

Date: 29 July 2024
Our ref: 482152
Your ref: EN070008



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BY EMAIL ONLY

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Dear David Wallace

NSIP Reference: EN070008 – Viking CCS Pipeline
Consultation: Deadline 4 Update

Natural England is a non-departmental public body. Our statutory purpose is to ensure that the natural environment is conserved, enhanced, and managed for the benefit of present and future generations, thereby contributing to sustainable development.

Please find Natural England's updated advice on all issues that were outstanding within our Written Representations at **Annex A** below.

For any further advice on this consultation please contact the case officer Robbie Clarey and copy to consultations@naturalengland.org.uk.

Yours sincerely

Robbie Clarey
Senior Sustainable Development Officer – NSIPs & High Risk Casework

Annex A

Part 1: Summary of Natural England's updated Advice

Natural England's advice is that, in relation to identified nature conservation issues within its remit, there is no fundamental reason of principle why the project should not be permitted. A summary of our updated advice & the key outstanding issues is set out below. Detailed comments regarding the key outstanding issues, and a record of issues resolved since our Written Representations, can be found in Part 2 of this letter.

Protected Landscapes – Lincolnshire Wolds National Landscape

Natural England welcome the applicant's engagement regarding protected landscapes during the examination, and consider most issues previously flagged within our written representations have been resolved, as far as possible, as a result of the information provided within the '**EN070008_EXAM_9.53 Response to each of Natural England's Recommendations relating to the LWNL**' and '**EN070008_EXAM_9.28_National Landscape_Technical_Note Rev B**'. These documents are due to be submitted into examination by the applicant at D4. For clarity, we have also uploaded the versions NE's comments relate to with this response as Annexes B & C, respectively. The only outstanding items are:

- Further clarity should be provided with regard to the timescales associated with construction & reinstatement as this is a key embedded mitigation measure (see updated comments at NE29c in Table 1 below).
- All relevant mitigation measures and management plans must be suitably secured in the DCO. As it stands, the CEMP & LEMP are suitably secured, however, the draft versions of these documents do not make explicit reference to the following, which NE advise is required (see updated comments at NE29b in Part 2 below).
 - Hedgerow establishment, management & monitoring
 - Protection of sensitive underlying hydrology
 - Road verge restoration

Habitats Regulations Assessment (HRA)

Natural England welcome the applicant's engagement regarding the HRA during the examination, and based on the updated HRA ('**EN070008_Viking_CCS_Pipeline_6.5_Habitat_Regulation_Assessment_Revision_C**'), consider most issues previously flagged within our written representations to be resolved. This revision to the HRA is due to be submitted into examination by the applicant at D4. For clarity, we have also uploaded the version NE's comments relate to with this response as Annex D. The only outstanding items are:

- Further clarity is required on the suite of acoustic mitigation measures proposed during construction of the pipeline and temporary compounds (See updated comments at NE16 in Table 1 below).
- Further assessment & consideration of Natterjack Toad, reported to be present in proximity to the Dune Valve Station (see comments on this new issue at NE30 in Table 1 below).

Soils and Best & Most Versatile Agricultural Land

Natural England welcome the applicant's engagement regarding Soils and Best & Most Versatile Agricultural Land during the examination, and based on the updates proposed within '**9.18 Applicant's Comments to Written Representations**' (REP2-029), consider most issues previously flagged within our written representations to be resolved. The only outstanding items are:

- Further information is required regarding the handling of soils in a wet condition (See updated comments at NE26d in Table 1 below)
- All relevant mitigation measures must be suitably secured in the DCO (See updated comments at NE26c in Table 1 below)

Part 2: Table of Natural England’s Updated Advice for Each Written Representation Issue

Our comments are flagged as red, amber, green, yellow, or grey:

- **Red** are those where there are fundamental concerns which it may not be possible to overcome in their current form.
- **Amber** are those where further information is required to determine the effects of the project and allow the Examining Authority to properly undertake its task and or advise that further information is required on mitigation/compensation proposals in order to provide a sufficient degree of confidence as to their efficacy.
- **Yellow** are those where Natural England does not agree with the Applicant’s position or approach. We would ideally like this to be addressed but are satisfied that for this particular project it is unlikely to make a material difference to our advice or the outcome of the decision-making process. However, we reserve the right to revise our opinion should further evidence be presented. It should be noted by interested parties that whilst these issues/comments are not raised as significant concerns in this instance, it should not be understood or inferred that Natural England would be of the same view in other cases or circumstances.
- **Green** are those which have been successfully resolved (subject always to the appropriate requirements being adequately secured).
- **Grey** are notes for Examiners and/or competent authority.

Specific actions required have been made clear via the use of **red text**.

NE Key Issue Ref	Topic	Issue Summary	Written Representations Comment (Deadline 1 - 26 April 2024)	Natural England’s Updated Position (Deadline 4 – 29 July 2024)	Natural England comment on the mechanism for securing mitigation/compensation measures in the DCO	Risk (RAG)
NE3	International designated sites <ul style="list-style-type: none"> • Humber Estuary SPA Humber Estuary Ramsar	HRA – assessment of significance for non-breeding birds (C)	We note that the significance of qualifying bird populations has been assessed on a per field basis. We advise there is potential for cumulative impacts to SPA birds using functionally linked land across the project area. The HRA should therefore consider the significance of bird numbers across the project area and the potential for cumulative impacts (see key issue NE12 below). Natural England welcomes that the	We welcome further information provided around the timing and duration of the pipeline construction in paragraph 7.3.11 and 7.3.13 - 7.3.16 of the updated HRA. Based on the information provided, we consider that potential cumulative impacts have been considered appropriately.	No further information required.	Green

			<p>baseline survey data will be reviewed in order to provide further clarification (SoCG ref. 37). Further detail should be provided on the sequence / timing of works and the availability of roost and feeding sites within the study area to provide context on the proportion of suitable habitat that would be affected at any one time. Natural England welcomes the commitment to update the Report to Inform the HRA to provide further justification for conclusions on loss of functionally linked land (SoCG ref. 37) and will review this once submitted. Discussions are ongoing with the applicant regarding this.</p>			
NE6	<p>International designated sites</p> <ul style="list-style-type: none"> Humber Estuary SPA <p>Humber Estuary Ramsar</p>	<p>HRA - Temporary loss of functionally linked land for non-breeding birds (C) LSE screening</p>	<p>Table 7-1 of the HRA identifies likely significant effects on golden plover and curlew from temporary loss of functionally linked land.</p> <p>However, Figures 13-31 of Appendix 6-7 indicate other qualifying SPA bird species, including lapwing and pink-footed goose, have been recorded in numbers greater than 1% of qualifying populations in proximity to the red line boundary. We advise that likely significant effects for lapwing and pink-footed goose cannot be screened out and should be included in the list of species in Table 7-1 for further assessment. Natural England welcomes that lapwing and pink-footed goose will be added into Table 7-1 in the updated Report to Inform the HRA (SoCG ref. 37). We advise that the</p>	<p>We welcome that further assessment of impacts to lapwing and pink-footed goose have been included in paragraph 7.3.13 - 7.3.16 of the updated HRA. Based on the information provided, we agree with the assessment conclusions.</p>	<p>No further information required.</p>	Green

			appropriate assessment should consider the potential cumulative impact on these species across the project area (as per key issue NE3).			
NE8	International designated sites <ul style="list-style-type: none"> Humber Estuary SPA Humber Estuary Ramsar	HRA - Lighting disturbance to breeding and non-breeding birds within functionally linked land (C, O and D) LSE screening	<p>We advise that further details should be provided on the proposed lighting across the project area, for all phases. We advise potential impacts from lighting should be considered at the HRA screening stage, proceeding to appropriate assessment where likely significant effects cannot be ruled out. Natural England welcomes that information on lighting will be provided in the updated Report to Inform the HRA (SoCG ref. 37) and we will review this once submitted.</p>	We welcome that further details of the proposed lighting have been provided and considered in the screening of impacts in the updated HRA. Based on the information provided, we agree with the assessment conclusions.	No further information required.	Green
NE9	International designated sites <ul style="list-style-type: none"> Humber Estuary SPA Humber Estuary Ramsar	HRA - Noise and visual disturbance to breeding birds within functionally linked land (O) LSE screening - Dune Isolation Valve	<p>We note from Table 7-1 of the HRA that likely significant effects from noise and visual disturbance to SPA breeding birds during operation has been screened out. However, section 4.2.30 of the Environmental Statement Volume I – Non-Technical Summary states maintenance to the Dune Isolation Valve is required. We advise that further assessment is required to determine potential impacts to SPA breeding birds at ‘Viking Fields’ during maintenance visits. The applicant has clarified that maintenance visits will require a maximum of two workers using hand tools or small powered hand tools. The applicant considers it unlikely that the minor maintenance works necessary to maintain the</p>	We welcome the confirmation at paragraph 6.3.14 and 6.3.15 of the updated HRA that maintenance would be undertaken outside of the nesting season and it is unlikely the works would create a disturbance greater than the baseline. Based on the information provided, we agree with the assessment conclusions.	No further information required.	Green

			<p>dune valve would create a disturbance event greater than existing baseline levels (SoCG ref. 37). The applicant has verbally confirmed it is expected that visual inspection of the dune valve will occur once per month and maintenance visits will occur annually.</p> <p>Natural England welcomes that clarity will be provided in the updated Report to Inform the HRA. However, although the maintenance visits are expected to occur infrequently, there is still a possibility that works will be undertaken in proximity to nests and have the potential to cause disturbance and nest abandonment. We advise that further assessment should be made on the suitability of habitat near to the dune valve, to assess if there is potential for SPA birds to nest to in close proximity to the working area. We will review this once submitted.</p>			
NE12	<p>International designated sites</p> <ul style="list-style-type: none"> Humber Estuary SPA Humber Estuary Ramsar 	<p>HRA - Temporary loss of functionally linked land for non-breeding birds (C) Appropriate Assessment</p>	<p>Justification is provided in section 7.3.8 of the HRA as to why the temporary loss of land will not have negative implications at the population level of SPA bird species. Natural England does not agree that the assessment is sufficient to rule out adverse effects on the Humber Estuary SPA in this case, due to the location of proposed works and number of SPA birds recorded within/adjacent to the construction area. Therefore, we advise that further assessment is</p>	<p>We advise it would have been beneficial to have further justification around alternative land availability for curlew and potential impacts from displacement from known foraging areas, as per our original advice. However, further information on timing and duration of works has been provided. Based on the information provided we agree with assessment conclusion.</p>	<p>No further information required.</p>	Yellow

			<p>required regarding the potential impacts to Humber Estuary SPA birds, in particular curlew, from temporary loss of functionally linked land during construction. Natural England highlights that loss of habitat may result in an increase in local bird densities and have consequences for individual bird fitness in terms of increased energy expenditure for flight, competition with other birds for food, and lack of knowledge of foraging resources in other areas which might make it more difficult to find food (Mander et al., 2021¹). Consequently, this may lead to effects on breeding productivity and ultimately population size (Baker et al., 2004²; Piersma et al., 2016³; Studds et al., 2017⁴).</p> <p>Satellite tagging of curlews on the Humber has demonstrated that individuals are highly site faithful and forage within a short distance of their high tide roost sites. During the study period, curlew home ranges were found to be between 4.4 and</p>			
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¹ Mander, L., Scapin, L., Thxter, C., Forster, R. and Burton, N. (2021). Long-Term Changes in the Abundance of Benthic Foraging Birds in a Restored Wetland. *Front. Ecol. Evol., Sec. Conservation and Restoration Ecology*, Volume 9.

² Baker, A. J., Gonzalez, P. M., Piersma, T., Niles, L. J., de Lima Serrano do Nascimento, I., Atkinson, P. W., et al. (2004). Rapid population decline in red knots: fitness consequences of decreased refuelling rates and late arrival in Delaware Bay. *Proc. R. Soc. London. Series B: Biol. Sci.* 271, 875–882.

³ Piersma, T., Lok, T., Chen, Y., Hassell, C. J., Yang, H.-Y., Boyle, A., et al. (2016). Simultaneous declines in summer survival of three shorebird species signals a flyway at risk. *J. Appl. Ecol.* 53, 479–490.

⁴ Studds, C. E., Kendall, B. E., Murray, N. J., Wilson, H. B., Rogers, D. I., Clemens, R. S., et al. (2017). Rapid population decline in migratory shorebirds relying on Yellow Sea tidal mudflats as stopover sites. *Nat. Commun.* 8:14895

			<p>9.6 km² (Cook et al, 2016⁵).</p> <p>Displacement from foraging sites will therefore have consequences for the birds' fitness in terms of increased energy expenditure for flight, competition with other birds for food, and lack of knowledge of foraging resources in other areas which might make it more difficult to find food. Therefore, we advise further consideration should be given to potential impacts on curlew associated with displacement from known foraging areas.</p> <p>We advise further assessment is required on the scale and timing of construction (i.e. if cable works happening sequentially or simultaneously across the project area) during sensitive periods to understand cumulative impacts.</p> <p>We advise further assessment of available alternative roosting/feeding sites in proximity to the works areas is required.</p> <p>If impacts cannot be ruled out, it may be necessary to consider mitigation measures such as restrictions on the timing/extent of works at sensitive times of the year.</p> <p>Natural England welcomes that the baseline survey data will be</p>			
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⁵ Cook, A.S.C.P., Turner, C., Burton, N.H.K. & Wright, L. J. (2016). *Tracking Curlew and Redshank on the Humber estuary*. BTO Research Report 688. British Trust for Ornithology, The Nunnery, Thetford, Norfolk IP24 2PU, UK.

			<p>reviewed in order to provide further clarification (SoCG ref. 37). Further detail should be provided on the sequence / timing of works and the availability of roost and feeding sites within the study area to provide context on the proportion of suitable habitat that would be affected at any one time. As detailed above (NE6), we advise that the assessment should include pink-footed geese and lapwing. Natural England welcomes the commitment to update the Report to Inform the HRA to provide further justification for conclusions on loss of functionally linked land (SoCG ref. 37) and will review this once submitted. Discussions are ongoing with the applicant regarding this.</p>			
NE15	<p>International designated sites</p> <ul style="list-style-type: none"> Humber Estuary SPA Humber Estuary Ramsar 	<p>HRA – Noise and visual disturbance to breeding birds within functionally linked land (C) Appropriate Assessment - Theddlethorpe Facility, Southern Compound</p>	<p>We note no assessment is provided regarding potential noise and visual disturbance impacts to breeding SPA birds using Viking Fields from works associated with the Theddlethorpe Facility and Southern Compound. Therefore, we advise that further information is required to determine potential impacts. Natural England welcomes the commitment to update the Report to Inform the HRA (SoCG ref. 35) and will review this once submitted.</p>	<p>We welcome the further information has been provided at paragraph 7.3.24 and 7.3.25 of the updated HRA regarding existing screening of the compounds. Based on the information provided, we agree with the assessment conclusions.</p>	<p>No further information required.</p>	'Green'
NE16	<p>International designated sites</p> <ul style="list-style-type: none"> Humber Estuary SPA 	<p>HRA – Noise and visual disturbance to non-breeding birds within functionally linked land (C) Appropriate</p>	<p>Section 7.3.16 of the HRA states that, with mitigation, average construction noise would be below the baseline. Section 7.3.19 of the HRA states <i>'noise fencing will be included for works within 500m of the relevant survey fields'</i>. We advise that further detail is provided</p>	<p>We welcome the further information on noise fencing provided in Appendix I and paragraphs 7.3.29 - 7.3.35 of the updated HRA. However, we advise clarity is still required on the suite of mitigation measures proposed, and triggers for implementation.</p>	<p>Further information required.</p>	'Amber'

	<ul style="list-style-type: none"> Humber Estuary Ramsar 	Assessment - pipeline route and temporary compounds	<p>regarding the locations at which noise mitigation is required, taking into consideration our advice on functionally linked land assessment above (NE12).</p> <p>Natural England welcomes that additional information will be provided in the updated Report to Inform the HRA outlining the sectors where noise fencing will be required (SoCG ref. 38) and we will review this once submitted.</p>	Natural England is in discussion with the Applicant regarding this issue and considers that it is possible for this issue to be resolved if further clarity is provided in the HRA.		
NE18	<p>International designated sites</p> <ul style="list-style-type: none"> Humber Estuary SPA Humber Estuary Ramsar 	HRA – Noise and visual disturbance to non-breeding birds within functionally linked land (C and D) Appropriate Assessment Theddlethorpe Facility, Southern Compound	<p>We note no assessment is provided regarding potential disturbance impacts to non-breeding SPA birds using ‘Viking Fields’ from works associated with the Theddlethorpe Facility and Southern Compound. Therefore, we advise that further information is required to determine potential impacts.</p> <p>Natural England welcomes the commitment to update the Report to Inform the HRA (SoCG ref. 35) and will review this once submitted.</p>	We welcome the further information at paragraph 7.3.24 and 7.3.25 of the updated HRA regarding existing screening of the compounds. Based on the information provided, we agree with the assessment conclusions.	No further information required.	‘Green’
NE24	<p>International designated sites</p> <ul style="list-style-type: none"> Humber Estuary SPA <p>Humber Estuary Ramsar</p>	HRA – In-combination assessment at appropriate assessment stage general comments (C and O)	Natural England notes that Table 7-2 of the HRA considers in-combination effects with other plans and projects. However, we advise that this table should identify where impacts have been fully avoided through mitigation and where there is still a residual impact that could act in-combination. This assessment should consider the residual effects of the identified developments acting together. If mitigation or compensation has completely avoided or removed the effect, then this would not act in-	Based on the updated in-combination assessment, we consider that the residual effects have been assessed appropriately.	No further information required.	‘Green’

			<p>combination with other projects. We note that section 7.4.4 of the HRA states <i>'Where similar impact pathways exist... the mitigation that is proposed for both the other project and Proposed Development will collectively ensure that overall impacts are reduced to a non-significant level.'</i> However, this does not take into consideration residual effects. Therefore, we advise that the in-combination assessment should be revised.</p> <p>Natural England welcomes that this will be made clearer and clarified within the updated Report to Inform the HRA (SoCG 35) and we will review this once submitted.</p>			
NE30	<p>Internationally designated Sites</p> <ul style="list-style-type: none"> Humber Estuary Ramsar 	Natterjack Toad presence in proximity to the Dune Valve Station	<p>None. However:</p> <p>NE stated in response to the planning inspectorate's First Written Question (ref 1.12.7), that <i>'Natterjack toads are not known to be present in the location of the Dune Valve Station or access route.'</i></p>	<p>Natural England have been made aware since this response that Natterjack Toad have been identified within 'Viking Fields', in proximity to the Dune Valve Station.</p> <p>We have raised this with the applicant, and highlighted the need for reconsideration within the HRA. We await further information from the applicant on this matter.</p> <p>Whilst additional mitigation measures may be required, Natural England consider this mitigation should be achievable.</p> <p>It should also be noted that a mitigation licence⁶ may be required where work will impact on natterjack toads.</p>	Updated assessment of impacts to Natterjack Toads in proximity to the Dune Valve Station.	Amber

⁶ [Natterjack toads: apply for a mitigation licence \(A44\) - GOV.UK \(www.gov.uk\)](http://www.gov.uk)

NE26a	Soils and Best and Most Versatile Land	Survey Approach - Timing	<p>Natural England consider the survey approach taken could be improved, whereby the ALC survey is undertaken pre-consent, to most accurately inform the ES. This is primarily as a pre-consent survey could input into the final route selection and project design, enabling further avoidance of Best and Most Versatile Land across all elements of the development.</p> <p>Nonetheless, for this development, with the commitment to undertake a detailed ALC survey post consent, and as a result of the small overall permanent land take (10.6.9, APP-052), commitments for restoration of the pipeline corridor (4.7.10, APP-096), and implementation of a soil management plan, undertaking detailed ALC survey post-consent is unlikely to make a material difference to our advice or the outcome of the decision-making process.</p>	Natural England's position is unchanged.	No further action required.	Yellow
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NE26b	Soils and Best and Most Versatile Land	Survey Approach - Extent	<p>oSMP Paragraph 1.1.5 (APP-052) states that the ALC survey will incorporate all land which will be subject to direct disturbance, however, direct disturbance has not been defined & the extent of the survey is unclear. Natural England consider that the ALC survey should cover the whole development area, in line with the DEFRA Construction Code of Practice for the Sustainable Use of Soils on Construction Sites, BSSS guidance and IoQ guidelines.</p> <p>There is a risk of soil damage, ALC degradation and long term or permanent loss of BMV. Soil will need to be handled according to best practice and reinstated to a high standard to reduce the impacts. The results from a detailed ALC survey would provide soils data to inform the soil management plan for the whole site regardless of whether the use is permanent or temporary in nature.</p> <p>ALC survey should normally be at a detailed level, e.g. one auger boring per hectare, supported by pits dug in each main soil type to confirm the physical characteristics of the full depth of the soil resource, i.e. 1.2 metres. We welcome the commitment of the oSMP for soil data collected as part of the ALC survey to be used to inform the soil resource and management plan, in line with the Defra Construction</p>	Natural England welcome the clarification provided by the applicant in REP2-029, ref 2.17.28, and consider the proposed ALC survey extent to be satisfactory.	No further action required	Green
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			Code of Practice for the Sustainable Use of Soils on Construction Sites.			
NE26c	Soils and Best and Most Versatile Land	Outline Soil Management Plan – (C and O) Reinstatement of agricultural land	<p>Natural England welcome use of the ‘Defra Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (2009)’ to guide soil management during construction. Where soils are being reinstated, we welcome the commitment to reinstate soils to their pre-development agricultural use (4.7.10, APP-096).</p> <p>Alongside this, Natural England welcome the acknowledgement at oSMP paragraph 4.12.5 that ‘<i>The main objective for the restoration of agricultural land is to reinstate the land to its original (pre-development) Agricultural Land Classification (ALC) grade</i>’. Natural England consider there should be a specified & clearly stated commitment for ‘best and most versatile’ (BMV) agricultural land temporality disturbed during</p>	<p>Natural England acknowledge the information provided in REP2-029, ref 2.17.29, and welcome the commitment to restore all BMV agricultural land to it’s former quality following construction. (REP3-012, mitigation measure F14).</p> <p>NE welcome clarity regarding the use of ALC survey information & soil profiles to inform restoration. We advise that this should be noted within the oSMP for clarity.</p> <p>The intention to ensure all BMV agricultural land restored upon decommissioning is returned to it’s original ALC grade is also welcomed; the approach to adopt the same mitigation measures set out in the SMP within the Decommissioning Plan is noted. Nonetheless, for clarity, NE recommend that this should be specifically included within the Outline Decommissioning strategy (APP-072),</p>	All relevant mitigation measures must be suitably secured in the DCO.	Amber

			<p>construction to be returned to its original ALC grade.</p> <p>To achieve this, the proposed restoration soil profiles should be provided in the detailed oSMP. Details should include the target soil profiles to be reinstated (soil volumes, soil textures, soil depth, stone content, likely depth to slowly permeable layers, moisture balances etc) and their predicted ALC grade where appropriate.</p> <p>Decommissioning: Paragraph 4.5.1 of the Decommissioning Strategy Plan (APP-072) notes that Block Valve locations may be restored to agricultural use. Similarly to the above, where soils at these locations are to be reinstated, there should also be a specific commitment for 'best and most versatile' (BMV) agricultural land to be returned to its original Agricultural Land Classification (ALC) grade.</p>	<p>i.e. in the 'reinstatement of land' sections.</p>		
NE26d	Soils and Best and Most Versatile Land	<p>Outline Soil Management Plan – (C and O) Soil handling in wet conditions</p>	<p>oSMP paragraphs 4.2.7 & 4.5.6 (APP-096) discusses soil handling in wet conditions.</p> <p>All soils should only be handled in a dry and friable condition, and it is expected that soil handling will be confined to the drier summer period to minimise risk of soil damage. Soil handling methods should normally be as specified in the Defra Construction Code of Practice for the Sustainable Use of Soils on</p>	<p>Natural England welcome the clarity provided in REP2-029, ref 2.17.30. Nonetheless, Natural England's position remains that soils should only be handled when dry and friable.</p> <p>The inclusion of the soil tests set out in oSMP Tables 2 and 3 are welcomed, however, we have concerns regarding works going ahead when these tests are failed.</p> <p>It is unclear what the consented time</p>	<p>Further clarification required regarding the need to handle soils in a wet condition.</p>	Amber

			<p>Construction Sites (including accompanying Toolbox Talks).</p> <p>Soil handling should normally be avoided during October to March inclusive, irrespective of soil moisture conditions, because it will generally not be possible to establish green cover over winter to help dry out soils and protect them from erosion. Soils should only be handled in a dry and friable condition. Natural England note this is recognised as part of the additional mitigation and enhancement measures (ES para 10.8.1 B16, APP-052) to be adopted during the construction phase, therefore soil handling methodology across the two documents is inconsistent. Please could the Applicant confirm what is proposed.</p>	<p>framed works include (i.e. that may require wet handling of soils), what impact this could have on ALC and whether it will have an effect on the potential to restore. We also have concerns regarding the term 'extenuating circumstances' as there is currently no definition of what this may include.</p> <p>Natural England have discussed these concerns with the applicant, and await further clarifications on these points, including definition of 'extenuating circumstances' which may necessitate handling soils in a wet condition.</p>		
NE26e	Soils and Best and Most Versatile Land	Outline Soil Management Plan – (C) Topsoil and subsoil storage	oSMP paragraph 4.5.1 discusses topsoil and subsoil storage. In all cases topsoil and subsoil must be separately handled to avoid mixing. Where soils are stored, the different soil types will need to be kept separated in the storage bunds. This should be reflected in the Restoration Plans (1-12), accompanied with a detailed soil balance.	Natural England welcome the amendments made to the oSMP, summarised in REP2-029, ref 2.17.31, and have no further comments with regard to Topsoil and Subsoil storage.	No further action required.	Green
NE26f	Soils and Best and Most Versatile Land	Outline Soil Management Plan – (C) Stockpiles	oSMP paragraph 4.7.5 (APP-096) discusses stockpile height. Best practice advises topsoil bunds shall not exceed 3 m in height and subsoil (or subsoil substitute) bunds shall not exceed 5 m in height.	Natural England welcome the clarity provided in REP2-029, ref 2.17.32, with regard to stockpile height and maintenance and have no further comments.	No further action required.	Green

			<p>There is an increased risk of soil compaction when increasing height of storage mounds, particularly where long term storage is expected. As a result, exceeding these heights should be avoided unless absolutely necessary and agreed by a suitably qualified specialist.</p> <p>Mowing and stripping should not be carried out during wetter periods when soils moisture content exceeds their lower plastic limit. Tracking of heavy machinery for maintenance interventions will increase the risk of soil compaction.</p>			
NE26g	Soils and Best and Most Versatile Land	Outline Soil Management Plan – (C, O and D) Decompaction	<p>oSMP paragraphs 4.12.6 and 4.12.15 discuss decompaction. The depth of decompaction should reflect the depth of compaction. Additionally, where compaction is likely to take place further consideration should be given to providing a decompaction strategy to maximise the effectiveness of decompaction methods. Further guidance may be found here; IQ Soil Guidance Sheet O.pdf (hubspotusercontent30.net)</p>	Natural England welcome the amendments made to the oSMP, summarised in REP2-029, ref 2.17.33, regarding decompaction, and have no further comments.	No further action required.	Green
NE29a	Protected Landscapes	Lincolnshire Wolds National Landscape - Assessment of alternatives	<p>Comment: Natural England advises that the ES does not include a full justification as to why the project cannot avoid the Lincolnshire Wolds National Landscape.</p> <p>Recommendation: A full justification behind the need to directly impact the National</p>	<p>Updated rationale has been provided by the applicant regarding the need to route the pipeline through the AONB. See 'EN070008_EXAM_9.53 Response to Natural England's Recommendations relating to the LWNL' & 'EN070008_EXAM_9.28_National Landscape_Technical_Note Rev B'.</p> <p>National planning policy sets a default of</p>	No further action required.	Yellow

			<p>Landscape should be provided, inclusive of why route Option B1 is the only valid alternative route that directly avoids the National Landscape, and why Option B2A is the preferred route given that this option cuts through the National Landscape directly—with open trenching—and abuts it for around 3km along the A18 boundary (AS-020).</p>	<p>no major development within a nationally designated landscape unless exceptional circumstances can be demonstrated (para 5.10.32 of NPS EN-1). This ‘major development test’ uses criteria to show that there is no viable alternative to locating the scheme elsewhere or delivering it in some other way. The Applicant has provided an updated statement (within EN070008_EXAM_9.28_National Landscape_Technical_Note Rev B’) on why alternative routes avoiding the National Landscape altogether are not available.</p> <p>Natural England advise that if the significant adverse construction impacts (to the National Landscape) are clarified as short-term as described (NE29c, and reinstatement plans are secured within the DCO (NE29b), NE agree with the conclusions of the Applicant’s impact assessment. Discussions on this matter have concluded & this will be reflected in the SoCG.</p>		
NE29b	Protected Landscapes	Lincolnshire Wolds National Landscape - Assessment of special qualities	<p>Comment</p> <p>Natural England do not consider that a full assessment of the impacts on special qualities has been provided, and therefore cannot agree with the conclusion that potential landscape effects on the Lincolnshire Wolds National Landscape are not significant for the purposes of EIA (minor adverse effects during construction reducing to negligible adverse during operation, paragraph 7.12.1, APP-049).</p>	<p>‘EN070008_EXAM_9.28_National Landscape_Technical_Note Rev B’ includes a table setting out each of the special qualities of the National Landscape.</p> <p>Natural England welcome the additional information and assessment provided & concur with the conclusions drawn in section 3 of this document. Natural England agree with the Applicant that the construction phase is the most impactful part of the scheme. The Applicant’s conclusion on impact is</p>	All relevant mitigation measures and management plans must be suitably secured in the DCO.	Amber

			<p>Recommendation</p> <ul style="list-style-type: none"> • Assess impacts to all relevant special qualities, including chalk streams. • Distinguish between effects on defined special qualities grouped under the heading “landscape character”. • We recommend that the effects of the proposed scheme on the special qualities of the Lincolnshire Wolds National Landscape are provided in table format. 	<p>dependent on a series of key embedded mitigation measures, including the following, which must be secured:</p> <ul style="list-style-type: none"> • Hedgerow Reinstatement Specification and Management Plan: OLEMP para 1.1.6 secures the detailed establishment and management plan for hedgerows for the initial 5 year period, which is welcomed. However, whilst oLEMP para 1.1.8 notes some long term management measures, as this is key embedded mitigation, NE advise that the Hedgerow establishment and management plan should also include details of the monitoring and remedial action to be taken where reinstatement is unsuccessful, including beyond the initial 5 year period. Chapter 7, para 7.8.90 states that only ‘by year 15 it is reasonable to assume that the perception of a continuous hedgerow would be re-established’. Reference should be made to this within the oLEMP to ensure it is secured through the DCO. • Protection of sensitive underlying hydrology: Where underlying hydrology is affected via HDD or auger drilling, this may affect reinstatement. CEMP mitigation measure E28 includes 		
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				<p>the need for ground investigation, assessment and the implementation of appropriate mitigation measures. NE advise that clarity should be provided regarding whether these investigations will be undertaken at the Chalk Stream Crossing Points.</p> <ul style="list-style-type: none"> • Road verge restoration: The reinstatement of a road verge within the National Landscape is key embedded mitigation; as such, NE advise this should be included in the LEMP. Reference should be made to this within the oLEMP to ensure it is secured through the DCO. • Short works and reinstatement period: See NE29c below for further comment on this. <p>In addition, although no specific areas have been identified, NE would like to welcome para 3.3.11 regarding possible hedgerow reinstatement, gap filling and hedgerow tree planting in areas not affected by the project, to enhance this landscape features are contribute towards furthering the purposes of the designated landscape.</p>		
NE29c	Protected Landscapes	Lincolnshire Wolds National Landscape - Extent & Duration of impacts to the protected landscape	Comment Natural England cannot agree with the conclusion to the assessment of impacts to special qualities provided, which is that “the affected section of the AONB would be small in extent and any impacts would be	<p>Natural England welcome the further commentary provided with regard to this issue in ‘EN070008_EXAM_9.53 Response to Natural England's Recommendations relating to the LWNL’.</p> <p>We have no further comment on these</p>	Further clarity should be provided with regard to the timescales associated with construction & reinstatement.	Amber

			<p>of short duration and reversible” (paragraph 7.8.82, APP-049).</p> <p>Recommendation</p> <ul style="list-style-type: none"> Remove reliance in the assessment on the mitigating effect of geographic extent on the assessed harm to the special qualities. Provide details on which elements of the project have been assessed as being situated within the setting of the Lincolnshire Wolds National Landscape A key embedded mitigation measure for the Lincolnshire Wolds National Landscape is a short construction timeframe. Clarity is needed on the expected timeframe for works in the Lincolnshire Wolds National Landscape. Further clarity on whether the route can be fully and successfully reinstated. 	<p>matters aside from the below:</p> <p>We do not have any further comment on the comparisons drawn with the Navitus Bay DCO regarding consideration of the small geographical extent of impacts. Discussions on this matter have concluded & this will be reflected in the SoCG. (Yellow)</p> <p>The LVIA concludes significant adverse landscape and visual effects associated with the construction period. A short works and reinstatement period are thus key embedded mitigation measures relied upon within the LVIA & the magnitude of landscape effects (as assessed) is dependent on the short duration and reversibility of works. While a Gantt chart of the preliminary construction schedule is provided in Figure 3-29 of the ES, and brief detail of the overall expected timescales per km are provided in ‘EN070008_EXAM_9.53 Response to Natural England’s Recommendations relating to the LWNL’, NE remain unclear on the realistic anticipated overall timeframe for construction and reinstatement (soils and hedgerows) works within the LWNL and its setting. We advise that these details are provided upfront and clearly set out. (Amber)</p>		
NE29d	Protected Landscapes	Lincolnshire Wolds National Landscape - Residual landscape effects during	<p>Comment</p> <p>Natural England advises that the evidence presented does not rule out the persistence of significant residual effects on the statutory purposes of the Lincolnshire Wolds</p>	<p>Natural England welcome the further clarifications provided within ‘EN070008_EXAM_9.53 Response to Natural England’s Recommendations relating to the LWNL’ & ‘EN070008_EXAM_9.28_National</p>	No further action required.	Green

		operation	<p>National Landscape within the operational phase.</p> <p>Recommendation</p> <ul style="list-style-type: none"> • A list of the potential impacts to the Lincolnshire Wolds National Landscape that are not fully reversible, and their significance. • Remove reliance on the mitigating effect of remaining field boundaries in the landscape when concluding the impact of hedgerow loss with potential to affect the Lincolnshire Wolds National Landscape. • Clarify the maximum hedgerow removal distance. 	Landscape_Technical_Note Rev B' and have no further comments.		
NE29e	Protected Landscapes	Lincolnshire Wolds National Landscape – Cumulative effects	<p>Comment</p> <p>Natural England advise that the assessment of cumulative effects should include an assessment of the impacts of relevant proposals currently at scoping stage, such as the Grimsby to Walpole National Grid project (Section 7.11, APP-049).</p> <p>Recommendation</p> <ul style="list-style-type: none"> • Provide justification as to whether the assessment of cumulative effects should include the Grimsby to 	Natural England acknowledge that in combination assessment with this project is not likely to be possible at this stage (see ' EN070008_EXAM_9.53 Response to Natural England's Recommendations relating to the LWNL '), and have no further comments.	No further action required.	Green

			Walpole National Grid project.			
NE29f	Protected Landscapes	Lincolnshire Wolds National Landscape – Visible surface infrastructure	<p>Comment Natural England advise that all visible surface infrastructure is considered within the landscape and visual assessment, inclusive of the temporary access and laydown areas, one of which includes HGV parking and hard infrastructure within the Lincolnshire Wolds National Landscape boundary near Irby upon Humber (Chapter 3, Figure 3-30 1 of 3, APP-045).</p> <p>Recommendation</p> <ul style="list-style-type: none"> • Provide justification that all visible surface infrastructure is considered within the landscape and visual assessment. • Ensure the landscape and visual assessment considers the impact of temporary access and laydown areas. 	Natural England welcome the further clarifications provided within 'EN070008_EXAM_9.53 Response to Natural England's Recommendations relating to the LWNL' & 'EN070008_EXAM_9.28_National Landscape_Technical_Note Rev B' and have no further comments.	No further action required.	Green
NE29g	Protected Landscapes	Lincolnshire Wolds National Landscape – Route reinstatement	<p>Comment Natural England advise that there is a need for clarity on whether the route can be successfully reinstated.</p> <p>Recommendation</p> <ul style="list-style-type: none"> • The ES should include a clear assessment, based on a full survey of the route, of the potential for and risks to 	Natural England welcome the further clarifications provided within 'EN070008_EXAM_9.53 Response to Natural England's Recommendations relating to the LWNL' & 'EN070008_EXAM_9.28_National Landscape_Technical_Note Rev B' and have no further comments.	No further action required.	Green

			<p>full reinstatement of the route within the Lincolnshire Wolds National Landscape and its setting.</p> <ul style="list-style-type: none"> Information should be provided on the feasibility and risks of using trenchless methods for avoiding trees, including the suitability of a 2m minimum depth under trees. The LVIA should reference the Soil Management Plan, which is important in ensuring the land is restored suitably to enable successful vegetation reinstatement. We advise that information is supplied on whether the trenchless methods described risk disturbing sensitive chalk streams, and what residual impacts could occur. Clarity is sought on any requirement for signage along the route of the pipeline during the operation. 			
NE29h	Protected Landscapes	Lincolnshire Wolds National Landscape – Monitoring	<p>Comment</p> <p>Natural England advise that there is a need for clarity on what monitoring arrangements will be put in place and what remedial works might be</p>	Natural England welcome the further clarifications provided within 'EN070008_EXAM_9.53 Response to Natural England's Recommendations relating to the LWNL' &	No further action required.	Green

			<p>undertaken if an adequate level of reinstatement is not being achieved.</p> <p>Recommendation</p> <ul style="list-style-type: none"> • Provide more information on what monitoring arrangements will be put in place and what remedial works might be undertaken if an adequate level of reinstatement is not being achieved. • Ensure the outline Landscape and Ecological Management Plan includes the Landscape Design Principle (embedded mitigation) for monitoring. • Provide clarity on when the detailed plan for the establishment and management of new hedgerows will be developed. 	<p>'EN070008_EXAM_9.28_National Landscape_Technical_Note Rev B' and have no further comments.</p>		
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