

A303 Amesbury to Berwick Down

TR010025

Deadline 6

**8.37.15 - Responses to the ExA's Written Questions
- Waste and Materials Management
(WM.2)**

APFP Regulation 5(2)(q)

Planning Act 2008

The Infrastructure Planning (Examination Procedure) Rules 2010

July 2019



Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Examination Procedure)

Rules 2010

A303 Amesbury to Berwick Down

Development Consent Order 20[**]

Responses to the ExA's Written Questions

- Waste and Materials Management (WM.2)

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15 Waste and Materials Management (WM.2)

Question WM.2.1

Site Waste Management Plan and Materials Management Plan

- i. Should the Site Waste Management Plan and the Materials Management Plan be prepared in consultation with either Wiltshire Council and/ or the Environment Agency? Please provide reasons for your answer.
- ii. Both these plans are listed in MW-G7 where there is a general requirement to consult with the relevant bodies in respect of the areas relevant to their functions. However, if required, should this consultation be explicitly set out (for example in MW_MAT1 and MW_MAT2 of the OEMP [REP4-020]) to provide clarity?

Highways England response

- i. **Should the Site Waste Management Plan and the Materials Management Plan be prepared in consultation with either Wiltshire Council and/ or the Environment Agency? Please provide reasons for your answer.**
 1. The CL:AIRE Definition of Waste Development Industry Code of Practice (Version 2, March 2011) is the framework under which the Materials Management Plan will be developed. There is a requirement for the Qualified Person, who will prepare and sign the declaration on the Materials Management Plan, to see written evidence that the Local Authority and Environment Agency does not object to the proposals. Highways England therefore considers that consultation will take place between the Contractor and Wiltshire Council and the Environment Agency on the principles of the Materials Management Plan. With regards to the Site Waste Management Plan, there is no obligation to consult with statutory bodies when preparing a Site Waste Management Plan.
- ii. **Both these plans are listed in MW-G7 where there is a general requirement to consult with the relevant bodies in respect of the areas relevant to their functions. However, if required, should this consultation be explicitly set out (for example in MW_MAT1 and MW_MAT2 of the OEMP [REP4-020]) to provide clarity?**
 2. Highways England considers the wording in MW-MAT2 in the OEMP [REP4-020] to be sufficient because it references the CL:AIRE Definition of Waste Development Industry Code of Practice (Version 2, March 2011) and hence the requirements set out in Part 1 of this response. With regards to the Site Waste Management Plan, there is no obligation to consult with statutory bodies when preparing a Site Waste Management Plan.

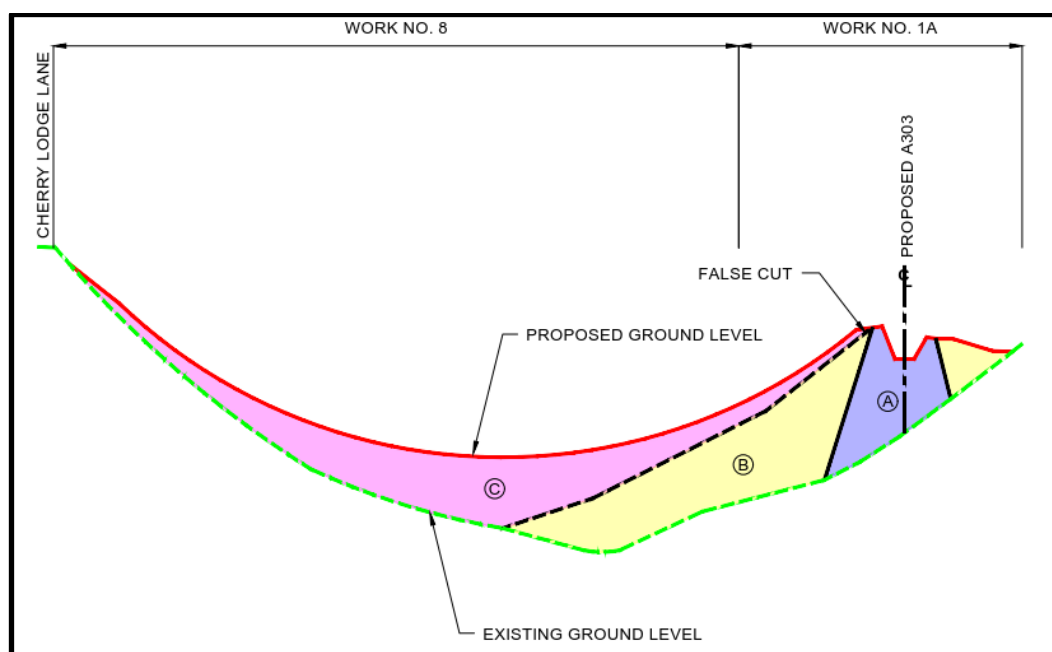
Question WM.2.2

Tunnel arisings

- i. To what extent would the deposition of tunnel arisings form part of Work No.1A being an integral part of the construction of the new A303.
- ii. Should this be specified in Work No.1A rather than solely being specified in Work No. 8?

Highways England response

- i. **To what extent would the deposition of tunnel arisings form part of Work No.1A being an integral part of the construction of the new A303.**
 1. Detail of the earthworks proposals for Work Nos. 1A and 8 is given in the Applicant's response to second written question ExQ2 WM.2.8 which includes the schematic figure below showing the relationship between Work Nos. 1A and 8 and the various design features of the structural embankment and the landscaping referred to in ES paragraph 2.4.54 [APP-040]. These areas are identified as A, B and C in the schematic figure below and as follows:
 - a. The structural embankment including false cuttings.
 - b. The minimum level of landscaping fill required for essential landscape and visual mitigation.
 - c. Additional landscaping required to avoid export of material to off-site locations.



Schematic Section through A303 and the area east of Parsonage Down

2. Deposition of tunnel arisings in Work No. 1A is proposed only within the area of landscape fill north of the proposed A303 structural embankment indicated above as zones (B) and (C).
3. Tunnel arisings will not be used for construction of the structural embankment indicated above as zone (A) or for landscape fill south of the structural embankment.

ii. Should this be specified in Work No.1A rather than solely being specified in Work No. 8?

4. The landscape fill required for Work No. 1A is included in Schedule 1 to the dDCO [REP4-018] as ancillary work item b(vi):

“comprising landscaping, re-grading, re-profiling, contouring, noise barriers, works associated with the provision of ecological and archaeological mitigation, and other works to mitigate any adverse effects of the construction, operation or maintenance of the authorised development;”

5. The use of tunnel arisings within the landscape fill is allowed for in ancillary work item b(vii):

“comprising the processing, deposition or use of excavated materials”

which allows for elements (B) and (C) in the schematic diagram above to form part of Work No.1A. As such, the Applicant does not consider that ‘the deposition of tunnel arisings’ needs to be specified in Work No.1A.

Question WM.2.3

Tunnel arisings

Please provide an additional sheet for the Work Plans combining sheet 3 and sheet 12.

Highways England response

1. Highways England has adopted a standard tile pattern which has been adopted for the sheets in the majority of the sets of DCO plans and for a number of figures in the Environmental Statement. This tile pattern has been chosen to provide adequate plan coverage while minimising the duplication of information on different sheets. Its consistent application across the documentation also provides clarity and facilitates 'read-across' between the different application documents. The Applicant is therefore reluctant to create an additional sheet for one particular set of drawings (i.e. the Works Plans [APP-008]). However, for the purposes of responding to the Examining Authority's question, a figure has been produced and is appended to this response, to show copy extracts from the Works Plans sheets 3 and 12, covering the full extent of Work No.8 and the adjacent length of Work No.1A.
2. For the avoidance of doubt, whilst the appended figure is based on, and is a copy of the information shown on sheets 3 and 12 of the Works Plans, in the event that there is any discrepancy of whatever nature between the figure itself and the Works Plans on which the figure is based, then the Works Plans [APP-008], which are required to be certified by the Secretary of State as true copies pursuant to article 56 and Schedule 12 to the DCO, shall always prevail.

Question WM.2.4

Tunnel arisings

400,000 square metres of the tunnel arisings will be utilised to allow blending into the surrounding landscape, providing essential landscape mitigation for the embankments at the Winterbourne Stoke bypass. Table 10.12 states that no import of soil is required.

What would be the origin of any topsoil required to provide the landscaped areas around the embankments?

Highways England response

1. All topsoil that will be replaced on landscaped areas around the embankments, as well as on highway verges and batters, will be generated by the topsoil strip within the Scheme's Order limits. There is no requirement to import any topsoil from outside the Scheme's Order limits

Question WM.2.5

Tunnel arisings and structural embankments

It is intended that the structural embankments would not be constructed from the tunnel arisings.

- i. Please clarify how the structural embankments will be constructed.
- ii. Should this be specified in the dDCO?

Highways England response

1. The structural embankments will be constructed using material excavated from the open cuttings in the Scheme. This material will be placed and compacted in accordance with the Manual of Contract Documents for Highway Works (MCHW); Volume 1 Specification for Highway Works; Series 600 Earthworks.
2. The Specification for Highway Works contains the standard requirements and approvals procedures for work, goods or materials used in the construction, improvement or maintenance of the Trunk Road network. As such, the standards set out in the Specification for Highway Works do not need to be specified in the dDCO or OEMP – they will apply in any event.
3. The highway design principles applied to the design of the Scheme are outlined in paragraph 2.3.27 of Chapter 2 of the Environmental Statement. [APP-040] and include the objective of seeking to achieve an ‘earthworks balance’ as explained below:

“An ‘earthworks balance’ is sought to minimise importing or exporting earthworks materials to/from the site.” (paragraph 2.3.27)

This is confirmed in paragraph 2.4.51:

“Construction of the Scheme would require excavation in places to form cuttings for the highway and this material would then be used to form embankments. The design aims to balance these ‘cut and fill’ requirements as far as practicable.”

Question WM.2.6

Tunnel arisings

It is intended that off-site disposal of tunnel arisings would only occur in exceptional circumstances. At ISH4 it was stated that such disposal was only likely to relate to modest quantities of materials.

- i. Please clarify what exceptional circumstances would be likely to lead to off-site disposal.
- ii. What measures would ensure that such off-site disposal is minimal, and should a maximum volume of material be specified?

Highways England response

- i. **Please clarify what exceptional circumstances would be likely to lead to off-site disposal.**
 1. Exceptional circumstances might arise if the Contractor were to encounter unexpected contaminated material that was found to be hazardous and unsuitable for re-use on site, or unsuitable for treatment to render it suitable for re-use on site. Any unsuitable material (Class U2 material - 'material excavated from the site which shall not be used in the permanent works', as defined in the Manual of Contract Documents for Highway Works (MCHW); Volume 1 Specification for Highway Works; Series 600 Earthworks), is expected to be very limited because the Applicant has a high degree of confidence that the potential to encounter unexpected contamination at the proposed tunnel depth is unlikely. This confidence has been gained from the historical and ongoing ground investigations.
- ii. **What measures would ensure that such off-site disposal is minimal, and should a maximum volume of material be specified?**
 2. The Applicant does not propose to set a maximum volume for off-site disposal of tunnel arisings, but has a high degree of confidence that, in the worst case, only small quantities would require off-site disposal due to the previous and ongoing ground investigations which will provide further information and confidence on the ground conditions ahead of the Contractor commencing works on site. Furthermore, off-site disposal would be a more costly option hence the Applicant would not expect the contractor to pursue this unless unavoidable.

Question WM.2.7

Tunnel arisings

The tunnel arisings are required for essential landscaping and biodiversity improvements and large-scale off-site removal could result in significant effects.

Please provide clarity that there are no circumstances in which large scale off-site removal would be required, and explain what measures are contained within the dDCO and/ or OEMP to ensure large scale off-site removal of the tunnel arisings could not take place?

Highways England response

1. The Applicant confirms that there are no realistic circumstances in which large-scale off-site removal of tunnel arisings would be required. The ground investigations carried out to date are sufficient to preclude the possibility of large-scale contamination that would necessitate such off-site removal. In addition, it would not be cost-effective for the contractor to carry out large-scale off-site removal of tunnel spoil, and there would therefore be a strong incentive not to do so unless all other options had been exhausted.
2. The requirement for arisings to be deposited on-site is secured pursuant to Requirement 8 in Schedule 2 to the draft DCO. This requires a landscaping scheme to be developed that is based on the mitigation measures set out in the ES, which includes the Outline Landscape and Ecology Management Plan (OLEMP) [APP-267], a document that explains how arisings would be used as part of the landscaping of the Scheme.
3. For the avoidance of doubt, however, the Outline Environmental Management Plan (OEMP) submitted at Deadline 6 includes an update which makes it clear that tunnel arisings would be used onsite to create landscape features including chalk grassland (see table 4.1 of the OEMP).

Question WM.2.8

Tunnel arisings

Given the quantity of materials and vehicle movements, please could the Applicant provide an outline methodology for the placement of the excavated materials at land east of Parsonage Down NNR (including that to be used for landscaping around the structural embankments).

Should a detailed methodology be secured, and should this require consultation with/ the agreement of the Council?

Highways England response

1. The method used for transporting, placement and compaction of earthworks or excavated materials will be determined by the main works contractor. Creation of a method statement will be secured by the following additions, shown in bold, underlined italic text, to the updated version of the Outline Environmental Management Plan (OEMP) submitted at Deadline 6.
 - In REAC table item MW-GEO7 “Excavated Materials Management”:

The re-use of excavated materials, including tunnel arisings **and material excavated to form highway cuttings**, shall be governed by a Materials Management Plan (refer to MW-MAT2)....
 - And in MW-MAT2 “Materials Management Plan”:

The main works contractor shall prepare a MMP in accordance with the CL:AIRE Definition of Waste: Code of Practice. **The MPP shall incorporate an earthworks method statement covering the excavation, on-site movement, placement and compaction of excavated material.**
2. Item MW-MAT2 in the version of the OEMP submitted at Deadline 6 has also been updated to provide that when the Materials Management Plan is approved by the Authority (i.e. by Highways England), such approval must be “*in consultation with the Environment Agency*”.
3. As noted in OEMP paragraph 4.5.14, “*The Authority, is the Strategic Highways Company with the responsibility for operating the strategic road network and responsible for delivering the Scheme. As such, it is appropriate that the final decision on detailed design remains its preserve, using its expertise and knowledge as to what would be appropriate and operationally feasible in the context of the Scheme*”.
4. The requirement (added at Deadline 6) to consult the Environment Agency on the Materials Management Plan is considered appropriate given the Environment Agency’s responsibility for regulating waste and its remit to protect and improve land and biodiversity. However, on the basis that the excavated materials dealt with under the Materials Management Plan would

be expected to remain within the Order limits (rather than being transported to off-site deposition locations via the local highway network) the Applicant does not consider that it would be necessary to consult Wiltshire Council on the detailed methodology underlying the Materials Management Plan.

Question WM.2.9

Tunnel arisings (off-site disposal)

Only a high-level analysis of noise receptors along the routes which would be utilised for the off-site disposal of tunnel arisings has been undertaken.

Please provide further information on how the assessments were undertaken.

Highways England response

1. The assessment methodology and results are provided in Appendix B of Appendix 12.1 of the Environmental Statement 'Tunnel Arisings Management Strategy' [APP-285].
2. In summary, details of the location of potential off-site disposal sites were used to identify the road links likely to be used to transfer material from the scheme to each site. The volume of material to be disposed of was used to estimate the likely volume of traffic generated by the off-site disposal. This was then used to produce traffic data (i.e. flows, % HGV and speed) for the identified road links for each site, with and without off-site disposal.
3. The traffic data was used to calculate the 'Basic Noise Level' (BNL) with and without off-site disposal, and therefore the potential change in BNL due to off-site disposal along each road link. The BNL corresponds to the road traffic noise level at a distance of 10m from the kerb. The Calculation of Road Traffic Noise (CRTN) provides a standard method of calculating the BNL, which was employed in the assessment.
4. The magnitude of the change in BNL on each road link due to off-site disposal was classified from negligible to major in accordance with the standard DMRB short term change methodology, as detailed in Table 9.8 of Chapter 9 (Noise and Vibration) of the Environmental Statement (ES) [APP-047]. This assessment methodology, based on the change in BNL, is the same as that adopted in the ES for 'affected routes' which are remote from the scheme, and therefore beyond the extents of the detailed operational traffic noise modelling. It is described as 'high-level' to distinguish it from detailed traffic noise modelling using computer software. The number and location of road links predicted to experience increases in BNL of more than negligible magnitude due to off-site disposal was used to form a conclusion on the potential significance of the adverse effect of off-site disposal options in terms of road traffic noise.

Question WM.2.10

Deposition of excavated materials

The deposition of excavated materials, other than on land east of Parsonage Down NNR, forms part of the ancillary works.

- i. Would/ could this include tunnel arisings and what is the likely extent of this deposition.
- ii. How has the impact of this been assessed and what measures would be in place to control the associated impacts?

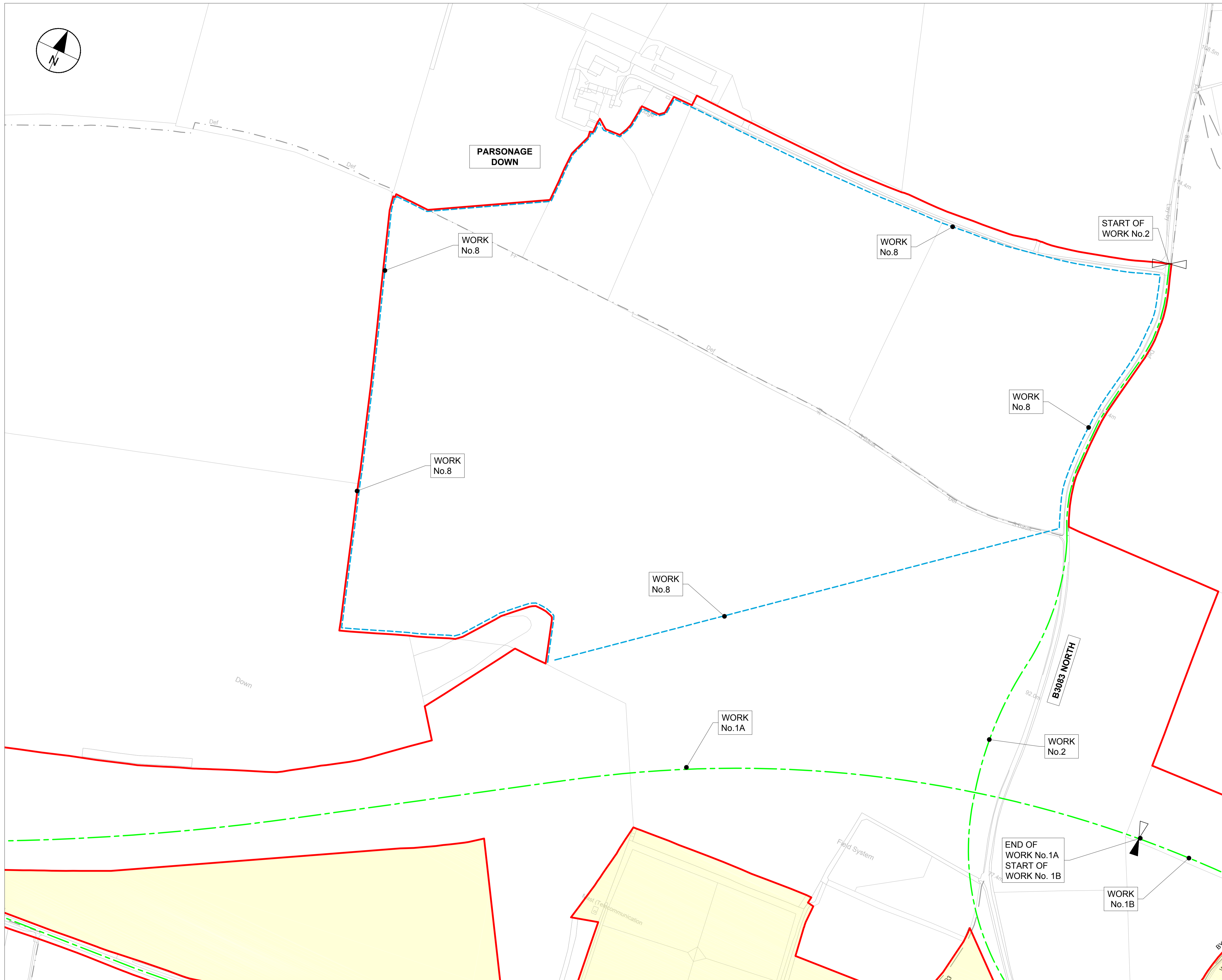
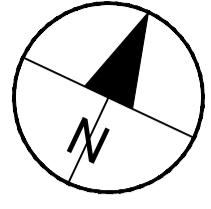
Highways England response

1. The ancillary works listed at the end of Schedule 1, Authorised Development in the draft DCO [REP4-018] are work items which relate to any or all of the numbered works including Work No.8.
2. The term “deposition of excavated materials” is used as a generic description covering all earthworks placement works. This includes the placement of tunnel arisings and of material excavated from cuttings. It includes the placement of excavated material both in structural embankments and in landscape areas.
3. Work No.8 has been identified as a Work in its own right; it is not a linear work and so is not considered to be part of Work No. 1A. The landscape area comprising Work No.8 and the adjacent section of Work No. 1A is also unique among the proposed landscape areas because it is the only area intended to be used for deposition of treated tunnel arisings. See Environmental Statement, Appendix 12.1, Tunnels Arisings Management Strategy [APP-285].
4. The impacts of deposition of treated tunnel arisings on the land east of Parsonage Down NNR has been assessed in the Environmental Statement. The nature of the work is described in paragraphs 2.4.51 to 2.4.56 “Excavated Materials” in ES Chapter 2 (The Proposed Scheme) [APP-040].
5. Impacts associated with the deposition of excavated material are identified in the Environmental Statement (ES). ES Chapter 10 (Geology and Soils) [APP-048], para 10.8.16 sets out that the re-use of excavated material would be governed by a Materials Management Plan developed in accordance with the CL:AIRE Code of Practice. The CL:AIRE Code of Practice is a voluntary framework for excavated materials’ management and re-use. Following this framework results in a level of information being generated that is sufficient to demonstrate that excavated material has been re-used appropriately and is suitable for its intended use. It demonstrates that unsuitable material or waste has not been used in the construction of the development. The Materials Management Plan would detail the procedures and measures that would be taken to classify, track, store, reuse and dispose of all excavated

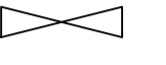



materials that would be encountered during the construction works. Production of the Materials Management Plan is included within commitments MW-GEO7 and MW-MAT2 of the OEMP [REP4-020] which are secured via Requirement 4 in Schedule 2 to the dDCO [REP4-018].

APPENDIX A

Works Plan Figure



- NOTES:
1. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
 2. NUMBERED WORKS ARE DESCRIBED IN SCHEDULE 1 (AUTHORISED DEVELOPMENT) TO THE DEVELOPMENT CONSENT ORDER.
 3. THE WORKS PLANS SHOULD BE READ IN CONJUNCTION WITH THE DEVELOPMENT CONSENT ORDER AND ENGINEERING SECTION DRAWINGS.

- LEGEND:
- ORDER LIMITS
 - AREA EXCLUDED FROM ORDER LIMITS
 - - - LINEAR WORK CENTRELINE
 - - - LIMIT OF DEVIATION
 -  START OF LINEAR WORKS
 -  START AND END OF LINEAR WORKS
 -  END OF LINEAR WORKS
 - - - SLAN1 EXISTING BYWAY / BRIDLEWAY / FOOTPATH
 - WORLD HERITAGE SITE BOUNDARY
 -  EXISTING ORDNANCE SURVEY DATA

SUBMITTED IN RESPONSE TO WRITTEN QUESTION WM.2.3		ES	JUL 2019	P01
Revision Details		By	Date	Suffix
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Purpose of Issue
RESPONSE TO WRITTEN QUESTION WM.2.3

Project Title
**A303
Amesbury to Berwick Down**

Drawing Title
**COPY OF WORKS PLANS REGULATION 5(2)(j)
SHEETS 3 AND 12 COMBINED**

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