

Date: 18 July 2023
Our ref: 437197
Your ref: EN020002



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BY EMAIL ONLY

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Dear Sir/Madam

NSIP Reference Name / Code: National Grid: Bramford to Twinstead Reinforcement / EN020002

Title: Natural England's relevant representations in respect of National Grid's Bramford to Twinstead Reinforcement

Examining authority's submission deadline 18 July 2023

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.

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

Yours faithfully,

Emma Hurrell, Lead Adviser, Norfolk and Suffolk Area Team

Sam Kench, Senior Adviser, Norfolk and Suffolk Area Team

Natural England's Relevant Representations

PART I: Summary and Conclusions of Natural England's advice.

PART II: Natural England's detailed advice (starting on page 15)

PART III: Natural England's detailed comments on the **Development Consent Order (DCO)** (starting on page 48)

Part I: Summary and Conclusions of Natural England's advice

Summary of Natural England's Advice

Internationally designated sites

- We advise that further information is required to ensure that the Stour and Orwell Estuaries Special Protection Area (SPA) and Stour and Orwell Estuaries Ramsar site, will not be affected by surface water and ground water quality changes.

Nationally designated sites

- There are potential impacts on both Hintlesham Woods SSSI 'lowland mixed deciduous woodland' and 'breeding bird assemblages - mixed: scrub and woodland' interest features. Further assessment and consideration of mitigation/compensation proposals is required.
- Further information is required to assess potential construction impacts on ground and surface water that could result in habitat degradation of the interest features of Arger Fen SSSI.
- The applicant should establish if there is any reliable data on the use of Little Blakenham Pits SSSI by barbastelle, and subsequently assess impacts of the scheme.

Protected species

- Further information is required before Natural England can issue a letter of no impediment (LONI) for dormouse.
- Natural England has issued a LONI **with caveats** for bats and badger.

Nationally designated landscapes

- Further information is required to make a full assessment of the project's effect on the special qualities of the AONB for both the construction and operational phases.
- There are outstanding queries around 'the setting' of the AONB.
- Further information is required to provide clarity on the Landscape and Visual Impact Assessment (LVIA) methodology.

Soils and best and most versatile agricultural land

- Natural England advises that further consideration is given to the survey work expected before construction work begins.
- A Soil Management Plan (SMP) should be prepared, informed by a detailed soil survey.
- The EIA has only considered the permanent land take from the cable sealing end (CSE) compounds and substation (3.18 ha). It has not considered the permanent access tracks nor land subject to temporary disturbance.
- Areas not subject to a detailed ALC survey should be surveyed prior to construction to inform soil handling and restoration criteria.

Ancient woodland and ancient/veteran trees

- We advise further consideration is given to implementing both our standing advice on ancient woodland, ancient trees and veteran trees¹ and the mitigation hierarchy in relation to Hintlesham Woods SSSI and the following ancient woodland sites; Bushy Park Wood, Butler's Wood and Waldergrave Wood.

Other valuable and sensitive habitats and species, landscapes and access routes

- For transparency and ease of review, Natural England would advise that the Applicant provides a summary table of the total area of **all** HPI that will be lost, both permanently and temporarily, alongside the total area of proposed mitigation for each HPI.
- Natural England advise that it is made clear that the aftercare plan (section 9) detailed in the LEMP (document 7.8) is intended for habitat loss mitigation proposals as well as reinstatement proposals.
- Natural England advises the Applicant to consider targeted use of herbicides within woodland, rather than the blanket approach currently in their woodland aftercare plan outlined in paragraph 9.2.1 of the LEMP (document 7.8).
- Natural England advises that further detail should be provided on the measures which would be taken if the establishment of naturally regenerated woodland is not occurring satisfactorily.

Natural England's advice in these relevant representations is based on information submitted by **National Grid Electricity Transmission plc (National Grid)** in support of its application for a Development Consent Order ('DCO') in relation to **Bramford to Twinstead Reinforcement** (*'the project'*).

Part I of these representations summarises what Natural England considers the main issues² to be in relation to the DCO application and indicate the principal submissions that it wishes to make at this point. It then sets out all the significant issues which remain outstanding, and which Natural England advises should be addressed by National Grid and the Examining Authority as part of the examination process to ensure that the project can properly be consented. These are primarily issues on which further information would be required in order to allow the Examining Authority to properly undertake its task or where further work is required to determine the effects of the project. Natural England may have further or additional points to make, particularly if further information about the project becomes available.

Our comments are set out against the following sub-headings which represent our key areas of remit:

- Internationally designated sites
- Nationally designated sites
- Protected species
- Biodiversity net gain
- Nationally designated landscapes
- Soils and best and most versatile agricultural land

¹ Ancient woodland, ancient trees and veteran trees: advice for making planning decisions (Natural England & Forestry Commission, January 2022) - Available at <https://www.gov.uk/guidance/ancient-woodland-ancient-trees-and-veteran-trees-advice-for-making-planning-decisions>

² PINS NSIP Advice Note 11 Annex C sets out Natural England's role in infrastructure planning. https://infrastructure.planninginspectorate.gov.uk/wp-content/uploads/2015/10/PINS-Advice-Note-11_AnnexC_20150928.pdf

- Ancient woodland and ancient/veteran trees
- Connecting people with nature (National Trails, open access land and England Coast Path)
- Other valuable and sensitive habitats and species, landscapes and access routes

Our comments are flagged as red, amber or green:

- **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.
- **GREEN** are those which have been successfully resolved (subject always to the appropriate requirements being adequately secured)

Natural England has been working closely with National Grid to provide advice and guidance since 2009 – The project was paused in 2013 before pre-application discussions restarted in January 2021.

Natural England has provided advice to the applicant in meetings and through consultations. This has included advice on:

- the proposed works around Hintlesham Woods SSSI.
- impacts on protected species (including badger, bats and dormouse).
- the assessment of Dedham Vale AONB and Stour Valley and the wider Landscape and Visual assessment.
- draft versions of the Habitats Regulations Assessment, Landscape and Ecological Management Plan (LEMP), Construction Environmental Management Plan (CEMP) and Code of Construction Practice (CoCP).
- The Statement of Common Ground.

Part I of these representations provides an overview of the issues and a summary of Natural England's advice. Section 2 identifies the natural features relevant to this application. Section 3 summarises Natural England's overall view of the application and the main issues which it considers need to be addressed by the Secretary of State.

Part II of these representations sets out all the significant issues which remain outstanding, and which Natural England advises should be addressed by National Grid Electricity Transmission plc and the Examining Authority as part of the examination process to ensure that the project can properly be consented. These are primarily issues on which further information would be required to allow the Examining Authority to properly undertake its task or where further work is required to determine the effects of the project and to expand on mitigation proposals and to consider compensation proposals to provide a sufficient degree of confidence as to their efficacy.

Natural England will continue discussions with National Grid Electricity Transmission plc to seek to resolve these concerns and agree outstanding matters in a statement of common ground. Failing satisfactory agreement, Natural England advises that the matters set out in section 4 will require consideration by the Examining Authority as part of the examination process.

The Examining Authority may wish to ensure that the matters set out in these relevant representations are addressed as part of the Examining Authority's first set of questions to ensure the provision of information early in the examination process.

2. The natural features potentially affected by this application

2.1 Internationally designated sites

2.1.1 Our position regarding impacts on internationally designated sites is summarised below. Further detail on our reasoning for this is given against each impact pathway within Part II.

2.1.2 Natural England is not yet satisfied for **AMBER** issues identified below that it can be ascertained beyond reasonable scientific doubt that the project would not have an adverse effect on the integrity of the **Stour and Orwell Estuaries SPA and Stour and Orwell Estuaries Ramsar site**.

2.1.3 Surface water and ground water quality change – AMBER

The Habitats Regulations Assessment (HRA) Report (document 5.3) identifies that the project could have a likely significant effect on surface water and ground water quality through pollution and sedimentation incidents on watercourses that discharge to the Stour and Orwell Estuaries SPA and Stour and Orwell Estuaries Ramsar site, and an appropriate assessment has been undertaken. Whilst Natural England welcomes the inclusion of several detailed good practice measures as mitigation to prevent these impacts from occurring (as outlined in the Code of Construction Practice (CoCP), document 7.5.1), it is advised that the Applicant should provide the following (further detail provided in Part II):

2.1.3.1 A detailed contingency plan should be provided on how a bentonite (or other lubricant used) "breakout" would be dealt with, should this occur during construction.

2.1.3.2 More detail within the following CoCP good practice measures: GH06 details a requirement for a foundation risk assessment and GH07 a requirement for a hydrogeological risk assessment for trenchless crossings. These assessments will need to include a requirement to consider the potential risks to the Stour and Orwell Estuaries SPA and Ramsar sites.

2.1.3.3 Ensure the wording of the good practice measure GH07 matches in the CoCP document and the HRA Report.

2.1.4 Natural England is satisfied that **GREEN** issues are unlikely to result in adverse effects on the integrity (AEoI) of the Stour and Orwell Estuaries SPA and Stour and Orwell Estuaries Ramsar, subject always to the appropriate mitigation/compensation as outlined in the application documents being secured adequately.

2.1.5 Habitat or species fragmentation, reduction in species density, disturbance/displacement of SPA/Ramsar featured bird species and air quality change – GREEN

The HRA Report rules out impacts from these identified pathways during construction and operation. Natural England concurs with this assessment and the reasoning provided.

2.2 Nationally designated sites

2.2.1 Natural England's position regarding nationally designated sites is summarised below. Further detail on our reasoning for this is given against each impact pathway in Part II.

2.2.2 On the basis of the information submitted in relation to these sites, Natural England advises that the project could damage the interest features of the following designated sites:

- Hintlesham Woods Site of Special Scientific Interest (SSSI)
- Arger Fen SSSI
- Little Blakenham Pit SSSI

2.2.3 Hintlesham Woods SSSI – AMBER

Natural England wishes to make clear that out of the designated sites which may be affected by the proposals, Hintlesham Woods SSSI is at most direct risk of damage. Further information is required to assess:

2.2.3.1 Potential impacts on the Hintlesham Woods SSSI 'lowland mixed deciduous woodland' interest feature, which is an ancient woodland, during the construction and operational phases. See Table 1 for more details.

2.2.3.2 Potential impacts on the Hintlesham Woods SSSI 'assemblages of breeding birds - mixed: scrub and woodland' interest feature, during the construction phase. Natural England considers it a key issue that the noise assessment in ES Chapter 14: Noise and Vibration (application document 6.2.14) and the interpretation of this assessment in Document 6.3.7.1.2: ES Appendix 7.1 – Annex B Hintlesham Woods SSSI Assessment should be revised to include peak values as well as average sound power values. This is because sudden, unpredictable loud noises are more likely to startle birds and cause an escape flight response. Natural England is particularly concerned about the impact of construction noise on the nightingale population, which is part of the breeding bird assemblages interest feature. See Table 1 for Natural England's detailed advice on potential impacts on this interest feature.

2.2.4 Arger Fen SSSI – AMBER

Further information is required:

2.2.4.1 To assess potential impacts on ground water during the construction phase that could result in habitat degradation of the interest features of Arger Fen SSSI.

2.2.4.2 The Applicant has identified that there is a potential impact pathway for changes in surface water quality resulting in habitat degradation from a temporary culvert crossing at a watercourse upstream of the site. More detailed information is required to conclude a neutral impact on Arger Fen SSSI.

2.2.5 Little Blakenham Pit SSSI – AMBER

2.2.5.1 Natural England broadly concurs with the assessment of potential impacts on Little Blakenham SSSI in Document 6.2.7: Environmental Statement (ES): Main Report Chapter 7 – Biodiversity. However, it is of note that the assessment does not consider the hibernating populations of Habitats Directive Annex II bat species. There are no local records of lesser horseshoe *Rhinolophus hipposideros*, greater horseshoe *Rhinolophus ferrumequinum* or Bechstein's *Myotis bechsteinii*, but barbastelle *Barbastella barbastellus* is frequent in the area as identified by the surveys. It may be suitable, therefore, to establish if there is any reliable data on the use of the SSSI by barbastelle, and subsequently assess impacts to potential flight lines and commuting routes that may be impacted by the scheme.

2.2.5.2 The potential impacts from severance of hedgerows and other linear features appear modest and proposed mitigation appears satisfactory.

2.2.6 Cattawade Marshes SSSI, Orwell Estuary SSSI and Stour Estuary SSSI – GREEN

Natural England advise that if the additional work on the mitigation for the Stour and Orwell Estuaries SPA and Stour and Orwell Estuaries Ramsar is carried out, agreed and secured, the project will have a neutral effect on the named sites.

2.2.7 Cornard Mere, Little Cornard SSSI – GREEN

Natural England concurs with the assessment of Cornard Mere, Little Cornard SSSI and the reasoning provided.

2.3 Protected species

2.3.1 Natural England's position regarding European protected species is summarised below. Further detail on our reasoning for this is given in part II.

2.3.2 Natural England has received submission of draft protected species licence applications for badger *Meles meles*, bat and hazel dormouse *Muscardinus avellanarius*.

2.3.3 Natural England has issued a letter of no impediment (LONI) **with caveats** for bats and badger – **GREEN**.

2.3.4 An initial assessment of the dormouse draft application was made in March 2023. At this time, Natural England's Licensing Service **could not reach a satisfied decision** based on the information provided. Natural England has discussed this with the applicant and have not yet received a response to this request for information – **AMBER**.

2.4 Biodiversity Net Gain (BNG)

2.4.1 Natural England's position regarding provision of biodiversity net gain (BNG) is summarised below. Further detail on our reasoning for this is given in Part II.

2.4.2 It is acknowledged that BNG will not be mandatory for NSIPs until 2025, and as such Natural England welcomes National Grid's commitment to delivering 10% BNG on this project. The comments provided are to highlight potential opportunities for improvement. Natural England recommends that any deviation from BNG guidance and principles should be identified through clear reporting. Please note that this topic has not been given a risk category as BNG is currently voluntary for NSIP projects.

2.4.3 In summary:

2.4.3.1 The Defra 3.1 metric is a suitable tool for calculating 10% BNG on the project as BNG is not currently mandatory for NSIPs. However, Natural England would encourage the use of version 4.0, which is now available.

2.4.3.2 Natural England would advise that schemes should include all land within the red line boundary within the Applicant's calculations, which would present a 'worst case scenario' approach. As plans are refined, and the scheme extents are reduced, then the calculations can be amended accordingly.

2.4.3.3 10% BNG has not yet been achieved for the river and stream units although Natural England acknowledges that National Grid are continuing to seek ways to increase river and stream gains to achieve the 10% BNG target (as stated in the Environmental Gain Report, document 7.4).

2.4.3.4 The Environmental Gain Report identifies that not all land was field surveyed. It is not clear to Natural England how much of the project area has been field surveyed and therefore how confident the Applicant can be that the correct habitat and condition score has been assigned. Where land has not been field surveyed, a condition score of good would be a more precautionary approach rather than moderate.

2.4.3.5 Paragraph 5.7.1 of the Environmental Gain Report identifies that the trading rules have not been met due loss of high distinctiveness habitat, which is not replaced on a 'like for like' basis. Further work should be done to resolve this issue. Natural England would advise undertaking further assessment of opportunities to avoid impacts to these high distinctiveness habitats. Where trading rules are not being adhered to, this should be clearly reported.

2.5 Nationally designated landscapes

2.5.1 Natural England's position regarding nationally designated landscapes is summarised below. Further detail on our reasoning for this is given against each impact pathway within Part II.

2.5.2 The proposed development scheme affects areas in both the Dedham Vale Area of Outstanding Natural Beauty (AONB), which is a nationally designated landscape, and its 'setting'. Natural England's advice with regards to landscape on this scheme is limited to the AONB and to the area surrounding it which constitutes its 'setting'. Natural England's priority and focus in providing its advice is to uphold the statutory purpose of the AONB which is to conserve and enhance the area's natural beauty. We are providing this advice as the national landscape agency for England and as the designating authority for AONBs. The following are considered **AMBER** issues:

2.5.2.1 Further information is required to make a full assessment of the project's effect on the special qualities of the AONB for both the construction and operational phases.

2.5.2.2 There are outstanding queries around 'the setting' of the AONB which the Applicant has not provided a response to. These queries were raised during a meeting held with the Applicant, Natural England and the AONB manager.

2.5.2.3 Further information is required to provide clarity on the Landscape and Visual Impact Assessment (LVIA) methodology.

2.5.3 **GREEN** issues (detailed in Part II) are subject to the appropriate requirements being adequately secured.

2.6 Soils and best and most versatile agricultural land

2.6.1 Natural England's position regarding soils and the best and most versatile agricultural (BMV) land is summarised below. Further detail on our reasoning for this is given in Part II.

2.6.2 Natural England advises that further consideration is given to the survey work expected before construction work begins and advise that a Soil Management Plan (SMP) should be prepared, which can be included as part of the CEMP. In summary, the following are considered **AMBER** issues:

2.6.2.1 A detailed Agricultural Land Classification (ALC) survey would be expected on all land subject to temporary development, this is to inform the Environmental Impact Assessment (EIA), soil handling requirements and soil restoration criteria.

2.6.2.2 A SMP should be prepared (this can be part of the CEMP), informed by a detailed soil survey as per the Defra Construction Code of Practice³. Further advice on aspects to consider in the SMP are provided in the detailed comments below.

2.6.2.3 The EIA has only considered the permanent land take from the cable sealing end (CSE) compounds and substation (3.18 ha). It has not considered the permanent access tracks nor land subject to temporary disturbance.

2.6.2.4 It is acknowledged that swathes of the underground cable route could not be surveyed due to the Avian influenza outbreak. Areas not subject to a detailed ALC survey should be surveyed prior to construction to inform soil handling and restoration criteria.

2.6.3 **GREEN** issues (detailed in Part II) are subject to the appropriate requirements being adequately secured

³ Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (Defra, 2009) – Available at <https://www.gov.uk/government/publications/code-of-practice-for-the-sustainable-use-of-soils-on-construction-sites>

2.7 Ancient woodland and ancient/veteran trees

2.7.1 Natural England's position regarding ancient woodland and ancient/veteran trees is summarised below. Further detail on our reasoning for this is given in Part II.

2.7.2 Please refer to Natural England's comments on Hintlesham Woods SSSI, which is an ancient woodland on the ancient woodland inventory (paragraph 2.2.4). Natural England strongly recommends that the applicant follows our standing advice on ancient woodland, ancient trees and veteran trees and the implementation of the mitigation hierarchy within this. Reasons for deviation from the standing advice should be clearly explained. In summary, the following are considered **AMBER** issues:

2.7.2.1 It is not clear that the works to be undertaken below the existing overhead line through Hintlesham Woods SSSI will be coppicing, rather than vegetation clearance. Verbal communication with the applicant has indicated that it is coppicing. However, Natural England seeks written confirmation that this is the case as it is not currently clear from the documentation provided. Natural England also requests that the impact from deer browsing is considered in the aftercare plan (section 9 of the LEMP).

2.7.2.2 Clarification is sought on why mitigation measures such as hand digging/ vacuum excavation are proposed within the 15m buffer around Hintlesham Little Wood (part of Hintlesham Woods SSSI) as this is not made clear in the documentation provided.

2.7.2.3 Application of Natural England's standing advice for ancient woodland, ancient trees and veteran trees should be applied and the implementation of the mitigation hierarchy reviewed for the following ancient woodland sites: Bushy Park Wood, Butler's Wood and Waldergrave Wood.

2.7.3 **GREEN** issues (detailed in Part II) are subject to the appropriate requirements being adequately secured. Natural England notes the following:

2.7.3.1 The Applicant has identified areas of ancient woodland that are not on the Ancient Woodland Inventory. We welcome the Applicant's decision to implement the mitigation hierarchy to treat these sites as if they were ancient woodland on the ancient woodland inventory.

2.8 Connecting people with nature (National Trails, open access land and England Coast Path) - **GREEN**

2.8.1 Natural England's position regarding access is summarised below. Further detail on our reasoning for this is given in Part II.

2.8.2 There does not appear to be National Trails, Open Access Land or Coast paths within the order limits; as such, no impacts to these features are likely.

2.8.3 It is noted that there will be several temporary diversions of Public Right of Ways (PRoWs) during the construction phase (as detailed in the ES: Chapter 12 – Traffic and Transport report, document 6.2.12) may be required during construction. Natural England welcomes the CoCP

good practice measure TT03, which requires temporary diversions to be clearly marked at both ends, including details of the duration of the diversion and a contact number to report concerns.

2.9 Other valuable and sensitive habitats and species, landscapes and access routes

2.9.1 Natural England's position regarding the loss and modification/degradation of Habitats of Principle Importance (HPI) is summarised below. Further detail on our reasoning for this is given in Part II. The following are considered **AMBER** issues:

2.9.1.1 For clarity and ease of review, Natural England advises that the Applicant provides a summary table of the total area of **all** HPI that will be lost, both permanently and temporarily, alongside the total area of proposed mitigation for each HPI.

2.9.1.2 Natural England advises that it is made clear that the aftercare plan (section 9) detailed in the LEMP (document 7.8) is intended for habitat loss mitigation proposals as well as reinstatement proposals.

2.9.1.3 Natural England advises the Applicant to consider targeted use of herbicides within woodland, rather than the blanket approach currently in their woodland aftercare plan outlined in paragraph 9.2.1 of the LEMP (document 7.8).

2.9.1.4 Natural England welcomes the use of natural regeneration of woodland proposed for some areas of mitigation woodland. We also welcome the assurance that these areas will be monitored to ensure they are establishing, as detailed in paragraph 9.1.3 of the LEMP aftercare plan. However, Natural England advises that further detail should be provided on the measures which would be taken if establishment does not occur as anticipated.

2.9.2 **GREEN** issues (detailed in Part II) are subject to the appropriate requirements being adequately secured. Natural England notes the following:

2.9.2.1 Natural England welcomes the principles that the Applicant has proposed to follow for planting proposals (outlined in paragraph 8.2.2 of the LEMP, document 7.8). This includes the use of trees and shrubs with local provenance, replacement of failed planting and the provision of protection for young trees from browsing rabbits and deer.

3. Natural England's overall conclusions

3.1 Natural England advise that there are number of outstanding matters that should be addressed by the Applicant (National Grid) and the Examining Authority as part of the Examination and consenting process before development consent can be granted, as summarised in Section 2 above and outlined in further detail in Part II below.

3.2 As previously stated in Part 1, Natural England has flagged our comments as red, amber or green. No issues are currently labelled **RED**, meaning that we do not consider that there are any fundamental concerns which are not possible to overcome in their current form. However, we have

flagged a number of comments as **AMBER**. This means in natural England's opinion further information is required to properly determine the effects of the project.

3.3 Whilst all **AMBER** issues require further information, the main issues raised by the application are as follows:

Internationally designated sites

- Further information is required to ensure that the Stour and Orwell Estuaries SPA and Stour and Orwell Estuaries Ramsar site, will not be affected by surface water and ground water quality changes.

Nationally designated sites

- There are potential impacts to both Hintlesham Woods SSSI interest features. Further assessment and consideration of mitigation/compensation proposals is required.
- Further information is required to assess potential construction impacts on ground and surface water that could affect the interest features of Arger Fen SSSI.
- The applicant should establish if there is any reliable data on the use of Little Blakenham Pits SSSI by barbastelle, and subsequently assess impacts of the scheme.

Protected species

- Further information is required before Natural England can issue a LONI for dormouse.

Nationally designated landscapes

- Further information is required to make a full assessment of the project's effect on the special qualities of the AONB for both the construction and operational phases.
- There are outstanding queries around 'the setting' of the AONB.
- Further information is required to provide clarity on the LVIA methodology.

Soils and best and most versatile agricultural land

- Natural England advises that further consideration is given to the survey work expected before construction work begins.
- A SMP should be prepared, informed by a detailed soil survey.
- The EIA has only considered the permanent land take from the CSE compounds and substation (3.18 ha). It has not considered the permanent access tracks nor land subject to temporary disturbance.
- Areas not subject to a detailed ALC survey should be surveyed prior to construction to inform soil handling and restoration criteria.

Ancient woodland and ancient/veteran trees

- We advise further consideration is given to implementing both our standing advice on ancient woodland, ancient trees and veteran trees and the mitigation hierarchy in relation to Hintlesham Woods SSSI and the following ancient woodland sites; Bushy Park Wood, Butler's Wood and Waldergrave Wood.

Other valuable and sensitive habitats and species, landscapes and access routes

- For transparency and ease of review, Natural England would advise that the Applicant provides a summary table of the total area of **all** HPI that will be lost and the proposed mitigation.
 - Natural England advise that it is made clear that the aftercare plan (section 9) detailed in the LEMP (document 7.8) is intended for habitat loss mitigation proposals as well as reinstatement proposals.
 - Natural England advises the Applicant to consider targeted use of herbicides within woodland, rather than the blanket approach currently in their woodland aftercare plan outlined in paragraph 9.2.1 of the LEMP (document 7.8).
 - Natural England advises that further detail should be provided on the measures which would be taken if the establishment of naturally regenerated woodland is not occurring satisfactorily.
- 3.4 The Applicant has provided a number of CoCP good practice measures (which form part of the CEMP that will be secured under Schedule 3, Requirement 4 of the DCO), which are welcomed by Natural England. However, we do feel in some instances further detail is required. Again, where applicable this has been summarised in Section 2 above and outlined in further detail in Part II below.
- 3.5 Natural England may decide to make oral representations at an issue specific hearing.

Natural England’s Relevant Representations

4. Part II: Natural England’s detailed advice

Part II of these representations expands upon the detail of all the significant issues (‘red’ and ‘amber’ issues) which, in our view remain outstanding and includes our advice on pathways to their resolution where possible. Part II also shows ‘green’ issues where a resolution has been reached and subject always to the appropriate requirements being adequately secured.

Natural England will continue engaging with the applicant to seek to resolve outstanding concerns throughout the examination. Natural England advises that the matters indicated as ‘amber’ will require consideration by the Examining Authority during the examination.

Natural England’s Relevant Representations, Part II, Table 1

Table 1: Natural England’s detailed advice						
NE key issue ref (and relevant part I paragraph number)	Topic	Issue summary (C) – construction phase (O) – operational phase	NE commentary and advice on: <ul style="list-style-type: none"> • Further details about the project in order to enable assessment • Further evidence or assessment work required 	NE comment on mechanism for securing resolution – e.g. mitigation/compensation	Matters that must be secured in the DCO (with DCO/DML or omission ref as applicable).	Risk Red/Amber/ Green
NE01 (2.1.3)	Internationally designated sites <ul style="list-style-type: none"> • Stour and Orwell Estuaries SPA • Stour and Orwell 	Ground water and surface water quality. (C)	As identified in the HRA Report, the project could potentially impact the surface and ground water quality of waterbodies hydrologically connected to the Stour and Orwell Estuaries SPA and Ramsar. To demonstrate robust mitigation against this impact, a detailed contingency plan should be provided on how a bentonite (or other	Mitigation - Mitigation in the form of best practice measures have been stated in the CoCP and CEMP, which should be secured once further details on the risk assessments and strategies noted in the CoCP best practice measures GH06,	Schedule 3, Requirement 4 – Management Plans Further information has also been requested	AMBER

	Estuaries Ramsar		<p>lubricant used) “breakout” would be dealt with, should one occur during construction.</p> <p>More detail within the following CoCP good practice measures: GH06 details a requirement for a foundation risk assessment and GH07 a requirement for a hydrogeological risk assessment for trenchless crossings. These assessments will need to include a requirement to consider the potential risks to the Stour and Orwell Estuaries SPA and Ramsar sites.</p> <p>There is a discrepancy between the description of good practice measure ref. GH07 in the CoCP document (document 7.5.1: CEMP Appendix A – Code of Construction Practice) and the wording of the same good practice measure referenced in table 6.1 of the HRA Report (document 5.3). Natural England advises the HRA is updated to reflect the more detailed measure described in the CoCP document.</p>	<p>GH07 and GG15 have been provided and agreed.</p> <p>A detailed contingency plan on how a bentonite (or other lubricant used) “breakout” would be dealt with.</p>		
NE02	<ul style="list-style-type: none"> • Stour and Orwell Estuaries SPA • Stour and Orwell 	Ground water and surface water quality (O)	No likely significant effect	N/A	N/A	GREEN

	Estuaries Ramsar					
NE03 (2.1.5)	<ul style="list-style-type: none"> Stour and Orwell Estuaries SPA Stour and Orwell Estuaries Ramsar 	Habitat or species fragmentation, reduction in species density, disturbance/displacement of SPA/Ramsar featured bird species and air quality change (C & O)	<p>No likely significant effect. The HRA Report rules out impacts from these identified pathways during construction and operation. Natural England concurs with this assessment and the reasoning provided.</p> <p>With regards to functionally linked land, Natural England acknowledges the Applicant has implemented our pre-application advice on assessing the suitability of the habitat of the development site for qualifying feature bird species to determine if it is considered functionally linked land. Natural England accepts the evidence presented in the HRA Report (paragraph 4.5.3 and section 5.2) that the project will not result in a likely significant effect due to loss of functionally linked land.</p>	N/A	N/A	GREEN
NE04 (2.2.3.1)	<p>National designated sites (biodiversity & geodiversity)</p> <ul style="list-style-type: none"> Hintlesham Woods SSSI <p>Ancient Woodland and</p>	<p>Feature - Lowland mixed deciduous woodland (also ancient woodland)</p> <p>(C & O)</p>	<p>Coppicing – For clarity it is important that the correct terminology is used throughout all the application documents. The embedded measure EM-AB12 in table 3.1 of the Hintlesham Woods SSSI Assessment (document 6.3.7.1.2) states, “<i>Vegetation management for works to the existing overhead line within Hintlesham Woods SSSI would comprise coppicing to</i></p>	<p>Mitigation – The aftercare plan (section 9 of the LEMP) should include details of how the stools within the coppiced area will be protected from deer browsing. Further clarification of why hand digging/vacuum excavation at Hintlesham Little Woods is needed. This may require</p>	<p>Schedule 3, Requirement 4 – Management Plans.</p> <p>Further information has also been requested.</p>	AMBER

	<p>Ancient/ Veteran Trees</p>		<p><i>ground level for a width of 20m along the existing operational maintenance swathe,”</i> which is considered acceptable as coppicing allows for regrowth. In other documents the works proposed within this area of the site refers to cutting the trees to ground level (paragraph 7.2.3 of the LEMP, document 7.8) and this would not necessarily secure the survival of the trees.</p> <p>Natural England advises that the Applicant considers the impact of deer browsing on re-growth of the coppiced area under the overhead line that runs through the site and possible mitigation. Anecdotally, Natural England colleagues are aware that when vegetation removal in this area has been undertaken for maintenance in the past, older stools have been lost because of deer browsing on re-growth.</p> <p>As advised throughout the pre-application process, Natural England reiterates that the applicant should apply the <u>standing advice for ancient woodland, ancient trees and veteran trees</u> to the design of their project. Clarity is needed on why mitigation measures such as hand digging/ vacuum excavation would be required within the 15m buffer</p>	<p>reassessment of the mitigation hierarchy.</p>		
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			around Hintlesham Little Wood (part of Hintlesham Woods SSSI). Natural England's understanding is that the only works being undertaken in this vicinity are coppicing and cable stringing.			
NE05 (2.2.3.1)	<ul style="list-style-type: none"> Hintlesham Woods SSSI 	<p>Feature - Lowland mixed deciduous woodland (also ancient woodland)</p> <p>(C)</p>	<p>Natural England welcomes the embedded measure EM-AB12, which states, "<i>No heavy good vehicle access would be undertaken within the woods</i>" This is important to avoid impacts on the root protection area of the trees on the site.</p>	<p>Mitigation - Embedded measures EM-AB12 outlined in table 3.1 of the Hintlesham Woods SSSI Assessment (document 6.3.7.1.2)</p>	<p>Omission 4. Once agreed, the embedded measures outlined in table 3.1 of the Hintlesham Woods SSSI Assessment (document 6.3.7.1.2) should be secured</p>	GREEN
NE06 (2.2.3.2)	<ul style="list-style-type: none"> Hintlesham Woods SSSI 	<p>Feature - Breeding bird assemblages - mixed: scrub and woodland</p> <p>Noise Assessment</p> <p>(C)</p>	<p>The noise assessment in ES Chapter 14: Noise and Vibration (application document 6.2.14) and the interpretation of this assessment in Document 6.3.7.1.2: ES Appendix 7.1 – Annex B Hintlesham Woods SSSI Assessment, should be revised to include peak values as well as average sound power values. This is because sudden, unpredictable loud noises are more likely to startle birds and cause an escape flight response.</p> <p>It would be expected that peak sound power levels would be provided to determine the impact from noise disturbance on breeding birds. The potential 'startle effect' can be assessed using maximum</p>	<p>Revision of the noise assessment may lead to further mitigation to be required.</p>	<p>N/A Further information has been requested</p>	AMBER

			noise level (L _{Amax}) and peak sound pressure (L _{Apeak}). The difference between L _{Apeak} and L _{Amax} shows the 'rise time' of the noise signal, which is likely to be an important factor with respect to the potential for the noise to disturb birds.			
NE07 (2.2.3.2)	<ul style="list-style-type: none"> Hintlesham Woods SSSI 	<p>Feature - Breeding bird assemblages - mixed: scrub and woodland</p> <p>(C)</p>	<p>Further assessment of the impacts of construction works on birds during the breeding season is required. Natural England is particularly concerned about the impact to the nightingale population, which Natural England has been notified by the RSPB has declined significantly. Paragraph 4.3.8 of Hintlesham Woods SSSI Assessment (document 6.3.7.1.2) suggests the woodland would buffer some of the construction noise. However, this is not the case for the nightingale, which the surveys reported in the Species Baseline Report (document 6.3.7.2) have identified are located on the edge of the woodland on the side where the works will occur.</p>	<p>Mitigation – Following the mitigation hierarchy, the first preference would be for all works to be completed outside the bird breeding season (March to August, inclusively). However, Natural England acknowledges there are constraints due to some works having to be undertaken during power outages during the summer months. We would therefore advise that the schedule of works during the bird breeding season is further considered to avoid all construction works between April and June, which is the peak breeding season for nightingale. Avoidance of July would also be recommended due to the potential for second broods⁴.</p>	N/A Further information has been requested	AMBER

⁴ Robert Morgan (1982) The breeding biology of the Nightingale *Luscinia megarhynchos* in Britain, *Bird Study*, 29:1, 67-72

				<p>The use of acoustic screening and other mitigation measures to reduce noise impacts from works inside breeding season should be considered.</p> <p>Monitoring surveys for schedule 1 bird species during construction works in the vicinity of Hintlesham Woods SSSI is advised.</p>		
NE08 (2.2.4)	<ul style="list-style-type: none"> Arger Fen SSSI 	<p>Feature - Composition of habitats: lowland and wet woodlands, fen and acid and calcareous grassland habitats. (C)</p>	<p>Natural England advises impacts to ground water, which could result in habitat degradation should be considered. Arger Fen SSSI is considered as a potential Groundwater Dependent Terrestrial Ecosystem (GWDTE) and should be included in the GWDTE assessment.</p> <p>The Applicant has acknowledged that there is a potential impact pathway for changes in surface water quality resulting in habitat degradation from a temporary culvert crossing at a watercourse upstream of the site. Natural England concurs that strict adherence to the CoCP measures summarised in paragraph 7.6.36 of the ES (document 6.2.7) is required. CoCP good practice measures GH06, GH07 and GG15 identify that additional assessments will need to be produced, which will require</p>	<p>Mitigation – Adherence to the CoCP good practice measures identified in paragraph 7.6.36 of the ES is required. Further work is required to ensure a neutral impact on the site. This includes a foundation risk assessment and hydrogeological risk assessment as identified in the CoCP good practice measures, which takes into consideration impacts on Ager Fen SSSI</p>	<p>Schedule 3, Requirement 4 – Management Plans</p> <p>Further information has also been requested</p>	AMBER

			consideration of impacts to Arger Fen.			
NE09 (2.2.5)	<ul style="list-style-type: none"> Little Blakenham Pit SSSI 	Feature – bat hibernation roost (C & O)	<p>Natural England broadly concurs with the assessment of potential impacts on Little Blakenham SSSI in Document 6.2.7: ES: Main Report Chapter 7 – Biodiversity. However, it is of note that the assessment does not consider the hibernating populations of Habitats Directive Annex II bat species. There are no local records of lesser horseshoe, greater horseshoe or Bechstein’s, but barbastelle is frequent in the area as identified by the surveys. It may be suitable, therefore, to establish if there is any reliable data on the use of the SSSI by barbastelle, and subsequently assessment of impacts to potential flight lines and commuting routes that may be impacted by the scheme.</p> <p>The potential impacts from severance of hedgerows and other linear features appear modest and proposed mitigation appears satisfactory.</p>	<p>Mitigation – Prompt reinstatement of all fragmented hedgerows, woodland belts and foraging habitat within the Order Limits where they overlap the SSSI Impact Risk Zone.</p> <p>Further assessment of the effects on barbastelle which might be considered interest features of the SSSI.</p>	<p>Schedule 3, Requirement 4 – Management Plans.</p> <p>Further information has also been requested</p>	AMBER
NE10 (2.2.6)	<ul style="list-style-type: none"> Cattawade Marshes SSSI Orwell Estuary SSSI 	N/A	<p>The named sites underpin the European designated sites Stour and Orwell Estuaries SPA and Stour and Orwell Estuaries Ramsar. Natural England is satisfied that once the additional work on the mitigation proposed for the</p>	<p>Mitigation - As outlined for the European designated sites named above, mitigation in the form of best practice measures have been stated in the CoCP and CEMP, which should be secured once</p>	<p>Schedule 3, Requirement 4 – Management Plans</p>	GREEN

	<ul style="list-style-type: none"> Stour Estuary SSSI 		European designated sites has been completed, agreed and secured, the project will have a neutral impact on the named sites.	further details on the risk assessments and strategies noted in the CoCP best practice measures GH06, GH07 and GG15 have been provided and agreed.		
NE11 (2.2.7)	<ul style="list-style-type: none"> Cornard Mere, Little Cornard SSSI 	N/A	Natural England concurs with the assessment made in the ES (paragraph 7.5.3, document 6.2.7) that there is no impact pathway for potential significant effects on Cornard Mere, Little Cornard SSSI	N/A	N/A	GREEN
NE12 (2.3.3)	Protected Species <ul style="list-style-type: none"> Bat 	Protected species (C & O)	<p>A letter of no impediment with caveats was issued on 15 March 2023. The draft licence has been submitted to the Planning Inspectorate (Document 6.3.7.7.1: ES Appendix 7.7 – Annex A Bat Draft Licence; dated April 2023). The following comments on the draft licence should be read in conjunction with the LONI with caveats:</p> <ul style="list-style-type: none"> A named ecologist is yet to be appointed. There has been no further survey effort or data produced for the final version of the report. The interpretation of the survey results has identified significant use of Hintlesham Woods SSSI by Barbastelle, with likely presence of a maternity roost, although no tree roosts have been 	Further information required.	N/A	GREEN

			<p>positively identified within the order limits. Trapping, static detectors, and crossing surveys have all been employed to characterise and model the use of suitable habitat by bats, and Barbastelle in particular. Future assessment in support of a formal licence application should apply scrutiny to this data. Is there scope to require further survey effort using radio-tracking to identify significant roosts?</p> <ul style="list-style-type: none">• It is further noted that the results of the static detector surveys have only included numbers for Barbastelle. A large number of other species have been recorded, but total passes have not been included in the results. Please note that a full data set would be beneficial in support of a formal licence application.• The proposed approach is unchanged from the previous draft licence. As a small number of trees have not been inspected or surveyed it is intended to apply LP4 using a precautionary approach, with			
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			<p>emergence/re-entry surveys prior to works. The LONI with caveats, dated 15 March 2023, advised that LP4 should only be applied to the trees that have been deemed unsafe to climb, and that Natural England do not believe it would be disproportionate to undertake activity surveys. Therefore, the applicant should note that if LP4 were to be applied further information/justification would be needed in support of a formal licence application.</p> <ul style="list-style-type: none"> • The LONI also notes that further survey effort is expected to be undertaken in 2023. The final report references surveys of the haul road off the A131, planned for Spring 2023, subject to landowner agreement, but there is no further reference to planned surveys. It is Natural England's understanding that further survey effort will have been undertaken in Spring 2023 as agreed. • Around 10% of the land area within the field study area has access constraints, but 			
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			<p>no mapping of the access constraints could be located for this assessment, and so it cannot be determined whether there are areas with potential significance for bats that remain un-surveyed. Please note that this further mapping would be beneficial in support of a formal licence application.</p>			
NE13 (2.3.3)	<ul style="list-style-type: none"> Badger 	Protected species (C & O)	<p>A letter of no impediment, with some caveats was issued on 24th March 2023. The draft licence which has been submitted to the Planning Inspectorate (Document 6.3.7.9.1: ES Appendix 7.9 – Annex A Badger Draft Licence; dated April 2023), has prompted the following further comments from Natural England's Wildlife Licensing Service. These should be read in conjunction with the comments and caveats raised in the LONI dated 24/3/2023.</p> <ul style="list-style-type: none"> The draft badger licence is acceptable. A named ecologist is yet to be appointed. This document also includes an acceptable draft Method Statement. Efforts have been made to minimise the impact 	Further information required.	N/A	GREEN

			<p>on badger setts through design of the project. 159 badger setts have been identified (within the Order Limits and a 30m buffer) of which 4 will require closure and destruction, 20 will require temporary closure and 4 will require partial closure. The lack of a draft Works Timetable (which must be included at the formal submission) does not currently allow an assessment of the timing/impact of these sett interferences on the overall badger population/social groups.</p> <ul style="list-style-type: none">• A pre-construction badger sett survey is proposed, which addresses one of the points raised in the LONI.• Regarding the Badger survey report, Final Issue A, April 2023: the survey consisted of a desk survey and field surveys, the last conducted March-June 2022. Most of the sites to be surveyed were accessible			
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			<p>but the dry weather reduced some field signs. The survey results are well presented (but with some necessary redactions), with maps and trail-cam images. An assessment of badger territories has not been made, but this is not critical for a project of this type.</p> <ul style="list-style-type: none"> • Information on the disposition of setts found in previous surveys (one of the points raised in the LONI) is referred to in the Badger Survey doc in paragraph 2.1.3, and 3.1.2: <i>“The results of the 2012/2013 badger surveys identified the presence of badger, including setts, within the Order Limits.... The location of setts and other field signs found during the 2012/2013 surveys are shown on Figure 7.9.1 (application document 6.4)”</i> – the unredacted version of this has not been reviewed prior to comment, but Natural England welcome the opportunity to 			
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			<p>do so if the scheme would benefit.</p> <ul style="list-style-type: none"> One of the points raised in the LONI was that the Method Statement should identify other setts available for temporarily displaced badgers. Paragraph 2.2.2 of the licence application states: "<i>There are many other setts within the badger survey area that are unlikely to be affected by the project...</i>" which is not yet considered specific enough to address this point, but it is considered likely that this will become clearer in a formal licence submission, alongside earlier surveys or additional narrative. 			
NE14 (2.3.4)	<ul style="list-style-type: none"> Dormouse 	Protected species (C & O)	An initial assessment of the dormouse draft application was made in March 2023. At this time, Natural England's Licensing Service could not reach a satisfactory decision based on the information provided. Natural England discussed this with the applicant and have not yet received a response to this request for information.	Natural England reserves the right to provide further comments at the Written Representation stage following receipt of the requested information.	N/A	AMBER

NE15 (2.4)	Biodiversity net gain	Environmental Gain Report (document 7.4) (C & O)	<p>It is acknowledged that BNG will not be mandatory for NSIPs until 2025, and as such Natural England welcomes National Grid's commitment to delivering 10% BNG on this project. The comments we have provided are to highlight as opportunities for improvement. Natural England recommend that any deviation from BNG guidance and principles should be acknowledged through clear and transparent reporting.</p> <p>The Defra 3.1 metric is a suitable tool for calculating 10% BNG on the project as BNG is not currently mandatory for NSIPs. However, Natural England would encourage the use of version 4.0, which is now available.</p> <p>Section 1.1.8 of the Environmental Gain Report (document 7.4) explains that location of infrastructure may change within the limits of deviation and therefore the BNG calculation and reporting will be updated throughout the planning and design phases. Natural England would advise that schemes should include all land within the red line boundary within the Applicant's calculations, which would present a 'worst case scenario' approach. As plans are refined, and the scheme</p>	Mitigation - To meet National Grid's voluntary commitment to delivering 10% BNG, Natural England would advise that the Metric is recalculated to account for the points outlined. This may also require a revision of the mitigation/compensation being provided.	Schedule 3 – Requirement 13 Biodiversity Net Gain	N/A – This topic has not been given a risk category as BNG is currently voluntary for NSIP projects. Natural England has provided advice on opportunities for improvement based on the Applicant's voluntary commitment to achieving 10% BNG.
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			<p>extents are reduced, then the calculations can be amended accordingly.</p> <p>The current 3.1 metric calculations result in a 12.8% net gain of area-based units; 13.4% net gain in hedgerow and line of tree units; and a 5.0% net gain in river and stream units. BNG guidance is that 10% net gain should be achieved for each category and Natural England acknowledges that National Grid are continuing to seek ways to increase river and stream gains to achieve the 10% BNG target (as stated in paragraph 5.6.2 of the Environmental Gain Report).</p> <p>Section 3.3.2 of the Environmental Gain Report (document 7.4) states, <i>“Where land access was not available, areas were habitat mapped through desk-based assessment using interpretation of aerial photography, Phase 1 survey data from 2012, surrounding mapped habitats and Natural England’s (2020) Priority Habitat Inventory.”</i> The Environmental Gain Report identifies that not all land was field surveyed. It is not clear to Natural England how much of the project area has been field surveyed and therefore how confident the Applicant can be that the correct</p>			
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			<p>habitat and condition score has been assigned. Where land has not been field surveyed, a condition score of good would be a more precautionary approach rather than moderate.</p> <p>Paragraph 5.7.1 the Environmental Gain Report identifies that the trading rules have not met due loss of high distinctiveness habitat. Further work should be done to resolve this issue. Natural England would advise undertaking further assessment of opportunities to avoid impacts to these high distinctiveness habitats. Where trading rules are not being adhered to, this should be clearly reported.</p>			
NE16 (2.5.2.1)	Nationally Designated Landscapes	<p>Issue summary</p> <p>(C) – construction phase</p> <p>(O) – operational phase</p>	<p>A key concern for Natural England is that the Statutory purpose the AONB is upheld. A significant adverse effect on any of the defining characteristics and ‘special qualities’ of the AONB would be a strong indicator that the ability of the AONB to deliver its statutory purpose would be compromised.</p> <p>Accordingly, Natural England have asserted that the effects on the special qualities of the AONB will need to be specifically assessed for both construction and operational</p>	<p>We strongly recommend that the commentary refers to the AONB’s natural beauty and special qualities identified in full in the Dedham Vale AONBs 2016 Natural Beauty and Special Qualities document, in addition to the brief summary presented in the AONB’s 2021 Statement of Significance.</p> <p>We recommend that the effects of the proposed scheme on the special</p>	N/A	AMBER

			<p>phases of the project in both the LVIA and the ES.</p> <p>Some consideration as to the effects of the scheme on some of the special qualities of the AONB has been made at this within document 6.3.6.2: ES Appendix 6.2 – Assessment of Effects on Designated Landscapes. However, this document does not provide a full and thorough description of the effects of the proposed scheme on all of the defined special qualities of the AONB identified within the <u>Dedham Vale AONBs 2016 Natural Beauty and Special Qualities document</u>⁵.</p>	<p>qualities of the AONB are presented in table format, using table 3.2 as a basis from the 2016 document linked, with the addition of 3 columns to describe the effects on each special quality at construction, Year 1 and year 15 post construction.</p>		
NE17 (2.5.2.2)	Nationally Designated Landscapes	Issue summary (C) – construction phase	<p>Natural England have agreed the proposed methodology for assessing ‘the setting’ to the AONB.</p> <p>Our Targeted consultation response dated 19th Oct 2022 stated in paragraph 4.4.3:</p>	<p>We are seeking to understand how the AONB manager’s comments have been considered in full, as this reflects Natural England’s role as the designating authority for the AONB and our remit in upholding the AONBs statutory purpose. Please</p>	N/A	AMBER

⁵ Alison Farmer Associates (2016). ‘Dedham Vale AONB Natural Beauty and Special Qualities and Perceived and Anticipated Risks’. Final Report. <https://www.dedhamvalestourvalley.org/wp-content/uploads/2021/04/Natural-Beauty-and-Special-Qualities-and-Perceived-and-Anticipated-Risks-Final-Report-July-2016-1.pdf> Accessed 14.07.2023

		(O) – operational phase	<p><i>‘At the meeting held between Natural England, National Grid and the Dedham Vale AONB Manager on 29th September 2022, it was confirmed, in response to queries that ‘the setting’ of the AONB as drawn in Figure 10 was informed by fieldwork, carried out by National Grid’s landscape consultants.</i></p> <p><i>The Dedham Vale AONB Manager has very helpfully undertaken a site visit to ‘ground truth’ the setting area identified by National Grid in the areas around Assington and Leavenheath. We strongly recommend that National Grid give careful consideration to the AONB managers’ views and the request made to enlarge the area indicated as ‘the setting’ to the AONB in Figure 10 of the setting study.’</i></p>	confirm whether ‘the setting’ shown in Figure 5.1 (formerly Figure 10) within Document 6.3.6.2.1: ES Appendix 6.2 – Annex A Dedham Vale AONB Approach and Identification of Setting Study has changed as a result of the AONB Manager’s site visit and whether there are any outstanding issues to address?		
NE18 (2.5.2.3)	Nationally Designated Landscapes	Landscape and Visual Impact assessment methodology	<p>Clarification is required on the LVIA methodology.</p> <p>The LVIA / ES chapter gives the Dedham Vale AONB a sensitivity rating of ‘high’ (international / nationally designated landscapes,) in accordance with the methodology set out in Table 2.1 of the Landscape and Visual methodology document 6.3.6.1. Para 2.4.4.</p>	For the avoidance of doubt, please clarify the approach taken to assessing the Value and Sensitivity of Nationally Designated landscapes within the assessment. Has Dedham Vale AONB been assigned the highest possible	The assessment should comply with GLIVA3 guideline 5.47 which states <i>‘landscapes that are nationally designated (National Parks and Areas of Outstanding Natural Beauty in</i>	AMBER

		<p>states 'In terms of landscape value, nationally and internationally designated landscapes are generally accorded the highest value.' Table 6.3 in the Document 6.2.6: ES: Main Report Chapter 6 – Landscape and Visual, assigns Dedham Vale AONB a 'high' sensitivity. However, Document 6.3.5.4: ES Appendix 5.4 - Assessment Criteria, Table 1.1 shows that designated landscapes appear to be given the second highest value of 'high' and not 'very high'. This appears to contradict the statement made in 2.4.4 and the 3rd Edition Guidelines on Landscape and Visual Impact Assessment (GLVIA3) guideline 5.47 which states <i>'landscapes that are nationally designated (National Parks and Areas of Outstanding Natural Beauty in England and Wales and their equivalents in Scotland and Northern Ireland) will be accorded the highest value in the assessment. If the area affected by the proposal is on the margin of or adjacent to such a designated area, thought may be given to the extent to which it demonstrates the characteristics and qualities that led to the designation of the area. Boundaries are very important in defining the extent of designated areas, but they often follow</i></p>	<p>landscape value in the assessment?</p>	<p><i>England and Wales and their equivalents in Scotland and Northern Ireland) will be accorded the highest value in the assessment.'</i></p>	
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			<i>convenient physical features and as a result there may be land outside the boundary that meets the designation criteria and land inside that does not. Similar principles apply to locally designated landscapes but here the difficulty may be that the characteristics or qualities that provided the basis for their designation are not always clearly set down.'</i>			
NE19 (2.5.3)	Nationally Designated Landscapes	Appendix 6.4 – Viewpoint Assessment Section maps	The AONB is indicated on ES Appendix 6.4 – Viewpoint Assessment Section maps, but the setting to the AONB is not marked on these maps. It would be helpful to include the setting of the AONB, as identified within the Document 6.3.6.2.1: ES Appendix 6.2 – Annex A 'Dedham Vale AONB Approach and Identification of Setting Study' on these maps. This would facilitate the examining authority in identifying viewpoints within the AONB which may pick up changes to the landscape and visual baseline within views from the AONB arising from proposed works within the setting of the AONB. Particularly around the 400kv overhead line and both eastern sealing end compounds	To facilitate interpretation of the Viewpoint Assessment, please indicate 'The Setting' of the AONB on the viewpoint maps in addition to the AONB itself.		GREEN

			which are proposed to be located within the setting of the AONB.			
NE20 (2.5.3)	Nationally Designated Landscapes - LEMP	(C) – construction phase	On 6 th January 2023, Natural England provided comments on the draft Landscape and Ecological Management Plan (LEMP). We noted that ' <i>Proposals for works around hedges allow for retention of hedge roots in-situ with mats proposed to protect the roots to allow for natural regeneration. Natural England is supportive of this approach but would want to see detailed proposals demonstrating that hedge roots would be adequately protected such that regeneration is viable.</i> ' We have not yet seen detailed proposals regarding the protection for hedgerow roots.	Please provide a 'typical detail' for hedgerow protection matting, including the specification for the matting, details of how the matting will be fixed in place, and the extent of the area the matting is to cover either side of the hedgerow to be protected.	Adequate protection for hedgerow roots left in-situ must be secured through planning conditions requiring detailed drawings of the proposed root protection. This is to ensure that hedge roots are adequately protected such that hedgerow regeneration is viable.	GREEN
NE21 (2.5.3)	Nationally Designated Landscapes - LEMP	(C) – construction phase (O) – operational phase	Section 9.2 of the LEMP states that inspections will also be undertaken in any areas that were coppiced during construction to check that the vegetation is re-establishing. This will confirm that these areas are regenerating as planned or would identify the need for further measures, such as additional planting where the coppicing is not leading to successful regrowth.	Please confirm the time of year and frequency at which these inspections will take place. We would expect, as an absolute minimum that regenerating hedgerows would be inspected at the beginning and end of each	The time of year and frequency at which regenerating hedgerow inspections will take place must be secured through planning conditions requiring detailed drawings of the proposed root	GREEN

				growing season for the first five years of regeneration.	protection. This is to ensure timely identification of any problems with hedgerow regeneration in order that remedial action can be undertaken in a timely manner to minimise impacts to the ecological function and visual amenity of the AONB landscape.	
NE22 (2.5.3)	Nationally Designated Landscapes - lighting	(C) – construction phase	We are aware that Dedham Vale AONB is intending to publish new lighting guidance around 13 th July 2023.	We recommend that the applicant cross references their assessment of lighting issues within the ES to the guidance contained in this new document and assesses how this new information might contribute to the strengthening of the ES.	Compliance with best practice guidance issued by the AONB should be secured via planning conditions to minimise adverse landscape effects arising from lighting within the highly sensitive AONB landscape and its setting.	GREEN
NE23 (2.6.2)	Soils and Best and Most Versatile Agricultural Land	ES Chapter 11: Agriculture and Soils (document 6.2.11)	Based on the information provided within the ES (Chapter 11: Agriculture and Soils (document 6.2.11) and Appendices 11.1), it appears that the proposed development will impact an area of	Mitigation - The spatial distribution of ALC grades determined from a detailed ALC survey are necessary to inform the reinstatement criteria, which allows the area	Natural England would advise that a SMP is made a requirement of the DCO Requirement 4.	AMBER

		(C & O)	<p>644 ha, of which 11.6 ha will be permanently lost. The chapter presents an impact assessment on 3.18 ha of permanently developed land (from the CSE compounds and substation) only, of which 3.13 ha is BMV agricultural land (Grades 1, 2 and 3a land in the ALC system), as determined from a soil survey. Section 11.4.8 of Chapter 11 states: <i>“Soil surveys have not been undertaken in the overhead line sections, as the working footprint of these areas would be limited, for example to the pylon bases and the temporary access routes. In addition, the location of these features could move within the parameters set by the Limits of Deviation. See ES Chapter 4: Project Description (application document 6.2.4) for further details.”</i></p> <p>Natural England notes that the installation of overhead pylons typically requires substantial temporary development in the form of temporary access tracks, as well as the smaller permanent land take from the pylon footprint. We would therefore expect a survey to be undertaken to inform the EIA.</p> <p>The impact assessment on the permanent agricultural land take has only been undertaken for the CSE</p>	<p>of each ALC Grade temporarily disturbed to be returned to the same quality as far as practicable to minimise potential loss.</p> <p>Natural England advises that a SMP should be prepared, which can be included as part of the CEMP. Plans of the detailed ALC grades should be provided in the SMP. The SMP should be based on site specific soils information to inform soil handling and restoration and include an aftercare programme which would enable a satisfactory standard of agricultural after-use to be reached, with regards to cultivating, reseeded, draining or irrigating, applying fertiliser, or cutting and grazing the site.</p>		
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			compounds and the substation (i.e. 3.18 ha of which 3.13 ha is BMV). This should be expanded to include all land to be permanently developed. The impact on the temporarily disturbed soils should also be presented.			
NE24 (2.6.2)	Soils and Best and Most Versatile Agricultural Land	ES Chapter 11: Agriculture and Soils (document 6.2.11) (C & O)	An ALC survey has been undertaken at the CSE compound and substation areas; and the underground cable swathes in area E and G. Natural England advises that the survey density should be provided. It is unclear how the ALC grading has informed micro-siting of the CSE compounds or substation, if at all, to minimise the impact on BMV agricultural land.	N/A	N/A, further information requested.	AMBER
NE25 (2.6.2)	Soils and Best and Most Versatile Agricultural Land	ES Chapter 11: Agriculture and Soils (document 6.2.11) (C)	Chapter 11 of the ES includes the good practice measures detailed in the CoCP to protect the quality of soils. Natural England advises that in relation to measure AS02, where land is being returned to agricultural use, the soils should be restored to achieve the baseline ALC grade.	Mitigation - Natural England advises that in relation to measure AS02, where land is being returned to agricultural use, the soils should be restored to achieve the baseline ALC grade.	Schedule 3, Requirement 4 – Management Plans	AMBER
NE26 (2.6.2)	Soils and Best and Most Versatile Agricultural Land	ES Chapter 11: Agriculture and Soils (document 6.2.11) (C)	Chapter 11 of the ES includes the good practice measures detailed in the CoCP to protect the quality of soils. Natural England advises that in relation to measure AS09, it is welcomed that the soils excavated will be re-used on site. The soils	Mitigation - Natural England advises that in relation to measure AS09, the soils excavated from areas of permanent land take should be re-used sustainably on site. Where this is not possible, the	Schedule 3, Requirement 4 – Management Plans	AMBER

			excavated from areas of permanent land take should be re-used sustainably on site. Where this is not possible, the re-use of soils off site should be secured.	re-use of soils off site should be secured.		
NE27 (2.6.2)	Soils and Best and Most Versatile Agricultural Land	ES Chapter 11: Agriculture and Soils (document 6.2.11) (C)	For clarity, we advise that the Applicant should provide simple breakdowns in this summary for each of the individual components. For example, total agricultural area impacted by the scheme (split by scheme component and by ALC grade), total area of BMV agricultural land (split by component) and total BMV agricultural area permanently and temporarily required for the development (split by component).	N/A	N/A Further information requested	AMBER
NE28 (2.6.3)	Soils and Best and Most Versatile Agricultural Land	CEMP Chapter 11. Agriculture and Soil (document 7.5) (C)	Paragraph 11.1.2 references the Good Practice Guide for Handling Soils ⁶ Good Practice Guide for Handling Soils in Mineral Workings ⁷ (Institute of Quarrying, 2021) Soils Guidance (quarrying.org) . Natural England would advise reviewing the measures to effectively manage soil resources set out in the CEMP against this guidance.	N/A	Schedule 3, Requirement 4 – Management Plans	GREEN
NE29 (2.6.3)	Soils and Best and Most	CEMP Chapter 11. Agriculture	Section 11.3 sets out the construction phase measures for	Mitigation - Natural England advises that an SMP should	Natural England advises that a SMP is	

⁶ Ministry of Agriculture, Fisheries and Foods (2000). Good Practice Guide for Handling Soils.

⁷ Good Practice Guide for Handling Soils in Mineral Workings (Institute of Quarrying, 2021). Available at https://www.quarrying.org/soils-guidance?hs_preview=TLRoGudX-47138641948

	Versatile Agricultural Land	and Soil (document 7.5) (C)	agriculture and soils. Natural England advises that an SMP should be prepared pre-consent, informed by site-specific soil information to inform suitable soil handling. The SMP will also set out the target specification for the proposed end uses. The target specification for the restored soils should be based on pre-construction ALC grade.	be prepared pre consent, informed by site-specific soil information to inform suitable soil handling. The SMP will also set out the target specification for the proposed end uses. The target specification for the restored soils should be based on pre-construction ALC grade.	made a requirement of the DCO Requirement 4	
NE30 (2.6.2)	Soils and Best and Most Versatile Agricultural Land	CEMP Chapter 11. Agriculture and Soil (document 7.5) (C)	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 (April through September) to minimise risk of soil damage. This would minimise the need to recondition soils, which requires additional space and time. This is particularly important for land to be restored to agricultural use. Soil handling methods should normally be as specified as in the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (Defra, 2009) and include accompanying Toolbox Talks.	Mitigation - A SMP that includes the reconditioning methodology and the separate handling and storage methodology of soils which may be plastic, however, every effort should be made to avoid this scenario.	Natural England advises that a SMP is made a requirement of the DCO Requirement 4	AMBER
NE31 (2.6.2)	Soils and Best and Most Versatile Agricultural Land	CEMP Chapter 11. Agriculture and Soil (document 7.5) (C)	Natural England advises that the following paragraphs are reviewed: Paragraph 11.3.4 is reviewed as soil should not be handled or trafficked	Further information requested.	N/A further information requested	AMBER

			<p>over/driven on when the ground is frozen or covered by snow.</p> <p>Paragraph 11.3.12 is reviewed. To avoid risk of soil damage and compaction, bulldozers (as currently proposed) should not normally be employed for soil stripping or replacement for soils being reused.</p> <p>Paragraph 11.3.17 should be reviewed. Topsoil stripping depths should be informed through a detailed soil survey. The soil survey will also identify the different soil types, and can be used to inform storage requirements, including the volumes and areas necessary.</p> <p>In addition to the measures outlined in 11.3.24 Natural England would advise that if in place for more than 6 months, the soil stockpiles should be seeded.</p> <p>Expanding on paragraph 11.3.41, in addition to the target specification, a monitoring and aftercare plan should be detailed to confirm the target ALC grade is achieved to ensure no loss of BMV land.</p>			
NE32 (2.6.3)	Soils and Best and Most Versatile Agricultural Land	CEMP Chapter 11. Agriculture and Soil (document 7.5) (C)	As stated in paragraph 11.3.6, Natural England welcomes that pre-construction soil surveys will be undertaken on land subject to temporary disturbance. This should normally be at a detailed level, e.g.,	N/A	Schedule 3, Requirement 4 – Management Plans	GREEN

			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.			
NE33 (2.6.3)	Soils and Best and Most Versatile Agricultural Land	CEMP Chapter 11. Agriculture and Soil (document 7.5) (C)	Natural England welcomes the provision of a soil specialist to oversee all soil handling activities as detailed in paragraph 11.3.7. Their tasks should include identifying when soils are dry enough to be handled.	N/A	Schedule 3, Requirement 4 – Management Plans	GREEN
NE34 (2.6.2)	Soils and Best and Most Versatile Agricultural Land	ES_Appendix 11.1: Agricultural Land Classification Survey	Based on the limitations set out section 2.4, it is expected that further soil surveys are undertaken pre-construction to confirm precise soil characteristics to inform restoration criteria. It is acknowledged that swathes of the underground cable route could not be surveyed due to the Avian Influenza. Areas not subject to a detailed ALC survey should be surveyed prior to construction to inform soil handling and restoration criteria.	N/A	N/A – Further information requested	AMBER
NE35 (2.7.2.3)	Ancient Woodland and Ancient/Veteran Trees	LEMP (document 7.8) (C)	Table 6.1 identifies that the mitigation hierarchy has not been applied to Bushy Park Wood, Butler’s Wood and Waldergrave Wood. Being sited next to a road or ditch does not mean the standing advice for a minimum 15m buffer can be discounted. The purpose of	Mitigation – Application of Natural England’s standing advice for ancient woodland, ancient trees and veteran trees should be applied and the implementation of the mitigation hierarchy reviewed for to Bushy Park Wood,	N/A – Further information requested	AMBER

			the *minimum* distance of 15m stated in Natural England's standing advice is not simply a buffer to protect the roots, it is a buffer to protect the woods and their ecology as a whole., Consideration should be given to the increased exposure to external pollution sources, protection of the canopy extending beyond the boundary, light pollution, dust pollution and changes to hydrology affecting the wood.	Butler's Wood and Waldergrave Wood.		
NE36 (2.7.3)	Ancient Woodland and Ancient/Veteran Trees	LEMP (document 7.8) & Ancient Woodland Report (document 6.3.7.4) (C)	Natural England notes that the Ancient Woodland and Potential Ancient Woodland Report (document 6.3.7.4) has identified sites within the project search area that are not recorded on the Ancient Woodland Inventory but consider them to be ancient woodland. We welcome the Applicant's decision to implement the mitigation hierarchy to treat these sites as ancient woodland.	Mitigation – Application of Natural England's standing advice for ancient woodland, ancient trees and veteran trees will be applied to potential ancient woodland as identified and the mitigation hierarchy will be implemented.	Schedule 3, Requirement 4 – Management Plans	GREEN
NE37 (2.8)	Connecting people with nature	CoCP (document 7.5.1) & ES: Chapter 12 – Traffic and Transport report (document 6.2.12). (C)	It is noted that there will be several temporary diversions of Public Right of Ways (PRoWs) during the construction phase (as detailed in the ES: Chapter 12 – Traffic and Transport report, document 6.2.12). may be required during construction. Natural England welcomes the CoCP good practice measure TT03, which requires temporary diversions to be clearly marked at both ends, including details of the duration of	Mitigation – As outlined in the CoCP good practice measure TT03.	Schedule 3, Requirement 4 – Management Plans.	GREEN

			the diversion and a contact number to report concerns.			
NE38 (2.9.1.1)	Other valuable and sensitive habitats and species, landscapes and access routes	ES Chapter 7 – Biodiversity (document 6.2.7) (C)	Natural England notes that the Applicant has provided table 7.10 in the ES Chapter 7 – Biodiversity that reports non-woodland HPI impacts. For transparency and ease of review, Natural England advises that the Applicant provides a summary table of the total area of all HPI that will be lost, both permanently and temporarily, alongside the total area of proposed mitigation for each HPI	N/A	N/A Further information request	AMBER
NE39 (2.9.1.2)	Other valuable and sensitive habitats and species, landscapes and access routes	Section 9 of the LEMP (document 7.8) (C & O)	Natural England advises that it is made clear that the aftercare plan (section 9) detailed in the LEMP (document 7.8) is intended for habitat loss mitigation proposals as well as reinstatement proposals.	Mitigation – Refinement of the aftercare plan.	Schedule 3, Requirement 4 – Management Plans. Further information requested	AMBER
NE40 (2.9.1.3)	Other valuable and sensitive habitats and species, landscapes and access routes	Section 9 of the LEMP (document 7.8) (C & O)	Natural England advises the Applicant to consider targeted use of herbicides within woodland, rather than the blanket approach currently in their woodland aftercare plan outlined in paragraph 9.2.1 of the LEMP (document 7.8).	Mitigation – Refinement of the use of herbicides in the aftercare plan.	Schedule 3, Requirement 4 – Management Plans. Further information requested	AMBER
NE41 (2.9.1.4)	Other valuable and sensitive habitats and species, landscapes and access routes	Section 9 of the LEMP (document 7.8) (C & O)	Natural England welcomes the use of natural regeneration proposed for some areas of mitigation woodland. We also welcome the assurance that these areas will be checked to ensure they are establishing, as detailed in paragraph 9.1.3 of the LEMP aftercare plan. However, Natural England requests that	Further information requested.	Schedule 3, Requirement 4 – Management Plans. Further information requested.	AMBER

			further detail is provided on what measures would be taken if establishment is not occurring as anticipated.			
NE42 (2.9.2.1)	Other valuable and sensitive habitats and species, landscapes and access routes	LEMP (document 7.8) (C & O)	Natural England welcomes the principles that the Applicant has proposed to follow for planting (outlined in paragraph 8.2.2 of the LEMP, document 7.8). This includes the use of trees and shrubs with local provenance, replacement of failed planting and the provision of protection for young trees from browsing rabbits and deer.	Mitigation – As outlined in paragraph 8.2.2 of the LEMP, document 7.8.	Schedule 3, Requirement 4 – Management Plans.	GREEN

Natural England's Relevant Representations

PART III: Natural England's detailed comments on the Development Consent Order (DCO) and associated documents

Page	DCO/DML or omission ref	Natural England's comments	Risk (Red/Amber/Green)
66	Schedule 3, Requirement 4 – Management Plans	Natural England welcomes the requirement that all construction works must be carried out in accordance with the approved CEMP and LEMP.	GREEN
66	Schedule 3, Requirement 5 – Drainage Management Plan	Natural England welcomes the inclusion of a requirement for a Drainage Management Plan (DMP).	GREEN
67	Schedule 3, Requirement 9 and 10 – Reinstatement planting plan	Natural England welcomes the requirement for a reinstatement planting plan, which includes maintenance for a period of 5 years after planting.	GREEN
68	Schedule 3 – Requirement 13 Biodiversity Net Gain	Natural England welcomes the inclusion of a requirement to demonstrate how at least 10% biodiversity net gain is to be delivered as part of the authorised development.	GREEN
43	Part 6, Paragraph 48 – Felling or lopping	Natural England advises that any works on trees must include pre-commencement bat surveys, and that no works must proceed until a licence is granted, if required. It should also be made clear that all works as outlined in paragraph 48 (1) must be carried out in accordance with the Landscape and Ecological Management Plan.	AMBER
19	Part 4, paragraph 19 – Discharge of water	Paragraph 19 (1) states that " <i>undertaker may use any watercourse or any public sewer or drain for the drainage of water</i> ". Natural England require clarification that there will be no contamination of watercourses, hydrologically linked wildlife sites and associated species. The mitigation outlined in the HRA report (document 5.3) (supported by the CEMP, document 7.5) must be	AMBER

		secured in the DCO to ensure no adverse effect on integrity of the Stour and Orwell Estuaries SPA and Ramsar.	
66	Schedule 3 – Requirement 4 – Management plans	Natural England advise that a Soil Management Plan (SMP) is included in the CEMP and should be prepared pre-consent, informed by site-specific soil information to inform suitable soil handling. The SMP should also set out the target specification for the proposed end uses. The target specification for the restored soils should be based on pre-construction ALC grade.	AMBER
NA	Omission 1	Natural England would advise that a SMP is made a requirement of the DCO Requirement 4	AMBER
NA	Omission 2	Natural England would advise that a drainage strategy is made a requirement of the DCO. To identify the methods required to control runoff for different areas of the project.	AMBER
NA	Omission 3	Natural England would advise that once approved, the embedded measures outlined in table 3.1 of the Hintlesham Woods SSSI Assessment (document 6.3.7.1.2) should be made a requirement of DCO Requirement 4.	AMBER

