeds)?			
Overall effect on carbon emissions	a) Non-traded - Diesel, petrol and bio-fuel (highway, diesel public transport/freight, electric cars etc.) b) Traded - Electric (aviation, electric powered public transport/freight, electric cars etc.)			
Topic: Socio-distributional impacts and the regions				
Sub-topic	**Criterion**	**Assessment**	**Score**	
Social and distributional impacts	Does the option have an impact on accessibility / affordability / availability / acceptability for vulnerable groups (low income, disabled, the elderly, etc.)?	This corridor will have a positive impact on noise, air quality, accidents and severance to the north of and adjacent to the current A303, due to reduced traffic using the more southern Route. However, residents within Amesbury (the north in particular) are likely to experience larger negative impacts to noise, air quality, severance and accidents due to the increased traffic through or close to the town. In the centre of Amesbury there is a higher than average proportion of children, which are likely to disproportionately impacted by an increase in noise. Bus services may have to be re-routed, which could have a negative impact on accessibility, and the new Route could have a negative impact on personal affordability and user benefits if it makes journey times longer. The corridor however is over a very rural area and therefore the number of people impacted is likely to be small.		
Regeneration	Does the option have an impact on a targeted regeneration area, if so what is the impact likely to be?	a) Levels of deprivation in south Wiltshire are generally low. However, there are three LSOAs located relatively close to the Route that fall into the 20% most deprived in England. Two of these are at Wilton, and one is in central Salisbury. b) The Salisbury Central Area Regeneration Programme, set out in the Wiltshire Core Strategy, identifies a number of regeneration sites within the city centre. In total these will provide 1,100 dwellings and 5 ha of predominantly B1 employment land. c) This corridor would provide a bypass to the south of the existing A303 within the WHS, and it is therefore not considered likely that it would have a significant impact on accessibility or economic activity in either the targeted regeneration areas in central Salisbury, or on areas of deprivation in Salisbury and Wilton.		
Regional imbalance	If this is a weak region, what is the impact of the option on the region?	The South West region exhibits lower GVA than the UK average. By delivering a new dual carriageway which would increase capacity, reduce journey times and improve reliability on a key strategic Route, it is likely that this corridor could help to support improvements in economic performance relative to the UK average.		
	How will this impact economic growth?	a) By delivering a new dual carriageway which would increase capacity, reduce journey times and improve reliability on a key strategic Route, it is likely that this corridor would enhance the potential for economic growth by improving connectivity between the South West and the South East of England, for local traffic as well as for strategic journeys. b) It is considered that improvements in traffic conditions along the Route as a result of this corridor would be likely to reduce costs and improve productivity for business users that rely on the A303 to access suppliers and customers. There could be particular benefits for key transport-dependent sectors, as well as sectors such as agriculture that are particularly important to the South West economy. c) This corridor would also improve access to the South West for visitors, including tourists and holiday traffic as well as business users, improving the visitor experience and supporting the visitor economy.		
Topic: Local environment				

Sub-topic	Criterion	Assessment	Score
Air quality	a) What impact does the option have on air quality? b) Is an AQMA being affected?	Environmental factors are assessed comprehensively in the assessment of each corridor against the NPSNN environmental criteria. The score inserted is the overall assessment score from the separate NPSNN environmental criteria assessment	
Noise	a) Does this option reduce absolute disturbance from noise? b) Does it affect a problem area?		
Natural environment, heritage and landscape	a) What is the overall impact on the natural and urban environment? b) If negative then what is the value of the environment affected?		
Streetscape and urban environment			
Topic: Well being			
Sub-topic	**Criterion**	**Assessment**	**Score**
Severance	Does it increase possibility of cross street / corridor connections between neighbourhoods?	Route does not run close to major developed areas and although new road will create severance the number of persons affected will be small	
	Will more or less people be outside the public realm as a result?	Route runs through a mainly rural area and hence there are limited opportunities for significant public realm improvements	
Physical activity	What impact does the option have on physical activity?	Impact on physical activity would be a combination of (a) improved access to the walking/cycling facilities and (b) the impact that the new infrastructure will have on existing walking/cycling routes. The net effect for this corridor is estimated to be neutral	
Injury or deaths	a) What impact does the option have on the number injured or killed in transport accidents? b) What impact does the option have on the risk of travelling (KSI per km)?	a) While it is assumed that the new highway infrastructure will be designed to higher standards than existing roads, increases in the length of the overall road network and the number of junctions will tend to increase accidents. The longer the additional carriageway the greater the number of accidents. For this corridor the number of junctions and distance from existing developments will result in a neutral impact. b) The risk of travelling will be linked directly to the experience in the observed accident levels. Hence the assessment parallels the score for the number of injured or killed.	
Crime	What impact does this option have on crime and on people's fear of crime?	a) A first assumption is that this does not relate to motoring offences but other non-traffic crime such as burglary and personal attacks. The effect on crime could therefore occur if there is improved access to areas with a higher crime level. This could either encourage criminals to relocate activities in new areas (because of the better access) or encourage the public to travel to areas (such as town/city centres) which although they have greater attractions also have a greater crime rate. On this basis, the impact of this corridor is likely to be neutral. b) Fear of crime is likely to be linked to crime itself and hence the previous criterion. However a slightly different emphasis would be where the residents fear that the new measure or infrastructure might improve access to their area by criminals. On this basis the corridor would have a neutral impact on the fear of crime.	
Enjoying access to a range of goods, Services, people and places?	What impact does it have on end-to-end journey time?	Using output from the traffic model on the change in journey times as a result of the scheme, the score represents the net impact of increased capacity and the directness of the corridor. With each corridor representing an increase in infrastructure, the emphasis will be on the scale of the travel time savings rather than whether it is positive or negative. The score reflects the direct route of the corridor.	
	Impact on day-to-day variability in journey times or average minutes of lateness?	The variability of the journey times reflects the increase in the available capacity provided by the new infrastructure, together with the volume of traffic on the new scheme. High levels of traffic on the new scheme would imply lower reliability and conversely lower traffic levels imply higher reliability. The score for the corridor reflects an improvement in journey time reliability with the scheme	
	Does it have an impact on the cost of travel (vehicle operating costs, fares, etc.)?	For the corridors, the impact on the cost if travel concentrates on the change in vehicle operating costs taking into account the changes in the length of journeys with the infrastructure. The score reflects the direct route travelled with the corridor.	
	What will happen to the number of incidents?	The assessment mirrors the approach to measure the impact of accidents. While it is assumed that the new highway infrastructure will be designed to higher standards than existing roads, increases in the length of the overall road network and the number of junctions will tend to increase accidents. The longer the additional carriageway the greater the number of accidents. For this corridor the number of junctions and distance from existing developments will result in a neutral impact.	

	Does the option improve access to key locations (supermarkets, doctors, hospitals, etc.)?	Accessibility to key locations reflects accessibility to towns rather than smaller communities, e.g. access to Amesbury, Andover or Salisbury. The corridor would provide access to the communities to the south of the area		
Terrorism	If the option might affect our vulnerability to terrorism then please state in the comments box provided	It is unlikely that the impact of terrorism will be a significant factor between the different schemes. The corridor is assessed as neutral		
Topic: Expected VfM category				
Criterion		**Assessment**	**Score**	
Expected VfM category		The Treasury defines the following ranges for the value for money: a) <1 poor b) 1-1.5 low c) 1.5-2 medium d) 2-4 high e) >4 very high Using the available VfM values from the Stage 0 work VfM measure for the corridor may be inferred taking into account the length of the scheme (and therefore its costs) and volume of traffic using the scheme (and hence benefits). The benefits are restricted to the core headings excluding wider impacts for which there is no available quantification. The score is assessed from the length of the scheme and the associated scheme costs.		

Managerial case			
Criterion	**Assessment**	**Score**	**Overall score**
Implementation timetable	Government commitment to start in 2020		
Public acceptability	There has been some public consultation but further input will be required going forward		
Practical feasibility	Road scheme managed by Highways England and delivered through the DCO process		
What is the quality of the supporting evidence?	Basic information available dating back to 1990's with little supporting evidence		
Key risks	a) Environmental / habitat assessment identifies showstoppers b) Unacceptable to key stakeholders c) Change of government policy (2020) d) Economy in recession leading to scheme cancellation	This criterion is not scored in EAST	

Financial case			
Criterion	**Assessment**	**Score**	**Overall score**
Affordability	Would be expected to cost less than the Government commitment to fund scheme of approx. £1.4 bn		
Capital cost (£m)	a) Assumed £26m per km at grade highways b) Assumed over £1 bn for any tunnel option c) Proportion to length of scheme		
Revenue costs (£m)	Proportion to length of scheme and whether a tunnel is included as part of the scheme		
Cost profile	No accurate estimates of implementation, operation, maintenance and enforcement costs available.	This criterion is not scored in EAST	
Overall cost risk	a) Absence of information in the contract b) Unforeseen site risks c) Impact on landtake		

Commercial case			
Criterion	**Assessment**	**Score**	**Overall score**
Flexibility of option	Some flexibility up to the point of publishing the DCO		
Where is funding coming from?	Likely to be publicly funded via Central Government, though option of private funds is being explored		
Any income generated? (Y/N)	Unlikely if publicly funded		

B6.6 Corridor F (north)

Strategic case			
Criterion	**Assessment**	**Score**	
Scale of impact	This corridor sits outside the WHS south of A303. It addresses most of the Client Scheme Requirements for cultural heritage, environment and community but impacts on MOD land at Boscombe Down airfield and has high potential to sever Amesbury town		
Fit with wider transport and government objectives	Criteria aligned with NPSNN environmental criteria assessment scores.		
Fit with other objectives	a) Closure of the existing A303 would bring substantial benefits for the WHS. Routes in the northern part of the corridor area may adversely affect the setting of the WHS, Routes further south may be sufficiently distant to not result in significant change to setting of WHS. b) Potential to impact European sites, where it crosses the River Avon SAC in two locations, and the Salisbury Plain SPA/SAC in the north eastern part of the corridor. Crosses or is located in close proximity to a number of nationally designated sites. Length of the corridor has the potential to result in larger areas of habitat loss and potential severance. c) Potential for disruption and impacts on quality of life for the residents of a number of settlements e.g: Berwick St James, Stapleford, Upper Woodford, Middle Woodford, Lower Woodford, High Post, and East of Amesbury		
Key uncertainties	a) Unknown archaeological sites b) Unknown utilities c) Environmental / habitat surveys d) Working space, site compounds, lay down areas e) Use of off-site consolidation and logistics centres f) Site staff access arrangements g) Diversion Routes	This criterion is not scored in EAST	
Degree of consensus over outcomes?	Some consultation has taken place and alternative Routes have previously been put forward during the statutory process.		

Economic case				
Topic: Economic growth				
Sub-topic	**Criterion**	**Assessment**	**Score**	**Overall score**
Connectivity	What impact does it have on end-to end journey time?	This corridor would deliver a dual carriageway bypass to the south of the WHS, and would result in journey time savings of around 1 minute.		
	Does it have an impact on cost of travel (vehicle operating costs, fares, etc.?)	This corridor would deliver a dual carriageway bypass immediately to the south of the WHS. With the existing A303 closed there would be a significant increase in vehicle-kms and therefore operating costs.		
Reliability	Impact on day-to-day variability in journey times or average minutes of lateness?	This corridor would increase capacity by delivering a new dual carriageway bypass. It is considered that this would be likely to reduce journey time variability and therefore decrease average minutes of delay.		
	What will happen to the number of incidents?	a) Most accidents on the existing stretch of the A303 occur at at-grade junctions. This corridor would deliver a new dual carriageway which would be designed to modern safety standards. All junctions would be removed, bypassed or grade separated. b) The dual carriageway would also increase capacity, which is expected to lead to a general improvement in traffic conditions on the Route, and a decrease in the rate of traffic incidents c) However this corridor would deliver a Route moderately longer than the existing route. Any reduction in the accident rate due to improvements in road standards could, therefore, be partially offset by the greater length of the Route.		
Resilience	What impact does this option have on the resilience of our infrastructure?	This corridor would deliver a new dual carriageway bypass. It is considered that this would be likely to improve resilience by increasing capacity and thereby reducing the scale of the impact arising from traffic incidents.		
Delivery of housing	How will this option facilitate new housing?	a) Here are no housing developments that have been identified as directly dependent on the scheme, so it is considered unlikely that that this corridor would directly facilitate new housing locally. b) However, Wiltshire Core Strategy allocates a number of residential and mixed use sites in and around Salisbury. Southern corridors would provide connections with the A345 and A360 north of Salisbury, and it is expected that this would improve access to these sites. c) Improvements in traffic conditions along the Route as a result of this corridor would be likely to improve accessibility more generally, including to allocated housing sites. Expected regional growth in housing in the South West peninsula is in the order of 242,000 to year 2031, and it is considered that this corridor has the potential to support housing growth, both in Wiltshire and more widely across the region.		
Wider economic impacts	Does it improve accessibility to key locations?	a) Key locations that could be affected by the Route include the WHS, Solstice Park business park, Porton Down biological research centre, and Boscombe Down airbase. The Wiltshire Core Strategy allocates 10 ha for employment uses at Porton Down, 7 ha at Boscombe Down, and further strategic employment sites in Salisbury and Wilton. b) The SEP published by the Swindon and Wiltshire LEP highlights opportunities for growth around Porton Down and the military presence on Salisbury Plain. The SEP identifies a South Wiltshire growth zone, with a focus on Salisbury, Porton and the garrison towns (Tidworth, Larkhill, Durrington, Bulford). c) This corridor would improve accessibility to Porton Down, Boscombe Down, and Salisbury		
	Does it improve connectivity to central business districts?	This corridor would improve connectivity across the South West region, and between the South West and South East. As stated above, it could also improve accessibility to key locations locally, including Solstice Park, Porton Down, and Boscombe Down. However it does not connect directly to any central business districts, and therefore no significant impacts are expected in this regard		
Topic: Carbon emissions				
Sub-topic	**Criterion**	**Assessment**	**Score**	
Activity	a) For non-public transport modes, is the number of vehicle trips expected to change? b) For public transport modes, are service frequencies expected to change? c) Are journey lengths expected to change? d) Does the option shift activity from low to higher occupancy vehicles, including public transport?	a) At the early stage of assessing corridors it is not practical to consider all of the assessment categories shown in EAST under the carbon heading. A simplified assessment which allows comparison between the corridors was undertaken as follows: b) Carbon emissions attributed to a project fall under three categories: Capital carbon (emissions from the construction of the asset); Operational carbon (emissions from the operation and maintenance of the asset); and User carbon (emissions from the end-users of the asset). c) The majority of the whole life carbon of a highway project is in the User carbon, with the capital and operational carbon typically forming a small component of the total. Therefore, User carbon is the primary consideration when determining an overall score for carbon emissions. When comparing different corridors road length was taken as a proxy for User carbon. d) Capital Carbon was determined on the basis of road length together with a high level assessment of the number of structures (Tunnel and bridges). e) For the purposes of the assessment, length is classified as Short, Medium or Long.		

Embedded carbon - currently assumed to be largely traded carbon	Is significant construction work required?	f) Corridor F (north) features a Medium length corridor which crosses rivers in two locations, requiring construction of long bridges with some gradient included.	
Carbon	Does the option involve a lower carbon fuel to be used (carbon per litre)?		
Efficiency	a) Are more efficient vehicles (car, goods vehicle, train, bus) to be used? b) Is a change in behaviour expected, not captured above (e.g. eco-driving, speeds)?		
Overall effect on carbon emissions	a) Non-traded - Diesel, petrol and bio-fuel (highway, diesel public transport/freight, electric cars etc.) b) Traded - Electric (aviation, electric powered public transport/freight, electric cars etc.)		
Topic: Socio-distributional impacts and the regions			
Sub-topic	**Criterion**	**Assessment**	**Score**
Social and distributional impacts	Does the option have an impact on accessibility / affordability / availability / acceptability for vulnerable groups (low income, disabled, the elderly, etc.)?	This corridor is likely to have a negative impact on air quality, noise levels, accidents and severance to the south of Amesbury and through small rural settlements to the south of the current A303, due to re-directed traffic flows. To the south of Amesbury there is a high proportion of children, who will be affected disproportionately through an increase in noise levels and air pollution. Although there are few people living to the south of the current A303 Route, a large proportion of these people are aged over 65 years old. This age group tend to be more dependent on public transport and walking to get around, and will therefore be more susceptible to changes in bus routes or severance created by the new Route.	
Regeneration	Does the option have an impact on a targeted regeneration area, if so what is the impact likely to be?	a) Levels of deprivation in south Wiltshire are generally low. However, there are three LSOAs close to the Route that fall into the 20% most deprived in England. Two of these are at Wilton, and one is in central Salisbury. b) The Salisbury Central Area Regeneration Programme, set out in the Wiltshire Core Strategy, identifies a number of regeneration sites within the city centre. In total these will provide 1,100 dwellings and 5 ha of predominantly B1 employment land. c) It is not expected likely that a bypass to the south of the WHS would have a significant impact on accessibility or economic activity in either the targeted regeneration areas in central Salisbury, or on areas of deprivation in Salisbury and Wilton. g) A bypass to the north of Salisbury, however, would provide connections with the A345 and A360 and could improve conditions for local traffic in and around the city. It is expected that this could have a small beneficial impact on identified regeneration sites and areas of deprivation within the city. For example, improved access could benefit those living in deprived areas and increase the attractiveness of regeneration sites for developers and residents. However it is considered that any impact would be likely to be relatively small, and more important in terms of local traffic than strategic traffic accessing the city from elsewhere.	
Regional imbalance	If this is a weak region, what is the impact of the option on the region?	The South West region exhibits lower GVA than the UK average. This corridor would deliver a new dual carriageway which would increase capacity, reduce journey times and improve reliability on a key strategic Route. Although this corridor would not reduce journey times to the same extent as Corridors A to E, it is likely that it could help to support some improvement in economic performance relative to the UK average.	
	How will this impact economic growth?	a) This corridor would deliver a new dual carriageway which would increase capacity and improve reliability on a key strategic Route. Although this corridor would not reduce journey times to the same extent as Corridors A to E, it is likely that it would, to a lesser extent, enhance the potential for economic growth by improving connectivity between the South West and the South East of England, for strategic journeys as well as local traffic. b) It is considered that improvements in traffic conditions along the Route as a result of this corridor would be less than Corridors A to E, and that reductions in costs and improvements in productivity would therefore be smaller. However, it is likely that there would still be some benefits for business users, including for key transport-dependent sectors and sectors such as agriculture that are particularly important to the South West economy. c) This corridor would also improve access to the South West for visitors, including tourists and holiday traffic as well as business users,	

		improving the visitor experience and supporting the visitor economy.	
Topic: Local environment			
Sub-topic	**Criterion**	**Assessment**	**Score**
Air quality	a) What impact does the option have on air quality? b) Is an AQMA being affected?	Environmental factors are assessed comprehensively in the assessment of each corridor against the NPSNN environmental criteria. The score inserted is the overall assessment score from the separate NPSNN environmental criteria assessment	
Noise	a) Does this option reduce absolute disturbance from noise? b) Does it affect a problem area?		
Natural environment, heritage and landscape	a) What is the overall impact on the natural and urban environment? b) If negative then what is the value of the environment affected?		
Streetscape and urban environment			
Topic: Well being			
Sub-topic	**Criterion**	**Assessment**	**Score**
Severance	Does it increase possibility of cross street / corridor connections between neighbourhoods?	Route does not run close to major developed areas and although new road will create severance the number of persons affected will be small	
	Will more or less people be outside the public realm as a result?	Route runs through a mainly rural area and hence there are limited opportunities for significant public realm improvements	
Physical activity	What impact does the option have on physical activity?	Impact on physical activity would be a combination of (a) improved access to the walking/cycling facilities and (b) the impact that the new infrastructure will have on existing walking/cycling routes. The net effect for this corridor is estimated to be neutral	
Injury or Deaths	a) What impact does the option have on the number injured or killed in transport accidents? b) What impact does the option have on the risk of travelling (KSI per km)?	a) While it is assumed that the new highway infrastructure will be designed to higher standards than existing roads, increases in the length of the overall road network and the number of junctions will tend to increase accidents. The longer the additional carriageway the greater the number of accidents. For this corridor the number of junctions and proximity to existing developments will increase the likelihood. b) The risk of travelling will be linked directly to the experience in the observed accident levels. Hence the assessment parallels the score for the number of injured or killed.	
Crime	What impact does this option have on crime and on people's fear of crime?	a) A first assumption is that this does not relate to motoring offences but other non-traffic crime such as burglary and personal attacks. The effect on crime could therefore occur if there is improved access to areas with a higher crime level. This could either encourage criminals to relocate activities in new areas (because of the better access) or encourage the public to travel to areas (such as town/city centres) which although they have greater attractions also have a greater crime rate. On this basis, the impact of this corridor is likely to be neutral. b) Fear of crime is likely to be linked to crime itself and hence the previous criterion. However a slightly different emphasis would be where the residents fear that the new measure or infrastructure might improve access to their area by criminals. On this basis the corridor would have a neutral impact on the fear of crime.	
Enjoying access to a range of goods, services, people and services?	What impact does it have on end-to-end journey time?	Using output from the traffic model on the change in journey times as a result of the scheme, the score represents the net impact of increased capacity and the directness of the corridor. With each corridor representing an increase in infrastructure, the emphasis will be on the scale of the travel time savings rather than whether it is positive or negative. The score reflects the relatively indirect route of the corridor and the limited communities along the Route	
	Impact on day-to-day variability in journey times or average minutes of lateness?	The variability of the journey times reflects the increase in the available capacity provided by the new infrastructure, together with the volume of traffic on the new scheme. High levels of traffic on the new scheme would imply lower reliability and conversely lower traffic levels imply higher reliability. The score for the corridor reflects a significant improvement in journey time reliability with the scheme.	
	Does it have an impact on the cost of travel (vehicle operating costs, fares, etc.)?	For the corridors, the impact on the cost if travel concentrates on the change in vehicle operating costs taking into account the changes in the length of journeys with the infrastructure. The score reflects the increased distance travelled with the corridor.	

	What will happen to the number of incidents?	The assessment mirrors the approach to measure the impact of accidents. While it is assumed that the new highway infrastructure will be designed to higher standards than existing roads, increases in the length of the overall road network and the number of junctions will tend to increase accidents. The longer the additional carriageway the greater the number of accidents. For this corridor the number of junctions and proximity to existing developments will increase the likelihood.		
	Does the option improve access to key locations (supermarkets, doctors, hospitals, etc.)?	Accessibility to key locations reflects accessibility to towns rather than smaller communities, e.g. access to Amesbury, Andover or Salisbury. The corridor would provide access to the communities to the south of the area including Salisbury		
Terrorism	If the option might affect our vulnerability to terrorism then please state in the comments box provided	It is unlikely that the impact of terrorism will be a significant factor between the different schemes. The corridor is assessed as neutral		
Topic: Expected VfM category				
Criterion		**Assessment**	**Score**	
Expected VfM category		The Treasury defines the following ranges for the value for money: a) <1 poor b) 1-1.5 low c) 1.5-2 medium d) 2-4 high e) >4 very high Using the available VfM values from the Stage 0 work VfM measure for the corridor may be inferred taking into account the length of the scheme (and therefore its costs) and volume of traffic using the scheme (and hence benefits). The benefits are restricted to the core headings excluding wider impacts for which there is no available quantification. The score is assessed from the length of the scheme and the associated scheme costs.		

Managerial case			
Criterion	**Assessment**	**Score**	**Overall score**
Implementation timetable	Government commitment to start in 2020		
Public acceptability	There has been some public consultation but further input will be required going forward		
Practical feasibility	Road scheme managed by HE and delivered through the DCO process		
What is the quality of the supporting evidence?	Basic information available dating back to 1990's with little supporting evidence		
Key risks	a) Environmental / habitat assessment identifies showstoppers b) Unacceptable to key stakeholders c) Exceeds scheme budget d) Change of government policy (2020) e) Economy in recession leading to scheme cancellation	This criterion is not scored in EAST	

Financial case			
Criterion	**Assessment**	**Score**	**Overall score**
Affordability	Would be expected to cost less than the Government commitment to fund scheme of approx. £1.4 bn		
Capital cost (£m)	a) Assumed £26m per km at grade highways b) Assumed over £1bn for any tunnel option c) Proportion to length of scheme		
Revenue costs (£m)	Proportion to length of scheme and whether a tunnel is included as part of the scheme		
Cost profile	No accurate estimates of implementation, operation, maintenance and enforcement costs available.	This criterion is not scored in EAST	
Overall cost risk	a) Absence of information in the contract b) Unforeseen site risks c) Impact on landtake		

Commercial case			
Criterion	**Assessment**	**Score**	**Overall score**
Flexibility of option	Some flexibility up to the point of publishing the DCO		
Where is funding coming from?	Likely to be publicly funded via Central Government, though option of private funds is being explored		
Any income generated? (Y/N)	Unlikely if publicly funded		

B6.7 Corridor F (south)

Strategic case			
Criterion	**Assessment**	**Score**	**Overall score**
Scale of impact	This corridor sits outside the WHS south of A303. It addresses Client Scheme Requirements for cultural heritage, environment and community but increases journey length due to longer Route to bypass Boscombe Down Airfield and Amesbury town.		
Fit with wider transport and government objectives	Criteria aligned with NPSNN environmental criteria assessment scores		
Fit with other objectives	a) Closure of the existing A303 would bring substantial benefits for the WHS. Routes in the northern part of the corridor area may adversely affect the setting of the WHS, Routes further south may be sufficiently distant to not result in significant change to setting of WHS. b) Potential to impact European sites, where corridor crosses the River Avon SAC at a number of locations. Crosses or is located in close proximity to a number of nationally designated sites. Length of the corridor has the potential to result in larger areas of habitat loss and potential severance. c) Potential for disruption and impacts on quality of life for the residents of a number of settlements e.g.: Berwick St James, Stapleford, Upper Woodford, Middle Woodford, Lower Woodford, Stoford, High Post, East of Amesbury, Winterbourne Earls, Porton, Great Durnford, Winterbourne Dauntsey, and Allington.		
Key uncertainties	a) Unknown archaeological sites b) Unknown utilities c) Environmental / habitat surveys d) Working space, site compounds, lay down areas e) Use of off-site consolidation and logistics centres f) Site staff access arrangements g) Diverson Routes	This criterion is not scored in EAST	
Degree of consensus over outcomes?	Some consultation has taken place and alternative Routes have previously been put forward during the statutory process.		

Economic case				
Topic: Economic growth				
Sub-topic	**Criterion**	**Assessment**	**Score**	**Overall score**
Connectivity	What impact does it have on end-to end journey time?	This corridor would deliver a dual carriageway bypass to the south of the WHS, and would result in a slight increase of journey time of <1min.		
	Does it have an impact on cost of travel (vehicle operating costs, fares, etc.?)	This corridor would deliver a dual carriageway bypass further to the south of the WHS. With the existing A303 closed there would be a large increase in vehicle-kms and therefore operating costs.		
Reliability	Impact on day-to-day variability in journey times or average minutes of lateness?	This corridor would increase capacity by delivering a new dual carriageway bypass. It is considered that this would be likely to reduce journey time variability and therefore decrease average minutes of delay.		
	What will happen to the number of incidents?	a) Most accidents on the existing stretch of the A303 occur at at-grade junctions. This corridor would deliver a new dual carriageway which would be designed to modern safety standards. All junctions would be removed, bypassed or grade separated. b) The dual carriageway would also increase capacity, which is expected to lead to a general improvement in traffic conditions on the Route, and a decrease in the rate of traffic incidents c) However this corridor would deliver a Route moderately longer than the existing route. Any reduction in the accident rate due to improvements in road standards could, therefore, be partially offset by the greater length of the Route.		
Resilience	What impact does this option have on the resilience of our infrastructure?	This corridor would deliver a new dual carriageway bypass. It is considered that this would be likely to improve resilience by increasing capacity and thereby reducing the scale of the impact arising from traffic incidents.		
Delivery of housing	How will this option facilitate new housing?	a) There are no housing developments that have been identified as directly dependent on the scheme, so it is considered unlikely that that this corridor would directly facilitate new housing locally. b) However, Wiltshire Core Strategy allocates a number of residential and mixed use sites in and around Salisbury. Southern corridors would provide connections with the A345 and A360 north of Salisbury, and it is expected that this would improve access to these sites. c) Improvements in traffic conditions along the Route as a result of this corridor would be likely to improve accessibility more generally, including to allocated housing sites. Expected regional growth in housing in the South West peninsula is in the order of 242,000 to year 2031, and it is considered that this corridor has the potential to support housing growth, both in Wiltshire and more widely across the region.		
Wider economic impacts	Does it improve accessibility to key locations?	a) Key locations that could be affected by the Route include the WHS, Solstice Park business park, Porton Down biological research centre, and Boscombe Down airbase. The Wiltshire Core Strategy allocates 10 ha for employment uses at Porton Down, 7 ha at Boscombe Down, and further strategic employment sites in Salisbury and Wilton. b) The SEP published by the Swindon and Wiltshire LEP highlights opportunities for growth around Porton Down and the military presence on Salisbury Plain. The SEP identifies a South Wiltshire growth zone, with a focus on Salisbury, Porton and the garrison towns (Tidworth, Larkhill, Durrington, Bulford). c) This corridor would improve accessibility to Porton Down, Boscombe Down, and Salisbury.		
	Does it improve connectivity to central business districts?	This corridor would improve connectivity across the South West region, and between the South West and South East. As stated above, it could also improve accessibility to key locations locally, including Solstice Park, Porton Down, and Boscombe Down. However it does not connect directly to any central business districts, and therefore no significant impacts are expected in this regard.		
Topic: Carbon emissions				
Sub-topic	**Criterion**	**Assessment**	**Score**	
Activity	a) For non-public transport modes, is the number of vehicle trips expected to change? b) For public transport modes, are service frequencies expected to change? c) Are journey lengths expected to change? d) Does the option shift activity from low to higher occupancy vehicles, including public transport?	a) At the early stage of assessing corridors it is not practical to consider all of the assessment categories shown in EAST under the carbon heading. A simplified assessment which allows comparison between the corridors was undertaken as follows: b) Carbon emissions attributed to a project fall under three categories: Capital carbon (emissions from the construction of the asset); Operational carbon (emissions from the operation and maintenance of the asset); and User carbon (emissions from the end-users of the asset). c) The majority of the whole life carbon of a highway project is in the User carbon, with the capital and operational carbon typically forming a small component of the total. Therefore, User carbon is the primary consideration when determining an overall score for carbon emissions. When comparing different corridors road length was taken as a proxy for User carbon. d) Capital Carbon was determined on the basis of road length together with a high level assessment of the number of structures (Tunnel and bridges).		

Embedded carbon - currently assumed to be largely traded carbon	Is significant construction work required?	e) For the purposes of the assessment, length is classified as Short, Medium or Long. f) Corridor F (south) is a Long corridor which crosses rivers in two locations, requiring construction of long bridges. It leads to heavy capital and user carbon.	
Carbon	Does the option involve a lower carbon fuel to be used (carbon per litre)?		
Efficiency	a) Are more efficient vehicles (car, goods vehicle, train, bus) to be used? b) Is a change in behaviour expected, not captured above (e.g. eco-driving, speeds)?		
Overall effect on carbon emissions	a) Non-traded - Diesel, petrol and bio-fuel (highway, diesel public transport/freight, electric cars etc.) b) Traded - Electric (aviation, electric powered public transport/freight, electric cars etc.)		
Topic: Socio-distributional impacts and the regions			
Sub-topic	**Criterion**	**Assessment**	**Score**
Social and distributional impacts	Does the option have an impact on accessibility / affordability / availability / acceptability for vulnerable groups (low income, disabled, the elderly, etc.)?	This corridor is likely to have a negative impact on air quality, noise levels, accidents and severance to the south of Amesbury and through small rural settlements to the south of the current A303, due to re-directed traffic flows. To the south of Amesbury there is a high proportion of children, who will be affected disproportionately through an increase in noise levels and air pollution. Although there are few people living to the south of the current A303 Route, a large proportion of these people are aged over 65 years old, this age group tend to be more dependent on public transport and walking to get around, and will therefore be more susceptible to changes in bus routes or severance created by the new Route.	
Regeneration	Does the option have an impact on a targeted regeneration area, if so what is the impact likely to be?	a) Levels of deprivation in south Wiltshire are generally low. However, there are three LSOAs close to the Route that fall into the 20% most deprived in England. Two of these are at Wilton, and one is in central Salisbury. b) The Salisbury Central Area Regeneration Programme, set out in the Wiltshire Core Strategy, identifies a number of regeneration sites within the city centre. In total these will provide 1,100 dwellings and 5 ha of predominantly B1 employment land. c) It is not expected likely that a bypass to the south of the WHS would have a significant impact on accessibility or economic activity in either the targeted regeneration areas in central Salisbury, or on areas of deprivation in Salisbury and Wilton. d) A bypass to the north of Salisbury, however, would provide connections with the A345 and A360 and could improve conditions for local traffic in and around the city. It is expected that this could have a small beneficial impact on identified regeneration sites and areas of deprivation within the city. For example, improved access could benefit those living in deprived areas and increase the attractiveness of regeneration sites for developers and residents. However it is considered that any impact would be likely to be relatively small, and more important in terms of local traffic than strategic traffic accessing the city from elsewhere.	
Regional imbalance	If this is a weak region, what is the impact of the option on the region?	The South West region exhibits lower GVA than the UK average. This corridor would deliver a new dual carriageway which would increase capacity, reduce journey times and improve reliability on a key strategic Route. Although this corridor would not reduce journey times to the same extent as Corridors A to E, it is likely that it could help to support some improvement in economic performance relative to the UK average.	
	How will this impact economic growth?	a) This corridor would deliver a new dual carriageway which would increase capacity and improve reliability on a key strategic Route. Although this corridor would not reduce journey times to the same extent as Corridors A to E, it is likely that it would, to a lesser extent, enhance the potential for economic growth by improving connectivity between the South West and the South East of England, for strategic journeys as well as local traffic. b) It is considered that improvements in traffic conditions along the Route as a result of this corridor would be less than Corridors A to E, and that reductions in costs and improvements in productivity would therefore be smaller. However, it is likely that there would still be some benefits for business users, including for key transport-dependent sectors and sectors such as agriculture that are particularly important to the South West economy. c) This corridor would also improve access to the South West for visitors, including tourists and holiday traffic as well as business users,	

		improving the visitor experience and supporting the visitor economy.	
Topic: Local environment			
Sub-topic	**Criterion**	**Assessment**	**Score**
Air quality	a) What impact does the option have on air quality? b) Is an AQMA being affected?	Environmental factors are assessed comprehensively in the assessment of each corridor against the NPSNN environmental criteria. The score inserted is the overall assessment score from the separate NPSNN environmental criteria assessment	
Noise	a) Does this option reduce absolute disturbance from noise? b) Does it affect a problem area?		
Natural environment, heritage and landscape	a) What is the overall impact on the natural and urban environment? b) If negative then what is the value of the environment affected?		
Streetscape and urban environment			
Topic: Well being			
Sub-topic	**Criterion**	**Assessment**	**Score**
Severance	Does it increase possibility of cross street / corridor connections between neighbourhoods?	Route does not run close to major developed areas and although new road will create severance the number of persons affected will be small	
	Will more or less people be outside the public realm as a result?	Route runs through a mainly rural area and hence there are limited opportunities for significant public realm improvements	
Physical activity	What impact does the option have on physical activity?	Impact on physical activity would be a combination of (a) improved access to the walking/cycling facilities and (b) the impact that the new infrastructure will have on existing walking/cycling routes. The net effect for this corridor is estimated to be neutral	
Injury or deaths	a) What impact does the option have on the number injured or killed in transport accidents? b) What impact does the option have on the risk of travelling (KSI per km)?	a) While it is assumed that the new highway infrastructure will be designed to higher standards than existing roads, increases in the length of the overall road network and the number of junctions will tend to increase accidents. The longer the additional carriageway the greater the number of accidents. For this corridor the number of junctions and proximity to existing developments will increase the likelihood. b) The risk of travelling will be linked directly to the experience in the observed accident levels. Hence the assessment parallels the score for the number of injured or killed.	
Crime	What impact does this option have on crime and on people's fear of crime?	a) A first assumption is that this does not relate to motoring offences but other non-traffic crime such as burglary and personal attacks. The effect on crime could therefore occur if there is improved access to areas with a higher crime level. This could either encourage criminals to relocate activities in new areas (because of the better access) or encourage the public to travel to areas (such as town/city centres) which although they have greater attractions also have a greater crime rate. On this basis, the impact of this corridor is likely to be neutral. b) Fear of crime is likely to be linked to crime itself and hence the previous criterion. However a slightly different emphasis would be where the residents fear that the new measure or infrastructure might improve access to their area by criminals. On this basis the corridor would have a neutral impact on the fear of crime.	
Enjoying access to a range of goods, services, people and services	What impact does it have on end-to-end journey time?	Using output from the traffic model on the change in journey times as a result of the scheme, the score represents the net impact of increased capacity and the directness of the corridor. With each corridor representing an increase in infrastructure, the emphasis will be on the scale of the travel time savings rather than whether it is positive or negative. The score reflects the relatively indirect Route of the corridor and the limited communities along the Route	
	Impact on day-to-day variability in journey times or average minutes of lateness?	The variability of the journey times reflects the increase in the available capacity provided by the new infrastructure, together with the volume of traffic on the new scheme. High levels of traffic on the new scheme would imply lower reliability and conversely lower traffic levels imply higher reliability. The score for the corridor reflects a significant improvement in journey time reliability with the scheme.	
	Does it have an impact on the cost of travel (vehicle operating costs, fares, etc.)?	For the corridors, the impact on the cost if travel concentrates on the change in vehicle operating costs taking into account the changes in the length of journeys with the infrastructure. The score reflects the increased distance travelled with the corridor.	

	What will happen to the number of incidents?	The assessment mirrors the approach to measure the impact of accidents. While it is assumed that the new highway infrastructure will be designed to higher standards than existing roads, increases in the length of the overall road network and the number of junctions will tend to increase accidents. The longer the additional carriageway the greater the number of accidents. For this corridor the number of junctions and proximity to existing developments will increase the likelihood.		
	Does the option improve access to key locations (supermarkets, doctors, hospitals, etc.)?	Accessibility to key locations reflects accessibility to towns rather than smaller communities, e.g. access to Amesbury, Andover or Salisbury. The corridor would provide access to the communities to the south of the area including Salisbury		
Terrorism	If the option might affect our vulnerability to terrorism then please state in the comments box provided	It is unlikely that the impact of terrorism will be a significant factor between the different schemes. The corridor is assessed as neutral		
Topic: Expected VfM category				
Criterion		**Assessment**	**Score**	
Expected VfM category		The Treasury defines the following ranges for the value for money: a) <1 poor b) 1-1.5 low c) 1.5-2 medium d) 2-4 high e) >4 very high Using the available VfM values from the Stage 0 work VfM measure for the corridor may be inferred taking into account the length of the scheme (and therefore its costs) and volume of traffic using the scheme (and hence benefits). The benefits are restricted to the core headings excluding wider impacts for which there is no available quantification. The score is assessed from the length of the scheme and the associated scheme costs and lower directness compared with the tunnel corridor		

Managerial case			
Criterion	**Assessment**	**Score**	**Overall score**
Implementation timetable	Government commitment to start in 2020		
Public acceptability	There has been some public consultation but further input will be required going forward		
Practical feasibility	Road scheme managed by HE and delivered through the DCO process		
What is the quality of the supporting evidence?	Basic information available dating back to 1990's with little supporting evidence		
Key risks	a) Environmental / habitat assessment identifies showstoppers b) Unacceptable to key stakeholders c) Change of government policy (2020) d) Economy in recession leading to scheme cancellation	This criterion is not scored in EAST	

Financial case			
Criterion	**Assessment**	**Score**	**Overall score**
Affordability	Would be expected to cost less than the Government commitment to fund scheme of approx. £1.4 bn		
Capital Cost (£m)	a) Assumed £26m per km at grade highways b) Assumed over £1bn for any tunnel option c) Proportion to length of scheme		
Revenue Costs (£m)	Proportion to length of scheme and whether a tunnel is included as part of the scheme		
Cost profile	No accurate estimates of implementation, operation, maintenance and enforcement costs available.	This criterion is not scored in EAST	
Overall cost risk	a) Absence of information in the contract b) Unforeseen site risks c) Impact on landtake		

Commercial case			
Criterion	**Assessment**	**Score**	**Overall score**
Flexibility of option	Some flexibility up to the point of publishing the DCO		
Where is funding coming from?	Likely to be publicly funded via Central Government, though option of private funds is being explored		
Any income generated? (Y/N)	Unlikely if publicly funded		

B6.8 Corridor G

Strategic case			
Criterion	**Assessment**	**Score**	**Overall score**
Scale of impact	This corridor sits outside of WHS and south of Salisbury town but fails to meet client specific requirements for transportation and will also have other environmental impacts over a longer length		
Fit with wider transport and government objectives	Criteria aligned with NPSNN environmental criteria assessment scores		
Fit with other objectives	a) Closure of the existing A303 would bring substantial benefits for the WHS. b) Potential to impact European sites where it crosses the Salisbury Plain SAC, Porton Down SPA, River Avon SAC. It is also located in proximity to the Chilmark Quarries Bat SAC, and crosses or is located in close proximity to a number of nationally designated sites and numerous areas of ancient woodland. Length of the corridor has the potential to result in substantially larger areas of habitat loss and potential severance. c) Potential for disruption and impacts on quality of life for the residents of a number of settlements e.g.: Teffont Magna, Dinton, Barford St Martin, Wilton, Harnham, Milford, Laverstock, Firsdown, Lopcombe corner, Middle Wallop, Grateley, Monxton, Andover.		
Key uncertainties	a) Unknown archaeological sites b) Unknown utilities c) Environmental / habitat surveys d) Working space, site compounds, lay down areas e) Use of off-site consolidation and logistics centres f) Site staff access arrangements g) Diversion Routes	This criterion is not scored in EAST	
Degree of consensus over outcomes?	No consultation taken place. Corridor proposed in 2016 by local interested party.		

Economic case				
Topic: Economic growth				
Sub-topic	**Criterion**	**Assessment**	**Score**	**Overall score**
Connectivity	What impact does it have on end-to end journey time?	This corridor would deliver a dual carriageway bypass to the south of Salisbury, and would retain the existing single carriageway Route. In general it would result in a 1 min increase in JT in AM peak and no change in inter-peak although PM peak shows decrease westbound and increase eastbound of >1 min		
	Does it have an impact on cost of travel (vehicle operating costs, fares, etc.?)	This corridor would deliver a dual carriageway bypass to the south of Salisbury, and would retain the existing single carriageway Route. It would result in a small increase (<1000 km) in total network vehicle kms in both the AM and PM peak. It is considered that this would be likely to result in a small increase in the cost of travel for users of the Route.		
Reliability	Impact on day-to-day variability in journey times or average minutes of lateness?	This corridor would increase capacity by retaining the existing single carriageway and delivering an additional dual carriageway bypass. It is considered that this would be likely to reduce journey time variability and therefore decrease average minutes of delay.		
	What will happen to the number of incidents?	a) Most accidents on the existing stretch of the A303 occur at at-grade junctions. This corridor would deliver a new dual carriageway which would be designed to modern safety standards. All junctions would be removed, bypassed or grade separated. b) This corridor would substantially increase capacity by retaining the existing single carriageway Route as well as delivering a new dual carriageway. However, the existing A303 has a poor accident record, and it is likely that its continued use could offset the general improvement in traffic conditions on the Route. c) This corridor would deliver a Route substantially longer than the existing route. Any reduction in the accident rate due to improvements in road standards could, therefore, be partially offset by the greater length of the Route.		
Resilience	What impact does this option have on the resilience of our infrastructure?	This corridor would retain the existing A303 and deliver an additional dual carriageway bypass. It is considered that this would be likely to significantly improve resilience by increasing capacity and providing an alternative Route that could be used in case of a traffic incident, thereby reducing the scale of the impact arising.		
Delivery of housing	How will this option facilitate new housing?	a) There are no housing developments that have been identified as directly dependent on the scheme, so it is considered unlikely that that this corridor would directly facilitate new housing locally. b) However, Wiltshire Core Strategy allocates a number of residential and mixed use sites in and around Salisbury. This corridor would provide connections with the A36 south of Salisbury, and it is expected that this would additionally improve access to these sites. c) Improvements in traffic conditions along the Route as a result of this corridor would be likely to improve accessibility more generally, including to allocated housing sites. This corridor would retain the existing single carriageway, and improvements in accessibility may be greater as a result of this increased capacity. Expected regional growth in housing in the South West peninsula is in the order of 242,000 to 2031, and it is considered that this corridor has the potential to support housing growth, both in Wiltshire and more widely across the region.		
Wider economic impacts	Does it improve accessibility to key locations?	a) Key locations that could be affected by the Route include the WHS, Solstice Park business park, Porton Down biological research centre, and Boscombe Down airbase. The Wiltshire Core Strategy allocates 10 ha for employment uses at Porton Down, 7 ha at Boscombe Down, and further strategic employment sites in Salisbury and Wilton. b) The SEP published by the Swindon and Wiltshire LEP highlights opportunities for growth around Porton Down and the military presence on Salisbury Plain. The SEP identifies a South Wiltshire growth zone, with a focus on Salisbury, Porton and the garrison towns (Tidworth, Larkhill, Durrington, Bulford). c) This corridor would improve accessibility to Porton Down, Salisbury and Wilton.		
	Does it improve connectivity to central business districts?	This corridor would improve connectivity across the South West region, and between the South West and South East. As stated above, it could also improve accessibility to key locations locally, including Solstice Park, Porton Down, and Boscombe Down. However it does not connect directly to any central business districts, and therefore no significant impacts are expected in this regard.		
Topic: Carbon emissions				
Sub-topic	**Criterion**	Assessment	**Score**	
Activity	a) For non-public transport modes, is the number of vehicle trips expected to	a) At the early stage of assessing corridors it is not practical to consider all of the assessment categories shown in EAST under the carbon heading. A simplified assessment which allows comparison between the corridors was undertaken as follows:		

	change? b) For public transport modes, are service frequencies expected to change? c) Are journey lengths expected to change? d) Does the option shift activity from low to higher occupancy vehicles, including public transport?	b) Carbon emissions attributed to a project fall under three categories: Capital carbon (emissions from the construction of the asset); Operational carbon (emissions from the operation and maintenance of the asset); and User carbon (emissions from the end-users of the asset). c) The majority of the whole life carbon of a highway project is in the User carbon, with the capital and operational carbon typically forming a small component of the total. Therefore, User carbon is the primary consideration when determining an overall score for carbon emissions. When comparing different corridors road length was taken as a proxy for User carbon. d) Capital Carbon was determined on the basis of road length together with a high level assessment of the number of structures (Tunnel and bridges). e) For the purposes of the assessment, length is classified as Short, Medium or Long. f) Corridor G is a Long corridor which will require major structures. It leads to heavy capital and user carbon.	
Embedded carbon - currently assumed to be largely traded carbon	Is significant construction work required?		
Carbon	Does the option involve a lower carbon fuel to be used (carbon per litre)?		
Efficiency	a) Are more efficient vehicles (car, goods vehicle, train, bus) to be used? b) Is a change in behaviour expected, not captured above (e.g. eco-driving, speeds)?		
Overall effect on carbon emissions	a) Non-traded - Diesel, petrol and bio-fuel (highway, diesel public transport/freight, electric cars etc.) b) Traded - Electric (aviation, electric powered public transport/freight, electric cars etc.)		

Topic: Socio-distributional impacts and the regions			
Sub-topic	**Criterion**	**Assessment**	**Score**
Social and distributional impacts	Does the option have an impact on accessibility / affordability / availability / acceptability for vulnerable groups (low income, disabled, the elderly, etc.)?	This corridor would take traffic away from populations living adjacent to the existing A303 route, including Amesbury and Winterbourne Stoke, resulting in less air and noise pollution, less severance and fewer accidents. It may however mean that buses are re-routed along the new A303 and that journey times take longer, which could have negative impacts on accessibility, user benefits and personal affordability. This corridor has potential to impact a number of small villages and hamlets to the south of the current A303 and also around the south of Salisbury. Though sparsely populated, the rural areas along the Route tend to have higher than average proportions of people aged over 65 years old. These people would be negatively affected by reduced severance caused by the new Route bringer higher traffic volumes to the areas, and by increases in noise and air pollution caused by an increase in vehicles. The south of Salisbury has both high proportions of over 65 year olds and under 16 year olds, both of which are vulnerable to increases in noise, worsening air quality, and a reduction in both severance and accessibility.	
Regeneration	Does the option have an impact on a targeted regeneration area, if so what is the impact likely to be?	a) Levels of deprivation in south Wiltshire are generally low. However, there are three LSOAs close to the Route that fall into the 20% most deprived in England. Two of these are at Wilton, and one is in central Salisbury. b) The Salisbury Central Area Regeneration Programme, set out in the Wiltshire Core Strategy, identifies a number of regeneration sites within the city centre. In total these will provide 1,100 dwellings and 5 ha of predominantly B1 employment land. c) This corridor would provide a bypass to the south of Salisbury. It is expected that this could improve conditions for local traffic in and around Salisbury, which could have a marginal beneficial impact on identified regeneration sites and areas of deprivation within the city. For example, improved access could benefit those living in deprived areas and increase the attractiveness of regeneration sites for developers and residents. However it is considered that any impact would be likely to be relatively small, and more important in terms of local traffic than strategic traffic accessing the city from elsewhere.	
Regional imbalance	If this is a weak region, what is the impact of the option on the region?	The South West region exhibits lower GVA than the UK average. This corridor would deliver a new dual carriageway which would increase capacity, reduce journey times and improve reliability on a key strategic Route. Although this corridor would not reduce journey times to the	

		same extent as Corridors A to E, it is likely that it could help to support some improvement in economic performance relative to the UK average.		
	How will this impact economic growth?	a) This corridor would retain the existing single carriageway and deliver a new dual carriageway which would substantially increase capacity and improve reliability on a key strategic Route. Although this corridor would not reduce journey times to the same extent as Corridors A to E, it is likely that it would, to a lesser extent, enhance the potential for economic growth by improving connectivity between the South West and the South East of England, for strategic journeys as well as local traffic. b) It is considered that improvements in traffic conditions along the Route as a result of this corridor would be less than Corridors A to E, F (north) and F (south), and that reductions in costs and improvements in productivity would therefore be smaller. However, it is likely that there would still be some benefits for business users, including for key transport-dependent sectors and sectors such as agriculture that are particularly important to the South West economy. c) This corridor would also, to a lesser extent, improve access to the South West for visitors, including tourists and holiday traffic as well as business users, improving the visitor experience and supporting the visitor economy.		
Topic: Local environment				
Sub-topic	**Criterion**	**Assessment**	**Score**	
Air quality	a) What impact does the option have on air quality? b) Is an AQMA being affected?	Environmental factors are assessed comprehensively in the assessment of each corridor against the NPSNN environmental criteria. The score inserted is the overall assessment score from the separate NPSNN environmental criteria assessment		
Noise	a) Does this option reduce absolute disturbance from noise? b) Does it affect a problem area?			
Natural environment, heritage and landscape	a) What is the overall impact on the natural and urban environment? b) If negative then what is the value of the environment affected?			
Streetscape and urban environment				
Topic: Well being				
Sub-topic	**Criterion**	**Assessment**	**Score**	
Severance	Does it increase possibility of cross street / corridor connections between neighbourhoods?	Route is longer than other corridors and runs closer to a number of communities. Hence there is greater likelihood of severance impacts		
	Will more or less people be outside the public realm as a result?	Route runs through a mainly rural area and hence there are limited opportunities for significant public realm improvements		
Physical activity	What impact does the option have on physical activity?	Impact on physical activity would be a combination of (a) improved access to the walking/cycling facilities and (b) the impact that the new infrastructure will have on existing walking/cycling routes. The net effect for this corridor is estimated to be neutral		
Injury or deaths	a) What impact does the option have on the number injured or killed in transport accidents? b) What impact does the option have on the risk of travelling (KSI per km)?	a) While it is assumed that the new highway infrastructure will be designed to higher standards than existing roads, increases in the length of the overall road network and the number of junctions will tend to increase accidents. The longer the additional carriageway the greater the number of accidents. For this corridor the number of junctions and proximity to existing developments will increase the likelihood. b) The risk of travelling will be linked directly to the experience in the observed accident levels. Hence the assessment parallels the score for the number of injured or killed.		
Crime	What impact does this option have on crime and on people's fear of crime?	a) A first assumption is that this does not relate to motoring offences but other non-traffic crime such as burglary and personal attacks. The effect on crime could therefore occur if there is improved access to areas with a higher crime level. This could either encourage criminals to relocate activities in new areas (because of the better access) or encourage the public to travel to areas (such as town/city centres) which although they have greater attractions also have a greater crime rate. Because the corridor will increase access to/from Salisbury town centre, the impact is assessed as slightly lower than for other corridors. b) Fear of crime is likely to be linked to crime itself and hence the previous criterion. However a slightly different emphasis would be where		

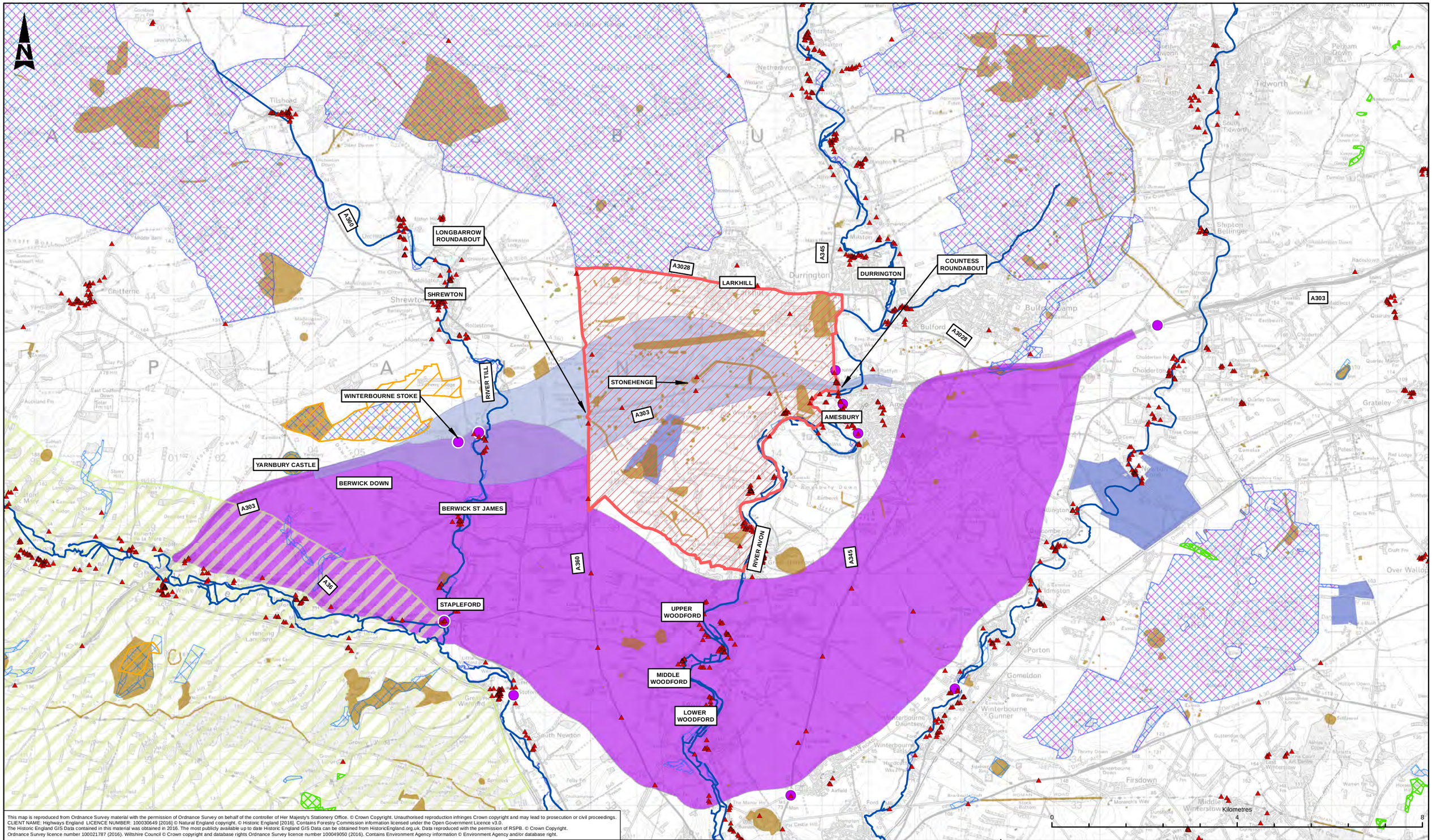
		the residents fear that the new measure or infrastructure might improve access to their area by criminals. On this basis because the corridor would improve access to Salisbury, it is assessed to have a slightly negative impact.		
Enjoying access to a range of goods, services, people and services	What impact does it have on end-to-end journey time?	Using output from the traffic model on the change in journey times as a result of the scheme, the score represents the net impact of increased capacity and the directness of the corridor. With each corridor representing an increase in infrastructure, the emphasis will be on the scale of the travel time savings rather than whether it is positive or negative. The low score reflects the indirect route of the corridor.		
	Impact on day-to-day variability in journey times or average minutes of lateness?	The variability of the journey times reflects the increase in the available capacity provided by the new infrastructure, together with the volume of traffic on the new scheme. High levels of traffic on the new scheme would imply lower reliability and conversely lower traffic levels imply higher reliability. The score for the corridor reflects a significant improvement in journey time reliability with the scheme.		
	Does it have an impact on the cost of travel (vehicle operating costs, fares, etc.)?	For the corridors, the impact on the cost if travel concentrates on the change in vehicle operating costs taking into account the changes in the length of journeys with the infrastructure. The score reflects the increased distance travelled with the corridor.		
	What will happen to the number of incidents?	The assessment mirrors the approach to measure the impact of accidents. While it is assumed that the new highway infrastructure will be designed to higher standards than existing roads, increases in the length of the overall road network and the number of junctions will tend to increase accidents. The longer the additional carriageway the greater the number of accidents. For this corridor the number of junctions and proximity to existing developments will increase the likelihood.		
	Does the option improve access to key locations (supermarkets, doctors, hospitals, etc.)?	Accessibility to key locations reflects accessibility to towns rather than smaller communities, e.g. access to Amesbury, Andover or Salisbury. The corridor would provide access to the communities to the south of the area especially Salisbury		
Terrorism	If the option might affect our vulnerability to terrorism then please state in the comments box provided	It is unlikely that the impact of terrorism will be a significant factor between the different schemes. The corridor is assessed as neutral		
Topic: Expected VfM category				
Criterion		**Assessment**	**Score**	
Expected VfM category		The Treasury defines the following ranges for the value for money: a) <1 poor b) 1-1.5 low c) 1.5-2 medium d) 2-4 high e) >4 very high Using the available VfM values from the Stage 0 work VfM measure for the corridor may be inferred taking into account the length of the scheme (and therefore its costs) and volume of traffic using the scheme (and hence benefits). The benefits are restricted to the core headings excluding wider impacts for which there is no available quantification. The score is assessed from the extended length of the scheme and the associated high scheme costs and lower directness compared with the tunnel corridor		

Managerial case			
Criterion	**Assessment**	**Score**	**Overall score**
Implementation timetable	It is envisaged the journey through DCO will be much longer as the scheme has not been identified though the statutory process		
Public acceptability	No public consultation has been undertaken for this corridor		
Practical feasibility	Road scheme managed by HE and delivered through the DCO process. Length of corridor impacts a significant number of communities so is likely to attract many objections.		
What is the quality of the supporting evidence?	No technical information is available.		
Key risks	a) Environmental / habitat assessment identifies showstoppers b) Unacceptable to key stakeholders c) Exceeds scheme budget d) Change of government policy (2020) e) Economy in recession leading to scheme cancellation	This criterion is not scored in EAST	

Financial case			
Criterion	**Assessment**	**Score**	**Overall score**
Affordability	Government commitment to fund scheme approx. £1.4 bn Scored low due to Route length. A route within this corridor is unlikely to be deliverable within the committed budget.		
Capital cost (£m)	a) Assumed £26m per km at grade highways b) Assumed over £1bn for any tunnel option c) Proportion to length of scheme		
Revenue costs (£m)	Proportion to length of scheme and whether a tunnel is included as part of the scheme		
Cost profile	No accurate estimates of implementation, operation, maintenance and enforcement costs available.	This criterion is not scored in EAST	
Overall cost risk	a) Absence of information in the contract b) Unforeseen site risks c) Impact on landtake d) Long length of corridor leading to large number of unknowns		

Commercial case			
Criterion	**Assessment**	**Score**	**Overall score**
Flexibility of option	Some flexibility up to the point of publishing the DCO		
Where is funding coming from?	Likely to be publicly funded via Central Government, though option of private funds is being explored		
Any income generated? (Y/N)	Unlikely if publicly funded		

B.7 Better performing corridors



LEGEND

- CORRIDOR D
- CORRIDOR F SOUTH OF A303 (OUTSIDE WHS) AND NORTH OF SALISBURY
- WORLD HERITAGE SITE
- RIVER NETWORK
- SPECIAL AREAS OF CONSERVATION (SAC)
- SITES OF SPECIAL SCIENTIFIC INTEREST (SSSI)
- ANCIENT WOODLANDS
- NATIONAL NATURE RESERVES (NNR)
- AREAS OF OUTSTANDING NATURAL BEAUTY (AONB)
- RSPB RESERVES
- SCHEDULED MONUMENTS
- LISTED BUILDINGS
- NOISE IMPORTANT AREAS (NIA)

SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following significant residual risks (Reference shall also be made in the design hazard log)

Construction
None

Maintenance / Cleaning
None

Use
None

Decommission / Demolition
None

Rev	Date	Description	By	Chk'd	App'd
P05	04/11/16	FINAL ISSUE	RJS	GS	SL

Drawing Status: FIT FOR INTERNAL REVIEW AND COMMENT
Suitability: S3

Client: highways england

Designers: ARUP ATKINS

Project Title: A303 AMESBURY TO BERWICK DOWN

Drawing Title: BETTER PERFORMING CORRIDORS D AND F

Scale	Designed / Drawn	Checked	Approved	Authorised
1:75,000	RJS	GS	SL	SH

Original Size	Date	Date	Date	Date
A3	04/11/16	04/11/16	04/11/16	04/11/16

Drawing Number: HE551506-AA-EGN-SWI-DR-LS-000026
(Project | Originator | Volume | Location | Type | Role | Number)

Revison: P05

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Highways England creative job number S160569

Report No HA540039-HHJ-ZZZ-REP-ZZZ-010

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Registered office Bridge House, 1 Walnut Tree Close, Guildford GU1 4LZ
Highways England Company Limited registered in England and Wales number 09346363

The Technical Assessment Report details the assessment of options leading up to consultation.