The Great Grid Upgrade

BT-NG-020621-545-0225

Bramford to Twinstead Reinforcement

Volume 8: Examination Submissions

Document 8.5.4: Applicant's Responses to First Written Questions

Final Issue A
October 2023

Planning Inspectorate Reference: EN020002

The Infrastructure Planning (Examination Procedure) Rules 2010) Regulation 8(1)(k)

nationalgrid

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Introduction

Document Purpose

This document provides the Applicant's responses to the Examining Authority's First Written Questions (ExQ1) [**PD-005**] received on 13 October 2023 for the project. This document contains responses to all of the questions addressed to the Applicant. It also includes certain instances where responses have been provided to questions not addressed to the Applicant, but where the Applicant considers a response would helpfully assist the Examining Authority.

Project Overview

National Grid Electricity Transmission plc (here on referred to as 'the Applicant') has made an application for development consent to reinforce the transmission network between Bramford Substation in Suffolk, and Twinstead Tee in Essex. The Bramford to Twinstead Reinforcement ('the project') would be achieved by the construction and operation of a new 400 kilovolt (kV) electricity transmission line over a distance of approximately 29km (18 miles), the majority of which would follow the general alignment of the existing overhead line network.

The application for development consent was accepted for Examination on the 23 May 2023.

Structure of the Document

The document has been structured to align with the numbering used within the ExQ1 [**PD-005**]. Therefore, the document starts at '0' in terms of the numbering of the chapters and continues through to Chapter 13: Traffic and Transport. In addition, the following appendices have been included at the end of the document:

- Appendix A: National Grid's Commitments when Undertaking Works in the UK
- Appendix B: Third Party Guidance Working Near National Grid Equipment
- Appendix C: East Anglia ONE DCO Approved Landscaping
- Appendix D: Table of Public General Legislation to be Applied, Modified and Excluded under the Draft Development Consent Order

- Appendix E: Copies of the Eastern Union and Hadleigh Junction Railway Act 1846 (the 1846 Act) and the Eastern Union and Hadleigh Junction Railway Sale Act 1847 (the 1847 Act))
- Appendix F: Table of Local Legislation to be Disapplied under the Draft Development Consent Order
- Appendix G: Design Manual for Roads and Bridges Vol.11, Section 3, Part 8

0. Miscellaneous and General

0.1 General and Cross-Topic

Table 0.1 – General and cross-topic

Reference	Question	Applicant's Response
MG1.0.1	There does not appear to be a separate application document dealing with the other consents and licences that would be required alongside any DCO for the Proposed Development. Is the list set out in section 2.5 of the Planning Statement definitive and up to date? The ExA notes that it is common practice for NSIP Applicants to provide a comprehensive, stand-alone guide, which has the advantage that it is simple to update during the Examination. Is the Applicant willing to do this?	The project will be run in compliance with all relevant legislation, consents and permits in accordance with good practice measure GG01 in the Construction Environmental Management Plan (CEMP) Appendix A: Code of Construction Practice (CoCP) (**document 7.5.1 (B)**). The licences and consents currently identified as being relevant to the project are listed in Table 2.1 of the CEMP (**document 7.5 (B)**). This provides a more detailed list than the generic list of potential consents, licences and permits identified in the Planning Statement [**APP-160**] and expands on this by providing details of the expected locations where the potential consents, licences and permits could reasonably be expected. The Applicant confirms that, to the best of the Applicant's knowledge the list in Table 2.1 of the CEMP (**document 7.5 (B)**) is correct and reflects the latest position. Therefore, the Applicant does not consider an additional standalone document necessary as that would duplicate this information.
MG1.0.2	If there was to be a dispute with the post-construction site condition survey and the landowner refused handover, how would the matter be resolved? How is handover secured in the dDCO? (Refer to paragraph 15.2.1 of the CEMP **[APP- 177]**.)	Article 26 of the draft Development Consent Order (dDCO) (**document 3.1 (C)**) (temporary use of land by National Grid) would be anticipated to be the relevant power pursuant to which site access would be taken. Article 26(5) and (6) each require that the land be restored to the reasonable satisfaction of the owners of the land, subject to certain provisos. Article 59 (arbitration) provides that where there are differences under any provision of the dDCO, they must be referred to arbitration. Article 26(7) provides for a right to compensation where there is damage or loss. Any dispute as to compensation must (26(8)) be determined pursuant to Part 1 of the 1961 Act. This process will be supported by, and the scenario limited through the use of the CEMP (15.2.1) (**document 7.5 (B)**) where it makes clear the provisions for pre site condition surveys: "*The contractor will undertake pre-site condition surveys as part of the site setup. This will include making a record of the condition of existing features such as tracks and roads. Post-site condition surveys will be*

Reference	Question	Applicant's Response
		undertaken by the contractor after construction and the results of these will be discussed with the landowner prior to handover."
MG1.0.3	The CEMP [**APP- 177**] at paragraph 15.4.5 sets out the process for dealing with complaints, involving the community relations team, other members of the project team and the project construction team. Would you have a target timeframe to investigate a complaint made by public, to issue findings, and to undertake remedial actions? If so, what would it be? If not, why not?	The Applicant endeavours to respond to all queries, including complaints, within 10 working days of receipt. In some instances, such as where more detailed investigations are required to resolve a complaint, or where a response to a complaint relies on the input of a third party outside of the Applicant's control, it may not be possible to resolve the complaint within this timeframe. Where this is the case, a holding response will be issued within 10 working days. This holding response will explain why the Applicant has been unable to respond in full and set out the new target date for resolving the complaint.
MG1.0.4	Following discussions at OFH1, you submitted the document, Extant Grid Supply Point Substation Consents [**REP1-037**] into Examination at Deadline 1. Its Appendix E, the Decision Notice, refers to approved plans. For completeness, can these be submitted into the Examination? If the grid supply point substation was to be constructed in accordance with the original and subsequently amended planning consent and approved drawings, would it affect the outcome and conclusions of the ES submitted with the DCO application?	The Applicant has provided a new document at Deadline 3, Extant Grid Supply Point (GSP) Substation Approved Plans (**document 8.5.14**) which comprises the approved plans relating to the GSP Substation consents. In terms of the application for development consent, Environmental Statement (ES) Chapter 1: Introduction [**APP-069**] notes that the Applicant obtained planning permission for the GSP substation under the Town and Country Planning Act (TCPA) in October 2022 (planning application reference: 22/01147/FUL). However, for the purposes of a complete assessment of the effects of the project, the GSP substation is described within ES Chapter 4: Project Description [**APP-072**] and the likely significant effects are assessed within ES Chapters 6 to 15. Section 4.8 of the ES Chapter 4: Project Description [**APP-072**] describes the works pursuant to the GSP substation and this description is compatible with the design originally submitted and approved under the TCPA. It is acknowledged that, following the submission of the application for development consent, a Section 73 (Minor Material Amendment) application was submitted and validated on 6 June 2023 in order to vary Condition 2 (Approved Plans) and Condition 3 (Surface Water Drainage) of the existing planning permission: Taking account of the approved TCPA design, as well as the proposed amendments to the existing planning permission, the Applicant is comfortable that the GSP substation, in its amended form remains deliverable pursuant to the Development Consent Order (DCO) (if required), and that the revised design remains in accordance with the parameters contained within the DCO (subject to the Limits of Deviation (LoD) and subsequently is assessed within the ES).

0.2 Legislation and Policy

Table 0.2 – Legislation and policy

Reference	Question	Applicant's Response
MG1.0.8	In the Applicant's cover letter [**APP-001**], reference is made to the Government document *Powering Up Britain*, published by the Department for Energy Security and Net Zero, March 2023, explaining the reason for not referencing it. What weight should be given to this publication?	Powering Up Britain provides confirmation that the Government remains committed to the delivery of 50GW of offshore wind and new nuclear; both are technologies supported by the project. It also recognises the urgent need for upgrades to the transmission network. Powering Up Britain (March 2023) is up to date Government policy, consistent with other documents (see Section 3.4 of the Planning Statement [**APP-160**]) and provides a national plan for the energy sector. However, the document does not comprise planning policy and was not written to guide decision making on Nationally Significant Infrastructure Project (NSIP) applications. As current Government policy, Powering Up Britain should attract full weight and is capable of being important and relevant for decision making.
MG1.0.9	Neither the Planning Statement [**APP-060**] nor Chapter 2 of the ES [**APP-070**] appear to refer to A *Green Future: Our 25 Year Plan to Improve the Environment* published by the Department for the Environment, Food and Rural Affairs in 2018. The Suffolk councils cite this in their LIR [**REP1-045**]. What weight should the Applicant give to this publication?	A Green Future: Our 25 Year Plan. The Plan provides the Government's plan to improve the environment. The Plan is relatively high level, is not planning policy, was not written for the energy sector and is five years old. The draft Overarching National Policy Statement (NPS) for Energy (EN-1) (March 2023) states in paragraph 5.4.39 that *'The government's 25 Year Environment Plan and the Environment Act 2021 mark a step change in ambition for wildlife and the natural environment. The Secretary of State should have regard to the aims and goals of the government's Environmental Improvement Plan and any relevant measures and targets, including statutory targets set under the Environment Act or elsewhere.'* It is clear, therefore, that the Plan remains current Government policy attracting full weight and that it is capable of being important and relevant for decision making. The Applicant considers that the project is compliant with the Plan insofar as it is relevant to the project. The Plan sets out ten goals which include the achievement of: clean air; clean and plentiful water; thriving plants and wildlife; reduced risk of harm from environmental hazards like flooding and drought; the more sustainable and efficient use of resources from nature; enhanced beauty, heritage and engagement with the natural environment; mitigation and adaption to climate change; minimisation of waste; management of exposure to chemicals; and enhanced biosecurity. Where relevant to the project, all these topics are covered in full in the ES. Policy on these topics is provided in the designated and draft NPS, which provide policy directly relevant to the development of NSIP. Under Section 104 of the Planning Act 2008, the Secretary of State (SoS) must have regard to the designated NPSs. The draft NPS are also relevant and important matters, comprising advanced draft documents that have been subject to consultation and are very recent (March, 2023). The Applicant's view is that policy on these topics in both the designated and draft NPS should carry more weight than A Green Future: Our 25 Year Plan.

Reference	Question	Applicant's Response
		A Green Future: Our 25 Year Plan highlights the Government's support for the reduction in the United Kingdom (UK)'s carbon footprint. The project is critical to the rapid decarbonisation of the National Grid and the principle of the project is therefore supported by the Plan.
MG1.0.10	Neither the Planning Statement [**APP-060**] nor Chapter 2 of the ES [**APP-070**] appear to refer to *The UK's Industrial Strategy*, included in the Suffolk councils' LIR [**REP1-045**], that gave rise to the associated *Build Back Better: our plan for growth* that was published by HM Treasury in March 2021. Should the Applicant take account of it?	The UK's Industrial Strategy was published in 2017 and has now been archived. The Government's website states that (His Majesty's (HM) Government, 2020). *'In the 4 years since the strategy was published, the UK's business and economic environment has changed. Creating and supporting jobs remains the government's central economic focus, but helping to drive growth in existing, new and emerging industries is also a priority. This is why we are transitioning the Industrial Strategy into our Plan for Growth and its related strategies.'* Given that the Strategy has been superseded and the Government states that it is out of date, the Applicant's view is that it carries no weight and is not important and relevant in decision making.
MG1.0.11	Has account been taken of *Smart Grid Vision and Routemap* published by the Department of Energy and Climate Change and Ofgem in February 2014 that is cited in Together Against Sizewell C's RR [**RR-049**]? What weight should be given to this publication?	Together Against Sizewell C's Relevant Representation (RR) [**RR-049**] mentions the Smart Grid Vision and Routemap as part of a description of documents published but does not state why it is considered important or relevant to the project. The document was a 'vision and routemap' rather than policy and was published nine years ago under the 2010-2015 Conservative and Liberal Democrat Coalition Government. Given that the document is dated, does not comprise policy, and was not written to guide applications for NSIPs, the Applicant considers that it should attract little, if any, weight and is not important and relevant in decision making. Whilst the Applicant does not consider the document important and relevant for decision making, the project does not conflict with the Smart Grid Vision. The project is one of a number of projects that is required to facilitate the future transmission network. As set out in the Needs Case [**APP-161**] the development of the network is informed by a number of publications produced by the Electricity System Operator (ESO), including the Future Energy Scenarios which considers how electricity is generated, transported and consumed in the future. The main case made in [**RR-049]** is that Sizewell C is not required because new nuclear is not required, and therefore, by implication, the project is not required. Given that the project is required to connect a large number of electricity generators, it would be required with or without the development of Sizewell C. See Table 3.2 of the Need Case [**APP-161**] for a list of developments to be supported by the project.
MG1.0.12	The Suffolk councils' LIR [**REP1-045**] refers to the Government's *Community Benefits for Electricity Transmission Network Infrastructure*, published in March 2023. Should the Applicant take account of it?	The Community Benefits for Electricity Transmission Network Infrastructure document is guidance that was published for consultation between March 2023 and June 2023. The guidance document is of direct relevance to the Applicant's operations and as a consequence, the Applicant has responded to the consultation and is monitoring the next steps. The consultation document recognises the critical role electricity networks play in connecting affordable green energy and transporting it to where it is needed. It also recognises the benefits of the onshore network

Reference	Question	Applicant's Response
		infrastructure in terms of investment and jobs to the UK. This provides further support for the need for the project. The consultation document recognises that the industry is already offering community benefits, but that a review is beneficial on how these are delivered. The consultation document sets out potential ways in which community benefits could be delivered, the types of benefits that could be delivered and the potential level of funding. Given that it is a consultation document seeking views, this process does not yet provide clear, robust guidance that can be followed for the project. The Applicant is committed to continuing discussions with the Councils and other key stakeholders regarding their aspirations in respect of community benefits. This process would be informed by the progression of the document referenced but cannot be guided by it whilst its requirements are evolving. The consultation document recognises that community benefits are separate from the planning process, as stated at page 12: *'For the purposes of community benefits for network infrastructure, we view community benefits as an additional tool, separate from the planning process, to ensure that where infrastructure is necessary, communities can directly benefit from hosting this infrastructure.'* Given that this is a consultation document it cannot yet be accorded full weight as current Government policy and, furthermore, in a context where community benefits are separate from the planning process, it is not important and relevant to decision making.
MG1.0.13	The Suffolk councils' LIR [**REP1-045**] refers to the National Planning Policy Framework, September 2023. Given that its publication superseded submission of this application, what weight should the Applicant attach to it?	Any document published before the decision is made on an application is capable of being an important and relevant matter, including the latest National Planning Policy Framework (NPPF). The NPPF (September 2023) was written to guide decision making on applications consented under the TCPA 1990 rather than the Planning Act 2008 and was therefore not designed to guide decision making in NSIPs. Therefore, the Applicant's view is that full weight should applied to policies in the NPPF (September 2023) depending on the extent to which they are important and relevant to decision making on NSIPs and their degree of consistency with policies in the relevant NPS. The Planning Statement [**APP-160**] provides a full assessment of the compliance of the project with policy contained in the previous iteration of the NPPF (July 2021). The NPPF published in September 2023 was very similar to the July 2021 version, with amendments primarily relating to minor changes to policy on onshore wind. There are not considered to be any changes to the NPPF relevant to the project and the assessment in the Planning Statement [**APP-160**] remains robust and accurate.
MG1.0.16	Section 4.3.3 of the Planning Statement [**APP-160**] states that: '*Section A (Bramford Substation) and Section B (Hintlesham) are addressed separately,*	This is an error; the paragraph should say: '*Section 4.3.3 of the Planning Statement* [***APP-160***] *is amended to read, 'For the purposes of the local planning policy assessment, Section A (Bramford Substation) and Section B (Hintlesham) are addressed separately,*

Reference	Question	Applicant's Response
	despite these are combined into a single Section AB (Bramford/Hintlesham) elsewhere in the application (sic). This recognises that Section A (Bramford Substation) falls within Mid Suffolk District, whereas Section B (Hintlesham) falls within Mid-Suffolk District.' Does this need to be corrected in relation to Section B?	*although, these are combined into a single Section AB (Bramford/Hintlesham) elsewhere in the application. This recognises that Section A (Bramford Substation) falls within Mid Suffolk District, whereas Section B (Hintlesham) falls within Babergh District'.'* The Errata List [**REP2-066**] will be resubmitted at an appropriate deadline to include this change.

0.3 The Proposed Development

Table 0.3 – Legislation and policy

Reference	Question	Applicant's Response
MG1.0.17	Trenchless crossings are proposed at several locations and the assessments set out in the ES have assumed their use (e.g., ES Ch 4 paragraph 4.7.2 *ff* [**APP-072**]). How does the dDCO secure the use of trenchless installation at these locations?	Requirement 4 of the dDCO (**document 3.1 (C)**), secures various management plans, including the CEMP (**document 7.5 (B)**) which includes Appendix B: Register of Environmental Actions and Commitments (REAC) (**document 7.5.2 (B)**). The REAC includes the following embedded measures which secure the trenchless crossings**:** • EM-E05 (River Box); • EM-G04 (River Stour and Sudbury branch line); and • EM-G08 (south of Ansell's Grove).
MG1.0.18	ES chapter 4 [**APP-072**] (paragraph 4.6.6) includes an illustration (4.2) that shows how trees would be cut back where the 400kV line passes through woodland. On either side of the 20m swathe there is a 12.5m band of 'graduated cutting back'. Is this appropriate? It could, for example, lead to tall tree stumps that look unnatural and may not regrow. Might coppicing and regrowth management be more	In the majority of cases, the proposed overhead line would use an existing maintained swathe through woodland areas either from the 132kV overhead line which would be removed or from the existing 400kV where a transposition is proposed at Hintlesham Woods. Coppicing is proposed in these areas, as this would hasten re-establishment compared to a standard working method where trees are removed. The vegetation within these swathes would already be managed to maintain operational safety clearances. Therefore, in such locations the trees are already coppiced and managed to some degree. During operation, the vegetation would be managed in accordance with operational safety clearances, which would require a smaller area than what is required during construction. As stated in paragraph 6.2.23 of the Landscape and Ecological Management Plan (LEMP) (**document 7.8 (B)**), all tree works would be carried out by a specialist arboricultural contractor to avoid damage to the health of the

Reference	Question	Applicant's Response
	appropriate to achieve a more natural and biodiverse woodland edge ecocline?	tree. The arboriculturist would advise on what tree works are required as part of balancing a safe working environment for the contractor and avoiding unnecessary damage to the trees.
MG1.0.19	Paragraph 5.2.4 of ES Appendix 4.1, Good Design [**APP-090**], compares the use of T-pylons and lattice pylons generally, and for the purposes of the Proposed Development. It states that T-pylons require *'permanent maintenance access to each pylon for maintenance activities, whereas steel lattice pylons can be climbed by linesmen to perform any necessary maintenance for the duration of the asset lifecycle of the lattice pylons*.' Assuming both types require permanent maintenance access, what is the difference between the requirements for the two pylon types, and what is the particular relevance of any difference to this project?	T-pylons do not have ladders access facilities or step-bolts for operatives to climb the structure therefore access to the work area for routine inspections or necessary maintenance is achieved using a Mobile Elevated Working Platform (MEWP). A permanent access route (made of stone or other suitable surfacing) to each T-pylon is required to allow for this MEWP access. Steel lattice pylons have traditionally been accessed by operatives climbing the pylon legs or ladders to the work area. As such, access for routine inspections or necessary maintenance, as noted in Good Design [**APP-090**] is achieved from light vehicles or from walking access which do not require permanent access routes to each pylon. For major works, for example construction or future conductor replacement, where plant and equipment is required, temporary access routes would be installed to facilitate the access and working area requirements. ES Chapter 4: Project Description [**APP-072**] provides details of the wider works involved with lattice pylon and overhead line construction and maintenance. As such, the use of lattice steel pylons means that permanent maintenance access routes would only need to be constructed to each pylon position for major works or in exceptional circumstances and the Applicant considers this point reinforces the assessment that standard steel lattice pylons would be the preferred pylon design.
MG1.0.20	The Proposed Development includes the removal of certain lengths of the existing 132kV line and its associated pylons, and 2km of the existing 400kV line to the south of Twinstead Tee. The ES includes this as a benefit of the Proposed Development. Where the line proposed for dismantling is not to be replaced by a new 400kV line (for example on Work Plan Sheet 21 [**APP-010**]), how is its removal secured by the dDCO, and over what timescale?	The removal of approximately 25km of the existing 132kV overhead line, as summarised in paragraph 4.5.6 – 4.510 of ES Chapter 4: Project Description [**APP-072**], is necessary to facilitate the installation of the new 400kV overhead line. It is secured as EM-P02 within the REAC (**document 7.5.2 (B)**). The REAC forms an appendix to the CEMP (**document 7.5 (B)**), compliance with which is secured through Requirement 4 (Management Plans) of Schedule 3 to the dDCO (**document 3.1 (C)**). In terms of timescales, it is necessary to remove many sections of this prior to commencing works on the new 400kV lines where it is in the same location, in all cases this will be complete by the end of the main construction period. In respect of the 2km length of 400kV line proposed to be removed, as summarised in paragraph 4.5.11 – 4.5.14 of ES Chapter 4: Project Description [**APP-072**] its removal is secured at EM-G01 in the REAC (**document 7.5.2 (B)**). As to timescale, as confirmed by paragraph 4.5.2 of ES Chapter 4 Project Description [**APP-072**], this is likely to be towards the end of the project after the Stour Valley West cable sealing end (CSE) compound has been constructed and the existing 400kV overhead line is no longer in operation. This works would also need to tie into an agreed outage. In regards to the duration for this piece of work, the Applicant estimates it will take one month for the removal.

Reference	Question	Applicant's Response
MG1.0.21	The parameters and LoD for the height of structures (Article 5 of the dDCO (**[APP-034]**) are set against finished ground level. How is it possible to compare and assess these against existing ground level? (It is noted that the grid supply point substation elevations show AOD, but this is less obvious for other structures.)	Until the detailed design stage, the finished levels will not be confirmed. The contractor's design would account for the existing ground levels, and any cut and fill necessary to establish that level. The reference to 'finished ground level' in Article 5 of the dDCO (**document 3.1 (C)**) refers in that instance to '*underground electric line*'. The ground above underground line (cables) would be reinstated to the original level, with a minimum distance between that level and the top of the protective tiles or where there are no protective tiles the top of the cable ducts, of 0.9m. In relation to pylons, the Table of Parameters, which forms part of the Work Plans [**APP-010**], references the ground level at the centre of the pylon for each proposed pylon position. A nominal allowance has been made by the designer to account for variations in ground level at each of the four legs, such that the structure height quoted within the schedule for that pylon position would only be exceeded because of this in exceptional circumstances. If the pylon position needs to be adjusted however, the ground level would be derived from the revised profile of the proposed overhead line centreline and a similar approach taken such that the LoD would not consequently be exceeded.
MG1.0.22	With reference to ES Chapter 4 [**APP-072**] at paragraph 4.4.10, have all of the temporary access routes that would be removed been identified, and have the effects of each been considered in the relevant ES chapters?	Paragraph 4.4.10 of ES Chapter 4, Project Description [**APP-072**] notes that some temporary access routes may be removed at the end of works in a particular area, whereas other temporary access routes may need to be in place for the duration of construction (up to four years). The temporary access routes are not fixed and could be located anywhere within the Order Limits. The ES has assessed a reasonable worst case, that all of the temporary access routes proposed on the project, as shown on ES Figure 4.1 [**PDA-002**] are assumed to be in place for the whole duration of construction. Section 11 of each ES topic chapter assesses flexibility associated with the design within the Order Limits. All temporary access routes would be removed at the end of construction in accordance with GG07 in the CEMP Appendix A: CoCP (**document 7.5.1 (B)**), which states that *'land used temporarily will be reinstated where practicable (bearing in mind any restrictions on planting and land use) to its pre-construction condition and use.'* Therefore, the Applicant can confirm that all ES Chapters have assessed the construction and subsequent removal of all temporary access routes proposed on the project.
MG1.0.23	For areas of new mitigation and enhancement planting, can you advise if future farm machinery movements were taken into consideration and if existing routes for farm machinery are to be preserved?	Existing field boundaries have been used where practicable for hedgerow planting and visual screening in order to avoid impacts on land use and farming. The locations of proposed additional mitigation measures are shown on ES Figure 16.1: Embedded Measures and Mitigation Proposals [**APP-155**] and require to be in those locations to mitigate the likely significant effects. The enhancement planting is described in the Environmental Gain Report [**APP-176**] and will be subject to further design to take into consideration site constraints. In both cases, the Applicant is in discussions with the relevant landowners to discuss the proposals to limit the effect of the planting on the operation of the land.

Reference	Question	Applicant's Response
		Taking account of discussions with landowners, including future farm operations, the final detailed layout of mitigation planting is subject to Requirement 9 (Reinstatement planting plan) of the dDCO (**document 3.1 (C)**). The final detailed layout of enhancement planting is subject to Requirement 10 (Reinstatement planting plan – implementation, compliance and replacement) of the dDCO (**document 3.1 (C)**).
MG1.0.24	Stour Valley Underground [**RR-045**] raised concerns about the apparent disassociation of the grid supply point substation from the wider Bramford to Twinstead NSIP project. Can you address its concerns about the need for this element of the Proposed Development not only in association with the current application but also: a) Against the background of issues raised about its potential cumulative impact in combination with other projects that may tie into the grid supply point substation including but not limited to the cited 'Butler's Wood Green Energy Centre' and 'the Great Grid Upgrade/Norwich to Tilbury'? b) About your perceived failure to 'accurately disclose the full need case and wider objectives of the GSP substation'?	The Planning Statement [**APP-160**] sets out the rationale for including the GSP substation within the wider proposals for the project. A further explanation of why the GSP substation is needed is included in Table 2.14 of the Applicant's Comments on RRs [**REP1-025**]. In summary, the GSP substation is a core part of the project and is needed to facilitate the removal of approximately 25km of 132kV overhead line between Burstall Bridge and Twinstead Tee. This is because this alignment is generally used for the Applicant's proposed new 400kV overhead line. This GSP substation work needs to be complete before the 132kV overhead line can be removed. The 132kV overhead line is the asset of the distribution network operator in this area, UK Power Networks (UKPN). The removal of this line means that alternative arrangements need to be put in place to secure the supply of the local electricity distribution network and the GSP substation is proposed as part of the project following consultation with UKPN. It is not designed for the purpose of connecting electricity generation and would require works outside of the scope of the project to facilitate any such connections. The cited Butler's Wood Green Energy Centre is an example of a project which has agreed a potential future connection to the GSP substation in the ESO's Transmission Entry Capacity (TEC) register of projects that hold a contract to directly connect to the national electricity transmission system. The ESO is a legally-separate part of the National Grid group which has a duty to agree connections onto the national electricity transmission system with developers who wish to build new electricity generation infrastructure. The ESO's decision-making is independent of the Applicant's needs case for the GSP substation as part of the project. The Butler's Wood Green Energy Centre meanwhile is a proposal by a third party which would need to secure its own separate consents before it could be delivered. With regard to the comment in the RR [**RR-045**] about a link between the Applicant's separate Norwich to Tilbury project and the Bramford to Twinstead Reinforcement, it is worth reiterating that the only point of interface between the two projects currently envisaged is that both projects would connect into Bramford substation. The Applicant strongly refutes that it has in any way disassociated or misrepresented its intentions regarding the GSP substation. As made clear by Sections 14 and 31 of the Planning Act 2008, insofar as development is an NSIP, a DCO must be sought. But in respect of any other development, including that related to the NSIP (so-called Associated Development), it is open to the Applicant to seek such planning permissions as it needs. Nonetheless, the Applicant took a positive decision to include the GSP in all consultations related to the project and in the final DCO submission to ensure the proposals could be considered holistically.

0.4 Alternatives

Table 0.4 – Alternatives

<table>
<tr><th>Reference</th><th>Question</th><th>Applicant's Response</th></tr>
<tr><td>MG1.0.25</td><td>Compared to those set out in Table 9.3, PS1 Lifetime Cost of the Strategic Options Report, June 2001 [APP-162], what are the equivalent current lifetime costs of transmission losses and maintenance for the PS1a (HVDC solution) and PS1b (AC solution)?</td><td>Table 9.3 PS1 Lifetime Costs of Strategic Options Report June 2011 [APP-162] sets out subsea alternatives for resolving the Applicant's needs case. The Applicant's current lifetime cost assessment used for appraising alternatives is based upon a validated 2020/21 cost base. Revised Table 9.3 sets out the lifetime costs for PC1a (high-voltage direct current (HVDC) Solution) and PC1b (alternating current (AC) Cable Solution) in 2020/21 prices.

Revised Table 9.3 in 20/21 Prices
<table><tr><th></th><th>PC1a
HVDC
Converters and Cables</th><th>PC1b
Cable and Shunt Reactors</th></tr><tr><td>Capital Cost</td><td>£2,552.10m</td><td>£3,988.22m</td></tr><tr><td>NPV Transmission Loss Cost over 40 years</td><td>£587.3m</td><td>£304.55m</td></tr><tr><td>NPV Maintenance Cost Over 40 Years</td><td>£174.01m</td><td>£20.05m</td></tr><tr><td>Lifetime Cost</td><td>£3,313.46m</td><td>£4,312.83m</td></tr></table></td></tr>
<tr><td>MG1.0.26</td><td>Tables 10.1 to 10.4 of the Strategic Options Report, June 2011 [APP-162] give costs for different technologies for the Bramford to Twinstead Strategic Options P2a, b and c for the financial year 2011/12. What are the current equivalent costs?</td><td>Tables 10.1 to 10.4 of Strategic Options Report June 2011 [APP-162] set out options for a connection between Bramford and Twinstead considering Option P2a (AC Overhead Line Connection), P2b (AC Underground Cable Connection), P2c (AC Gas Insulated Line Connection). The Applicant's current lifetime cost assessment used for appraising alternatives is based upon a validated 2020/21 cost base.

In 2011 some common works were defined as part of the strategic consideration of options. These common works have now been completed or have been separated from the project. Therefore, to provide a consistent approach, Tables 10.1 to 10.3 are revised to the 2020/21 cost base excluding common works, which can be compared to the same 'total excluding common works' set out in Tables 10.1 to 10.3 in the Strategic Options Report June 2011.</td></tr>
</table>

It should also be Noted that the proposed reinforcement is now slightly longer (29km) than that assumed in the Strategic Options Report June 2011 (28km). This is due to the detailed routing to avoid constraints. The tables below have used the 28km length from the Strategic Options Report June 2011 to maintain consistency and ensure a comparison of relative costs. References to 'Chapter 8' in the tables below refer to Chapter 8 of the Strategic Options Report June 2011.

Revised Table 10.1 PS2a (AC Overhead Line) Capital Cost Summary in 20/21 prices

Common Works		
As set out in Chapter 8		N/A
Potential Strategic Option – Transmission Reinforcement Assets		
Resolving East Anglia Boundary and Negative Phase Sequence Currents	2 Additional AC Connection Bays at the Bramford 400kV Substation	£20.1m
	Construction of a new Bramford – Twinstead Tee 28km 400kV double circuit overhead line	£111.4m
Potential Strategic Option – Contingent Transmission Works		
Reconductoring of all Sizewell to Bramford Overhead Line Circuits		£127.8m
Total excluding common works		**£259.3m**

Revised Table 10.2 PS2b (AC Underground Cables) Capital Cost Summary in 20/21 prices

Common Works	
As set out in Chapter 8	N/A
Potential Strategic Option – Transmission Reinforcement Assets	

Resolving East Anglia Boundary and Negative Phase Sequence Currents	2 Additional AC Connection Bays at the Bramford 400kV Substation	£20.1m
	Construction of a new Bramford – Twinstead Tee 28km 400kV two circuit AC Cables (3 Cores per phase), including shunt reactors and switching	£1,169.4m
Potential Strategic Option – Contingent Transmission Works		
Reconductoring of all Sizewell to Bramford Overhead Line Circuits		£127.8m
Total excluding common works		**£1,317.3m**

Revised Table 10.3 PS2c (GIL) Capital Cost Summary in 20/21 prices

Common Works		
As set out in Chapter 8		N/A
Potential Strategic Option – Transmission Reinforcement Assets		
Resolving East Anglia Boundary and Negative Phase Sequence Currents	2 Additional AC Connection Bays at the Bramford 400kV Substation	£20.1m(
	Construction of a new Bramford – Twinstead Tee 28km 400kV two circuit AC Cables (3 Cores per phase), including shunt reactors and switching	£1211.3m
Potential Strategic Option – Contingent Transmission Works		
Reconductoring of all Sizewell to Bramford Overhead Line Circuits		£127.8m
Total excluding common works		**£1,359.2m**

Reference	Question	Applicant's Response
		Table 10.4 has been revised below to apply the 2020/21 validated cost base. To provide clarity, the distance for maintenance costs has been revised to only consider the 28km section of new construction rather than the full 50km circuit to Braintree. This is because the existing 22km section of the revised circuit from Twinstead to Braintree is already part of the existing maintained Transmission system. The consideration of losses across the complete revised circuit from Bramford to Braintree via Twinstead (with 28km of the circuit being the new build section and 22km of existing circuit) remains valid for consideration as part of the whole life cost.

Revised Table 10.4: PS2 Lifetime Cost in 2020/21 prices

	PS2a OHL	PS2b AC Cable and Shunt Reactors	PS2c AC GIL
Capital Cost	£131.5m	£1,189.5m	£1,231.4m
Transmission Loss Cost (50km to Braintree)	£140.3m	£98.5m	£65.1m
Maintenance Cost (28km new build)	£1.64m	£4.33m	£2.94m
Lifetime Cost	**£273.4m**	**£1,292.3m**	**£1,299.4m**
Lifetime Cost including Twinstead Substation capital cost £33m	**£306.4m**	**N/A**	**N/A**

MG1.0.27	In respect of Option PS1a: Sizewell to Bradwell (subsea), the second sentence of paragraph 9.12 of the Strategic Options Report, June 2011 [**APP-162**] identifies a technical risk to the option. Has the technology progressed in the intervening 12 years to the extent that this risk would not weigh against its deployment?	The second sentence in paragraph 9.12 of the Strategic Options Report June 2011 [**APP-162**] provides the following statement: *'There are currently no VSC HVDC systems of this size installed in the world, and a sufficiently fast response time within 100's of milliseconds has not yet been demonstrated. Whilst such response may be achievable, such issues remain a technical risk to this option.'* This statement refers to the technology risk that occurs when stability issues form part of a need case as set out Needs Case April 2023 [**APP-161**]. Appendix B Technical Explanation of Security and Quality of Supply on page 32 of the Transient Stability section explains:

Reference	Question	Applicant's Response
		'Faults on transmission circuits are cleared, meaning that the short- circuited line is disconnected from the system, typically within tenths of a second. Unless the fault is cleared this quickly – in the hydraulic analogy, the rupture is repaired – a generator close to the fault would have accelerated with so much inertia that pole slipping occurs.' It is still the case that in 2023 the Applicant is not aware of a VSC HVDC link, utilising direct current (DC) cables of this proposed size, built with specific requirement to resolve Transient Stability on a main interconnected transmission system anywhere in the world. As Transient Stability is set out in the Needs Case April 2023 [**APP-161**] this option remains a technical risk to resolve Transient Stability requirements within the region. This risk would remain until a detailed specification is developed with the manufacturers and they tender to meet these specific requirements. Such detailed development would normally only take place when a HVDC option is being proposed and manufacturers are competing to win the tender to build such a connection.
MG1.0.28	What would be the cost differential between the development as proposed and undergrounding the entirety of the proposed new line?	MG1.0.28 sets out the appraisal of the proposed option (combination of underground cables and overhead lines) consistent with PS2 as set out in the Strategic Options Report June 2011 [**APP-162**] and applying the 2020/21 validated cost base.

Table MG1.0.28 Proposed Development in 20/21 prices

Common Works		
As set out in Chapter 8		N/A
Potential Strategic Option – Transmission Reinforcement Assets		
Resolving East Anglia Boundary and Negative Phase Sequence Currents	2 Additional AC Connection Bays at the Bramford 400kV Substation	£20.1m
	Construction of a new Bramford – Twinstead Tee sections of 400kV double circuit overhead line 17km	£67.7m
	Construction of a new Bramford – Twinstead Tee sections of 400kV two circuit AC Cables (3 Cores per phase), including shunt reactors and switching 11km	£450m
Potential Strategic Option – Contingent Transmission Works		
Reconductoring of all Sizewell to Bramford Overhead Line Circuits		£127.8m

Reference	Question	Applicant's Response
		Total excluding common works | **£665.6m** This total cost excluding common works of £665.6m is compared to Revised Table 10.2 PS2b (AC Cables) Capital Cost Summary in 20/21 prices, presented in response to question MG1.0.26 of £1,317.3m to fully underground the connection. This provides a cost differential between the proposed development and undergrounding the entirety of the proposed connection of £651.7m. It should be noted that the total cost of the works contained within the dDCO and reported in the Funding Statement (£499m) differs to the amount calculated above for the equivalent works (£538m). The former figure is the absolute forecasted cost of the actual project based on a detailed bottom-up estimate. The latter, as described above, is based on the validated 2020/21 cost base to allow comparative assessments between options (i.e., the other options have not been refined to the same extent as the proposed development so this would not be an appropriate comparator).
MG1.0.29	The contents page of the Route Corridor Study October 2009 [**APP-163**] refers to '*NG's Schedule 9 Statement*' but it is not appended to the document. Has this been submitted into the Examination?	The Applicant can confirm that this omission was unintentional. A replacement (Revision B) of the Route Corridor Study (RCS) 2009 with all Figures and Appendices has been submitted at Deadline 3 (**document 7.2.3 (B)**).
MG1.0.30	Point 10 of paragraph 5.5 of the Route Corridor Study October 2009 [**APP-163**] refers to review of the Schedule 9 Statement annually. Has the latest version been submitted into the Examination?	The Applicant's latest statement in respect of Schedule 9 of the Electricity Act 1989, *National Grid's commitments when undertaking works in the UK: Our stakeholder, community and amenity policy* is included within Appendix A of this document (**document 8.5.4**). This superseded the version appended to Revision B of the RCS 2009 (**document 7.2.3 (B)**) referred to in response to question MG1.0.29.
MG1.0.31	The contents page of the Route Corridor Study 2009 [**APP-163**] refers to Figure 1 to Figure 19 inclusive; these have not been included. Was their omission intentional or will they be submitted into the Examination?	The Applicant can confirm that this omission was unintentional. A replacement (Revision B) of the RCS 2009 with all Figures and Appendices has been submitted at Deadline 3 (**document 7.2.3 (B)**).
MG1.0.32	What weight can the Applicant reasonably attach to the Substation Siting Study (February 2013) [**APP-165**] when planning	As noted in ES Chapter 1: Introduction [**APP-069**], the Applicant obtained planning permission for the GSP substation under the TCPA in October 2022 (planning application reference: 22/01147/FUL).

Reference	Question	Applicant's Response
	permission has been granted for the grid supply point substation and work has started on site?	It is acknowledged that, due to the fact that planning permission has been granted and preliminary works (principally comprising ground investigations and the construction of a bellmouth access to the site) have now commenced on site, that the Substation Siting Study (February 2013) [**APP-165**] has, in effect, been superseded by events. Nevertheless, the application documentation submitted as part of planning application reference: 22/01147/FUL (and as subsequently varied by s.73 application reference 23/01488/VAR) did have regard to the optioneering set out in the Substation Siting Study (February 2013) [**APP-165**], in order to provide the determining authority (in this case Braintree District Council) with the information they considered necessary in the determination of the application.
MG1.0.33	Which wood are you referring to in your RR [**RR-058**]?	The Applicant understands that the woods being referred to in RR-058 are Hintlesham Woods and Ramsey Wood.

0.5 The Funding Statement

Table 0.5 – The Funding Statement

Reference	Question	Applicant's Response
MG1.0.34	You say in the Funding Statement [**APP-037**] that £128.3 million of funding has already been secured; does this leave a current shortfall of £370.7 million given the current capital cost of £499 million? If so, is this the amount that RIIO-T3 (Revenue = Incentives + Innovation + Output) is hoped to fund?	As described in the Funding Statement [**APP-037**], the Applicant is satisfied that the funding required to meet the estimated implementation costs would be made available, and release of the funding would be subject to the appropriate internal governance and sanction approval process (paragraph 4.1.3 of the Funding Statement [**APP-037**]). As concluded at paragraph 7.1.3 of the Funding Statement [**APP-037**], it is the Applicant's case that 'the Secretary of State can be satisfied that all aspects of the project would be fully funded and that there is no reason to believe that, should the DCO be made, the project would not proceed due to an absence or shortfall in available funding. The Applicant is the sole owner and operator of the high voltage electricity transmission network in England and Wales. In this regard, the Applicant operates as a regulated monopoly with the regulator, Ofgem, safeguarding consumers interests by setting the level of charges that the Applicant is allowed to pass on to its customers and controlling its revenue whilst ensuring that the regulatory framework puts in place funding arrangements that allow the Applicant to carry out its licensed duties. The project needs case was originally triggered in 2013 under the RIIO T1 regulatory funding period. Due to the long consenting and construction period, the project life extended beyond the RIIO -T1 timeframe into RIIO -T2 and would complete construction during RIIO -T3, which would run from 2026 – 2031. The £128.3m baseline

Reference	Question	Applicant's Response
		funding and bridging allowances were put in place at the beginning of the project. The bridging allowances allow the project to continue across multiple regulatory time periods and all works are subject to a 'true-up' mechanism on completion which provides for all project costs to be recovered on the basis that they have been incurred on an economic and efficient basis. The project would complete during the RIIO -T3 regulatory period, but the funding arrangements cross RIIO -T1, RIIO -T2 and RIIO -T3 regulatory periods. The total funding allowed would be subject to the true-up mechanism which would take place during the RIIO –T3 period. The actual financial recovery period for the investment is recovered over 40 years through network charges to consumers.
MG1.0.35	Your Funding Statement [**APP-037**] says that any costs incurred during the RIIO-T3 period (i.e., post April 2026) will be subject to the prevailing framework agreement at that time, which is expected to make provision for the project. Accordingly: ● Is there a risk that Ofgem might set an allowance that is lower than the amount required? ● If this happened, how would any funding shortfall be met?	The true-up mechanism applied by Ofgem (referred to in response to MG1.034) is intended to ensure that the costs of completing the project have been incurred in an economic and efficient manner. The Applicant is subject to a statutory duty pursuant to the Electricity Act 1989 to be 'co-ordinated, economic and efficient'. The Applicant applies this principle to all its construction activities to ensure the risk of under recovery is avoided and does not expect an under recovery for this project. If a shortfall were to be realised, it would result in the Applicant recovering a smaller amount through network charges over the 40-year cost recovery period, which would have an impact on the Applicant's financial performance. As concluded at paragraph 7.1.3 of the Funding Statement [**APP-037**], it is the Applicant's case that 'the Secretary of State can be satisfied that all aspects of the project would be fully funded and that there is no reason to believe that, should the DCO be made, the project would not proceed due to an absence or shortfall in available funding'.
MG1.0.36	What do 'reactive compensation works' entail? (Funding Statement [**APP-037**], paragraph 2.3.1.)	Reactive compensation works referred to in paragraph 2.3.1 of the Funding Statement **[APP-037]** is the installation of shunt reactors at the substations at Bramford in Suffolk and Rayleigh in Essex. Reactive compensation in the form of shunt reactors is required to control voltage levels on the transmission network as a result of including underground cable sections on project. Structurally, shunt reactors are similar to super grid transformers, they consist of wound copper house in a steel tank and are filled with mineral insulating oil. In operation they are housed with a concrete bund which is constructed on site to protect the environment from leakage of any insulating oil during operating life of the plant. The reactive compensation works at Bramford substation are included within the DCO. The works at Rayleigh would be undertaken pursuant to the Applicant's permitted development powers as these constitute permitted works within an existing operational substation.

Reference	Question	Applicant's Response
MG1.0.37	Does the £112.7 million baseline funding allowance through RIIO-T2 [**APP-037**] provide for: • The estimated £2.84 million required to enter into the agreements for the necessary land and rights before access and construction commences? • The estimated £26.2 million needed for necessary agreements for all land acquisition matters (including a 10% contingency)? If not, considering *Planning Act 2008: guidance related to procedures for the compulsory acquisition of land* (paragraph 18), what evidence do you have to show that adequate funding is likely to be made available to enable the CA within the statutory period following any DCO being made?	The baseline funding allowance was set at the beginning of the project. The actual funding allowance that would be recovered for the total project spend would be determined through the true-up mechanism on completion of the project as described in response to question MG1.0.34. The true – up mechanism would assess all project costs including those incurred for necessary land rights and land acquisition matters and would all be subject to an economic and efficient test by Ofgem, the regulator. Whilst the exact regulatory mechanisms vary, it is common that the Applicant does not have complete certainty on the funding allowance prior to the conclusion of planning or Compulsory Purchase Order (CPO) processes. Part of the Applicant's role is managing risk and securing private investment on behalf of energy consumers which is then recovered over 40 years as part of a portfolio of investments. The Applicant is satisfied that adequate funding is likely to be available given the Applicant's statutory obligation to deliver the project and Ofgem's obligation to allow funding for economic and efficient expenditure on the same to be recovered over 40 years.
MG1.0.38	Can you explain how the BNG is intended to be funded as this is not clear from the Funding Statement? [**APP-037**]. How does this reconcile with your statement at paragraph 4.2.23 of Chapter 4 of the ES [**APP-072**] which says that: '*the enhancements may be delivered through different funding streams….so that a clear distinction is drawn between necessary mitigation required to offset likely significant effects"*?	Biodiversity Net Gain (BNG) activity would be funded through the total project costs. The cost of BNG delivery has been included in our total project cost forecast, which is currently £499m. BNG costs would be subject to economic and efficient tests along with all other project costs in the true – up mechanism. The statement in the ES regarding funding streams refers to the range of different methodologies that may be used to deliver BNG which would differ across the different locations that are identified for this work. For example, this may be partnerships with local environmental organisations where the Applicant funds another party to deliver the physical works/ management.
MG1.0.39	Can you advise if the change in Bank of England base rate of interest has altered the £499 million project cost? (The Funding Statement [**APP-037**] refers.)	The Bank of England base rate of interest has not been specifically applied to the £499m forecast project costs. The base rate is likely to fluctuate significantly throughout the development, construction and recovery period. Multiple aspects of the project include resources and procured items of plant and equipment from third parties, the costs for these items may have been affected by the interest rate and the costs may reflect this.

Reference	Question	Applicant's Response
		In common with all projects delivered both by the Applicant and indeed other such promoters, the estimated cost of a project is likely to vary in response to many different factors, including interest rates, many of which are outside the Applicant's control. However, given the established need for the project, the statutory duties on the Applicant and Ofgem and the mechanisms in place, the Applicant is satisfied that the appropriate level of funding would be available.
MG1.0.40	Can you advise if the dDCO restricts or prevents other developments and whether there is an allowance for potential loss of development in the project cost?	With the exception of the non-linear elements of the project, overhead lines and underground cables are generally not incompatible with other forms of development. Where the Applicant becomes aware of potential development (usually through planning applications or discussions with Affected Persons and their agents but noting also the role in this context of Article 53 (Safeguarding) of the dDCO **(document 3.1 (C)**)) it would work collaboratively with the promoter to ensure both projects can be developed in a compatible way. The Applicant has issued guidance for those planning developments within the vicinity of transmission assets (See Appendix B of this document). The Applicant is not currently aware of any developments that the project would completely prevent. Should this arise the Applicant would consider claims for compensation in the usual way. The Applicant considers that values and contingencies provided for within the figures which sit behind the statements made in the Funding Statement [**APP-037**] are reasonable estimates given the known circumstances.
MG1.0.41	Prior to pre-commencement, would a guarantee or security be in place to safeguard potential liability to compensation payable under the DCO?	As summarised in paragraph 2 of the Funding Statement [**APP-037**], the Applicant holds a statutory transmission licence, is subject to statutory duties and operates as a regulated monopoly, subject to the scrutiny of the economic regular, Ofgem. The Applicant is part of the National Grid Group which has a regulatory asset value of £58.977m and the Applicant itself has a regulatory asset value of £15,486m (as per paragraph 2.1.8 of the Funding Statement [**APP-037**]). Given the above, the Applicant's submission is that there is no need to put in place any such safeguard, and indeed the imposition of such a mechanism is likely to bring unnecessary cost to consumers.
MG1.0.42	What impact would compound interest per annum (until end of construction period) have on the cost of the project?	The drawdown of funds for the project is carried out throughout the delivery period of the project itself. Project cost profiles are forecast and reviewed monthly to allow sufficient funds to be available throughout the project at the relevant time avoiding unnecessary cashflow. In common with all projects, the estimated cost is likely to vary in response to many different factors, including interest rates, many of which factors are outside the Applicant's control. However, given the established need for the project, the statutory duties on the Applicant and Ofgem and the mechanisms in place, the Applicant is satisfied that the appropriate level of funding would be available.

0.6 Socio-Economics and Other Community Matters: General

n/a

0.7 Socio-Economics and Other Community Matters: Farming

Table 0.7 – Socio-economics and other community matters: farming

Reference	Question	Applicant's Response
MG1.0.45	Can you explain the process that you would use to microsite new pylons to ensure that impacts on arable practices are considered alongside construction related issues?	Micrositing of the pylons would be undertake by the main works contractor, when appointed and would involve the following steps. Firstly, a review of the Proposed Alignment against any updated information gathered during the detailed designs stage. This additional information would include any feedback from landowners on how they manage and operate the land as well as detailed topographical survey, additional ground investigations and pre-construction environmental surveys. This information would then be used to identify pylons that may need to be relocated within the LoD and the route model reassessed to understand the effects of such changes on the rest of the overhead line alignment within that section (i.e. between tension/angle pylons) and to confirm compliance with the Applicant's design standards and DCO parameters. The final positioning of the pylons would need to take into account many factors, including technical constraints (existing services, roads and operational requirements), environmental factors (such as where commitments to retain features have been made in the management plans), health and safety factors (including safety clearances - including those for agricultural machinery operating beneath the line) and also landowner feedback. The Applicant will continue to work with landowners to limit the effects of the project on arable (or other) practices, but these need to be considered alongside many other factors when deciding on the final position of the pylons. Once the agricultural practices in each section are understood, clearance beneath and adjacent to the proposed overhead line are determined with reference to the Energy Networks Association Technical Specification (ENATS) 43-8 for the statutory requirements to ensure that the Applicant's obligations under the Electricity Safety, Quality and Continuity Regulations 2002 (ESQCR) are met with respect to minimum clearances from overhead lines. Health and Safety Executive (HSE) guidance on agricultural work in proximity to overhead lines (HSE Agriculture Information Sheet AIS8) also outlines what can be done by the land user to reduce the risks of electric shock when working near overhead lines.

Reference	Question	Applicant's Response
MG1.0.46	Could farming operations continue safely in the area whilst operations to dismantle pylons are underway? Has this been included in the assessment?	Overhead line removal is discussed in Section 4.5 of ES Chapter 4: Project Description [**APP-072**]. Farming operations in proximity to the work area associated with the dismantling works may be limited or need to be stopped during the works as the contractor undertaking the overhead line works would need to establish a safe working environment during the removal. Prior to the works, the contractor would need to confirm the areas required for related activities, therefore discussions with affected parties including landowners and occupiers would be held to confirm the techniques to be employed and the effect of pylon dismantling on existing assets and / or operations to ensure these are unaffected or adequately accommodated. A safe working area required for any dismantling will need to be established and agreed which may impact on the land use for a period. ES Chapter 11: Agriculture and Soils [**APP-079**] assumed a worst case that farming would not continue within the Order Limits during dismantling works. Areas affected would be reinstated as soon as practicable to help limit impacts on the landowner. In addition, the compensation process allows landowners to claim for loss of income as a result of the project as noted in ES Chapter 11: Agriculture and Soils [**APP-079**].
MG1.0.47	Can you describe the range of actions that would be taken to identify, maintain, repair or replace field drainage?	The Applicant has requested existing field drainage plans from the Affected Persons where these are available. In accordance with good practice measure AS05 from the CEMP Appendix A: CoCP (**document 7.5.1 (B)**), land drains and ditch locations would be identified based on existing land drainage plans and/or site observations. Methods to locate existing drainage would include site walkovers to locate surface features such as ditches and catch pit covers and undertaking trial holes to locate sub- surface drainage. Where required, additional land drainage suitable for the location, such as ditches, mole drainage, filter drains and carrier drains would be installed (either temporary or permanent) to maintain the integrity of existing field drainage systems for the duration of construction works. Drainage ditches would be excavated using an excavator, piped drainage would be installed using open cut methods and mole drainage would be installed using a suitable plough attachment pulled by a tractor or excavator. Drainage located in working areas would be repaired or replaced following completion of the construction works, using the methods described above. This would occur during reinstatement of agricultural land to its pre-construction condition as per good practice measure GG07 of the CEMP Appendix A: CoCP (**document 7.5.1 (B)**).
MG1.0.48	How has the ES considered the potential effects of haul roads on Rural Payments Agency (RPA), Basic Payment Scheme (BPS), Sustainable Farming Incentive (SFI), and Farming Investment Fund (FIF) on landowners and tenants?	As stated in paragraph 11.6.13 in ES Chapter 11: Agriculture and Soils [**APP-079**], any claims regarding compensation, including in relation to agri-environment and stewardship payments, would be addressed outside of the Environmental Impact Assessment (EIA) process. Paragraph 11.3.5 of ES Chapter 11: Agriculture and Soils [**APP-079**] states that economic effects on landowners due to fragmentation of land holdings during construction are noted in the assessment and any that arise would be addressed through landowner discussions

Reference	Question	Applicant's Response
		and through the compensation payments. If a landowner or tenant considers their payments to be affected by the project, then they should discuss this with the Applicant's Agents. ES Chapter 11: Agriculture and Soils [**APP-079**] concludes, with the good practice measures in place as outlined in Chapter 11 of the CEMP (**document 7.5 (B)**) its Appendix A: CoCP (**document 7.5.1 (B)**), there are no likely significant residual effects in relation to agriculture and soils during construction or operation. All temporary access routes would be removed at the end of construction in accordance with GG07 in the CEMP Appendix A: CoCP (**document 7.5.1 (B)**), which states that land used temporarily would be reinstated where practicable (bearing in mind any restrictions on planting and land use) to its pre-construction condition and use.
MG1.0.49	What degree of access would be afforded to farmers and landowners in order to maintain access to their land over the proposed temporary haul roads? Would access over existing access tracks to be used as haul roads during the construction phase of the proposed development also be concurrently available for the use of farmers and landowners? What measures would be implemented in relation to temporary accesses and haul routes to minimise impacts on the efficient and effective operation of the remaining agricultural land?	Access for farmers and landowners would be provided throughout the construction period, or as agreed in landowner discussions, as detailed in AS03 from the CEMP Appendix A: CoCP (**document 7.5.1 (B)**). Exact arrangements for land access would be on a case-by-case basis discussed with the relevant landowners. This may include designated crossing points over the proposed temporary access routes but the use of such crossing points would at times be restricted. In some cases, access would also be provided to farmers and landowners by signed diversions. Disruption to the continued operation of agricultural land would be limited as far as practicable by communicating restrictions with affected parties in advance of these restrictions being required. Where restricted access is unavoidable or agricultural land fragmented into a parcel that is too small to economically use, claims for compensation will be considered in the normal way.
MG1.0.50	Would the height of the overhead conductors provide for unfettered use by modern farm machinery, maintaining the separations specified by the Health and Safety Executive to ensure safe working below and in the vicinity of overhead conductors?	Access available beneath the overhead line conductors would be dependent upon the type of machinery being moved or the activity being undertaken. Design specifications allow for passage beneath the conductors with vehicles however use of an irrigator for example would not unless an allowance has been made for this in the design of the overhead line. Each section of proposed overhead line would need to be assessed by the main works contractor during the detailed design stage to understand the activities undertaken and whether any enhanced clearances are required. This would require consultation with affected parties to understand the presence, extent, and nature of any farming operations in the Order Limits that could affect the overhead line design, such that the necessary clearances can be established for safe working. Regarding clearance beneath and adjacent to the proposed overhead line, reference is made to the ENATS 43-8 for the statutory requirements to ensure that the Applicant's obligations under the ESQCR are met with respect to minimum clearances from overhead lines. HSE guidance on agricultural work in proximity to overhead lines

Reference	Question	Applicant's Response
		(HSE Agriculture Information Sheet AIS8) also outlines what can be done to reduce the risks of electric shock when working near overhead lines. The HSE guidance notes a minimum conductor height of 7.3m above ground level for a 400kV overhead line; a minimum 8.1m ground clearance has been allowed for in the proposed design. The HSE guidance also notes that risks can be reduced if certain activities are not carried out within a horizontal distance of at least 10m from the overhead line, although a larger horizontal clearance (up to 15m) may be necessary to cater for overhead line swing on longer span lengths. If such work activities cannot be avoided closer than 10m, the Applicant can advise on the site-specific clearances available to assess the risks and help determine a safe system of work. In all cases the Applicant will design to, and construct in accordance with the relevant legislation and guidance outlined above.
MG1.0.51	Given the proposed Limits of Deviation, could the positioning of new pylons relative to field boundaries constrain the use of wide spraying and cultivating machinery?	The presence of electricity pylons on farmland may have an impact on the use of some farm machinery in limited circumstances. The proposed LoD permit changes to the Proposed Alignment that may increase or reduce the impact on the use of wide spraying and cultivating machinery. The Applicant has sought to limit these impacts through design phases where reasonably practicable, by placing apparatus on or close to field boundaries. This aim has been balanced with an efficient design to limit the overall number of pylons required and a landscape design to avoid significant wirescape where pylons are located close together. These other considerations mean that it is not reasonably practicable to always place pylons in the optimum location for agriculture.
MG1.0.52	Once installed, can you confirm the implications for, and restrictions on farming practices along the proposed underground cable alignment?	The restrictions described in the Applicant's standard underground cable easement require the Grantor: *'3.2 not to erect any building, structure, plant or machinery (whether temporary or permanent) or allow to grow any plant, bush, tree or similar vegetation within the Easement Strip PROVIDED THAT subject to paragraph 3.1 nothing in this paragraph 3.2 shall prevent the carrying on of normal agricultural and horticultural operations and cultivations on the Easement Strip including (but not limited to) the growing of shallow rooted crops or the grazing of livestock'* [and] *'not to drill, dig or break up the Grantor's Land within the Easement Strip without the written consent of the Grantee and where consent is granted ensuring that at all times a representative of the Grantee is present'.* Accordingly, there are no implications for usual arable horticultural and pastoral farming practices from the proposed underground cable alignment. However, should farmers wish to underdrain their land this must be with the consent of, and under the supervision of the Applicant.

Reference	Question	Applicant's Response
MG1.0.53	Paragraph 4.3.16 of the Socio-Economic and Tourism Report [**APP-066**] states, *'The vast majority of agricultural land would be reinstated following construction and existing agricultural operations would continue'.* Explain: (i) the feasibility of commercial tree planting within the Order Limits (refer [**RR-090**]); (ii) the timescale for farmland affected by construction activity to return, post-construction, to its pre-construction agricultural output (refer [**RR-002**], [**RR-026**] and [**RR-066**]).	(i) The underground cable easement width (60m) impacts on other horticultural and silvicultural enterprises, such as planting trees (including commercial cricket bat willow plantations) and the establishment of orchards. This is owing to the potential impact of deeper rooting systems on soil moisture, which adversely affects underground cables. Precluding planting of deep-rooted species, such as trees, is necessary to protect the assets. This restriction, where it leads to proven losses, is a compensation issue. (ii) The time taken to secure the restoration of farmland to full productivity is largely dependent on weather conditions both during construction and over the restoration period. In good conditions full pre-construction output is likely to be achieved within 2-3 years of completion of the restoration. The RRs reference concerns for the future of farm productivity resulting from the project which is believed to be largely predicated on their anticipation of permanent damage to soils. The Applicant has undertaken to follow the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites (Defra, 2009) and Chapter 11 of the CEMP (**document 7.5 (B)**) sets out the measures that would be taken to avoid harm to soils and make good any damage done. In practice, engineering and construction methods have been improving and taking better account of soil conservation over recent years, and evidence from the Applicant's more recent projects demonstrates that the impact of deep compaction and poor drainage noted in earlier studies of gas pipelines (Batey, 2015) do not hold true for this project. As this document concludes: *Current reinstatement techniques are to provide an effective system of drains running parallel to the pipeline with gravel backfill above the drain to reach the base of the topsoil, with thorough loosening of compact subsoil prior to the reinstatement of topsoil. When these techniques are used, relatively few instances of adverse effects on plant growth have been found in pipelines installed since 2000 (A.C.C. Reynolds, Perth, Scotland, 2013, personal communication*). Paragraph 11.3.27 of the CEMP (**document 7.5 (B)**) states that: *'prior to subsoil and topsoil placement the area will be assessed for evidence of compaction and any compaction will be relieved through a suitable method such as ripping to an appropriate depth and at an appropriate spacing to remove all compaction. Ripping or other methods will only be undertaken when the soils are in a non-plastic state to ensure the ripping operation does not result in smearing and additional soil compaction'.* AS05 in the CEMP Appendix A: CoCP (**document 7.5.1 (B)**) states that consultation with affected landowners would be carried out to investigate the current extent of land drainage. A scheme of pre-construction land drainage would be designed with the intent of maintaining the efficiency of the existing land drainage system and to assist in maintaining the integrity of the working area during construction. The project may include a system of 'cut-off' drains which feed into a new header drain, and the project would also take into account surface water runoff measures.

Reference	Question	Applicant's Response
		The Applicant is confident the damage and loss predicted in the RRs would be avoided and where this is not achieved would pay compensation for proven losses.

0.8 Socio-Economics and Other Community Matters: Tourism and Local Recreational Users

Table 0.8 – Socio-economics and other community matters: tourism and local recreational users

Reference	Question	Applicant's Response
MG1.0.55	Paragraph 5.3.8 of the Socio-Economics and Tourism report [**APP-066**] states, *'The good practice measures within the CEMP Appendix A: CoCP (**application document 7.5.1**) would reduce the effects experienced by visitors, by only closing accesses for short periods while construction activities occur and providing signed diversions for any temporary diversions required (TT03 in the CEMP Appendix A: CoCP), and therefore it is considered unlikely that there would be significant effects on these visitor attractions.'* Would all routes subject to temporary closure in the Dedham Vale Area of Outstanding Natural Beauty (AONB) and the Stour Valley with public access (walkers, cyclists and horse riders) be diverted?	There are five Public Rights of Way (PRoW) within the Order Limits through Dedham Vale AONB, as shown on the Access, Rights of Way and Public Rights of Navigation Plans [**APP-012**]**.** Of these five PRoW, two would have temporary diversions, as also shown on the same plans and as described in Appendix F of the Transport Assessment (TA) [**APP-061**]. The remaining three would not have diversions, but the closures would be of short duration for one day only. For the Stour Valley there are 17 PRoWs within the Order Limits, as shown on the Access, Rights of Way and Public Rights of Navigation Plans [**APP-012**]. Of these 17 PRoWs, three would have temporary diversions, as also detailed in Appendix F of the TA [**APP-061**]. A further two would be closed but without a diversion, as the PRoW would be re-aligned around the work site. The remaining 12 would not have diversions and would either be a managed closure or of a short duration for one day only.

0.9 Socio-Economics and Other Community Matters: Employment

Table 0.9 – Socio-economics and other community matters: employment

Reference	Question	Applicant's Response
MG1.0.57	Paragraph 4.3.22 of the Socio-Economics and Tourism report [**APP-066**] states, *'However, from experience of other National Grid projects, it is likely that a minimum of 10% of the workforce would be sourced from the local labour market, including apprentices, security workers and delivery drivers.'* (ES Chapter 4 [**APP-072**], paragraph 4.4.55 also refers). What arrangements would be put in place to ensure that you source a minimum of 10% of the workforce from the local labour market? How is this secured in the dDCO?	The Socio Economics and Tourism Report [**APP-066**] confirms the conclusions of the Scoping Report [**APP-156**] that there are no likely significant effects from the project during construction or operation in relation to socio economics and tourism. In the Socio Economics and Tourism Report [**APP-066**] workforce numbers are estimated to be around 350 staff at peak and an average of around 180 workers on site during construction. The majority of employment activities would require trained specialists who are qualified to work on high voltage electricity lines. These are typically sourced from the Applicant's approved contractors who have demonstrated the skills, training, and experience to undertake the works safely and competently. However, it is likely that 10% of the workforce (up to approximately 35 jobs at peak) could be sourced from the local labour market, (including but not limited to) apprentices, security workers and delivery drivers. Paragraph 4.3.24 of the Socio Economics and Tourism Report [**APP-066**] states that: '*Given the relatively low numbers of construction workers employed on the project and that the project would require workers to be experienced in working on high voltage electricity lines, there are unlikely to be significant adverse effects on jobs and employment. The above measures could deliver small beneficial effects through the creation of local job and employment opportunities. As these cannot be guaranteed and as they would be low in number, they are unlikely to result in significant effects on job creation and employment during construction*'. Given the relatively low number of construction workers, as well as the low number of the construction workforce predicted to be sourced from the local labour market and the absence of any likely significance of effect, the Applicant does not consider that it is proportionate nor necessary to secure a minimum percentage of the workforce from the local labour market in the dDCO. Outside of the DCO process, the Applicant requests contractors tendering for the construction of the project to identify how they propose to provide job opportunities for local people. The Applicant also promotes the use of local supply and small/medium enterprises through main works contractors by embedded targets within its framework contracts. The Applicant will continue to work with Councils and business leaders to identify opportunities to invest in employment networks, including looking for opportunities to work with local businesses.
MG1.0.58	Will you engage with Essex and Suffolk County Councils ([**RR-004**] and [**RR-006**]) to address what could amount to a skills shortage with the other projects, to secure benefits for and investment in local	It has been determined that there are no likely significant effects on socio economics associated with the project during construction, and ES Appendix 15.5 Inter Project Cumulative Effects Assessment (CEA) [**APP-144**] concludes that significant cumulative socio-economic effects are also unlikely. However, the Applicant is committed to continuing discussions with the Councils and other key stakeholders regarding their aspirations in respect of community benefits. These discussions are outside of the DCO process whilst the Applicant awaits the outcome of the Government's consultation on community benefits. However, to confirm the Applicant would

Reference	Question	Applicant's Response
	businesses, the supply chain and employment networks?	work in collaboration with the Councils, suppliers and other parts of industry to leverage the benefits from the project to the local economy. The Applicant is committed to working with Councils, other energy projects and local stakeholders to understand their priorities on skills and employment. This separate process with the Councils has already begun. Due to the nature of the project, there would not be a permanent operational workforce.

0.10 Socio-Economics and Other Community Matters: Businesses

Table 0.10 – Socio-economics and other community matters: businesses

Reference	Question	Applicant's Response
MG1.0.59	Paragraph 4.3.14 of the Socio-Economics and Tourism report [**APP-066**] states, *'National Grid has been working with local landowners and businesses that lie within the Order Limits to seek to reduce impacts on their operations.'* Has the Applicant been in contact with those business operations referred to in RRs [RR-133] and [RR-040]? If so, what is the outcome?	The Applicant has been in contact with both parties in response to the questions raised. The Applicant has written to the individual who submitted RR-040 (and also that individual's agent) confirming that the area of BNG proposed at Causton Hall Farm has been removed from the project proposals. However, the construction works would have an unavoidable temporary impact on that individual's shoot and hence that individual would be entitled to submit a claim for compensation in due course. The Applicant has had regard to the concerns raised in RR-133. A letter of comfort, relating to the provision of emergency access to the individual's property, as well as their potable water supply Was posted directly to the individual on 28 October 2023.

0.11 Socio-Economics and Other Community Matters: Local Residents and Community

Table 0.11 – Socio-economics and other community matters: local residents and community

Reference	Question	Applicant's Response
MG1.0.61	For the construction works, can you explain: (i) The engagement techniques that would be used to facilitate active community liaison with members of the community (including residents) and local businesses	Section 3.4 of the CEMP (**document 7.5 (B)**) sets out the Applicant's proposed engagement techniques with members of the local community during the construction phase. With regard to (i), specific examples include a project website and free telephone project helpline for the construction phase of the project. The project helpline would be publicised on any communications issued by the project. It would also be displayed at the entrance to the main site compound and on boards placed in

Reference	Question	Applicant's Response
	(including landowners and tenants), including unscheduled activities that overrun beyond approved core working hours? (ii) Which aspects of the works would be communicated to members of the community and local businesses? (iii) How you would achieve accessibility for all members of the community and local businesses affected by the works? (iv) The resourcing and governance of good practice measure GG25 to ensure suitable and sufficient reduction of disturbance to residents?	appropriate locations within the project area. The project website would include an overview of the project and details of ongoing and upcoming construction activity. Local residents would also be informed of key construction milestone activity through a letter drop. Landowners and tenants whose land is impacted by construction activity would receive more tailored information and the Applicant would endeavour to engage with these parties directly throughout the construction process. It is likely that such engagement would take the form of individual meetings, and it may be appropriate to also offer such meetings to local representatives such as parish councils, who can help to disseminate information about construction activity to the communities they represent. The approach to communicating when activities overrun beyond approved core working hours is dependent on the scale and/or nature of the works. For works that have an impact on a small number of residents, landowners or tenants, it may be practicable to communicate any overrun to these parties individually. For larger works, engagement would pivot to a more reactive approach. The project telephone number would continue to be available for any residents with questions during overrunning works, and depending on the nature of the works it may also be appropriate to share details of this on the project website. With regard to point (ii), the information to be provided would be specific to the works to be carried out, describing the nature of the works, the location and extent of the works, the duration of works and the hours to be worked. Some works, such as the delivery of abnormal indivisible loads to the construction working area, may require further targeted communications. This could involve working with partners such as local authorities, the police and local media outlets to communicate upcoming disruption such as road closures. With regard to (iii), planned engagement techniques include a mixture of digital and non-digital approaches to provide accessibility for all members of the community and local businesses. With regard to (iv), it is envisaged that the activity detailed above would be delivered by an appointed community relations team.

1. Air Quality and Emissions

Table 1.1 – Air quality and emissions

Reference	Question	Applicant's Response
AQ1.1.1	ES Appendix 4.1, Good Design, states that National Grid would undertake emissions monitoring and implement control measures that are compliant with the F-gas Regulation or its successors until the point that Sulphur Hexafluoride (SF_6) can be phased out of use on the project. Is it the Applicant's intention to follow the requirement in the consultation draft of NPS EN-5 to produce and submit to the ExA a plan for the monitoring and control of fugitive SF_6 emissions consistent with the Fluorinated Gas Regulation and its successors, noting that the 2023 draft does not include reference to the ExA directly? Can you also advise how monitoring and control is secured through the dDCO?	The Applicant operates its entire fleet of SF6 filled assets in accordance with the existing F-gas Regulations (The Fluorinated Greenhouse Gases (Amendment) Regulations 2018). The Applicant notes that the successor to the F-gas Regulations would not automatically apply to the UK post-Brexit but that the Applicant would continue to work with Defra to ensure appropriate provisions are included in any UK updates to the present Regulations. In addition, the Applicant is committed to ongoing reduction in SF6 emissions, a 50% reduction by 2030 from a 2018/19 baseline as per Responsible Business Charter and externally verified Science Based Targets with an expectation of continued reduction to 2050. This requires the Applicant to manage all SF6 filled assets according to established best practice and to ensure that any SF6 inventory increase from new SF6 assets does not compromise the ability to achieve real (kg) year-on-year emission reductions. The Applicant is also incentivised by Ofgem to reduce emissions year-on-year through its special licence conditions. As the Applicant is already providing monitoring data on how it is reducing its use of SF6 in its assets through legally binding mechanisms and its licence, the Applicant does not consider there to be a need to submit project specific monitoring and control measures nor to secure them as part of the dDCO (**document 3.1 (C)**).
AQ1.1.2	Draft NPS EN-5 refers to providing evidence as to why SF6 -free alternative are technically infeasible or require bespoke components that are grossly disproportionate in terms of cost. Can an estimate of the cost differential between the SF_6 - reliant asset and the appropriate SF_6-free alternative be provided? Will the Applicant be providing the evidence referred to above for the two emerging technologies [fluorinated compound in combination with natural origin gases (CO_2, N_2, O_2); and synthetic	The Applicant is proposing to use both SF6 and SF6-free equipment on the project, this being primarily driven by the availability of SF6-free equipment in the marketplace. A summary of the relevant equipment is as per below. At Bramford 400kV substation, the 400kV Gas -Insulated Switchgear (G-IS) bays to be used by the project are spare bays within the existing SF6 400kV G-IS substation. There are currently no plans to replace this equipment, which was installed circa 2013/14. At Bramford 400kV substation, the 400kV Gas Insulated Busbar (GIB) to be installed by the project will utilise an SF6-free insulating gas in accordance with current National Grid Policy. At the GSP substation, the 400kV live tank circuit breakers will utilise SF6 insulating gas as there is currently no SF6-free product available in the marketplace.

Reference	Question	Applicant's Response
	air] for SF6-free switchgear into the Examination?	At the GSP substation, the 132kV live tank circuit breakers will utilise an SF6-free insulating gas in accordance with current National Grid Policy. The Applicant is unable to provide cost estimates as no appropriate SF6-free alternative is available where SF6 insulating gas is proposed. As no appropriate SF6-free alternative is available where SF6 insulating gas is proposed, the Applicant is unable to provide evidence on alternative technologies, however, please refer to the response to AQ1.1.3 for a general progress update on alternative technologies.
AQ1.1.3	Are you able to give a progress update on the research and development of alternative circuit breakers of SF_6 for the grid supply point substation and Bramford substation? Paragraph 4.9.4 in ES Chapter 4 Project Description [**APP-072**].	The Applicant refers the Examining Authority to AQ1.1.2 for a description of where SF6 and SF6-free equipment would be used on the project. SF6-free equipment is available in the marketplace for 400kV GIB and 132kV live tank circuit breakers and would be used on the project in accordance with current National Grid Policy (PS(T) 005 – Sulphur Hexaflouride (SF6) Gas). Although SF6-free equipment for 400kV G-IS is starting to come onto the market, as the existing Bramford 400kV G-IS is well within its 40year design life there are no current plans to replace this switchgear. In respect of 400kV live tank circuit breakers, the product development plans published by the various manufacturers indicate that products are not currently expected onto the market until 2024/25, although this is subject to product development progressing as the manufacturers predict. As the construction of the GSP substation is in progress following TCPA approval, the SF6-free equipment would be unlikely to be available in the project timescales.
AQ1.1.4	Why are other greenhouse gases (other than carbon dioxide and sulphur hexafluoride) not relevant to the Proposed Development? (Paragraph 2.1.2 in ES Appendix 4.3, Greenhouse Gas Assessment [**APP-092**]).	As per paragraph 2.1.3 of ES Appendix 4.3, Greenhouse Gas Assessment [**APP-092**] the greenhouse gases (GHG) are equated to a carbon dioxide equivalent (CO2e). The Carbon Asset Database underpinning the carbon calculations incorporates all appropriate GHG in the CO2e within the data. Paragraph 2.1.2 should have more accurately referenced 'CO2e' rather than 'CO2'. The Errata List [**REP2-066**] will be resubmitted at an appropriate deadline to include this change. SF6 is mentioned in particular as this would be required in significant quantities in the proposed 400kV circuit breakers at the GSP substation and in the proposed 400kV switchgear at Bramford Substation.
AQ1.1.5	Has the estimated 111,484 tCO2e arising as a result of the Proposed Development been independently verified by a recognised and qualified party? If not, please outline your quality assurance checks to validate the figure. (Paragraph	The CO2e estimate for the project was derived from the Cost Book as described in Section 2.2 and 2.3 of ES Appendix 4.3, Greenhouse Gas Assessment [**APP-092**]. This Cost Book estimate is prepared held by the Applicant only. As the Applicant uses the same Cost Book across all projects, the carbon estimates provided are internally consistent. However, as described in paragraph 2.2.2 of ES Appendix 4.3, Greenhouse Gas Assessment [**APP-092**], the Carbon Asset Database underpins the calculations within the Cost Book, and the data within the Carbon Asset Database comes from a wide range of sources. The Carbon Asset Database, which is jointly managed by all

<table>
<tr><th>Reference</th><th>Question</th><th>Applicant's Response</th></tr>
<tr><td></td><td>3.1.1 in ES Appendix 4.3, Greenhouse Gas Assessment [APP-092]).</td><td>three Transmission Operators in Great Britain via the Reduction of Capital Carbon in Infrastructure – Transmission (ROCCIT) group, has had external assurance carried out by an independent consultant to validate the underlying data.</td></tr>
<tr><td>AQ1.1.6</td><td>Is the Applicant able and willing to provide a summary breakdown of the carbon emission data related to the estimated 84,050 tCO2e for capital (construction) referred to in paragraph 3.1.1 of ES Appendix 4.3, Greenhouse Gas Assessment [APP-092]?</td><td>Following a review of the Cost Book for the project, the Applicant can advise that the approximate summary breakdown of the carbon emission data related to the estimated 84,050 tCO2e for capital (construction) is as per the table below:

<table><tr><th>Project Component</th><th>Cost Book(tCO2e)</th></tr><tr><td>Overhead Line</td><td>16,240</td></tr><tr><td>Underground Cable</td><td>48,705</td></tr><tr><td>Bramford Substation</td><td>10,769</td></tr><tr><td>Rayleigh Substation</td><td>2,833</td></tr><tr><td>GSP Substation</td><td>5,503</td></tr><tr><td>TOTAL</td><td>84,050</td></tr></table>
The Applicant notes that works to be undertaken at Rayleigh Substation do not form part of the application for development consent, as they will be undertaken under the Applicant's Permitted Development rights. However, the carbon emission impact of these works has been incorporated within the Greenhouse Gas Assessment [APP-092] as part of the Applicant's overall GHG reporting on carbon.</td></tr>
<tr><td>AQ1.1.7</td><td>Is the Applicant able to identify any measures to be taken to reduce the estimated capital (construction) carbon dioxide equivalent and explain how these measures are secured in the dDCO?</td><td>As referenced within Section 3.2 in ES Appendix 4.3: Greenhouse Gas Assessment [APP-092], the Applicant has identified further measures to reduce the climate impact of the project, including:
• Following the principles of PAS 2080 to reduce carbon through more intelligent design, construction and use;
• Requesting tendering contractors to propose low carbon alternative materials; and
• The Contractor would be incentivised to reduce the carbon footprint against the initial baseline.</td></tr>
</table>

Reference	Question	Applicant's Response
		The Materials and Waste Management Plan (MWMP) (**document 7.7 (B)**) also includes measures to reduce waste that would also lead to reductions in the capital (construction) carbon, including reference to the second and third bullet points above (paragraphs 5.4.2 and 5.4.3). See also the response to AQ1.1.21.
AQ1.1.8	How would the estimated operational transmission loss of 26,133 tCO2e be monitored and controlled? (Paragraph 3.1.1 in ES Appendix 4.3 Greenhouse Gas Assessment [**APP-092**]).	The majority of operational CO_2e emissions arise from the transmission losses associated with the installed equipment and are a function of their electrical resistivity and the electrical current flowing through this equipment over the course of its operational life. Such losses are uncontrollable, being inherent to the installed equipment, and no specific monitoring of operational emissions associated with these losses is undertaken. However, as clean/renewable generation on the UK electricity network is expected to continue to displace fossil-fuelled generation into the future, the CO_2e emissions arising from transmission losses can be expected to decrease from present levels.
AQ1.1.9	How would the estimated operational transmission loss of 1,301 tCO2e (for sulphur hexafluoride) referred to in Paragraph 3.1.1 of ES Appendix 4.3, Greenhouse Gas Assessment [**APP-092**], be monitored and controlled?	For operational emissions the SF6 emissions are calculated by an estimated volume of SF6 within an asset and a standard leakage rate of 0.5% per year. It is noted that whilst the SF6 operational emissions are based on a leakage rate of 0.5% per year, that performance in service is normally better than this and as such the estimates are likely to represent a worst case. The SF6 gas pressures are continuously monitored in service via an automatic monitoring system and an alarm raised if the gas pressure drops below defined limits. If gas leaks are identified, these are repaired, where practicable.
AQ1.1.10	Do you intend to summarise your approach to carbon emissions effects against any local target set by Essex County Council and Sussex County Council? If not, why not?	In the Applicant's comments on Essex County and Braintree District Councils Local Impact Report (LIR) [**REP1-039**] (Chapter 10 - Climate Change), the Applicant has advised as follows: *'The Applicant can advise that the approximate allocation of embodied CO2e applicable to the portion of the project in Essex is 25,646 tCO2e for capital (construction) carbon, 8,711 tCO2e for transmission losses during 40 years of operation and 466 tCO2e for SF6. The total CO2e estimated on the Essex section of the project is 34,823 tCO2e'.* Paragraph 10.3.9 of the Essex County and Braintree District Councils LIRs [**REP1-039**] advised that "Estimated CO2 emissions within Essex in 2019 totalled 6,834 kilo-tonnes" and in the Applicant's comments it is advised: *'The total carbon for construction of the project (25,646 tCO2e) is the equivalent of 0.4% of the 6,834 ktCO2e estimated as emitted within ECC in 2019. The transmission losses are estimated to be average CO2e equivalent emissions of 218 CO2e (8,711 tonnes divided by an estimated 40 year design life), representing 0.003% of the ECC 2019 CO2e emissions'.* Following on from the figures quoted above for Essex, the Applicant can advise that the approximate allocation of embodied CO2e applicable to the portion of the project in Suffolk is 58,404 tCO2e for capital (construction) carbon, 17,422 tCO2e for transmission losses during 40 years of operation and 835 tCO2e for SF6. The total CO2e estimated on the Suffolk section of the project is 76,661 tCO2e.

Reference	Question	Applicant's Response
		As per ES Appendix 4.3: Greenhouse Gas Assessment [**APP-092**] the Applicant would emphasise that the delivery of the project plays a key role in delivering the UK Government's net zero ambitions and delivering up to 50GW of offshore wind connected by 2030. Addressing the shortfalls in transmission capacity is vital to facilitate the ambitious green targets set by the Government, and to contribute to the growth in renewable energy and the decarbonisation of the UK.
AQ1.1.11	Is the alignment of the haul routes as shown on ES Figure 4.1 [PDA-002] considered to be worst case for the air quality assessment?	The assessment presented in sections 6 to 10 of ES Chapter 13, Air Quality [**APP- 081**] assumes the temporary access routes as shown on ES Figure 4.1 [**PDA-002**]. However, Section 11 of ES Chapter 13 Air Quality [**APP-081**], presents the sensitivity testing to identify if there was any difference in the assessment if temporary works were located anywhere else within the Order Limits. As stated in paragraph 13.11.5, changing the location of project infrastructure within the Order Limits would not alter the number of receptors assessed within the dust risk assessment or their distance from the development. As such, this sensitivity testing has shown that there would be no new or different likely significant effects as a result of project infrastructure being placed in a different location. Therefore, a worst-case has been considered. The temporary access routes would be temporary with the effects of any fugitive dust or emissions controlled through the use of the good practice measures described in Chapter 11 of the CEMP (**document 7.5 (B)**).
AQ1.1.12	Section 3.3, Mitigation, in ES Appendix 13.1, Dust Risk Assessment [**APP-135**], refers to site-specific mitigation. Can you summarise your proposed monitoring and response to dust incidents.	Table 15.1 in the CEMP (**document 7.5 (B)**) sets out the proposed monitoring that would be undertaken in relation to dust. This would include visual inspections to monitor for visible dust emissions or deposition on site and also monitoring of weather conditions that could increase the need for dust suppression measures. Any incidents relating to dust would be dealt with using the incident process outlined in Section 3.5 and 15.3 in the CEMP (**document 7.5 (B)**).
AQ1.1.13	Please signpost and summarise the dust assessment undertaken for fruit growing, crops, and properties, and the measures envisaged for dust control and dust monitoring.	The Dust Risk Assessment [**APP-135**] sets out the measures proposed for reducing dust on the project. This follows the methodology outlined in the Institute of Air Quality Management's (IAQM) Guidance on the assessment of dust from demolition and construction (2014). Table 3.4 in the Dust Risk Assessment [**APP-135**] describes the risk of dust soiling in each construction section for each of the construction activities. The assessment assumes a high or medium sensitivity for the construction sections, due to the presence of human receptors as described in Table 3.2 and Table 3.3. Agricultural receptors are of low sensitivity as detailed in Box 6 of the IAQM Guidance. The resultant assessment of risk is therefore conservative when applied to agricultural areas as it has been assumed that all receptors are of high sensitivity. As stated in paragraph 3.4.1, following the application of the good practice measures set out within the CEMP (**document 7.5 (B)**) and CEMP Appendix A: CoCP (**document 7.5.1 (B)**) it has been assessed that any residual risk of dust would be reduced to negligible and therefore no additional mitigation is required.

Reference	Question	Applicant's Response
AQ1.1.14	What is your response to the suggestion in the Howards' Relevant Representation [RR-090] that development impacts would make land unusable for their fruit growing business.	The Applicant notes that a strip of land (as yet unplanted with orchard trees) would not be suitable for orchard tree growing in the future owing to the protection required for the proposed underground cables. This extends to 0.85Ha out of a holding the Applicant estimates to extend to 5.4Ha or approximately 15% of the holding. The restrictions would not apply to fruit growing on bushes or other horticultural operations.
AQ1.1.15	Has any air quality information sourced from third parties been validated with on-site background air quality measurements?	As stated in paragraph 13.4.10 of ES Chapter 13: Air Quality [**APP-081**], no on-site air quality measurements were taken for the purpose of validation because background air quality concentrations were sourced from the Defra background air quality archive. This dataset is produced for Defra by Ricardo and is already validated and adjusted against Automatic Urban and Rural Network (AURN) monitoring, therefore it is considered robust.
AQ1.1.16	Receptors sensitive to potential dust impacts during earthworks and construction were identified from a desktop study using AddressBase Plus data (Ordnance Survey, 2022), as noted in paragraph 13.5.4 of ES Chapter 13, Air Quality [**APP- 08**1]. How would new or updated information in AddressBase Plus data (or information by third parties) be considered and what effects could this have on the ES and its conclusion?	Ordnance Survey Addressbase Data was originally procured for the project in February 2021. An updated request for this data was made in August 2022. The number of receptors within the study area remained the same in both datasets, showing there was no change in the number of receptors during this period. Given that the study area is rural, and there are limited developments proposed within the area the Applicant considers that it is unlikely that the number of receptors sensitive to dust is likely to change. In addition, due to the inherently semi-quantitative nature of the assessment, following the IAQM methodology, any change to the number of receptors in the dataset within study area prior to construction of the project is highly unlikely to change the conclusions of the assessment presented in ES Chapter 13: Air Quality [**APP-081**].
AQ1.1.17	ES Chapter 13, Air Quality [**APP-081**], refers to *Construction Dust Guidance* (IAQM, 2016). Would the use of the latest IAQM Guidance on the assessment of dust from demolition and construction (Version 2.1, August 2023) affect the conclusions in the ES?	The latest IAQM Guidance on the assessment of dust from demolition and construction (Version 2.1, August 2023) was issued after submission of the application. The guidance was initially issued in July with a large number of errors, and the August revision still retains a number of errors. The Applicant has been informed by IAQM that a corrected version is due to be issued but this has yet to occur. Until a corrected version is issued it is not possible to accurately answer this question. However, as the overall worst-case assessed level of risk was high for six out of the seven construction sections as a result of the effects of dust soiling on local amenity, any change to the assessment as a result of subsequently issued guidance is unlikely to result in a worse result than that already calculated.
AQ1.1.18	The TA [**APP-061**] anticipates that there would be no construction traffic through the AQMA in Sudbury based on the construction routes shown on ES Figures Part 8, 12.1: Traffic and Transport Study Area [**APP-153**]. How could you lawfully	As stated in paragraph 5.4.5 of the Construction Traffic Management Plan (CTMP) (**document 7.6 (B)**), the construction routeing would avoid the AQMA in Sudbury (AQ01 in the CEMP Appendix A: CoCP (**document 7.5.1 (B)**). In addition, paragraph 7.2.5 of the CTMP states that the contractor will implement a monitoring and reporting system to check compliance with the measures set out within the CTMP (**document 7.6 (B)**). This would include the need for a Global Positioning System (GPS) tracking system to be fitted to Heavy Goods

Reference	Question	Applicant's Response
	prohibit routing of construction traffic along public highways that run through the Sudbury Air Quality Management Area (AQMA)?	Vehicles (HGV) owned and operated by the contractor to check for compliance with authorised construction routes. The CTMP is secured through Requirement 4 of the dDCO (**document 3.1 (C)**).
AQ1.1.19	Should The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023 be included in ES Appendix 2.1, Legislation Policy and Guidance [**APP-088**], and how would they affect the ES and its conclusion?	The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023 relates to targets and objectives for PM2.5. The IAQM Guidance on the assessment of dust from demolition and construction (current and proposed) uses PM10 background for the measure of impact due to the high proportion of coarse particles produced during construction activities versus the proportion of fine particles, as stated in paragraph 4.2.2 and Table 3 of the 2016 and 2023 versions of the guidance. The largest source of PM2.5 is likely to be from emissions from construction plant and machinery, which are controlled by GG12 in the CEMP Appendix A: CoCP (**document 7.5.1 (B)**). As such inclusion of The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023 would not change the conclusion of the assessment. The list of legislation, policy and guidance in Appendix 2.1 Legislation Policy and Guidance [**APP-088**] is not required to be exhaustive nor is it generally updated as new documents are published unless there is a material impact on the methodology or conclusions of the ES. Therefore, the Applicant does not propose to update ES Appendix 2.1 to include these Regulations.
AQ1.1.20	Should the Environmental Improvement Plan 2023 be included in ES Appendix 2.1, Legislation Policy and Guidance [**APP-088**], and how would it affect the ES and its conclusion?	The Government published the Environmental Improvement Plan (EIP) 2023 on 31 January 2023. This plan builds upon the 25 Year Environment Plan which was published five years prior. The Applicant's response to MG1.0.9 sets out the weight that should be applied to the Green Future: Our 25 Year Plan to Improve the Environment. Similar weight can be applied to the EIP 2023. The EIP now contains new powers and duties arising from various secondary legislation and seeks to provide a delivery plan for the Government's 'apex goal' of improving nature by halting and then reversing its decline. Key measures in the EIP which are capable of being relevant to the project include (not exhaustive): ● Creation of thousands of jobs and skills (the policies underpinning the net zero strategy claim to support up to 480,000 'green jobs' by 2030); ● Restore or create more than 500,000 hectares of wildlife-rich habitat by 2042; ● New incentives to manage hedgerows; and ● The promotion of BNG. The Applicant considers that the project is compatible with the EIP insofar as it is relevant to the project.

Reference	Question	Applicant's Response
		The EIP does not introduce any new policies or guidance that would affect the scope of the ES, the methodology for assessment or the conclusions. The list of legislation, policy and guidance in Appendix 2.1 Legislation Policy and Guidance [**APP-088**] is not required to be exhaustive nor is it generally updated as new documents are published unless there is a material impact on the methodology or conclusions of the ES. Therefore, whilst the EIP can be a relevant and important matter, the Applicant does not propose to update ES Appendix 2.1: Legislation Policy and Guidance [**APP- 088**] to include this Plan. Although the new legislation is not included in ES Appendix 2.1, the project is compliant with the legislation and it supports the government's goal to improve nature.
AQ1.1.21	Can the Applicant explain whether it proposes to secure any of the carbon reduction measures outlined in Section 3.2 of ES Appendix 4.3 [**APP-092**] through the dDCO (**document 3.1 (B)**) and, if so, how this would be achieved. If not, what are the reasons?	In respect of paragraph 3.2.1 and the Applicant's requirement for its contractors to use PAS 2080, the Applicant does not consider it appropriate to secure this via the dDCO (**document 3.1 (C)**) and will not be proposing this. In respect of paragraph 3.2.4 and the Applicant's commitment to deliver Carbon Neutral construction by end 2025/26, the policies for delivering this commitment are still in the process of development and review and the Applicant does not propose to secure this commitment through the dDCO (**document 3.1 (C)**). In respect of paragraphs 3.2.2 (low carbon materials) and paragraph 3.2.3 (use incentives to reduce carbon against the Carbon Interface Tool (CIT) baseline), these measures are also incorporated within the MWMP (**document 7.7 (B)**) in paragraphs 5.4.2 and 5.4.3. The MWMP is secured through Requirement 4 of the dDCO (**document 3.1 (C)**).

2. Approach to the EIA and the ES, Including Cumulative Effects

Table 2.1 Approach to the EIA and the ES, including cumulative effects

Reference	Question	Applicant's Response
EA1.2.1	Noting the definitions of 'environmental information' and 'ES' in the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (as amended), why do you believe it is better to submit the documents listed at paragraph 5.7.2 of Chapter 5 of the ES [**APP-073**] outside the ES rather than as part of it? Are you content that the ES is compliant with Regulation 14 of these Regulations and relevant case law around the ES containing the information that is reasonably required to assess the effects of the project and noting that the ES must constitute a *'single and accessible compilation of the relevant environmental information and the summary in non-technical language*'?	As stated in paragraph 2.1.5 of the Legal Note on EIA Points Raised at the Preliminary Meeting [**REP1-035**], Regulation 14(2) of the Infrastructure Planning (EIA) Regulations 2017 prescribes the contents of an ES. The focus being on 'likely significant effects'. UK legislation and policy requires the production of a number of products that are required to support planning applications outside of the statutory EIA process. These products have their own guidance and legislative requirements that are separate to an assessment of likely significant effects required by the Infrastructure Planning (EIA) Regulations 2017. The documents listed in paragraph 5.7.2 of ES Chapter 5: EIA Approach and Method [**APP-073**] are required documents outlined in the NPS but are not needed to support an ES, where there are no likely significant effects. Therefore, although the Applicant considers these documents are required to support the application for development consent, they do not constitute part of the ES as these matters do not relate to likely significant effects.
EA1.2.2	The ES is defined in the dDCO (**document 3.1(B)**) as, '*ES means the ES (Documents 6.1 to 6.4 (inclusive)) together with any supplemental or additional environmental information certified under article 57 (certification of documents), and any ES submitted for the purposes of complying with and/or discharging the Requirements*.' The ExA wishes it to be clear what constitutes the ES at the close of Examination for the purposes of the relevant provisions in the dDCO. Can the	As stated in paragraph 2.1.5 of the Legal Note on EIA Points Raised at the Preliminary Meeting [**REP1-035**], Regulation 14(2) of the Infrastructure Planning (EIA) Regulations 2017 prescribes the contents of an ES, which is focussed on identifying likely significant effects on the environment. Based on this, the Applicant considers that the following documents constitute the ES: • ES Non-Technical Summary [**APP-068**] • ES Chapters 1 to 17 [**APP-069** to **APP-085**] • ES Reference List [**APP-086**] • ES Appendices [**APP-087** to **APP-144**] • ES Figures [**PDA-002, APP-146** to **APP-155**]

Reference	Question	Applicant's Response
	Applicant provide a schedule setting out the documents that form part of the ES, including the revision number of any updated chapters, appendices or figures, and the name of any supplemental or additional information submitted during Examination? Can a final version of this schedule be submitted at Deadline 10?	The Applicant has included the Scoping Report [**APP-156** to **APP-158**] and the Scoping Opinion [**APP-159**] in Volume 6 of the application for development consent for information only. However, the Applicant does not consider these to be part of the ES given that these are distinctively different documents required under the Infrastructure Planning (EIA) Regulations 2017. The Applicant can confirm that a schedule of the final versions of the documents that form part of the ES, including the revision number of any updated chapters, appendices or figures, and the names of any supplemental or additional information, will be submitted at Deadline 10.
EA1.2.3	Chapter 5 of the ES, EIA Approach and Method [**APP-073**] (paragraph 5.4.2), notes that the assessment was based on a 'reasonable worst case'. How is 'reasonable' defined, and how does this approach ensure that the implementation of the Proposed Development could not give rise to environmental effects that are worse than those predicted?	The reasonable worst case is considered to represent the scenario after highly implausible scenarios are excluded. As well as working with the Applicant's internal engineers, the Applicant procured early construction contractor involvement to support the initial design and to develop a robust, reasonable worst case suitable for assessment. This early engagement with a construction contractor was critical to understanding how the project 'could' be built and operated in this location to define the parameters of the design. The construction contractor who is experienced in constructing both overhead lines and underground cables has assisted in providing key assumptions for the EIA, including construction techniques, construction land requirements, traffic numbers, construction staff numbers, and programming (sequencing and duration) information. A precautionary approach has been taken in using information provided by the construction contractor. The Applicant is aware of the importance of understanding at the pre-application stage how the project may eventually be constructed, and that the greater the confidence in the environmental effects reported in the ES, the less the likelihood for materially different effects if changes are made in the detailed design. The reasonable worst case was determined by technical specialist for each receptor using professional judgement based on the parameters of the design and previous experience of similar projects. The EIA is based on assessing the reasonable worst-case scenario taking into account the flexibility that is sought as part of the DCO application. For example, the Applicant would need to remove vegetation along the working area to construct the project. However, the LoD provides flexibility as to where the final alignment would lie. The Applicant considers it unreasonable to base the ES on the assumption that all vegetation within the Order Limits would be removed (absolute worst case) as this would never occur. This would over-estimate the impacts and mitigation required as a result. Instead, the Applicant has assessed a reasonable worst case based on the engineering parameters defined within ES Chapter 4: Project Description [**APP-072**]. This recognises that the working area can move within the LoD but the scale of impact would remain within the parameters set out within the ES, for example the underground cables would have an 80m working area within the 100m Order Limits.
EA1.2.4	ES Chapter 4 [**APP-072**] (paragraphs 4.7.22 *ff*) assumes that HDD would be used, *'particularly the geology and noise*	Horizontal directional drilling (HDD) has been assumed because it is the most widely used technique for installing high voltage power lines beneath sensitive features. It is also the technique that has been assumed throughout

Reference	Question	Applicant's Response
	chapters'. It also notes that, *'There are different methods that could be used to construct the trenchless crossings. Each method would have a different construction footprint and potentially different environmental effects*.' Is HDD the worst case for all possible impacts at all possible receptors, and, if so, where is this evidenced? If not, where are the worst-case impacts assessed?	the options appraisal to date, for example, as described in paragraph 4.20 of the Connection Options Report May 2012 [**APP-164**]. Section 11 at the end of each chapter of the ES considers whether the flexibility in construction method from HDD would change the likely significant effects within the main assessment. In all chapters except ES Chapter 10: Geology and Hydrogeology [**APP-078**], the assessment around flexibility in the design has determined that changing the trenchless crossing method would not result in any new or different significant effects. In relation to geology and hydrogeology, HDD can be the worst case on some projects and at some locations. However, the effects depend on many different variables including the ground conditions, groundwater conditions and also the nature and sensitivity of receptors. This is noted in paragraph 10.11.4 of ES Chapter 10: Geology and Hydrogeology [**APP-078**]. Therefore, the Applicant has included good practice measure GH07 in the CEMP Appendix A: CoCP (**document 7.5.1 (B)**), which has been updated at Deadline 3 and now states that: '*A hydrogeological risk assessment will be undertaken once the trenchless crossing method has been confirmed. This will assess the risks on groundwater or surface water quality associated with the construction method including considering the potential for breakout during drilling and the use of bentonite or other agents proposed. Where the assessment identifies an unacceptable risk to groundwater or surface water quality, then alternative methods and/or additives shall be proposed, assessed and used. The hydrogeological risk assessment will be submitted to the Environment Agency for approval prior to construction. The Environment Agency will have up to 21 working days to respond on the hydrogeological risk assessment and their comments will be considered as part of finalising the risk assessment. This can be supported by a pre-submission draft to reduce the risk of any delays'*.
EA1.2.5	Section 4.10 of ES Chapter 4, the Project Description, [**APP-072**] assumes that the decommissioning impacts would be no worse than those assessed for construction. Is this a reasonable assumption in relation to all receptors for all topics, such as biodiversity and noise and vibration, bearing in mind the nature and amount of infrastructure to be broken up and removed? Would the following addition to Requirement 12 of the Ddco be beneficial? *'The written scheme of decommissioning must include sufficient information to demonstrate the validity of the assumption made in the original ES for*	As stated in paragraph 4.10.8 of ES Chapter 4: Project Description [**APP-072**], decommissioned underground cables could be left in the ground with any above ground structures such as link pillars removed. The decommissioning of the GSP substation and the CSE compounds would be similar to removal of the overhead line in terms of dismantling the above ground features and excavating the foundations to approximately 1.5m below ground level, before reinstating the subsoil and topsoil. In terms of the overhead line, the project involves removal of 27km of overhead line and removal of approximately 95 pylons, as shown on the General Arrangement Plans [**APP-018**]. The proposed infrastructure consists of 18km of new overhead line and 50 new pylons. Therefore, at the point of decommissioning there would be less overhead line and fewer pylons to remove than during construction of the project, even taking into account the similar above ground infrastructure at the CSE compound and GSP substation. Therefore, the Applicant considers it to be a reasonable conclusion that decommissioning impacts would be no worse than those assessed for construction and hence any amendment to Requirement 12 (Decommissioning) would not meet the established legal or policy tests for necessity as are relevant to the imposition of requirements (or planning conditions) and referred to in Paragraph 15 of Planning Inspectorate Advice Note 15 (Drafting Development Consent Orders).

Reference	Question	Applicant's Response
	the Proposed Development that decommissioning impacts would be no worse than those concluded for construction or provide new assessments for any types of impact for which this is not demonstrated.'	
EA1.2.6	Paragraphs 5.4.18 *ff* of the ES [**APP-073**] describe how significance has been applied to each predicted impact and includes a matrix that was used in this process (Illustration 5.1). It recognises that the EIA Regulations 2017 do not define what constitutes a significant effect but suggests that these are, *'typically taken to be a moderate or greater adverse or beneficial significance*'. Is this approach based on any policy or professional guidance, noting that it is discouraged in the IEMA publication, *'The State of EIA Practice in the UK'*, 2011? Paragraph 5.4.21 states that, *'consideration has been given to how those significant effects could be avoided, reduced or offset'*. Does this mean that impacts of 'minor' significance (in matrix terms) have not been considered for mitigation? If so, does this address the intention of EIA to, *'reduce residual effects, where practicable, to a non-significant level'* (paragraph 5.1.1), given that impacts of minor significance might reasonably be considered inherently significant?	As stated in paragraph 5.4.20 of ES Chapter 5: EIA Approach and Method [**APP-073**], the EIA Regulations 2017 do not define what constitutes a significant effect, however this is typically taken to be a moderate or greater adverse or beneficial effects. This is a typical definition of significance and aligns with the Design Manual for Roads and Bridges (DMRB) LA 104: Environmental Assessment and Monitoring (Highways England, 2020), which states in NOTE 3 that *'Significant effects typically comprise residual effects that are within the moderate, large or very large categories'*. As stated in paragraph 5.4.15 of ES Chapter 5: EIA Approach and Method [**APP-073**], whilst the DMRB was initially established for assessment of roads and bridges, it is widely adopted as appropriate for other major developments. In line with Institute of Environmental Management and Assessment (IEMA) guidance (such as Guide to Shaping Quality Development (2015)), the EIA takes a proportionate approach and focuses on the likely significant effects, which can be considered to be material to decision making. Table 3.7 of DMRB LA 104 sets out typical descriptions of significance, and identifies that moderate, large or very large effects can be considered to be, are likely to be, or are material to the decision-making process, respectively. As stated in paragraph 5.4.20 of ES Chapter 5: EIA Approach and Method [**APP-073**], minor effects are not considered to be significant effects, but reflect that there may be some differences from the baseline conditions. While mitigation is proposed to avoid, reduce or offset significant effects (where appropriate), project commitments such as the good practice measures in the CEMP Appendix A: CoCP (**document 7.5 (B)**) would help to reduce minor effects too (for example, the pollution prevention measures).
EA1.2.7	Can you explain the steps that you would take to keep information about other developments that are relevant to the cumulative effects assessment (ES	The Applicant is undertaking monthly reviews of planning registers during the Examination period, including the Councils planning portals and the Planning Inspectorate's register of applications, to check whether there are any new developments to add to the long list of developments [**APP-142**] or updates and amendments to existing developments considered in the long list of other developments [**APP-142**]. The relevant planning applications

Reference	Question	Applicant's Response
	Chapter 15 [**APP-083**]) under review, including how any changes would be addressed and reported to the Examination?	are then screened using the methodology set out in ES Chapter 15: CEA [**APP-083**] to identify other developments that would progress to the Stages 2- 4 of the inter-project CEA process. No such updates have been identified to date. Should the review identify the potential for new or different significant effects or changes to the conclusions presented in the ES, then these would be published into Examination as updates to the relevant inter-project CEA documents [**APP-083 / APP-142** to **APP-144**] as appropriate. The CEA would not be updated just because there is new information available about a development, where this information has been assessed as having no change to the assessment or conclusions presented in ES Chapter 15: CEA [**APP-083**].
EA1.2.9	Anglian Water [RR-022] provided comments about potential cumulative effects with its proposed 69km strategic pipeline project between Bury St Edmunds and Colchester, which you had identified in your list of potentially cumulative projects in ES Appendix 15.3 [**APP-142**]. ES Appendix 15.5 [**APP-144**] concludes that there would be no likely significant effects. However, Anglian Water notes that the construction programme for its project has changed from that used in your ES. Can you explain any implications of this for the cumulative assessment in ES Chapter 15 [**APP-083**]?	The applicant understands that the construction programme for the Anglian Water Bury St Edmunds to Colchester strategic pipeline has been delayed since their ES was published. Enabling works would start in early autumn 2023 (compared with March 2023 previously), construction would start in November 2023 (compared with July 2023 previously) and finish in October 2024, commissioning would start in summer 2024 (compared with June 2024 previously), and reinstatement would be completed by summer 2025 (compared with September 2024 previously). The inter-project CEA with the Bury St Edmunds to Colchester strategic pipeline (as reported in ES Appendix 15.5: Inter Project CEA [**APP-144**]) assumed a temporal overlap in construction, as it was recognised that there could be delays to the indicative construction programme for the pipeline, as the pipeline had not been granted planning permission at the time of the CEA. Therefore, there would be no changes to the conclusions of the inter-project CEA due to the change in the construction programme for the pipeline [**APP-144**]. The Applicant and Anglian Water have been and will continue to work collaboratively. The parties have agreed heads of terms for a construction interface agreement between the two projects in relation to the timelines for construction of both projects. Commercial negotiations in respect of the interface agreement are progressing, and an interface agreement would reduce the potential for inter-project cumulative effects during construction. Further details can be found in the Draft Statement of Common Ground (SoCG) with Anglian Water [**REP1-019/020**].

3. Biodiversity, Ecology and Nature Conservation, Including HRA Matters

Table 3.1 – Biodiversity, ecology and nature conservation, including Habitats Regulation Assessment matters

Reference	Question	Applicant's Response
EC1.3.1	The Applicant's comments on RRs [**REP1-025**] do not seem specifically to address the suggestion from Natural England [RR-042] that the potential impacts on the Hintlesham Woods SSSI interest features 'lowland mixed deciduous woodland' and 'breeding bird assemblages - mixed: scrub and woodland' require further assessment, and that consideration of mitigation or compensation is required. Can you indicate your current position on these matters.	Following the RR received from Natural England [**RR-042**], the Applicant has produced two further Technical Notes (which have been submitted at Deadline 3) to clarify the impacts of the works on the habitats and breeding bird assemblages at Hintlesham Woods Site of Special Scientific Interest (SSSI). The Technical Note on Noise Levels at Hintlesham Woods SSSI (**document 8.5.9**) sets out the additional noise assessment that has been undertaken as part of considering 'peak' sound levels at the woods. The Technical Note on Ancient Woodland and Potential Ancient Woodland (**document 8.5.12**) sets out further details of the specific works proposed at Hintlesham Woods SSSI. The updated commitments contained within these Technical Notes have been included in the REAC submitted at Deadline 3 (**document 7.5.2 (B)**). Both Technical Notes have been submitted into Examination at Deadline 3 for Natural England to confirm whether this resolves the outstanding matters in relation to Hintlesham Woods SSSI. The Applicant will provide an update on these matters in an updated SoCG with Natural England at a future deadline.
EC1.3.2	Nick Miller [**RR-103**] raises concerns relating to biodiversity and refers to impacts on designated and non-designated sites of wildlife value. Can you respond to the specific suggestion that your assessment fails to pay adequate regard to the Alphamstone Meadows Local Wildlife Site and important adjacent scarce habitats, which he believes to be scarce in eastern England and to probably meet the NPPF glossary definition of 'Irreplaceable Habitat'?	ES Chapter 7: Biodiversity [**APP-075**] Table 7.5 provides a summary of the findings of the field surveys undertaken in 2022 where the Order Limits cross Alphamstone Meadows Local Wildlife Site (LoWS). The Applicant has committed to a trenchless crossing at this location in order to avoid habitats within the LoWS. In addition, embedded measure EM-G08 set out within the REAC (**document 7.5.2 (B)**) states that existing routes through the woods will be used where practicable by light goods vehicles or tracked vehicles. Otherwise, pedestrian access would be maintained over the top of the trenchless crossing. There would be no temporary access route along the trenches crossing. Table 7.8 ES Chapter 7: Biodiversity [**APP-075**] provides the impact assessment for the LoWS which concludes that there would be a neutral effect (not significant) on the LoWS. This is because the trenchless crossing would avoid impacts to the LoWS. As shown on Figure 7.1.3: Habitats of Principal Importance and Ground Water Terrestrial Ecosystems (Sheet 17) [**APP-148**], the adjacent habitats located outside the LoWS were not classified as irreplaceable habitat during the 2022 field surveys. Lowland mixed deciduous woodland and open mosaic on previously developed land habitats of principal importance are located west of the LoWS (approximately 220m and 275m respectively). The lowland mixed deciduous woodland would not be affected as it is located within the

Reference	Question	Applicant's Response
		trenchless crossing. It is assumed in the assessment that the open mosaic on previously developed land could be lost subject to the exact methodology of the trenchless crossing. Paragraph 7.6.71 in ES Chapter 7: Biodiversity [**APP-075**] states that the proposed construction works would be no more disruptive than the activities that have gone before to create these habitats. The areas would be left to re-establish following construction.
EC1.3.3	Natural England has requested [**RR-042**] a summary table of the total area of all Habitats of Principal Importance that would be lost, permanently and temporarily, alongside the total area of proposed mitigation for each. Your response to RRs [**REP1-025**] seems to indicate that you do not intend to provide this. Please explain why.	A summary of data from Section 7.6 of ES Chapter 7: Biodiversity [**APP-075**] is provided below to show total loss (permanent and temporary) and proposed mitigation for each Habitat of Principal Importance (HPI). There would be temporary loss of the following HPI which would be fully reinstated on completion of construction. No permanent loss of these HPI would occur: ● Coastal and floodplain grazing marsh – 0.04ha ● Lowland dry acid grassland – 0.07ha ● Arable field margins – 0.62ha ● Open mosaic on previously developed land – 0.35ha ● Purple moor grass and rush pastures – 0.01ha Loss of woodland HPI is summarised below with temporary loss comprising both coppiced and pruned vegetation. ● Wet woodland - no permanent loss, temporary loss of 1.08ha ● Lowland mixed deciduous woodland – permanent loss of 0.35ha, temporary loss of 3.49ha (this number is slightly lower to that mentioned in paragraph 7.6.49 of ES Chapter 7: Biodiversity [**APP-075**] due to rounding methods using in the calculations). 13ha of mitigation woodland creation (natural regeneration and planting) is proposed at two locations connected to Hintlesham Woods to compensate for woodland loss or that which has been retained but modified/degraded and due to the timescales required for this habitat to establish. No permanent or temporary loss would occur to the following HPI present within the Order Limits: ● Lowland fen ● Rivers ● Eutrophic standing waters and ponds ● Mesotrophic lakes.

Reference	Question	Applicant's Response
EC1.3.4	Woodland creation is proposed to mitigate the loss and degradation of lowland mixed deciduous woodland (a habitat of principal importance). This is captured as EIA_B01 in the REAC [**APP-179**] and the location of the planting is shown on LEMP Appendix B [**APP-184**], as secured through Requirement 4(2) of the dDCO. However, the LEMP [**APP-182**] does not appear to provide information about the timing of planting or the approach to aftercare. (Section 9 sets out general principles but these relate to reinstatement rather than habitat creation.) Can you describe the approach to this woodland habitat creation in more detail and how the commitments are secured in the dDCO (**document 3.1 (B)**), including: • when the planting would be undertaken; • whether this would be prior to habitat loss and, if not, why not; • the proposals for aftercare, including the time period proposed and why this is considered appropriate; and, • the mechanism for remedial action, if required.	The LEMP (**document 7.8(B)**) covers all of the planting proposed on the project as set out in the ES. The LEMP has been updated at Deadline 3 in response to this Written Question to make clear that the text in Chapter 8 covers mitigation (new) planting as well as reinstatement planting. Paragraph 8.2.2 of the LEMP (**document 7.8(B)**) states that reinstatement and mitigation planting would be carried out in the first available planting season after that part of the authorised development to which the reinstatement and mitigation planting works apply is first brought into operational use. The majority of vegetation affected on the project is as a result of temporary works and the vegetation would be reinstated in situ following construction. Therefore, it would not be appropriate to plant habitats prior to the habitat loss, as these would then be damaged during construction. In terms of the time period proposed for aftercare, the Applicant notes that in respect of certain sites along the project route where the freehold has been, or is proposed to be acquired by the Applicant, landscape screening (incorporating reinstatement planting) is an embedded measure which would be retained for the lifetime of the transmission asset and, therefore, maintained on a permanent basis. This would be at the GSP substation and around the CSE compounds, as per embedded measures EM-D01, EM-F01, EM-G03, EM-G06 and EM-H02 set out within the REAC (**document 7.5.2 (B)**). The Applicant has also committed to maintaining the environmental enhancement areas for a period of up to 30 years, as described in paragraph 7.3.1 in the Environmental Gain Report [**APP-176**]. The Applicant has also committed to up to a 30 year aftercare period for the mitigation planting MM09 at Hintlesham Woods, which is a priority site for development of mixed broadleaved native woodland planting, scrub planting and species rich grassland. The 30-year aftercare period for MM09 is considered necessary to enable the woodland planting to achieve the growth rates predicted and secure its long-term viability. Wording has been added to Section 9.1 of the LEMP (**document 7.8 (B)**) at Deadline 3 to show the clear commitment from the Applicant in relation to this site. For those areas where reinstatement planting is identified in LEMP Appendix B: Vegetation Reinstatement Plans (**document 7.8.2 (B)**), other than those areas mentioned above, in accordance with good practice measure LV03, and as stated in Requirement 10 of the dDCO (**document 3.1 (C)**), a five-year aftercare period would be established for mitigation planting and reinstatement. By the end of that five-year period all planting delivered would be established. Following that time, the planting would be managed by the relevant landowner, as currently takes place in respect of existing planting on private land. The Applicant considers that five-years is appropriate in the context of these locations based on the types of reinstatement and mitigation planting proposed, which is typically hedgerow reinforcement and planting. Planting sizes and species have been selected based on those which would naturalise more easily than larger trees stock, for example, smaller whips and transplants. The purpose of the proposed reinstatement planting is to replace what is removed, in order to maintain the existing baseline. Once the reinstatement planting is delivered and has been established through the five-year maintenance period the purpose of the reinstatement planting has been achieved. It is the Applicant's view that there should be no additional obligation on the Applicant (or private landowners) to manage or maintain planting on private land which forms part of the wider baseline, in the same way as the Applicant (or private landowners)

Reference	Question	Applicant's Response
		would not be obliged to maintain existing baseline planting which is not affected by the project. In summary, the purpose of the reinstatement planting would not be undermined as its purpose is as replacement planting, and not as planting to be retained by the Applicant. There is also no justification for the Applicant to permanently acquire land for the management of replacement planting in perpetuity or seek to agree long term management with a landowner, where that landowner would ordinarily be entitled to manage existing planting on their land as they consider appropriate. Management of replacement or mitigation planting following the five-year period is not considered directly related to the development or necessary on the basis that the planting required would have been delivered and its establishment secured, which is the purpose of the replacement planting. In terms of remedial actions within the aftercare period, Section 9.1 of the LEMP (**document 7.8 (B)**) outlines the periodic checks that would be undertaken to check the reinstatement and to replace species that have not taken. These checks would identify whether additional measures need to be undertaken so that vegetation re-establishes in these areas. This could include additional planting.
EC1.3.5	The LEMP [**APP-182**] includes proposals for woodland establishment through natural regeneration, using the local seed bank already present. Does the LEMP include sufficient information on which to base the establishment and management of the larger areas that extend some distance from existing woodland on arable soils? Would soil fertility need to be reduced and is further detail needed on control of weeds? Is further detail required on the measures that would be taken if the establishment of naturally regenerated woodland is not occurring satisfactorily? Is the proposed monitoring and aftercare period sufficient?	Mitigation area MM10 would provide an enhanced habitat connection between the southern aspects of Ramsey Wood and Hintlesham Little Wood. Although natural regeneration takes longer to create, this method was agreed with RSPB, Natural England and the relevant planning authorities in a meeting on 1 November 2021 as generating the best outcome for biodiversity at this location, allowing the existing woodland to expand and limit the introduction of non-local/invasive species. The establishment phase would also have value and would provide additional habitat for species such as nightingale that prefer scrub type vegetation. Paragraphs 8.4.10 and 8.4.11 of the LEMP (**document 7.8 (B)**) set out the general principles for natural generation of woodland including that it is assumed that this would follow natural regeneration guidance from Flora Locale (2022). Additional wording has been added into paragraph 8.4.11 following the LIR from Suffolk County Council [**REP1-045**], expressing concerns about natural regeneration, to note that aftercare checks would identify whether additional planting is required to achieve the habitat objectives. Paragraph 8.4.12 notes that the soil would be ploughed or subsoiled to break up any compacted soil. The site would be disced and repeatedly harrowed during the spring and summer to reduce successive flushes of weeds and to produce an even seedbed. Please refer to the response to EC1.3.4 regarding the duration of aftercare.
EC1.3.6	Section 9 of the LEMP [**APP-182**] appears to suggest that most areas of habitat (trees, woodlands, hedges, grasslands) created for mitigation, restoration, compensation and BNG revert to the landowner after five years. Is this a correct understanding and do you believe that this is sufficient guarantee that the created	Please refer to the response to EC1.3.4 regarding the duration of aftercare.

Reference	Question	Applicant's Response
	habitat would provide its mitigation or compensation function in the longer term?	
EC1.3.10	As a result of the preparatory management works that would be necessary in Hintlesham Woods SSSI, including coppicing and felling along the existing line corridor, did your assessment consider potential windthrow impacts on the woodland, and, if so, what would be the impacts on the woodland habitats and the SSSI? If not, why not?	As described in Section 2.2 of ES Appendix 7.1 Annex B: Hintlesham Woods SSSI Assessment [**APP-111**], where the Order Limits cross Hintlesham Woods SSSI there is an existing maintenance swathe beneath the existing overhead line for operational safety clearances, therefore the trees along this gap would already be adapted to wind along this corridor. Furthermore, this existing maintained swathe runs through the middle of the woods rather than creating a new wind-buffeted exposed woodland edge.
EC1.3.11	The HRA Report [REP1-007] sets out how mitigation measures have been dealt with at the screening stage. Is there sufficient clarity in relation to the proposed trenchless crossings of the Rivers Box and Stour (paragraph 2.4.1, etc) to demonstrate that the approach accords with the People Over Wind and Sweetman v Coillte Teoranta judgement?	The trenchless crossings of the River Box and Stour are embedded measures as described in Table 4.2 of ES Chapter 4: Project Description [**APP-072**]. They are an intrinsic part of the project design and no other techniques for crossing these watercourses have been proposed. The Applicant considers that its approach in this respect is entirely consistent with Paragraph 3.15 of Planning Inspectorate Advice Note 10 (Habitats Regulations Assessment (HRA) relevant to nationally significant infrastructure projects) and with Paragraph 007 of extant 'Guidance on the use of Habitats Regulations Assessment' (DLUHC/MHCLG, July 2019), both of which reflect the decision of the Court of Justice of the European Union in Case C-323/17 *People Over Wind & Peter Sweetman v Coillte Teoranta.* Indeed, the latter expressly confirms that *"[features] that are integral to the design or physical characteristics of the project that is being assessed, for example, the layout, timing and location of a scheme, may be considered at the screening stage."*
EC1.3.12	The list of plans and projects where in-combination effects could occur was fixed on the 31 January 2023 to allow the HRA to be finalised for submission [**APP-057**]. Have any further relevant plans or projects come forward or become known since then that might affect the in-combination assessment?	The Applicant is undertaking monthly reviews of planning registers, including the Councils planning portals and the Planning Inspectorate's register of applications. These reviews are to identify whether there are any new developments or if there are any updates and amendments to existing developments considered in the long list of other developments, that could introduce potential new or different significant effects into the CEA. See the Applicant's response to written question EA1.2.7 for further details. The Applicant can confirm that there are no new relevant plans or projects or changes to existing relevant plans or projects (since the cut-off date of 31 January 2023 used for the application) that would affect the conclusions of the in-combination assessment presented in Section 6.4 of the HRA Report [**REP1-007 - REP1-008**], taking into account the implementation of the good practice measures outlined in Table 6.1 of the document (which are taken from the CEMP Appendix A: CoCP (**document 7.5.1 (B)**).
EC1.3.13	Can you signpost where you have dealt with Natural England's concerns [RR-042]	The Applicant has updated the wording of GH07 in the CEMP Appendix A: CoCP (**document 7.5.1 (B)**) to say:

Reference	Question	Applicant's Response
	in relation to a possible bentonite breakout and the implications for habitats downstream, including the European sites.	*'A hydrogeological risk assessment will be undertaken once the trenchless crossing method has been confirmed. This will assess the risks on groundwater or surface water quality associated with the construction method including considering the potential for breakout during drilling and the use of bentonite or other agents proposed. Where the assessment identifies an unacceptable risk to groundwater or surface water quality, then alternative methods and/or additives shall be proposed, assessed and used. The hydrogeological risk assessment will be submitted to the Environment Agency for approval prior to construction. The Environment Agency will have up to 21 working days to respond on the hydrogeological risk assessment and their comments will be considered as part of finalising the risk assessment. This can be supported by a pre-submission draft to reduce the risk of any delays.'* Natural England, in their Written Representation [**REP2-026**], state in Table 1, key issue reference WR-NE02, that *'Natural England acknowledges that the Applicant intends to update the wording of the CEMP Appendix A: CoCP good practice measure GH07 so that the more detailed measure described in the CEMP Appendix A: CoCP document will be reflected in the HRA Report.'* The updated CEMP Appendix A: CoCP (**document 7.5.1 (B)**) has been submitted at Deadline 3. The Applicant does not propose to update the wording of the commitment in the HRA Report as it would not change the conclusions of the report.

4. Compulsory Acquisition, Temporary Possession and Other Land or Rights Considerations

Table 4.1 – Compulsory Acquisition, Temporary Possession and other land or rights considerations

Reference	Question	Applicant's Response
CA1.4.6	In relation to your duties under section 149 of the Equalities Act 2010, have any Affected Persons been identified as having protected characteristics? (Any individual's specific details should not be included in your response.)	The Applicant itself is not subject to the Public Sector Equalities Duty (PSED) but confirms that it has considered the position in respect of section 149 of the Equalities Act 2010, as summarised in paragraph 9.2 of the Statement of Reasons (SoR) [**APP-038**]. The Applicant has, on a voluntary basis, and to inform the Secretary of State's own compliance with the PSED, carried out an Equalities Impact Assessment (EqIA), which has been submitted at Deadline 3 (**document 8.5.13**). The Applicant does not hold information as to any protected characteristics held by Affected Persons. However, to the extent that any Affected Persons do have protected characteristics, the impact upon them has been considered as part of the EqIA. This confirms no equality impacts are expected to arise as a consequence of the exercise of powers of compulsory acquisition.
CA1.4.7	Can you confirm that the BoR [REP1-005] complies with the advice contained in the *Planning Act 2008 Guidance related to procedures for the compulsory acquisition of land*, September 2013, Department for Communities and Local Government, Annex D, paragraph 8? For example, are all those identified in BoR Part 3 also recorded in Part 1?	The Applicant confirms that to the best of its knowledge the Book of Reference (BoR) [**REP1-005**] complies with the guidance. To confirm, all those listed in Part 3 are also listed in Part 1.
CA1.4.8	Can you confirm that all persons having an interest in land, including any rights over unregistered land, have been identified? Where this has not been possible can you: a) Provide a summary of where it has not yet been able to identify any persons having an interest in land, including any rights over unregistered land.	a) All persons having an interest in land, including rights over unregistered land, have been identified through a process of diligent inquiry. The diligent inquiry process for identifying all interests in land is set out in Appendix J of the Consultation Report [**APP-053**]. Where, despite having completed this diligent inquiry process, an interest or right in land has been identified but the holder of that interest remains unknown, 'Unknown' has been listed as an entry in the BoR. The plots (with references made to the Land Plans [**REP1-004**]) in which the Applicant has identified an unknown freehold interest are: 1-18, 1-19, 1-24, 2-01, 6-19, 15-59, 16-77, 16-80, 17-35, 17-70, 21-18, 21-41, 21-51, 22-04, 22-09.

Reference	Question	Applicant's Response
	b) Advise as to what further steps you will be taking to identify unknown rights during the Examination.	An 'Unknown' is also included in every public road where ownership cannot be confirmed. In these plots the adjacent freehold interests have been included for their rights to half width of subsoil. Additionally, where the current holder of a historical right over land has not been identified the Applicant has included an 'Unknown' in the BoR (**document 4.3 (C)**). b) Reviews are being undertaken on a regular basis to identify updates in Land Registry records. Where information comes to light during the Examination on the holders of these interests, or any additional interests in the BoR, these will be followed up, and investigated and updated in the BoR (**document 4.3 (C)**).
CA1.4.9	The methodology for identifying Category 3 persons, as defined by Section 44 of the PA2008, are set out in Section 6.7 of the SoR [**APP-038**]. The ExA notes at page 3 of Appendix J of the Consultation Report [**APP-053**] the Applicant's statement that, '*the exclusion of parties from the Book of Reference or consultation does not preclude them from being able to make a relevant claim'*. Nevertheless, having considered Interested Parties' and Affected Persons' submissions on the impact that the Proposed Development would have on their interests, does the Applicant consider that are there any other persons who might be entitled to make a relevant claim if the dDCO were to be made and fully implemented and should therefore be added as Category 3 parties to the BoR [**REP1-005**]? This could include, but might not be limited to, those that have provided representations on, or have interests in the effect of construction or operation of the proposed development in respect of: • human and animal health and wellbeing; • property values or prejudice to property sales; • access to their property;	The Applicant is not aware of any other parties that should be added to Category 3 parties including consideration of the categories listed. This conclusion is predicated on the detailed assessment as set out below and also detailed in the Section 6.7 of the SoR [**APP-038**]. Persons who may have a valid blight claim are fully identified in the BoR (**document 4.3 (C)**) as blight claims are related to the impact of the exercise of powers afforded by the dDCO (**document 3.1 (C)**) over interests in land. The Applicant undertook diligent inquiry to identify the parties in Part 2 of the BoR (**document 4.3 (C)**) who would, or might be entitled to, make a relevant claim. The Applicant does not consider there are any further parties who need to be included but confirms '*the exclusion of parties from the Book of Reference or consultation does not preclude them from being able to make a relevant claim'.*

Reference	Question	Applicant's Response
	• potential subsidence; • dust; • impacts on a business; • claims that there are viable alternatives; or • blight.	
CA1.4.10	Paragraphs 27 and 28 of *Planning Act 2008 Guidance related to procedures for the compulsory acquisition of land*, September 2013, Department for Communities and Local Government, state that applicants are urged to consider offering full access to alternative dispute resolution (ADR) techniques for those with concerns about CA of their land. Have you offered full access to ADR techniques for those with concerns about the CA of their land or considered other means of involving those affected? If so, give details.	The Applicant has carefully considered the use of ADR in the process of securing Heads of Terms by voluntary agreement and finds that in practice there is no demand for it at this stage. The Applicant considers that a potential grantor will either agree to engage in voluntary negotiations or can legitimately decline to do so and those that do not wish to negotiate have no incentive to and are unlikely to wish to engage in ADR. No Interested party or their Agent have requested ADR. Where they are negotiating it is with the intent of reaching a voluntary agreement. Others have simply declined to engage with the offers made to them. The Applicant will keep the position under review, mindful of paragraphs 27 and 28, and ADR would be considered should any affected person request it.
CA1.4.12	Can you confirm the factors that you considered in weighing public benefit against private loss and how that exercise was undertaken. In doing so, you are asked to bring together the cross-referencing between the SoR [**APP-049**], the Planning Statement [**APP-060**] and the Need Case [**APP-061**].	The SoR [**APP-038**] sets out the Applicant's case for seeking powers of compulsory acquisition. The Planning Statement [**APP-060**] sets out the Applicant's case for the granting of development consent. The Needs Case report [**APP-061**] sets out the need for the project. The SoR [**APP-038**] therefore draws on the wider application documentation, including the Needs Case [**APP-061**], the Strategic Options Report [**APP-162**] and associated processes, the optioneering and consultation processes, which are addressed in application documents such as the ES Alternatives Chapter 3 [**APP-071**], the various optioneering reports [**APP-162** to **APP-166**], and the Consultation Report [**APP-043**]. The SoR [**APP-038**] addresses each of the legislative requirements of the Planning Act 2008, including Section122, as well as policy and other legislative requirements. The Applicant took all relevant factors into account (see paragraph 10.3 of the Planning Statement in respect of the public benefits of the project) and is of the view that, the compelling case in the public interest is made out and outweighs any private loss. The Applicant has taken a number of steps to ensure its approach to land acquisition is proportionate and would not give rise to interference with private rights beyond what is necessary.

Reference	Question	Applicant's Response
		Firstly, the Applicant has drawn the Order Limits as tightly as possible, thereby keeping the areas of land affected to a minimum. The Order Limits do allow for a small degree of flexibility to enable any necessary lateral deviation during construction of the Authorised Development. This is necessary at this stage of design development, and typical for a project of this type. Secondly, the Applicant has sought to limit so far as possible any proposed permanent acquisition to rights over land rather than land itself. In the majority of cases, the Applicant is seeking rights over land or temporary possession of the land. In many cases, the land in question is in agricultural use and this use would be able to continue following construction of the Authorised Development. As such, the level of interference will be minimal. The Applicant has developed bespoke categories (summarised at Table 5.1 of the SoR [**APP-038**]) to ensure the nature and extent of powers being sought over each parcel of land was kept to the minimum required. Thirdly, the Applicant has sought, wherever possible, to rely on temporary possession of land rather than permanent acquisition, in order to reduce the impact on landowners. Fourthly, the Applicant has sought to engage with all persons with an interest in land affected with a view to reaching a voluntary agreement for the use of, or the acquisition of (or rights in respect of) the land and the payment of compensation to the landowner. Given the steps the Applicant has taken in order to limit interference with private rights, the Applicant considers that such interference is both necessary and proportionate when compared to the benefits realised by the project.
CA1.4.13	What degree of importance did you attribute to the existing uses of the land proposed to be acquired in assessing whether any interference would be justified, and why?	As summarised in the Evolution of the Project report [**APP-166**], the design of the project is the result of an iterative process. The project evolution included factors such as existing land uses. In particular, efforts were made where possible to avoid existing settlements. In terms of the case being made for powers of compulsory acquisition, the Applicant refers to the steps taken and summarised in response to CA 1.4.12, which includes a recognition that in many cases, the land in question is in agricultural use and this use would be able to continue following construction of the Authorised Development. The consideration of project impacts, the presence or absence of a compelling case in the public interest, and the consequences of the exercise of powers of compulsory acquisition are part of various processes throughout the project development cycle. At the options identification and selection stage of the project development process, the Applicant sets out clearly how it has considered alternative route corridor and site options and the determination of preliminary corridors for the connection works. Paragraph 6.3 of the SoR [**APP-049**] sets out the existing land uses, and Section 7 sets out the Applicant's justification for powers of compulsory acquisition in relation to the project.

Reference	Question	Applicant's Response
		The Applicant considers the impact on the existing uses to be important in its assessment as to the public benefit and private loss so as to justify interference which is why has sought to minimise the extent of land required either on a freehold basis or for the acquisition of rights, and why it has preferred temporary possession where possible. The predominant land use across the project route is agricultural. As with any project of this size and scale, unfortunately some disruption to normal agricultural activities would be inevitable. Any disturbance that results in financial loss to the occupier or tenant, including additional time taken to liaise with the Applicant or its contractors as well as additional time taken to undertake normal agricultural activities on the land etc would be subject to compensation claims, made to the Applicant. Where it has been necessary to seek the permanent acquisition of land, such as to facilitate construction of CSE compounds, the Applicant has ensured that they are only seeking to acquire the minimum land / rights required for the delivery of the project. Any person affected by the exercise of compulsory purchase powers, or indeed the exercise of temporary possession powers, may be entitled to claim compensation. This entitlement is provided for by the existing compensation code. To ensure that compensation is paid fairly, in the event of any dispute it may be referred to the Upper Tribunal (Lands Chamber) for independent determination.
CA1.4.14	The SoR [**APP-049**] notes that, in pursuing the dDCO, the Applicant has weighed the potential infringement of the European Convention on Human Rights consequent on the inclusion of compulsory powers within the dDCO and concluded that the significant public benefits outweigh the effects of the dDCO on persons who own property in the Order Limits such that there would not be a disproportionate interference with Article 8 and Article 1 First Protocol rights ([**APP- 03**8], paragraphs 9.1.5 to 9.1.19). Can you explain more fully the factors that you considered in the balance (including references to any paragraphs of the relevant NPSs and Government guidance), the weight attributed to those	The process to develop new network infrastructure has many stages where the impact of development is considered. The consideration of project impacts, the presence or absence of a compelling case in the public interest, and the consequences of the exercise of powers of compulsory acquisition are part of various processes throughout the project development cycle. These considerations form part of the Applicant's iterative project development process. The Applicant has also addressed the public benefit and private loss in response to CA1.4.12. Statutory duties imposed on the Applicant by the Electricity Act 1989, and the Licence Conditions applied by Ofgem, ensure that the need for the project, and balancing of public benefit versus private loss remain live considerations from the outset of a project and major development stages throughout the life of any project. Projects are designed to comply with statutory duties and Licence obligations. This work is recorded through the iterative project development process in documents such as Need Case as detailed in Need Case [**APP-161**], Strategic Options and related documents as detailed in the Strategic Options Report [**APP-162**], RCS [**APP-163**], Connection Options Report [**APP-164**] and Substation Siting Study [**APP-165**]. Policy also requires these matters to be considered in the design and routing of any proposed project. NPS for Electricity Networks Infrastructure EN -5 refers to the long established Holford Rules in paragraphs 2.9.16 - 2.1.17 and states that:

Reference	Question	Applicant's Response
	factors and how this exercise was undertaken?	*'…they should be embodied in the applicants' proposals for new overhead lines…'.* Holford Rule 7 guides new lines to routes where the impact on development is minimised as far as possible. It also requires alignment to be chosen only after consideration of the effects on the amenity of existing development and on proposals for new development. This policy guidance is considered at each of the iterative project development stages. The Horlock Rules which set out the approach to substation siting and design in the context of the Applicant's duties under Schedule 9 of the Electricity Act 1989, including Horlock Rule 3 also guides that areas of local amenity value should be protected as far as reasonably practicable. The Applicant attaches significant weight to both NPS EN - 5 and the Holford Rules and Horlock Rules in the development of and selection of corridors for new overhead line infrastructure and substation sites, the identification of preferences within a preferred corridor and in the design of the proposal and alignment and siting of infrastructure. It is known that Holford Rule 7 encourages network development away from residential buildings and gardens, and as a consequence also drives compliance with Article 8. Further details can be seen in the Planning Statement [**APP-160**] submitted as part of the application – for example at paragraphs 5.8 and 5.9 which address the Holford and Horlock rules – and in respect of compliance with EN-5 see Appendix B of the Planning Statement. Policy and custom and practice also work together to shape the rights that the Applicant seeks in order to deliver transmission infrastructure. The vast majority of the assets forming part of the electricity network are secured via the lowest level of intervention with the landowner concerned. The vast majority of the network is secured via rights in the form of wayleaves and easements, rather than by ownership. Freeholds are only sought where absolutely necessary. This approach is now driven by policy in the form of NPS EN-5, and custom and practice where DCOs are not involved. Draft NPS EN-5 which is being consulted on at present confirms that this approach should continue in paragraph 2.6.4, with the only change being a strong preference for permanent rights (easements) over voluntary and terminable rights (wayleaves) because: *'…of their greater reliability and economic efficiency and reflecting the importance of the relevant infrastructure to the nation's net zero goals'.* It is known that policy, and custom and practice, drives compliance with Article 1. The Applicant attaches significant weight to NPS EN-5 and notes the emerging importance of draft NPS EN-5. Turning then to guidance - as noted in the SoR [**APP-038**] the Applicant has also had regard to the guidance related to procedures for compulsory acquisition of land. At paragraph 7.1.6 of the SoR the Applicant has referenced paragraphs 8 to 19 of the guidance which include alternatives to compulsory acquisition. The principles set out above have influenced the location of the interests to be acquired and the need to minimise the impact and number of landowners affected. The need and requirements for each plot was considered as part of the design and the detail of what is required, as set out at the application stage in Appendix A of the SoR [**APP-**

Reference	Question	Applicant's Response
		039]. The Applicant places significant weight on the guidance which has informed the approach to acquisition. The Applicant's preference as noted in the SoR is to acquire by negotiation and agreement. This is reflective of the guidance – see for example paragraph 25. As noted above the Applicant has also addressed the public benefit and private loss in response to written question CA1.4.12 above.
CA1.4.15	Paragraphs 2.4.4 and 2.4.5 of the SoR [**APP-038**] say that not all the land shown within the Order Limits on the Land Plans [REP1-004] as being subject to permanent acquisition or acquisition of rights would be required during the construction phase. In that context, can you explain how the extent of rights sought in land is consistent with the test at s122(3) of PA2008?	Paragraphs 2.4.4 and 2.4.5 of the SoR [**APP-038**] explain that at the construction stage, temporary use powers are anticipated to be employed, with the Applicant in those circumstances only exercising powers of compulsory acquisition once the exact positions of the permanent assets are known. This means that the Applicant can limit the land and rights to be acquired, an important factor in demonstrating proportionality and therefore a compelling case. This approach is being taken because the Applicant has included necessary flexibility in the application for development consent, which means that, once there is certainty as to the ultimate position of the project, the Applicant would need to exercise powers of compulsory acquisition over a narrower area than the full width of the LoD. This is a conventional approach employed by multiple promoters of linear DCO (and Transport and Works Act Order (TWAO)) projects, balancing engineering and delivery, with the need to ensure sufficient land powers. This is further balanced against the need to make out the compelling case, and the Applicant went through assurance processes to seek to meet this. At paragraph 7.3 of the SoR, the Applicant summarised its position in respect of S.122(3) and the compelling case in the public interest. The Applicant has considered their position in respect of the above matters, in reaching its conclusion in respect of the test in S.122(3).
CA1.4.16	Paragraph 6.1.5 of the SoR [**APP-038**] describes a sequential approach to acquiring the rights in land necessary to construct the Proposed Development. What provisions of the Ddco is this approach founded on?	The dDCO (**document 3.1 (C)**) contains both powers of temporary use (articles 26-29) and compulsory acquisition (articles 23-25). The availability of both kinds of power provide the foundation for the Applicant's sequential approach to acquisition of rights. For the avoidance of doubt, the Applicant notes that the temporary use power is not one of compulsory acquisition but simply a power to enter on, and take temporary possession of, land in order to carry out a specified purpose. Of particular relevance is article 26 (temporary use of land by the Applicant), which as explained in the Explanatory Memorandum (**document 3.2 (B)**) paragraph 3.30, would enable the Applicant to 'occupy land to construct the authorised development without having to permanently acquire the land or a right over land. Once constructed, that land, or rights in the land, may be compulsorily acquired. This means that the Applicant would be able to compulsorily acquire rights to retain, operate and maintain the authorised development over an area of land which matches the final footprint of the authorised development. This provides flexibility to the Applicant and, for the landowner, minimises the area of land required for the compulsory acquisition of land or rights, which has a lesser impact on the landowner.' (Paragraph 3.30.3).

Reference	Question	Applicant's Response
		This type of 'two stage' or sequential approach has been adopted by the Applicant on previous DCO projects (e.g. Richborough Connection Project) and by other DCO undertakers (e.g. Thames Water in respect of the Thames Tideway Tunnel) and finds precedent in TWAOs (e.g. Docklands Light Railway (DLR) extension TWAOs) and the DCO Model Provisions. The alternative to the above, would be to exercise compulsory purchase powers before commencing construction, which would then either constrain the flexibility allowed for in the DDCO, or would mean that the Applicant would have to take a larger area of land in the first instance, negatively impacting affected landowners. There may then also be a future need to offer land back (in conventional Compulsory Purchase Orders (CPOs) the Crichel Down rules would apply). Amongst other matters, including unnecessary impacts on landowners, there would be the matter of the compensation then payable. Hence this type of approach is not preferred, for the reasons set out above. The Applicant submits that a 'two stage' approach is proportionate and appropriate.
CA1.4.17	At paragraph 6.7.3 of the SoR [**APP-038**], you say that an assessment was carried out to identify properties outside the 500m buffer with a potential claim and, at paragraph 6.7.6, refer to Appendix J of the Consultation Report [**APP-053**]. However, as that does not appear to address the matter, what qualifying criteria were applied to the assessment?	The Applicant has applied a multidisciplinary approach to the initial identification of potential Category 3 parties. This involved input from specialist land agents, environmental consultants and the project team. As part of the identification and refinement process, the respective subject matter experts combined to i) confirm what could constitute a relevant claim; ii) advise on matters arising from the construction or operation of the project which may give rise to a claim; and iii) undertake a property due diligence exercise on properties where it was perceived a claim could possibly be made; and conclude the properties potentially impacted and the likelihood of success of any claims. Appendix J of the Consultation Report [**APP-053**] details the land referencing methodology, used to identify all interests in land through diligent enquiry. Page 3 of this document refers to the identification of Category 3 parties who may have a potential claim.
CA1.4.18	Can you explain how your approach to BNG is consistent with the statement at paragraph 4.2.23 of ES Chapter 4 where you say that, '*in the interests of clarity, the enhancements are not addressed as part of the ES, as the enhancements may be delivered through different funding streams and over a different timetable and so that a clear distinction is drawn between necessary mitigation required to offset likely significant effects*'?	BNG is not included within the ES or Management Plans. BNG is covered within the Environmental Gain Report [**APP-176**] and is secured via Requirement 13 of the dDCO (**document 3.1 (C)**). As stated in paragraph 7.1.2 of the Environmental Gain Report [**APP-176**], the environmental areas have been designed to demonstrate a proposal that is capable of delivering a minimum of 10% BNG. Further iterations of the designs are anticipated both through working with environmental bodies, discussions with landowner and ongoing detailed designs which may reduce areas of assumed vegetation loss and identify additional opportunities to deliver BNG. A final scheme is required to be submitted for approval in accordance with Requirement 13.

Reference	Question	Applicant's Response
CA1.4.19	Can you explain why, save for the bell-mouths at the junction with public roads, the Order Limits for the proposed haul road between the A131 and Stour Valley west cable sealing end compound vary considerably in width? Is the extent of proposed acquisition of rights in this respect consistent with s122 of PA2008?	The width of the Order Limits for the temporary access route off the A131 are based on a range of factors including: • The basic width for the temporary access route including space for stored topsoil and subsoil which is generally consistent throughout the route; • Localised widening for small embankments or cuttings to make the temporary access route more consistent in level in places where the ground level is undulating so that large/heavy vehicles are not destabilised; • Localised widening to accommodate swept path on bends where required; and • Localised widening to accommodate passing and holding points for opposing vehicles. These elements combine to define the land needed to deliver this part of the project and therefore are consistent with Section122 of PA2008.
CA1.4.20	In the RR made on behalf of Peter Nott [**RR-039**], the point is made that definition of Class 4 – Compulsory Acquisition of Rights – Access is not appropriate to the requirements of the Proposed Development as it would affect his land and he asks whether an alternative Class should be defined? What is your response to this suggestion?	The application for development consent includes plans for a temporary access route off the A131 to be in place for the duration of construction activities, following this the access would be removed and the land reinstated (including replanting of hedgerows and removal of temporary bridging structures). However, in common with all temporary access routes on the project, the Applicant has sought permanent land rights for the Applicant to access the project in the unlikely event that major works should be required in the future. Re-use of the temporary access route off the A131 is not planned for future routine maintenance and repair of the project. Re-use of the temporary access route off the A131 would only be required for large scale works, for example the replacement of cable infrastructure, an event that may not occur. However, given the importance of ensuring the integrity of the electricity transmission network, it is imperative that this right is retained to enable this access if it is ultimately required. Although the Applicant is seeking a permanent easement, the nature of the temporary access route off the A131 itself would be temporary land use, as the Applicant would still remove it at the end of the construction period and reinstate the land to its original condition. In the unlikely event that the temporary access route off the A131 was required during the operation of the project, the land would again be reinstated after works were complete. An obligation to 'make good' forms part of the Heads of Terms as offered.
CA1.4.21	How do you justify the land take for the temporary construction compounds as described in Table 4.3 of the Project Description [**APP-072**]?	The land take for each of the temporary construction compounds is required in order to provide sufficient area for the compound contents and layout. The extent of these areas have been informed by expert engineering input from those with direct experience of delivery of such projects. As detailed in paragraph 4.4.57 of ES Chapter 4: Project Description [**APP-072**], this would include where required, areas for welfare facilities and site offices, parking spaces, working areas, exclusion zones, access, working platforms and other temporary works, equipment and laydown areas, storage of plant and materials including topsoil and waste management facilities.

Reference	Question	Applicant's Response
CA1.4.22	Looking at the Land Plans [**REP1-004**], and with specific regard to each of the plots listed below, what would be the practical implications of CA or TP of those adjoining plots for access to and use of these Class 8 plots whilst construction is on-going? Further, should persons with rights in those plots be included within Category 3 as defined by s48 of PA2008? a) Sheet No. 02 - Rectangular plot of land bounded by the proposed overhead line to the north, plot 2-03 to the east and 2- 04 to 2-06 inclusive to the south and west. b) Sheet No. 02 - Roughly square plot due north-west on the opposite side of the overhead line corridor. c) Sheet No. 02 - Triangular plot bounded by plots 2-32 and 2-33. d) Sheet No 03 - Rectangular strip of land bounded in the main by plots 2-53 and 2-52. e) Sheet No. 08 - Triangular piece of land (roughly in the middle of the sheet) bounded by, amongst others, plots 8-22, 8- 25, 8-28 and 8-40. f) Sheet No. 09 - Land to the north of Plot 8-129 and bounded by Plot 8-131 on the other three sides. g) Sheet No. 09 – Triangular piece of land bounded to the west by Plot 8-131 and the overhead line corridor to the south and south-east. h) Sheet No. 28 - Triangle of land bounded by Plots 28-03 and 28-02, adjoining the	The plots listed below are not Class 8 Plots, rather they are outside of the Order Limits and have been identified as areas where there is no need for the Applicant to seek the CA of rights nor temporary use powers. These areas are all held by PILs with whom negotiations are being held and the Applicant has undertaken to provide access wherever reasonably possible and has included this in its negotiations with those parties in respect of Heads of Terms. Where parcels are temporarily severed, and no access is possible, compensation would be payable. The Applicant believes that the ExA's reference to S.48 should be to S.44 and Category 3 parties. The Applicant has identified Category 3 parties in Part 2 of the Book of Reference [**REP1-005**] further to the exercise of diligent enquiry in accordance with the methodology at Appendix J to the Consultation Report [**APP-053**]. In terms of the areas of land listed by the ExA, we comment on the specifics as follows: a) The field including all the named plots is owned by a PILPIL 419, Nicholas John Fiske and there is a pylontower and mitigation proposed for other parts of the farm. The owner is a Schedule 1 party. The plots in his ownership are listed in the Book of Reference REP1-005 b) The field including all the named plots is owned by a PIL 419,Nicholas John Fiske and there is a pylontower and mitigation proposed for other parts of the farm. The owner is a Schedule 1 party. The plots in his ownership are listed in the Book of Reference REP1-005.. c) The field including these plots is owned by a PIL who also has a pylon proposed on their land. d) The field including these plots is owned by a PIL who also has two pylons proposed on their land. e) The field including these plots is owned by a PIL who also has a pylon proposed on their land. f) The field including these plots is owned by a PIL who also has two pylons along with pylon take down proposed on their land. g) The field including these plots is owned by a PIL who also has two pylons along with tower and take down proposed on their land. h) This field is owned by a PIL who is also the owner of the land where part of the proposed Sealing End Compound is proposed. i) This field is owned by a PIL who is also the owner of the land where the other part of the CSE compound is proposed.

Reference	Question	Applicant's Response
	proposed Stour Valley west cable sealing end compound. i) Sheet No. 28 - A strip of land to the west of Henny Back Road that plot 28-36 is contiguous with.	
CA1.4.23	Can you explain the rationale for the inclusion in the Order Limits and proposed acquisition of rights over: a) Plots 9-11 and 9-14 (Sheet 09). b) 'Proposed power connection' that would lead north from the Stour Valley east cable sealing end, cross under the existing 132kV line, skirt Sawer's Farm and terminate beside the curtilage of Little Hitches, Upper Road, Little Cornard (Sheet 19). c) Part of the curtilage of Little Hitches (Sheet 19).	With reference to the Land Plans [**REP1-004**] the Applicant would advise as follows: a) Plots 9-11 and 9-14 (Sheet 09) are proposed as soil storage areas for material arising from the construction of the temporary access route adjacent to these two areas. b) The rights sought for the 'proposed power connection' are for the provision of a new low voltage power supply to the Stour Valley East CSE compound. The route of this power connection as shown on Sheet 19 is in accordance with the route indicated by UKPN in their connection offer to the Applicant. c) In defining the rights required for the proposed power connection, the Applicant has estimated both a construction area and associated construction access envelope on either side of the connection route advised by UKPN. The application of these estimated construction areas around the power supply connection point immediately adjacent to Little Hitches results in the rights extending into part of the curtilage of Little Hitches.
CA1.4.30	Table 3-1 of the Special Category Land Report [**APP-041**], Compulsory Acquisition Powers sought over Open Spaces, says in respect of Hintlesham Golf Course that CA Class 4 Compulsory Acquisition of rights of access are sought. However, when Sheet 02 of the Special Category Land Plan [**APP-009**] is cross-referenced with Sheet 03 of the Land Plans [**APP-008**], five of the plots identified as Open Space appear to be sought for Class 3 – Compulsory Acquisition of rights, underground cable. These are 3-13, 3-16, 3-18, 3-22 and 3-23. This appears to be consistent with what is said at paragraph 4.1.4 of the aforementioned Report [**APP-041**] and Table 8 of the SoR [**APP-038**].	Table 3.1 of the Special Category Land Report [**APP-041**] will be amended at Deadline 3 (**document 4.2.3 (B)**) and included within the Errata Log to reflect that the plots 3-13, 31- 16, 3-18 and 3-22 at Hintlesham Golf Club are recorded as Compulsory Acquisition (CA) Class 4 and not as Class 3 as they are currently recorded in that document. This will be included in the errata document.

Reference	Question	Applicant's Response
	Accordingly, does Table 3-1 of the Special Category Land Report [**APP-041**] need to be amended?	
CA1.4.31	When Sheet 02 of the Special Category Land Plans [**APP-009**] is considered in the context of Sheet 03 of the General Arrangement Plans [**APP-018**], part of the Special Category Land at Hintlesham Golf Course is shown as 'Environmental area' ENV02. What would these proposed works involve? Would they be consistent with the excepting provision that the Applicant is relying on at s132 (3) of PA2008?	The works proposed at ENV 02 is shown on LEMP Appendix B and in the Environmental Gain Report **[APP-176]**. The area taken up by the physical works would not be different in area and would not affect the golf course use of this land. The proposals would mean that the land, when burdened with the right, would be no less advantageous to the parties set out in s132 (3) of PA2008.
CA1.4.32	Table 3-1 of the Special Category Land Report [**APP-041**], Compulsory Acquisition Powers sought over Open Spaces, says in respect of Hintlesham Great Wood that CA Class 2 - Compulsory Acquisition of rights, overhead line is sought. However, when Sheet 03 of the Special Category Land Plans [**APP-009**] is cross-referenced with Sheet 06 of the Land Plans [**APP-008**], two of the plots identified as open space appear to be sought for Class 4 - Compulsory Acquisition of rights of access. These are 6-02 and 6-04. Table 8.1 of the SoR [**APP-038**] appears to be correct in saying that CA classes 2 and 4 are sought. On the foregoing basis, does row 2, column 5 of Table 3-1 of the Special Category Land Report [**APP-041**] need to be amended?	Row 2, Column 5 of Table 3.1 in Special Category Land Report (**document 4.2.3 (B)**) has been amended at Deadline 3 and included within the Errata Log [**REP2-066**] to show Plots 6-02 and 6-04 as CA Class of Right 4 instead of CA Class of Right 2 that they currently show.
CA1.4.33	Paragraph 3.1.2 of the Special Category Land Report [**APP-041**] sets out the definition of 'open space' at Section 19 (4) of the Acquisition of Land Act 1981. Whilst	From the definition of Open Space in the Special Category Land Report (**document 4.2.3 (B)**) paragraph 3.1.2 Assington Green has been included on a precautionary approach for the purposes of public recreation. As stated in paragraph 4.1.18 the Assington Neighbourhood Plan includes this site as a Local Green Space, the criteria

Reference	Question	Applicant's Response
	noting that the Applicant has taken a precautionary approach to include all land that could be considered to be open space, in light of the statutory definition of the term and its statement at paragraph 4.1.18 of the aforementioned Report that the land is not publicly accessible: • Why do you consider that each of the 3 plots at Assington Green (shown as 16-71, 16-75 and 16-79) on Sheet No 5 of the Special Category Land Plans [**APP-009**]) fit the legal definition of open space? • Does s131 of PA2008 apply to this aspect of the Proposed Development?	being that the land holds a particular local significance such as beauty, historic, recreational, tranquillity or richness of wildlife'. Section 131 of the Planning Act 2008 does not apply to this aspect of the project because the Applicant is seeking the acquisition of rights over the land referred to, rather than outright acquisition. For reference, the following is stated in the Planning Act 2008 S. 131 – '(2) This section does not apply in a case to which section 132 applies.' Section 2.7 of the SoR [**APP-038**] provides further information on this.
CA1.4.35	Are the rights sought by the Applicant in respect of land at Assington Green, as shown on Special Category Land Plans [**APP-009**] at Sheet No. 05 and described in the Special Category Land Report [**APP-041**], consistent with Policy ASSN-10 Local Green Spaces of the Assington Neighbourhood Plan 2018 - 2036? Please give reasons for your answer and highlight any implications for the Examination.	Mill Farm Land is designated in the Assington Neighbourhood Plan as 'Local Green Space'. The land is privately owned grazing land, orchard and wet woodland. A PRoW borders both the southern and western extents of the designated land, outside of the designation. As such, the land itself is not publicly accessible. However, adopting a precautionary approach to the definition of open space in the Planning Statement [**APP-160**], the land has been considered as potential open space for the purposes of the National Planning Policy assessment, as it may provide public value in terms of visual amenity. Within the designated Mill Farm land, it is proposed to remove the existing 132kV overhead line and one pylon (PCB 67). The proposed (new) 400kV overhead line would run broadly parallel to the existing 400kV overhead line and a new pylon may be sited within the designation, subject to the LoD implemented in this location; although, this is likely to be within the arable field within the designation. In any event, as the designation is not publicly accessible, it is not considered that the replacement of a 132kV pylon with a 400kV pylon within the designation would materially impact on the function or use of this space. Consequently, there would be, at worse, no net increase in the number of pylons within the designation, resulting in no loss in the use or function of this space. This land was also included in the Special Category Land Plans [**APP-009**] at Sheet No. 05 and described in the Special Category Land Report (**document 4.2.3 (B)**) because given the nature of the land and on site observations it was observed that the land could be described as open space and the land was included on a precautionary basis. In any event, the land would be no less advantageous when burdened with the rights

Reference	Question	Applicant's Response
		sought and is in compliance with National Planning Policy in respect to open space. As such, there are not considered to be any implications for the Examination.

5. General Construction Matters

5.1 General Construction Matters

Table 5.1 – General construction matters

Reference	Question	Applicant's Response
CM1.5.1	Can you describe how the worst-case scenario for archaeological works has been assessed in the EIA and how it has been considered in ES Appendix 4.2, Construction Schedule [**APP-091**]?	ES Chapter 8: Historic Environment [**APP-076**] and ES Appendix 8.2 Historic Environment Impact Assessment [**APP-127**] assessed the footprint of the Proposed Alignment (including the footprint of temporary works) and assumed complete disturbance within the LoD in the sections of underground cables and smaller-scale disturbance within the sections of overhead line sections with most focus on the pylon bases, construction compounds and temporary access routes. Section 11 of ES Chapter 8: Historic Environment [**APP-076**] considered the flexibility offered by the LoD, including potential changes to the locations of temporary access routes and compound areas. No significant effects were identified, and the adverse effects arising from construction would be addressed assuming the archaeological mitigation in line with the Outline Written Scheme of Investigation (OWSI) [**AS-001**]. ES Chapter 8: Historic Environment [**APP-076**] assumed the construction schedule in ES Appendix 4.2 Construction Schedule [**APP-091**] together with an alternative, later one and identified no new significant effects. The OWSI [**APP-187**] sets out the stages of the project where the various forms of archaeological mitigation are to be applied. These are aligned with ES Appendix 4.2 Construction Schedule [**APP-091**].
CM1.5.2	Please provide a progress update on discussions for mains water and electricity supply to the main site compound at Leavenheath. Paragraph 4.4.58 in ES Chapter 4 Project Description [**APP-072**]	Discussions have been held with UKPN regarding establishing the mains electrical supply to the main works compound at Leavenheath, this connection would be progressed once the DCO has been secured. The main works contractor would progress the mains water supply connection subsequent to the DCO being secured. Establishing mains connections for utilities at compounds of the size required and which are in place for a prolonged period of time, is standard practice and obtaining this connection in the timescales faced is not expected to be an issue.
CM1.5.3	Table 4.5 in ES Chapter 4, Project Description [**APP-072**], indicates key waste anticipated on the project. Can you confirm the estimated quantity of shuttering, and also any hazardous waste anticipated (e.g., coal tar in tarmac)?	At the time of the Applicant's submission there was uncertainty around whether wooden shuttering would become hazardous waste with the withdrawal of the Regulatory Position Statement (RPS) 250 by the Environmental Agency from the 1 of September 2023. The RPS 250 previously provided an exemption on all timber waste from construction being classified as hazardous waste. It has been clarified that timber hazardous waste classification now aligns with the testing requirements from the Wood Recycling Association and does not include wood that has been in contact with concrete such as shuttering. Therefore, timber shuttering would continue to be recycled on construction sites and would not be classified as hazardous waste.

Reference	Question	Applicant's Response
		Part of the main works contractor responsibilities would be to define the requirements of the shuttering. The Applicant is unable to define the total quantity of timber shuttering at this stage. However due to the clarification that it would not be classified as hazardous waste, it is likely to be recycled. Due to the age of many of the local roads there is a risk that the bituminous materials may contain coal tar. Where the concentration of coal tar exceeds 0.1% in the asphalt, it is classified as a hazardous waste. If it does not contain coal tar, the asphalt is classified as inert waste. It is construction practice to assume coal tar is within the carriageway until proven otherwise and treated accordingly. It would be the responsibility of the main works contractor to identify whether the asphalt is hazardous material and handle it appropriately. Sections 6.4 and 6.5 of the MWMP (**document 7.7 (B)**) set outs requirements for handling and disposing of hazardous waste. There are currently 126 temporary access points proposed across the Order Limits. Over half of the temporary access points, particularly the DAP and YLAP access points, make use of existing access points on the Local Road Network (LRN). Some of these may need to be widened to create a bellmouth (a widened entrance with visibility splays) to safely accommodate construction vehicles. These works may include widening existing entrances to provide space for vehicle turning. Others involve creating new temporary entrances where a current access point does not exist. An example of what a proposed access point and bellmouth may look like can be found in Design and Layout Plans Temporary Bellmouth for Access [**APP-030**]. It is anticipated there would be less than 150 tonnes of asphalt that may need to be treated as hazardous waste, while there may be other hazardous waste generated from materials such as: ● adhesives; ● paint and paint tins; ● varnish; ● solvents; ● fluorescent light tubes; ● contaminated packaging; and ● silicone/sealant tubes. The amounts of these materials are unlikely to exceed 500kg due to the nature of construction therefore the hazardous waste from coal tar is the dominant hazardous waste that would need to be dealt with. The transport movements associated this material is covered in the risk allowance allowed for in the TA [**APP-061**].
CM1.5.4	The draft Statement of Common Ground with TC East Anglia ONE OFTO Limited [REP1-030] notes that works associated	A draft SoCG with TC East Anglia ONE OFTO Limited [**REP1-030**] has been provided. This Draft SoCG is caveated by the text contained in the Status of SoCG document [**REP1-013**] and this text reads:

Reference	Question	Applicant's Response
	with Proposed Development may affect East Anglia One landscaping mitigation measures. Please can you provide an annotated drawing showing the area and extent of these works?	*'The subject of this SoCG was previously contained in the Draft Statement of Common Ground TC East Anglia One OFTO Limited and East Anglia Three Limited [**APP-174**]. However, the transmission assets of the East Anglia One Windfarm were subsequently transferred to TC East Anglia One OFTO Limited, who are now the Transmission Licence holder for these assets. Since the divestment of East Anglia One from Scottish Power Renewables (SPR), the Applicant has been engaging with the new licence holder. Meanwhile, the East Anglia Three project remains wholly owned by SPR. As such, the submission SoCG [**APP-174**] has been split into two separate SoCG to reflect the two discrete projects and Licence holders. This SoCG reflects ongoing discussions with TC East Anglia One OFTO Limited. An updated draft version of the SoCG was sent to TC East Anglia One OFTO Limited in July 2023; however, no response has been received to date. The Applicant will continue to attempt to engage with TC East Anglia One OFTO Limited in order to fully determine the technical interface between the respective projects. Overall, the Applicant believes the Draft SoCG represents an accurate representation of the status of discussions; however, at present, this has not been formally confirmed with TC East Anglia One OFTO Limited.'* As such, despite a request, at present, the Applicant has been unable to obtain the Shapefile from East Anglia ONE OFTO Limited for their approved landscape planting, to overlay the designs with the project's general arrangement. Nonetheless, the Applicant has reviewed East Anglia ONE's Discharge of Requirement Material and it is understood that Appendix C of this document provides East Anglia ONE's approved Soft Landscape General Arrangement Plan in this location. An extract of this plan was also provided in Appendix 4 of the Draft SoCG TC East Anglia ONE OFTO Limited [**REP1-030**]. Referring to the Soft Landscape Legend of this plan and 'WM1-C (Core Woodland comprising generally slower growing mixed broadleaf species such as oak)'; a very small section of this feature interacts with the Order Limits for the project. However, it is likely that this planted woodland area would remain untouched and this would only need to be removed in the eventuality the preferred alignment was moved further north within the LoD, then it is possible that a section of this woodland may need to be managed (coppice or pollard) to facilitate the cable swing. In addition, in respect to the removal of the short section of the existing 400kV overhead line including two pylons 4YL002 and 4YL003, soil stripping beneath the three pylon bases would be required, which is shown as 'G3 (species Rich Grass Land seed mix)' of the East Anglia ONE's approved Soft Landscape General Arrangement Plan in this area. However, this would be reinstated in line with GG07 in the CEMP Appendix A: CoCP (**document 7.5.1 (B)**) and states that land used temporarily would be reinstated where practicable (bearing in mind any restrictions on planting and land use) to its pre-construction condition and use. Based on the above, the Applicant considers this interface to be limited.
CM1.5.5	Paragraph 3.2.4 in ES Appendix 13.1, Dust Risk Assessment [**APP-135**], refers to	Paragraph 3.2.4 in ES Appendix 13.1: Dust Risk Assessment [**APP-135**] references the relevant IAQM construction category to determine the potential dust emission magnitude during the construction phase. The

Reference	Question	Applicant's Response
	construction of temporary access routes and potentially dusty construction materials (e.g., concrete) and on-site concrete batching. Please signpost the relevant ES chapters where on-site concrete batching has been assessed, and - if applicable - identify the location(s) assumed.	total building volume for the project is expected to fall within the total building volume criteria for t'e 'Med'um' dust emission magnitude IAQM category, which 's *'Total building volume 25,000 m^3 – 100,000 m^3, potentially dusty construction material (e.g. concrete), on site concrete batch'ng'* (IAQM, 2014). On-site concrete batching is one of the three criteria in IAQM (2014) that can be used to define a dust emission magnitude 'f 'Med'um' during construction. It is a category that the Applicant has used to equate the level of dust. The Applicant has not identified the need for, or assumed on-site concrete batching for the project and it has therefore not described or assessed in the ES.
CM1.5.6	The section shown on Design and Layout Plans Stour Valley east cable sealing end compound [**APP-025**] suggests that the proposed finished ground level would be level as it does not show a gradient or fall and would tie into existing levels near the perimeter security fence. At Issue Specific Hearing 1 the Applicant described the surrounding ground as undulating which would result in earthworks. Bearing in mind the preliminary design status for the Proposed Development can you confirm if earthworks would extend beyond the Order Limits?	The Applicant notes that the final design of the Stour Valley East CSE compound would be undertaken by the main works contractor within the constraints set by the LoD and the Order Limits. In undertaking the preliminary design of the Stour Valley East CSE compound, a 3D model of the existing ground topology was prepared based on a Lidar survey of the site. A preliminary earthworks design was prepared based on a balanced cut-to-fill approach. This design indicated that all necessary earthworks could be completed within the requested Order Limits with earthworks 'cut' on the northern and western boundaries and earthworks 'fill' on the southern and eastern boundaries.
CM1.5.7	Whilst recognising the temporary construction compound on ES Figure 4.1, sheet 20, [**PDA-002**] can you explain the much wider Order Limit at Bures Road, River Stour and the railway in comparison to the River Box crossing (sheet 14)?	The assumed length of the trenchless crossings, as detailed in Table 4.7 of the Project Description [**APP-072**] are as follows: • River Stour = 525m • Sudbury Branch Rail Line = 415m • Ansall's Grove = 602m • River Box = 100m The shorter length of the crossing at the River Box means there is a shallower crossing resulting in there being less need for the cables to spread out for thermal dissipation purposes than for the other crossings. Hence the Order Limits are narrower at the River Box than at the River Stour and Sudbury Branch Rail Line.

Reference	Question	Applicant's Response
CM1.5.8	Why there are two drill pits next to each other and adjacent to the railway on ES Figures, Figure 4.1, sheet 20 [**PDA-002**]?	In sheet 20 of Figure 4.1, ES Figures [**PDA-002**], there are two adjacent drill pits because the preliminary design of the cable system requires a joint bay to connect lengths of cable, at most, every 1000m, as this is the length of cable that can be transported on one cable drum (i.e. the maximum cable drum dimension cannot exceed a certain size to avoid becoming an exceptional transport). As a consequence, a maximum of 1000m of cable can fit on one such cable drum. The section from the drill pit to the west to the one furthest to the east, exceeds the 1000m limit and therefore the assumed HDD had to be divided into two separate drills. The additional drill pit is for the cable to resurface and a joint bay to be inserted. It is noted that HDD has been assumed for the purposes of the EIA. The final method would be determined by the main works contractor.
CM1.5.9	Please confirm the span parameters of the temporary bridge over the River Stour and likely abutment location for the EIA worst case scenario and how it relates to the floodplain and limit of deviation (ES Figures, Figure 4.1, Sheet 20 [**PDA-002**] and Design and Layout Plans Temporary Bridge for Access [**APP-031**]).	As per the Design and Layout Plans Temporary Bridge for Access [**APP-031**], the span to the centreline of the abutment bearing is proposed as 8m from the river's edge with soffits that are raised 600mm above the flood level (or as otherwise agreed with the Environment Agency). Following correspondence with the Environment Agency, a 'Navigation Envelope' of a minimum channel width of 6m and a minimum headroom of 3m above normal retention levels is also required. The temporary bridge is proposed to be located as indicated by point 'W-'-5' on ES Figure 4.1, Sheet 20 [**PDA-002**] which is near the centre-line of the Order Limits. As per the Flood Risk Assessment (FRA) [**APP-059**] and in particular Figure 1 Sheet 3 of 3, the temporary bridge would be in Flood Zone 2 for Fluvial Flooding and as per Figure 2 Sheet 3 of 3, would be in 0.1% of Surface Water Flooding. The FRA has been reviewed and accepted by the Environment Agency in the SoCG (**document 7.3.3 (B)**). In addition, further details on the construction method and the design of the bridge would be agreed with the Environment Agency as part of the Flood Risk Activity Permit (FRAP).
CM1.5.11	The Applicant's follow-up notes to Issue Specific Hearing 1, at action point 6 [REP1-034], estimate an approximate volume of imported material of 277,800 tonnes. Construction activity plant and noise data [**APP-136**] indicate 9t dumpers (BS 5228-1 reference c4.4) for temporary access route and implies the number of dumpers (9t) bringing imported material to site to be in the region of 30,867(one way). How many heavy goods vehicles were considered in the transport assessment for import of material?	Material would be transported to site via the road network using 'GV's, not using a 9t dumper, which would only be used to move material on or around site. The minimum size of HGV used would be a 20t tipper lorry, which would equate to 13,890 movements (one way). The number of HGV movements considered in the TA [**APP-061**] for the construction and reinstatement of the temporary access route was 32,284 movements (two way). The plant and equipment in the ES Appendix 14.1 Construction Noise and Vibration Data [**APP-136**] relates to the construction of the temporary access routes. The assessment of noise from vehicles using the temporary access routes is presented in ES Appendix 14.2 Construction Traffic Noise and Vibration [**APP-137**] which identifies that significant effects are not expected.

Reference	Question	Applicant's Response
CM1.5.12	The Applicant's written summary of oral representations to Issue Specific Hearing 1 [**REP1-024**] notes that the provisional programme has been prepared using 'standard industry working hours'. Can you provide any evidence to demonstrate that Sundays and bank holidays are or are not standard industry working hours?	The dDCO (**document 3.1 (C)**) contains (at Schedule 3), Requirement 7 (construction hours), which would allow for both weekday working and working each weekend. This latter aspect is intended to be in respect of areas where different work activities may overlap or interface – for example construction compounds or CSE compounds. It also provides flexibility and contingency to recover any delays to ensure the critical path programme can be delivered. It is however generally anticipated that alternate weekends would be worked in any specific geographical location (noting that the overhead line works and underground cable works would be in different locations (and with different contractors), save where they meet / overlap, as noted above), due to standard work shift patterns which would reduce disruption from construction activities. The expectation therefore is that such alternate weekend working by one contractor (for example for overhead line works), would generally be in different geographical areas (for example when compared to the underground cable works). Hence there might be work undertaken each weekend, but in different locations and hence with different receptors. The Applicant notes that each of The National Grid (Hinkley Point C Connection Project) Order 2016 and The National Grid (Richborough Connection Project) Development Consent Order 2017 provided for construction works to take place between the hours of 0800 and 1700 on Saturdays, Sundays and Bank Holidays, subject to a restriction which limited working on a consecutive Saturday and Sunday to two out of any four consecutive weekends in each relevant local authority area. Similar construction working hours to those proposed in respect of the project have been sought in respect of the draft National Grid (Yorkshire Green Energy Enablement Project) DCO. More widely these construction working hours are generally adopted across the Applicant's construction projects consented under other regimes. For example: the GSP Substation TCPA extant permission includes these working hours which are included in Condition 20 [**REP1-037**]. Moreover, given the urgent need for the project set out in the Need Case [**APP-161**] the Applicant considers that these working hours are required more than ever as set out in the Justification for Construction Working Hours document (**document 8.5.11**).
CM1.5.13	What would be the implications for the Proposed Development if the core construction hours were modified to align with core construction hours suggested in the two local authority LIRs ([**REP1-039**], paragraph 17.4.6 and [**REP1-045**], paragraph 17.69).	The Applicant has considered the impact of the alternative construction working hours proposed by the Local Authorities on its ability to deliver the project to the required timescales. Please refer to the Applicant's Justification for Construction Working Hours (**document 8.5.11**) submitted at Deadline 3.
CM1.5.14	Can you confirm any assumptions made in the ES about the expected frequency and	The temporary access route off the A131 would only be required during operation if there was a need for a full refurbishment of the line within Section G: Stour Valley. As stated in paragraph 4.9.16 of ES Chapter 4: Project

Reference	Question	Applicant's Response
	duration of major works that may require the temporary access route off the A131 to be reinstated for use during operation, explain how the dDCO would control this, and indicate any other consents or procedures that would be necessary?	Description [**APP-072**], a full refurbishment would typically be undertaken after the end of the project design life (40 years). As such, a full refurbishment would be infrequent and may never occur during the design life of the project. Paragraphs 4.9.18, 4.9.27 and 4.9.39 of ES Chapter 4: Project Description [**APP-072**] state that if a full refurbishment were to occur then the activities would be similar to those identified during construction, including the use of temporary access routes. The Applicant would need to apply for any relevant licences and consents at that time, for example European Protected Species licences and FRAPs.
CM1.5.15	ES Chapter 4, Project Description [**APP-072**], notes that the proposed 12-hour construction day is likely to result in construction work taking place after nightfall during winter, for which task lighting may be required. The assessment assumed that activity would only take place at 'contained sites' (including ES Chapter 7, Biodiversity [**APP-075**]). Can you define contained sites and confirm how the dDCO (**document 3.1 (B)**) restricts winter night-time working to these locations?	Contained sites comprise the temporary construction compounds as shown in Table 4.1 of the updated CEMP (**document 7.5 (B)**) provided at Deadline 3 and specific sites where construction activities are being undertaken at the time. The location of specific sites is likely to change as work activities are completed in one area and relocate to a different working area. Task lighting for winter working would not occur on a wide scale across the project. Compliance with the CEMP is secured through Requirement 4 (Management Plans) of the dDCO (**document 3.1 (C)**).
CM1.5.16	Please confirm if United Kingdom Power Networks (UKPN) worker numbers were included in the baseline and alternative scenario profiles in ES Chapter 4 Project Description [**APP-072**].	The baseline and alternative scenario worker profiles presented in ES Chapter 4: Project Description [**APP-072**] include the UKPN worker numbers for removal of the 132kV overhead line. The diversion of UKPN services and provision of new power supplies to compounds is not included in these worker profile numbers. These numbers would be extremely low, typically one or two gangs requiring one for a short duration of approximately 1-2 weeks. This is allowed for in the risk uplift in the TA.
CM1.5.17	What is your response to the alternative route suggested by Little Maplestead PC in its Relevant Representation [RR-017] to use the Collins Road junction for traffic coming from the Halstead direction, to join the A131 at the Catley Cross junction for the return traffic?	Collins Road was considered as a construction route but the size of the vehicles carrying the drums of cable for underground sections of the proposals to the east are too large to accommodate given the width and alignment of this road. If Collins Road were used for construction traffic, it would have to be closed for all other access, effectively preventing access to the residential and agricultural properties fronting that road. An alternative route retaining Collins Road in normal use was therefore considered necessary and the route was proposed at the Targeted Consultation in September 2022 and refined following landowner feedback. This has been discussed within the Technical Note on Temporary Access Route off the A131 (**document 8.5.5**).
CM1.5.18	What is your response to the suggestions in Alphamstone and Lamarsh PC's Relevant Representation [RR-008]: i) To join the proposed access road to the south of pylon PCB80 with the principal	i) To build the temporary bridge over the River Stour it is necessary to gain access to both sides of the river. The only suitable rail bridge to access the area west of the river is that to the east of proposed Access Point G-DAP3, on the north side of Lamarsh village. It is necessary therefore to provide temporary access routes to the area west of the River Stour and both sides of the railway via Lamarsh

Reference	Question	Applicant's Response
	east-west access road along the 132kV corridor to ensure that no site traffic goes through Lamarsh Village? ii) To extend HDD drilling to the west and north near to pylon 4YLA003 to mitigate further the impact on Ansells?	village and Access Point G-DAP3. Construction traffic from the south to access these elements of the works must therefore use Lamarsh Village. ii) The application has assumed HDD for environmental assessment purposes. However, the final construction method for the trenchless crossings would be determined by the main works contractor once the Applicant's cable system design, environmental (including geotechnical) and safety constraints have determined optimal entry/exit point for the trenchless solution. It has also determined that the maximum theoretical section between two consecutive joint bays length to be 1000m. The Proposed Alignment of the trenchless route to the west and south of pylon 4YLA003 would increase the maximum section length to a value not compatible with the system design and with the constraints of the trenchless drill and the maximum cable length.
CM1.5.19	What is your response to Mrs Helen Neal's contention [**RR-105**] that Henny Road, Lamarsh, is narrow, has few passing places and is unsuitable for large vehicles?	The Applicant notes the constraints on this route which is only included as there is no alternative way of accessing this localised part of the works. To build the temporary bridge over the River Stour it is necessary to gain access to both sides of the river. The only suitable rail bridge to access the area west of the river is that to the east of proposed Access Point G-DAP3, on the north side of Lamarsh village. It is necessary therefore to provide temporary access routes to the area west of the River Stour and both sides of the railway via Lamarsh village and Access Point G-DAP3 Shown in Sheet 20 in the Access, Rights of Way and Public Rights of Navigation Plans [**APP-012**]. Construction traffic from the south to access these elements of the works must therefore use Henny Road.
CM1.5.20	Can you submit updated versions of the grid supply point substation layout [**APP-019**] and elevations [**APP-020**] showing the location, extent and height of the proposed mounds, with an indication of the slope angles. (See paragraph 4.9.37 of ES Chapter 4, Project Description [**APP-072**])?	Updated versions of the Design and Layout Plans: GSP Substation Layout [**APP-019**] and Elevations [**APP-020**] showing the location and form of the proposed mounds have been submitted at Deadline 3 (**document 2.11.1 (B)**) and (**document 2.11.2 (B)**).
CM1.5.21	In response to a comment from Suffolk County Council about Table 4.1 of the CTMP [**APP-180**] related to responsibility for compliance and enforcement of management plans, confirm that the applicant would retain overall responsibility for the works undertaken pursuant to the DCO?	It is stated in Table 4.1 that the main works contractor would be responsible for implementing the measures in the CTMP (**document 7.6 (B)**). However, the Applicant, as the Client of the main works contractor, would ultimately retain overall responsibility for the works at all times.

Reference	Question	Applicant's Response
CM1.5.22	For the good practice measures relating to the layout of construction sites GG11 and TT01 to TT03 (CEMP Appendix A: CoCP [**APP-178**]), can you confirm there is adequate space within the order limits to suitably and sufficiently: (i) segregate pedestrians and all works vehicles? (ii) protect all open edges of cable trenches to prevents falls from height?	The Applicant has engaged technical specialists in the design of the project (including early contractor inputs) to inform the design and the extent of the Order Limits. The Applicant considers that the Order Limits are sufficient in extent to encompass the activities required to safely construct and operate the project. A number of typical design and layout plans have been produced, **APP-019** to **APP-033**, such as the Design and Layout Plans Cable Working Cross Section [**APP-027**] to support the production of the General Arrangement Plans [**APP-018**] and the Order Limit extent required. These typical layouts have considered the space required to suitably and sufficiently: i. Segregate pedestrians and all works vehicles: The proposed methods for segregating pedestrians from the working area are set out in the PRoWMP (**document 8.5.8**) and may include the use of barriers or buffer zones to segregate accesses. The Access, Rights of Way and Public Rights of Navigation Plans [**APP-012**] show the proposed closures and diversion routes that have been factored into the design when developing the Order Limits. ii. The working width for the underground cable areas has been developed based on the Applicant's experience from other high voltage electricity line installation projects, such as the Richborough Connection. When developing the extent of the Order Limits, the Applicant considered safety in design including consideration of risks from falls or heights in relation to the open edges of the cable trench and by factoring in an allowance within the overall working width to potentially batter back of the sides of excavations or installing barriers as required. In both examples above, a risk assessment would be undertaken by the main works contractor to identify specific measures to reduce risks and additional measures as required during construction. The requirement to provide a safe place of work is a legal requirement under the Construction, Design and Management Regulations (2015) and the Health and Safety at Work Act (1974) that the main works contractor, as a competent contractor, would adhere to.
CM1.5.23	How would you ensure that operatives who receive briefings had the required skills, knowledge, experience and training to make sure the control measures set out in the CEMP are carried out suitably and sufficiently? (Paragraph 15.1.2 of the CEMP [**APP-177**] refers.)	The main works contractor would be subjected to a rigorous tender process at both framework and contract level to demonstrate their competence, including in matters of environmental awareness and safety. CVs for key staff would have to be provided during this tender process and key roles would require a minimum level of qualifications, training and experience. All operatives would be suitably trained and competent and hold an appropriate Construction Skills Certification Scheme (CSCS) / Construction Plant Competence Scheme (CPCS) card (or equivalent) with the correct category of training for their role. Supervisors will have received appropriate training such as the Site Supervisors Safety Training Scheme (SSSTS), Site Managers Safety Training Scheme (SMSTS), or equivalent. As detailed in paragraph 3.3.1 and 3.3.2 of the CEMP (**document 7.5 (B)**) all staff and operatives would receive a site-specific induction informing them of site environmental issues and procedures, whilst regular toolbox talks will be provided to give targeted information about site-specific issues.

Reference	Question	Applicant's Response
CM1.5.24	In relation to soil stripping (paragraph 11.3.19 of the CEMP [**APP-177**], can you explain: (i) who would (a) agree the moisture content criteria and (b) measure the moisture content on site, and (ii) the weather- specific methods to be deployed prior to recommencing of soil stripping activities?	5) With regards to soil stripping (paragraph 11.3.19 of the CEMP (**document 7.5 (B)**) A soil specialist as outlined in Table 3.1 of the CEMP (**document 7.5 (B)**) would agree the moisture content criteria prior to soil stripping, they would then measure the moisture content periodically as the works progressed. ii) In accordance with the Construction Code of Practice for the Sustainable Use of Soils on Construction Sites, Defra (2009) a suitable length of time will be left following heavy rainfall to allow soils to dry out before undertaking stripping works.
CM1.5.25	Would the relevant highway authorities and the Environment Agency be consulted about drainage works that could impact on highway drainage and watercourses? (Paragraphs 9.3.6 and 9.3.7 of the CEMP [**APP-177**]**)** refer.)	The nature of the works affecting public highways would have low impact on highway drainage, for example small bellmouth areas using impermeable surfacing materials. Once the design of drainage for the proposed works has been undertaken, the relevant highways authority would be consulted regarding potential impact on highway drainage. As per paragraph 9.3.10 of the CEMP (**document 7.5 (B)**), no surface water discharges have been identified for the project. Any discharge to, or drainage that may impact on a watercourse would only be undertaken with the required treatment and with authorisation from the Environment Agency or appropriate authority (depending on jurisdiction), as detailed in good practice measure GG15 and W05 in the CEMP Appendix A: CoCP (**document 7.5.1 (B)**).
CM1.5.26	Further to paragraph 9.3.9 of the CEMP [**APP-177**], what volume of water would be required to be (i) abstracted, and (ii) delivered by tanker for use: • in the construction of trenchless crossings; • in the site cabins; • for general cleaning; and, • for dust suppression? Under what circumstances would abstraction of water be required for the construction of the trenchless crossings?	As detailed in paragraph 9.3.9 of the CEMP (**document 7.5 (B)**) water for the construction of trenchless crossings, for site cabins, general cleaning and for dust suppression will tankered or mains water, as is commonplace for projects not obtaining water via abstractions. The tankers numbers are already assumed within the TA [**APP-061**]. It is not envisaged abstraction would be used for the purposes described. No surface abstractions are anticipated for the project.
CM1.5.27	Can you confirm that the regime of monitoring and checking set out in Section 15 of the CEMP [**APP-177**] would include data collection, monitoring and reporting of	Complying with the project's emissions standards would be a requirement for the main work contractors and its suppliers. Data would be collected for 'GV's accessing site as part of the Environmental Inspections and Site Checks detailed in Table 15.1 of the CEMP (**document 7.5 (B)**, Monitoring of breaches would be reported in line with the procedure set out in Section 15.4 of the CEMP (**document 7.5 (B)**).

Reference	Question	Applicant's Response
	the use of large vehicles complying with the most recent emission standards?	
CM1.5.28	Further to Table 5.1 of the CEMP [**APP-177**], can you provide an estimate of the cost and construction time differences between open trench and trenchless methods for road crossings?	The Applicant would advise that it is not possible to provide a firm estimate of the difference in cost and construction time differences between open trench and trenchless methods for road crossings as this would be highly dependent on the nature of the road to be crossed, the presence (or absence) of services within the road, the ground conditions to be negotiated and the local ground topography at the crossing point e.g. presence of drainage ditches at road edges. From previous experience on other projects the Applicant would advise that in rural locations the open trench method is usually faster and more cost effective as indicated in Table 5.1 of the CEMP (**document 7.5 (B)**). The methodology to be adopted for each of the road crossings on the project would be determined by the main works contractor as part of the detailed design activities and would take due consideration of the particular circumstances associated with each road crossing.
CM1.5.29	Can you confirm that the lifting operations described in paragraph 4.4.6 of the CEMP [**APP-177**] would be undertaken in compliance with the relevant lifting plan to ensure all anticipated heavy lifting operations are properly managed?	A lift plan would be prepared by a CPCS A61 trained Appointed Person and would be in place for lifting operations to ensure they are properly planned and managed.
CM1.5.30	Would low-carbon concrete technology be used on the project? (Paragraph 4.5.4 of the CEMP [**APP-177]** refers.)	The main works contractor would be incentivised to demonstrate a reduction in capital carbon over the duration of the project. As stated in Section 3.2 of ES Appendix 4.3: Greenhouse Gas Assessment [**APP-092**], the Applicant would request the tendering contractors to propose low carbon alternative materials as part of their response to the main works package. The tendering contractors would also complete the Applicant's CIT, where they provide a more detailed breakdown of materials, assets, equipment and energy that they propose to use in construction of the project. The CIT also considers the origin of materials, the transport distances, opportunities for reuse of materials and low carbon alternatives. On tender award this CIT would become the 'carbon baseline' for the project and the main works contractor is incentivised to demonstrate a reduction in capital carbon over the duration of construction of the project. The CIT and carbon footprint is reviewed on a monthly basis and there would be key performance indicators in place that incentivise the main works contractor to reduce the carbon footprint against the initial baseline.

5.2 CoCP and Control Documents

Table 5.2 – CoCP and control documents

Reference	Question	Applicant's Response
CM1.5.32	Would the Environmental Manager and Environmental Clerk of Works roles have a full-time presence on site during the pre-commencement and construction phase? Please explain how many such personnel there would be, and how these roles would fulfil their duties across the full working day, along a 29km distance, during seven-day working. (Refer to the CEMP [**APP-177**]).	Typically, on projects of a similar type and scale, the Environmental Manager would not have a full-time presence on site, but would be available to the project team, rather they would hold a management, oversight and advisory role to assist the site team in complying with the requirements of the CEMP **(document 7.5 (B)**) and the main works contractor's environmental procedures. It is anticipated the Environmental Manager would attend site to carry out weekly inspections, as detailed in Table 15.1 of the CEMP (**document 7.5 (B)**), regular audits and as needed due to the requirements of the works, or should any issues arise, for example assisting and advising in the event of a pollution event. It would be the full-time site team who are responsible for day-to-day matters and would fulfil the responsibilities listed in Table 3.1 of the CEMP (**document 7.5 (B)**). Typically, on projects of a similar type and scale, the Environmental Clerk of Works (EnvCoW) would not have a full-time presence on site, but would be available to the project team; but it is anticipated they would attend site to carry out weekly inspections, as detailed in Table 15.1 of the CEMP (**document 7.5 (B)**), regular audits and as required to ensure compliance with the relevant environmental DCO requirements. This may include monitoring site works that could have an environmental impact and providing advice and guidance should any issues arise, such as a pollution event. The EnvCoW would manage a team of technical advisors, who would attend site to undertake surveys and monitor works, which align with their specialism.
CM1.5.33	Paragraph 15.3.1 (2.) of the CEMP [**APP-177**] explains liaison procedures in the event of non-compliance with the Plan and refers to a 'Land Officer' who would be contacted if on private land. There appears to be no definition of this role or its responsibilities at Table 3.1 of the CEMP. Can you address this apparent omission?	The role of the Land Officer has been added to Table 3.1 of the CEMP which has been updated at Deadline 3 (**document 7.5 (B)**).
CM1.5.34	Please confirm the minimum notice period that would be given to local residents to inform them about commencement and likely duration of the construction work. (Paragraph 3.4.2 in the CEMP [**APP-177**].	The approach to communicating construction begins with the pre-construction communications detailed in paragraph 3.4.2 of the CEMP (**document 7.5 (B)**). The Applicant would endeavour to provide local residents with at least one week's notice of construction work activities. However, there may be instances where this is not possible, such as where external factors result in late changes to planned construction activity.

Reference	Question	Applicant's Response
		Such changes may not be practicable to communicate through a letter drop. As such, the Applicant would endeavour to ensure information provided on the project website is up-to-date, and the project telephone number would remain available for those with any questions about construction activities.
CM1.5.35	Paragraph 4.2.5 in the CEMP [**APP-177**] notes that, where required, working areas would be appropriately fenced to reduce the risk of site staff from unintentionally exiting the site boundary (GG24). Please could you confirm your approach to the health and safety of the general public and how the Proposed Development would satisfy the Construction (Design and Management) Regulations, Regulation 18 (2) – fencing and signage of the perimeter of the construction site.	The health and safety of the general public is of the utmost importance to the Applicant. A proportional and risk-based approach would be used to identify suitable measures to prevent the public entering the work area, through the use of signage and, or fencing, in compliance with Regulation 18 (2) of the Construction Design and Management Regulation (2015). This is in accordance with good practice measure GG24 from the CEMP Appendix A: CoCP (**document 7.5.1 (B**)). The use of fencing may include, for example, the use of stockproof fencing in grazing areas, temporary fencing panels at construction compounds and pedestrian barriers used to segregate working areas during the pulling of overhead lines, where appropriate.
CM1.5.36	Further to paragraph 6.4.6 of the CEMP [**APP-177**] have temporary construction compounds where exceptional work and lighting is required been identified?	The temporary construction compounds where lighting may be required are shown in Table 4.1 of the updated CEMP (**document 7.5 (B)**) provided at Deadline 3.
CM1.5.37	Please provide an illustrative plan and elevation with indicative dimension showing the cable sealing end compound covered with a weatherproof scaffold structure, as referred to in paragraph 4.6.11 of the CEMP [**APP-177**].	Paragraph 4.6.11 of the CEMP (**document 7.5 (B)**) refers to *temporary* works required for the preparation of the cable terminations. Design and Layout Plans ([**APP-023** to **APP-025**]) illustrate the typical layout and elevation for a CSE compound. Since the activity required for cable termination installation must be performed in a protected environment, typically scaffolding and weather protection is placed around three terminations at the time (not around the entire CSE compound). Because the project's cable system is proposing to use three conductors per phase, the scaffolding would cover the footprint of nine adjacent terminations. The final solution would be down to the appointed contractor. A typical example of such scaffolding and protection is shown.

Reference	Question	Applicant's Response
		
CM1.5.38	Can you give examples of additional pollution prevention measures that would be adopted if mobile plants were to be located within 15m of sensitive water features? (Paragraph 9.3.20 in the CEMP [**APP-177**] refers.)	In accordance with good practise measure GG14 from the CEMP Appendix A: CoCP (**document 7.5.1 (B)**), where it is not practicable to maintain a 15m distance for mobile plant from water sensitive features, all refuelling, oiling and greasing of construction plant and equipment would take place above drip trays and away from drains as far as is reasonably practicable. Vehicles and plant would not be left unattended during refuelling. Appropriate spill kits will be made easily accessible for these activities. Storing plant in close proximity to water sensitive features would be avoided wherever practicable, in accordance with good practise measure GG14 from the CEMP Appendix A: CoCP (**document 7.5.1 (B)**). Once appointed the main works contractor would be responsible for developing a refuelling procedure that complies with the CEMP **(document 7.5 (B))**. This refuelling procedure would identify which items of plant require refuelling, their location, control measures, proximity to environmental receptors, and persons competent on undertaking refuelling operations. The principles of Elimination, Reduction, Isolation, and Control would be used when developing the refuelling procedure. Where practicable the item of equipment would be moved away from the watercourse prior to refuelling, in accordance with good practice measure GG14 from the COCP [**APP-178**]. Where larger, immovable items of plant, need refuelling then these would

Reference	Question	Applicant's Response
		be sited away from watercourses. When items of equipment that cannot be moved away from the watercourse, appropriate spill prevention and reduction measures would be deployed.
CM1.5.39	Can a summary of the Proposed Development incident reporting procedure mentioned in paragraph 9.3.26 of the CEMP [**APP-177**]be provided?	Incident reporting is undertaken by the main works contractor and is enacted following the initial site level response. The reporting procedure ensures the correct level of the management and affected stakeholders are informed and ensures an investigation is carried out into the cause and impact of the incident. This means further remedial action can be taken if necessary and actions identified that prevent, or reduce the impact of, such incidents re-occurring. Typically, this follows the following process: • The incident is reported to the Applicants Project Manager by phone as soon as practicable; • The incident is investigated, which includes identifying lessons learned and any actions resulting from the investigation; and • A written report is provided to the Applicants Project Manager and Environmental Manager.
CM1.5.40	Can you clarify if any of the main rivers are to be crossed by open cut method. (Refer to paragraph 9.3.29 of the CEMP [**APP-177**]?	As described in paragraph 9.5.1 of ES Chapter 9: Water Environment [**APP-077**], the Order Limits cross the following main rivers; the Belstead Brook, the River Brett, the River Box and the River Stour. The Belstead Brook and River Brett are not crossed by underground cables. The River Box and River Stour are both crossed by trenchless crossings, as stated in embedded measures EM-E05 and EM-G04 in the REAC (**document 7.5.2 (B)**) respectively. Therefore, the Applicant can confirm that there are no main rivers crossed by open-cut methods for the underground cable installation.
CM1.5.41	What would be the future maintenance and monitoring responsibilities of any new or diverted permanent drainage, and how would such responsibilities be secured in any DCO? (Paragraph 9.3.35 of the CEMP [**APP-177**]).	The future maintenance and monitoring responsibilities of any new or diverted permanent drainage would lie with the asset owner. For land used temporarily during construction the Applicant is only taking rights for apparatus, not the freehold, so anything affixed to the land (otherwise than secured by agreement) would belong to and be the responsibility of the landowner. The Applicant would take responsibility for any drainage installed under the Drainage Management Plan (DMP) as per Schedule 3, Paragraph 5 of the dDCO (**document 3.1 (C)**).
CM1.5.42	Further to paragraph 10.3.5 of the CEMP [**APP-177**], can you outline your approach to discharge to ground if the ground was saturated during winter?	Paragraph 9.3.10 of the CEMP **(document 7.5 (B)**) states that no surface water discharges have been identified on the project. However, if during the works the main works contractor experiences high ground water during excavation works, and discharge to ground was not possible, then a surface discharge to a watercourse may be required. Paragraph 10.6.10 of ES Chapter 10 Geology and Hydrogeology [**APP-078**] states that dewatering during construction is not anticipated along the majority of the route. However, paragraph 10.6.11 states that there could be localised dewatering requirements in the location of launch and reception pits for the trenchless crossings. In the first instance this dewatering would discharge to land. If this

Reference	Question	Applicant's Response
		was not possible then discharge to watercourse may be required. These discharges would use the Environment Agency RPS guidance with respect to temporary dewatering from excavations to surface water.
CM1.5.43	Can you confirm if archaeological strip, map and sample excavations would be backfilled, or would they remain open to facilitate the subsequent construction phase? Can you confirm what was assumed in the EIA? (Paragraph 11.3.18 of the CEMP [**APP-177**] refers.)	Strip, map and sample (SMS) is typically undertaken just ahead of the topsoil strip and backfilling would not take place. Whether the excavations are backfilled or remain open would depend on the construction programme. However, this would not change the assessment or the conclusions presented in ES Chapter 8: Historic Environment [**APP-076**]. In any event, the SMS would be undertaken in accordance with the Detailed Written Scheme of Investigation, as secured through Requirement 6 of the dDCO (**document 3.1 (C)**).
CM1.5.44	With reference to paragraph 14.3.7 of the CEMP (document 7.5(B), can you provide examples of additional temporary noise mitigation measures (with evidence of consequent noise reduction levels) that would be put in place to reduce noise levels from construction plant and machinery, and their effectiveness for distinctive tonal sounds, and also for impulsive construction activities?	Specific construction noise mitigation measures would be determined by the main works contractor based on the plant and equipment they proposed to use. However, Table 14.3 of the ES Chapter 14, Noise and Vibration [**APP-082**] provides examples of construction noise mitigation measures that may be employed (such as using quieter plant or screening), together with the likely attenuation they may provide, based on guidance from British Standard 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites – Part 1: Noise (BS 5228-1). The mitigation measures outlined in Table 14.3 would reduce overall noise levels, including those containing total or impulsive characteristics.
CM1.5.45	Paragraph 14.3.9 of the CEMP [**APP-177**] refers to mitigation of vibration effects. Please provide examples of additional temporary measures that would be put in place to reduce vibration levels from construction plant and machinery at pylon 4Y004A (with evidence of vibration reduction levels).	Specific construction vibration mitigation measures would be determined by the main works contractor based on the plant and equipment they proposed to use. However, Table 14.4 of the ES Chapter 14, Noise and Vibration [**APP-082**] provides examples of construction vibration mitigation measures that may be employed, together with the likely attenuation they may provide, based on guidance from British Standard 5228-2:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration (BS 5228-2).
CM1.5.46	Please describe your engagement approach with affected residents, landowners and tenants for any unscheduled activities that would overrun beyond the approved core working hours. (Paragraph 14.4.11 of the CEMP [**APP-177**] refers).	The approach to communicating unscheduled or overrunning activities begins with the pre-construction communications detailed in paragraph 3.4.2 of the CEMP (**document 7.5 (B)**). When informing local residents of the commencement and likely duration of construction work activities, the Applicant would provide an overview of its approach to any unscheduled/ overrunning works. This approach is dependent on the scale and/or nature of the works. For works that have an impact on a small number of residents, landowners or tenants, the Applicant would communicate any overrun to these parties individually. For larger works, engagement would pivot to a more reactive approach. The project

Reference	Question	Applicant's Response
		telephone number would continue to be available for any residents with questions during overrunning works, and depending on the nature of the works it may also be appropriate to share details of this on the project website.
CM1.5.47	Can you confirm the minimum road width required to enable one lane to remain open to traffic (with traffic management) and advise if roads not meeting this criterion have been identified in the ES? (See paragraphs 4.7.20 to 21 in ES Chapter 4, Project Description [**APP-072**]).	To allow one lane to remain open to traffic, including buses and H'V's, an absolute minimum width of 3.0m is required, with 3.25-3.5m desirable. As detailed in paragraph 4.7.21 of the ES Chapter 4: Project Description [**APP-072**] the roads and their diversion routes that are not wide enough to allow one lane to continue operating during installation of the underground cables, are shown on the Access, Rights of Way and Public Navigation Plans [**APP-012**].
CM1.5.48	Following on from paragraph 5.5.4 of the CTMP [**APP-180**], can you describe the activities required to create an access point and how these would result in the closure of single carriageways for up to two weeks?	Works immediately adjacent to a live carriageway require the closure of the nearside lane for the safety of workers and the public. A typical access point can be seen in Design and Layout Plans Temporary Bellmouth for Access [**APP-030**]. Typical stages of work and durations associated with the construction activities are as follows: • Establish traffic management measures, mobilise to site, set out works and identify any services in the work area = 1 day; • Excavate the area for the new access point and remove the top layer of the adjacent road surface = 4 days; • Sub-base material would then be laid and compacted for the new bell mouth = 4 days; • Install the new running surface, which would tie into the carriageway where the existing road surface has been removed = 2 days; • Demobilise the site and remove traffic management measures = 1 day; and • Contingency for delays, including encountering services or unexpected ground conditions = 2 days.
CM1.5.49	Further to paragraph 7.2.2 of the CTMP [**APP-180**], can you clarify if the mobile gangs being collected by the minibus or welfare van would report daily to the main site compound or go directly to their place of work on site?	Based on experience of similar projects, where mobile vans are to be used to provide the welfare facilities for the works, these mobile welfare vans would be used to transport mobile gangs directly to their place of work from their accommodation. Minibus services would also be provided to collect staff from pick-up-points and drop them off at work fronts along the Order Limits. Staff would not be transported to the main site compound by minibus unless that is where their place of work is located, and staff would not be required to sign in at the main site compound before travelling to the work front.

Reference	Question	Applicant's Response
CM1.5.50	Can you clarify the approach to reinstatement of land, noting that the CEMP [**APP-177**] at paragraph 4.7.1 refers to reinstatement of land to its 'pre-construction' condition whilst paragraph 11.3.35 refers to an 'appropriate' condition?	Articles 26 and 27 of the dDCO (**document 3.1 (C)**) require the Applicant and UKPN (respectively) to remove all temporary works and restore land subject to temporary possession to the reasonable satisfaction of the owners of the land. The requirement to do so is subject to certain exceptions set out in Articles 26 and 27 and explained in further detail in Paragraph 3.30 of the Explanatory Memorandum (**document 3.2 (B)**). Consequently, and as detailed in good practice measure GG07 from the CoCP (**document 7.5.1 (B)**) land used temporarily would be reinstated where practicable (bearing in mind any restrictions on planting and land use) to its pre-construction condition and use. Good practice measure GG06 of the CEMP Appendix A: CoCP **[APP-178]** secures that the main works contractor would reinstate roads, tracks and PRoW to their pre-construction condition using the full photographic and descriptive pre-condition survey. No change has been made to the text in paragraph 11.3.35 of the CEMP **(document 7.5 (B))** as this will depend on what the pre-site conditions were and what the end land use needs to be. For example, trees cannot be planted over the underground cables and the land use within the CSE compounds and GSP substation footprint would differ from the pre-project conditions.
CM1.5.51	Table 2.1 of ES Appendix 14.1 the construction activity plant and noise data [**APP-136**], indicates plant required for construction activities. How would construction activity be monitored, and the type of construction plant controlled to ensure that the impacts assessed in the ES are not exceeded?	In accordance with Table 15.1 of the CEMP (**document 7.5(B)**), noise monitoring would be carried out during specific activities such as piling. This would include measuring sound levels and potential impacts on noise sensitive receptors (NSR) to check whether thresholds are likely to be exceeded. As detailed in paragraph 14.3.5 of the CEMP, the project would use Best Practicable Means to reduce noise during construction, in accordance with Section 72 of the Control and Pollution Act 1974. Methods of construction and associated plant would be selected so as to reduce noise and vibration in the first instance and the main works contractor would undertake detailed construction noise and vibration assessments as part of site planning activities. Plant would be inspected on arrival to site and the project would only using plant that conforms with or better than relevant national or international standards, directives or recommendations on noise or vibration emissions, including The Noise Emission in the Environment by Equipment for Use Outdoors Regulations 2001.
CM1.5.52	The MWMP [**APP-181**] notes that the Circular Economy Package Policy Statement (Defra, 2022) has been considered. Can you elaborate and summarise your approach to circular economy principles and how the Proposed Development would maximise opportunities to reuse material and minimise waste?	The Applicant is committed to sustainability and diverting waste from landfill (including circular economy principles). The Applicant has recently published its Annual Environmental Report for electricity transmission (National Grid, 2023) which states *'We're committed to achieving zero waste to landfill across key areas of waste and using circular economy principles to make the most of natural resources and our assets. This year we achieved zero waste to landfill across our construction projects and are ahead on our office water and waste tonnage reduction targets. We also achieved certification of our environmental management system to ISO14001 for our Electricity Transmission business alone.'* As part of the main works contractor tendering process, they would submit a Sustainability Action Plan detailing how they would support the delivery of the Applicant's commitment to divert 100% of waste from

Reference	Question	Applicant's Response
		landfill, maximise recycling rates and integrate principles of a circular economy in a way that they and their supply chain would deliver their works on the project. Sections 2.2 (Designing out Waste), 5 (Material Management), 5.2 (Efficient Material Use During Construction), 6 (Waste Management) and 6.5 (Handling and Disposal of Waste During Construction) of the MWMP [**APP-181**] include proposals to maximise opportunities to reuse material and minimise to achieve the current project specific target (set out in Section 2.5) that: ● The contractor appointed to construct the project will have carbon reduction targets; ● The project would seek to reduce waste to landfill during construction and contribute to the target to achieve zero-waste to landfill across construction projects; and ● The project would keep records of how it has followed the waste hierarchy to reduce waste and avoid waste being sent to landfill. These proposals, where possible, all seek to manage resources, materials and wastes efficiently, follow the waste hierarchy and seek circular solutions.
CM1.5.53	The MWMP [**APP-181**] identifies that environmental targets would be set for materials and waste, and that these would be monitored by the contractor when appointed. Can the Applicant explain how these environmental targets would be quantified and what is proposed in terms of identifying and implementing any remedial action if targets were to be exceeded?	As part of the main works contractor tendering process, the tendering contractors would submit a Sustainability Action Plan detailing how they would support the delivery of the Applicant's commitment to divert 100% of waste from landfill, maximise recycling rates and integrate principles of a circular economy in a way that they and their supply chain would deliver their works on the project. The Sustainability Action Plan would be evaluated by the Applicant as part of their main works contractor tendering process. Section 2.5 of the MWMP [**APP-181**] includes the current project specific targets: ● The contractor appointed to construct the project would have carbon reduction targets; ● The project would seek to reduce waste to landfill during construction and contribute to the target to achieve zero-waste to landfill across construction projects; and ● The project would keep records of how it has followed the waste hierarchy to reduce waste and avoid waste being sent to landfill. These targets would be monitored by the contractor and reported to the Applicant during construction. As part of the ongoing monitoring, if the contractor does not meet, as a minimum, the targets set, remedial actions would be agreed with the applicant and implemented by the contractor. As referenced in Table 4.1 of the MWMP [**APP-181**], the Applicant has confirmed that specific targets would be defined during the detailed design stage of the project when a main works contractor has been appointed.

Reference	Question	Applicant's Response
CM1.5.54	Explain how you would determine whether a change to the CEMP (**document 7.5(B)**, CTMP [**APP-180**], MWMP [**APP-181**] or LEMP [**APP-182**] should be reported to the relevant planning authority and what mechanism would be in place to manage any dispute about a proposed change.	The following sections of the management plans set out the change process for the respective documents: Section 15.5 of the CEMP (**document 7.5 (B)**), Section 8.6 of the CTMP (**document 7.6 (B)**), Section 7.4 of the MWMP (**document 7.7 (B)**), Section 10.5 of the LEMP (**document 7.8 (B)**) and Section 6.6 of the PRoWMP (**document 8.5.8**). In addition to specific derogations (the process for which is governed by Requirement 1(4) of Schedule 3 to the dDCO (**document 3.1 (C)**) and explained further in each of the sections of text noted above),it may be necessary to amend the details contained in the management plans as a result of the iterative discussion and engagement that would continue after the management plans have been approved. The resulting changes would not alter any of the underlying commitments, mitigations and methodologies set out in the management plans. In every case, consideration would be given to any changes to the outcome of the assessment of environmental effects. Where there is a proposed change to a management plan, the Applicant would provide details to the 'relevant planning authority' together with evidence of relevant stakeholder engagement, where upon, the 'relevant planning authority' will, acting reasonably, endeavour to respond within 28 days to either confirm its consent to the change to the management plan or provide its reasons why the change is not accepted. Where there is a dispute over a proposed change to the management plans, this would be managed through the appeals procedure in paragraph 4(1) of Schedule 4 of the dDCO (**document 3.1 (C)**), which states that ''*The undertaker may appeal if –* *(a) the relevant authority refuses an application for:* *(i) any consent, agreement or approval required by a Requirement or any document referred to in any Requirement; or* *(ii) any other consent, agreement or approval required under this Order, or grants it subject to conditions to which the undertaker objects'.* This is on the basis that it would amount to a refusal by the relevant authority to grant a consent required by a document referred to in a Requirement (in this case Requirement 4 – Management Plans).
CM1.5.55	Paragraph 1.2.6 of the LEMP [**APP-182**] cites two appendices but elsewhere it refers to three. Three were submitted with the application [**APP-182**] to [**APP-184**] inclusive. Does paragraph 1.2.6 need to be amended accordingly?	This is an error and the Applicant has updated this paragraph in the LEMP (**document 7.8 (B)**) to refer to all three appendices submitted: Appendix A: Vegetation Retention and Removal Plan [**APP-183**], Appendix B: Vegetation Reinstatement Plan (**document 7.8.2(B)**), and Appendix C: Planting Schedules [**APP-185**].

Reference	Question	Applicant's Response
CM1.5.56	The LEMP [**APP-182**] suggests that good practice measure GG07 (reinstatement of hedgerows, fences, walls, earthworks and boundary features) would only be implemented 'with landowner agreement' (paragraph 8.1.3). However, the REAC [**APP-179**] refers to implementation in consultation with the landowner. Can you clarify what is intended and the extent to which the ExA and SoS could rely on this measure being implemented to mitigate the relevant adverse impacts?	The Applicant has updated paragraph 8.1.3 of the LEMP (**document 7.8 (B)**) to be consistent with the wording in the REAC (**document 7.5.2 (B)**) and that implementation would be in consultation with, rather than in agreement with the landowner. Requirement 9 (Reinstatement planting plan), Schedule 3 of the dDCO (**document 3.1 (C)**) prevents any stage of the authorised development from being brought into operational use until a reinstatement planting plan for trees, groups of trees, woodlands and hedgerows to be reinstated during that stage has been submitted to and approved by the 'relevant planning authority'. The reinstatement planting plan must be in general accordance with the LEMP (**document 7.8 (B))** approved under Requirement 4, Schedule 3 of the dDCO (**document 3.1 (C)**).
CM1.5.57	Paragraph 8.6.3 of the LEMP [**APP-182**] refers to natural regeneration of grassland as a restoration measure. Can the Applicant advise where this is intended as it is not evident in the Vegetation Reinstatement Plan set out in Appendix B of the LEMP [**APP-184**].	The Applicant has removed paragraphs 8.6.3 and 8.6.4 of the LEMP (**document 7.8(B)**) that reference natural regeneration of grassland as this is not shown on LEMP Appendix B Vegetation Reinstatement Plan (**document 7.8.1 (B)**).
CM1.5.58	The first bullet point of paragraph 8.2.2 of the LEMP [**APP-182**] refers to planting in 'urban or park environments, where ornamental species may be more appropriate'. Can the Applicant clarify where this is intended as it is not evident in the Vegetation Reinstatement Plan set out in Appendix B of the LEMP [**APP-184**].	The Applicant has reviewed this bullet point and can confirm that there are no 'urban or park environments, where ornamental species may be more appropriate'. Therefore, the reference has been removed from the Deadline 3 version of the LEMP (**document 7.8 (B)**).
CM1.5.59	Paragraph 8.8.1 of the LEMP [**APP-182**] refers to an existing arable field margin (MM23) that would be retained and enhanced to compensate for arable field margin losses. Can you signpost where this feature is described and the proposals for mitigation and enhancement?	The arable field margin is Habitat ID HL-352a described in ES Appendix 7.1: Annex A Habitats Baseline UKHab Descriptions [**APP-110**] and shown on Sheet 17 of Figure 7.1.3 Habitats of Principal Importance and Ground Water Dependent Terrestrial Ecosystems in ES Figures Part 3 [**APP-148**]. MM23 is shown on Sheet 28 of ES Figure 16.1: Embedded Measures and Mitigation Proposals [**APP-155**]. As shown on Sheet 28 of LEMP Appendix B: Vegetation Reinstatement Plan (**document 7.8.2 (B)**), the proposals in this location include species rich grassland which is described in Section 8.6 of the LEMP (**document 7.8 (B)**).

Reference	Question	Applicant's Response
CM1.5.60	Could you confirm that you intend the submitted versions of the various management plans such as the LEMP to be considered as the final versions, rather than outline versions that would be detailed for agreement post-consent as part of the discharge of any DCO requirements? Can you respond to the Suffolk councils' submission in their LIR [REP1-045] (paragraphs 6.25 and 6.148) that this is concerning as the proposals are still at a preliminary stage.	The Applicant refers to Reference 6.148 – 6.152 of the Applicant's Comments on Suffolk County Council and Babergh Mid Suffolk District Council LIR (**document 8.5.3.1**).
CM1.5.61	Could the Applicant explain how it would determine whether a change to the CEMP [**APP-177**], CTMP [**APP-180**], MWMP [**APP-181**] or LEMP [**APP-182**] should be reported to the relevant planning authority and what mechanism would be in place to manage any dispute about a proposed change?	The Applicant has addressed this question in response to CM1.5.54.
CM1.5.63	How do you respond to the Suffolk councils' suggestion in their LIR [REP1-045] (paragraph 6.18) that all prescriptions for implementation, establishment, and management of areas to be seeded, planted, or otherwise managed for landscape and ecology, should be brought together comprehensively in the LEMP?	The Applicant refers to Reference 6.18 of the Applicant's Comments on Suffolk County Council and Babergh Mid Suffolk District Council LIR (**document 8.5.3.1**).
CM1.5.64	The Suffolk councils' LIR [REP1-045] (paragraphs 6.114 to 6.117) raises questions and concerns in relation to your landscape softening proposals. Why are these measures not considered to be mitigation that would be secured like other proposals? Why would they be they dealt with as voluntary measures that would not therefore	The Applicant refers to Reference 6.114 – 6.117 of the Applicant's Comments on Suffolk County Council and Babergh Mid Suffolk District Council LIR (**document 8.5.3.1**).

Reference	Question	Applicant's Response
	be secure, to be agreed only with the landowner and tenant, but not with the relevant local planning authority (LEMP [**APP-182**], paragraph 8.2.6)?	

6. Draft Development Consent Order

Table 6.1 – dDCO

Reference	Question	Applicant's Response
DC1.6.1	Does the dDCO address the concerns expressed in the Essex councils' LIR [REP1-039] at paragraph 21.2.5 in respect of what constitutes the 'ES'? If not, how can these be accommodated?	The Applicant's response to Paragraph 21.2.5 of the joint LIR submitted by Essex County Council and Braintree District Council [**REP1-039**] is set out in Section 17 of the Applicant's Comments on Essex County Council and Braintree District Council LIR (**document 8.5.3.2**). The Applicant considers that the response provided addresses the Councils' concerns in this respect.
DC1.6.2	Your statement at page 69 of your Comments on Relevant Representations [REP1-025] is noted but what are your perceived operational reasons for a statutory pre-commencement stage? How would it provide clarity and for whom?	The ability to undertake the '*pre-commencement operations'* listed in Article 2(1) of the dDCO (**document 3.1 (C)**) is of critical importance in the context of the anticipated construction programme for the project. An inability to undertake any of those operations before all pre-commencement Requirements listed in Schedule 3 to the dDCO have been discharged would ultimately require a number of additional activities to be carried out as part of an already constrained construction programme. The net effect would be an unacceptable delay to delivery of the project (the urgent national need for which is set out in the Need Case [**APP-161**]). The Applicant's response to Paragraphs 17.2 to 17.7 of the joint LIR submitted by Suffolk County Council and Babergh and Mid Suffolk District Council [**REP1-045**] provides further explanation as to how the Applicant anticipates that the "*pre-commencement operations*" would be undertaken (please see Section 14 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**)). As is explained in the Applicant's Comments on RRs [**REP1-025**] the inclusion of a specific definition of "*pre-commencement operations*" within Article 2(1) of the dDCO is intended to ensure alignment with emerging drafting in the draft National Grid (Yorkshire Green Energy Enablement Project) DCO. The Applicant also notes parallels in this respect with the draft A122 (Lower Thames Crossing) DCO (to which see Schedule 2, Paragraph 1), the Longfield Solar Farm Order 2023 (to which see Article 2(1)), the Keadby 3 (Carbon Capture Equipped Gas Fired Generating Station) Order 2022 (to which see Article 2(1)) and the draft AQUIND Interconnector Order (to which see Article 2(1) in the draft Order appended to the Examining Authority's Recommendation Report). Not only is the current approach, therefore, well precedented but, in the Applicant's opinion, it assists with interpretation of the dDCO and the practical application of Requirement 4 (Management Plans).

Reference	Question	Applicant's Response
DC1.6.3	Paragraph 21 of PINS Advice Note 15: *Drafting DCOs* deals with the issue of defining 'commencement*'* - advance works and environmental protection and suggests they are generally unlikely to find favour with the SoS. The Applicant's associated submission is noted at paragraphs 3.6.14 and 3.6.15 of the Explanatory Memorandum (EM) [**APP-035**]. Nevertheless, can the range of potential *'*pre-commencement operations' in Article 2 of the dDCO reasonably be described as either *de minimis* or having minimal potential for adverse impact?	The Applicant notes that a very similar point was raised in Paragraph's 17.2 to 17.7 of the joint LIR submitted by Suffolk County Council and Babergh and Mid Suffolk District Councils [**REP1-045**]. The Applicant therefore refers to Section 14 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**).
DC1.6.4	In arriving at the conclusion that the range of potential 'pre-commencement operations' in Article 2 are either *de minimis* or having minimal potential for adverse impact, where have you assessed the likely impact of each?	The Applicant notes that a very similar point was raised in Paragraphs 17.2 to 17.7 of the joint LIR submitted by Suffolk County Council and Babergh and Mid Suffolk District Councils [**REP1-045**]. The Applicant therefore refers to Section 14 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**).
DC1.6.5	Is the definition of 'pre-commencement operations' in Article 2 sufficiently clear and unambiguous? For example, 'demolition of existing buildings' could be read as meaning either the surveys required for the demolition of existing buildings or the actual demolition of existing buildings. Is amendment required in this or other respects?	The Applicant respectfully disagrees with the Examining Authority's interpretation of Article 2(1) of the dDCO (**document 3.1 (C)**). The deliberate inclusion of commas within the list of "*pre-commencement operations*" makes clear that "….*operations consisting of…. surveys and monitoring investigations for the purpose of assessing ground conditions….*" are intended to be separate to "….*operations consisting of….[the] demolition of existing buildings….*" (albeit both sets of operations could theoretically be undertaken in close geographic and/or temporal proximity to one another). However, to the extent that the Examining Authority considers there is any residual ambiguity, the Applicant would suggest that the "*pre-commencement operations*" in Article 2(1) instead be listed as lettered sub-paragraphs. The definition would, therefore, read as follows: '*pre-commencement operations*" *means: operations consisting of engineering investigations and surveys; environmental (including archaeological) investigations and monitoring; surveys and monitoring investigations for the purpose of assessing ground conditions; diversion and laying of services; demolition of existing buildings; site clearance; environmental mitigation measures; remediation in respect of any contamination or other adverse ground conditions; set up works associated with the establishment of construction compounds; temporary accesses; erection of any temporary means of enclosure or temporary*

Reference	Question	Applicant's Response
		demarcation fencing marking out site boundaries; and the temporary display of site notices or advertisements.'
DC1.6.6	How do you respond to each of the specific concerns articulated in paragraph 12.16 to 12.19 inclusive of the Suffolk councils' LIR [REP1-045] in respect of pre-commencement operations?	The Applicant's response to matters raised in Paragraphs 12.16 to 12.19 of the joint LIR submitted by Suffolk County Council and Babergh and Mid Suffolk District Councils [**REP1-045**] is set out in Section 9 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**). The Applicant considers that the response provided addresses the Councils' concerns in this respect.
DC1.6.7	What enforcement mechanism is available to local planning and highway authorities in respect of pre-commencement operations?	The Applicant notes that a very similar point was raised in Paragraph 21.2.4 of the joint LIR submitted by Essex County Council and Braintree District Council [**REP1-039**]. The Applicant therefore refers to Section 17 of the Applicant's Comments on Essex County Council and Braintree District Council LIR (**document 8.5.3.2**).
DC1.6.8	Does the definition of 'maintain' in Article 2 need to be amended in response to paragraph 21.2.6 of the Essex councils' LIR [**REP1-039**]?	The Applicant's response to matters raised in Paragraph 21.2.6 of the joint LIR submitted by Essex County Council and Braintree District Council [**REP1-039**] is set out in Section 17 of the Applicant's Comments on Essex County Council and Braintree District Council LIR (**document 8.5.3.2**). As the response explains, the Applicant does not consider that an amendment to the definition of "*maintain*" in Article 2(1) of the dDCO (**document 3.1 (C)**) is required.
DC1.6.9	Looking at the final sentence of paragraph 21.2.7 of your LIR [**REP1 -039**], how should the dDCO be amended to address your specific concern about 'trigger timings'.	The Applicant's response to matters raised in Paragraph 21.2.7 of the joint LIR submitted by Essex County Council and Braintree District Council [REP1-039] is set out in Section 17 of the Applicant's Comments on Essex County Council and Braintree District Council LIR (**document 8.5.3.2**). As is set out in that response, the Applicant would also welcome further clarification from the Councils as to the nature and extent of the further consideration which is mentioned in Paragraph 21.2.7.
DC1.6.10	The dDCO does not include any provisions relating to any 'enactment applying to land within or adjacent to the Order Limits', providing that they have effect subject to the provisions of the DCO. The purpose of including such a provision, which has been commonly used in other DCOs, would be to avoid inconsistency with other relevant statutory provision that applies in the	The Applicant understands that Question DC1.6.10 is concerned with the omission from Article 3 (Development consent etc. granted by the Order) of the dDCO (**document 3.1 (C)**) of the following wording: "*Any enactment applying to land within or adjacent to the Order limits has effect subject to the provisions of this Order*." Whilst such wording has been included in certain highways-related DCOs, save for Article 3(9) of the draft National Grid (Yorkshire Green Energy Enablement Project) DCO, the Applicant is not aware of other precedent for use of this wording within previous overhead line DCOs. The Applicant notes that Article 56 (Amendment of local legislation) of the dDCO fulfils an equivalent function to the wording set out above. The purpose and effect of Article 56 is set out in detail at Paragraph

Reference	Question	Applicant's Response
	vicinity. Can you explain why this has not been included?	3.60 of the Explanatory Memorandum (**document 3.2 (B)**). Indeed, the Applicant considers that Article 56(4) provides an additional procedural safeguard beyond that which would otherwise be provided by the wording noted above. Furthermore, Article 55 of the dDCO addresses public general legislation (to which see further in response to DC1.6.113 below). The draft Order therefore already addresses the interplay with other local and public legislation, and the inclusion of further wording would risk importing uncertainty on this topic.
DC1.6.11	Articles 3 (2) (b) and 3 (3) (b) of the dDCO both contain the word 'may'. The expectation is that the apparatus would be removed as part of the Proposed Development. Should the wording be amended accordingly in the interests of precision?	The use of the word 'may' in Articles 3(2)(b) and 3(3)(b) reflects the fact that the dDCO (**document 3.1 (C)**) is, as with all other DCOs, by its very nature, permissive. The Applicant refers to its response to question MG1.0.20, which sets out where certain of these removals are secured. In that context it should be noted that Article 3 is a 'bare power' which is then subject to controls elsewhere in the dDCO. The design and proposed delivery of the project, in the context of the Applicant's statutory duties, has led to the inclusion of the removal of sections of existing 400kV and 132kV overhead line which would be removed as part of the project (to which see further at Section 4.4 (General Construction) of ES Chapter 4: Project Description [**APP-072**]). However, more widely, the Applicant cannot predict with any certainty the potential for, and/or nature of, future changes to the economic regulatory environment within which it operates. Agreeing to an absolute obligation in Articles 3(2)(b) and 3(3)(b) of the dDCO to remove or replace existing electric line could, at any time in the future, place the Applicant in breach of its other duties. That said, where the Applicant can so commit, it is doing so via negotiations with the distribution network operator (UKPN) where a commercial agreement is being put in place. Therefore, the Applicant considers that use of the word 'may' is appropriate and justified in this context.
DC1.6.12	Over and above the issue raised in the preceding question, can you respond to the concerns aired in paragraphs 21.3.1 and 21.3.2 of the Essex councils' LIR [**REP1-039**] in respect of Articles 3 and 4 of the dDCO?	The Applicant's response to matters raised in Paragraphs 21.3.1 and 21.3.2 of the joint LIR submitted by Essex County Council and Braintree District Council [**REP1-039**] is set out in Section 17 of the Applicant's Comments on Essex County Council and Braintree District Council LIR (**document 8.5.3.2**).
DC1.6.13	In several places the dDCO (document 3.1(B)) seeks to incorporate flexibility by disapplying certain vertical LoD (Article 5 (1) (b), (d) and (3) (b)), where it can be demonstrated that this would not give rise	The Applicant has given careful consideration to the selection of the vertical LoD set out in Article 5(1)(b), 5(1)(d) and 5(3) of the dDCO (**document 3.1 (C)**). However, and as Paragraph 3.9.9 of the Explanatory Memorandum (**document 3.2(B)**) explains, there may be limited and localised instances where unexpected ground conditions are encountered during construction

Reference	Question	Applicant's Response
	to any materially new or materially different environmental effects to those identified in the ES. Can the Applicant explain how these provisions would operate in practice, and how any amendments or addenda to the ES would be captured to provide certainty for the discharging authority?	and which may render it dangerous or impracticable to install certain aspects of the authorised development within the vertical LoD specified in Article 5(1)(b), 5(1)(d) and 5(3). Article 5(4) (which does not disapply the LoD but gives a discretion to the Secretary of State) would be engaged in these circumstances in order to avoid a scenario whereby a minor departure from the stated vertical LoD would otherwise lead to a disproportionate and/or onerous delay. The adverse consequences of such a delay would be particularly acute in the context of the project given the urgent national need which it is intended to address (to which see further in the Need Case [**APP-161**]). In all instances, the Secretary of State would first need to be satisfied that such a departure would not give rise to any materially new or materially different environmental effects to those reported in the ES. However, the Applicant does not consider that there needs to be a formal process in place for the Secretary of State to make determinations of this nature. Rather, it appears to have been accepted in the context of previously made DCOs – and the Applicant has not sought to depart from this approach – that this provision would operate in a flexible manner, enabling the Secretary of State to adapt to the specific nature of the request before it. (Reference is made in this context to broadly equivalent drafting in the M20 Junction 10a DCO 2017 (to which see Article 8), the A19/A184 Testo's Junction Alteration DCO 2018 (to which see Article 6), and the Southampton to London Pipeline DCO 2020 (to which see Article 6(2)). In the first instance, it would be incumbent upon the Applicant to satisfy itself that a deviation in excess of the limits in Article 5(1)(b), 5(1)(d) and/or 5(3) would not give rise to any materially new or materially different environmental effects from those reported in the ES and to compile such evidence as may be necessary to demonstrate this as a matter of fact to the Secretary of State. The Secretary of State, in consultation with the 'relevant planning authority' and such other parties as the Secretary of State considers appropriate, would then need to consider the submission made by the Applicant and determine whether or not they agree with the Applicant's view that the environmental impacts of the deviation would not give rise to effects which are materially new or materially different to those set out in the ES. Given the nature of the process and certification which could be sought pursuant to Article 5(4), whereby jurisdiction only extends to circumstances where the deviation does not depart materially from the ES, the Applicant does not anticipate that any amendments or addenda to the ES would be necessary. If the deviation was likely to give rise to effects which are materially new or materially different to those set out in the ES then Article 5(4) would not apply. However, to the extent that any formal certification is issued by the Secretary of State, the Applicant would intend to make a copy of the same publicly available in line with its duties pursuant to Article 57(5) of the dDCO.
DC1.6.14	Article 5 (1) (b) of the dDCO would allow pylons to deviate up to 4m above the	Yes. The LoD set out in Article 5 of the dDCO (**document 3.1 (C)**) would apply in respect of works to modify or realign sections of existing overhead electric line, which form part of the numbered works listed within

Reference	Question	Applicant's Response
	heights shown on the Work Plans. In addition to the proposed new pylons, some of the Work Nos (Schedule 1) include modifications to the existing overhead transmission lines. Do the proposed LoD apply to existing as well as proposed pylons? If so, has this been accounted for in the ES?	Article 5(1). The Work Plans [**APP-010**] show the Proposed Alignment for such works, with pylons coloured brown or grey. The Work Plans also include a Table of Parameters at the end, listing pylons by number. ES Chapter 4: Project Description [**APP-072**] makes clear at Table 4.1 (pages 5-7 (inclusive)) that the Applicant's EIA takes account of the flexibility afforded by the LoD as currently proposed in Article 5.
DC1.6.15	It is not clear, either from the dDCO itself or the EM [**APP-035**] (section 3.9 onwards) as to what, if any, provision that Article 5 makes for 'Associated Development' as defined in Schedule 1 of the dDCO. Can you advise if such works and activities are provided for?	The Applicant refers to Article 3(7) of the dDCO (**document 3.1 (C)**) which makes clear that the construction and installation of the authorised development (being the development described in Schedule 1 and, therefore, including all Associated Development) is subject to Article 5 (LoD). Practically speaking, the Associated Development either forms part of or is 'linked' to the numbered works identified in Schedule 1 to the dDCO (i.e. the Associated Development must be "*necessary or expedient for the purposes of or in connection with the construction or maintenance of the Work Nos.*") The principal permanent elements of the numbered works are, in turn, identified by reference to description and depiction on the Work Plans [**APP-010**]. The Work Plans show the Order limits and also the horizontal LoD, as set out in Article 5. The works listed in Article 5 are therefore constrained by LoD. As noted above, the 'Associated Development' is development which is subordinate to the principal works. Insofar as that development is not listed within a numbered work within Schedule 1 to the dDCO, then Schedule 1 makes further provision under the title 'Associated Development' referring to "*[such] associated development not listed above, within the Order Limits, as may be necessary or expedient for the purposes of or in connection with the construction or maintenance of the above Work Nos. or any of them…*" Hence as noted at Item 7.1 of the Applicant's Written Summary of Oral Representations to Issue Specific Hearing 1 [**REP1-024**], it is a 'catch-all' list, constrained by the Order limits.
DC1.6.16	In exercising rights conferred by Article 5, is it sufficiently clear on the face of the dDCO, without recourse to supporting documents, where construction activity should and should not take place, e.g., to avoid certain features or environmentally sensitive areas?	The Applicant respectfully disagrees with the Examining Authority's suggestion that Article 5 of the dDCO (**document 3.1 (C)**) should be capable of being interpreted without recourse to any other documentation. The Applicant's view is that Article 5 must necessarily be read and interpreted alongside the Work Plans [**APP-010**], and in the context of ES Chapter 4: Project Description [**APP-072**]. The current approach to Article 5 is well precedented (to which see further at Paragraph 3.9 of the Explanatory Memorandum (**document 3.2(B)**). Further, any attempt for the dDCO, as a statutory instrument, to convey detailed technical and/or supporting environmental information is likely to create significant and, in the Applicant's opinion, unnecessary ambiguity.

Reference	Question	Applicant's Response
DC1.6.17	Is there merit in concerns expressed by the Essex councils about a '*one size fits all approach'* at paragraph 21.3.3 of their LIR [**REP1-039**]? If not, why not?	The Applicant's response to matters raised in Paragraph 21.3.3 of the joint LIR submitted by Essex County Council and Braintree District Council [**REP1-039**] is set out in Section 17 of the Applicant's Comments on Essex County Council and Braintree District Council LIR (**document 8.5.3.2**). The Applicant also refers to the response provided to Item 7.1 of the Applicant's Written Summary of Oral Representations to Issue Specific Hearing 1 [**REP1-024**] and to the response provided to Action No. AP22 in the Applicant's Response to Issue Specific Hearing 1 Action Points [**REP1-034**].
DC1.6.18	At paragraph 17.9 of the Suffolk councils' LIR [**REP1-045**] concerns are set out about the breadth of the LoD in relation to pylons and overhead lines in sensitive locations. How do you respond to these?	The Applicant's response to matters raised in Paragraph 17.9 of the joint LIR submitted by Suffolk County Council and Babergh and Mid Suffolk District Councils [**REP1-045**] is set out in Section 14 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**). The Applicant considers that the response provided addresses the Councils' concerns in this respect.
DC1.6.19	Does the perceived need for Article 10 (2) of the dDCO extend beyond the grid supply point substation for which planning permission has already been granted under the Town and County Planning Act 1990 regime? If so, can you give examples of hypothetical situations that might arise whereby it perceives the inclusion of Articles 10 (2) and 10 (3) to be necessary? If no, could the drafting be limited to deal only with the GSP development subject of extant planning permission?	Article 10(1) of the dDCO (**document 3.1 (C)**) is concerned with the interface between the dDCO and any planning permission authorising development which is not an NSIP but which is functionally linked to the construction, use or operation of any part of the authorised development. The Applicant considers that construction, use and operation of the GSP substation pursuant to the existing planning permission would fall within the scope of Article 10(1). Whilst not currently anticipated, there is also the potential that one or more standalone planning permission(s) is required to be obtained by the Applicant for example for access or enabling works, or to facilitate the diversion and relocation of apparatus belonging to another statutory undertaker. The Applicant intends for Articles 10(2) and 10(3) to have a much broader application – i.e. in respect of the interface between the dDCO and any other planning permission(s) authorising development or use which is not functionally linked to the authorised development. The need for articles 10(2) and 10(3) is explained further in Paragraph 3.14 of the Explanatory Memorandum (**document 3.2 (B)**). That need is arguably more acute given the linear nature of the project, as well as the known and anticipated volume of other planned or proposed development within and/or close to the Order limits (see, by way of example, ES Appendix 15.3 Long List of Other Developments [**APP-142**]). In the absence of Articles 10(2) and 10(3), the Applicant considers there to be a significant risk of future enforcement action and also a risk to the deliverability of the project or indeed other development within or adjacent to the Order limits. Further, and given the rapid rate of change of other planned or proposed development, the Applicant does not consider it appropriate or necessary to seek to constrain the scope or application of either Article 10(2) or 10(3) in any way.

Reference	Question	Applicant's Response
DC1.6.20	Are there any extant planning permissions or current applications for planning permission that the Applicant is aware of that it considers would warrant the retention of Article 10?	The Applicant refers to its response to DC1.6.19. From the Applicant's perspective, it is clearly impossible to predict with any certainty the nature and extent of consents which may in future overlap with the exercise of powers pursuant to the dDCO (**document 3.1 (C)**). At the point in time at which the application was made, known developments and planning permissions formed part of the cumulative impact assessment undertaken (to which see ES Chapter 15: CEA [**APP-083**] and accompanying appendices).
DC1.6.21	Given that the Applicant would have control over how the Proposed Development would be carried out within the scope of any forthcoming DCO and could presumably ensure that it would not conflict with planning permission it has secured or would apply for, can it provide fuller justification for Article 10 over and above what is set out in the EM [**APP-035**]?	The Applicant refers to its response to DC1.6.19. As made clear by Sections 14 and 31 of the Planning Act 2008, insofar as development is an NSIP a DCO must be sought. But in respect of any other development including that related to the NSIP (so-called Associated Development), it is open to the Applicant to seek such planning permissions as it needs. This could include planning permissions with details which are different to those in the dDCO (albeit this is not currently anticipated). Such applications would properly be matters for the relevant local planning authority in the usual way. The Applicant acknowledges that the Planning Act provides jurisdiction for certain changes (see Schedule 6 of that Act) to the Secretary of State. Hence there is clarity in respect of where the jurisdiction for future decisions resides. In addition, the recent caselaw from the Supreme Court in *Hillside Parks Ltd v Snowdonia National Park Authority* has led to the Applicant forming the view that the additional facets of Article 10 are necessary to avoid future issues as to compatibility as between consents (including those not sought by the Applicant). In short, the Applicant has included these provisions to give certainty and avoid the prospect of any unfortunate future interface issues which, whilst not currently envisaged, might arise.
DC1.6.22	In several of the dDCO's Articles (11, 14, 15, 16, 19, 47 and 53) provision is made for consent not being 'unreasonably withheld or delayed' together with the grant of the application default if the relevant authority does not determine it within the specified period. With inclusion of the quoted wording, what is the perceived need for the subsequent provision?	Paragraph 3.3.4 of the Explanatory Memorandum (**document 3.2 (B)**) explains in detail the Applicant's approach to, and justification for, the deeming provisions included in the dDCO (**document 3.1 (C)**). This includes a safeguard for the relevant consenting authority. There is recent precedent for this approach in both the National Grid (Hinkley Point C Connection Project) Order 2016 and the National Grid (Richborough Connection Project) DCO 2017. There is further and extensive recent precedent for such provisions, including in the Southampton to London Pipeline DCO 2020 (see Article 11), the A57 Link Roads DCO 2022 (see Article 14), and the Awel y Môr Offshore Wind Farm Order 2023 (see Article 12).

Reference	Question	Applicant's Response
		The Applicant considers that the extent of recent precedent, particularly in the context of linear infrastructure projects, emphasises the fact that deeming provisions are both a typical and necessary feature of current DCO drafting.
DC1.6.23	Does the Applicant agree with the suggestion that the words 'unreasonably withheld or delayed' are deleted from the Articles referred to in the previous question?	The Applicant does not agree with the suggestion that the inclusion of deeming provisions in the dDCO (**document 3.1 (C)**) negates the need for the dDCO to also state that approvals must not be unreasonably withheld or delayed. As is explained in Section 14 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**) (in particular the response to Paragraphs 17.11, 17.14 and 17.15), the Applicant envisages that there may well be situations where a more straightforward or routine approval is sought from the relevant authority and where it would therefore be reasonable to expect a decision to be proactively taken without delay by the authority at the earliest opportunity – notwithstanding the ultimate fall-back position of a deemed consent mechanism. The Applicant would, in practical terms, anticipate working closely with the relevant authority to provide advance notice, where practicable, of any requests for approval to which a deeming provision would apply under the dDCO (**document 3.1 (C)**).
DC1.6.24	How does the Applicant respond to the concern that failure to make the revision referred to in the previous question could render the consenting authority open to criminal liability by virtue of Section 161 (1) (b) of PA2008; an excessive measure?	The Applicant submits that this quest95ion is best answered through the inclusion of the wording set out in the previous two questions – i.e. such that approvals are not to be 'unreasonably withheld or delayed' but with a default deeming provision as a fallback. In this way there should be no issue as each consent or approval sought has a mechanism to ensure that it does not become 'stuck' in due process. It merits recording that as far as the Applicant is aware, in 15 years of the Planning Act 2008 regime, the sanction in Section 161 has not been exercised in respect of any DCO. This is in part because each DCO provides mechanisms for the resolution of issues, including appeals and arbitration. The dDCO (**document 3.1 (C)**) in this case is no different in providing those means to resolve disputes as between parties (see Articles 52 and 59). The Applicant submits that this is entirely appropriate and well-precedented. Notwithstanding the above, and the many practical avenues for dispute resolution available, the Applicant also notes that Section 161(1)(b) of the Planning Act 2008 states (with emphasis added): "*A person commits an offence if without reasonable excuse the person.otherwise fails to comply with the terms of an order granting development consent*." Whilst the actual application of Section 161(1)(b) would clearly be fact and circumstance specific, the Applicant cannot foresee any instances where a consenting authority would be unable to proffer a 'reasonable excuse' (noting the authority's public law duty to act reasonably) as to why it had failed to provide the necessary consent or other approval within the timescales contemplated in the dDCO (**document 3.1 (C)**).

Reference	Question	Applicant's Response
DC1.6.25	At paragraph 3.15.1 (c) of the EM [**APP-035**] reference is made to the provisions of Article 11 (2) of the Thames Water Utilities Limited (Thames Tideway Tunnel) Order 2014. It is noted that the phrase 'unreasonably withheld or delayed' is not included in that provision of the made Order. In that context, how is that facet relevant to this dDCO and why is it considered necessary and appropriate for the scheme applied for?	The Applicant notes that a very similar point was raised in Paragraph 17.12 of the joint LIR submitted by Suffolk County Council and Babergh and Mid Suffolk District Councils [**REP1-045**]. As is explained in Section 14 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**), Paragraph 3.15.1(c) of the Explanatory Memorandum should correctly refer to Article 10 of The Thames Water Utilities Limited (Thames Tideway Tunnel) Order 2014 (rather than to Article 11). This correction has been made in the updated version of the Explanatory Memorandum published at Deadline 3 (**document 3.2 (B)**).
DC1.6.26	How does the Applicant respond to the suggestion that the 28-day time period in Articles 11 (3), 14 (5), 15 (9), 16 (2), 19 (9), 21 (8), 47 (8) and 48 (4) is increased to 56 days for the reasons set out in paragraphs 17.16 to 17.19 inclusive of the Suffolk councils' LIR [**REP1-045**]?	The Applicant's response to matters raised in Paragraphs 17.16 to 17.19 of the joint LIR submitted by Suffolk County Council and Babergh and Mid Suffolk District Councils [**REP1-045**] is set out in Section 14 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**).
DC1.6.27	Is it reasonable that the period in the Articles specified in the preceding question should be paused if the relevant authority considers that additional information is reasonably required to determine the application?	The Applicant considers the suggestion made by Suffolk County Council and Babergh and Mid Suffolk District Councils in Paragraphs 17.16 to 17.19 of the joint LIR [**REP1-045**] to be a reasonable one. The Applicant has therefore included the words "*unless otherwise agreed*" in each of the relevant deeming provisions within the dDCO (**document 3.1 (C)**). It is intended that such wording would allow for requests made by the relevant authority for further information to be dealt with on a case-by-case basis and in line with the terms of the framework highways agreement (the heads of terms for which are currently with the host authorities for review).
DC1.6.28	At paragraph 3.16.7 of the EM [**APP-035**] reference is made to similar wording to the provisions of Article 12 of this dDCO being included in two other Orders, one of which is made. Paragraph 1.5 of PINS Advice Note 15: *Drafting DCOs* says that if a dDCO includes wording derived from other made Orders, the EM should explain why that particular wording is relevant to the proposed dDCO, for example detailing what	Paragraphs 3.16.1 to 3.16.6 of the Explanatory Memorandum (**document 3.2 (B)**) set out in detail how the provisions of Article 12 (Application of the Permit Schemes) of the dDCO (**document 3.1 (C)**) are intended to operate in the context of the project, noting in particular the fact that the Permit Schemes (as defined) are not, so far as the Applicant is aware, presently in widespread and frequent use. The Applicant's understanding is that it is the preference of the two highways authorities that the Permit Schemes apply, and the Applicant is willing to use the dDCO to make that compliance express. Turning then to the Explanatory Memorandum, the Applicant has sought to provide a proportionate and accessible explanation of the provisions of the dDCO (**document 3.1 (C)**). Therefore, and as with the

Reference	Question	Applicant's Response
	is factually similar for both the relevant consented NSIP and the Proposed Development. It is not sufficient for an EM to simply state that a particular provision has found favour with the SoS previously; the ExA and SoS will need to understand why it is appropriate for the scheme applied for. Can the Applicant address this omission? In doing so, the ExA notes that Article 9A (2) (a) of The Aquind Interconnector Order, at Appendix C of the ExA's Report, makes tailored provisions for specific local circumstances. On this basis, how are its provisions on all fours with the Article 12 of this dDCO?	remainder of the Explanatory Memorandum (**document 3.2 (B)**), cross-references to other Orders are intended to underscore the fact that the dDCO (**document 3.1 (C)**) is based on broad precedent. In the context of Article 12, the Applicant anticipates that these cross-references simply highlight helpful parallels from other linear infrastructure projects in a relatively novel area of statutory drafting. Whilst Article 12 of the dDCO (**document 3.1 (C)**) does have broad similarities with the equivalent drafting in the Southampton to London Pipeline DCO 2020 and in the AQUIND Interconnector Order (the form of which is appended to the Examining Authority's Recommendation Report), and indeed the Applicant has had due regard to those provisions, it is clear from the Explanatory Memorandum (**document 3.2 (B)**) that the justification for inclusion of Article 12 in the present case is in no sense predicated on the prior use of similar provisions elsewhere.
DC1.6.29	At paragraph 3.17.5 of the EM [**APP-035**], reference is made to similar wording to the provisions of Article 13 of this dDCO being included in three made Orders. How is that wording is relevant to this dDCO and why is it considered necessary and appropriate for the scheme applied for?	Paragraph 3.17.4 of the Explanatory Memorandum (**document 3.2 (B)**) explains: "*[The] disapplication of the provisions listed in Article 13(3) (which are designed primarily to regulate the carrying out of street works by utility companies in respect of their apparatus) is appropriate given the scale of works proposed under the Order, the specific authorisation given for those works by the Order (particularly Article 4 and Schedule 1), and the specific provisions in the Order which would regulate the carrying out of the Order works.*" Other parts of Paragraph 3.17 of the Explanatory Memorandum further explain the approach proposed in Article 13 more generally, including a table detailing each section referred to in Article 13(3). It is also important to note that there is an interplay between Article 13 and Article 12 which imports the Permit Schemes. Section 9 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**) provides further justification for the disapplication of certain of the provisions listed in Article 13(3) of the dDCO (**document 3.1 (C)**). The justification underpinning the drafting of Article 13 is not predicated on the prior use of similar provisions in the Orders referenced in Paragraph 3.17.5 of the Explanatory Memorandum. The Applicant anticipates that these cross-references simply highlight helpful parallels in the context of other linear infrastructure projects. As explained in response to DC1.6.28 above, in general terms, and notwithstanding the helpful guidance set out in Advice Note 15, the function of the Explanatory Memorandum is to provide a proportionate and accessible explanation of the provisions of the dDCO. Therefore, and as with the remainder of the

Reference	Question	Applicant's Response
		Explanatory Memorandum, cross-references to other Orders are intended to underscore the fact that the dDCO is based on broad precedent.
DC1.6.30	How do you respond to paragraphs 12.21 to 12.22 of the Suffolk councils' LIR [**REP1-045**] in respect of disapplication provisions of Article 13 (3) of the dDCO?	The Applicant's response to matters raised in Paragraphs 12.21 to 12.22 of the joint LIR submitted by Suffolk County Council and Babergh and Mid Suffolk District Councils [**REP1-045**] is set out in Section 9 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**).
DC1.6.31	Save for the disapplication provisions subject of the previous question, are the highway authorities content with the disapplication of the New Roads and Street Works Act 1991 that is sought by Articles 13 (3) and 13 (4) in relation to works executed under Article 12? If not, please explain why not and advise how those provisions might be changed to address your concerns.	The Applicant refers to its responses to DC1.6.29 and DC1.6.30 above. More broadly, the Applicant considers that the disapplication of the provisions listed in Articles 13(3) and 13(4) of the dDCO (**document 3.1 (C)**) is appropriate given the scale of the works proposed, the specific authorisation given for those works by the dDCO, and the specific provisions in the dDCO which would regulate the carrying out of the works. For the avoidance of doubt, the Applicant is not seeking to dispense with the 1991 Act in its entirety and Articles 13(5) and 13(6) specifically apply certain provisions of the 1991 Act. The Applicant is only seeking to disapply provisions which could otherwise cause delays to the project disproportionate to the scale of the street works proposed to be carried out.
DC1.6.32	In paragraph 12.23 of their LIR [**REP1-045**], the Suffolk councils refer to perceived tension between Articles 14 (1) and Requirement 11 (1). Can you address this?	The Applicant's response to matters raised in Paragraph 12.23 of the joint LIR submitted by Suffolk County Council and Babergh and Mid Suffolk District Councils [**REP1-045**] is set out in Section 9 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**). The Applicant does not consider there to be a tension or incompatibility as between Article 14 (which is a 'bare power' to alter the layout of existing streets) and Requirement 11 (which is a control akin to a condition) in Schedule 3 to the dDCO (**document 3.1 (C)**). The Applicant further notes that Article 16 is the article which gives the power to form and layout accesses.
DC1.6.33	The Suffolk councils' LIR [**REP1-045**] (paragraphs 12.25 and 12.26) sets out concerns with Article 15. Can you address the points that are raised?	The Applicant's response to matters raised in Paragraphs 12.25 and 12.26 of the joint LIR submitted by Suffolk County Council and Babergh and Mid Suffolk District Councils [**REP1-045**] is set out in Section 9 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**).
DC1.6.34	Do Article 15 or Schedule 17 need to be amended considering comments in paragraph 21.3.7 of the Essex councils' LIR [**REP1-039**]?	The Applicant presumes that DC1.6.34 should correctly refer to Article 15 of, and Schedule 7 to, the dDCO (**document 3.1 (C)**). The Applicant's response to matters raised in Paragraph 21.3.7 of the joint LIR submitted by Essex County Council and Braintree District Council [**REP1-039**] is set out in Section 17 of the Applicant's Comments on Essex County Council and Braintree District Council LIR (**document 8.5.3.2**).

Reference	Question	Applicant's Response
DC1.6.35	Should Articles 16 (1) (b) and (2) refer (solely) to the relevant highway authority?	The Applicant notes that the exercise of powers pursuant to Article 16 is already subject to Requirement 11 (Highway Works) in Schedule 3 to the dDCO (**document 3.1 (C)**). The effect of Requirement 11 is summarised in paragraph 4.3.31 of the Explanatory Memorandum (**document 3.2 (B)**). Article 16(1)(b) (and hence (2)) relates to accesses at locations not yet known, and hence normally this would be a planning matter where planning permission is required. Section 33 of the 2008 Act provides that where a DCO is granted, planning permission is not required. Hence it is appropriate for Article 16(1)(b) to firstly refer to the planning authority, in consultation with the highway authority. Requirement 11 on the other hand relates to details of design, layout and reinstatement of means of access and hence appears to be more of a matter for the highways authority directly. As such, the Applicant does not consider that further amendments to Article 16 are necessary.
DC1.6.36	How do you respond to the proposed amendments to Article 17 in: a) The Suffolk councils' LIR [**REP1-045**] at paragraphs 12.27 and 12.28; and b) the Essex councils' LIR [**REP1-039**] at paragraph 21.3.9?	The Applicant's response to matters raised in Paragraphs 12.27 and 12.28 of the joint LIR submitted by Suffolk County Council and Babergh and Mid Suffolk District Councils [**REP1-045**] is set out in Section 9 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**). The Applicant's response to matters raised in Paragraph 21.3.9 of the joint LIR submitted by Essex County Council and Braintree District Council [**REP1-039**] is set out in Section 17 of the Applicant's Comments on Essex County Council and Braintree District Council LIR (**document 8.5.3.2**).
DC1.6.37	At paragraph 3.21.1 of the EM [**APP-035**], reference is made to similar wording to the provisions of Article 17 of this dDCO being included in a made Order. Can the Applicant explain: why that particular wording is relevant to this dDCO; why it is considered necessary and appropriate for the scheme applied for; and give examples of where it might apply?	As Paragraphs 3.21.3 and 3.21.7 of the Explanatory Memorandum (**document 3.2 (B)**) explain that: "*[Article 17] is necessary to facilitate the adoption of new street further to the proposed alterations to streets as a result of article 14 (power to alter layout, etc. of streets) of the Order."* *"The rationale for its inclusion is to provide a process within the Order which addresses the status of new street. However, it will always be open to the undertaker and the street authority to enter into any appropriate agreement further to article 18…."* The Applicant considers that the above mentioned text suitably addresses the Examining Authority's questions as to why Article 17 is relevant to the dDCO (**document 3.1 (C)**) and necessary and appropriate in the context of the project. The Applicant's view is that these matters should be addressed to provide certainty as to the status of any new street, and without Article 17 those matters would remain at large. Pursuant to Section 120 of the 2008 Act, the Applicant's submission is that this is a matter which can properly be regulated by the dDCO and as a matter of public policy it is appropriate to do so. In terms of examples, the Applicant refers to Sheets 15 and 20 of the Access, Rights of Way and Public Rights of Navigation Plans [**APP-012**]. Sheets 15 and 20

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		reference the creation of a permanent bellmouth at each of access points F-AP4 and G-AP3 respectively. Whilst works to construct those bellmouths would be undertaken pursuant to Article 14 of the dDCO, the permanent nature of the bellmouths means that the adoption and dedication provisions in Article 17 would be anticipated to apply.
DC1.6.38	At paragraphs 3.22.1 and 3.22.2 of the EM [**APP-035**], reference is made to similar wording to the provisions of Article 18 (1) (a) and 18 (2) (c) of this dDCO being included in made Orders. Can the Applicant explain: why that wording is relevant to this dDCO; why it is considered necessary and appropriate for the scheme applied for: and give examples of where it might apply?	As with the remainder of the Explanatory Memorandum, cross-references in Paragraphs 3.22.1 and 3.22.2 of the Explanatory Memorandum (**document 3.2 (B)**) to other Orders are intended to underscore the fact that Article 18 of the dDCO (**document 3.1 (C)** is based on broad precedent. The Applicant considers that the inclusion of Article 18 is entirely appropriate in light of the street works powers set out in Part 3 of the dDCO and the street works proposed as part of the project. Without Article 18 there would be the question as to the ability of parties to enter into appropriate agreements to regulate matters with street authorities. Article 18 ensures certainty as to the parties' ability to enter into such agreements. Indeed, the Applicant proposes to enter into a framework highways agreement (or similar) with Essex County Council and Suffolk County Council (each in its capacity as local highways authority (LHA)) in order to regulate how street works and other highways powers would be exercised during construction of the project. Heads of Terms in respect of the framework highways agreement have been produced by the Applicant and currently remain with the Councils for review, and it is anticipated that the substance of that agreement would be broadly comparable with the content of Article 18.
DC1.6.39	You explained in the ExM [**APP-035**], section 3.24, that Article 20 is more widely drawn than that included in other overhead line Orders: i) by extending the powers beyond a building and the land within its curtilage to 'any land, building, structure, apparatus or equipment'; and ii) by extending the powers beyond the Order Limits. Can you assist the ExA in providing fuller justification for the widening of the powers under this Article than currently set out in the EM [**APP-035**], namely helping to mitigate the risk of unforeseen circumstance prejudicing the delivery of this NSIP? a) What sort of unforeseen circumstances could arise (or have arisen on other built projects)?	As Paragraph 3.24.2 of the Explanatory Memorandum (**document 3.2 (B)**) makes clear, the scope of Article 20 is considered necessary "*given the linear nature of the authorised development and also given the range of potential items that might necessitate protective works (which are defined in sub-paragraph (12) as being both protective and remedial works) and, in particular, the inclusion of this provision will help to mitigate the risk of unforeseen circumstances prejudicing the delivery of this nationally significant infrastructure project*." It merits recording that Article 20 of the dDCO (**document 3.1 (C)**) pertains to protective or remedial works (i.e. to protect a structure or remediate it), in respect of which notice must be served and where landowners can serve counter notices, with arbitration as a recourse. Compensation must also be paid for loss or damage. In response to the particular questions raised by the Examining Authority: (a) The Applicant considers that unforeseen circumstances might include, for example, the expansion of farm buildings or other similar agricultural operations. Such developments, which could take place within the Order Limits or the vicinity of the proposed project, often rely upon permitted development rights; of which the Applicant would have no prior notice. These projects could also be wholly or partially constructed prior to the dDCO being granted, thereby impacting upon the delivery of the project.

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	b) Could 'may be affected by the authorised development' (Article 20(1)) be more precisely defined? c) The EM states that exercising the power outside the Order Limits is caveated by 'where reasonably necessary'. The word 'reasonably' does not appear in Article 20(1). It refers to whether the undertaker considers it to be 'necessary or expedient'. Can you reconsider this wording in the interests of precision and clarity? d) Can you justify the length of the notice periods being not less than 14 days' notice to exercise the right and ten days' notice for a counter-notice (Articles 20 (5) and (6))? e) How is 'part' defined for the purposes of Article 20 (8) (b)? Does this mean that there would be partial completions relating to different timings for first bringing into operational use? f) What could, or would be most likely to, constitute 'any other works' (Article 20 (12) (a))? g) Can you explain how you would establish owners and occupiers of land outside the Order Limits. h) If not covered in SoCGs with Statutory Undertakers, how would you establish if they agree with the powers in this Article? i) Should the title of this Article be amended to properly reflect the powers sought within it that include land, structure, apparatus or equipment (Article 20 (12) (a))?	(b) The Applicant notes that Article 20(1), including the words "….*may be affected by the authorised development*…." is heavily precedented (see, for example, The Southampton to London Pipeline DCO 2020 (Article 19) and The A428 Black Cat to Caxton Gibbet DCO 2022 (Article 21)). Such drafting reflects the fact that the exercise of powers pursuant to Article 20(1) is ultimately at the discretion of the undertaker. It is important here to note the notice provisions and counter notice process, offering protection to those receiving such notice. (c) The wording in the Explanatory Memorandum ('where reasonably necessary') was seeking to summarise the Article. Article 20 indeed uses the wording 'where necessary or expedient'. The Applicant notes the established precedent cited above in response to (b) which also supports the use of the words "….*necessary or expedient*…." in the context of Article 20(1). As noted, such drafting reflects the fact that the exercise of powers pursuant to Article 20(1) is ultimately at the discretion of the undertaker. The undertaker would need to assess whether something is necessary (which implies a reasoned judgment as to why it is necessary) or expedient. (d) Article 20 is a temporary power which allows the undertaker to enter onto land to undertake protective works (for the benefit of the structure etc). As set out in Paragraph 3.24 of the Explanatory Memorandum, the equivalent power has been included within other DCOs and the same 14 days' notice period was permitted in those instances. A 14 day notice period is also consistent with the notice period stipulated in Article 21 (in respect of surveys and investigations) and Articles 26 and 27 (in respect of temporary use of land). Further, and even in cases of emergency (when no notice is required), the reason for carrying out protective works is to either repair or prevent damage and so it is expedient to do so at relatively short notice (potentially to mitigate the risk of needing further such works). It is also worth noting that compensation is payable for any loss or damage attributable to the exercise of powers pursuant to Article 20. If a party upon whom notice is served does not wish for such works to be undertaken (for the benefit of their structure etc) then they can serve a counter notice. (e) For the purposes of Article 20(8)(b), a 'part' must necessarily be taken to mean "….*the part of the authorised development carried out in the vicinity of the land, building, structure, apparatus or equipment [in respect of which protective works are carried out pursuant to Article 20(8)(a)].*" Hence, what constitutes a 'part' would be determined on a case by case basis by reference to the geographic location of the particular land, building, structure, apparatus or equipment. From the Applicant's perspective, it is logical that there could therefore only ever be a single date on which the authorised development in a particular geographic location is *first* brought into operational use – even if other aspects of the authorised development in that location are not commissioned until a later date. This provision is designed to benefit third parties – for example if one part of the authorised development is brought into earlier use, the party affected by Article 20 works should not have 'time running' from that earlier date, when the part of the authorised project in question (by virtue of proximity) has yet to be bought into use. (However, there is no direct correlation between

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		the drafting of Article 20(8)(b) and the extent to which the project may or may not be brought into operational use on a phased basis.) (f) The reference to "*any other works*" in Article 20(12)(a) is necessarily constrained by the fact that the purpose of those protective works must be to "*prevent damage which may be caused to the land, building, structure, apparatus, equipment or the authorised development by the carrying out, maintenance or use of the authorised development*." With this limitation in mind, those 'other' works would be determined on a case by case basis but may include, for example, scaffolding and netting. Without that wording, the power may not enable sufficient protective or remedial works to occur. (g) As has been the case in respect of the identification of land interests within the Order limits, the Applicant would use diligent enquiry to identify all persons with an interest in the relevant land outside of the Order limits. Please refer in this respect to Paragraph 6.4 of the SoR [**APP-038**] and to Appendix J (Land Referencing Methodology) of the Consultation Report [**APP-053**]. (h) The Applicant notes that DC1.6.41 and DC1.6.42 seek the views of statutory undertakers in this respect. The Applicant also notes that Paragraph 16 of the protective provisions included for the benefit of Anglian Water Services Limited at Part 3 of Schedule 14 to the dDCO makes specific provision for the exercise of powers pursuant to Article 20. Similarly, Paragraphs 31(4) and 32 of the protective provisions included for the benefit of Network Rail Infrastructure Limited at Part 4 of Schedule 14 to the dDCO prescribe the circumstances in which protective works must be implemented for the protection of railway infrastructure. The Applicant would also endeavour to ensure that the topic of protective works is raised as part of its ongoing engagement and dialogue with all other relevant statutory undertakers and would include a reference to this point within corresponding Statements of Common Ground if necessary. Article 16 is subject to a notice and counter-notice process, with arbitration and compensation provisions, to ensure protection for third parties. (i) The Applicant does not consider that the current title of Article 20 is likely to give rise to any ambiguity or uncertainty. The scope of Article 20 is readily apparent from Article 20(1). To the extent that an amendment was required, a fuller title of: '*Protective works to any land, building, structure, apparatus or equipment'* would seem somewhat less preferable. Whilst the general model provisions used the title *'P*rotective works to buildings', the dDCO deals with more than just buildings. Hence '*Protective works*' was felt to be appropriate. The Applicant notes that the title would not change the effect of the article.
DC1.6.40	When exercising rights conferred by Article 20 in respect of any land, building, structure, apparatus or equipment lying outside the Order Limits, if those works	The Applicant's expectation is that planning permission (and indeed any further ancillary consents) would be required to be obtained where protective works to be undertaken outside of the Order limits comprise development within the meaning of Section 55 of the TCPA 1990.

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	constituted development for which planning permission is required in accordance with s55 of the TCPA 1990, how would the dDCO interface with that legislation?	However, it would not be appropriate for the dDCO (**document 3.1 (C)**) to attempt to address all such eventualities (especially those which are already controlled as a matter of general planning law), and particularly to prescribe steps to be taken in respect of operations outside of the Order Limits.
DC1.6.41	Are you content with the extent of the powers sought under Article 20? If not, set out your reasons and any suggested amendments to the wording of this Article.	The Applicant refers to its responses to DC1.6.39 and DC1.6.40 above. The Applicant also notes that Paragraph 16 of the protective provisions included for the benefit of Anglian Water Services Limited at Part 3 of Schedule 14 to the dDCO (**document 3.1 (C)**) makes specific provision for the exercise of powers pursuant to Article 20. Similarly, Paragraphs 31(4) and 32 of the protective provisions included for the benefit of Network Rail Infrastructure Limited at Part 4 of Schedule 14 to the dDCO (**document 3.1 (C)**) prescribe the circumstances in which protective works must be implemented for the protection of railway infrastructure.
DC1.6.42	Have you any objection to: a)The powers sought in connection with your land, building, structure, apparatus and equipment? b)The powers sought outside of the Order Limits? c)The notice periods (Article 20 (5) and (6))? d)The definition of 'protective works' (Article 20 (12))?	The Applicant refers to its responses to DC1.6.39 and DC1.6.40 above. The Applicant also notes that Paragraph 16 of the protective provisions included for the benefit of Anglian Water Services Limited at Part 3 of Schedule 14 to the dDCO (**document 3.1 (C)**) makes specific provision for the exercise of powers pursuant to Article 20. Similarly, Paragraphs 31(4) and 32 of the protective provisions included for the benefit of Network Rail Infrastructure Limited at Part 4 of Schedule 14 to the dDCO (**document 3.1 (C)**) prescribe the circumstances in which protective works must be implemented for the protection of railway infrastructure.
DC1.6.43	Article 21 (1) permits the undertaker to enter on any land 'within the Order limits or which may be affected by the authorised development', which appears to be a wide power. Can the Applicant explain: a) Whether the scope of Article 21 (1) appropriate and proportionate in the context of the powers sought? b) Why it considers 14 days' notice (Article 21 (3)) appropriate and reasonable prior to entering land to undertake surveys and investigations.	(a) The Applicant considers it necessary and appropriate to secure through the dDCO (**document 3.1 (C)**) a power to undertake surveys and other investigations. Whilst the Applicant would always seek to obtain access to land by agreement with the landowner, the inclusion of Article 21 is ultimately justified by the need to avoid unreasonable delays in the implementation of this nationally significant infrastructure project where voluntary consent is not readily forthcoming. It also avoids the need to rely on the general statutory powers found in Section 53 of the Planning Act 2008, Paragraph 10 of Schedule 4 to the Electricity Act 1989, and Section 172 of the Housing and Planning Act 2016. As to the precise wording of Article 21(1), the dDCO (**document 3.1 (C)**) makes clear that this is power is only exercisable in relation to land within the Order limits or which "*may be affected by the authorised development*." From the Applicant's perspective, such drafting is proportionate and necessary as it contemplates circumstances where land may be affected by the authorised development such as works proposed at the edge of the LoD and which may require site investigations or surveys on adjacent land which may be outside the Order Limits.

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		A DCO can of course include provisions extending outside the Order limits so long as those provisions do not constitute development. Site surveys or investigations are not development. Further, appropriate safeguards for owners and occupiers of the land are provided in Article 21 in that no land may be entered or equipment placed, left on or removed from the land unless at least 14 days' notice has been given to every owner and occupier of the land. Article 21 also contains compensation provisions for owners and occupiers in respect of any loss or damage arising. This position has been widely accepted in other made DCOs for linear infrastructure projects, including: The National Grid (Richborough Connection Project) DCO 2017 (Article 18), The National Grid (Hinkley Point C Connection Project) DCO 2016 (Article 18), and The Southampton to London Pipeline DCO 2020 (Article 20). In light of the above, the Applicant's position remains that the scope of Article 21(1) is necessary and proportionate. (b) A 14 day notice period was accepted in relation to each of the made DCOs referred to in the response to (a) above. The Applicant considers that this period is proportionate in the circumstances and is ultimately longer than that which landowners agreed to in the majority of cases in relation to carrying out of pre-submission surveys. In addition, authority pursuant to Section 53 of the Planning Act 2008, Paragraph 10 of Schedule 4 to the Electricity Act 1989, and Section 172 of the Housing and Planning Act 2016 are also exercisable on 14 days' notice.
DC1.6.44	Do you consider that 14 days' notice (Article 21 (3)) is an appropriate and reasonable amount of notice for the undertaker to give you prior to entering land to undertake surveys and investigations? If not, what notice period would you consider to be proportionate and reasonable?	The Applicant refers to its response to DC1.6.43.
DC1.6.45	To what extent have provisions in Article 24 been drafted in accordance with PINS Advice Note 15: Drafting DCOs, in particular, sections 23 (extinguishment of rights) and 24 (restrictive covenants)?	The Applicant has had regard to the helpful guidance set out in Advice Note 15. Article 24 of the dDCO (**document 2.1(C)**) allows the Applicant (and UKPN in respect of the UKPN works) to compulsorily acquire existing rights, create and acquire new rights and impose restrictive covenants over Order for the purposes of authorised development. Classes of rights 2 to 5 (set out in Table 2.1 of the BoR (**document 4.3(C)**)) include the imposition of restrictions, for example to require the landowner not to do or suffer anything to be done upon the land which may interfere with or cause damage to the element of the authorised development. By virtue of Articles 37 (extinguishment and suspension of private rights), 38 (power to override easement and other rights) and 39 (statutory authority to override easements and other rights), of the dDCO

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		(**document 3.1 (C)**), all or any rights exercisable over or in respect of the Order Land would be extinguished or overridden insofar as they interfere with the construction or use of the authorised development. Articles 37, 38 and 39 are subject to Article 40 (extinguishment of private rights and restrictive covenants relating to apparatus belonging to the Applicant or UKPN removed from land subject to temporary possession) in respect of apparatus belonging to the Applicant or UKPN which is removed. The land subject to powers of compulsory acquisition and therefore extinguishment and suspension of private rights (if required) is shown, as per Paragraph 23.3 of Advice Note 15, on the Land Plans [**REP1-004**]. In compliance with Paragraph 23.4 of Advice Note 15, Article 37 of the dDCO (**document 3.1 (C)**) makes clear that the power is intended to clear the title of all private rights over land subject to compulsory acquisition. In respect of the imposition of restrictive covenants, and in compliance with Paragraph 24 of Advice Note 15, the individual plots of land in respect of which restrictive covenants are sought to be imposed (and the purpose for which the rights are required) are referred to within Tables A.2(i) and (ii) of Appendix A to the SoR [**APP-039**].
DC1.6.46	Given parliamentary approval of the TP regime under the Neighbourhood Planning Act 2017, which was subject to consultation and debate before being enacted, should any provisions relating to notices or counter-notices in Article 26, 27 and 28 of the dDCO, which do not reflect the Neighbourhood Planning Act 2017 proposed regime (not yet in force,) be modified to reflect the incoming statutory regime more closely, where possible, as follows: a) The Neighbourhood Planning Act 2017 provisions include the ability to serve a counter-notice objecting to the proposed TP so that the landowner would have the option to choose whether TP or permanent acquisition was desirable. Should these Articles make some such provision, whether or not in the form in the NPA 2017? b) Under the Neighbourhood Planning Act	As Paragraph 3.50.3 of the Explanatory Memorandum (**document 3.2(B)**) makes clear: "….*a disapplication is sought in respect of the temporary possession provisions of the Neighbourhood Planning Act 2017. This disapplication is considered necessary as the relevant sections of the Neighbourhood Planning Act 2017 have not been brought into force and subsidiary regulations to that Act have not yet been made. There is currently no certainty as to the requirements of the new temporary possession regime. As such, this disapplication enables the temporary possession regime created by this Order to be applied. This approach has been accepted by the Secretary of State in, amongst others, the Southampton to London Pipeline DCO 2020, the A303 (Amesbury to Berwick Down) DCO 2020 and the Silvertown Tunnel Order 2018.*" On this basis, and given the continued uncertainty (including as to the practical workings of the new temporary possession regime once it eventually comes into force), the Applicant does not consider that it is necessary or appropriate to depart from established precedent by allowing for the service of counter-notice (as suggested in (a)) or requiring any notice served pursuant to Articles 26, 27 or 28 of the dDCO (**document 3.1 (C)**) to state the duration for which temporary possession is sought. In any event, the Applicant notes that Articles 26(3), 27(3) and 28(4) already provide for a long-stop date in respect of the exercise of temporary possession powers.

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	2017, the notice would also have to state the period for which the acquiring authority is to take possession. Should such a requirement be included in the aforementioned Articles?	
DC1.6.47	Do you agree with the notice periods set out in Articles 26 (2), 27 (2), 28 (3) and 28 (11)? If not, set out the reasons why you do not agree and suggest timescales that you consider to be appropriate, with reasoning.	The Applicant considers the minimum 14 day notice period in Articles 26(2) and 27(2) to be necessary, appropriate and proportionate given the urgent and well-established need for the project. Similarly, the minimum 28 day notice period in Article 28(3) – which is subject to the emergency notice provision in Article 28(11) – is considered appropriate and necessary in the context of the Applicant's overriding statutory and regulatory duties to ensure both the security of energy supply as well as the safety of electricity transmission infrastructure.
DC1.6.48	In respect of Article 28 (11), the EM (**APP-035**) cites the River Humber Gas Pipeline Replacement Order 2016 as justification for the provision. However, the EM does not explain why that particular wording is relevant to the proposed dDCO, for example detailing what is factually similar for both the relevant consented NSIP and the Proposed Development. In that context, its relevance is unclear moreover as the ExA notes that it was not included in the Richborough Connection Project Order 2017. Why is it needed in this context?	Paragraph 3.32 of the Explanatory Memorandum (**document 3.2 (B)**) explains that the effect of Article 28(11) is to disapply the minimum notice period in Article 28(3) in instances where there is a potential risk to the safety of all or part of the authorised development, the public or the surrounding environment. In such circumstances, the undertaker must give as much notice as is reasonably practicable. The Applicant is required to comply with the terms of its electricity transmission licence in the delivery of its statutory duties. In its role as transmission owner, the Applicant's obligations include maintaining the national electricity transmission system safely, reliably, economically and efficiently, in accordance with its statutory duty under Section 9 of the Electricity Act 1989 to maintain 'an efficient, co-ordinated and economical' system of electricity transmission. Further, the Applicant must at all times adhere to the standards set out in the National Electricity Transmission System Security and Quality of Supply Standard (NETS SQSS). An inability to enter on, and take temporary possession of, land for the purposes of maintenance in an emergency situation is therefore highly likely to place the Applicant in breach of its statutory and regulatory duties, industry safety standards, legal requirements and HSE standards. Further, any damage or fault to a part of the authorised development could have potentially serious and hazardous consequences for individuals or property located in the vicinity if it were to fail. Whilst such scenarios are not anticipated, if such circumstances were to arise, the Applicant therefore considers the inclusion of Article 28(11) necessary and proportionate in the context of the project. Cross-references in Paragraphs 3.32 of the Explanatory Memorandum to other Orders are intended to underscore the fact that Article 28 of the dDCO (**document 3.1 (C)**) is based on broad precedent.
DC1.6.49	Can you explain whether and how the controls on noise elsewhere in the dDCO	Paragraph 14.4 of the CEMP (**document 7.5(B)**) (which is secured by virtue of Requirement 4 in the dDCO (**document 3.1 (C)**)) confirms that the Applicant and its contractors would be required to submit applications

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	are sufficient to justify the defence being provided by this Article 46 in respect of statutory nuisance claims?	for consents, variations and dispensations pursuant to Section 61 of the Control of Pollution Act 1974 for any construction activities which are likely to result in a significant effect at a sensitive receptor. The Applicant expects that effective liaison with the local authority in agreeing mitigation and/or noise limits (as required by the CEMP) would further minimise the likelihood of statutory nuisance arising. The Statement of Statutory Nuisance [**APP-058**] also sets out the reasons why, based on the environmental assessment undertaken and the controls secured, the Applicant considers it unlikely that a statutory nuisance would arise. Taking account of the above, the Applicant considers that as a matter of public policy, the controls on noise in the dDCO (**document 3.1 (C)**) are sufficient to justify the defence to statutory nuisance claims provided by Article 46.
DC1.6.50	Comments at paragraph 3.50.2 of the EM [**APP-035**] are noted in respect of Articles 46 (2) and (3). Nevertheless, are there any made DCOs for comparable projects where they have been included? Why are they considered necessary in this context and what are they perceived to add to the provisions of the Article when read in the round?	The Applicant notes that virtually identical provisions were included at Articles 41(2) and (3) of the Southampton to London Pipeline DCO 2020 as well as Articles 43(2) and (3) of the draft National Grid (Yorkshire Green Energy Enablement Project) DCO. Similar provisions are also found in Article 58 of the draft A122 (Lower Thames Crossing) DCO. The Thames Tideway Tunnel Order 2014 also included text akin to Article 46(3) at Schedule 19, Part 1, Paragraph 13. All are DCOs for linear infrastructure projects and are, therefore, considered appropriate comparators. The Applicant considers Article 41(2) to be necessary to clarify the scope of the defence of statutory authority arising from the grant of development consent. The CEMP (**document 7.5(B)**) would reflect the set of appropriate measures and controls endorsed and approved by the Secretary of State if development consent is granted. It would not be reasonable or appropriate for there to be a claim of statutory nuisance in circumstances where there is compliance with plans which have been approved and which are intended to manage matters related to statutory nuisance.
DC1.6.51	Are you satisfied that Articles 46 (2) and (3) provide a reasonable and proportionate defence to statutory nuisance. If not, why not?	The Applicant refers to its response to DC1.6.50.
DC1.6.52	Should Article 46 (3) refer to 'the local planning authority' rather than 'the local authority'?	The Applicant notes that Article 41(3) of the Southampton to London Pipeline DCO 2020 and Article 43(3) of the draft National Grid (Yorkshire Green Energy Enablement Project) DCO both refer in this context to 'the local authority'.

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		Nonetheless, the Applicant suggests that Article 46(3) of the dDCO (**document 3.1 (C)**) should be amended to refer to 'the 'relevant planning authority'' to ensure consistency with an earlier reference in the same provision. The Applicant would suggest that the following change to Article 46(3) is made at Deadline 4: "*(3) Where a relevant planning authority is acting in accordance with section 60(4) and section 61(4) of the Control of Pollution Act 1974 in relation to the construction of the authorised development then the relevant planning authority must also have regard to the controls and measures relating to noise referred to in the Construction Environmental Management Plan.*"
DC1.6.53	Can the Applicant address the points at paragraph 21.3.11 of the Essex councils' LIR [**REP1-039**]?	The Applicant's response to matters raised in Paragraph 21.3.11 of the joint LIR submitted by Essex County Council and Braintree District Council [**REP1-039**] is set out in Section 17 of the Applicant's Comments on Essex County Council and Braintree District Council LIR (**document 8.5.3.2**).
DC1.6.54	In Article 48 (8), is the reference intended to be to a tree identified in the Landscape and Ecological Management Plan (LEMP) or to works to a tree identified in the LEMP?	LEMP Appendix A: Vegetation Retention and Removal Plan [**APP-183**] shows the locations where trees (including groups of trees) would be pruned, coppiced or removed. Article 48(8) of the dDCO (**document 3.1 (C)**) therefore correctly refers to a tree identified in the LEMP.
DC1.6.55	'Near' is not defined in Article 2 of the dDCO. In that context, how is it to be interpreted in Article 48 (1)? In the interests of clarity, certainty and enforcement, does it need to be defined so that all parties know what rights it conveys?	The Applicant notes that a very similar point was raised in Paragraph 17.40 of the joint LIR submitted by Suffolk County Council and Babergh and Mid Suffolk District Councils [**REP1-045**] and also in Paragraph 21.3.12 of the joint LIR submitted by Essex County Council and Braintree District Council [**REP1-039**]. The Applicant therefore refers to Section 14 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**) and to Section 17 of the Applicant's Comments on Essex County Council and Braintree District Council LIR (**document 8.5.3.2**). In the Applicant's opinion, a definition of 'near' is not necessary or appropriate.
DC1.6.56	At paragraph 21.3.13 of your LIR [**REP1-039**], you raised concerns about the implications for vessels moored upstream of proposed works on the River Stour. Do the Applicant's Comments on Relevant Representations [**REP1-025**] on pages 81 and 102 as they relate to the works, allay	The Applicant's response to matters raised in Paragraph 21.3.13 of the joint LIR submitted by Essex County Council and Braintree District Council [**REP1-039**] is set out in Section 17 of the Applica't's Comments on Essex County Council and Braintree District Council LIR (**document 8.5.3.2**).

Reference	Question	Applicant's Response
	your concerns about Article 50. if not, how should it be redrafted to address them?	
DC1.6.57	In your capacity as the navigation authority for the River Stour, has the Applicant addressed your concerns about Article 50 of the dDCO in Applicant's Comments on Relevant Representations [**REP1-025**] at pages 81 and 102?	The Applicant refers to its response to DC1.6.120.
DC1.6.58	Whose would be responsible for registering Article 53's provisions as a local land charge, including any associated cost, as Article 53 (6) seeks?	The Applicant anticipates that the 'relevant planning authority', acting in its capacity as 'originating authority', would be responsible for registering the requirement to consult as a local land charge (pursuant to Article 53(6) of the dDCO (**document 3.1 (C)**). This reflects procedural arrangements set out in Paragraph 2 of HM Land Registry's 'Practice guide 79: Local Land Charges' (February 2022) and which is applicable in England and Wales. Whilst the Applicant is not aware that there are likely to any costs associated with the making of a registration application, the Applicant would be pleased to discuss the matter further with the 'relevant planning authority'.
DC1.6.59	A proposal's implications for the construction and operation of the Proposed Development would be capable of being a material consideration in determining any application for planning permission made wholly or partly within the Order Limits by virtue of Section 70 of the Town and County Planning Act 1990. In that context, is the Article 53 proposal to add to local planning authorities' administrative burden proportionate and necessary?	The Applicant notes that a very similar point was raised in Paragraph 17.43 of the joint LIR submitted by Suffolk County Council and Babergh and Mid Suffolk District Councils [**REP1-045**]. The Applicant therefore refers to Section 14 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**).
DC1.6.60	The local planning authority is under a legal duty to determine applications for planning permission according to principles of administrative law. If this is not done, there is opportunity for challenge under existing	From the Applicant's perspective, Article 53 of the dDCO (**document 3.1 (C)**) is not concerned with the sufficiency or otherwise of existing legal checks and balances, noting that those checks and balances principally relate to the underlying decision-making process (i.e. whether a decision reached could be said to be unreasonable, irrational or procedurally improper).

Reference	Question	Applicant's Response
	legislation and public law principles. In relation to the proposed Article 53, do you consider the existing legal checks and balances to be insufficient to protect the Applicant's interests?	The obligation placed on the decision making authority is simply to take into account any representation (from the Applicant as an expert in its field, like any other expert consultee), and ensure that matters raised are addressed. This would be a matter of judgment for the local planning authority, with weight to be attached as it sees fit, as part of the planning balance to be undertaken. As explained in the Applicant's response to DC1.6.59 and in the Explanatory Memorandum (**document 3.2(B)**), Article 53 seeks to overcome a significant risk to the proper delivery and functioning of a critical national infrastructure project stemming from the carrying out of other proximate works or development. For obvious reasons, it is important that such works or development is not undertaken in a manner which could in any way compromise the safety or integrity of the national electricity transmission system.
DC1.6.61	Article 53 (5) of the dDCO would require that the matters raised in the undertaker's representations are 'addressed'. This contrasts with Section 70 (2) (c) of Town and County Planning Act 1990 that requires a local planning authority to 'have regard to' the listed considerations. Would this facet of the Article's wording arguably fetter a local planning authority's implementation of the provision of Town and County Planning Act 1990 by including the word 'addressed' as opposed to 'have regard to'?	The use of the word 'addressed' in Article 53(5) of the dDCO (**document 3.1 (C)**) is intentional. The Applicant is required to comply with the terms of its electricity transmission licence in the delivery of its statutory duties. In its role as transmission owner, the Applicant's obligations include maintaining the national electricity transmission system safely, reliably, economically and efficiently, in accordance with its statutory duty under Section 9 of the Electricity Act 1989 to maintain 'an efficient, co-ordinated and economical' system of electricity transmission. Further, the Applicant must at all times adhere to the standards set out in the NETS SQSS. Any representation submitted by the Applicant pursuant to Article 53 will therefore reflect the practical application of those duties and obligations. The Applicant would be responding as an expert consultee, akin to any other consultee the local planning authority must or might consult. It would be wholly inappropriate for a local planning authority to simply 'have regard' to matters raised in those representations, particularly where the technical content extends beyond the expertise of the local planning authority and/or raises concerns of national strategic importance or overriding public safety. In such circumstances, it is clearly vital that any concerns or representations are properly addressed, albeit accepting that the ultimate arbiter and decision maker exercising judgment and the planning balance, will be the determining local planning authority.
DC1.6.62	In relation to Article 53, the EM [**APP-035**] cites the Thames Tideway Tunnel Order as precedent but does not explain what it considers to be the factual similarities between the consented scheme and the Proposed Development? How are they considered to be comparable?	The Applicant recognises that Article 53 of the dDCO (**document 3.1 (C)**) is not well precedented in a DCO context, albeit the inclusion of a safeguarding provision is still considered appropriate in the context of the project for the reasons stated in response to DC1.6.58 to DC1.6.61 (inclusive). Safeguarding of course occurs in other contexts, such as for hybrid bill projects. The project and the Thames Tideway Tunnel are both lengthy, linear infrastructure projects, through environments where other developments are likely to occur.

Reference	Question	Applicant's Response
	Are the Thames Tideway Tunnel Order and the Proposed Development not distinguishable in terms of context with this being a predominantly rural area subject to comparatively less development pressure?	Whilst the Applicant agrees with the Examining Authority that the projects are distinguishable in basic geographic terms, ES Appendix 15.3: Long List of Other Developments [**APP-142**] serves to highlight the sheer volume and extent of known and anticipated planned or proposed development within and/or close to the Order Limits. In the Applicant's opinion, there is clearly an important role which Article 53 might play in the context of the project (even if the overall scale and nature of other proposed development is of a lower order of magnitude than that encountered in the context of the Thames Tideway Tunnel project). More generally, and as is explained elsewhere, the Applicant anticipates that the existing cross-references in Paragraph 3.57 of the Explanatory Memorandum (**document 3.2(B)**) highlight what are considered to be helpful parallels in the context of another significant linear infrastructure project. Without Article 53, the Applicant's ability to protect the project in respect of other planning applications would be reduced. The burden on the local planning authorities of Article 53 would be limited, when compared to the public benefit of supporting the protection of nationally important infrastructure.
DC1.6.63	The Planning Statement [**APP-160**] at paragraph 1.1.6. lists 'ancillary activities… required to facilitate construction and operation of the project…' Does this require amendment given that a number of the entries are not activities as such, and to be consistent with the dDCO, which identifies them as Associated Development for which consent is sought?	The Applicant refers to the Applicant's Written Summary of Oral Representations to Issue Specific Hearing 1 [**REP1-024**] and specifically to the response set out in respect of Item v. – Ancillary Activities at Table 6.2 (Section 6.2, page 33).
DC1.6.64	Do you have any observations on the Applicant's response to Action Point 21 (AP21) arising from ISH1 that is set out on pages 14 and 15 of [**REP1-034**]?	The Applicant notes that a very similar point was raised in Paragraph 17.43 of the joint LIR submitted by Suffolk County Council and Babergh and Mid Suffolk District Councils [**REP1-045**]. The Applicant therefore refers to Section 14 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**).
DC1.6.65	In respect of 'Associated Development' as defined in Schedule 1 of the dDCO, how does the Applicant respond to the local planning authorities' concerns set out in paragraph 17.45 of the Sussex councils' LIR [**REP1-045**]?	The Applicant's response to matters raised in Paragraph 17.45 of the joint LIR submitted by Suffolk County Council and Babergh and Mid Suffolk District Councils [**REP1-045**] is set out in Section 14 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**).
DC1.6.66	Does sub-paragraph (r) under the Heading 'Associated Development' in Schedule 1	The Applicant notes that a very similar point was raised in Paragraphs 17.46 to 17.50 of the joint LIR submitted by Suffolk County Council and Babergh and Mid Suffolk District Councils [**REP1-045**].

Reference	Question	Applicant's Response
	need to be amended to read, '…and which do not give rise to any materially new or materially different environmental effects from those assessed in the ES'? If you consider the amendment to be unnecessary, can you explain how sub-paragraph (r) relates to Article 2 (10)?	The Applicant is grateful to the Councils and to the Examining Authority for drawing attention to this point. Necessary amendments were made to sub-paragraph (r) in the updated version of the dDCO published at Deadline 2 (**document 3.1(B)**). Please also refer to the Applicant's Schedule of Changes to the dDCO (**document 8.4.2(B)**).
DC1.6.67	Can you address the concerns in respect of 'Associated Development' at paragraph 21.4.1 of the Essex councils' LIR [**REP1-039**]?	The Applicant's response to matters raised in Paragraph 21.4.1 of the joint LIR submitted by Essex County Council and Braintree District Council [**REP1-039**] is set out in Section 17 of the Applicant's Comments on Essex County Council and Braintree District Council LIR (**document 8.5.3.2**).
DC1.6.68	How do you respond to the concern about temporary site compounds at paragraph 21.4.2 of the Essex councils' LIR [**REP1-039**]?	The Applicant's response to matters raised in Paragraph 21.4.2 of the joint LIR submitted by Essex County Council and Braintree District Council [**REP1-039**] is set out in Section 17 of the Applicant's Comments on Essex County Council and Braintree District Council LIR (**document 8.5.3.2**).
DC1.6.69	Does the Applicant's response to Action Point 22 (AP22) arising from ISH1 address local planning authorities' concerns that were raised in the preceding question? ([**REP1-034**], at page 15.)	The Applicant refers to its response to DC1.6.68.
DC1.6.70	It is noted that you propose to include the locations of the construction compounds within an updated version of the CEMP as a way of securing their locations and the works anticipated at each compound. Why is this approach favoured as opposed to their inclusion on the Work Plans and the accompanying Work Nos. at Schedule 1 of the dDCO?	The Applicant addressed this matter in the response provided to Action No. AP22 in the Applicant's Response to Issue Specific Hearing 1 Action Points [**REP1-034**]. As discussed during ISH1 (to which see also the Applicant's Written Summary of Oral Representations to Issue Specific Hearing 1 [**REP1-024**]), the Applicant had considered which works to give numbers to, and which works to show on the Work Plans [**APP-010**]. The Work Plans principally show the permanent works, such as overhead lines, underground cables, sealing end compounds, the GSP and substation. Given their temporary nature, and that LoD are not applied to Work No.12 as they are temporary works, the Applicant considers that it is preferable to show the compounds on the General Arrangement Plans [**APP-018**] (which is already done) and secure them via Requirement 4 in the dDCO (**document 3.1 (C)**) and the CEMP (**document 7.5(B)**). The CEMP (which has been updated at Deadline 3) includes, at Table 4.1, a list of the temporary construction compounds and the locations of the same.

Reference	Question	Applicant's Response
		As confirmed on Page 32 of the Applicant's Written Summary of Oral Representations to Issue Specific Hearing 1: "*the Applicant noted that this was deliberate, given that the main works contractor has not yet been appointed. The Applicant confirmed that there are no applicable LoD available for the temporary construction compounds. The location of the temporary construction compounds is restricted by the drawing of the proposed Order Limits and the practicalities of where these need to be located along the project route. The management plans will apply to the temporary construction compounds.* *The Applicant confirmed that the locations for the temporary construction compounds indicatively shown on the GAP [**APP-018**] were assessed on this basis within the ES, alongside a general consideration of where these may be relocated within the Order Limits across the projec*t." Another alternative would have been to not give those compounds a works number and simply list them under the heading of 'Associated Development'. However, the Applicant does not consider that would be the correct approach either.
DC1.6.71	Do you wish to respond to the Applicant's remarks about 'Associated Development' in its comments on RRs [**REP1 -025**] at page 80?	The Applicant refers to Section 14 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**) and, in particular, the responses provided to matters raised in Paragraphs 17.45 to 17.50 (inclusive) of the joint LIR submitted by Suffolk County Council and Babergh and Mid Suffolk District Councils [**REP1-045**].
DC1.6.72	Requirement 1 (1) defines the 'biodiversity metric' as Biodiversity Metric 3.1 as published by Natural England in April 2022. Your evidence on this point at page 111 of your Comments on Relevant Representations [**REP1-025**] about the use of version 4.0 are noted. Nevertheless, should the dDCO refer to the most up-to-date version or any version that subsequently replaces it?	The Applicant notes that a very similar point was raised in Paragraph 21.5.1 of the joint LIR submitted by Essex County Council and Braintree District Council [**REP1-039**]. The Applicant therefore refers to Section 17 of the Applicant's Comments on Essex County Council and Braintree District Council LIR (**document 8.5.3.2**).
DC1.6.73	Should Requirement 1 (2) of the dDCO make provision for the relevant highway authority in addition to the relevant planning authority?	The Applicant notes that a very similar point was raised in Paragraphs 17.51 to 17.53 of the joint LIR submitted by Suffolk County Council and Babergh and Mid Suffolk District Councils [**REP1-045**]. The Applicant is grateful to the Councils and to the Examining Authority for drawing attention to this point. Necessary amendments were made to paragraph 1(2) (and also to paragraph 1(3)) of Schedule 3 in the updated version of the dDCO published at Deadline 2 (**document 3.1(B)**). Please also refer to the Applicant's Schedule of Changes to the dDCO (**document 8.4.2(B)**).

Reference	Question	Applicant's Response
DC1.6.74	How do you respond to the points made in paragraph 17.56 of the Suffolk councils' LIR [**REP1-045**] in respect of Requirement 1 (4)?	The Applicant's response to matters raised in Paragraph 17.56 of the joint LIR submitted by Suffolk County Council and Babergh and Mid Suffolk District Councils [**REP1-045**] is set out in Section 14 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**).
DC1.6.75	Article 2 of the dDCO includes a definition of 'commence' but neither it nor Requirement 1 define 'begin' for the purposes of Requirement 2 (1). For the sake of precision and enforceability, is such a definition required?	The rationale behind the inclusion of sub-paragraph 2(1) in Schedule 3 of the dDCO (**document 3.1 (C)**) is set out in Paragraphs 4.3.7 and 4.3.8 of the Explanatory Memorandum (**document 3.2(B)**).
DC1.6.76	The issue of time limits has been addressed at paragraphs 4.37 and 4.38 of the EM [**APP-035**] but can the Applicant explain why: · both Requirement 2 (1) and 2 (2) are considered necessary; and · the differences in the practical application of both in implementing the DCO?	The Applicant refers to its response to DC1.6.75. As set out at Paragraph 4.3.8 of the Explanatory Memorandum (**document 3.2(B)**), the need for both requirements stems from the uncertainty further to the Swansea Bay Tidal Lagoon litigation in the Court of Appeal. It is for this reason that the Applicant has included both Requirements 2(1) and 2(2), to ensure no such uncertainties as between the traditional commencement provisions and the clear drafting of sections of the Planning Act 2008 which refer to 'begun' and 'begin'.
DC1.6.77	Is the distinction between the applicability of the time limits in Requirement 2 precise and enforceable? If not, how should it be changed?	The Applicant refers to its response to DC1.6.75.
DC1.6.78	Notwithstanding how 'stage' is defined in Requirement 1 of the dDCO, is it sufficiently clear to you what it means in the context of Requirement 3?	The Applicant refers to its response to DC1.6.79.
DC1.6.79	Should the written scheme referred to in Requirement 3 (1) be subject to approval by the relevant planning authority within a stated time period? If not, why not?	The Applicant notes that a very similar point was raised in Paragraph 21.5.3 of the joint LIR submitted by Essex County Council and Braintree District Council [**REP1-039**]. The Applicant therefore refers to Section 17 of the Applicant's Comments on Essex County Council and Braintree District Council LIR (**document 8.5.3.2**).
DC1.6.80	Should any amendments to the written scheme, referred to in Requirement 3 (2),	The Applicant refers to its response to DC1.6.79 which is applicable in the context of Requirement 3(2) also.

Reference	Question	Applicant's Response
	be subject to approval by the relevant planning authority? If so, why?	
DC1.6.81	By virtue of Requirement 4 (3), pre-commencement works must be carried out in accordance with the plans listed in sub-paragraph (2). However, the drainage and archaeological plans subject of Requirements 5 and 6 are not included – why is this?	The Applicant notes that the DMP referenced in Requirement 5 of the dDCO (**document 3.1 (C)**) is concerned with matters related to the operational use of the development, rather than to the carrying out of any 'pre-commencement operations'. Therefore, it would be unnecessary to require the 'pre-commencement operations' to be carried out in accordance with the DMP. Similarly, Requirement 6 (Archaeology) of the dDCO expressly provides that (a) the authorised development must be undertaken in accordance with the Archaeological Framework Strategy [**APP-186**] and the OWSI [**APP-187**], and (b) that no stage of the authorised development must commence until a Detailed Written Scheme of Investigation of areas of archaeological interest relevant to that stage (if any) has been approved by the County Archaeologist. Given that the 'pre-commencement operations' form a part of the authorised development, the Applicant considers that Requirement 6 already applies to the carrying out of those operations. Further, the Applicant notes that the OWSI imposes controls in respect of the carrying out of archaeological investigations and monitoring (which are a form of 'pre-commencement operation').
DC1.6.82	Requirement 4 (3) refers to 'other discharging authority as may be appropriate to the relevant plan concerned'. Would this not address your concern that any departure from the CTMP should be agreed with the relevant highway authority?	The Applicant agrees that an amendment of this nature would be helpful. Necessary amendments were made to Requirement 4(3) (and also to Requirement 4 (1) of Schedule 3 in the updated version of the dDCO published at Deadline 2 (**document 3.1(B)**). Please also refer to the Applicant's Schedule of Changes to the dDCO (**document 8.4.2(B)**).
DC1.6.83	Should Requirement 5 be amended to include consultation with the relevant planning authority in respect of the Drainage Management Plan?	The Applicant notes that a very similar point was raised in Paragraph 21.5.4 of the joint LIR submitted by Essex County Council and Braintree District Council [**REP1-039**]. The Applicant therefore refers to Section'17 of the Applicant's Comments on Essex County Council and Braintree District Council LIR (**document 8.5.3.2**).
DC1.6.84	Does Requirement 6 need to be amended in accordance with the comments of Suffolk CC Archaeological Service set out in paragraphs 8.49 to 8.52 inclusive of the Suffolk councils' LIR [**REP1-045**]?	The Applicant's response to matters raised in Paragraphs 8.49 to 8.52 (and Paragraph 17.59) of the joint LIR submitted by Suffolk County Council and Babergh and Mid Suffolk District Councils [**REP1-045**] is set out in Section 5 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**).

Reference	Question	Applicant's Response
DC1.6.85	Following on from your comment in paragraph 6.26 of your LIR [**REP1-045**], can you specify which Requirement(s) you consider need to be amended and suggest wording that would address your concerns?	The Applicant notes that a very similar point was raised in Paragraphs 6.148 to 6.152 of the joint LIR submitted by Suffolk County Council and Babergh and Mid Suffolk District Councils [**REP1-045**]. The Applicant therefore refers to Section 3 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**).
DC1.6.86	Should Requirement 8 refer to the baseline information and assessment set out in the Arboricultural Impact Assessment [**REP1-011**]? If not, why not?	Requirement 8 refers retention and removal of trees, woodlands and hedgerows. This information is currently shown on LEMP Appendix A: Vegetation to be Retained or Removed [**APP-183**] which already uses the baseline information from the arboricultural surveys. Therefore, Requirement 8 does not need to refer to the Arboricultural Impact Assessment (**document 5.11(B)**).
DC1.6.87	Should the plan submitted under Requirement 8(1) also include: · tree protection plans detailing temporary physical tree protection measures according to BS 5837:2012; · a schedule of any proposed tree and hedgerow management to facilitate retention; · specifications for temporary physical protection for retained and vulnerable trees; and · details of an auditable system of compliance with the approved protection measures? If not, why not?	Taking each of the points raised by the Examining Authority in turn, the Applicant responds as follows: (a) The LEMP (**document 7.8.1(B)**) stipulates that retained trees will be protected during construction in accordance with the measures set out in BS 5837:2012 (and BS 3998:2010). A further reference to BS 5837:2012 in Requirement 8(1) is therefore not considered necessary. (b) The Vegetation Retention and Removal Plan [**APP-183**] which forms Appendix A to the LEMP already includes this information. An additional schedule is therefore not considered necessary. (c) The LEMP already includes this information (by virtue of the stipulation that retained trees will be protected during construction in accordance with the measures set out in BS 5837:2012 (and BS 3998:2010)). (d) The Applicant is not aware of any legal requirement relating to the implementation of such a system, noting that it is not related to significant effects.
DC1.6.88	For the purposes of Requirement 9, can you clarify if 'reinstatement planting' is replacement planting for trees, shrubs and hedgerows lost to the Proposed Development?	The Applicant confirms that 'reinstatement planting' in the context of Requirements 9 and 10 has the meaning given to it in the LEMP (**document 7.8.1(B)**) published at Deadline 3 and may, therefore, comprise reinstatement planting, landscape softening, habitat compensation and/or additional planting required to mitigate an environmental effect.
DC1.6.89	Should Requirement 9 also refer to the need to include details of ground cultivation for planting, five-year maintenance proposals, and arrangements for the	The Applicant considers that the LEMP (**document 7.8.1(B)**) already addresses these matters. Requirement 9(3) of Schedule 3 to the dDCO (**document 3.1 (C)**) ensures that the reinstatement planting plan is in general accordance with the LEMP.

Reference	Question	Applicant's Response
	identification and replacement of any failures? The Applicant is referred to the Yorkshire Green dDCO as an example.	
DC1.6.90	Requirement 10 - the title is ambiguous; the word 'maintenance' refers to the planting not the plan. Can the applicant address this imprecision?	Requirement 10(1) deals with implementation of reinstatement planting works, Requirement 10(2) with compliance with the approved reinstatement planting plan, and Requirement 10(3) with replacement of any reinstatement planting in the case of damage or disease etc. Taking account of the above, and noting the point raised by the Examining Authority, the Applicant has altered the title of Requirement 10 to: 'Reinstatement planting plan – implementation, compliance and replacement planting'. This change is reflected in the updated version of the dDCO published at Deadline 3 (**document 3.1 (C)**). Please also refer to the Applicant's Schedule of Changes to the dDCO (**document 8.4.2(B)**).
DC1.6.91	In the interests of clarity, do you agree that the maintenance arrangements in Requirement 10 (3) would be better part of the reinstatement planting plan to be agreed by the relevant planning authority and thus should be included in that plan and referred to in Requirement 9? If not, please explain why not.	The Applicant considers it unnecessary to move the maintenance arrangements from Requirement 10(3) to Requirement 9. Requirement 10 relates to implementation, of which maintenance forms a necessary component part.
DC1.6.92	Can you explain why a five-year aftercare period for mitigation planting has been proposed, as described in the LEMP [**APP-18**2] and secured through Requirement 10 (3) of the dDCO (**document 3.1 (C)**), given that the mitigation and residual effect conclusions in ES Chapter 6 [**APP-074**] rely on replacement planting maturing at Year 15 of operation. Please comment on the potential for a longer aftercare period and provide evidence for your position. The Suffolk councils' LIR [**REP1-045**] (paragraphs 6.29 to 6.31) notes that they consider the proposals for aftercare presented in the LEMP to be insufficient.	The Applicant refers in the first instance to the response to EC1.3.4 above. The Applicant also notes that a very similar point was raised in Paragraphs 17.75 to 17.77 of the joint LIR submitted by Suffolk County Council and Babergh and Mid Suffolk District Councils [**REP1-045**], and in Paragraph 21.5.7 of the joint LIR submitted by Essex County Council and Braintree District Council [**REP1-039**]. The Applicant therefore refers to Section 14 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**) and to Section 17 of the Applicant's Comments on Essex County Council and Braintree District Council LIR (**document 8.5.3.2**).

Reference	Question	Applicant's Response
	For trees, the councils advocate a minimum of 10 years aftercare, and for woodland planting a minimum of 15 years: even longer time scales may be required for natural woodland regeneration. They also suggest that the proposals for management and aftercare of natural woodland regeneration are not covered by any requirements in the dDCO and advocate a requirement for dynamic aftercare. They believe that the proposals should allow for the costs of annual inspections by and reports to the local planning authorities for the duration of the aftercare period. You are also referred to Paragraph 21.5.7 of the Essex councils' LIR [**REP1-039**] in this respect. Can you respond to each of these comments?	
DC1.6.93	What wording would you suggest in place of Requirement 11 as drafted?	The Applicant refers to Section 14 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**).
DC1.6.94	Can you explain how the description of decommissioning presented in Requirement 12 of the dDCO differs from the activities defined in accordance with 'maintain' presented in Article 2 (1) thereof?	Article 2(1) of the dDCO (**document 3.1 (C)**) defines 'maintain' as: *"[including] inspect, repair, adjust, alter, dismantle, remove, clear, refurbish, paint, surface treat, decommission, improve, reconstruct or replace any or all of the authorised development including through the use of robots, helicopters, drones, gadgets or similar devices either remote controlled or autonomous, provided such works do not give rise to any materially new or materially different environmental effects to those identified in the ES, and any derivative of "maintain" must be construed accordingly;"* This term is used in particular in Article 4 (Maintenance of authorised development): *"4.—(1) National Grid may at any time maintain the authorised development (excluding the UKPN Works), except to the extent that this Order, or an agreement made under this Order, provides otherwise.* *(2) UKPN may at any time maintain the UKPN Works, except to the extent that this Order, or an agreement made under this Order, provides otherwise."* Requirement 12 (Decommissioning) states:

Reference	Question	Applicant's Response
		"12.—(1) In the event that, at some future date, the authorised development, or part of it, is to be decommissioned, a written scheme of decommissioning must be submitted for approval by the relevant planning authority at least six months prior to any decommissioning works. *(2) The approved scheme must be implemented as approved as part of the decommissioning of the authorised development or relevant part of it.* *(3) This requirement does not apply to the part of the authorised development and associated development described in Schedule 1 (authorised development) which relates to the dismantling and removal of existing infrastructure or apparatus."* In the ES Chapter 4: Project Description [**APP-072**], maintenance is explained in Section 4.9, and decommissioning in Section 4.10. Paragraphs 4.10.2 and 4.10.3 summarise the Applicant's expectations as to decommissioning in that there are no plans to decommission the project. As to the difference of activities, the definition of 'maintain' includes many words other than decommission, but it does include the word 'decommission' in order that the Applicant can decommission an asset if required (Pursuant to Article 4 of the dDCO). Article 4 is a bare power to maintain. Requirement 12 is a control on decommissioning, for all or part of the authorised development. At the end of its lifetime, if the transmission infrastructure is no longer required, the lines would be removed. Similarly, equipment within the substations would be removed, structures such as the gantries dismantled and broken up, concrete and buildings demolished, underground cables and other materials removed, and the site restored. It is anticipated that a written scheme of decommissioning may likely cover matters such as the following: ● Background to the Project; ● Project Description; ● Current baseline/site characteristics; ● Anticipated program of decommissioning; ● Decommissioning methodology; ● Further environmental assessment as necessary including surveys and mitigation; and ● Land reinstatement/restoration. Given the remoteness of the likely time period when these works would be carried out, the Applicant does not consider it appropriate to be more prescriptive at the present time on the details of a written scheme of decommissioning.

Reference	Question	Applicant's Response
DC1.6.95	Whilst BNG is not yet required by law, you ask the ExA and SoS to take its benefits into account. Requirement 13 simply commits you to submitting written evidence to the relevant planning authority in advance of the Proposed Development's operational use: there is no requirement for implementation, management, maintenance and retention of the proposed BNG. In this context: a) What is the purpose of Requirement 13; and b) What weight can the ExA and SoS give to it in the overall balancing exercise?	The position in respect of BNG is summarised in the Environmental Gain Report [**APP-176**] and in Paragraphs 4.10.5 -10 of the SoR [**APP-038**]. In respect of NSIPs the legal requirement in the Environment Act is not expected to come into force until November 2025. Paragraph 1.2 of the Environmental Gain Report sets out the legislative and policy position, including pursuant to the NPS suite (and the 2021 consultation drafts). Clearly updated draft NPSs were issued in 2023 for consultation, which also address BNG, including in EN-1 at Paragraph 4.5 and EN-5 at Paragraph 2.5. Paragraph 1.2 of the Environmental Gain Report also addresses the local policy position. The Planning Statement [**APP-160**] addresses policy, including the NPPF (paragraph 7.4.23) as to net gain. At paragraph 7.5.9, the Applicant notes: *"meanwhile the development secures an environmental net gain (despite not being a mandatory requirement) weighing in the schemes favour".* Paragraph 10.3.1 states: "This net gain is in addition and separate to any required EIA mitigation to avoid overlap or double counting." Therefore, whilst BNG is not required by the Environment Act 2021 at the present time, the principles of at least 10% BNG are recognised as an integral component of existing and emerging policy and aligns closely with the Applicant's own commitments. Turning to Requirement 13, this secures the delivery of at least 10% BNG, in that the Applicant must provide written evidence of its compliance, based on the metric, showing how at least 10% will be delivered. That detail must be submitted before the overhead / underground connection comes into first operational use. As noted in the Environmental Gain Report, the Applicant cannot yet apply the metric in final form, due to the necessary flexibility in the project. The Environmental Gain Report provides an initial calculation (see paragraph 8.3.1) which would be updated and refined. In light of the above, the Applicant considers that the commitment to BNG weighs in favour of the granting of development consent.
DC1.6.96	Without prejudice to the ExA's position on the incorporation of BNG, has sufficient land been included within the Order Limits to accommodate this aspect of the Proposed Development in full? Paragraph 7.4.11 of the SoR [**APP-038**] suggests that is not the case. If not, how can the ExA be satisfied that additional land would be secured for that purpose and appropriate provisions put in place for its	Yes, sufficient land for BNG has been included within the Order limits. Paragraph 7.4.11 of the SoR [**APP-038**] states that: *"[the] order land encompasses land for BNG (BNG).* *…The government's guidance states the preference is that BNG should be provided on-site or in close proximity to a development site. Whilst National Grid is seeking voluntary agreements with parties, if these cannot be agreed, National Grid has identified within the project Order Limits areas for suitable BNG, and the best chance of providing BNG successfully on-site or close to the proposed development, is to seek compulsory acquisition powers."* Paragraph 4.10.7 confirms that *"[the] proposed enhancement locations are included within the Order Limits."*

Reference	Question	Applicant's Response
	implementation, maintenance and retention, moreover, as you said that you did not envisage the need for Section 106 Agreements (refer to the Planning Statement [**APP-160**], paragraph 4.19)?	The Applicant notes that the 2023 consultation draft NPS EN-5 states at Paragraph 2.6.6 that *"where the use of land at a specific location is required to facilitate the development by providing for … [BNG], an applicant may …. seek the compulsory acquisition of that land, or rights over that land".* As is explained in the Deadline 1 Cover Letter **[REP1-001],** *"[the] Land Plans have been updated by the Applicant to reflect the fact that Class 5 rights (compulsory acquisition of rights for BNG (BNG)) are no longer sought in respect of certain plots. This reflects the Applicant's discussions with landowners and refinement of its BNG proposals."*
DC1.6.97	In paragraphs 21.5.10 and 23.3.2 of your LIR you refer to additional Requirements that you say should be considered. Can you provide draft wording of the additional Requirements that you consider need to be included in the DCO to deliver the project?	The Applicant refers to Section 17 of the Applicant's Comments on Essex County Council and Braintree District Council LIR (**document 8.5.3.2**).
DC1.6.98	How do you respond to the Suffolk councils' contention at paragraphs 17.70 to 17.83 inclusive of their LIR [REP1-045] that the 28-day decision-making period in paragraph 1 (1) of Schedule 4, compared to the 42-day period in paragraph 1 (2) of Appendix 1 of PINS Advice Note 15: *Drafting DCOs* is unlikely to affect '*the immediate and pressing national need which the project is intended to address*' as you say at paragraph 4.4.2 of your EM [**APP-035**]?	The Applicant's response to matters raised in Paragraphs 17.80 to 17.83 of the joint LIR submitted by Suffolk County Council and Babergh and Mid Suffolk District Councils [**REP1-045**] is set out in Section 14 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**).
DC1.6.99	Paragraph 1 (2) of Schedule 4 of the dDCO provides for consent being acquired by default if the relevant authority does not determine an application for discharge of Requirements within 28 days. In this context and taking account of councils' submissions about resource implications for dealing with applications within the 28-day period specified in Paragraph 1 (1) of Schedule 4 of the dDCO, is it fair, reasonable and proportionate?	The Applicant's response to matters raised in Paragraphs 21.6.1 and 21.6.2 of the joint LIR submitted by Essex County Council and Braintree District Council [**REP1-039**] is set out in Section 17 of the Applicant's Comments on Essex County Council and Braintree District Council LIR (**document 8.5.3.2**).

Reference	Question	Applicant's Response
	You are, for example, referred to paragraph 21.6.1 and 21.6.2 of the Essex councils' LIR [**REP1-39**] where precedent for a 56-day period for discharge is provided.	
DC1.6.100	How do you respond to local planning authorities' contention that the timescale at Paragraph 2 (3) of Schedule 4 is insufficient? You are, for example, referred to Paragraphs 21.6.4 and 21.6.5 of the Essex councils' LIR [**REP1-39**] in this respect.	The Applicant's response to matters raised in Paragraphs 21.6.4 and 21.6.5 of the joint LIR submitted by Essex County Council and Braintree District Council [**REP1-039**] is set out in Section 17 of the Applicant's Comments on Essex County Council and Braintree District Council LIR (**document 8.5.3.2**).
DC1.6.101	What is your response to submissions made by the local planning authorities that the fee at Paragraph 3 (1) (b) of Schedule 4 is insufficient? You are, for example, referred to Paragraph 21.6.3 of the Essex councils' LIR [**REP1-39**] in this respect.	The Applicant's response to matters raised in Paragraph 21.6.3 of the joint LIR submitted by Essex County Council and Braintree District Council [**REP1-039**] is set out in Section 17 of the Applicant's Comments on Essex County Council and Braintree District Council LIR (**document 8.5.3.2**).
DC1.6.102	Can you respond to the Applicant's submission on 'Timeframes for Determining Applications and Fees' in its comments on RRs [**REP1-025**] at page 82?	The Applicant refers to its responses to DC1.6.100 and DC1.6.101.
DC1.6.103	Why do you consider paragraph 3 (2) of Schedule 4 to be unreasonable? How does it need to be amended to address your concerns?	The Applicant has had due regard to the Councils' comments. Notwithstanding the fact that substantially similar provisions are found in the Sizewell C (Nuclear Generating Station) Order 2022 and the Southampton to London Pipeline DCO 2020, the Applicant is content to remove paragraph 3(2) from the dDCO. Necessary amendments were made to Schedule 4 in the updated version of the dDCO published at Deadline 2 (**document 3.1(B)**). Please also refer to the Applicant's Schedule of Changes to the dDCO (**document 8.4.2 (B)**).
DC1.6.104	What fee should be levied by paragraph 3 (1) (b) of Schedule 4 of the dDCO?	The Applicant's response to matters raised in Paragraph 17.84 of the joint LIR submitted by Suffolk County Council and Babergh and Mid Suffolk District Councils [**REP1-045**] and in Paragraph 21.6.3 of the joint LIR

Reference	Question	Applicant's Response
		submitted by Essex County Council and Braintree District Council [**REP1-039**] is set out in Section 14 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**) and in Section 17 of the Applicant's Comments on Essex County Council and Braintree District Council LIR (**document 8.5.3.2**).
DC1.6.105	Can you provide suggested wording of the amendments to Articles, Requirements and Paragraph 1 of Schedule 4 that you refer to in paragraph 17.87 (a to j inclusive) of your joint LIR [**REP1-045**]?	The Applicant considers that each of the matters raised in Paragraph 17.87 of the joint LIR submitted by Suffolk County Council and Babergh and Mid Suffolk District Councils [**REP1-045**] is addressed in detail in the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**).
DC1.6.106	Burstall PC [**RR-013**] seeks community involvement in the discharge of Requirements: what is your response?	The discharge of Requirements is a matter for the named discharging authority, exercising its discretion as such an authority. As with any such application, it would be open to the discharging authority to exercise that discretion as it sees fit, which presumably might involve engagement. The Applicant expects that Suffolk County Council, in particular, will have experience of discharging DCO requirements, having been both a host authority and a promoter.
DC1.6.107	Who would be the arbiter in deciding whether a right exercised by virtue of the DCO would give rise to any materially new or materially different environmental effects from those assessed in the ES in the context of: Article 2 (1) definition of 'maintain'; Article 2 (10); Article 5 (4); Schedule 1 definition of 'Associated Development' sub-paragraph (r); Schedule 3 - Requirement 1 (4); and Schedule 4 – paragraph 1 (3) (c)? Would that decision be made after consultation with other parties and, if so, what Provision is made for that in the dDCO?	In overall terms, the Applicant would be responsible for determining whether or not a materially new or materially different environmental effect is likely to arise, based on the specific facts and circumstances and the application of reasoned professional judgment. The Applicant intends to implement practical measures opposite its contractor (which will be a matter as between the Applicant and its appointed contractor), to ensure that there is compliance with the DCO. As an example of that process in action, the Applicant notes that on its Richborough DCO project, provision was agreed with the contractor such that where the contractor wished to deliver something which moved away from that envisaged by the DCO, there was a process to assess the proposed change, which included multi-disciplinary inputs (including EIA). Decisions were then made as to how this complied with the DCO and steps which needed to be taken. The exact process for the Bramford to Twinstead project would depend on the contractual position. As a consequence, the need to involve any other party in that assessment process would be dependent on the particular context and the power to be exercised. For instance, Article 5(4) of the dDCO (**document 3.1 (C)**) anticipates that the Secretary of State will be responsible for certifying whether a materially new or materially different environmental effect is likely to arise in the context of any departure from the prescribed LoD – based on information provided to it by the undertaker and following consultation with the 'relevant planning authority' and other appropriate persons. Similarly, Paragraph 1(4) of Schedule 3 requires the undertaker to *"[demonstrate] to the satisfaction of the relevant highway authority or the relevant planning authority that the subject matter of the approval or agreement sought is unlikely to give rise to any materially new or materially different environmental effects*

Reference	Question	Applicant's Response
		from those assessed." The Applicant further notes Paragraph 1(3) of Schedule 4, where submission to the relevant authority of an environmental report is capable of triggering a deemed refusal of consent. On the other hand, it would be for the Applicant to determine whether or not the carrying out of any or all of the operations listed within the definition of "maintain" in Article 2(1) is likely to give rise to any materially new or materially different environmental effects. The maintenance of this asset, which would become an operational part of the national high voltage transmission network, should be a matter solely for the Applicant pursuant to its statutory obligations and licence. The findings of the Applicant's environmental assessment have been used to inform the commitments and other measures which are set out in the Management Plans and which would be implemented during construction of the project. Therefore, the Applicant does not currently consider that the detailed design of the project, and in turn tHE Exercise of powers pursuant to the dDCO is likely to give rise to any materially new or materially different environmental impacts to those already assessed. However, to the extent that such circumstances do arise, the Management Plans already include an appropriate 'Change Process' (see, for example, Section 15.5 of the CEMP (**document 7.5(B)**). Article 2(10), the effect of which is explained in Paragraph 3.6.25 of the Explanatory Memorandum (**document 3.2(B)**), will have effect in each of the situations outlined above, such that avoidance, removal or reduction of an adverse environmental effect is not unnecessarily caught. Given all of the above, the Applicant submits that compliance is a matter for it in its role in delivering the project. Notwithstanding the above, if a local authority felt that there was an issue, they already have at their disposal the provisions in the Planning Act 2008 such as the ability to request information pursuant to Section 167.
DC1.6.108	Can you advise if the streets and public rights of way referred to in Schedules 7, 8 and 12 have been described in accordance with the street gazetteer and definitive map?	The Applicant has undertaken a further detailed review OF schedules 5, 6, 7, 8 and 12 of the dDCO in light of the comments raised in the joint LIR submitted by Suffolk County Council and Babergh and Mid Suffolk District Councils [**REP1-045**]. All necessary Updates have been incorporated in the dDCO (**document 3.1 (C)**) published at Deadline 3. Please also refer to the Applicant's Schedule of Changes to the dDCO (**document 8.4.2(B)**).
DC1.6.109	Do you need to amend any of the Schedules cited in the previous question considering paragraph 12.31 of the Suffolk councils' LIR [**REP1-045**] where they have identified errors when checking t124he location of accesses and their description against the street gazetteer thereby	The Applicant refers to its response to DC1.6.108.

Reference	Question	Applicant's Response
	potentially invalidating speed limits, parking restrictions and road closures?	
DC1.6.110	In respect of Schedule 12, Part 1, how do you respond to paragraph 12.35 of the Suffolk councils' LIR [**REP1-045**] where they question the need for proposed parking restrictions and, if they are to be retained, seek clarity on their scope?	The proposed restrictions represent the reasonable worst case, and it is possible that some of these would not be needed in practice. At the current stage the restrictions are included, and the Applicant will liaise with the relevant authorities in detailed design to develop the specific restrictions required. The Applicant's comments to matters raised in Paragraph 12.35 of the joint LIR submitted by Suffolk County Council and Babergh and Mid Suffolk District Councils [**REP1-045**]'is set out in Section 9 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**).
DC1.6.111	In respect of Schedule 12, Part 3, at paragraph 12.36 of the Suffolk councils' LIR [**REP1-045**] they say that one-way movements on specified roads would be unacceptable to the local highway authority unless implemented overnight with an acceptable diversion; how do you respond?	The Applicant's comments to matters raised in Paragraph 12.36 of the joint LIR submitted by Suffolk County Council and Babergh and Mid Suffolk District Councils [**REP1-045**]'is set out in Section 9 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**).
DC1.6.112	Where a representation is made by a Statutory Undertaker under s127 of PA2008 and it has not been withdrawn by the close of the Examination, the SoS would be unable to authorise powers relating to the Statutory Undertaker's land unless satisfied of specified matters set out in s127. If the representation is not withdrawn by the end of the Examination, confirmation would be needed that the 'expedience' test is met. The SoS would also be unable to authorise removal or repositioning of apparatus unless satisfied that the extinguishment or removal would be necessary for the purposes of carrying out the Proposed Development to which the Order would relate in accordance with s138 of PA2008. Justification would be needed to show that extinguishment or removal would be necessary.	The Applicant has set out the latest position in respect of negotiations with those statutory undertakers where powers of compulsory acquisition and/or temporary use are sought, in the Compulsory Acquisition and Temporary Possession Objections Schedule (**document 8.4.4 (B)**). The Applicant will continue to update the Examining Authority in accordance with the Rule 8 examination programme, including the list of commercial side agreements at Deadline 9. If and when it becomes apparent that any objection is not going to be removed, the Applicant will provide the requisite information at that juncture. In light of the progress with negotiations, the Applicant is currently hopeful that all issues can be suitably resolved such that no objections subsist at the end of the examination.

Reference	Question	Applicant's Response
	Can you indicate when, if the objections from Statutory Undertakers are not withdrawn, this information would be submitted to the Examination?	
DC1.6.113	In respect of the public general legislation specified in Schedule 15, can you provide a table setting out: • why the specified provisions are being disapplied; • how the equivalent protections are provided for in the dDCO. If they are not provided for, provide justification of the approach; and • relevant provisions of the dDCO.	A table containing the Applicant's response to DC1.6.113 can be found at Appendix D (Table of Public General Legislation to be Applied, modified and excluded under the dDCO).
DC1.6.114	In respect of Schedule 16, can the Applicant provide: a) Copies of the local legislation; b) A table specifying: • the provisions of both chapters; • why each is being disapplied; • how the equivalent protections are provided for in the dDCO; • if they are not provided for, provide justification of the approach; and • relevant provisions of the dDCO.	(a) Copies of the Eastern Union and Hadleigh Junction Railway Act 1846 (the 1846 Act) and the Eastern Union and Hadleigh Junction Railway Sale Act 1847 (the 1847 Act) can be found appended to this document at Appendix D (Copies of Local Legislation to be disapplied under the dDCO). (b) A table containing the Applicant's response to part (b) of DC1.6.114 can be found at Appendix F (Table of Local Legislation to be disapplied under the dDCO).
DC1.6.115	Can you address the concerns raised in respect of Article 57 and Schedule 17 at paragraph 21.3.14 of the Essex councils' LIR [**REP1-039**]?	The Applicant's response to matters raised in Paragraph 21.3.14 of the joint LIR submitted by Essex County Council and Braintree District Council [**REP1-039**] is set out in Section 17 of the Applicant's Comments on Essex County Council and Braintree District Council LIR (**document 8.5.3.2**).
DC1.6.116	In respect of Schedule 17, can you advise if there Is a need to include the appendices to the principal (listed) plan documents they are an annex to if they have their own document numbers? For example, the	In Article 2 of the dDCO (**document 3.1 (C)**) definitions are included for each of the management plans (comprising the CEMP (**document 7.5(B)**) (which includes by way of appendix, the CEMP Appendix A: CoCP (**document 7.5.1 (B)**) and the REAC (**document 7.5.2 (B)**)), the CTMP (**document 7.6 (B)**), the MWMP (**document 7.7 (B)**), the LEMP (**document 7.8 (B)**) and the PRoW Management Plan (**document 8.5.8)**).

Reference	Question	Applicant's Response
	LEMP is document 7.8 and is listed as such in Schedule 17. It has three Appendices, each of which is critical to achieving the mitigation assumed in the ES, but these are separately numbered as documents 7.8.1, 7.8.2 and 7.8.3. As such, it could be argued that they are currently not included in Schedule 17 and are therefore not secured. (Alternatively, it may be possible to achieve this through an amendment to the definition of the LEMP in Article 2 by adding the three appendices and their Document numbers.)	Necessary updates to those Definitions have been incorporated in the dDCO published at Deadline 3. Please also refer to the Applicant's Schedule of Changes to the dDCO (**document 8.4.2 (B)**). In addition, it merits noting that Schedule 17 does not secure any of the documents it lists. The role of securing documents is carried out by other operative provisions – for example Schedule 3 (pursuant to article 3), Requirement 4, would secure the management plans. Schedule 17 and Article 57 merely provide for the certification of certain documents, so that all parties can be sure as a matter of evidence as to which document is referred to. Schedule 17 itself does not secure compliance with any documents.
DC1.6.117	At pages 122 to 125 inclusive of its Comments on Relevant Representations [**REP1 -025**], the Applicant responds to various points that you made in your RR [**RR-042**] about the scope of the dDCO's provisions. Have its comments addressed your concerns? If not, can you explain why not?	The Applicant provides no further response at this stage.
DC1.6.118	At paragraph 12.15 of their LIR [**REP1-045**] the Suffolk councils seek either the inclusion of Protective Provisions in the DCO or separate side agreement to provide sufficient protection for their role as highway authority. How do you respond both to this suggestion and also to their reference to an exemplar highway agreement?	The Applicant's response to matters raised in Paragraph 12.15 of the joint LIR submitted by Suffolk County Council and Babergh and Mid Suffolk District Councils [**REP1-045**] is set out in Section 9 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**).
DC1.6.119	At paragraph 12.11 of your LIR [**REP1-45**] you refer to the need for a Requirement to address decommissioning and removal route; can you suggest the wording that you would like to see included within the DCO?	The Applicant refers to Requirement 12 (Decommissioning) in Schedule 3 to the dDCO (**document 3.1 (C)**).

Reference	Question	Applicant's Response
DC1.6.120	Are negotiations continuing between the Applicant and the Environment Agency about potential further Requirements in the dDCO in relation to navigation of the River Stour and temporary in-river and cross-river construction structures and permanent cross-river structures? Will the outcome be reported in the SoCG between the parties, and, if so, when is this expected? If there is no agreement on these matters as yet, can the Environment Agency suggest the wording that you would like to see included within the DCO?	The Applicant is in discussion with the Environment Agency regarding the consent required for temporary closure of navigation to the River Stour during construction. No permanent cross-river structures are required on the project. It is anticipated that this would require an additional consent to be added to Table 2.1 of the CEMP (**document 7.5(B)**), as per other consents that are not disapplied by the dDCO (**document 3.1 (C)**). The matter is included in Table 5.1 of the Draft SoCG The Environment Agency (**document 7.3.3 (B)**) as a matter still under discussion. The Applicant also notes the text in Section 1.5 of the CTMP (**document 7.6(B)**) that states that the only works that is anticipated to affect navigation is the lowering of the 132kV conductors and the installation and removal of the temporary bridge. As stated in Paragraph 1.5.3 of the CTMP, these are anticipated to be short term in duration (i.e. up to one week for each). Outside of this, there are not anticipated to be effects on navigation.

7. Good Design

Table 7.1 – Good design

Reference	Question	Applicant's Response
GD1.7.1	Does the design of the proposed mitigation mounds and planting at the proposed new grid supply point substation comply with Horlock Guideline 9 and the good design tests in NPS EN-1 in terms of existing landscape character and landform?	Environmental, engineering, and economic considerations as well as several rounds of consultation and pre-application discussions with Braintree District Council, have all influenced the optioneering and design evolution process for the GSP substation. The Horlock Rules provide guidelines for the siting and design of new substations, or substation extensions and these rules have been an important consideration in the design and siting of the GSP substation. Horlock Rule 9 states, *'the design of access roads, perimeter fencing, earthshaping, planting and ancillary development should form an integral part of the site layout and design to fit in with the surroundings.'* In addition, paragraph 4.5.3 of NPS EN-1 states, '*Whilst the applicant may not have any or very limited choice in the physical appearance of some energy infrastructure, there may be opportunities for the applicant to demonstrate good design in terms of siting relative to existing landscape character, landform and vegetation.'* As per EM-H04 in the REAC (**document 7.5.2(B)**), low mounds are proposed to the west of the A131 and to the west of the proposed GSP substation. These would be planted to help filter views of the GSP substation from the A131 and from Wickham St Paul. These are identified in paragraph ES Chapter 6: Landscape and Visual [**APP-074**] as helping to mitigate any landscape and visual effects. Landscape architects have advised on the design of the mounds, in terms of the low profile and shallow slope so that these provide a screening function in a sympathetic manner to the landscape character as per the guidelines in the Horlock Rules and the good design tests in NPS EN-1. This embedded design measure of the proposal was generally in response to consultation feedback and public desire for a well-screened development. Braintree District Council's Case Officer for the GSP substation commented in their Committee Report, *'The proposal would likely integrate into the landscape through the pattern of existing vegetation including hedgerows with trees and woodlands. Landscape proposals including planting and landscape mounding to the west and east of the site would further integrate the proposal into the landscape. There are no significant landscape or visual effects anticipated.'* Therefore, the Applicant does consider that the design of the proposed mounds and planting at the GSP substation would comply with Horlock Guideline 9 and the good design tests in NPS EN-1 in terms of existing landscape character and landform.
GD1.7.2	Paragraphs 1.4.2 and 1.4.3 of ES Appendix 4.1 Good Design [**APP-090**] describe the	Temporary works are removed once no longer required for the construction works and therefore have no long-term effects. Their location is dictated by the nature and location of the permanent works, however

Reference	Question	Applicant's Response
	relationship between the LoD for permanent infrastructure and evolving good design, and the approach that the Applicant intends to take to this. Why have the same good design principles not been applied to temporary works such as access routes and construction compounds?	within this constraint the Applicant has applied the good design principles to temporary works as well as permanent works, including paragraph 1.4.2 of ES Appendix 4.1 Good Design [**APP-090**] which states that '*The Order Limits delineate the extent of the project for which development consent is being sought; and encompass the land required temporarily to build th' project and permanently to operate the project'.*
GD1.7.3	Appendix 1 of the LIR from Essex County Council and Braintree District Council [REP1-039] supports the preliminary design principles for the Proposed Development offered by Suffolk County Council in Annex C to its LIR [REP1-044]. Explain if and how these principles were considered and how they influenced the design of the Proposed Development. If they were not, explain why not.	The scale and form of any proposal put forward by the Applicant is largely determined by the need for the new infrastructure (functional and operational requirements) and adherence to the Applicant's duties under the Electricity Act. In respect to design, paragraph 4.5.3 of EN-1 accepts that the nature of much energy infrastructure development will often be limited to the extent to which it is able to contribute to the enhancement of the quality of the area. Paragraph 4.5.3 of EN-1 also considers that '*whilst the applicant may not have any or very limited choice in the physical appearance of some energy infrastructure, there may be opportunities for the applicant to demonstrate good design in terms of siting relative to existing landscape character, landform and vegetation.'* Also of relevance in terms of design, paragraph 2.8.5 of EN-5 states that the Holford Rules '*should be used by developers when designing their proposals'.* The Applicant employs the Holford Rules, usually as a starting point, to inform the design and routeing of all new overhead line projects, including the project. However, environmental, engineering, and economic considerations as well as several rounds of consultation, have all influenced the optioneering and design evolution process and the design evolution of the project has been an iterative process. The Applicant has considered ways to achieve good design through the careful consideration of route corridors and the application of design principles. ES Appendix 4.1: Good Design [**APP-090**] presents the different choices made during the design process. This Appendix sets out the design aspects that have been considered during the development of the project and should be read alongside both ES Chapter 3: Alternatives [**APP-071**], which documents the key environmental factors in consideration of the main alternatives, and Chapter 5 of the Planning Statement [**APP-160**], which explains how planning policy, as well as the requirements of the Electricity Act and the principles of the Holford and Horlock Rules, have influenced the optioneering and design evolution process. The latter demonstrating how such policy and legislative objectives have been embedded into the design of the project. The Applicant confirms that the design principles are in general accordance with those identified in Annex C and have been followed throughout the development of the project as demonstrated within the submitted documentation, including the RCS [**APP-163**] and the Connection Options Report [**APP-164**]. Further evidence is provided in ES Chapter 3: Alternatives Considered [**APP-071**] and ES Appendix 4.1: Good Design [**APP-090**]. The Planning Statement [**APP-160**] demonstrates compliance with the relevant NPS and the Horlock and Holford Rules.

Reference	Question	Applicant's Response
		Further details are provided in response to this point in Chapter 17 Applicant's Comments on Annex C (Design Principles) of the Applicant's Comments on Suffolk County and Babergh and Mid Suffolk District Councils LIRs [**document 8.5.3.1**].
GD1.7.4	Paragraph 7.2.1 in ES Appendix 4.1, Good Design [**APP-090**] notes that further work would be undertaken during detailed design to identify good design principles. Can you outline your design review process, and whether a design review panel and design champion (with relevant experience and qualifications) would be engaged?	The National Grid Design Management process [NG/ET/SR188] sets out the design management procedures for all contractors working on the Applicant's construction contracts and is in addition to the internal design management processes that each main works contractor would also have. This sets out requirements for the appointment of a number of design personnel with responsibilities as follows: • Lead Contractor Design Approval Engineer to lead and co-ordinate the contractor's design team and to lead design review meetings; • Contractor Design Approval Engineers to lead each of the discipline specific design activities; and • Principal Designer Representative to ensure designers are co-ordinating health and safety aspects of design work and to lead hazard review meetings. Contractor personnel proposed to undertake these roles are required to submit documentation demonstrating they have the appropriate skills, knowledge and experience in accordance with the Applicant's process [NG/ET/BP137] and only those personnel accepted by the Applicant as having the relevant capability can undertake these roles. In addition to the above, the Applicant appoints design assurance engineers in accordance with the Applicant's process [NG/ET/SR141] to undertake audits of the main works contractor's design, and each design package must be formally accepted by the relevant design assurance engineer prior to proceeding to construction. Design assurance engineers must pass an exam set by the Applicant to demonstrate their extensive knowledge of the Applicant's standards before they can undertake the design assurance role.

8. Historic Environment

Table 8.1 – Historic environment

Reference	Question	Applicant's Response
HE1.8.4	Chapter 8 of the ES, Historic Environment [**APP-076**], recognises that Dedham Vale and the Stour Valley have important historical cultural associations with famous artists. The LVIA methodology (Table 2.2 of ES Appendix 6.1 [**APP-097**]) also recognises the importance of such associations. Where can the assessment of the landscape and visual impacts of the Proposed Development on the relevant historical cultural receptors be found? The passing references in paragraphs 8.3.6 and 8.5.30 of the ES are noted, but they do not appear to identify any specific locations or views that were represented by the artists, nor do they provide any substantiation of the conclusion reached that, '*the project would not result in any change that would affect the artistic representations more than they have already been changed by the existing transport and overhead energy infrastructure*.' Could elaboration of the assessment and conclusions be provided. Also comment on the suggestion in the Suffolk councils' LIR [**REP1-045**] (paragraph 6.130) that the Brett Valley shares similar characteristics and that the ES neither recognises the cultural significance of this landscape nor addresses the residual adverse impacts on its cultural associations with artists and writers, some of whom are	The Landscape and Visual Impact Assessment (LVIA) has followed Table 2.2 of the LVIA methodology presented at ES Appendix 6.1: Landscape and visual Methodology [**APP-097**], whereby cultural and heritage associations were used to inform the baseline judgements on value as presented in ES Appendix 6.3: Assessment of Effects on Landscape Character [**APP-100**] for example at Table 3.1 and Table 3.5. Historical cultural receptors are not individually assessed but are embedded in the overall assessment on landscape character as the value judgments form part of the assessment. This follows guidance in Guidelines on Landscape and Visual Impact Assessment (GLVIA) 3 and 5(2) of the Draft Notes and Clarifications on aspects of the 3rd Edition guidelines on LVIA (GLVIA3) published in July 2023. The assessment of effects on individual historical cultural receptors is found at ES Chapter 8: Historic Environment [**APP-076**]. The Applicant refers to Reference 6.130 to 6.131 of the Applicant's Comments on Suffolk County Council and Babergh Mid Suffolk District Council LIR (**document 8.5.3.1**).

Reference	Question	Applicant's Response
	listed in their Annex A, Assessment of Effects in the Brett Valley [**REP1-044**].	
HE1.8.6	Comment on the five suggestions in section 11.9 of the LIR from the Essex councils [**REP1-039**] to amend the Outline Written Scheme of Investigation [**APP-187**], and the suggested amendments set out in the Suffolk councils' LIR at paragraphs 8.48 to 8.52, providing reasoning for your response in each case.	The Applicant refers to Section 11.9 of the Applicant's Comments on Essex County Council and Braintree District Council LIR (**document 8.5.3.2**). The Applicant refers to Reference 8.48 to 8.52 of the Applicant's Comments on Suffolk County Council and Babergh Mid Suffolk District Council LIR (**document 8.5.3.1**).
HE1.8.7	Requirement 6 of the dDCO (document 3.1(B)) requires the Proposed Development to be undertaken in accordance with the Archaeological Framework Strategy [**APP-186**] and Outline Written Scheme of Investigation [**AS-001**], with a requirement for submission and approval of a detailed Written Scheme of Investigation prior to commencement of each stage. The Outline Written Scheme of Investigation sets out the proposed approach to further archaeological investigation. The proposed location for each technique is shown on Figure 1 of the Outline Written Scheme of Investigation, with areas in Sections D, G and H annotated as 'Archaeological mitigation to be confirmed'. Section 2 of the Archaeological Framework Strategy states that a targeted phase of archaeological trial trenching surveys has been completed but that this would be an ongoing process, which may not be available to inform the ES. The initial phase of archaeological trial trenching has focused on areas where there is potential for more complex remains, the results being presented in ES Appendix 8.1 [**APP-125**]. Can you confirm at what stage the archaeological	The programme of inkered logical trial trenching is expected for completion in late October 2023. The results of the trenching will feed into an updated Outline Written Scheme of Investigation (OWSI) submitted at an appropriate deadline. The mitigation proposals will take the form of strip map and sample (SMS or open area excavation (OAE) in the areas of cable undergrounding. Where trial trenching has not located any potential for archaeological remains, these areas will not be subject to archaeological mitigation proposals. Therefore, the Applicant can confirm that archaeological mitigation would be confined to one of the mitigation types already identified within the OWSI [**AS-001**].

Reference	Question	Applicant's Response
	mitigation required in Sections D, G and H (Figure 1 of Outline Written Scheme of Investigation) would be confirmed and whether this is likely to comprise one of the mitigation types already identified in the Outline Written Scheme of Investigation?	
HE1.8.8	Can you comment on the suggestion in the Suffolk councils' LIR [**REP1-045**] (paragraphs 6.136 to 6.138) that some assets have not been properly explored and assessed, including Benton End House (a Grade II* Listed Building) and Overbury Hall (a Grade II Listed Building)? It is suggested that both assets, and their wider landscape setting in the Brett Valley, are particularly sensitive due to their associations with artists.	The Applicant refers to Reference 6.135 to 6.138 of the Applicant's Comments on Suffolk County Council and Babergh Mid Suffolk District Council LIR (**document 8.5.3.1**).
HE1.8.10	Noting that nearby locations and slightly different angles of view might introduce one or more of the proposed new pylons into the visualisation in addition to the new overhead lines, is the location of viewpoint HV01 [**APP-063**] reasonably representative of the full range of potential impacts on the listed buildings at the Hintlesham Hall estate, including their setting? On this basis, is the assessment set out in the Hintlesham Hall Assessment [**APP-128**] a reasonable worst case?	HV-01 was selected as a representative heritage viewpoint through discussions with Historic England and the local planning authorities due to the proximity of the overhead line to the listed buildings at this location. HV-01 primarily captures the filtered view from the archway of the Grade II* Ancillary buildings, northward, towards the proposed overhead line. The assessment presented in ES Chapter 8: Historic Environment [**APP-076**] and Viewpoint HV-01 [**APP-063**] are based on the Proposed Alignment as shown on the General Arrange Plans [**APP-018**]. Section 11 of ES Chapter 8: Historic Environment [**APP-076**] then presents the assessment when taking into account the flexibility provided by the LoD. The same approach was used in the Hintlesham Hall Assessment [**APP-128**] which took into account the worst-case scenario whereby the pylons and other project components could be located anywhere within the LoD, as set out in paragraphs 4.3.2 to 4.3.8. If a pylon to the north of Hintlesham Park were to become more prominent in viewpoint HV01 [**APP-063**] from the Grade II* Ancillary buildings, this would have a marginal additional impact in visual terms on the listed building. The Ancillary block is partially screened and filtered from the existing overhead line by mature trees, even in winter, with view HV01 representing a small section where inter-visibility is most clear, with most of the building having no project inter-visibility. However, the principal elevation of Hintlesham Hall faces to the south-west and views northward towards the overhead line are obscured by intervening buildings and vegetation. The principal vista from Hintlesham Hall is captured in photomontage AB-20 [**APP-063**], facing south-west, down the former tree-lined avenue, towards Hintlesham Woods. In this view, ES Appendix 8.2 Annex A Hintlesham Hall AssesSMent [**APP-128**]

Reference	Question	Applicant's Response
		concludes that the proposed 400kV overhead line would not be visually intrusive to the Hall irrespective of its exact location within the LoD. The assessment concluded that, during winter (the worst-case scenario), the photomontage AB20 demonstrates that the view would not change signifiCAntly with the construction of the proposed 400kV overhead line, even with the LoD. This is due to the distance from which the project would be experienced from the Hall as well as the intervening woodland screening, the topography and presence of existing pylons. However, in response to the feedback received from Historic England and the local planning authorities on this matter, the Applicant has amended the existing commitment in the REAC at Deadline 3 (**document 7.5.2(B)**) to say that: '*when utilising the LoD, National Grid will not position a pylon between the access track to Kennels Cottage (608112, 244204) and 100m to the south west of the track (608027, 244151) in order to avoid its visibility in key views from the Grade II* listed ancillary buildings located to the north of Hintlesham Hall, which comprise the converted service ranges, stables, coach house and brewhouse*.'
HE1.8.11	Paragraph 8.11.6 of the ES [**APP-076**] and the Hintlesham Hall Assessment [**APP-128**] address the sensitivity testing that was carried out in relation to pylon locations and alignment. What would Be the worst-case scenario for the proposed 400kV line and pylons in relation to the impacts on Hintlesham Hall and Park? Provide a full assessment with visualisations of this scenario to compare with the assessment provided, which was based on the indicative proposed alignment.	In terms of alignment, the worst-case scenario for the overhead line through Hintlesham Park would be for it to be brought closer to the Grade I listed Hall and Grade II* Ancillary buildings. However, this would have little additional impact in visual terms given the current limited inter-visibility considering the position of the buildings relative to the existing overhead line and the screening and filtering effects from mature trees. In terms of pylon placement, the worst-case scenario would be during winter a pylon placed near the path leading north-west from the Hall's Grade II* Ancillary buildings potentially bringing a pylon into the HV01 viewpoint set out in the photomontages [**APP-063**]. In this view, ES Appendix 8.2: Annex A Hintlesham Hall Assessment [**APP-128**] concludes that this would have a marginal additional impact in visual terms on the listed building. The Ancillary block is partially screened and filtered from the existing overhead line by mature trees, even in winter, with view HV01 representing a small section where inter-visibility is most clear, with most of the building having no project inter-visibility. A site visit was carried out with Historic England in August 2023 to discuss pylon placement within viewpoint HV01. The outcome of this meeting led to the updated wording of EM-AB01 in the REAC at Deadline 3 (**document 7.5.2(B)**), which now commits to avoiding the worst-case in terms of pylon position. The additional wording states: **'***In utilising the LoD, National Grid will not position a pylon between the access track to Kennels Cottage (608112, 244204) and 100m to the south west of the track (608027, 244151) in order to avoid its visibility in key views from the Grade II* listed ancillary buildings located to the north of Hintlesham Hall, which comprise the converted service ranges, stables, coach house and brewhouse*.' The principal vista directly from Hintlesham Hall is captured in photomontage AB-20 [**APP-063**], facing southwest towards Hintlesham Woods. In this view, ES Appendix 8.2: Annex A Hintlesham Hall AsseSSment [**APP-128**] concludes that the proposed 400kV overhead line would not be visually intrusive to the Hall

Reference	Question	Applicant's Response
		irrespective of its exact location within the LoD. The assessment concluded that, during winter as the worst-case scenario, the photomontage AB20 demonstrates that the view would not change signifiCAntly with the construction of the proposed 400kV overhead line, even with the flexibility provided by the LoD. The Applicant has not produced designs or a 3D model for the worst-case alignment, as this is not something that the Applicant intends to build. Designs and 3D model would be needed to produce visualisations such as the photomontages [**APP-063**].
HE1.8.12	Can you explain the options available to you to reduce the vertical and horizontal LoD in the vicinity of Hintlesham Hall and its setting. If you consider there to be none, provide evidence of the constraints to support this position.	The Hintlesham Hall Assessment [**APP-128**] took into account the worst-case scenario taking into account the flexibility provided by the LoD. As set out in paragraph 4.4.2 and 4.3.12 respectively of ES Appendix 8.2 - Annex A Hintlesham Hall Assessment [**APP-128**], any changes to the overhead line or changes to the pylon locations within the LoD would result in a change so marginal as to not influence the effects identified within the assessment. The Final Alignment of the overhead line including the pylons would be subject to a range of factors including the required distances between spans, local features such as roads and other services, as well as the local topography (which will also affect the final pylon height at any given location). Further considerations also include the need for a safe clearance space beneath the conductors and an allowance for the maximum distance within which conductors can swing in high winds (which is up to 30m either side of the centre line). This is shown on the figure in Appendix A of the Applicant's Response to Issue Specific Hearing 1 Action Points [**REP1-034**]. Due to the presence of the existing 400kV overhead line and the need to maintain an 85m offset between the existing and the proposed overhead line and also allowing for maximum conductor swing, there is very little flexibility to move the pylons within the horizontal LoD (approximately 20m at this location). As noted in response to HE1.8.11, the Applicant has limited the longitudinal LoD to the north of Hintlesham Hall through updating the wording of EM-AB01 in the REAC at Deadline 3 (**document 7.5.2(B)**). The additional wording states: '*In utilising the LoD, National Grid will not position a pylon between the access track to Kennels Cottage (608112, 244204) and 100m to the south west of the track (608027, 244151) in order to avoid its visibility in key views from the Grade II* listed ancillary buildings located to the north of Hintlesham Hall, which comprise the converted service ranges, stables, coach house and brewhouse*.'
HE1.8.13	Sheet 3 of the Land Plans [**APP-008**] seems to indicate that you are seeking Compulsory Acquisition rights for BNG at two points in the former continuation of the avenue from the front of Hintlesham Hall (parcels 3-09, 3-04 and 3- 10). What assumptions were made in	The proposals presented within the Environmental Gain Report [**APP-176**] were identified through discussions with Historic England and the local planning authorities as having benefit (would enhance) the historic landscape and parkland setting. The proposal involves partial restoration of the historic tree avenue to the south-west of the Hall. The enhancements focus on the better-preserved parts of the historic parkland setting, such as the area along the main driveway to the house, as these areas make the biggest

Reference	Question	Applicant's Response
	terms of the historic environment assessment in relation to these proposals? What is the nature of the BNG proposed here and what implications might there be for the assessment of impacts on Hintlesham Hall and its setting? Explain what control there would be through the dDCO to ensure that any effect was not adverse in historic environment terms.	contributions to the historic legibility and aesthetic value of the listed buildings and would bring beneficial effects to the setting of Hintlesham Hall. As an enhancement, the Applicant is seeking powers through the DCO to partially restore the original tree-lined avenue to the south-west of Hintlesham Hall, which would reinstate a small part of the historic character of Hintlesham Park visible on historic mapping. This is a proposed enhancement and is shown on Figure 1 in the Environmental Gain Report [**APP-176**]. The proposals aim to balance the aspirations of the Councils with the requirements of the landowner to continue to farm the land. As stated in paragraph 4.2.23 of ES Chapter 4: Project Description [**APP-072**], the enhancement proposals are not assessed as part of the ES. However, the environmental appraisal for each enhancement is within the Environmental Gain Report [**APP-176**]. The appraisal for ENV02: Hintlesham Hall states in paragraph 3.2.6 that no adverse impacts on the historic environment are anticipated for the proposed enhancement planting.
HE1.8.14	In your response to Relevant Representations [**REP1-025**], can you confirm an omission of 'no' in table 3.13, top of page 106 (i'.e., should it read,' *''s no significant effect*…')?	The Applicant notes that this is an error and has added this to Errata List to be provided at Deadline 4. It should read 'no significant effect' as no significant effect is expected on Hintlesham Hall.
HE1.8.15	The ExA notes that the Applicant and Historic England are in ongoing discussions about mitigation for adverse effects on heritage assets, including the potential for landscape restoration of the historic park at Hintlesham Hall [RR-036]. Can the Applicant and Historic England provide an update on discussions and comment on how the LoD proposed in this location might affect any proposals to restore parts of the historic park.	The Applicant has held a number of meetings with Historic England to discuss the project. This engagement has focused on the potential changes to the settings of the Hintlesham Hall and its ancillary buildings. In particular the location of the pylon to the north of the hall and the proposed planting (including enhancement) proposals. Following a site visit with Historic England in September 2023 to Hintlesham Hall, the Applicant issued the updating the wording of EM-AB01 (as referenced in HE1.8.13) to Historic England and is waiting feedback on whether this wording is acceptable. The Applicant has also signposted Historic England to the planting proposals shown on the LEMP Appendix B: Vegetation Reinstatement Plan (**document 7.8.2(B)**) and the enhancements referenced in the Environmental Gain Report [**APP-176**]. Again, the Applicant is waiting for feedback from Historic England on whether these proposals are acceptable. The Applicant is seeking to agree these matters within a SoCG, which the Applicant will submit into Examination at a future deadline.

9. Landscape and Views, Including Trees and Hedgerows

9.1 AONB

Table 9.1 – AONB

Reference	Question	Applicant's Response
LV1.9.5	A number of AONB policy and management documents have been mentioned in submissions into the Examination, including: 'the AONB Management Plan' and six position statements on key issues affecting the AONB (including the '*Dedham Vale AONB Position Statement: Development in the Setting of the Dedham Vale AONB*') (ES Appendix 6.2 Annex A, Dedham Vale AONB Approach and Identification of Setting Study [**APP-099**]); the '*Dedham Vale AONB and SVPA Management Plan (2016-2021)*'; the '*Dedham Vale AONB and SVPA Management Plan (2021-2026)*'; and the 'Dedham Vale Area of Outstanding Natural Beauty': Natural Beauty and Special Qualities document' [**RR-028**]. Which of these do you believe to be important and relevant to the considerations of the ExA and SoS, and do any of them need to be submitted into the Examination as a consequence?	ES Chapter 6: Landscape and Visual [**APP-074**] has considered the following documents which the Applicant considers are important and relevant to the considerations of the ExA and SoS: • *Dedham Vale AONB and SVPA Management Plan (2021-2026*) which sets out the special characteristics and qualities of the Dedham Vale AONB and Stour Valley Project Area referring at page 12 to the Alison Farmer report below. • *Dedham Vale Area of Outstanding Natural Beauty: Natural Beauty and Special Qualities document and Perceived and Anticipated Risks*, (Alison Farmer, 2016) referred to in RR-028. Table 3.2 sets out the natural beauty factors and special qualities of the AONB, together with supporting evidence. ES Chapter 6: Landscape and Visual [**APP-074**] details the likely significant effects of the project on landscape and visual receptors and has been prepared in accordance with paragraphs 5.9.5 to 5.9.8 of EN-1 and Section 2.8 of EN-5. Landscape receptors include the nationally designated Dedham Vale AONB. The assessment presented at ES Chapter 6: Landscape and Visual [**APP-074**] and supporting document ES Appendix 6.2: Assessment of Effects on Designated Landscapes [**APP-098**] considers the natural beauty, character and special qualities of the landscape, as part of the assessment on the Dedham Vale AONB. However, for transparency purposes, and as requested in the RRs [**RR-042** and **RR-028**], the Applicant has produced an assessment of the impacts of the project on the natural beauty factors and special qualities of the AONB and how this may impact on the AONB's ability to deliver its statutory purpose to conserve and enhance natural beauty. This is presented in the Dedham Vale AONB and Special Qualities and Statutory Purpose [**REP1-032**]. The natural beauty factors and special qualities of the AONB are presented in the report entitled, Dedham Vale AONB Natural Beauty and Special Qualities and Perceived and Anticipated Risks (Alison Farmer Associates, 2016). The six natural beauty factors are landscape quality, scenic quality, relative wildness, relative tranquillity, natural heritage features, and cultural heritage. Examples of special qualities include assemblage of features, rural charms and tranquillity, traditional land use patterns and historic sites and landscapes.

Reference	Question	Applicant's Response
		The assessment of effects on the individual natural beauty factors and special qualities of the AONB undertaken by the Applicant does not change the conclusions of the ES. These are all publicly available documents like other documents that provide source material for the ES. The Applicant considers that they are important and relevant but that the documents do not specifically need to be submitted into Examination.

9.2 Visual Assessment

Table 9.2 – Visual assessment

Reference	Question	Applicant's Response
LV1.9.7	Why are the visualisations for Viewpoint D04 in winter and summer taken from a different location or orientation [**APP-064**]? A worst case appears to be illustrated in the winter view, with the proposed pylon to the right of centre sitting between the mature trees, whilst in summer the same proposed pylon is partially obscured by one of those mature trees.	There was a difference in the precise location of winter and summer photography at this location which has resulted in a slightly different angle of view. Whilst every effort is made to ensure photographs taken in different seasons are taken from the same location through the use of tripod location photography and survey data, sometimes these do not match exactly. This can be for several reasons (e.g. lack of GPS signal / new vegetation growth etc). In this case, due to the location in a working arable field, no accurate marking of the location could be undertaken in the summer visit due to it being in full crop, and then the footpath was ploughed before the winter photograph was taken. However, the Applicant considers the location is close enough to reflect the same view. This does not affect the assessment at this viewpoint location, as the flexibility means that pylons could be located anywhere longitudinally as explained in Section 6.11 of ES Chapter 6: Landscape and Visual [**APP-074**] which discusses flexibility and sensitivity testing.
LV1.9.8	What was the rationale for the selection of the location and angle of view for viewpoint F2.14 (bearing to centre of panoramic: 170°) ([**APP-064**] and [**APP-105**])? Would the impact of the difference in prominence between the line and pylons to be removed and the proposed new ones have been more effectively illustrated had the location been moved to a nearby location on the footpath where there was a clear view over the hedgerow at normal pedestrian eye level, and the bearing	The main focus for people walking along this footpath are views to the south and therefore this location is considered to be representative of these users. The inset photo on page 12 of ES Appendix 6.4: Viewpoint Assessment Section F Part 5 [**APP-105**] shows that vegetation filters views to the south-west (225°). Views of the project from locations rotated by 240° further south along this footpath would be screened by vegetation at Oatetch Grove. Views of the project from locations rotated by 240° further north along this footpath would have views filtered by vegetation within Assington and Assington Thicks. It should be noted that the assessment was not just based on the viewpoint photography and wirelines presented, but also on the views experienced during site visits by the LVIA assessors. It is considered that

	rotated to approximately 240°, from where a user of the public footpath would be viewing the lines rising with the topography to a hilltop beside the Stour valley, and from where the influence of the man-made water tower might be considered less?	rotating the view 240° would not change the outcome of the assessment which would remain small due to the filtering of views from existing vegetation and the presence of the existing pylons.
LV1.9.9	Why does visualisation G01 not illustrate the full height of the proposed pylon and line, when there appears to be ample superfluous foreground to allow the angle of the photograph to be altered to show the full height ([**APP-106**] and [**APP- 065**]). Does this under-represent the magnitude and significance of the visual impact from this viewpoint?	The Applicant does not consider that the visualisation G01 underrepresents the magnitude of the visual impact from this viewpoint. The visualisations were produced following the Landscape Institute, 2011 - Technical Guidance Note 06/19 – Visual Representation of Development Proposals [LITGN 06/19] which provides recommendations on viewpoint selection and size. A standard panoramic field of view (FoV) was set for all viewpoint photography across the project. This approach is deemed appropriate and proportionate for a large linear infrastructure project within a predominantly rural setting as recommended in the guidance. To accord with LI TGN 06/19 for Type 4 Visualisations, images and camera equipment specifications are prescribed for different applications. In relation to linear infrastructure within a rural setting, the accepted approach is to represent the viewpoints within a 90° panoramic using a levelled 50mm fixed lens Digital single-lens reflex camera setup. The prescribed image sizes (820 x 250mm reflecting a 96% enlargement of 90° Horizontal 27° Vertical FoV) are in accordance with those stated in LITGN 06/19 Section 4: Table 5 and paragraph 4.5.22. This enables the baseline image and photomontage to be presented together on a single A1 sheet. It should be noted that the assessment was not just based on the viewpoint photography and visualisation presented, but also on the views experienced during site visits by the LVIA assessors. Due to the prominence of the existing 400kV overhead line in views from this location, the project would not fundamentally change their character or composition and therefore was considered to be a medium magnitude of change.
LV1.9.10	What is the rationale for your description of effects at viewpoint AB2.13 - a reduction of pylons and a small beneficial change - in the context of what appears to be illustrated as an increase in pylons in the wirelines [**APP-101**]?	The wireline images for the viewpoint locations show all the pylons that would potentially be visible if there was no screening by intervening buildings and/or vegetation. For viewpoint AB2.13, the proposed 400kV pylons would be Further from the viewpoint that the existing 132kV pylons. Whilst there is the potential for a couple of these on the north side of Hintlesham Woods to be distantly visible, the majority would be obscured by the intervening vegetation. The effect on the view would be negligible and adverse. Whilst The Applicant appreciates that the existing 132kV pylons are not very noticeable in this photograph, the LVIA assessors consider that they were more visible in on site and therefore their removal represents a greater change in the view than is apparent from the photograph. When balancing the Beneficial effects of removing the existing 132kV pylons and adverse effects of introducing the new 400kV pylons, the overall effect would be small and beneficial Due to the closer proximity of the existing 132kV overhead line than the proposed 400kV overhead line. This was however a marginal decision.

LV1.9.11	What is the rationale for the description of effects at viewpoint AB01 (A medium beneficial change), given that the 132kV pylons to be removed are barely discernible in the baseline photography, whilst there is a much more noticeable increase IN density and numbers of the more prominent 400kV pylons in the right third of the view [**APP-101**]?	The existing 132kV pylons are not prominent in this photograph as they are seen against a backdrop of landform and vegetation. The LVIA assessors consider that they were more visible on site and from other locations along Burstall Lane and nearby PRoW. Therefore, the assessment of the change (medium beneficial) presented in ES Appendix 6.4: Viewpoint Assessment Section AB Part 1 [**APP-101**] is correct. The confusion leading to this comment is caused by an error in the wirelines. The wireline was mistakenly orientated at 225°, whereas to align with the photograph it should be at 192° i.e. in a more southerly direction. This sheet in the Viewpoint Assessment [**APP-101**] will be updated for Deadline 4. Because the wireline is orientated more to the west than the photograph, it shows all the existing and proposed pylons that would potentially be Visible including the existing and proposed 400kV pylons around Hintlesham Woods. As with all the wireline images, they assume no screening by intervening buildings and/or vegetation. To ensure that a significant adverse impact from this location has not been missed, the Applicant has reviewed this direction of view (225°) and concluded that none of the existing or proposed 400kV pylons would be visible at this location. This is due to screening by trees along the north side of Burstall Lane and by the woodland at Long Covert, Alder Carr and Hintlesham Golf Club.
LV1.9.12	A 'small' magnitude of visual change is predicted in the ES for viewpoint D02, but the existing 132kV line pylons seem barely perceptible on the baseline photograph or wireline, whereas the future wireline suggests that the proposed 400kV line pylons Would be almost as prominent as the existing 400kV line pylons, adding perhaps five prominent pylons to the four already in the centre and right of the baseline view [**APP-103**]. What was your rationale for this conclusion?	Although there would be a slight increase in the number of pylons visible, these would be further from the viewpoint than the existing overhead line and therefore would not appear as prominent as the existing 400kV pylons. The intervening vegetation shown in the viewpoint photo for D02, presented in ES Appendix 6.4 Viewpoint Assessment [**APP-103**], would filter views of several of the new pylons with potentially only two visible. Therefore, the Applicant considers that the magnitude of change would be small as recorded for Viewpoint D02.
LV1.9.13	Your analysis of the predicted change at viewpoint D06 for operational year 1 states that the, *'removal of the existing 132kV overhead line in association with the underground cables would remove the 400kV pylons from the foreground resulting in a beneficial effect ON the view*...' [**APP-103**]. What is meant by the 400kV pylons in the foreground, and how did this lead to a predicted beneficial	The assessment was not just based on the viewpoint photography and photomontage presented, but also on the views experienced during Site visits by the LVIA assessors. The existing 400kV pylons to be removed are not shown in the panoramic image on page 28 of ES Appendix 6.4: Viewpoint Assessment Section D Part a [**APP-103**] as they are slightly out of view to the south-west. Instead, they are shown in the right inset photograph on page 28. As noted in the assessment text, the visual effect of removing these pylons would be beneficial but would be outweighed by the presence of the CSE compound, which is shown in the wireline for the Project. Hence the LVIA assessors' overall judgement that the visual effect would be medium-large and adverse.

	outcome in relation to the baseline situation?	
LV1.9.14	Your analysis of the predicted change at viewpoint D07 for operational year 1 states that the, *'removal of the existing 132kV overhead line and Presence of underground cable' would remove the 400kV pylon behind the conifers…'* [**APP-10**3]. What does this mean, and was it considered to contribute beneficially to the overall assessment of visual change at the viewpoint?	There is an error in the first sentence of the Year 1 operation text for D07 in ES Appendix 6.4 Viewpoint Assessment Section D Part 3 [**APP-103**]**.** The assessment should say: *'The absence of 132kV pylons in the mid-ground would be beneficial'.* The conclusion of the assessment would be unaffected and would still be medium-large and adverse. The error has been added to the Errata List which will be submitted at a future deadline.
LV1.9.15	The predicted wireline for viewpoint F01 uses a different graphical representation for the existing pylon than that used on the baseline wireline [**APP-105**]. Confirm this represents an existing 400kV line pylon, and why there is a difference?	This was an error in the wireline for the project shown on page 21 of ES Appendix 6.4 Viewpoint Assessment Section F Part 5 [**APP-105**]. This sheet in the Viewpoint Assessment will be updated for Deadline 4. The pylon illustrated in the baseline wireline is a tension pylon as shown in the photograph. This was mistakenly illustrated as a suspension pylon for the wireline showing the project. The slight difference in the appearance of a tension pylon compared to a suspension pylon does not affect the assessment of magnitude for viewpoint F01.
LV1.9.17	Suffolk CC [PDA-007] believes there is an omission on Photomontages 34A and 34B [**APP-065**] (which display VP G07 in year 1 and year 15), in that no mitigation planting is shown in year 15 whereas ES Appendix 6.4, Viewpoint Assessment Section G Part 6 [**APP-106**], notes that year 15 would include mitigation. What is the situation with this?	Locations of planting for the Stour Valley West CSE compound are shown on Sheet 28 at ES Appendix B Vegetation Reinstatement Plan (**document 7.8.2(B)**) and planting schedules are provided at ES Appendix C Planting Schedules [**APP-185**]. Based on the average growth rates set out in Table 3.1 in Photomontages [**PDA-001**] it is assumed that the native trees would achieve heights up to 7.7m after 15 years. However, views from the south would remain open due to the location of the underground cables. The effects of this are shown in photomontage 34B at G-07 presented in ES Appendix 3 Photomontages [**APP-065**]. Embedded planting is shown to the left of the CSE compound where it is seen against existing trees which makes it hard to distinguish from the modelled vegetation. It is acknowledged in the assessment for G-07 at Year 15 that the views would remain open due to the location of the underground cables. This was balanced with the benefits of removing pylons from within the view and resulted in an adverse medium-small magnitude of change overall.
LV1.9.18	Can you explain why VP H07 from Rectory Lane on the edge of Wickham St Paul [**APP-107**] was chosen as representative of impacts on users of public rights of way in this area rather than a view from a public rights of way closer to the Proposed Development (such as Bridleway 14	The Applicant refers to Reference 7.4.2 of the Applicant's Comments on Essex County Council and Braintree District Council LIR (**document 8.5.3.2**).

	Bulmer, Footpath 16 Bulmer, Footpath 18 Bulmer, footpath 13 Wickham St Pauls or the nearby single-track lane)? (Section 7.4 of the Essex councils' LIR [**REP1-039**] refers.)	
LV1.9.20	Clarify the nature, extent and anticipated effectiveness of your proposed mitigation for the visual impacts highlighted for the view from Rectory Lane on the edge of Wickham St Paul (VP H07) during construction and at years 1 and 15. Explain how the mitigation planting that was assumed in the assessment is secured and monitored. (The Essex councils' LIR [**REP1-039**] refers to this at paragraph 7.4.4.)	As shown in the baseline photos for photomontage 36A and 36B at H-07 presented in ES Appendix 3 Photomontages [**APP-065**], existing intervening vegetation would screen views towards the GSP substation in summer months and would continue to filter views in winter. Embedded planting proposed on the western side of the GSP substation would help to further screen and integrate the GSP substation into the landscape. This would be planted post construction of the GSP substation, becoming effective by Year 15. Based on the average growth rates set out in Table 3.1 in Photomontages [**PDA-001**], it is assumed that the native trees would achieve heights up to 7.7m after 15 years. Regarding the mitigation plans, the Applicant refers to Reference 7.4.4 of the Applicant's Comments on Essex County Council and Braintree Council LIR (**document 8.5.3.2**).
LV1.9.21	Can you address the request in the Essex councils' LIR [REP1-039] at paragraph 7.5.5 to clarify the nature, extent and anticipated effectiveness of proposed mitigation for the visual impacts highlighted for the Stour Valley west cable sealing end compound, including those from VP G07 (the public right of way near Mabb's Corner) during construction and at years 1 and 15? Explain how the mitigation planting that was assumed in the assessment is secured and monitored.	The Applicant refers to Reference 7.5.5 of the Applicant's Comments on Essex County Council and Braintree Council LIR (**document 8.5.3.2**). It is acknowledged in the assessment for G-07 at Year 15 presented at ES Appendix 6.4: Part 6 [**APP-106**] that the views would remain open due to the planting restrictions over the underground cables. The adverse effects of the CSE compound when balanced against the benefits of removing pylons from within the view would result in an adverse medium-small magnitude of change overall. The planting proposals are shown on sheet 19 in ES Appendix B Vegetation Reinstatement Plan (**document 7.8.2 (B)**) and the planting schedules are included in ES Appendix C Planting Schedules [**APP-185**]. Therefore, the planting would be secured through Requirement 4 of the dDCO (**document 3.1 (C)**). Chapter 9 of the LEMP (**document 7.8 (B)**) sets out the aftercare proposals that would be undertaken to check the planting was establishing.
LV1.9.23	The Suffolk councils' LIR [**REP1-045**] at paragraph 6.110 contends that the accumulation of long-term, minor, adverse effects on landscape and visual amenity experienced by communities along the route should be considered to be significant. What is your response to this? Has the cumulation of sequential effects been ignored or underestimated in your	The Applicant 'refers to Reference 6.109 to 6.110 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**). Effects on sequential views from promoted footpaths such as the Painters Trail are presented in the relevant community area assessments at ES Appendix 6.5 Assessment of Visual Effects on Communities [**APP-108**]. The LVIA presents clear professional judgements on the likely adverse and beneficial effects of the project on each community area and acknowledges that the linear nature of the development means that several community areas would be affected, albeit that most effects are unlikely to be significant.

	assessment? If not, please signpost where the sequential assessment can be read.	The Applicant however remains of the view that the beneficial effects of removing the existing 132kV overhead line in Association with undergrounding of the proposed 400kV cables through the Dedham Vale AONB and Stour Valley would outweigh the adverse effects. It is for the decision makers to weigh up any harm against the benefits of the development in the planning balance.
LV1.9.24	The Suffolk councils' LIR [**REP1-045**] at paragraph 6.108 suggests that the visual impact on recreational receptors using the public right of way represented from VP AB21 should be considered significant. What is your response to this?	Each viewpoint records the predicted magnitude of change rather than the significance of effect, which also takes account of the sensitivity of receptors to the project. This is because viewpoints typically represent several different receptor groups with different sensitivities. One of the purposes of the representative viewpoints is to inform wider judgments on the visual effects of the project presented at ES Appendix 6.5: Assessment of Visual Effects on Communities [**APP-108**]**.** With regards to viewpoint AB-21, the Applicant refers to Reference 6.108 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**).
LV1.9.25	What is your response to the uncertainty identified in the Suffolk councils' LIR [**REP1-045**] (paragraphs 6.144 to 6.145) about the nature of the landscape planting mitigation proposals for the Stour Valley West cable sealing end compound?	The Applicant refers to Reference 6.144 to 6.145 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**).
LV1.9.26	The Suffolk councils' LIR [**REP1-045**] at paragraphs 6.161 to 6.164 raises concerns about your reliance on natural regeneration to achieve visual mitigation from some of the larger areas, both in terms of establishment and aftercare. Can you provide additional information and comfort that this would be effective in visual terms?	The Applicant refers to Reference 6.161 to 6.164 of the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**).
LV1.9.27	Can you signpost any landscape and visual assessment undertaken for the temporary bridges that are proposed to cross the River Stour, River Brett and River Box, as referred to in various documents such as the CEMP [**APP-177**] at paragraph 9.3.28? Clarify the dimensions of each of the proposed river bridges and the likely construction	Any reference to temporary access tracks in the assessment of construction effects presented at ES Appendix 6.3 Assessment of Effects on Landscape Character [**APP-100**] includes associated infrastructure including temporary bridges. Temporary bridges were not specifically listed as a construction element in each assessment as listing out all aspects of the construction process, the full nature of which would not be known at the time of the assessment (some aspects such as bridges are subject to detailed design), would be unwieldy. As stated in paragraph 4.4.40-41 in ES Chapter 4: Project Description [**APP-072**] temporary clear span bridges would be used and the main works contractor would be responsible for producing a detailed design for each

	materials, explain how long each would be in place, and provide a landscape and visual assessment for each, if one is not already available, taking into account the sensitivity and susceptibility of the landscape and views in each case.	crossing. The ES assumed that these would be a steel bailey type design as shown in Design and Layout Plans Temporary Bridge for Access [**APP-031**]. The exact span of the bridges is not known at this stage. It has been assumed that the bridges will be in place for the duration of construction works (assumed 4 years).

9.3 General LVIA Matters

Table 9.3 – General LVIA matters

Reference	Question	Applicant's Response
LV1.9.29	The assessment is said to be based on GLVIA3 (ES Chapter 6 paragraph 6.4.11 [**APP-074**].) The Landscape Institute produced a consultation version of Draft Technical Guidance Note 05/23, *Notes and Clarifications on aspects of the 3rd Edition Guidelines on Landscape and Visual Impact Assessment (GLVIA3),* in July 2023. Noting this remains as a draft, do any of the contents have any relevance to, or change the outcome of the LVIA set out in the ES?	The application for development consent was submitted in April 2023 and therefore did not consider this draft technical note at time of writing. One of the Bramford to Twinstead LVIA assessors was on the GLVIA Advisory Panel responsible for drawing up and consulting on the clarifications prior to their finalisation for publication. The LVIA team was therefore familiar with most of the issues raised in the draft technical note, while undertaking the LVIA on the project. Having reviewed the draft technical note, the Applicant considers that there would be no change to the outcome of the LVIA presented within ES Chapter 6: Landscape and Visual [**APP-074**] and its appendices.
LV1.9.30	Could you check consistency between the 'value', 'susceptibility' and 'sensitivity' ratings in ES Appendix 6.5 [**APP-108**], Assessment of Visual Effects on Communities, and ES Appendix 6.4 [**APP-101**] to [**APP-107**], the Viewpoint Assessments and clarify the situation as necessary for all visual receptors. (Apparent inconsistences in the assessments include (*inter alia*): viewpoint D-04 (Shelley), (high susceptibility, high value, high sensitivity -v- high susceptibility, medium value, sensitivity not	The assessments presented in ES Appendix 6.5: Assessment of Visual Effects on Communities [**APP-108**], consider the way that a community currently experiences views from public locations such as streets and open spaces and how those may change. Judgements on the value, susceptibility and sensitivity of the community area were based on the professional expertise and experience of the LVIA assessor. Whilst the viewpoint assessments informed these judgements, conclusions for the individual viewpoints may be different (and in some cases may be higher or lower) as they assessed the magnitude of change of the project on very specific view rather than a more generalised geographic area. Consequently, there are no implications for the results and conclusions of the visual assessments.

Reference	Question	Applicant's Response
	stated); viewpoint F-20 (Boxford), (high susceptibility, high value, high sensitivity -v- medium susceptibility, medium value, sensitivity not stated); viewpoint F-22 (Assington), (high susceptibility, high value, high sensitivity -v- medium susceptibility, medium value, sensitivity not stated); F-23 (Newton), (high susceptibility, high value, high sensitivity -v- medium susceptibility, medium value, sensitivity not stated). Are there any implications for the results and conclusions of the visual assessments as a consequence of that check?	
LV1.9.31	Noting the statement in paragraph 6.4.26 of the ES [**APP-074**] that, *'All assessment work has applied a precautionary principle, in that where limited information is available... a realistic worst-case scenario is assessed*', can you provide clarification in relation to the comparative Zone of Theoretical Visibility map in the ES figures ([**APP-146**], figure 6.7). Confirm that the ZTV for the new infrastructure, including all pylons, cable sealing ends and substation structures, is that shown in the pink and blue colours on the map. Explain the legend text that states, *'AOD pylon height of 2.5 meters (sic) below top height of an indicative design. This provides an indication of places from which the very tops of the structures may theoretically be visible*.' Firstly, does this mean that a height 2.5m lower than the indicative design has been used to generate the ZTV? Secondly, are the 4m LoD sought in the dDCO (Article 5(1)(b)(i)) taken into account? As such, is it the case	The comparative Zones of Theoretical Visibility (ZTVs) was produced to inform understanding of the differences in the existing 132kV overhead line and the proposed 400kV overhead line. Therefore, only pylons were used in the creation of th comparative ZTV. Additional ZTV were produced for pylons within each section of the project and the individual CSE compounds and GSP substation, presented on Figures 6.8-6.12 in the ES Figures [**APP-146**], to better understand the theoretical visibility of those elements only. The ZTV is created in Geographic Information System (GIS). Including the uppermost part of a pylon where the steelwork lattice is much reduced would exaggerate the extent of the theoretical visibility. This is because GIS records every part of th pylon whereas when seen at a distance, the top of the pylon (above the top cross arm) is highly unlikely to result in a significant effect. To focus the assessment, a height 2.5m below the top height of the pylon was therefore used. The ZTV are based on the pylon schedules presented on page 34 of the Work Plans [**APP-010**] which includes for heights proposed pylons and gantries at CSE compounds and the GSP substation. The ZTV were primarily used to inform the exte of study area and location of viewpoints and to illustrate the theoretical visibility. The assessment presented in ES Chapter Landscape and Visual [**APP-074**] is not based on the ZTV but on judgements made by the LVIA assessment team considered during site visits to viewpoint locations. As described in Section 11 of ES Chapter 6: Landscape and Visual [**APP-074**], the flexibility of the 4m vertical LoD has bee considered in the assessment, and that there would be no difference in the judgements made for individual receptors. An additional 4m is unlikely to increase the level of effect of a pylon more than 50m in height. The maximum heights stated in the LoD were not used for the ZTV. The requirement to increase the height of a pylon woul be localised and would not be used throughout. Using this additional height for pylons would have exaggerated the ZTV. A reduction in height was not considered in the LVIA. As stated in Table 4.1 of ES Chapter 4: Project Description [**APP-072** the vertical Limit of Deviation downwards could be *'any extent downwards as is considered necessary or convenient'*. The ZTV were primarily used to identity study areas and viewpoint locations and therefore used the heights presented in the

Reference	Question	Applicant's Response
	that the ZTV may be based on a pylon height that is 6.5m shorter than that which could be built? Or on a pylon height that is 4m shorter than that which could be built?	Work Plans [**APP-010**] are more appropriate to illustrate. It is unlikely a pylon would reduce in height by 4m as minimum clearances would still need to be achieved.
LV1.9.32	How has the screening effect of vegetation been taken into account in generating the ZTV? Can you clarify the apparent contradiction between the legend of figure 6.7 [**APP-146**] (*'woodland factored in'*) with paragraph 6.4.6 of the LVIA chapter [**APP-074**] (*'does not take into consideration screening effects of existing vegetation*')?	To create a more accurate ZTV and due to the wooded nature of the landscape within the study area, the woodland include on the National Woodland Inventory as shown on Figure 6.3 [**APP-146**] was used in production of the ZTV. A height of 15m to represent blocks of woodland was applied to the woodland layer. A comparative ZTV was produced initially without woodland but was subsequently updated to include woodland as described on Figure 6.7 [**APP-146**]. Therefore, the reference in ES Chapter 6: Landscape and Visual [**APP-074**] is an error the sentence *'does not take into consideration screening effects of existing vegetation*' should be deleted. This error has been added to the project's errata list to be submitted at a future deadline. However, it is also worth noting that there is mor vegetation present in the area than has been assumed in the vegetation layers used for the ZTV e.g. hedgerows were not assumed in the ZTV. This discrepancy does not change the justification for the study area as described in paragraph 6.4.6 of ES Chapter 6 [**APP 074**] for which the ZTV were initially used.
LV1.9.33	Can clarification be provided in relation to the more detailed ZTV maps? In ES figures 6.8 to 6.13 inclusive [**APP-147**], what is the basis for determining the visibility of proposed pylons and other structures in relation to their height and the LoD that the dDCO seeks? Is the worst-case scenario used and shown? No ZTV is provided for pylon works in Project Section H. Is this because the works in this section are considered unlikely to lead to material changes in visibility?	Please refer to the answer for LV1.9.31 for clarification on the ZTV, LoD and worst-case scenario. Section H primarily relates to the GSP substation for which a ZTV is provided on Figure 6.12 in ES Figures Part 2 [**APP-147**]. This ZTV was created using the top height of the proposed gantries within the GSP substation presented on page 34 the Work Plans [**APP-010**]. It is correct that there are some minor works to the existing overhead line at this location including the removal of 4YLA081 and replacement with 4YLA081A, but the Applicant considers that these works do not increase the visibility of the existing 400kV overhead line and were therefore not included in the ZTV so as to focus on the GSP substation itself.
LV1.9.34	The Vegetation Retention and Removal Plan [**APP-183**] indicates trees and hedgerows to be retained, pruned, coppiced and removed. Does this categorisation assume that the proposed alignment is followed, and is it therefore just indicative? How is flexibility in the	The purpose of the plan in LEMP Appendix A: Vegetation Retention and Removal Plan [**APP-183**], is to set out the assume vegetation losses for the main works contractor to use for detailed design and construction and not for assessment purposes. The plan is therefore based on the Proposed Alignment, as shown on the General Arrangement Plan [**APP-018**] The proposed vegetation loss and soil stripping could change subject to detailed design. However, if the Final Alignment requires changes to the LEMP (**document 7.8(B)**) and its Appendices, these would be addressed through the change process documented in Section 10.5 of the LEMP and through Requirement 8 and 9 of the dDCO (**document 3.1 (C)**).

Reference	Question	Applicant's Response
	location of the Proposed Development within the Order Limits allowed for on the Plan and in the assessment?	The assessment based on the flexibility provided by the LoD is set out in Section 11 of ES Chapter 6: Landscape and Visua [**APP-074**]. As stated in paragraph 6.11.6 there are no aspects of flexibility in the reasonable worst case that would increas the level of magnitude of any of the effects. The assessment has considered pylon locations anywhere within the LoD and an additional 4m is unlikely to increase the level of effect of a pylon more than 54m in height. The value and susceptibility are constant and would not therefore change. As such, the significance of residual effects would be no different from those outlined in Sections 6.6 to 6.10.
LV1.9.35	Why is soil stripping considered essential at locations where temporary haul routes cross sensitive areas? For example, sheet 6 of the Vegetation Retention and Removal Plan [**APP-183**] shows the removal of an area of potential ancient woodland along the footpath (PoAWS5) along a haul route under the indicative route of the new line. Sheet 9 shows a similar impact on EM-AB03 Valley Farm Meadows County Wildlife Site. Why is it necessary for these temporary works to include root removal rather than a temporary clearance by coppicing to ground level with root protection as part of a temporary trackway?	In the absence of a main works contractor, detailed ground conditions and detailed methodology being available for each location, the ES has assumed a reasonable worst case. As stated in paragraph 4.5.5 of ES Chapter 4: Project Description [**APP-072**], this assumes that a stone access route would be installed to access each pylon location due to an assumption that a crane and piling rig could be required to install the pylons. The detailed design may mean that a lower form of access route intervention, such as trackway, could be used but this has not been assumed as part of the reasonable worst case assessed. Where a stone access route is required, this would involve soil stripping which would be undertaken in accordance with the good practice measures outlined within Chapter 11 of the CEMP (**document 7.5 (B)**). In relation to the specific areas listed in the question, additional commitments have been made to limit the effect on these sites: • PoAWS5, EM-AB05 in the REAC (**document 7.5.2 (B)**) states: The tree belt to the north of Hintlesham Woods (PoAWS5) would be retained other than at a 5m gap where the proposed temporary access route will cross the tree be Soil from the PoAWS5 would be stored separate to general soil storage so that it can be replaced at PoAWS5, where soil is suitable for reuse (for example, not contaminated). • Valley Farm Meadows Country Wildlife Site, EM-AB03 in the REAC (**document 7.5.2 (B)**) states: No new pylon would be located within Valley Farm Meadows County Wildlife Site (CWS) (Babergh 61). Soil stripping within the CWS would be confined to the construction of the temporary access route. All vehicle access, including the temporary access route through Valley Farm Meadows CWS would avoid the Priority Habitat w1d - Wet woodland (polygon ID H_A_944) and f2 - Fen marsh and swamp (Polygon ID H_A_809) located near the southern edge of the Order Limits.
LV1.9.36	There appear to be a considerable number of instances where the Vegetation Retention and Removal Plan [**APP-183**] and the Vegetation Reinstatement Plan [**APP-184**] do not correspond in relation to retained features. As just one example (on sheet 13 in both cases), a tree shown as lost (including roots) from H-E-04 on the removal plan re-appears as an existing	LEMP Appendix B: Vegetation Reinstatement Plan (**document 7.8.2 (B)**) has been updated at Deadline 3 to address the inconsistencies with regards to retained and reinstated features.

Reference	Question	Applicant's Response
	feature on the reinstatement plan. Can each of the plan sheets be checked and an explanation provided, including any implications for the assessment?	
LV1.9.37	The key for the Vegetation Reinstatement Plan [**APP-184**] includes a pink line for 'H1 hedgerow mix planting' and a green line for 'H1 hedgerow planting'. What is the difference, and how do these two categories relate to the H1 planting described in the Planting Schedule [**APP-185**]?	The pink line on LEMP Appendix B: Vegetation Reinstatement Plan (**document 7.8. 2(B)**) for H1 refers to reinstated hedgerows where they are shown as removed on LEMP Appendix A: Vegetation Retention and Removal Plan [**APP-183**], the green line for H1 refers to new hedgerow planting. LEMP Appendix B: Vegetation Reinstatement Plan (**document 7.8.2 (B)**) has been updated at Deadline 3 to provide clarity with regards to this matter.
LV1.9.38	Can you clarify if the commitment to replace individual trees that are lost to the Proposed Development at a similar location or nearby is illustrated as 'T1 Individual Tree Planting' in the Planting Schedule [**APP-185**]? The Vegetation Reinstatement Plan [**APP-184**] includes this measure as a purple triangle on the key, but there are no immediately apparent uses of it on the plans themselves. Can this be explained?	The purple triangles shown on LEMP Appendix B: Vegetation Reinstatement Plan (**document 7.8.2 (B)**) represent the commitment to replace specific trees that would be lost as a result of the project. As noted in response to LV1.9.36, this document has been updated at Deadline 3 to address the inconsistencies with regards to retained and reinstated features.
LV1.9.39	Can you clarify how the final planting mix would be determined in each case of reinstatement, and how it would relate to those set out in the Planting Schedule [**APP-185**]?	The LEMP Appendix B: Vegetation Reinstatement Plan (**document 7.8.2 (B)**) details the location of proposed embedded planting, reinstatement planting, landscape softening, habitat compensation and additional planting required to mitigate an environmental effect. This plan cross refers to the specification for the planting in LEMP Appendix C: Planting Schedules [**APP-185**], which sets out the proposed planting and seed mixes. Appendix C This may be updated during detailed design and/or following the results of any pre-Construction surveys. However, Requirement 9 of the dDCO (**document 3.1 (C)**) prevents any stage of the authorised development from being brought into operational use until a reinstatement planting plan for trees, groups of trees, woodlands and hedgerows to be reinstated during that stage has been submitted to and approved by the 'relevant planning authority'. The reinstatement planting plan must be in general accordance with the LEMP (**document 7.8 (B)**), compliance with which is secured under Requirement 4 of the dDCO.

Reference	Question	Applicant's Response
LV1.9.40	In the Planting Schedule [**APP-185**], do you consider the inclusion of *Alnus glutinosa* (alder) in the H2 species-rich hedgerow mix with trees appropriate? Is alder die-back prevalent in the area, and - if so - should the planting of new alder trees be restricted?	Although Phytophthora alni (or Phytophthora disease of alder) is present in the UK this is not currently a reportable disease Current guidance from Forestry Research (the principal organisation for forestry and tree related research) states that measures such as elevating nursery stock prior to purchase and good biosecurity practices should be used, but currently there are no restrictions on the growing or selling of Alnus from UK nurseries.

9.4 Hedgerows and Trees

Table 9.4 – Hedgerows and trees

Reference	Question	Applicant's Response
LV1.9.41	The impact assessment for hedgerows and trees (Arboricultural Impact Assessment [**APP-067**] paragraph 1.1.2 and section 2.3) is said to be based on the proposed alignment as set out on the General Arrangement Plans [**APP-018**]. As such, it does not seem to have allowed for the different vegetation removal impacts that would arise where the LoD were used. Can you explain how much reliance can be placed on the conclusions, and how this approach fulfils the requirements of the EIA Regulations in relation to impacts on trees and hedgerows?	The Arboricultural Impact Assessment [**APP-067**] has been produced to support the application for development consent under the Planning Act 2008 and does not form part of the ES. It is therefore not required to fulfil the requirements of the EIA Regulations 2017. As stated in paragraph 1.1.2 of the Arboricultural Impact Assessment [**APP-067**], it assesses the trees that could be affected by the project as shown on the Trees and Hedgerows to be Removed or Managed Plans [**APP-017**], based on the Proposed Alignment shown on the General Arrangement Plans [**APP-018**]. Paragraph 1.1.2 of the Arboricultural Impact Assessment [**APP-067**] notes that the application of the LoD may result in changes to the trees affected or the impacts that may occur as a result. As stated in paragraph 5.4.4 of ES Chapter 5: EIA Approach and Method [**APP-073**], Section 11 of each ES topic chapter covers sensitivity testing that has been undertaken to identify if there would be any new or different significant effects that may occur through the Application of flexibility that is allowed for within the dDCO (**document 3.1 (C)**) compared to the assessment undertaken in the previous sections. Hedgerows and trees are considered in ES Chapter 6: Landscape and Visual [**APP-075**] (as an important part of the landscape character and for the screening they provide. They are also considered in ES Chapter 7: Biodiversity [**APP-076**] in terms of their habitat value. Both of these chapters conclude (in section 11 of the respective chapter) that there would be no new or different likely significant effects to those identified in the baseline scenario assessed in Sections 6 to 10 of the respective chapter when taking into account the flexibility provided by the LoD. Therefore, the Applicant can confirm that the approach taken is compliant with the requirements set out in the EIA Regulations 2017.

Reference	Question	Applicant's Response
LV1.9.42	At paragraph 2.3.2, 'he Arboricultural Impact Assessment [**APP-067**] assumes that, *'trees on the periphery of the Orde' Limits would be retained and protected during construction*.' Were the tree and hedgerow, landscape and visual assessments carried out on this basis? If so, how is this assurance that these peripheral trees would be retained and protected secured in the dDCO?	The Applicant refers the Examining Authority to the response to LV1.9.41, which states that the Arboricultural Impact Assessment [**APP-067**] does not form part of the ES and that the EIA takes account of the flexibility afforded by the LoD. As paragraph 3.9 of the Explanatory Memorandum (**document 3.2(B)**) makes clear, the LoD sought in respect of the project are intended to provide the Applicant with a necessary and proportionate degree of flexibility, thereby reducing the risk that the project as approved cannot later be implemented. The Applicant also refers to Action Item AP4 in the Applicant's Response to Issue Specific Hearing 1 Action Points [**REP1-034**]). Here the Applicant explains that it is necessary for the horizontal LoD for the proposed pylons and overhead conductors to take account of maximum conductor swing during high wind conditions. This is shown on the figure in Appendix A: Overhead Line LoD Principles Drawing. This demonstrates that trees at edge of the Order Limits in the overhead line sections are unlikely to be removed but may require pruning to provide the required safety clearances. LV01 in the CEMP Appendix A: CoCP (**document 7.5.1 (B)**) states that the contractor(s) would retain vegetation where practicable. LEMP Appendix A: Vegetation Retention and Removal Plan [**APP-184**] also shows that the Applicant is intending to retain peripheral trees at the edge of the Order Limits. The CEMP Appendix a: CoCP and LEMP are secured through Requirement 4 of the dDCO (**document 3.1 (C)**).
LV1.9.43	The Arboricultural Impact Assessment [REP1-011] is numbered as document 5.10 and does not form part of the submitted ES or the certified documents in Schedule 17 of the dDCO (**document 3.1 (B)**). Your comments on RRs [REP1-025] (page 129) notes that it includes information that would be relied on for construction planning and to design mitigation measures to reduce impacts on important receptors, for example root protection areas for veteran trees. Is this the only application document to identify the detailed baseline information that underlies the assessment and loss of important receptors such as veteran trees (e.g., T378) and associated design and mitigation measures? If not, please signpost where the same information can be found in the ES.	ES Figure 7.4.1 [**APP-149**] shows the veteran trees that have been identified on the project. These are described in Section 5 of ES Appendix 7.4: Ancient Woodland and Potential Ancient Woodland Report [**APP-114**]. Therefore, the Applicant can confirm that the baseline information regarding veteran trees is already included within the ES and this was used to support the assessment presented in ES Chapter 7: Biodiversity [**APP-075**].The Applicant notes that all baseline information used to support the ES and its assessment of likely significant effects is included within the ES, either within the topic chapter or its supporting appendices and figures. As noted in the Arboricultural Impact Assessment [**REP1-012**] this contains the tree survey information to inform the detailed design and construction. This information has been used to provide the baseline survey information for LEMP Appendices A and B (**APP-183** and **document 7.8(B)** respectively). Based on the above, the Applicant considers all information supporting the ES is contained within Volumes 6.1 to 6.4 of the application, and the AIA should not form part of the certified ES.

Reference	Question	Applicant's Response
	Furthermore, Table 2.1 of the LEMP [**APP-182**], which lists the baseline surveys on which the LEMP is based, includes the Arboricultural Impact Assessment [REP1-011]. Given all above, can you explain why it should not form part of the certified ES?	
LV1.9.44	The Trees and Hedgerows to be Removed Plans [**APP-017**] use two shades of green to distinguish between those hedgerows considered to be 'important' and those considered to be 'not important' (in terms of the Hedgerow Regulations 1997). However, the impacts of the Proposed Development such as coppicing, pruning and complete removal are laid over this base using other colours. The ExA is having difficulty interpreting the underlying colour and therefore the value of the receptor. In addition, a red line is used to indicate removal of a hedgerow. This could cause confusion with the demarcation of the Order Limits. Can these plans be redrawn more clearly and resubmitted?	The purpose of the Trees and Hedgerows to be Removed Plans [**APP-017**] is to show the scale of the vegetation that would be lost as a result of the project rather than the value of the receptor, which is assessed in the ES. The hedgerow importance is shown on ES Figure 7.5.1 [**APP-150**] as part of the hedgerow assessment. The Applicant considers that introducing more colours or lines to distinguish value on the figure would detract from its purpose, which is to reflect scale. In terms of the red line used to represent hedgerow removal. The Applicant chose this colour as part of the sliding scale of colours (red, orange, yellow) to visually represent the level of intervention required. The red line used to represent hedgerow loss is much heavier than the red line used to represent the Order Limits and therefore the Applicant does not consider this to be confusing.
LV1.9.45	Paragraph 4.4.48 of Chapter 4 of the ES [**APP-072**] notes an intention to replant hedgerow gaps created during construction and that, *'other areas would be replanted along with reinforcement planting along the surrounding hedgerow where appropriate*.' Is this the reinforcement planting referred to in the LEMP [**APP-182**] at paragraph 8.5.1, 'reinforcement of hedgerow at MM06 and	Paragraph 4.4.48 of Chapter 4 of the ES [**APP-072**] notes an intention to replant hedgerow gaps created during construction and that, *'other areas would be replanted along with reinforcement planting along the surrounding hedgerow where appropriate*.' Is this the reinforcement planting referred to in the LEMP [**APP-182**]'at paragraph 8.5.1, 'reinforcement of hedgerow at MM06 and MM15'? If not, where is this reinforcement intended, and how is it secured? 'The locations of hedgerow reinforcement are shown on LEMP Appendix B: Vegetation Reinstatement Plans (**document 7.8.2(B)**) as a dark green line with green hatch.

Reference	Question	Applicant's Response
	MM15'? If not, where is this reinforcement intended, and how is it secured?	
LV1.9.46	The RR from Alan Hall [**RR-033**] suggests that the proposed entrance at an existing farm track adjacent to Rose Cottage in Burstall causes '*needless… destruction of hedges and trees, including two very mature oak trees.*' Can you signpost where this specific matter is considered in the ES and explain why you were unable to propose a less damaging option?	The Applicant notes that the RRs from Alan Hall is RR-083. The Applicant understands that the 'proposed entrance' is temporary access point AB-AP5. The Applicant has included a bellmouth at this location as it is an existing site entrance (with an existing gap in the hedgerow) that is used by the landowner to access the agricultural fields. The Applicant understands that the trees that Alan Hall references, are the mature trees to the south of the proposed access point. Sheet 2 of LEMP Appendix A: Vegetation Retention and Removal Plans [**APP-183**] shows the vegetation immediately adjacent to the access point (up to 10m either side) may need to be removed to allow access by the construction vehicles. The vegetation for up to 40m either side of the access point is also shown on the same plan as potentially being cut back or coppiced to provide sight lines for vehicles exiting onto the LRNs at this access point. 40m is considered to be a worst case for assessment purposes. The risk assessment that would determine the length of sight lines at a specific location (based on factors such as road speed and vehicle types and numbers) will conclude what vegetation would need to be removed or cut back. In addition, the vegetation cut back would be that obstructing the sight lines. The ES assesses vegetation loss as a whole (cumulatively on the project). Temporary loss of vegetation due to the temporary works is assessed in ES Chapter 7: Biodiversity [**APP-075**]. In particular, in paragraphs 7.6.57 to 7.6.61 and Table 7.9, which concludes that once planting has matured, the impact of the combination of works on hedgerows would result in a short term minor adverse effect, reducing to a neutral effect once the hedgerow vegetation had established, which would be not significant.
LV1.9.47	Can you explain the difference in hedgerow loss between paragraph 5.3.1 of the Environmental Net Gain Report [**APP-176**] (72m) and Table 7.9 of ES Chapter 7 Biodiversity [**APP-075**] (42m)?	The hedgerow loss reported Table 7.9 of ES Chapter 7: Biodiversity [**APP-075**] is for the main project, whereas the additional 30m of hedgerow lost at the GSP substation section is discussed in paragraph 7.6.171 of ES Chapter 7: Biodiversity [**APP-075**]. Paragraph 5.3.1 of the Environmental Gain Report [**APP-176**] considers the two combined, hence the difference.
LV1.9.48	In Table 7.7 of ES Chapter 7, Biodiversity [**APP-075**], can you further justify why Important Hedgerows have been given the same 'medium' value as other hedgerows (in terms of the Hedgerows Regulations).	The 'medium value' in Table 7.7 of ES Chapter 7: Biodiversity [**APP-075**], is the value given to the collective hedgerow resource within the Order Limits. This includes all hedgerows including those classified as Habitats of Principal Importance, Important hedgerows and other hedgerows.
LV1.9.49	Good practice measure GG07 in the CEMP Appendix A: CoCP [**APP-178**] refers to hedgerows being reinstated to a	GG07 in the CEMP Appendix A: CoCP (**document 7.5.1(B)**) refers to the action required to reduce the likely significant effects. In this regard, the reinstatement of hedgerows to a similar style and quality to those removed is considered suitable to meet ES requirements in any given location. The reinstatement planting is set out in

Reference	Question	Applicant's Response
	similar style and quality to those that were removed, in consultation with the landowner. Paragraph 3.2.6 of the Environmental Net Gain Report [**APP-17**6] states that the objectives of new or restored habitats should always aim for a higher habitat distinctiveness or condition than those lost. Can you explain the reason for the two different condition restoration objectives for hedgerows?	LEMP Appendix B (**document 7.8.2(B)**), which shows all of the planting that has been considered when undertaking the assessment on hedgerows presented in ES Chapter 7: Biodiversity [**APP-075**], including the embedded planting, reinstatement planting and additional mitigation. For clarity, the Applicant has separated net gain into the separate Environmental Gain Report [**APP-176**] to clearly define what is additional to the requirements of the EIA process. In order to achieve 10% net gain, enhancement measures such as the reinstatement of hedgerows to increased condition has been identified as a way of achieving more biodiversity units and this is why there are different condition restoration objectives referenced between these two documents.

10. Land Use and Soil

10.1 Agriculture and Other Land Use

Table 10.1 – Agriculture and other land use

Reference	Question	Applicant's Response
LU1.10.1	Have agricultural business activities currently operating beneath the 132kV overhead line to be removed been identified? (Paragraph 11.3.7 in the ES Chapter 11, Agriculture and Soils [**APP-079**].)	The Applicant has not specifically identified individual agricultural Businesses that operate beneath the proposed removal of the 132kV overhead line other than through those listed within the BoR [**REP1-005**]. The Applicant has sought access rights from the landowners in draft Heads of Terms that have been offered to Persons with an Interest in Land (PILs). The impact of the works required in removal would be limited, covered by compensation payable to the businesses affected. The impact of the removal of the line on agricultural or other business that are currently affected by UKPN apparatus is likely to be positive on both businesses and the landscape.
LU1.10.2	Please provide a table with the following data for each agricultural holding affected by the Proposed Development: • holding name; • description of holding and land use; • land parcel/ plot; • Proposed Development infrastructure; • ALC grades in hectares (ha), Other (ha), Urban (ha); • total temporarily affected (ha); • total permanently affected (ha).	Information relating to the first four bullet points is presented in the BoR [**REP1-005**]. The agricultural land classification (ALC) grades for land within the Order Limits are shown on ES Figure 11.2 [**APP-153**]. The ALC assessment presented in ES Chapter 11: Agriculture and Soil [**APP-079**] is based on the overall impact of all aspects of the project within the Order Limits on best and most versatile (BMV) land. This concludes that there would be temporary effects on BMV land during construction due to soil stripping, but that there would be no significant effects on BMV land during operation as the majority of land would be restored to its pre-construction use. The extent of land required permanently is limited and does not result in a significant effect. As no significant effect of the project on BMV land has been identified, there would not be a significant effect on any specific land parcel. Therefore, the Applicant does not consider that a table showing the breakdown of ALC grades and areas affected by landholding is necessary or proportionate to support an application for development consent for a linear project of this nature.
LU1.10.3	NPS EN-1 (paragraph 5.1.080) states Applicants should seek to minimise impacts on the best and most versatile agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land	As stated in paragraph 11.4.7 of ES Chapter 11: Agriculture and Soils [**APP-079**], where soil surveys could not be completed the assessment has assumed a reasonable worst case, i.e. that BMV land is present within the Order Limits. As such the assessment has assumed that any land Provisionally classified as Grade 3 would comprise BMV land.

Reference	Question	Applicant's Response
	Classification) and preferably use land in areas of poorer quality (grades 3b, 4 and 5). Please describe how it was possible to address this policy requirement when grade 3a and 3b land was grouped together for most of the Proposed Development.	As evidenced in ES Appendix 11.1: Agricultural Land Classification Survey [**APP-133**], the soil surveys so far have confirmed that the majority of land surveyed within the Order Limits is ALC Grade 3a or above, with only small parcels of Grade 3b identified so far.
LU1.10.4	Claims regarding compensation, including in relation to agri-environment and stewardship payments, would be addressed outside of the Examination process. Can you outline the claims process and confirm the data required to undertake the assessment? (Paragraph 11.6.13 in ES Chapter 11, Agriculture and Soils [**APP-079**] refers.)	The Applicant's claims process is as follows: • The Applicant's Agents are instructed to deal with claims arising from the project; • The claims process requires the PIL or their appointed agent to submit a claim with supporting evidence including any actions undertaken to mitigate the claim if appropriate; • The Applicant will assess the claim using the Applicant's internal approval process; and • When this process is concluded the matter would be referred for payment from the Applicant's client account held by their appointed representative in this matter. There are no special data or proofs required. For example, in a claim for lost environmental payments copies of correspondence (including the payment rate and area affected) together with evidence of any derogations sought and a signed claim form would be sufficient.
LU1.10.5	How would link pillars and marker posts be positioned in a manner to limit the effect on LAND use and agriculture and how is this approach secured in the dDCO? (See ES Chapter 4, Project Description [**APP-072**].)	Marker posts and link pillars are detailed in paragraph 4.7.2 of ES Chapter 4: Project Description [**APP-072**]. There will be a link pillar for each joint bay. These would be located at or near field boundaries where practicable. In addition, marker posts would be required for example where cables run across or along the railway, across agricultural land, change direction and at joint positions. Whilst the Applicant would endeavour to satisfy as much as possible stakeholder's expectations, the exact location of the link pillars/ marker posts needs to be based on technical requirements during detailed design and therefore I locations cannot be secured as part of the dDCO (**document 3.1 (C)**). However, the components are small and are not considered to limit the use of land substantially.
LU1.10.6	Further to paragraph 11.6.6 of ES Chapter 11, Agriculture and Soils [**APP-079**], would there be long term impact on soil volume or function associated with land removed from agricultural use at the cable sealing end compounds?	Paragraph 11.8.2 of ES Chapter 11: Agriculture and Soils [**APP-079**] states that the effective reuse of the soils from the footprint of permanent infrastructure elements associated with the CSE compounds would enable the re-used soils to continue to provide functions in their new locations, for example in supporting landscape planting or biodiversity. Whilst the land would be removed from agricultural production, soil functions would not be adversely impacted as this land use change has the potential to enhance further soil functions such as carbon storage and

Reference	Question	Applicant's Response
		biodiversity. As such, it is considered that there would be no long-term effect on soil volume or function associated with these areas.
LU1.10.7	Referring to paragraph 11.3.5 of ES Chapter 11, Agriculture and Soils [**APP-079**], how were fragmentation and economic effects on farm holdings assessed?	Paragraph 11.6.13 of ES Chapter 11: Agriculture and Soils [**APP-079**] states that any claims regarding compensation, including in relation to agri-environment and stewardship payments, would be addressed outside of the EIA process. Paragraph 11.3.5 of ES Chapter 11: Agriculture and Soils [**APP-079**] says that economic effects on landowners due to fragmentation of land holdings during construction are noted in the assessment and any that arise would be addressed through landowner discussions and through the compensation payments. The Applicant has made it clear in its offer of Heads of Terms to landowners that it will work to limit severance during construction. This is reinforced by measures such as AS03 in the CEMP Appendix A: CoCP (**document 7.5.1(B)**). There would be no impacts on severance or fragmentation of farm holdings during operation, as land-based activities would freely traverse underneath overhead lines or over the top of underground cables.
LU1.10.8	Paragraph 11.4.2 in ES Chapter 11, Agriculture and Soils [**APP-079**] refers to key information gathered from discussions with landowners and land managers. Has or will this key information be submitted into the Examination?	As stated in paragraph 11.4.2 of ES Chapter 11: Agriculture and Soils [**APP-079**], baseline information was gathered from discussions with landowners and land managers. This was undertaken through the land discussions and has resulted in the Applicant receiving information such as field drainage plans. The Applicant does not consider that this information should be submitted into Examination as it does not change the assessment or conclusions presented in ES Chapter 11: Agriculture and Soils [**APP-079**].
LU1.10.9	Paragraph 10.11.18 of ES Chapter 10, Geology and Hydrogeology [**APP-078**] refers to land at Layham Quarry within and adjoining the Order Limits having been worked upon and that there would be no future work here. Can you signpost evidence of this?	There is no paragraph 10.11.18 in ES Chapter 10, Geology and Hydrogeology [**APP-078**], therefore the Applicant assumes that this is in relation paragraph 10.11.8. In paragraphs 10.6.3 and 10.6.4 it says that Layham Quarry is currently crossed by both the existing 132kV overhead line and the existing 400kV overhead line where mineral extraction is understood to have been undertaken beneath the existing overhead lines. The quarry is currently dormant and has not been operational since prior to 2013, although the mineral extraction period at the quarry has been extended and therefore could recommence. There is no suggestion that there would be no work in future. The quarry would be crossed by the proposed overhead line, and the proposed Alignment currently follows roughly the same line as the 132kV overhead line which would be removed. Evidence that the quarry has been worked is based on a review of historical aerial imagery (Google Earth, 2000-2021) and consultation with the quarry owners. It appears that the part of the quarry the Order Limits crosses has previously been worked and at least partly restored. Therefore, the project would not sterilise any mineral at the quarry and is unlikely to impact quarry operations should they recommence. A planning application to extend the timescales for extraction and restoration at Layham Quarry to April 2032 and October 2033, respectively, was approved in October 2019 (Planning Ref: SCC/0018/19B/VOC).

Reference	Question	Applicant's Response
LU1.10.10	Please provide a table with the following information for mineral resource affected by the Proposed Development: • description of mineral/ land use; • land parcel/ plot; • within Minerals Consultation Area/ Minerals Safeguarding Area; • Proposed Development infrastructure; • mineral extent (ha); • total temporarily affected (ha); • total permanently affected (ha).	The only current mineral land use within the Order Limits is Layham Quarry, which is shown as a 'mineral extraction site' on ES Figure 10.3 [**APP-153**]. This site provides evidence that overhead lines do not need to sterilise minerals. The Mineral Consultation Area and Minerals Safeguarding Areas are also shown on ES Figure 10.3 [**APP-153**]. The minerals assessment presented in ES Chapter 10: Geology and Hydrogeology [**APP-078**] and ES Appendix 10.3: Minerals Resource Assessment [**APP-132**] is based on the cumulative effects of all aspects of the project on minerals. As there is no significant effect on minerals when considered cumulatively, there would not be a significant effect on any specific land parcel. Therefore, the Applicant does not consider that a table showing mineral resource on a parcel-by-parcel basis is required to support the application for development consent. This is supported by the responses from Suffolk and Essex County Councils who have both closed all outstanding matters on minerals in their respective LIR. See paragraph 19.5.4 in the Essex County Council and Braintree District Council LIR [**REP1-039**] and paragraph 10.43 in the Suffolk County Council and Babergh Mid Suffolk District Council LIR [**REP1-045**].
LU1.10.11	What would be the estimated economic value of the minerals sterilised by the Proposed Development?	As described in ES Chapter 10: Geology and Hydrogeology [**APP-078**] and ES Appendix 10.3: Minerals Resource Assessment [**APP-132**], the majority of the project would not sterilise mineral resources. Where overhead line is proposed, it is entirely feasible to extract any viable mineral resources of economic value from the ground below conductors. The economic value of the mineral that would be sterilised by the very small areas of the physical footprint of the operational project components would depend on a significant number of variables. The presence, quality, thickness, depth beneath overburden and market demand of/for the mineral which would vary at each location. This would also need to be weighed against the potential environmental impacts and effects of extraction. Braintree District Council and Essex County Council's LIR [**REP1-039**] acknowledges that there is likely to be significant variability in the quality of the mineral resources safeguarded and that extraction in areas such as the Dedham Vale AONB would likely lead to significant effects that outweigh the benefit associated with the mineral. Similarly, the Suffolk County Council's LIR [**REP1-045**] has identified that for much of the route proposals for sand and gravel extraction would not be acceptable due to high landscape quality.
LU1.10.12	Please provide a table with the following information for agri-environmental schemes/ forestry schemes/ woodland grant schemes affected by the Proposed Development: • description of land use; • land parcel/plot; • Proposed Development infrastructure;	The agri-environmental schemes within the Order Limits are shown on ES Figure 11.4 [**APP-153**]. The assessment presented in ES Chapter 11: Agriculture and Soils [**APP-079**] is based on the cumulative effects of all aspects of the project on agri-environmental schemes. Paragraph 11.6.12 of ES Chapter 11: Agriculture and Soils [**APP-079**] states that areas of land under agri-environment and stewardship schemes would be affected temporarily, resulting in a short term minor adverse effect which would be not significant. As there is no significant effect on agri-environmental schemes when considered cumulatively, there would not be a significant effect on any specific land parcel. Therefore, the Applicant does not consider that a table showing the

Reference	Question	Applicant's Response
	• agri-environmental scheme/forestry schemes/woodland grant schemes (ha); • total temporarily affected (ha); • total permanently affected (ha).	breakdown of agri-environmental schemes on a parcel-by-parcel basis is required to support the application for development consent.
LU1.10.13	Can you clarify where and how you intend to carry out pre-construction soil surveys to establish baseline soil conditions (CEMP [**APP-177**] and CEMP Appendix A: CoCP [**APP-178**])? What are the proposed aftercare maintenance arrangements related to defined soil condition, soil nutrient levels and organic content? Notwithstanding the measures set out amongst others in the CEMP [**APP-177**]and the CEMP Appendix A: CoCP [**APP-178**], could such information be usefully collated into an outline Soil Management Plan, as suggested by Natural England [RR-042]?	As stated in paragraph 11.3.6 of the CEMP (**document 7.5(B)**, pre-construction soil surveys would be undertaken in areas of underground cabling, and the temporary access route off the A131 where soil stripping is proposed, and no existing soil survey data is available. This would be in addition to the surveys already undertaken at the GSP substation, the CSE compounds and part of the underground cable section. These surveys are being undertaken over the autumn of 2023. All surveys would be undertaken following published guidelines (MAFF, 1988) for ALC surveys. Surveys would be conducted at a density of one auger per 1ha. This information would be used to support the development of detailed soil management measures to inform the handling, movement, and reinstatement of soil during construction, in accordance with Chapter 11 of the CEMP (**document 7.5(B)**). As stated in paragraph 11.3.41 of the CEMP, the aftercare period would commence after soil characteristics required to achieve the reinstatement standards have been achieved. This means that the land is brought as close as practically possible to its physical state before construction. The Applicant has included all the information that would be covered within a standalone Soil Management Plan (SMP) within Chapter 11 of the CEMP (**document 7.5(B)**). Should any parties consider information to be missing, this should be supplied to the Applicant for consideration for inclusion. The Written Representation from Natural England [**REP2-026 to REP2-027**] states that a clearly defined and detailed SMP should be provided. However, this does not need to be a separate document and can be included in the CEMP. The Applicant has updated the CEMP at Deadline 3 (**document 7.5(B)**) to clarify that Chapter 11 fulfils this purpose.
LU1.10.16	Paragraph 10.3 of the Suffolk councils' LIR [**REP1-045**] suggests that extraction (of minerals) within parts of the area occupied by the lattice towers, sealing end compounds and underground cables would not be possible. Please summarise your approach to restoring access to mineral resources following decommissioning and removal of development in the future.	As described in ES Chapter 10: Geology and Hydrogeology [**APP-078**] and ES Appendix 10.3: Minerals Resource Assessment [**APP-132**], the majority of the project would not prevent mineral extraction. Where overhead line is proposed, it is entirely feasible to extract any viable mineral resources of economic value from the ground below. At the locations of pylons and CSE compounds, access to any viable mineral resource of economic value would be re-established following decommissioning of these project components, as described in ES Chapter 4: Project Description [**APP-072**], once the above ground built components are removed. Where underground cables would have been constructed, the landscape value is generally considered to be very high quality e.g. AONB, and therefore, as acknowledged by the LIR for both Suffolk County Council [**REP1-039**] and Essex County Council and Braintree District Council [**REP1-045**], extraction of minerals is not likely to be acceptable.
LU1.10.18	Please advise how an unknown infill site (Bte325), which is within the Order Limits,	The site (Bte325) mentioned within ES Appendix 10.1: Geology Baseline and Preliminary Risk Assessment [**APP-130**] is located outside of the Order Limits and therefore interaction with the project and disturbance of any

Reference	Question	Applicant's Response
	has been scoped out. (Refer to Table A.1 in ES Appendix 10.1, Geology Baseline and Preliminary Risk Assessment [**APP-130**].)	potentially contaminated ground is not anticipated. The site was scoped out in part, because of its very small size, and because it has not been identified as a contaminated site or historical landfill by the Environment Agency, and in the context of the proportionate assessment of likely significant risks, the reasonable worst case was not considered to be significant.
LU1.10.19	Please summarise your approach to address potential missing contaminated land areas between the data set contained in National Library of Scotland's (NLS) online resource and Google Earth imagery, as noted in in the Essex councils' LIR [**REP1-039**] at paragraph 13.5.1.	The Applicant refers to Reference 13.5.1 and 13.5.2 of the Applicant's Comments on Essex County Council and Braintree District Council LIR (**document 8.5.3.2**).
LU1.10.20	Please summarise the impact of the Proposed Development on security of food production in the UK.	The potential impact any development which disrupts agricultural activity has on food security is complex given the range of variables involved. For example, productive land may not actually be used to its full potential, the extent of food imported can change, efficiency of transport routes can be affected by a variety of events, the influence big supermarkets have would vary and so on. In terms of policy, there is no requirement to have to take account of food security other than the reference in paragraphs 5.10.8 and 5.10.15 of EN-1 to seeking to minimise impacts on BMV land. The assessment of impacts on BMV land is addressed in ES Chapter 11: Agriculture and Soils [**APP-079**]. As stated in paragraph 11.4.19 of ES Chapter 11: Agriculture and Soils [**APP-079**], the permanent land take of the project is measured at 11.6ha. As a proportion of agricultural land in England this permanent loss equates to 0.00010%, the removal of which would not have a significant effect on national food production.

10.2 Soils, Geology and Ground Conditions

Table 10.2 – Soils, geology and ground conditions

Reference	Question	Applicant's Response
LU1.10.21	How did your inability to survey and dig the soil pits along the full length of undergrounding section affect the EIA and its conclusions? (Paragraph 11.4.7 in the	As stated in paragraph 11.4.7 of ES Chapter 11, Agriculture and Soils [**APP-079**], where soil surveys could not be completed the assessment has assumed a reasonable worst case, that BMV land is present within the Order Limits. As such the assessment assumes that any land provisionally classified as Grade 3 land comprises BMV land.

Reference	Question	Applicant's Response
	ES Chapter 11, Agriculture and Soils [**APP-079**] refers.)	
LU1.10.22	Can you confirm, for the worst-case EIA scenario, the topsoil (ha): i) stripped; ii) re-used; iii) disposed of.	As stated in paragraph 11.4.19 of ES Chapter 11, Agriculture and Soils [**APP-079**] it is assumed that: • within the overhead line sections soil stripping would be limited to the pylon bases, crane pads (where used) and temporary access routes; • Soil stripping would be required for the whole footprint of the CSE compounds and GSP substation; and • Soil stripping would generally be required for 80m of the 100m wide Order Limits within underground cable sections (excluding compound/storage area requirements) unless a specific commitment has been made otherwise. However, paragraph 11.6.3 of ES Chapter 11, Agriculture and Soils [**APP-079**] acknowledges that temporary impacts on soils have the potential to occur across the land within the Order Limits, adversely affecting the ecosystem services the soils provide over an area of up to approximately 644ha (the full extent of the Order Limits). Exact stripping depths, and therefore volumes, would vary across the site as care would be taken to strip the whole topsoil horizon within the working boundaries without contamination from the subsoil below. The preconstruction surveys, as noted in the paragraph 11.3.6 of CEMP (**document 7.5(B)**), would record topsoil thickness. All data would be logged in GIS and so be available to interrogate to determine exact volumes to be stripped. AS09 in the CEMP Appendix A: CoCP (**document 7.5.1(B)**) states that soil excavated from the project would be reused on site through the backfilling of trenches and for landscaping where practicable and where soil is suitable for reuse (for example, not contaminated and giving consideration to land holdings and applicable biosecurity measures). It is intended that all soil would be reused on site, however if it arises that excess spoil cannot be reused on site, this soil would be taken off site in accordance with measures outlined within the MWMP (**document 7.7(B)**). Therefore, as the Applicant is intending to reuse all soil on site, the ES has assumed that all soil would be reused on site and no soil would be disposed of off-site.
LU1.10.23	Can you confirm, for the worst-case EIA scenario, the subsoil quantities (m^3): i) excavated; ii) re-used; iii) disposed of.	See answer to LU1.10.22 which covers the assumptions around soil stripping used in ES Chapter 11, Agriculture and Soils [**APP-079**]. In addition, exact stripping depths, and therefore volumes, would vary across the project depending on what construction activities are being undertaken. It may be that no subsoil requires stripping to construct compounds, whilst subsoil is likely to be stripped to excavate the cable trenches. The preconstruction surveys, as noted in the paragraph 11.3.6 of CEMP (**document 7.5(B)**), would record topsoil thickness. All data would be logged in GIS and so be available to interrogate to determine exact volumes of subsoil to be stripped.

Reference	Question	Applicant's Response
LU1.10.24	For foundation excavation, can you clarify if the EIA assumed any pecking or drilling into rock?	One of the key reasonable worst-case assumptions in ES Chapter 10: Geology and Hydrogeology [**APP-078**] is that piling may be required at pylon's, CSE compounds and the GSP substation. Therefore, depending on the site-specific ground conditions at any given location, piling or drilling into rock may be required. The LoD allow for this.
LU1.10.25	Further to paragraph 4.7.27 of ES Chapter 4, Project Description [**APP-072**], can you clarify what is meant by wet arisings from trenchless methods and how it would be determined if it was waste or material?	The wet arisings referenced in paragraph 4.7.27 of ES Chapter 4: Project Description [**APP-072**] refer to the drilling fluids used for drilling purposes mixed with drilling arisings. Depending on the type of drilling fluid used (bentonite or other), ground conditions and any additives used during the drilling operations, the main works contractor would decide whether to dispose of or recycle drill arisings onsite.
LU1.10.26	How do you respond to Ian Rutledge's contention [RR-123] that there are difficult ground conditions for trenchless work in the valley and wooded area between Lightlands and Ansells Farm and across Culverdown?	Ground investigations were undertaken by the Applicant as part of the preliminary design in the area, and no issues were identified that would prevent a trenchless crossing solution in this area. However, the main works contractor, once appointed, would need to review and validate these ground conditions and design the trenchless crossing accordingly as part of their detailed design.
LU1.10.27	What is your response to Graham Baxter's RR [**RR-057**] regarding subsidence occurring as a result of plant and machinery?	With regard to Graham Baxter's RR [**RR-057**], all construction plant would travel on and work from designed temporary working platforms such as stone and geotextile or track matts. These platforms would be designed to accommodate the loads from such plant and therefore prevent settlement of the underlying or adjacent ground. Once constructed, the main compound would be used for car parking, material storage, and static offices. Construction plant would typically be located at the works site away from the main compound. The detailed design will account for existing ground conditions. On decommissioning all materials used to create the platforms would be removed and the land would be reinstated in line with guidance published by Defra (Construction Code of Practice for the Sustainable Use of Soils on Construction Sites, 2009) and as set out in document 7.5.1 CEMP Appendix A: CoCP [**APP-178**] (commitment references AS0 and AS02).
LU1.10.28	What would be the effects on the soil structure when transporting, placing and moving cable drums? How would any damage be prevented?	It has been assumed as a reasonable worst case, that the cable drums would be transported as abnormal indivisible loads along stoned temporary access routes to the relevant working area. As a minimum, topsoil would be stripped from both the temporary access routes and the cable working area and a stable load-bearing surface created, as described in ES Chapter 4: Project Description [**APP-072**]. The soil stripping, storage and reinstatement after the temporary access routes and working areas are removed would follow the good practice measures outlined within Chapter 11 of the CEMP (**document 7.5(B)**). It is anticipated that cable drums would not have any effects on soil structure.

Reference	Question	Applicant's Response
		Please see the Applicants response to MG1.0.53 with regard to soil compaction.
LU1.10.29	How has the EIA considered unexploded ordnance?	The EIA has not considered unexploded ordnance as this is not required under the Infrastructure Planning (EIA) Regulations 2017. The Construction (Design and Management) Regulations 2015 would require the Applicant and its main works contractor to prepare pre-construction health and safety information. A desk based unexploded ordnance survey would be part of this. The outputs of the survey would inform any additional measures that the contractor would need to put into place to manage the risks around unexploded ordnance on the project.
LU1.10.30	Further to your comments on RRs [**REP1-025**], can you explain how you considered Mark Westwood's suggestion [**RR-135**] that the start of underground cabling at Polstead Heath should move less than a kilometre east to the old gravel pit, and confirm the reasons for your response.	Please refer to the Applicant's Comments on Written Representations Section 3 (**document 8.5.2**) for a full response to this question.
LU1.10.31	Prior to and during construction, would there be a specific site role assigned to consult and engage with landowners and tenants?	This role would be undertaken by the Land Officer, details of which have been added to Table 3.1 of the CEMP (**document 7.5(B)**).

11. Noise and Vibration

Table 011.1 – Noise and Vibration

Reference	Question	Applicant's Response
NV1.11.1	Is the alignment of the haul routes as shown on ES Figures [**PDA-002**], figure 4.1] considered to be worst case for the noise and vibration assessment? If not, how is this accounted for in the noise chapter of the ES?	Section 11 of ES Chapter 14: Noise and Vibration [**APP-082**] included consideration of Flexibility of Design in the assessment of construction noise and vibration. This sensitivity testing included consideration of potential movement of the proposals within the Order Limits and LoD. The assessment identified four additional NSR that may experience significant adverse effects from potential movement of proposed pylons. However, no new potential significant effects were identified in relation to potential movement of temporary access routes within the Order Limits.
NV1.11.2	Have on-site background noise measurements been undertaken at any of the noise sensitive receptors? If not, how was the baseline noise environment established and how reliable is this as a basis for the assessment?	Baseline noise monitoring has been conducted in relation to the assessment of operational noise from the proposed GSP substation, as described in ES Appendix 14.4: GSP Substation Noise Assessment [**APP-139**]. Baseline noise surveys have not been conducted in relation to construction noise. The baseline acoustic environment and the assessment construction noise impacts are presented in Section 14.5 and 14.6 of the ES Chapter 14: Noise and Vibration [**APP-082**]. The construction noise assessment takes account of the predominantly rural setting of the project and assumes that baseline noise levels are low along the entire route. Worst-case lower thresholds are therefore assumed in the assessment. These correspond to Category 'A' values in the Absorption, Blocking, and Covering (ABC) method described in Annex E of British Standard 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites – Part 1: Noise (BS 5228-1).
NV1.11.3	Have any structural surveys been undertaken for existing buildings or other structures close to the Order Limits and would a vibration level of less than 12.5 mm/s peak particle velocity result in structural damage to sensitive buildings or structures? (Paragraph 14.4.31 in ES Chapter 14, Noise and Vibration [**APP-082**] refers.)	No structural surveys have been undertaken at buildings or structures close to the Order Limits. The assessment of construction vibration impacts is described in Section 14.6 of ES Chapter 14: Noise and Vibration [**APP-082**] and did not identify any locations where there is potential for damage to buildings or structures due to the distance between vibratory works and buildings and structures. This would, however, be reviewed further by the contractor as part of their detailed assessments. British Standard 5228-2:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration (BS 5228-2) and British Standard 7385-2:1993 Evaluation and measurement for vibration in buildings – Part 2: Guide to damage levels from groundborne vibration (BS 7385-2) state that the probably of damage to buildings tends towards zero at 12.5 mm/s PPV.

Reference	Question	Applicant's Response
NV1.11.4	Further to the CEMP Appendix B, the REAC, EM-H01 [**APP-179**], please provide further details on the size and type of noise enclosure for the transformers at the grid supply point substation and evidence to demonstrate its effectiveness in reducing noise levels.	The specific design of the noise enclosures is subject to further detailed design but would be in accordance with National Grid technical specification document TS 2.10.07 which requires a minimum insertion loss of 20 dB at 100Hz. The size of an enclosure is typically in the order of 1m to 2m larger than the transformer in each direction to allow for an internal walk space between the transformer and the enclosure walls. Transformer enclosures are typically of steel frame construction fitted with galvanised internally absorbent acoustic panels and doors. Vents would be fitted with acoustic baffles to control noise breakout, and where there are protrusions through the enclosure walls and roof, e.g. for cooling pipes and the high voltage bushings, close fitting panels would be used to form a seal.
NV1.11.5	Paragraph 14.1.3 in the ES Non-Technical Summary [**APP-068**] notes that a triple araucaria conductor bundle on a lattice pylon is relatively quiet in comparison to other conductor bundles. Please signpost the evidence that demonstrates this.	Details of operational noise generated by the overhead lines is provided in the ES Appendix 14.3 Overhead Line Noise Assessment [**APP-138**]. The assessment in Section 3.1 of Appendix 14.3 demonstrates that worst-case operational noise at all NSR due to the proposed 400kV overhead line is significantly below the 'No Adverse Impact' assessment criteria. This confirms the decision to scope out operational noise from overhead lines.
NV1.11.6	Appendix B of the CEMP, the REAC, EIA_NV01 [**APP-179**] refers to additional temporary noise mitigation measures (site-specific, best practicable means) that would be put in place to reduce noise levels from construction plant and machinery at specific locations. Please provide an example of screening or enclosures including their effectiveness in reducing noise levels.	Specific construction noise mitigation measures would be determined by the main works contractor. However, Table 14.3 of the ES Chapter 14: Noise and Vibration [**APP-082**] provides examples of construction noise mitigation measures that may be employed, together with the likely attenuation they may provide, based on guidance from British Standard 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites – Part 1: Noise (BS 5228-1).
NV1.11.7	Appendix B of the CEMP, the REAC, EIA_NV02 [**APP-179**] refers to additional temporary measures that would be put in place to reduce vibration levels from construction plant and machinery at a specific pylon. Please provide an example including their effectiveness to reduce vibration levels from construction plant and machinery at this pylon location.	Specific construction vibration mitigation measures would be determined by the main works contractor. However, Table 14.4 of the ES Chapter 14: Noise and Vibration [**APP-082**] provides examples of construction vibration mitigation measures that may be employed, together with the likely attenuation they may provide, based on guidance from British Standard 5228-2:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites – Part 2: Vibration (BS 5228-2).

Reference	Question	Applicant's Response
NV1.11.8	Would a Noise and Vibration Management Plan (NaVMP) be useful to bring together and secure all of the relevant controls and mitigation measures? If so, should it be secured through Requirement 4 of the dDCO?	Measures to control construction noise and vibration are already set out in Chapter 14 of the CEMP (**document 7.5(B)**), compliance with Which is secured through Requirement 4 (Management Plans) of the dDCO (**document 3.1 (C)**). No further measures would be identified through providing a separate Noise and Vibration Management Plan (NVMP) therefore, the Applicant does not consider this to be necessary. The Applicant has added text to Chapter 14 of the CEMP (**document 7.5 (B)**) to clarify that the Chapter provides the same function as a standalone NVMP.
NV1.11.9	Should the impact of noise and vibration and the potential effects on horses and livestock housed or grazing close to the Proposed Development been assessed in the ES? If not, why not?	There is not a standard agreed methodology for assessing noise and vibration impacts on horses and livestock, and this has not been assessed within the ES. Any effects would be limited to the construction phase. Impacts have been assessed at identified farms and stables within the study area, considering impacts on human receptors. The majority of the reinforcement runs through arable farmland. However, there are isolated locations where horses and livestock may be housed or grazed close to the project. Where such locations are identified, the main works contractor would review construction methodologies and apply best practicable means to reduce noise and vibration in accordance with the requirements of the CEMP (**document 7.5 (B)**).
NV1.11.10	ES Chapter 14, Noise and Vibration [**APP-082**], refers at paragraph 14.6.5 to temporal significance of ten days in any 15 consecutive days, or 40 days in any consecutive six months, as a reasonable worst case. Can you confirm the duration (short/ temporal) for noise and vibration effects associated with new pylon works shown on pylon working areas [**APP-029**] including earthworks and piling? If these works have been assigned a short duration in the EIA, can you explain what measures would be put in place to ensure that the effects of a longer duration resulting in a temporal impact would not be greater that those predicted in the ES? Similarly, can you advise on the scenario consisting of pylon removal including earthworks and breaking up of concrete foundation?	As stated in paragraph 14.6.5 of the ES Chapter 14: Noise and Vibration [**APP-082**], the reasonable worst-case assumption includes potential for works to exceed the temporal requirement for significance of ten days in any 15 consecutive days, or 40 days in any consecutive six months based on DMRB LA111 (Highways England *et al*, 2020). In practice some works may be of a shorter duration. The assessment therefore assumed that works associated with pylon construction and removal may exceed these temporal thresholds. Additional mitigation has been identified for potentially significant works, including that described in Tables 14.3. and 14.4 of ES Chapter 14: Noise and Vibration [**APP-082**]. The additional mitigation is contained within the REAC (**Document 7.5.2 (B)**) which is secured through Requirement 4 of the dDCO (**document 3.1 (C)**).

Reference	Question	Applicant's Response
NV1.11.11	Paragraph 5.11.4 of NPS EN-1 notes that, where noise impacts are likely to arise from the proposed development, the applicant should identify any distinctive tonal, impulsive or low frequency characteristics of the noise. How were these characteristics explored and assessed in the ES in relation to construction noise?	The construction noise assessment presented in ES Chapter 14: Noise and Vibration [**APP-082**] has been undertaken in accordance with British Standard 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites – Part 1: Noise (BS 5228-1), in accordance with the requirements of paragraph 5.11.6 of NPS EN-1. The methodology in BS5228-1 does not give advice on assessing construction noise with distinctive characteristics. The Standard notes (in Section 6.3) that acceptability may reduce for sounds with such characteristics. The best practicable means for noise control in the CEMP (**document 7.5(B)**) aim to reduce the overall impact, targeting overall levels and/or distinctive noise characteristics as relevant for each particular source.
NV1.11.12	Can you signpost where the ES has considered the effect of noise and vibration on nearby environmental designated sites and permanently present or seasonal wildlife?	Noise and vibration effects during construction are discussed in the disturbance sub sections of Section 7.6 of ES Chapter 7: Biodiversity [**APP-075**] for the following receptors: Hintlesham Woods SSSI, bats, breeding birds (outside of Hintlesham Woods) dormice, riparian mammals and wintering birds. Table 7.1 in ES Chapter 7: Biodiversity [**APP-075**] explains that operational noise and vibration to species has been scoped out. In addition, and in response to feedback from Natural England and the Royal Society for the Protection of Birds (RSPB) in their RRs [**RR-042**] and **RR-044**], the Applicant has produced a Technical Note on Noise Levels at Hintlesham Woods (**document 8.5.9**) (which has been submitted at Deadline 3). This provides details of the peak or maximum sound levels that would be anticipated during construction in the vicinity of Hintlesham Woods SSSI and has led to a further commitment which has been added to the REAC (**document 7.5.2**) at Deadline 3. This states: *'Percussive piling would not be used to construct the foundations of temporary pylon RB12T (607067, 243469) to reduce the maximum (peak) noise levels associated with this construction method to avoid subsequent disturbance on sensitive species at Hintlesham Woods SSSI'. The* REAC is secured through Requirement 4 of the dDCO (**document 3.1 (C)**).
NV1.11.13	Whilst paragraph 4.9.29 of ES Chapter 4, Proposed Development [**APP-072**], refers to a noise enclosure around the transformers to reduce operational noise, paragraph 5.11.8 of NPS EN-1 also refers to containment of noise within buildings wherever possible. Please summarise if such transformers can be housed within buildings, whether this was considered, and the reason for the outcome.	The standard practice is to house transformers in enclosures in situations where noise attenuation is required. Enclosures are effectively buildings containing the transformer, with the specific purpose of attenuating noise. Using a 'normal' building to house substation equipment would require a significant height to allow for safety clearances. Depending on the context for the need, typically urban areas and city centres, buildings may or may not be designed to provide acoustic attenuation. Transformers at the proposed GSP substation would be housed within acoustic enclosures.

Reference	Question	Applicant's Response
NV1.11.14	Paragraph 5.11.1 of NPS EN-1 notes that excessive noise can have wide-ranging impacts on the use and enjoyment of quiet places and areas with high landscape quality. Table 6.1 of ES Chapter 6, Landscape and Visual [**APP-074**], summarises the likely significant effects during construction with mitigation for landscape receptors and community areas. Can you confirm if any noise and vibration mitigation measures related to such receptors were considered and are included in the Proposed Development? If not, explain why.	As is common practice in LVIA, noise impacts were not individually assessed for each landscape character area but formed part of the wider assessment of construction effects. The assessment of construction effects presented in ES Appendix 6.3: Assessment of Effects on Landscape Character [**APP-100**] includes reference to noise disturbance (and by inference vibration) associated with construction activities. The assessment of construction effects presented in ES Appendix 6.5: Assessment of Effects on Landscape Character [**APP-108**] only includes reference to visual disturbance associated with construction activities as this was the focus of this assessment. Both assessments assumed implementation of the good practice measures included in the CEMP Appendix A: CoCP (**document 7.5.1 (B)**). The assessment presented in ES Chapter 14: Noise and Vibration [**APP-082**] did not identify any significant noise effects on NSR within communities, assuming implementation of the good practice measures included in the CEMP Appendix A: CoCP (**document 7.5.1 (B)**) and mitigation measure (EIA_NV01) relating to specific properties near to the works, included in the REAC (**document 7.5.2(B)**). Based on these assessments, no specific mitigation noise measures are considered necessary over and above those set out in the CEMP Appendix A: CoCP (**document 7.5.1 (B)**).
NV1.11.15	Please respond to Graham Baxter's RR [**RR-057**] that the impact of noise from the compound would result in a loss of use of his garden for three to five years.	Section 6 of ES Chapter 14: Noise and Vibration [**APP-082**] includes an assessment of construction noise on nearby NSR. This includes the property owned by Mr Baxter, Walnut House. Walnut House is located to the south of the proposed trenchless crossing of the River Stour. Noise levels due To the trenchless crossing of the River Stour were predicted to be 58 dB $L_{Aeq,T}$ without mitigation at this location. This sound level would not be considered significant during daytime working periods, but has potential to be significant during evenings, weekends and night-time. The assessment identifies in Table 14.1 of ES Chapter 14: Noise and Vibration [**APP-082**] that Walnut House potentially experiences significant adverse effects from noise during night-time works, without mitigation. It is expected that the trenchless crossing works would take a period of several months to complete. Specific construction noise mitigation measures would be determined by the main works contractor to reduce this noise level which has been derived using reasonable worst-case principles. However, Table 14.3 of the ES Chapter 14: Noise and Vibration [**APP-082**] provides examples of construction noise mitigation measures that may be employed, together with the likely attenuation they may provide, based on guidance from BS 5228-1. In relation to the trenchless crossing of the River Stour it is assumed that a reduction in noise levels of at least 15dB would be achievable with a combination of the use of quieter plant, screening, and the use of an acoustic shed around trenchless crossing machinery. The residual assessment including acoustic mitigation, is provided in Table 14.5 of ES Chapter 14: Noise and Vibration [**APP-082**].

Reference	Question	Applicant's Response
		Noise levels at Walnut House due TO the trenchless crossing of the River Stour were predicted to be ≤43 dB $L_{Aeq,T}$ with mitigation. This sound level would not be considered significant. Noise from other construction activities affecting Walnut House were assessed not to be significant. In relation to the garden at Walnut House, guidance is given in British Standard 8233:2014 Guidance on sound insulation and noise reduction for buildings (BS 8233). BS 8233 provides guidance for external amenity areas, such as gardens and patios, stating '*it is desirable that the external noise level does not exceed 50 dB $L_{Aeq,T}$, with an upper guideline value of 55 dB $L_{Aeq,T}$ which would be acceptable in noisier environments*.' The predicted noise level, with Mitigation, of ≤43 dB $L_{Aeq,T}$ is below the lower guideline value of 50 dB $L_{Aeq,T}$ and indicates that noise levels due to construction would not be undesirable at Walnut House.

12. The Water Environment

12.1 Flood Risk Assessment

Table 12.1 – Flood Risk Assessment

Reference	Question	Applicant's Response
WE1.12.5	Paragraph 3.2.11 of the Flood Risk Assessment [**APP-059**] states that it is not necessary to apply the exception test to the Proposed Development. Can you explain how this is compliant with paragraph 5.7.11 of NPS EN-1, given the presence of some infrastructure within Flood Zone 3?	No permanent infrastructure would be located in Flood Zone 3. The GSP substation and CSE compounds, which represent the parts of the project that are most vulnerable to flooding, are situated in Flood Zone 1, satisfying the Sequential Test. W14 in the CEMP Appendix A: CoCP (**document 7.5.1 (B)**) states that pylons would be located outside of Flood Zones 2 and 3 or where this is not practicable positioned in accordance with the conditions of a FRAP. It is therefore concluded by the FRA [**APP-059**] that the project complies with the ethos of the Sequential Test and as such, application of the Exception Test is not required. The Environment Agency Written Representation [**REP2-023**] states they have no outstanding Flood Risk concerns.
WE1.12.6	The Flood Risk Assessment [**APP-059**] does not differentiate between land in Flood Zone 3a and Flood Zone 3b. Can you clarify the assumptions made about the extent of these areas within the Order Limits and any implications for the flood risk assessment?	Datasets showing Flood Zone 3a/3b were requested by the Applicant from the District Councils. Babergh and Mid Suffolk District Council confirmed that it only has this data for areas with a housing allocation in the emerging Joint Local Plan, none of which are within the Bramford to Twinstead Order Limits. Braintree District Council provided the Flood Zone 3b mapping data, covering the main channel of the River Stour within the Order Limits. At this location, Flood Zone 3b has the same extent as Flood Zone 3 (as mapped by the Environment Agency and shown on Figure 1 within the FRA [**APP-059**]. For the construction phase, only limited works would be undertaken in Flood Zone 3b, specifically the temporary works for the trenchless crossing and the temporary access route associated with the crossing of the River Stour. Given the temporary nature of these activities and the embedded/good practice measures described in the FRA [**APP-059**], the residual flood risk during construction would be very low. There are no implications for the assessments presented or conclusions drawn in the FRA. The Environment Agency Written Representation [**REP2-023**] states they have no outstanding Flood Risk concerns.
WE1.12.7	To what extent are the proposed (a) permanent development (structures, access tracks) and (b) construction activities (drive pits, soil storage and stockpiling, temporary haul roads, and so on) within flood zones 2 and 3?	Figure 9.1 of the ES Figures Part 8 [**APP-153**] shows the areas of Flood Zone 2 and 3 within the order limits. a. Permanent development: As stated in the FRA [**APP-059**], during operation, the reinforcement would generally be elevated (overhead line) or buried (underground cable). The GSP substation, CSE compounds and pylons would be situated in Flood Zone 1, not Flood Zone 2 or 3.

Reference	Question	Applicant's Response
	If there would be permanent development and construction activities in flood zones 2 and 3: (i) Confirm whether it is possible that any floodplain storage would be temporarily lost and water flows impeded during construction, based on assumptions made about extent of flood zone 3b, and (ii) Confirm that there would be no permanent infrastructure in flood zone 3b resulting in loss of floodplain storage/ impeding water flows?	b. Construction activities: During construction, the majority of the works would take place in Flood Zone 1, outside of the floodplain. The only construction works within Flood Zones 2 and 3 are as follows: • River Stour and River Box – temporary works associated with the trenchless crossing and the temporary access route across the watercourse. • River Brett and tributary – temporary access route across the watercourses. As per Commitment W07 in the CEMP Appendix A: CoCP (**document 7.5.1(B)**) soil would be stored outside of the floodplain where practicable or placed leaving gaps to avoid blocking floodplain flow paths. No permanent ground raising would be undertaken in the floodplain hence no loss of floodplain storage via this mechanism. No permanent infrastructure will be located in Flood Zone 3b.
WE1.12.8	Can you confirm whether Flood Zone 3 has been treated as a functional flood plain (Zone 3b) for the purposes of designing permanent and temporary (construction stage) infrastructure, such as drive pits (River Box and River Stour), temporary haul routes and stockpiles? Can you clarify how this represents the worst case for the purposes of concluding minor adverse (not significant) effect on flood risk during construction?	For the purposes of the FRA [**APP-059**] and the assessment presented in ES Chapter 9: Water Environment [**APP-077**], the Applicant assumed that all Flood Zone 3 was 3b as part of a worst case assessment. The Applicant notes that as shown on Figure 1 in the FRA [**APP-059**] the floodplains crossed by the project are very narrow, with the widest being the River Stour. As noted in the answer to WE1.12.6, at this location, Flood Zone 3b has the same extent as Flood Zone 3 (as mapped by the Environment Agency. No permanent infrastructure would be located in Flood Zone 3. The GSP substation and CSE compounds are situated in Flood Zone 1. W14 in the CEMP Appendix A: CoCP (**document 7.5.1(B)**) states that pylons would be located outside of Flood Zones 2 and 3 or where this is not practicable positioned in accordance with the conditions of a FRAP. For the construction phase, only limited works would be undertaken in Flood Zone 3/3b, specifically the temporary works for the trenchless crossing and the temporary access route associated with the crossing of the River Stour. Given the temporary nature of these activities and the embedded/good practice measures described in the FRA [**APP-059**], the residual flood risk during construction would be very low. Hence the minor adverse effect concluded. The Environment Agency Written Representation [**REP2-023**] states they have no outstanding Flood Risk concerns.
WE1.12.9	Can you confirm the appropriate systems that would be put in place to include risk assessments, method statements (RAMS) and design drawings with permit applications (Paragraph 9.5 of the	Once appointed the main works contractor would be responsible for planning and managing the works in accordance with the Construction and Design Management Regulations 2015 and Health and Safety at Work Act 1974. These would require the main works contractor to produce RAMS to cover the construction works. In addition, National Grid processes do not allow a main works contractor from commencing work without RAMS in place.

Reference	Question	Applicant's Response
	Environment Agency RR, [RR-031] refers)?	The FRAP applications would include all the necessary documentation that the Environment Agency require in order to gain consent. This would normally include the detailed designs and RAMS for the activities for which the FRAP is sought.
WE1.12.10	The Flood Risk Assessment [**APP-059**] notes that a sustainable drainage system would be used during construction to manage surface water flood risk and that this is committed through W11 in the CEMP Appendix A: CoCP [**APP-178**]. Does the commitment in W11 to a sustainable drainage system apply to both the construction and operation phases? If so, how is the commitment secured through the operational phase?	Paragraph 4.4.7 of the FRA [**APP-059**] states that *'As outlined in good practice measure W12 in the CEMP Appendix A: CoCP (application document 7.5.1), the drainage design at the GSP substation and the CSE compounds would be designed in accordance with the requirements of the SuDS Design Guide (Essex County Council, 2020) and the SuDS Palette (Suffolk County Council, 2018).'* This measure would only apply during the construction phase. The CEMP Appendix A: CoCP (**document 7.5.1 (B)**) is secured through Requirement 4 of the dDCO (**document 3.1 (C)**). A DMP would be produced at each stage of the authorised development to address operational surface water management matters. This is secured through Requirement 5 of the dDCO (**document 3.1 (C)**).

12.2 Surface Water Management

Table 12.2 – Surface water management

Reference	Question	Applicant's Response
WE1.12.11	Can you provide information and a plan to show your proposed surface water management proposals during construction and operation and provide an explanation of how these proposals would be secured in any DCO.	The main works contractor, when appointed, would be responsible for designing the surface water management proposals for construction. Chapter 9 of the CEMP (**document 7.5 (B)**) describes the methods that may be used for managing surface water across the working areas. The CEMP is secured through Requirement 4 of the dDCO (**document 3.1 (C)**). A DMP would be produced at each stage of the authorised development to address operational surface water management matters. The Drainage Management would be submitted to the 'relevant planning Authority for approval. This is secured through Requirement 5 of the dDCO (**document 3.1 (C)**).

12.3 Management Measures

Table 12.3 – The Water Environment - Management measures

Reference	Question	Applicant's Response
WE1.12.16	Can you confirm that ES Chapter 10 [**APP-078**] (paragraph 10.4.37, bullet point 3) and ES Appendix 10.2 [**APP-131**] (paragraph 3.4.13) will be amended to reflect the need to gain Environment Agency approval of hydrogeological risk assessments? Is negotiation about the timescale of any such approval ongoing, and will it be a matter set out in the Statement of Common Ground between the Applicant and the Environment Agency?	The Applicant has updated the wording of good practice measure GH07 in the CEMP Appendix A: CoCP which has been submitted at Deadline 3 (**document 7.5.1 (B)**) to align with the request from the Environment Agency in their Written Representation [**REP2-023**]: *'GH07: A hydrogeological risk assessment will be undertaken once the trenchless crossing method has been confirmed. This will assess the risks on groundwater or surface water quality associated with the construction method including considering the potential for breakout during drilling and the use of bentonite or other agents proposed. Where the assessment identifies an unacceptable risk to groundwater or surface water quality, then alternative methods and/or additives shall be proposed, assessed and used. The hydrogeological risk assessment will be submitted to the Environment Agency for approval prior to construction. The Environment Agency will have up to 21 working days to respond on the hydrogeological risk assessment and their comments will be considered as part of finalising the risk assessment. This can b' supported by a pre-submission draft to reduce the risk of any delays.'* This matter is included in the updated Draft SoCG with the Environment Agency (**document 7.3.2 (B)**) submitted at Deadline 3. The Applicant does not propose to update the relevant wording in ES Chapter 10: Geology and Hydrogeology [**APP-078**] and ES Appendix 10.2: Groundwater Baseline and Assessment [**APP-131**] as the amendment to the commitment would not change the conclusions of the assessment.
WE1.12.17	Can you explain the systems that would be put in place to use ensure that water is used efficiently so as to minimise or negate reliance on the abstraction of water (paragraph 15.0 of the Environment Agency RR [RR-031] refers)?	Section 5.3 of the MWMP (**document 7.6 (B)**) describes efficient water consumption during construction. Paragraph 5.3.3 outlines examples of water efficiency measures that would be employed during construction, for example the use of water-efficient taps could be used within welfare facilities, waterless toilet facilities, assessment of whether water can be reused, and regular checks to hoses for water leaks. The MWMP (**document 7.6 (B)**) is secured through Requirement 4 of the dDCO (**document 3.1 (C)**).
WE1.12.18	Can you confirm the appropriate systems that would be put in place to engage with licence holders of abstractions downstream of the watercourse crossings ([RR-031], paragraph 18)?	The Applicant is not intending to undertake water abstractions or otherwise change the flow of watercourses. Therefore, there would be no anticipated change to water levels that would affect abstractions downstream. Chapter 9 of the CEMP (**document 7.5 (B)**) explains the good practice measures that would be undertaken to avoid effects on water quality within the Order Limits during construction. As these measures would avoid impacts on water quality, the construction works would not affect abstractions downstream. This demonstrates that there are unlikely to be any effects on abstractors downstream and therefore licence holders would not need to be informed of the works. If, in the very unlikely event that an incident was to occur, the process set out within

Reference	Question	Applicant's Response
		Section 3.5 of the CEMP (**document 7.5 (B)**) outlines how the Applicant would respond to an emergency incident, including notification to relevant parties.
WE1.12.20	Which of the proposed site compounds would be located in Flood Zone 2, 3a or 3b? Further to paragraph 9.3.2 of the CEMP (**document 7.5 (B)**), what would be the criteria for deciding whether buffer zones at watercourses would have silt fencing to provide further protection from potential site runoff?	None of the proposed site compounds would be located in Flood Zone 2, 3a or 3b. As stated in section 9.3 of the CEMP (**document 7.5(B)**), fencing such as a pedestrian barrier or heras type barrier would be used where runoff risk is low. Where runoff risk is higher, silt fencing would be used. The risk of silt run off would be assessed by the main works contractor for all area of topsoil removal when setting out the works areas. Runoff risk would be dependent on the activities taking place at the specific locations, the nature of the existing ground cover/soils and the gradient of the ground. Appropriate measures will be put in place to protect watercourse where a risk is identified.
WE1.12.21	In paragraph 9.3.3 of the CEMP (**document 7.5 (B)**, you state: *'Where applicable, compounds will be provided with good practice measures for water conservation for example the use of water-efficient taps within welfare, waterless toilet facilities, assessment of whether water can be reused, for example for dust suppression, and regular checks for water leaks.'* Under what circumstances would these good practice measures not be implemented?	The water conservation measures outlined in paragraph 9.3.3 of the CEMP (**document 7.5 (B)**) would be suited to the welfare facilities within the main compound. These facilities would be established for the duration of the project and therefore yield maximum water conservation. Where these water conservation measures are not suited is in movable self-contained welfare units which would be required along the route as the works progress.
WE1.12.22	What are the requirements for the installation of land drainage (see paragraph 9.3.6 of the CEMP, (**document 7.5 (B)**)?	In accordance with paragraph 9.3.6 of the CEMP, **(document 7.5(B))** land drainage would only be installed to maintain the integrity of existing field drainage systems. These drainage systems would be designed as part of the detailed design and landowners would be included in the process to ensure any local knowledge appropriate to individual circumstances is not missed. Land drainage would be installed that is suitable for the location and may include, for example, ditches, mole drainage, filter drains and carrier drains. Drainage channels would be excavated using an excavator, piped drainage would be installed using open cut methods and mole drainage would be installed using a suitable plough attachment pulled by a tractor or excavator.

Reference	Question	Applicant's Response
WE1.12.23	Further to paragraph 9.3.10 of the CEMP (**document 7.5 (B)**, under what circumstances would surface water discharges be required?	Paragraph 9.3.10 of the CEMP (**document 7.5 (B)**) states that no surface water discharges have been identified on the project. However, if during the works the main works contractor experiences high ground water during excavation works, and discharge to ground was not possible, then a surface discharge to a watercourse may be required, this is an example of a circumstance when a surface water discharge may be required. Such discharges would use the Environment Agency RPS guidance with respect to temporary dewatering from excavations to surface water.
WE1.12.24	What is the degree of certainty that good practice measure W02 would capture runoff and pollutants to prevent their entry into the watercourse (paragraph 9.3.15 of the CEMP [**APP-177**] refers)? Would spill kits, booms and other containment devices (and the necessary supporting equipment to install these devices) be located at each river crossing site in anticipation of a spill event? Would those on site be competent and experienced in the safe installation and use of this spill containment equipment for main and non-main rivers?	Surface waters are at risk of pollution from silt, fuel and other materials, either from pumping out of water from excavations, surface water run-off or spills. Spill control measures will be employed, including drip trays, nozzles and absorbent pads as appropriate. CEMP Appendix A: CoCP [**APP-178**] secures W02 which is in line with industry good practice. The main works contractor (once appointed) would be deemed competent,as part of their acceptance onto the Applicants construction framework and be responsible for implementing the good practice measures for the duration of the works. By implementing industry good practice there is a high degree of confidence that the measures would prevent the runoff from entering watercourses. As a competent contractor, the main works contractor would have environmental processes and procedures that the site team would adhere to. These would include a risk assessment process that would determine what equipment was appropriate to have at each location and the technical competencies and training requirements for individuals tasked with implementing the spill prevention and surface runoff measures. As a minimum adequate spill kits will be kept in all site vehicles and plant; additional stocks will be issued to watercourse crossing crews and the emergency crew(s) and staff will be trained in their use.
WE1.12.25	Following on from paragraph 9.3.18 of the CEMP (**document 7.5 (B)**), under what circumstances would a wheel cleaning system not be provided at all site compounds where vehicles exiting a works compound on to the highway could deposit dust or mud onto the public road surface?	Wheel cleaning would be implemented when there is a risk that vehicles leaving the site could convey mud or debris onto the public roads. If there is no risk of conveying mud or debris onto the public roads then wheel cleaning does not provide any benefit and as such is not required. Such scenarios could be where a vehicle is: • exiting a tarmac or stone surfaced compound; • exiting a tarmac or stone surfaced access route; or • exiting an area of the site that due to weather or ground conditions does not contain mud or dust.
WE1.12.26	In paragraph 9.3.19 of the CEMP (**document 7.5 (B)**), you state: *'It is anticipated that the storage of flammable liquids will be within double-*	The requirement for secondary containment is outlined in the Control of Substances Hazardous to Health (COSHH) Regulations 2002 and the Control of Major Accident Hazards (COMAH) Regulations 2015. As a competent contractor the main works contractor would be responsible for complying with these regulations.

Reference	Question	Applicant's Response
	walled tanks or surrounded by a containment area of 110% capacity which will capture any spillage/leakage in the event of a breach of containment.' If the anticipated scenarios do not materialise what are the alternative methods for storing flammable liquids?	There are no anticipated scenarios where secondary containment could not be provided for storage of flammable liquids.
WE1.12.27	In paragraph 9.3.20 of the CEMP [**APP-177**] you state: *'where practicable, they [refuelling points] will be stored at least 15m from watercourses, ponds and groundwater dependent terrestrial ecosystems. Where it is not practicable to maintain a 15m distance, additional pollution prevention measures will be identified.'* Would those additional pollution prevention measures that have been identified also be implemented, and would they be secured?	Once appointed, the main works contractor would be responsible for developing a refuelling procedure that complies with the CEMP (**document 7.5 (B)**). This refuelling procedure would identify which items of plant require refuelling, their location, control measures, proximity to environmental receptors, and persons competent on undertaking refuelling operations. The principles of Elimination, Reduction, Isolation, and Control would be used when developing the refuelling procedure. Where practicable the item of equipment would be moved at least 15m away from the watercourse prior to refuelling, this would apply to excavators, dumpers, small generators etc. Where larger, immovable items of plant needed refuelling then these would be sited at least 15m away from watercourses. When items of equipment that cannot be moved away from the watercourse, such as safety boats, appropriate spill prevention and mitigation measures would be identified and implemented. The Applicant believes these measures are sufficiently secured in good practise measure GG14 of CEMP Appendix A: COCP (**document 7.5.1 (B)**), therefore an additional measure does not need to be secured.
WE1.12.28	In the reference to an 'emergency' situation in the description of practice measure GG15 in the CEMP Appendix A: CoCP [**APP-178**], are you referring to a situation that is unexpected or dangerous? Can you set out the scenarios when the discharge of contaminated site runoff to ditches, watercourses, drains or sewers without the appropriate treatment and agreement of the appropriate authority would be necessary?	The emergency situation referred to in GG15 in the CEMP Appendix A: CoCP (**document 7.5.1 (B)**) does refer to unexpected or dangerous events. Specifically, where there is a danger to life or critical equipment. In the unlikely scenario where discharge of contaminated site runoff to ditches, watercourses, drains or sewers without the appropriate treatment and agreement of the appropriate authority occurs, for example inundation of an excavation as a result of extreme rainfall or flooding from an adjacent river, then the Emergency Action Plan would be followed. In some cases, there would not be sufficient time to seek agreement from the appropriate authorities. However, weather and Environment Agency flood warnings would be consulted by the main works contractor to proactively manage the risk and prevent the scenario occurring and the relevant authority would be notified as soon as practicable after the event.
WE1.12.29	In paragraph 9.3.23 of the CEMP (**document 7.5 (B)**), are you referring to positioning the washout systems and	The washout systems would be deployed within the site boundary and away from the public highway. The 'roadside' referenced in paragraph 9.3.23 of the CEMP (**document 7.5 (B)**) is the temporary access routes used to access the work fronts.

Reference	Question	Applicant's Response
	containers on the side of a public highway?	
WE1.12.30	Would the extent of buffer zone, referred to in paragraph 9.3.30 of the CEMP (**document 7.5 (B)**), be established by calculation or professional judgement?	The buffer zone referred to in paragraph 9.3.30 of the CEMP (**document 7.5 (B)**) would be established using a combination of calculation and professional judgement. Where flood data was available this would be used however, during periods of low rainfall the main works contractor would use professional judgement to reduce the temporary works land take.
WE1.12.31	In paragraph 9.3.34 of the CEMP [**APP-177**], you say: *'It is also anticipated to include replacing any channel substrate that was temporarily removed during the works.'* If the anticipated scenarios do not materialise what would be the alternative proposals for channel substrate temporarily removed during the works?	When temporary culverts and crossings are removed, substrate would be replaced. Ideally this would be the substrate that was removed, however if this is not possible, for example if the substrate that was removed contains contaminants, then a suitable replacement substrate that has appropriate hydraulic and environmental properties would be used.
WE1.12.32	Can you provide your definition of wastewater in paragraph 9.3.5 of ES Chapter 9, Water Environment [**APP-077**]?	The term 'wastewater' used in ES Chapter 9: Water Environment [**APP-077**] is used in a general sense in terms of it covering any water that is a waste product of the development. Table 3.11 in the Applicant's comments on RRs [**REP1-025**], the Applicant notes the Environment Agency definition provided for wastewater. However, as this would not change the assessment presented within the ES, the Applicant does not propose to include a definition within ES Chapter 9: Water Environment [**APP-077**]. The text in Table 2.1 of the CEMP (**document 7.5 (B)**) provides additional definition as to when an environmental permit would be required.
WE1.12.33	Can you confirm the appropriate systems that would be put in place to remove contaminated rainwater (GG14 in the CEMP Appendix A: CoCP [**APP-178**])?	Where contaminated rainwater was identified as a risk, as either part of the detailed design or as part of the main works contractors temporary works, then management measures or a drainage design would be developed that included appropriate measures. For example, drip trays would be inspected regularly and may require water to pass through an interceptor before disposal. Typical systems that have been deployed on other projects include interceptors and or settlement ponds/tanks.
WE1.12.34	Can you confirm the appropriate systems they would be put in place to inform the Environment Agency as soon as possible of any discharge of contaminated water in an emergency (paragraph 7.2 of the	The CEMP (**document 7.5 (B)**), section 3.5 outlines the emergency procedures for the project. Paragraph 3.5.2 states that the contractor will produce an Emergency Action Plan that will set out the specific incident response procedures. The Emergency Action Plan will detail the roles and responsibilities for responding to a discharge of contaminated water. The plan would also include the relevant organisations that will be contacted in the event of a discharge; this includes the Environment Agency. Typical methods of communication to inform the

Reference	Question	Applicant's Response
	Environment Agency's RR [**RR- 031**] refers)?	Environment Agency of a possible discharge of contaminated water would be a telephone call to the Environment Agency's project contact as soon as the incident has been reported to the site management.
WE1.12.35	What systems would be put in place to contain pollution events and how and when would these be agreed with the Environment Agency (paragraph 7.3 of the Environment Agency's RR [**RR-031**] refers)?	In accordance with GG22 in the CEMP Appendix A: CoCP (**document 7.5.1(B)**), the contractor would develop an Emergency Action Plan for the construction phase. This would set out specific incident response procedures, including the preventative measures and response to a pollution event. This would be produced in accordance with the CEMP (**document 7.5 (B)**), particularly paragraphs 9.3.24 to 9.3.26 which set out the steps that would be taken in the event of pollution events including contacting the Environment Agency as the relevant enforcement authority.
WE1.12.36	Can you describe the systems that would be put in place to prevent groundwater flow patterns being altered (see paragraph 8.2 of the Environment Agency's RR [**RR-031**])?	AS08 in the CEMP Appendix A: CoCP (**document 7.5.1 (B)**) states that clay bungs or other vertical barriers would be constructed within trench excavations where deemed necessary by a suitably experienced person, to prevent the creation of preferential drainage pathways. The Applicant notes that the Environment Agency's Written Representation [**REP2-023**] notes at paragraph 3.3 that it welcomes that the CEMP Appendix A: CoCP (**document 7.5.1 (B)**) states that clay bungs would be constructed within trench excavations where necessary to prevent the creation of preferential drainage pathways. In addition, the Applicant has updated GH07 in the CEMP Appendix A: CoCP (**document 7.5.1 (B)**) at Deadline 3 in response to the Environment Agency's Written Representation [**REP2-023**] to confirm that the Hydrogeological Risk Assessment undertaken for the trenchless crossings would be submitted for approval by the Environment Agency. This would set out the measures that would be taken to reduce risks on groundwater.
WE1.12.37	A detailed, operational phase Drainage Management Plan is proposed to be produced post-consent, to be secured by any Development Consent Order. When will a Draft Drainage Management Plan be submitted?	Requirement 5(1) of the dDCO (**document 3.1 (C)**) states that no stage of the authorised development may be brought into operational use until, for that stage, a DMP, to address operational surface water management matters, has been submitted to and approved by the 'relevant planning authority'.
WE1.12.38	The CEMP Appendix A: CoCP [**APP-178**] includes a commitment (W11) to applying the Environment Agency's peak rainfall climate change allowances from May 2022 to the drainage design. Would this be the central or upper end allowance?	The upper end allowance would be applied to the drainage design in line with Flood Risk Assessments: Climate Change Allowances (Environment Agency, 2022).

Reference	Question	Applicant's Response
WE1.12.39	Good practice measure W18 in the CEMP Appendix A: CoCP [**APP-178**] states that temporary access routes and underground cables would cross an existing flood defence on the River Stour. The CEMP Appendix A: CoCP commits to avoiding impacts on this defence, but it is stated that should potential impacts be identified during detailed design, then monitoring would take place as agreed through a future application to the Environment Agency for a Flood Risk Activity Permit. What are the additional flood risk implications? What remedial actions might be required if issues arose during monitoring?	Whilst it is considered very unlikely that the existing flood defence on the River Stour would be affected by the temporary bridge, good practice measure W18 is included in the CEMP Appendix A: CoCP (**document 7.5.1 (B)**), as a precautionary measure. The monitoring, if required, would identify any deviation from the pre-construction baseline and remedial actions, to be agreed with the Environment Agency prior to commencement of the works. These details would be agreed with the Environment Agency through the FRAP required for the temporary bridge across the main river.

12.4 Temporary Bridges and Culverts

Table 12.4 – Temporary bridges and culverts

Reference	Question	Applicant's Response
WE1.12.41	Paragraphs 11.1 and 11.2 of the Environment Agency RR [RR-031] raise concerns about the possible need to remove part of the embankment to install a temporary bridge. The Applicant [REP1-025] is not expecting this to be necessary. This matter appears to be close to agreement, but will it be included in the Statement of Common Ground between the two parties?	W18 in the CEMP Appendix A: CoCP (**document 7.5.1(B)**) states that the crossing designs would avoid impacts on the defence foundations and construction works would be undertaken using methods that limit ground movement/settlement to reduce the potential to compromise the condition and stability of the embankment. The Applicant is not intending to affect the flood defence along the River Stour.. In the unlikely event that the final methodology for the temporary bridge did impact the flood defence, then this would require a FRAP with approval from the Environment Agency. Reference relating to the flood defence has been added to the draft SoCG with the Environment Agency submitted at Deadline 3 (**document 7.3.3 (B)**). Paragraph 5.1 of the Environment Agency Written Representation [**REP2-023**] states that it is pleased that the Applicant has confirmed that they do not envisage any disruption to the flood bank in this location. In addition, the Applicant would also need to apply for a FRAP.
WE1.12.42	Paragraph 1.3 of the Environment Agency RR [RR-031] comments on the design	The Applicant has not yet appointed a main works contractor, who would be responsible for the detailed designs of the temporary bridge structures.

Reference	Question	Applicant's Response
	considerations for temporary bridges spanning watercourses. Can you confirm that temporary bridges would be designed so that: (i) from the top of the bank on each side of the river, there is a minimum of 3m width of natural land corridor between the bank top and the abutments of the bridge; and (ii) there is a minimum of 600mm clearance between the land surface at the bank top and the soffit of the bridge? Can you confirm the measures that would be put in place to prevent (i) soil or other materials on the bridge surface falling directly into the river causing pollution, or (ii) run-off from the bridge deck could find its way into the watercourse.	In terms of the temporary bridge design, W17 in the CEMP Appendix A: CoCP (**document 7.5.1 (B)**) states that temporary clear span bridge crossings would be designed with soffits that are raised 600mm above the flood level in accordance with Environment Agency requirements and would be set back 8m (or at a distance otherwise agreed with the Environment Agency) from the river's edge. Appropriate flood levels would be agreed with the Environment Agency and specified in the FRAP applications for these structures. In relation to the measures that would be put in place, W17 in the CEMP Appendix A: CoCP (**document 7.5.1 (B)**) has been amended at Deadline 3 to include *'The bridge designs will include measures to reduce the risk of material falling into the watercourses*'. Specific measures required to manage runoff would be designed by the main works contractor when appointed and would be in accordance with GG15 in the CEMP Appendix A: CoCP (**document 7.5.1 (B)**). The temporary bridge design would require a FRAP, therefore the Environment Agency would receive further details on the design. Paragraph 7.1 of the Environment Agency Written Representation [**REP2-023**] states that it has no further comments on water quality.
WE1.12.43	Paragraphs 2.1 and 2.2 of the Environment Agency RR [RR-031] comment on the impacts of temporary culverts on habitats and the hydro-morphology of watercourses. The Applicant has responded in its comments on RRs [REP1-025]. Will this matter be included in the Statement of Common Ground between the two parties? Can the Applicant confirm the extent of temporary culverting of watercourses that would be required during construction?	As acknowledged in the Environment Agency Written Representation [**REP2-023**], culverts for temporary crossings are only proposed on non-main rivers for which the relevant Lead Local Flood Risk Authority is the drainage authority. It is therefore not planned to include this matter in the draft SoCG with the Environment Agency (**document 7.3.3 (B)**) These culverts would only be in place for the construction phase and would subsequently be removed. The watercourses would then be reinstated to at least as good as previous condition, as detailed in commitment W02 in the CEMP Appendix A: CoCP (**document 7.5.1 (B)**). The assumptions regarding these crossings (locations, lengths and durations) based on the Proposed Alignment can be found in Appendix 1 of the Water Framework Directive (WFD) Assessment [**APP-060**/**REP1-009**]. The final details would be subject to confirmation by the main works contractor, who would be responsible for the detailed designs of the temporary culverts.'
WE1.12.44	Paragraph 11.1 of the Environment Agency RR [RR-031] states: *'11.1 The standard crossing design it does mention about navigation and the crossing over the Stour will have some effect on the navigation during construction/installation'.* You have responded in your comments on RRs [REP1-025]. Will this matter be	The Applicant is in discussion with the Environment Agency regarding the nature of the consent required for temporary closure of navigation to the River Stour during construction. It is anticipated that this would require an additional consent to be added to Table 2.1 of the CEMP (**Document 7.5 (B)**), as per other consents that are not disapplied by the dDCO (**document 3.1 (C)**). The matter is included in Table 5.1 of the draft SOCG with the Environment Agency (**document 7.3.3 (B)**) as a matter still under discussion.

Reference	Question	Applicant's Response
	included in the Statement of Common Ground between the two parties?	

12.5 Water Resources

Table 12.5 – Water resources

Reference	Question	Applicant's Response
WE1.12.45	Further to the reference in the CEMP [**APP-177**], where temporary works are anticipated to last for a period of fewer than 100 days but within 500m of an active private groundwater supply, what measures for supply would be put in place for landowners and tenants?	As described in ES Appendix 10.2: Groundwater Baseline and Assessment [**APP-131**], private water supplies within the Order Limits have been identified and those within 500m of the Order Limits have undergone assessment. In the event that a new private water supply is identified within 500m of any temporary works, then good practice measures W09 and W10, presented in the CEMP Appendix A: CoCP (**document 7.5.1 (B)**), apply.
WE1.12.46	If there was to be a risk of pollution or spillage leading to contamination of groundwater and private water supply, would there be a target timeframe to complete an assessment and to provide an alternative water supply to the affected parties? (The CEMP [**APP-177**] refers).	The CEMP (**document 7.5 (B**)), section 3.5 outlines the emergency procedures for the project. Paragraph 3.5.2 states that the contractor would produce an Emergency Action Plan that would set out the specific incident response procedures. The Emergency Action Plan would detail the roles and responsibilities for responding to pollution or spillage leading to contamination of groundwater and private water supply. The plan would also include the relevant organisations and individuals that would be contacted in the event that groundwater or private water supplies become contaminated. In the unlikely event that water becomes unusable then an alternative water supply will be provided to affected stakeholders within a maximum of 24hrs. This water supply could be in the form of tankered or bottled water. This alternative water supply would continue until the contamination was remediated and the ground water or private water supply returned to its previous condition.

13. Traffic and Transport

13.1 Traffic Assessment

Table 13.1 – Transport Assessment

Reference	Question	Applicant's Response
TT1.13.1	Can you explain the assumptions and judgements used to define the geographic boundaries of the TA [**APP-061**]? If the appointed contractor chose not to endorse the construction routes selected by the Applicant, what would be the implications for the validity of the traffic study?	The geographical boundaries used to define the TA [**APP-061**] includes all roads that have been identified as construction routes for the project between the Strategic Road Network (SRN) and the construction access points which are illustrated on the Access, Rights of Way and Public Rights of Navigation Plans [**APP-012**]. This includes the routes used by construction workers travelling between their accommodation and the Access Points. In addition, the geographic boundaries include all PRoW that lie within, connect to or interact with PRoW within the Order Limits and the construction routes. These geographical limits are shown in Figure 1 in the TA [**APP-061**]. The Construction Routes have been included in Appendix A of the CTMP at Deadline 3 (**document 7.6(B)**). As per paragraph 7.25 of the CTMP (**document 7.6 (B)**), the contractor would implement a monitoring and reporting system to check compliance with the measures set out within the CTMP (**document 7.6 (B)**). This would include the need for a GPS tracking system to be fitted to HGVs owned and operated by the contractor to check for compliance with authorised construction routes. The contractor would also be expected to monitor the number of construction vehicles between the site and the SRN.
TT1.13.2	Which traffic models were used to undertake the transport assessment [**APP-061**]? Have you consulted with National Highways and the local highways authorities on the assessment and mitigation?	Dynamic traffic models were not used to develop the TA [**APP-061**]. A spreadsheet-based junction capacity assessment was undertaken to determine any requirements to assess junctions on the LRN and the SRN in greater detail (i.e. through traffic modelling). The assessment results are provided in Chapter 7 and Appendix E of the TA [**APP-061**]. This assessment concluded that project construction traffic would not have a substantial impact on either the LRN or the SRN, even with substantial contingency built into the forecast traffic numbers (as set out in Chapter 6). In addition, the peak traffic impacts reported in the TA are only expected to occur for a short duration around the peak August 2025 month, with lower traffic levels forecast during other months in the construction programme. Therefore, it was determined that no junction modelling or highway mitigation was required. The Applicant has held multiple traffic and transport thematic meetings with the relevant highway authorities at Suffolk County Council and Essex County Council, and National Highways. These discussions have covered the proposed scope and methodology used in the assessment. There have also been discussions about survey

Reference	Question	Applicant's Response
		methodology and agreement on proposed traffic count locations, which was set out within the TA Scoping Report (National Grid, 2022) that was issued to the relevant highway authorities and National Highways in June 2022. Further details on how consultation responses have informed the assessment can be found in ES Appendix 5.2: Response to Consultation Feedback [**APP-094**]. Post DCO submission, engagement has also taken place with the relevant highway authorities at Suffolk County Council and Essex County Council, and National Highways as set out in the relevant SoCG (**REP1-015** and **document 7.3.4 (B)** respectively).
TT1.13.3	Have the relevant highway authorities and National Highways agreed to the baseline conditions, methodology, transport analysis set out in TA [**APP-061**]? If not, what are the outstanding issues?	The LHA have submitted LIRs [**REP1-045** and **REP1-0'9**]. The response to the outstanding matters can be found in the Applicant's Comments on Suffolk County Council and Babergh and Mid Suffolk District Council LIR (**document 8.5.3.1**) and the Applicant's Comments on Essex County Council and Braintree District Council LIR (**document 8.5.3.2**). National Highways has confirmed their acceptance of the TA and there are no outstanding matters in relation to the SRN, as set out in the Statement of Common Ground with National Highways (**document 7.3.4 (B)**).
TT1.13.4	Has agreement been reached with the relevant highway authorities and National Highways on: (i) construction routes set out in Figure 1 of the TA [**APP-061**]? (ii) traffic restrictions set out in paragraph 2.4.6 of the CTMP [**APP-180**]? (iii) the necessity or otherwise of time restrictions on construction traffic movements in peak hours and normal working hours? If not, what are the outstanding issues?	The Applicant continues to engage with the relevant LHAs and National Highways in order to reach agreement on the issues as detailed. (i) Regarding construction routes, the LHAs have identified some queries in their LIRs and the response to those documents address the reason for routing proposals including specific works access requirements. (ii) Regarding traffic restrictions, no specific objections to proposed restrictions have been reported. The LHAs have noted a general preference for diversions to use equivalent or high-classifications of roads compared to the closed road. The Applicant has noted this and would only divert onto routes whose width and form was comparable to or higher standard than that of the closed road. Occasionally this might be on a lower classification (e.g. a B road rather than an A road) but that the specific affected section of that route would be comparable to or higher standard than the closed road. (iii) Regarding working hours, and specifically timing of constructions traffic movements, the LHAs have been advised of the ES Appendix 4.2: Construction Schedule [**APP-091**] for this project, which would achieve the 2028 delivery date, is based on core working hours of 07:00 to 19:00 on weekdays and 08:00 to 17:00 on alternating Saturdays and Sundays, with works also being undertaken on bank holidays. The typical shift patterns for these contracts mean that while within the overall project extents there is likely to be working on every day, at any location working patterns include rest days for residents and visitors. The Applicant continues to discuss these concerns through thematic meetings on Highways and PRoW.

Reference	Question	Applicant's Response
TT1.13.5	How are the volumes of construction traffic for the Proposed Development calculated (paragraph 6.2.10 of the TA [**APP-061**] refers)?	The volumes of construction traffic for the project have been calculated based on the preliminary design for the project. This has been used to calculate estimates of materials required during construction which was then used to quantify the total number of HGVs and Light Goods Vehicles (LGV) for the project. The vehicle numbers were then distributed in accordance with the activities set out in the Alternative Scenario presented in ES Appendix 4.2: Construction Schedule [**APP-091**]. The output of this exercise was the traffic data used in the TA [**APP-061**].
TT1.13.6	What assumptions were made in the TA ([**APP-061**], paragraph 6.2.8) about the sourcing of construction materials? What are the most likely sources of materials for access road construction? What impact would the choice of supply sources have on the delivery routes? How can the ExA be confident that the final sources of construction materials and use of associated routes would not lead to traffic and transport effects greater than or different from those assessed in the ES?	The main works contractor, once appointed, would be responsible for procuring materials to use in the permanent and temporary works depending on material cost and availability at that time. The main works contractor would look to procure materials that allow the works to be completed in an economic, efficient and sustainable way. Part of this procurement strategy would be to assess local sources for high volume materials such as stone, concrete, and steel. Local sources may not be suitable for the specialist components (cable, conductors, mechanical and electrical equipment) and these may need to be sourced from national and international suppliers. Due to the rural nature of the project access routes to the works locations are limited and therefore the TA [**APP-061**] has considered the suitable and likely routes that a main works contractor would select. The TA [**APP-061**] assumes that the highest volume of construction traffic would route between the construction sites and the SRN via the A12/A14 Copdock junction, with less traffic expected to use other SRN junctions. This assumption has been made because the Copdock junction provides a connection (via a very short section of the A1214) to the A1071. The alignment and characteristics of the A1071 make it the most appropriate distributor road to connect to most access points across the study area. As set out in the CTMP [**APP-180**], the general construction routeing strategy (section 5.4) assumes a hierarchical approach that prioritises use of the SRN followed by A-roads where practicable. Therefore, regardless of the source of construction materials, most construction traffic is likely to use the Copdock junction to access the A1071. Given the focus of the assessment on the LRN, this means that the source of materials is unlikely to change the conclusions in the TA. The low construction vehicles numbers means that there would be no effect on SRN flows.
TT1.13.7	What assumptions were made in the TA ([**APP-061**], paragraph 6.2.8) about the disposal of materials at the end of the construction and dismantling process, especially with regard to stone from access tracks and haul roads? How can the ExA be confident that the agreed disposal points and the use of associated construction routes would not lead to traffic and transport effects greater than those assessed in the ES?	It has been assumed that all materials brought to site and used temporarily for construction activities would be removed post construction. Construction traffic associated with removal would use the defined access points and vehicles used for removal have been included in the traffic numbers. As noted in the response to TT1.13.6, the construction vehicles numbers means that there would be no effect on the SRN flows. Therefore, it does not matter where material is disposed of in terms of the TA **[APP-061],** once beyond the local junction with the SRN.

Reference	Question	Applicant's Response
TT1.13.8	Once a main contractor has been appointed, could efficiencies such as a reduction in overall construction programme result in concentration of construction traffic over a shorter period and consequently affect the ES worst-case scenario for traffic and transport?	The construction programme has been generated around network outages. These network outages are fixed and therefore acceleration of the works would typically not result in a shorter construction period. The construction traffic forecast contained within the ES is therefore considered the worst case.
TT1.13.9	In paragraph 5.1.1 of its draft Statement of Common Ground [**APP-171**], National Highways expects to see a risk assessment (GG104) of the impact of the construction traffic on the junctions where the construction traffic joins the strategic road network. How would you assess the risks associated with construction traffic joining the strategic road network?	Flows joining the SRN have been discussed further with National Highways and clarification provided that flows are low and as such no Safety Risk Assessment in accordance with GG104 is required. This is confirmed in the SoCG with National Highways updated for Deadline 3 (**document 7.3.4 (B)**). The SoCG confirms that there are no outstanding matters in relation to the SRN.
TT1.13.10	National Highways has a major upgrade of the A11 between J19 and J25 scheduled for 2024 and 2027 (Table 4.1 of the TA [**APP-061**] refers). Have you obtained detailed information on routing or locations of impacts associated with the proposed A11 Junctions 19 to 25 major upgrade works from National Highways? Have these planned improvements to the A11 been taken into account in the transport assessment?	It is assumed that this question relates to the A12 and not the A11. At the time of writing the TA [**APP-061**], limited information was available on the traffic and transport impacts of the A12 Junctions 19 to 25 widening project. The information that was available indicated that construction activities would add traffic to the SRN and that the project could generate some construction worker trips on the LRN primarily in Chelmsford and Colchester. There was (and still is) no suggestion that there would be any significant construction impacts on LRN roads north of the A12.
TT1.13.11	Table 6.1 of the TA [**APP-061**] assumes that 70% of the construction staff workforce would travel in minibuses (four per minibus). Has a modelling sensitivity exercise been undertaken to test deviations in the percentage use of staff minibuses?	The TA [**APP-061**] did not include a sensitivity test varying the percentage of staff per minibus. However, a significant level of general contingency has been built into the staff forecasts, as summarised in Chapter 6 of the TA. For example, the monthly staff forecast at each access point was reviewed over a seven-month period, three months either side of the August 2025 peak, and the highest forecast at each Access Point in that seven-month window was applied in the peak month forecast. This resulted in a significant uplift in the forecast used in the TA: the peak daily on-site staff estimate for the whole project in August 2025 is 350, but the result of the seven-month review meant that the TA assumes 528 staff are on-site during a peak day – this is a 51% uplift in

Reference	Question	Applicant's Response
		expected staff numbers for the purposes of assessment. This contingency would therefore cover the impact of a substantial degree of variation in the percentage use of staff minibuses.
TT1.13.12	The latest Institute of Environmental Management and Assessment guidance on the environmental assessment of traffic and movement published in July 2023 refers to the 'Safe System' approach as international best practice. Did you consider using the 'Safe System' approach to analyse personal injury and collision data? If not, why not?	The application for development consent was submitted in April 2023 and was based upon the latest available guidance at the time. The updated guidance from IEMA (IEMA, 2023), 'Environmental Assessment of Traffic and Movement' (EATM), was published in July 2023 after the application was submitted. It consequently could not be considered during the assessment. The Safe System is a systematic approach to design and network management combining road factors; vehicle factors; human factors; speed/asset management and post-crash response. It recognises that human error underpins most road traffic collisions and aims to create inherently-safe networks which are forgiving of those errors. Examples of Safe-System approach activities include passively-safe signs posts and lamp columns which prevent severe deceleration in the event of a collision, and speed management to keep vehicle speeds to a range compatible with the road environment. As such, Safe System integrates design approaches and components which have been widely used for many years. For this project, with large numbers of very small highway engineering works, for example access points, signs, and other minor alterations, the scope for a network-wide safe system approach is limited. The Applicant recognises the need for the design to take opportunities for Safe System benefits, and these would be developed in the detailed design. Examples would include passively safe signs where new posts are needed; access point design that is site-specific in a route context (consistent routes have the best safety performance), and speed limits consistent with the character of the route.
TT1.13.13	In relation to existing traffic flows, can you confirm whether traffic speeds were recorded as part of the traffic count surveys (paragraphs 4.3.3 to 4.3.6 of the Traffic Assessment [**APP-061**])? If traffic speeds were recorded, can you confirm whether the 85%ile speeds did or did not exceed the speed limit on those roads surveyed?	Traffic speed data was recorded as part of the Automatic Traffic Counters (ATCs) surveys. The following roads show that the 85th percentile speed exceeded the speed limit; • A134, south of A12; • A134, north of Old House Road; • Colchester Road, shortly east of Mill Field; • B1508, north-west of junction with Wyatts Lane; • A134, south of junction with High Road; • A1071, west from the turning for Old Hall Farm; • Duke Street, South West of the junction with Back Road; • Cornard Road, south of King Street Roundabout;

Reference	Question	Applicant's Response
		• B1508, north-west of junction with Normandie Way; • B1508, opposite Fulibroch Dairy, South East of the junction with Spout Lane; • B1068, east of junction with The Old Road; • Stackwood Road, north of junction with Straight Road; • A1071, west from the turning for Old Hall Farm; • Assington Street; • A134, south of Junction with A134; • Henny Road, south of junction with Alphamstone Road; • Shawlands Avenue, south-east of the junction with Raydon Way; • Colchester Road, east of Halstead town centre; and • Colchester Road, White Colne.
TT1.13.14	Paragraphs 4.3.7 to 4.3.9 of the Traffic Assessment [**APP-061**] address personal injury and collision data. Can you confirm whether speeding was or was not a factor in the analysis of personal injury and collision?	Road traffic collision data on injury collisions is collected using standardised national rules set out by the Department for Transport and defined in guidance STATS20. These include mandatory fields of data and optional fields. Speed as a contributory factor is an optional field and as such is not always collected. It is also a subjective matter, as collision reports may be collated by non-specialists including by the parties involved rather than by a police collision investigation specialist. Therefore, while in some cases speed (above the limit, and/or above that appropriate for the route) may be recorded as a factor, this is not always the case. Therefore, it is not possible to undertake collective analysis of the proportion of collisions in which speeding was a factor, or to determine with confidence whether any individual collision was speed-related. As set out in the TA [**APP-061**], all traffic collisions recorded over a five-year period (2015-2019 inclusive) were reviewed for roads where the project is forecast to increase baseline traffic by 5% or more. A total of only nine collisions were identified on all these roads (spread across six project construction routes) over this five-year period. There was therefore no evidence of any road safety issues on roads where the project is expected to notably increase baseline traffic volumes.
TT1.13.15	Does the TA [**APP-061**] submitted with the application meet the criteria set out in NPS EN-1, Section 5.14 Traffic and Transport, in relation to	The NPS EN-1 section on 'Applicant assessment' (paras 5.14.5-10) indicates the following: • DfT's Transport Analysis Guidance (TAG) is referenced as appropriate for modelling and assessing the impacts of transport schemes – this was referenced during the development of the TA [**APP-061**] as set out in TA paragraph 3.4.1.

Reference	Question	Applicant's Response
	the requirements of a TA? If not, in what respects is it lacking?	• Applicants should consult National Highways and Highways Authorities – consultation was undertaken as set out in TA paragraphs 1.3.9 and 1.3.10. • The Applicant should prepare a travel plan – this is included as a chapter in the CTMP (**document 7.6 (B)**). • The Applicant should provide details of proposed measures to improve access by active, public and shared transport – the CTMP sets out good practice measures to encourage sustainable transportation for the workforce, in a way that reduces both environmental and social impacts on the local area. • The assessment should consider any possible disruption to services and infrastructure – this is included in the TA, which, for example, considers the impacts of temporary closures of PRoW. • If additional transport infrastructure is needed or proposed, it should always include good quality walking, wheeling and cycle routes, and associated facilities – due to the rural location of the project, construction access by sustainable modes of travel is limited. However, minibuses would be provided for construction workers to reduce impacts on the road network. • Applicants should discuss with network providers the possibility of co-funding by government for any third-party benefits. The Applicant does not consider this to be applicable to the project. In summary the Applicant considered that the TA meets the criteria set out in NPS EN-1 Section 5.14 Traffic and Transport on TA requirements.
TT1.13.16	Would there be heavy goods vehicles movements associated with the maintenance and replacement of structural elements of the Proposed Development during its operational lifetime? (Refer to the Traffic Assessment [**APP-061**], paragraph 1.3.3.)	Section 1.3 of the TA [**APP-061**] considers the operational effects on the project on local traffic flows. Paragraph 1.3.1 states that all components would be unmanned during operation. Paragraph 1.3.2 states that there yearly checks would be undertaken at the same time as the existing 400kV overhead line. Paragraph 1.3.3 states that monthly and annual surveys of the CSE compounds would be undertaken using a small van. For these reasons paragraph 1.3.4 states that operational traffic movements would be limited and that they have been excluded from the TA [**APP-061**]. In an unlikely circumstance, such as a major fault repair this may require temporary access routes to be established for HGV's and other large items of equipment. The numbers of any HGV's required for these works would be in relation to the scale of the works required, however this would be less than the traffic numbers that have been used within the Traffic Assessment [**APP-061**].
TT1.13.17	Have vehicle movements and staff numbers associated with the works to be undertaken by UK Power Networks been factored into the assumptions set out in Appendix C of the TA [**APP-61]**?	The baseline and alternative scenario worker profiles presented in ES Chapter 4: Project Description [**APP-072**] include the UKPN worker numbers for removal of the 132kV overhead line. The diversion of UKPN services and provision of new power supplies to compounds is not included in these worker profile numbers. These numbers would be extremely low, typically one or two gangs requiring one LGV for a short duration of approximately 1-2

Reference	Question	Applicant's Response
		weeks. A risk uplift has been applied to the traffic numbers used in the TA [**APP-061**] that would more than cover these additional vehicle movements.

13.2 Construction Traffic and Construction Route Strategy

Table 13.2 – Construction traffic and construction route strategy

Reference	Question	Applicant's Response
TT1.13.18	Are there any publicly maintained roads with 'C' or 'U/C' classification included in Figure 1 of the TA [**APP-061**] showing project construction routes?	There are a number of publicly maintained roads with 'C' or 'U/C' classification. These can be determined through reference to [**APP-061**] alongside the website www.findmystreet.co.uk/map. It is further noted, that in some cases the quality of 'C' or 'U/C' classification can vary in terms of quality, width etc and as such assessment for construction routes is based on appropriateness of route as opposed to classification. The Applicant can confirm that where such routes are proposed, they have been checked for adequacy for the proposed use and found appropriate in terms of width and alignment.
TT1.13.19	Regarding the definition of LGV given in the CTMP [**APP-180**], can a distinction be drawn between vans and passenger car vehicles?	Yes, the definition of LGV has been updated in Table 4.1 in CTMP at Deadline 3 (**document 7.6 (B)**) to exclude cars used for commuting in the definition of LGV.
TT1.13.20	Will the list of enforcing authorities provided in point 4 of paragraph 15.3.1 of the CEMP [**APP-177**] be extended to include local highway authorities for construction traffic activities on the highway not complying with the Construction Environment Management Plan?	The Applicant has updated point 4 of the list in paragraph 15.3.1 of the CEMP (**document 7.5 (B)**) submitted at Deadline 3 to include the LHA in the list of appropriate enforcing authorities that would be contacted should there be an incident that affects the LRN during construction. The original list included examples of relevant authorities and was not considered to be exhaustive.
TT1.13.21	Has agreement been reached with the highway authorities on a monitoring and enforcement strategy for construction and related traffic [sections 8.2 and 8.3 of the CTMP [**APP-180**] refer)? If not, what are the outstanding issues?	The Applicant continues to engage with the relevant highway authorities and seeks confirmation on the issues as detailed through a suitable agreement. At the time of writing, the outstanding issues relate to working hours, see item TT1.13.4, and compliance with construction routes. Discussions will continue through the thematic meetings on Traffic and Transport which cover Highways and PRoW, with a view to cover all areas in the highways framework agreement.

Reference	Question	Applicant's Response
		The Applicant can confirm that there are no matters outstanding in relation to the SRN, as evidenced by the SoCG with National Highways (**document 7.3.4 (B)**).
TT1.13.22	Can you demonstrate how the proposed good practice measure GG17 in the CEMP Appendix A: CoCP [**APP-178**] is in full compliance with section 149 of the Highways Act?	Wheel cleaning would be implemented when there is a risk that vehicles leaving the site could convey mud or debris onto the public roads. If there is no risk of conveying mud of debris onto the public roads then wheel cleaning does not provide any benefit and as such is not required. Such scenarios could be; where a vehicle is exiting a tarmac or stone surfaced compound, exiting a tarmac or stone surfaced access route, exiting an area of the site that due to weather or ground conditions does not contain mud or dust. Typically, when there is a risk of mud or debris being deposited onto the road then equipment for removing this debris, such as a sweeper collector attachment to a road going telehandler would be kept on site, as an additional precaution. This equipment would be deployed on public roads where the risks to operatives and the public can be safely managed in line with a suitable risk assessment and method statement. The Applicant considers these measures to be compliant with section 149 of the Highways Act 1980 (Removal of things so deposited on highways as to be a nuisance etc.).
TT1.13.23	Would suitable arrangements be put in place to monitor, report and enforce vehicle emission standards on the project?	The requirement to comply with the vehicle emissions standards on the project would be a contractual requirement of the main works contractor, subcontractors and suppliers, as the standards are written into good practise measure GG14 of the CoCP (**document 7.5.1 (B)**). Typically, on a project of this size and nature a delivery booking system would be used to manage HGV deliveries. This would include registering information for each vehicle, including evidence it met the required emissions standards before it w's allowed to access site. Checks would be undertaken and recorded for HGV's accessing site as part of the Environmental Inspections and Site Checks detailed in Table 15.1 of the CEMP (**document 7.5(B))**, to monitor compliance. Any breaches would be reported in line with the procedure set out in Section 15.4 of the CEMP (**document 7.5 (B)**). GPS vehicle tracking of all HGV's owned or operated by the main works contractor would be implemented in accordance with good practice measure TT02 in the CoCP (**document 7.5.1 (B)**).
TT1.13.24	How would remediation works be commissioned by the applicant post-construction to return roads, tracks and public rights of way to their pre-construction condition (see section 8.2 of the CTMP [**APP-180**])?	GG06 of the CEMP Appendix A: CoCP [**APP-178**] secures that the main works contractor would reinstate t roads, tracks and PRoW to their pre-construction condition using the full photographic and descriptive pre-condition survey.

Reference	Question	Applicant's Response
TT1.13.26	Has the proposed frequency for checks of temporary signage, vehicle condition, and use of agreed construction routes been subject to a risk assessment (Table 8.1 of the CTMP [**APP-180**] refers)? How would site checks be reported to interested stakeholders?	Table 8.1 of the CTMP (**document 7.6)** specifies weekly checks on these issues. At this stage of project development the proposed temporary signage, vehicle condition and use of agreed construction routes have yet to be developed and confirmed to a level at which a risk assessment could be undertaken. Once a main works contractor has been appointed and the design and programme confirmed, then risk assessments can commence, because the contractor's specific plans need to be in place before that risk assessment can be undertaken. Chapter 7 of the CTMP (**document 7.6 (B)**) includes details on implementation, including 7.3 (Non-Compliance Procedure) and 7.5 (Complaints Procedure). The checking and management of these issues is a matter for the appointed main works contractor.
TT1.13.27	Following on from paragraph 5.4.16 of the CTMP [**APP-180**], how long would temporary diversion signs be in place? How frequently would the signs be checked for safety defects?	Temporary diversion signs would be in place during whole period of the diversion being in place; with prior notification to stakeholders as covered by CTMP (**document 7.6 (B)**) Section 7.4 community liaison. CTMP (**document 7.6 (B)**) Table 8.1 provides for a weekly signage check by the Environmental Clerk of Works (EnvCoW).
TT1.13.28	Paragraph 5.4.3 of the CTMP [**APP-180**] refers to a requirement for drivers of abnormal indivisible loads and heavy goods vehicles (be they the main contractors, a sub-contractor or a supplier) not to use satnav equipment. How would compliance be monitored and enforced?	The use of satnav equipment would not be applicable for drivers of abnormal indivisible loads who would be escorted to the works site by police representatives. Such routes would be pre-determined with appropriate regulation orders in place to ensure a safe operation. Section 5.4 of the CTMP (**document 7.6 (B)**) describes the construction routeing including HGV deliveries, with colour-coded signing to indicate which vehicle classes may use each route. Section 7.3 of the CTMP sets out the process for non-compliance.
TT1.13.29	Which organisation commissioned the pre-construction structural surveys on routes anticipated to be used by abnormal indivisible loads (Section 5.2 of the CTMP [**APP-180**])? Were the local highway authorities engaged in this structural survey exercise?	The Applicant commissioned independent transportation engineers Wynns to assess the access routes for all Abnormal Indivisible Loads (AIL) on the project. The structural authorities consulted included Essex County Council, Suffolk County Council and National Highways. The detailed design would develop the routes and arrangements in detail which would include liaison with the affected Highway Authorities in accordance with the CTMP Section 5.2 (**document 7.6**).
TT1.13.30	Can a draft plan be provided to indicate the locations of construction route signage beyond the Order Limits and explain how the signage would be secured in the dDCO?	Construction route signage beyond the Order Limits has yet to be confirmed so no plan can be provided at this stage. The signing proposals would form part of the package of design proposals that would be subject to Road Safety Audit (RSA) and therefore be subject to local authority approval.

Reference	Question	Applicant's Response
TT1.13.31	Would heavy good vehicles associated with the Proposed Development travel past any schools or other particularly sensitive receptors? If so, which would be affected and how would these heavy goods vehicles near these areas be controlled? How would any measures be secured?	ES Appendix 12.1: Traffic and Transport Significance of Effects Tables [**APP-134**] Table 4.1 summarises receptor sensitivity for each section of road expected to be used by construction vehicles and staff vehicles, and the rationale for each categorisation (including identifying where a school is either on the road section or nearby). Table 4.1 also includes the number of HGV that are expected to travel along the road section on a peak construction day. The table below summarises all road segments classified as 'high' or 'very high' sensitivity (including the rationale) that are expected to carry HGV construction traffic.

Road Name (section)	Sensitivity	Rationale
A1071 section 7 (Hintlesham)	Very High	Access to Hintlesham and Chattisham Primary School.
A134 section 2 northern segment (Great Horkesley)	High	The Trinity Private General Practice (GP) within 500m, footways/crossings and some residential frontage.
A134 section 2 southern segment (south of A12, Colchester)	High	The St Aubyn (health) Centre within 500m.
B1508 section 2 northern segment (Great Cornard)	Very High	Within 200m of Chalk Hill school access, adjacent to park with playground and large grocery store with off-street parking.
B1508 section 2 southern segment (Little Cornard)	High	Mental health clinic and Little Cornard Village Hall adjacent to road.
A131 section 3 northern segment (Halstead town centre south of A1124 junction)	Very High	Halstead hospital, high street shops, pavements and church.
A131 section 2 southern segment (Halstead town centre north of A1124 junction)	Very High	Halstead hospital, high street shops, pavements.

Only two roads in the table above would be expected to carry more than 100 construction HGV trips during a peak construction day: the A1071 (120 trips) and the A134 (194 trips). These would be spread over a 12-hour working day and would be a relatively low proportion of total HGV traffic on these roads: the A1071 is forecast to

Reference	Question	Applicant's Response
		carry over 1,400 baseline HGV trips in 2025 with the A134 forecast to carry approximately 1,000 baseline HGV trips. In accordance with GG25 in the CEMP Appendix A: CoCP (**document 7.5.1 (B)**, members of the community and local businesses would be kept informed regularly of the works through active community liaison. This is anticipated to include notification of heavy traffic periods and start and end dates of phasing. Compliance with CEMP Appendix A: CoCP is secured through Requirement 4 of the dDCO (**document 3.1 (C)**).
TT1.13.32	Further to section 8.4 of the CTMP [**APP-180**] and in relation to raising complaints, how would members of the public be able to identify whether a vehicle was associated with the construction of the project? Would each vehicle (be it the main contractors, a sub-contractor or a supplier) bear distinguishable logos or livery to indicate its connection with the project?	There is no intention to use standardised livery on main contractors, sub-contractors or supplier vehicles. Members of the public won't be able to recognise vehicles associated with the project. As a competent contractor, the main works contractor would follow the requirements of the CTMP (**document 7.6(B)**). Typically, on a job of this size and scale HGVs would be logged into a booking system, which would include providing details of that vehicle, including the vehicle registration.
TT1.13.33	What are the 'good practice commitments' referred to in Table 8.1 of the CTMP (Site Check) [**APP-180**]?	The Applicant notes that Table 8.1 in the CTMP should say good practice 'measures' rather than 'commitments'. This has been amended in the Deadline 3 version of the CTMP (**document 7.6 (B)**)**,** noting that Table 8.1 is now Table 7.1. Good practice measures are defined in paragraph 1.3.2 of the CTMP (**document 7.6 (B)**). This states that good practice measures are standard approaches and actions to be implemented on construction sites, intended to protect the environment. These may be general or topic-specific but are typically applicable across the whole project. The good practice measures are provided in full in the CEMP Appendix A: CoCP (**document 7.5.1 (B)**), which is secured through Requirement 4 of the draft dDCO (**document 3.1 (C)**).
TT1.13.34	Has agreement been reached with the relevant highway authorities on condition surveys of existing highway assets likely to be used during construction (sections 5.2 and 8.2 of the CTMP [**APP-180**])? If not, what are the outstanding issues?	The Applicant has not yet reached agreement on the nature of surveys that would be required. The Applicant continues to engage with the relevant highway authorities on this issue.
TT1.13.35	How were potential off-site contractor and visitor parking impacts considered in the	It has been assumed for the purpose of the ES that there would be sufficient parking provision for construction workers, construction vehicles, and visitors within site compounds. Off-site contractor and visitor parking impacts

Reference	Question	Applicant's Response
	ES? (Paragraph 4.2.10 of the CEMP [**APP-177**] refers).	have consequently not been assessed in the ES. Due to the rural nature of the area, there are limited options available for offsite parking in the vicinity of the Order Limits.

13.3 Temporary Traffic Regulation Orders

Table 13.3 – Temporary Traffic Regulation Orders

Reference	Question	Applicant's Response
TT1.13.37	Has agreement been reached between the relevant highway authorities and the Applicant on the use of Temporary Traffic Regulation Orders (Schedule 11 of the dDCO (**document 3.1(B)**) refers)? If not, what are the outstanding issues?	The Applicant has held discussions with the relevant highway authorities to date on outstanding matters with regards Temporary Traffic Regulation Orders and their use pursuant to Article 47 of, and Schedule 12 to the dDCO (**document 3.1 (C)**). The LHAs have suggested during Traffic and Transport thematic meetings that they do not expect all powers to be required, and enquired as to whether enforcement activity will be proposed to achieve compliance with speed and/or parking restrictions. They have also noted that many roads are not of sufficient width to implement lane closures and therefore one-way operation may not be required or appropriate. The authorities noted that site-specific decisions on whether powers will need to be exercised will be determined during the site-specific detailed design for proposals at each location. This will include both the application of powers to impose reduce speed limits during the works, and the expected compliance and extent of operation which would be determined for each location once the main works contractor is appointed.
TT1.13.38	What length of road markings and how many associated signs would be required for compliance with the current Traffic Signs Regulations and General Directions and to bring the proposed temporary waiting restrictions into lawful effect? (See Schedule 11 of the dDCO (**document 3.1 (C)**).)	The length of road markings and how many associated signs required would be determined at the point of making the application for the temporary waiting restrictions as required. Such markings and signs would be provided in order for restrictions to be lawful. These would be submitted through the permit scheme for the approval of the highway authority.
TT1.13.39	In relation to Schedule 11, Part 1, of the dDCO (**document 3.1 (C)**), have Essex County Council and Suffolk County Council been consulted about the civil enforcement of the proposed no waiting restrictions?	The enforcement of the proposed no waiting restrictions is being discussed with the LHAs as part Traffic and Transport thematic meetings as noted above.

Reference	Question	Applicant's Response
TT1.13.40	The numbering convention used in Schedule 7 of the dDCO (**document 3.1 (B)**) indicates that the start and end points of various streets are given the same number even though they are not the same points. Is this street numbering convention novel for DCOs? Would it be clearer if a more usual street numbering convention (as used, for example, in previous electricity transmission made Orders)?	The dDCO (**document 3.1 (C)**) Schedule 7 part 1 has been amended for deadline 3 submission. The schedule has been updated to align with the gazetteer. Due to multiple PRoWs interacting, and the closures only affecting some of these, the approach taken has been to number the full extent of the closure with the same reference as this could be applied to multiple different PRoWs.
TT1.13.41	In relation to the temporary stopping up of streets and the temporary restriction of vehicular movement dDCO (**document 3.1 (B)**), Schedule 7, Parts 1 and 2, and Schedule 11, Part 3) can the Applicant explain: i. for how long is it intended each restriction should operate? ii. what is the minimum and maximum period of closure sought for each location identified? iii. when would they be implemented? iv. how has the likely disruption to users of these streets been assessed in the ES? v. what are the lengths of the proposed diversionary routes? vi. what mitigation measures would be used and how would these be secured in any DCO? Are the proposed periods of closure likely to be acceptable to the highway authorities?	i to iii) The main works contractor would provide the detailed programme relating to stopping up of streets and temporary restrictions of vehicle movements. Therefore, this information is not available at the current time, but would be subject to consultation through the permit scheme with the LHA once details have been proposed. The Applicant has also submitted a PRoW Management Plan (**document 8.5.8**) at Deadline 3. This sets out that the impacts on PRoW are short term and temporary. Therefore, no addition mitigation is required beyond the good practice measures such as signage and notices during closures and diversions. iv) The assumptions used in ES Chapter 12: Traffic and Transport [**APP-080**] are based on the assumed duration of closures based on the preliminary design. The TA [**APP-061**] concludes that the project would not result in any significant effects on Road Network Performance and Safety, including consideration of impacts on bus passengers. Therefore, these aspects have been scoped out of ES Chapter 12: Traffic and Transport [**APP-080**], as noted in paragraph 12.3.7. v) There are many permutations of diversions for closures and diversions, so it is not possible to define a schedule of every permutation. The lengths of diversions are broadly of short additional length, and none cover extended periods. Mitigation is not considered likely to be needed; this would be subject to consultation with the LHAs as part of permitting process. vi) Please see the response to the previous item. In addition, compliance with the PRoW Management Plan (**document 8.5.8**) is secured through Requirement 4 of the dDCO.
TT1.13.42	Can you confirm that each of the emergency services covering the counties of Suffolk and Essex have been consulted about the impact of the proposed	In addition to statutory and non-statutory consultation with the affected emergency services, further engagement is currently taking place with emergency services regarding Temporary Traffic Regulation Orders (TTROs).

Reference	Question	Applicant's Response
	temporary traffic regulation orders in Schedule 11 of the dDCO (**document 3.1 (C)**)?	The Applicant is engaging with Essex Police and Fire and Rescue Services to discuss the issues raised in their RR [**RR-033**]. Other Emergency Services such as East of England Ambulance Service National Health Service (NHS) Trust [**RR-030**], Essex Partnership University NHS Foundation Trust [**RR-032**], and Suffolk and North East Essex Integrated Care Board [**RR-047**] were responded to within the Applicant's Response to RR [**REP-025**] Table 3.19 and 3.20 explains why the Applicant considers that no impact from the TTRO's would arise during construction.
TT1.13.43	Have Essex and Suffolk Police Roads Constabularies been consulted about the enforcement of the moving traffic restrictions in Schedule 11 of the dDCO [**APP-34**]?	In addition to statutory and non-statutory consultation, engagement is currently taking place with emergency services regarding TTROs and enforcement. The Applicant is engaging with Essex Police to discuss the issues raised in their RR [**RR-033**] which include traffic restriction contained on Schedule 12 of the dDCO (**document 3.1 (C)**). Essex Police is leading this matter on behalf of both affected constabularies.

13.4 Temporary and Permanent Measures to Access the Works

Table 13.4 – Temporary and permanent measures to access the works

Reference	Question	Applicant's Response
TT1.13.44	Have you discussed compliance of your proposed bellmouth design (Design and Layout Plans Temporary Bellmouth for Access [**APP-030**]) with the relevant Councils' highways planning standards?	The Applicant has been engaging with the LHAs regarding the proposed bellmouth design. At this stage, the design for junction form shown in the Design and Layout Plans: Temporary Bellmouth for Access [**APP-030**] is generic and based on 'worst case'. The detailed design of each site-specific location would be submitted for approval by the LHA as per Requirement 11 of the dDCO (**document 3.1 (C)**). The Applicant will continue to discuss the development of the designs through the Traffic and Transport thematic meetings with the LHAs.
TT1.13.45	For each of the 116 locations where a temporary access point is proposed, explain the types of works vehicles that would access the works site at each access point (paragraph 2.2.4 of the TA [**APP-061**])?	ES Chapter 4: Project Description [**APP-072**] provides a detailed description of the project in terms of the infrastructure proposed, where it would be located, what size it would be, permanent and temporary access requirements. Assessment has shown that all of the proposed access points can accommodate all vehicle types anticipated, excluding AIL which are subject to separate evaluation. It is therefore not necessary to provide details of which vehicle types would use which Access Points.
TT1.13.46	Does the arboricultural survey data in the Arboricultural Impact Assessment [**APP-067**] include vegetation that would be lost to achieve the required visibility sightlines	As described in paragraph 1.1.2 of the Arboricultural Impact Assessment (**document 5.10(B)**), the Arboricultural Impact Assessment assesses the trees that could be affected by the project as shown on the Trees and Hedgerows to be Removed or Managed Plans [**APP-017**]. These assumptions are based on the Proposed Alignment shown on the General Arrangement Plans [**APP-018**].

Reference	Question	Applicant's Response
	at each of the 116 proposed temporary access points?	The Applicant has provided the Design and Layout Plans Temporary Bellmouth for Access [**APP-030**]. The access junction form shown is a generic form based on a 'worst case' approach at the outline design stage. The detailed design would include individual access development reflecting the specific vehicles to be accommodated, and the site-specific characteristics of each individual access, including geometry and constraints such as trees and hedgerows to limit removal of vegetation and using crown-lifting in preference to tree-removal. LEMP Appendix A: Vegetation Retention and Removal Plan [**APP-183**] shows the trees and hedgerows which would be affected by the works based on the Proposed Alignment, including visibility splays at temporary access points. If this required any changes as a result of detailed design, then it would be submitted to the 'relevant planning authority' in accordance with Requirement 8 of the dDCO (**document 3.1 (C)**).
TT1.13.47	What steps have been taken to ensure that the areas of land whose acquisition is sought for the construction of suitable and safe temporary highway access points are of the appropriate size?	As shown in Design and Layout Plans Temporary Bellmouth for Access [**APP-030**], a typical temporary access point layout has been generated that complies with the required standards for highways in accordance with DMRB Design document CD 123 - Geometric design of at-grade priority and signal-controlled junctions (Standards for Highways, 2021) and LHAs' local requirements. The splay is based on the national speed limit and a standard range of vehicles; none of the construction vehicles is expected to have a more onerous form (for example driver position further back from the front of the vehicle than provided for in CD 123). Therefore, this approach is considered a worst case for construction planning and has been used in the DCO submission. As the detailed design is undertaken this typical layout would be made location specific for each individual access and would either match the indicative design in Design and Layout Plans Temporary Bellmouth for Access [**APP-030**] or be reduced if that is appropriate but will remain within the Order Limits.
TT1.13.50	How would speed limits of 10mph and 15mph on the non-public unsurfaced and surfaced temporary access routes be enforced to ensure compliance with speed limits? (Paragraph 5.6.2 of the CTMP [**APP-180**] refers.)	The main works contractor would implement the CTMP (**document 7.6(B)**) including site speed limits as detailed in good practice measure GG26 of the CoCP (**document 7.5.1 (B)**). Section 7.3 of the CTMP sets out the process regarding compliance with measures in the CTMP, in accordance with good practise measure GG05 the site workforce will be informed of these requirements through toolbox talks and briefings.
TT1.13.51	Can you confirm: (i) which organisation would be responsible for removing temporary accesses and working areas once the main works and testing were completed? (ii) whether there are reasons, other than testing, why temporary working accesses and working areas might remain in place after the main works had been completed?	(i). The main works contractor would be responsible for removing temporary accesses and working areas in accordance with good practise measure GG07 from the CoCP (**document 7.5.1 (B)**). (ii). Temporary working areas would be reinstated and handed over once access to complete the commissioning, reinstatement and demobilisation works is no longer required.

Reference	Question	Applicant's Response
TT1.13.52	Has agreement been reached with the local highway authorities on the road safety audit process to be followed for new and upgraded temporary access points and other new and upgraded highway improvements?	The project would be subject to RSA the same as all other developments on the local highway network in Essex and Suffolk, in accordance with the RSA procedures in place at the time. While the majority of the works are temporary, they would be in place for a sufficient period to make an RSA appropriate. As the works comprise a large number of small highways works from a public highway works perspective, the Applicant considers that a Combined Stage 1 and 2 RSA is the most appropriate form of design stage RSA. Whether a Stage 3 (post-implementation) RSA is also required would be a decision for each LHA to take, subject to the outcome of the Combined Stage 1 and 2 RSA.
TT1.13.53	In your comments on RRs in relation to the various PCs ([**REP1-025**], page 131), and in relation to accesses south-east of Lamarsh Village Hall and Daws Hall, you state you will endeavour to reduce impacts during construction. Can you explain the measures by which construction traffic impacts would be reduced?	The accesses south-east of Lamarsh Village Hall and Daws Hall are required to provide access to the trenchless crossings of the River Stour and the Sudbury Branch Railway. In accordance with good practise measure TT01 from the CoCP (**document 7.5 (B)**), the CTMP [**APP-180**] sets out measures that would reduce traffic impacts during construction, including to reduce route and journey mileage to and from and around site, and prevent nuisance to the residents, businesses and the wider community caused by parking, vehicle movements and access restrictions. It also provides suitable controls for the means of access and egress to the public highway. In accordance with Section 3.4 of the CEMP **(document 7.5 (B))** residents would be provided with information regarding the works, including periods where higher levels of traffic can be expected, before they commence.

13.5 Public Rights of Way

Table 13.5 – Public rights of way

Reference	Question	Applicant's Response
TT1.13.54	Would local authority Public Rights of Way Officers be involved in monitoring of: (i) temporary signage; (ii) the various forms of public rights of way closures; (iii) safety measures; (iv) condition surveys; and (v) the reinstatement and inspections of the public rights of way affected by the project?	The PRoW Management Plan (**document 8.5.8**) submitted at Deadline 3 sets out the measures that the Applicant is proposing regarding temporary diversions and closures to PRoW. This is secured through Requirement 4 of the dDCO (**document 3.1 (C)**). The PRoW Management Plan sets out the following: (i) Paragraph 5.2 sets out details regarding temporary signage (ii) Paragraph 1.3 sets out details regarding the various forms of PRoW closures; (iii) Section 3 sets out details of control measures and roles and responsibilities which would provide for the safety of the works for everyone affected; (iv) Paragraph 5.5 sets out details regarding condition surveys in accordance with GG06 in the CEMP Appendix A: CoCP (**document 7.5.1 (B)**); and

Reference	Question	Applicant's Response
		(v) Paragraphs 2.2 and 5.5 set out details regarding the reinstatement and inspections of the PRoW affected by the project in accordance with GG06 in the CEMP Appendix A: CoCP (**document 7.5.1 (B)**) The main works contractor would undertake regular checks of the PRoW in accordance with the site checks set out within 7.2 of the PRoW Management Plan. Any non-compliance would be dealt with as per section 7.3 of the PRoW Management Plan. Therefore, the Applicant does not see a requirement for the Local Planning Authorities to be involved in any monitoring of the measures set out in the PRoW Management Plan.
TT1.13.55	Have the views of the Essex and Suffolk Local Access Forums and the British Horseriders Society been sought on the significance of effects for walkers, cyclists and horse riders outlined in ES Appendix 11.1, Traffic and Transport Significance of Effects Tables [**APP-134**]: Table 2.1 – Significance of Effect Tables for WCH – Journey Length? Table 3.1 – Significance of Effect Tables for WCH – Severance? Table 4.1 – Significance of Effect Tables for WCH – Pedestrian, Amenity, Fear and Intimidation?	The views of Essex and Suffolk Local Access Forums and the British Horseriders Society have not been directly sought as they are not prescribed consultees. However, those organisations had the opportunity to respond to the Applicant's pre-application consultations or to register as Interested Parties. The traffic and transport impacts of the project (including the generation of construction traffic and the closure of PRoW) are temporary in nature and of a low order of magnitude, with for example most individual PRoW closures expected to be for short durations of four weeks or less. It is the Applicants' view therefore that it would have been disproportionate to engage beyond the statutory consultees regarding traffic and transport issues prior to the DCO application. In accordance with GG25 in the CEMP Appendix A: CoCP (**document 7.5.1 (B)**), members of the community and local businesses would be kept informed regularly of the works through active community liaison. This is anticipated to include notification of heavy traffic periods and start and end dates of phasing.
TT1.13.56	The Design Manual for Roads and Bridges guidance, Volume 11, Section 3, Part 8 (Highways Agency, 1994) has been withdrawn but is referenced in paragraph 11.4.3 (Impact Magnitude) of ES Chapter 11, Traffic and Transport [**APP-080**]. Could a copy of the relevant parts be submitted into the Examination?	The DMRB guidance, Volume 11, Section 3, Part 8 (Highways Agency, 1994) has been submitted in Appendix G.
TT1.13.57	In paragraph 11.4.9 of ES Chapter 11, Traffic and Transport [**APP-080**], explain how the needs of mobility impaired persons were considered in the selection of survey sites on the public rights of way network?	Survey data has been used to inform temporary impacts on PRoW. 2013 and 2021 PRoW survey locations were chosen partly based on the connections to the wider PRoW network to understand which routes users take. They were also chosen based on the expected duration of individual closures of PRoW and the PRoW sensitivity, which is summarised in Table 2.1 in ES Appendix 12.1 [**APP-134**]. This is based on the receptor sensitivity classification as set out in ES Appendix 5.4: Assessment Criteria [**APP-096**]. Table 2.1 in ES Appendix 12.1 [**APP-134**] demonstrates that there is only one PRoW (FP 13 118) which has a sensitive receptor that could indicate a usage

Reference	Question	Applicant's Response
		by mobility impaired persons (All Saints Church) and was included in the PRoW surveys undertaken for the project. The impacts of the project on PRoW are temporary in nature and of a low order of magnitude on PRoW that have a low usage. Most individual PRoW closures are expected to be for four weeks or less. It is the Applicants' view therefore that the assessment described above is proportionate to the expected impact of the project on PRoW and its users.
TT1.13.58	Which, if any, national guidance document was the following threshold from Table 1.2 of ES Appendix 5.4, Assessment Criteria [**APP-096**] based: '*Where closure is less than four weeks impacts downgraded to medium*.' Is the threshold considerate of the public rights of way users who are mobility impaired?	The two primary guidance documents used to develop ES Chapter 12 [**APP-080**] were the DMRB LA 112 Population and Human Health (Highways England *et al,* 2020) and the Guidelines for the Environmental Assessment of Road Traffic (GEART) (Institute for Environmental Assessment, 1993). These documents do not include any guidance on appropriate thresholds for magnitude of impact based on impact duration. Downgrading based on duration was therefore based on professional judgement, noting that guidance in the two referenced documents is designed to cover the assessment of permanent project impacts. Based on this, the Applicant considered it appropriate to amend the assessment to account for the short (less than four weeks in most cases) expected duration of the PRoW closures. Consideration of the effect on mobility-impaired users was captured in the classification of PRoW receptor sensitivity, as described in the response to TT1.13.57. It is therefore addressed separately from the classification of magnitude of impact but is captured when magnitude of impact and receptor sensitivity are combined to determine significance of effect.
TT1.13.59	Table 8.1 of the CTMP [**APP-180**], Anticipated Site Checks Relevant to the CTMP notes that the role of the Environmental Clerk of Works includes monitoring of vehicles and the road network and public rights of way routes. Can you confirm that the Environmental Clerk of Works would liaise with the relevant highway authorities and resolve issues and problems through liaison with relevant stakeholders, and how this would be ensured?	The EnvCoW would not manage these issues. Issues and problems relating to the monitoring of vehicles, the road network and PRoW would be managed by the site team with guidance of the Environmental Manager. Where issues require the attention of the relevant Highways Authority the main works contractor would engage with the authority to resolve the issues. Incidents would be reported via the incident reporting procedure outlined in section 3.5 of the CEMP (**document 7.5 (B)**). Section 3.3 of the CTMP (**document 7.6 (B)**) sets out the anticipated appointment of a community relations team with responsibility for external communications support. The Applicant considers that the EnvCoW is responsible for compliance with the DCO requirements including mitigation measures, but the main works contractor would be responsible for co-ordinating liaison with external parties including the relevant highway authorities.
TT1.13.60	Further to Table 6.1 of the CTMP [**APP-180**], Types of Public Rights of Way Intervention, have the proposed control measures to safeguard users of the public	The PRoW Management Plan (**document 8.5.8**) submitted at Deadline 3 sets out in Section 3 examples of intervention that could be used during construction to manage PRoW. Once appointed, the main works contractor would be responsible for designing the interventions applicable to each PRoW. This would be based on a risk assessment to safeguard users, as required under the Construction Design Management (CDM) regulations.

Reference	Question	Applicant's Response
	rights of way been subject to a risk assessment?	
TT1.13.61	What measures are proposed to ensure that proposed diversions for bridleways would be suitable for equestrian use? (Paragraph 4.5.6 of Appendix F of the TA [**APP-061**] refers.) How are these measures secured in the dDCO?	As shown on the Access, Rights of Way and PRoW Navigation Plan (Sheet 1 of 30) [**APP-012**], only one bridleway requires diversion on the project (reference W-155/001/0). The existing bridleway would be used as a temporary access route during the works, therefore bridleway users would be diverted onto a separate route adjacent to the temporary access route. Paragraph 5.1.10 of the PRoW Management Plan (**document 8.5.8**) details the minimum widths required for PRoW facilities. Compliance with the PRoW Management Plan is secured through Requirement 4 (Management Plans) of the draft DCO (**document 3.1 (C)**).
TT1.13.62	Has the scope of the survey work that would need to be carried out to ensure that final reinstatement would return public rights of way to their original condition on completion of the Proposed Development been agreed? (Section 4.7 of the CEMP [**APP-177**] and paragraph 6.2.3 of the CTMP [**APP-180**].)	Section 5.5 of the PRoW Management Plan (**document 8.5.8**) sets out the principles of the pre-commencement and post-completion survey scope. The details would be the responsibility of the main works contractor.

13.6 Navigation

Table 13.6 – Navigation

Reference	Question	Applicant's Response
TT1.13.63	Have you surveyed commercial and private use of the rivers that would be affected by the Proposed Development and established times of peak navigational usage? If not, why not?	The Applicant has undertaken a desk study to identify any local groups or businesses using the river and the results of this study are set out in Section 1.5 of the CTMP (**document 7.6 (B)**). No other groups or commercial or private users had been identified through consultation responses to date and no signs of river use have been identified by the Applicant in their visits to the site as part of the project planning. In addition, the Applicant is not aware of any moorings or locations that would provide safe access and egress to the river within the vicinity of the Order Limits. Therefore, no surveys have been undertaken as navigation usage of this section of river appeared to be limited. However, the Environment Agency noted in a meeting in October 2023 that the River Stour Trust is a charity that encourages navigation along the River Stour. The Applicant is looking into this information further. The Applicant also notes the text in Section 1.5 of the CTMP (**document 7.6(B)**) that the only works that are

Reference	Question	Applicant's Response
		anticipated to affect navigation is the lowering of the 132kV conductors and the installation and removal of the temporary bridge. As stated in paragraph 1.5.3 of the CTMP, these are anticipated to be short term in duration (i.e. up to one week for each). Outside of this, there are not anticipated to be effects on navigation. The Applicant has committed (as per paragraph 1.5.3 in the CTMP (**document 7.6(B)**) to placing notices upstream and downstream of the Order Limits at least four weeks in advance (or as otherwise agreed with the navigation authority) to notify river users of the works. The Environment Agency would also be notified at the same time as notices are placed, if not before. During the conductor lowering and bridge works, a boat would be moored in the river to prevent and warn users accessing the working area during the works (unless otherwise agreed with the Environment Agency). The CTMP (**document 7.6 (B)**) is secured through Requirement 4 of the DCO (**document 3.1 (C)**). The Applicant is continuing to work with the Environment Agency to understand what is required in relation to navigation and any consent required for the temporary closure. This matter is included in Table 5.1 Matters Outstanding in the Draft SoCG with the Environment Agency (**document 7.3.3 (B)**).
TT1.13.64	Have you identified local user groups with which to work to mitigate the impact of closures of the navigation or impingements on the navigation envelope, including businesses catering for tourist use of the rivers? If not, why not?	The Applicant has undertaken a desk study to identify any local user groups using the river and the results of this study are set out in Section 1.5 of the CTMP (**document 7.6 (B)**). No other groups had been identified through consultation responses to date. However, the Environment Agency noted in a meeting in October 2023 that the River Stour Trust is a charity that encourages navigation along the River Stour. The Applicant is looking into this information to see whether an update is needed to the CTMP (**document 7.6 (B)**) with regards to contacting this local group. As described in paragraph 1.5.3 of the CTMP (**document 7.6 (B)**), the Applicant is only proposing to close the river for short periods of time (up to one week), therefore the Applicant does not consider that there would be any effects on businesses catering for tourist use of the river.
TT1.13.65	Can you describe the site-specific measure and the construction methodologies that would be required to avoid or reduce effects on navigation (for powered and unpowered craft), assist with travel planning and maintain safety?	The Applicant notes the text in Section 1.5 of the CTMP (**document 7.6 (B)**) that the only works that are anticipated to affect navigation is the lowering of the 132kV conductors and the installation and removal of the temporary bridge for safety reasons. As stated in paragraph 1.5.3 of the CTMP, these are anticipated to be short term in duration (i.e. up to one week for each). Outside of this, there are not anticipated to be effects on navigation As detailed in paragraph 9.3.38 of the CEMP (**document 7.5 (B)**), the clear span of the bridge crossing over the River Stour would be set on the basis of navigational requirements which is 6m width and 3m minimum headroom. In addition, the Applicant has committed (as per paragraph 1.5.3 in the CTMP (**document 7.6 (B)**) to placing notices upstream and downstream of the Order Limits at least four weeks in advance (or as otherwise agreed with the navigation authority) to notify river users of the works. During the conductor lowering and bridge works, a boat would be moored in the river to prevent and warn users accessing the working area during the works (unless

Reference	Question	Applicant's Response
		otherwise agreed with the Environment Agency). The CTMP (**document 7.6 (B)**) is secured through Requirement 4 of the dDCO (**document 3.1 (C)**).
TT 1.13.66	If at any time the complete closure of the River Stour to the passage of boats was required, what systems would you put in place to notify the Environment Agency and users of such closures?	Paragraph 1.5.3 of the CTMP (**document 7.6 (B)**) has been updated following the Environment Agency's RR [**RR-031**] to say that the Applicant would place notices upstream and downstream of the Order Limits at least four weeks in advance (or as otherwise agreed with the navigation authority) to notify river users of the works. During the conductor lowering and bridge works, a boat would be moored in the river to prevent and warn users accessing the working area during the works (unless otherwise agreed with the Environment Agency). The CTMP (**document 7.6 (B)**) is secured through Requirement 4 of the dDCO (**document 3.1 (C)**).

References

- Department for Energy Security and Net Zero (2023) The Community Benefits for Electricity Transmission Network Infrastructure
- Energy networks association (2016) Technical Specification 43-8 Issue 4 2015 + Amendment 1 2016
- Health and Safety Executive (2012) Working safely near overhead electricity power lines
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- National Grid (2023) Our 2021-2026 Environmental Action Plan, April 2023. Available from https://www.nationalgrid.com/electricity-transmission/document/136551/download (accessed 17 October 2023)
- Standards for Highways (2021) CD 123Geometric design of at grade priority and signal controlled junctions
- The Electricity Safety, Quality and Continuity Regulations (2002)

Acronyms

Acronym	Description
ABC	Absorption, Blocking, and Covering
AC	Alternating Current
ADR	Alternative Dispute Resolution
ALC	Agricultural Land Classification
AIL	Abnormal Indivisible Loads
AOD	Above Ordnance Datum
AONB	Area of Outstanding Natural Beauty
ATC	Automatic Traffic Counters
AQMA	Air Quality Management Assessment
AURN	Automatic Urban and Rural Network
BMV	Best and Most Versatile
BNG	Biodiversity Net Gain
BoR	Book of Reference
BPS	Basic Payment Scheme
CA	Compulsory Acquisition
CDM	Construction Design Management

CEA	Cumulative Effects Assessment
CIT	Carbon Interface Tool
CoCP	Code of Construction Practice
CEMP	Construction Environmental Management Plan
COMAH	Control of Major Accident Hazards
COSHH	Control of Substances Hazardous to Health
CPCS	Construction Plant Competence Scheme
CPO	Compulsory Purchase Order
CSCS	Construction Skills Certification Scheme
CSE	Cable Sealing End
CTMP	Construction Traffic Management Plan
CWS	County Wildlife Site
DC	Direct Current
DCO	Development Consent Order
dDCO	Draft Development Consent Order
DLR	Docklands Light Railway
DLUHC	Department for Levelling Up, Housing and Communities
DMP	Drainage Management Plan
DMRB	Design Manual for Roads and Bridges
EATM	Environmental Assessment of Traffic and Movement

ECC	Essex County Council
EIA	Environmental Impact Assessment
EIP	Environmental Improvement Plan
ENATS	Energy Networks Association Technical Specification
EnvCoW	Environmental Clerk of Works
ES	Environmental Statement
ESO	Electricity System Operator
ESQCR	Electricity Safety, Quality and Continuity Regulations 2002
FIF	Farming Investment Fund
FRA	Flood Risk Assessment
FRAP	Flood Risk Activity Permit
GEART	Guidelines for the Environmental Assessment of Road Traffic
GLVIA	Guidelines on Landscape and Visual Impact Assessment
GIB	Gas Insulated Busbar
GIS	Geographic Information System
G-IS	Gas-Insulated Switchgear
GHG	Greenhouse Gases
GP	General Practice
GSP	Grid Supply Point
HDD	Horizontal Directional Drilling

HGV	Heavy Goods Vehicles
HM	His Majesty
HRA	Habitats Regulation Assessment
HPI	Habitat of Principal Importance
HSE	Health and Safety Executive
HVDC	High-Voltage Direct Current
IAQM	Institute of Air Quality Management
IEMA	Institute of Environmental Management and Assessment
LEMP	Landscape and Ecological Management Plan
LGV	Large Goods Vehicles
LHA	Local Highways Authority
LITGN	Technical Guidance Note 06/19 – Visual Representation of Development Proposals
LIR	Local Impact Report
LoD	Limits of Deviation
LRN	Local Road Network
LVIA	Landscape and Visual Impact Assessment
MEWP	Mobile Elevated Working Platform
MHCLG	Ministry of Housing, Communities & Local Government
MWMP	Materials and Waste Management Plan
NETS SQSS	National Electricity Transmission System Security and Quality of Supply Standard

NHS	National Health Service
NLS	National Library of Scotland
NPA	Neighbourhood Planning Act
NPPF	National Planning Policy Framework
NPS	National Policy Statement
NSIP	Nationally Significant Infrastructure Project
NSR	Noise Sensitive Receptors
NVMP	Noise and Vibration Management Plan
OAE	Open Area Excavation
Ofgem	Office of Gas and Electricity Markets, supporting the Gas and Electricity Markets Authority
OWSI	Outline Written Scheme of Investigation
REAC	Register of Environmental Actions and Commitments
ROCCIT	Reduction Of Capital Carbon in Infrastructure – Transmission
RR	Relevant Representation
RPA	Rural Payments Agency
RPS	Regulatory Position Statement
PC	Principal Contractor
PINS	Planning Inspectorate
PRoW	Public Rights of Way
PSED	Public Sector Equalities Duty

RAMS	Specific Risk Assessments and Method Statements
RCS	Route Corridor Study
RSA	Road Safety Audit
RSPB	Royal Society for the Protection of Birds
SFI	Sustainable Farming Incentive
SMP	Soil Management Plan
SMS	Strip, Map and Sample
SMSTS	Site Managers Safety Training Scheme
SoCG	Statement of Common Ground
SoR	Statement of Reasons
SPR	Scottish Power Renewables
SQSS	System Security and Quality of Supply Standard
SRN	Strategic Road Network
SSSI	Site of Special Scientific Interest
SSSTS	Site Supervisors Safety Training Scheme
TA	Transport Assessment
TAG	Transport Analysis Guidance
TCPA	Town and Country Planning Act 1990
TEC	Transmission Entry Capacity
TP	Temporary Possession

TWAO	Transport and Works Act Order
UK	United Kingdom
UKPN	United Kingdom’s Power Networks
WCH	Walking, Cycling and Horse-Riding
WFD	Water Framework Directive
WR	Written Representation
ZTV	Zones of Theoretical Visibility

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Appendix A: National Grid's Commitments when Undertaking Works in the UK

nationalgrid

National Grid's commitments when undertaking works in the UK

Our stakeholder, community and amenity policy

Introduction

This document describes the ten commitments we have made to the way we carry out electricity and gas works in the UK. This includes setting out how we will meet our amenity responsibilities and how we will involve our stakeholders and communities in our work.

We explain how we will meet our obligations under Section 38 and Schedule 9 of the Electricity Act 1989. These obligations relate to the preservation of amenity and regularly reviewing how we manage those duties, including our consultation process.

Preserving amenity forms only part of our wider environmental responsibilities. You can find out more about the environmental issues not formally covered by Schedule 9 in other publications. These cover topics ranging from our role in countering climate change in electric and magnetic fields, pollution control and connecting new and renewable sources of electricity generation.

There is no equivalent to a Schedule 9 statement requirement in the provisions of the Gas Act 1986. However, we believe the principles in this document should apply equally to our electricity and gas transmission works.

About National Grid

We own the electricity transmission network in England and Wales and operate the electricity transmission system throughout Great Britain. Local distribution companies then supply electricity at progressively lower voltages to homes and businesses. Our transmission network in England and Wales covers some 7,200km of overhead line, 690km of underground cable and 337 substations.

We are also the sole owner and operator of the gas transmission system in the UK. Our gas transmission network includes 7,600km of high pressure pipeline and 26 compressor stations.

Our responsibilities under the Electricity Act

Under the Electricity Act 1989 National Grid holds a transmission licence. Under this we are required to develop and maintain an efficient, coordinated and economical electricity transmission system and to facilitate competition in the supply and generation of electricity.

Under Schedule 9 of the Act we are required to consider ways to preserve amenity in England and Wales.

What the Electricity Act states

Extracts from Schedule 9

Preservation of amenity: England and Wales

Paragraph 1(1)

1(1) in formulating any relevant proposals, a licence holder or a person authorised by exemption to generate or supply electricity

(a) shall have regard to the desirability of preserving natural beauty, of conserving flora, fauna and geological or physiographical features of special interest and of protecting sites, buildings and objects of architectural, historic or archaeological interest; and

(b) shall do what he reasonably can to mitigate any effect which the proposals would have on the natural beauty of the countryside or on any such flora, fauna, features, sites, buildings or objects.

Paragraph 2(1) states

A licence holder shall within twelve months from the grant of his licence prepare, and from time to time modify, a statement setting out the manner in which he proposes to perform his duty under paragraph 1(1) above, including in particular the consultation procedures.

Where this document applies

As highlighted previously this document applies to our transmission activities in the UK, for electricity and gas works.

Some definitions

Here, we explain our interpretation of some of the terms we use throughout this document.

Amenity: The natural environment, cultural heritage, landscape and visual quality. Our interpretation also includes the impact of our works on communities, such as the effects of noise and disturbance from construction.

Works: Constructing new transmission infrastructure. This includes overhead lines, underground cables, marine interconnectors, sealing end compounds and substations; pipelines, compressor stations, pressure reduction installations and other above-ground gas installations (where all are part of networks operating above 7 bar (gauge) pressure). It also includes the major refurbishment of any of these and the dismantling and removal of any parts of the system.

Stakeholders: Organisations and individuals who can affect or are affected by our works. We also refer to communities which includes those stakeholders (organisations and individuals, including residents) who have a particular interest in the local area affected by the works.

Engaging stakeholders and communities

Developing, maintaining and refurbishing gas and electricity networks can affect the communities through which they pass. The way we manage our relationships and work with these communities and other affected stakeholders is important to us.

We strive to engage positively with stakeholders and communities. We are committed to involving them in the work we do and recognise the benefits of doing this. We will listen to people, take their views and opinions into account and respond to them as part of the way we work.

The principles contained in our second commitment (Involving stakeholders and communities) provide the framework that will help us to develop and promote a culture of genuine and meaningful stakeholder and community engagement.

Our commitments

Here, we describe the ten commitments we have made to the way we carry out electricity and gas works in the UK to provide safe, reliable and affordable transmission networks. This includes setting out how we will meet our amenity responsibilities and how we will involve our stakeholders and communities in our works.

1. Establishing need

We will only seek to build electricity lines or pipelines along new routes, or above-ground installations in new locations where:

- our existing infrastructure can not be upgraded (technically or economically) to meet system security standards and regulatory obligations
- forecasted increases in demand for electricity or gas will not be satisfied by other means
- customer connections are required or
- where an existing electricity transmission line has been identified for replacement through our Visual Impact Provision (VIP)[1] project.

2. Involving stakeholders and communities

We will promote genuine and meaningful stakeholder engagement. We will meet and, where appropriate, exceed the statutory requirements for consultation or engagement.

We will adopt the following principles to help us meet this commitment and

- seek to identify and understand the views and opinions of all the stakeholders and communities affected by our works
- provide opportunities for engagement from the early stages of the process, where options and alternatives are being considered and there is the greatest scope to influence the design of the works
- endeavour to enable constructive debate to take place, creating open and two-way communication processes
- ensure that benefits, constraints and adverse impacts of proposed works are communicated openly for meaningful stakeholder and community comment and discussion. We will be clear about any aspects of the works that cannot be altered
- utilise appropriate methods and effort in engaging stakeholders and communities, proportionate to the scale and impact of the works
- provide feedback on how views expressed have been considered and the outcomes of any engagement process or activity.

Our commitments

3. Routeing networks and selecting sites

If we need to build new infrastructure, we will seek to avoid the following areas which are nationally or internationally designated for their landscape, wildlife or cultural significance: National Parks; Areas of Outstanding Natural Beauty; National Scenic Areas; Heritage Coasts; Preferred Conservation Zones; World Heritage Sites; Sites of Special Scientific Interest; Marine Conservation Zones; Special Protection Areas; Special Areas of Conservation; Ramsar sites; National Nature Reserves; Registered Battlefields; Scheduled Monuments and Registered Parks or Gardens.

An exception to this is where an existing electricity transmission line has been identified for replacement through our VIP process.

1. The Visual Impact Provision (VIP) project represents a major opportunity to enhance the landscape within our most protected landscapes. The £500m allocated by Ofgem applies to the most protected landscapes in Great Britain. You can find out more about the project at **www.nationalgrid.com/VIP**

Our commitments

4. Minimising the effects of new infrastructure

When we are developing new infrastructure, we will seek to reduce the effect of our work on communities by having particular regard to safety, noise and construction traffic.

We will also seek to minimise the impact of developing new infrastructure in areas that are nationally or internationally designated for their landscape, wildlife or cultural significance as well as other sites valued for their amenity, such as listed buildings, conservation areas, areas of archaeological interest, local wildlife sites, historic parks or gardens and historic battlefields. We will take into account the significance of these, their settings and other areas through consultation with local authorities and other stakeholders who have particular interests in these sites.

5. Mitigating adverse effects of works

We will carry out relevant environmental investigations and report on these when we apply for consent for new works. We will use best practice environmental impact assessment techniques to assess possible effects of our works and identify opportunities for mitigation measures.

In the course of this we will consult with relevant stakeholders and affected landowners where works are likely to have an adverse effect on amenity.

6. Offsetting where mitigation is not practicable

Sometimes the measures we take cannot adequately mitigate against loss of amenity – or mitigation might not be viable. When this happens, we will seek to offset the impact of our work in practical and sustainable ways, which we will develop by engaging with relevant stakeholders.

Offsetting could include landscaping and planting works, contributing to heritage or community programmes or other benefits that deliver lasting value to the people and communities affected.

7. Enhancing the environment around our works

When undertaking works, we will consider what practicable measures can be taken to enhance areas in the vicinity of the works for the benefit of local communities and the natural and historic environment.

Our commitments

8. Monitoring and learning for the future

We will monitor, evaluate and review our engagement processes so that we can learn from our experiences and continue to improve in the future. We will carry out periodic reviews of the environmental impact of our works. We will seek the views of our stakeholders and communities so we can gauge the effectiveness of our assessment and any mitigation measures. We will use the results of these reviews to help us improve our environmental assessments and the way we manage our work.

9. Reviewing our commitments

We intend to review these commitments at least every five years. We will make additional revisions in response to new legislation, policy and guidance. As a responsible company practising good corporate governance, we will review the relevance of these commitments and publish case studies on our website that show how we preserve amenity and engage with our stakeholders and communities.

10. Working with others

We require other organisations working on our behalf to demonstrate these same commitments. We will continue to create an environment where we can share and deliver best practice.

Appendix

Background

The first significant revision to our Schedule 9 Statement was prepared in 2001. The statement and our performance in meeting the commitments were reviewed and modified in 2006. In preparing that revision we consulted the bodies that have statutory responsibilities for amenity as referred to in Schedule 9 of the Electricity Act. In addition, we consulted other non-government organisations concerned with amenity, representatives of other stakeholder groups and our own employees.

With the advent of the Planning Act 2008 in February 2010 we incorporated our Schedule 9 statement duty into this policy. We also incorporated gas works (above 7 bar in pressure), and new commitments to stakeholder and community engagement.

Preparing the 2015 revision

In preparing this revised version we have again consulted statutory bodies, non-government organisations and representatives of other stakeholder groups (see list below). We have also drawn on our own experiences of delivering electricity and gas projects through the provisions of the Planning Act 2008.

In 2016 National Grid will sell our majority stake in our UK gas distribution business. As a result references to gas distribution have been removed from this document.

Bodies consulted

Cadw, Campaign for National Parks, CPRE, Environment Agency, Historic England, Historic Scotland, NAAONB, Natural England, NRW, RSPB, Scottish Environment Protection Agency, Scottish Natural Heritage, The Wildlife Trusts.

For more information on National Grid policies and projects please refer to our website **www.nationalgrid.com**

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Published: December 2016

Appendix B: Third Party Guidance Working Near National Grid Equipment

Technical Guidance Note 287

Third-party guidance for working near National Grid Electricity Transmission equipment

Purpose and scope

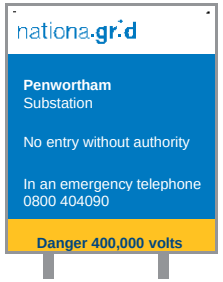
The purpose of this document is to give guidance and information to third parties who are proposing, scheduling or designing developments close to National Grid Electricity Transmission assets.

The scope of the report covers information on basic safety and the location of our assets – and also highlights key issues around particular types of development and risk areas.

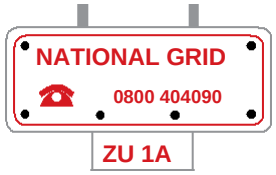
In the case of electrical assets, National Grid does not authorise or agree safe systems of work with developers and contractors. However, we will advise on issues such as electrical safety clearances and the location of towers and cables. We also work with developers to minimise the impact of any National Grid assets that are nearby.

How to identify specific National Grid sites

Substations
The name of the Substation and emergency contact number will be on the site sign.



Overhead Lines
The reference number of the tower and the emergency contact number will be on this type of sign.



Contact National Grid

Plant protection

For routine enquiries regarding planned or scheduled works, contact the Asset Protection team online, by email or phone.

www.lsbud.co.uk

Email: assetprotection@nationalgrid.com

Phone: 0800 001 4282

Emergencies

In the event of occurrences such as a cable strike, coming into contact with an overhead line conductor or identifying any hazards or problems with National Grid's equipment, phone our emergency number 0800 404 090 (option 1).

If you have apparatus within 30m of a National Grid asset, please ensure that the emergency number is included in your site's emergency procedures.

Consider safety

Consider the hazards identified in this document when working near electrical equipment

Part 1

Electricity transmission infrastructure

National Grid owns and maintains the high-voltage electricity transmission network in England and Wales (Scotland has its own networks). It's responsible for balancing supply with demand on a minute-by-minute basis across the network.

Overhead lines

Overhead lines consist of two main parts – pylons (also called towers) and conductors (or wires). Pylons are typically steel lattice structures mounted on concrete foundations. A pylon's design can vary due to factors such as voltage, conductor type and the strength of structure required.

Conductors, which are the 'live' part of the overhead line, hang from pylons on insulators. Conductors come in several different designs depending on the amount of power that is transmitted on the circuit.

In addition to the two main components, some Overhead Line Routes carry a Fibre Optic cable between the towers with an final underground connection to the Substations.

In most cases, National Grid's overhead lines operate at 275kV or 400kV.

Underground cables

Underground cables are a growing feature of National Grid's network. They consist of a conducting core surrounded by layers of insulation and armour. Cables can be laid in the road, across open land or in tunnels. They operate at a range of voltages, up to 400kV.

Substations

Substations are found at points on the network where circuits come together or where a rise or fall in voltage is required. Transmission substations tend to be large facilities containing equipment such as power transformers, circuit breakers, reactors and capacitors. In addition Diesel generators and compressed air systems can be located there.

Part 2

Statutory requirements for working near high-voltage electricity

The legal framework that regulates electrical safety in the UK is *The Electricity Safety, Quality and Continuity Regulations (ESQCR) 2002*. This also details the minimum electrical safety clearances, which are used as a basis for the Energy Networks Association (ENA) TS 43-8. These standards have been agreed by CENELEC (European Committee for Electrotechnical Standardisation) and also form part of the *British Standard BS EN 50341-1:2012 Overhead Electrical Lines exceeding AC 1kV*. All electricity companies are bound by these rules, standards and technical specifications. They are required to uphold them by their operator's licence.

Electrical safety clearances

It is essential that a safe distance is kept between the exposed conductors and people and objects when working near National Grid's electrical assets. A person does not have to touch an exposed conductor to get a life-threatening electric shock. At the voltages National Grid operates at, it is possible for electricity to jump up to several metres from an exposed conductor and kill or cause serious injury to anyone who is nearby. For this reason, there are several legal requirements and safety standards that must be met.

Any breach of legal safety clearances will be enforced in the courts. This can and has resulted in the removal of an infringement, which is normally at the cost of the developer or whoever caused it to be there. Breaching safety clearances, even temporarily, risks a serious incident that could cause serious injury or death.

National Grid will, on request, advise planning authorities, developers or third parties on any safety clearances and associated issues. We can supply detailed drawings of all our overhead line assets marked up with relevant safe areas.

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Your Responsibilities - Overhead lines

Work which takes place near overhead power lines carries a significant risk of coming into proximity with the wires. If any person, object or material gets too close to the wires, electricity could ‘flashover’ and be conducted to earth, causing death or serious injury. You do not need to touch the wires for this to happen. The law requires that work is carried out in close proximity to live overhead power lines only when there is no alternative, and only when the risks are acceptable and can be properly controlled. Statutory clearances exist which must be maintained, as prescribed by the Electricity Safety, Quality and Continuity Regulations 2002.

Under the Health and Safety at Work etc. Act 1974 and Management of Health and Safety at Work Regulations 1999, you are responsible for preparing a suitable and sufficient risk assessment and safe systems of work, to ensure that risks are managed properly and the safety of your workforce and others is maintained. Your risk assessment must consider and manage all of the significant risks and put in place suitable precautions/controls in order to manage the work safely. You are also responsible for ensuring that the precautions identified are properly implemented and stay in place throughout the work.

Work near overhead power lines must always be conducted in accordance with GS6, ‘avoiding danger from overhead power lines’, and any legislation which is relevant to the work you are completing.

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What National Grid will provide

National Grid can supply profile drawings in PDF and CAD format showing tower locations and relevant clearances to assist you in the risk assessment process.

What National Grid will not provide

National Grid will not approve safe systems of work or approve design proposals

Part 3

What National Grid will do for you and your development

Provision of information

National Grid should be notified during the planning stage of any works or developments taking place near our electrical assets, ideally a minimum notification period of 8 weeks to allow National Grid to provide the following services:

Drawings

National Grid will provide relevant drawings of overhead lines or underground cables to make sure the presence and location of our services are known. Once a third party or developer has contacted us, we will supply the drawings for free.

Risk or impact identification

National Grid can help identify any hazards or risks that the presence of our assets might bring to any works or developments. This includes both the risk to safety from high-voltage electricity and longer-term issues, such as induced currents, noise and maintenance access that may affect the outcome of the development. National Grid will not authorise specific working procedures, but we can provide advice on best practice.

400kV

The maximum nominal voltage of the underground cables in National Grid's network

Risks or hazards to be aware of

This section includes a brief description of some of the hazards and issues that a third party or developer might face when working or developing close to our electrical infrastructure.

Land and access

National Grid has land rights in place with landowners and occupiers, which cover our existing overhead lines and underground cable network. These agreements, together with legislation set out under the *Electricity Act 1989*, allow us to access our assets to maintain, repair and renew them. The agreements also lay down restrictions and covenants to protect the integrity of our assets and meet safety regulations. Anyone proposing a development close to our assets should carefully examine these agreements.

Our agreements often affect land both inside and outside the immediate vicinity of an asset. Rights will include the provision of access, along with restrictions that ban the development of land through building, changing levels, planting and other operations. Anyone looking to develop close to our assets must consult with National Grid first.

For further information, contact Asset Protection:

Email: assetprotection@nationalgrid.com
Phone: 0800 001 4282

Electrical clearance from overhead lines

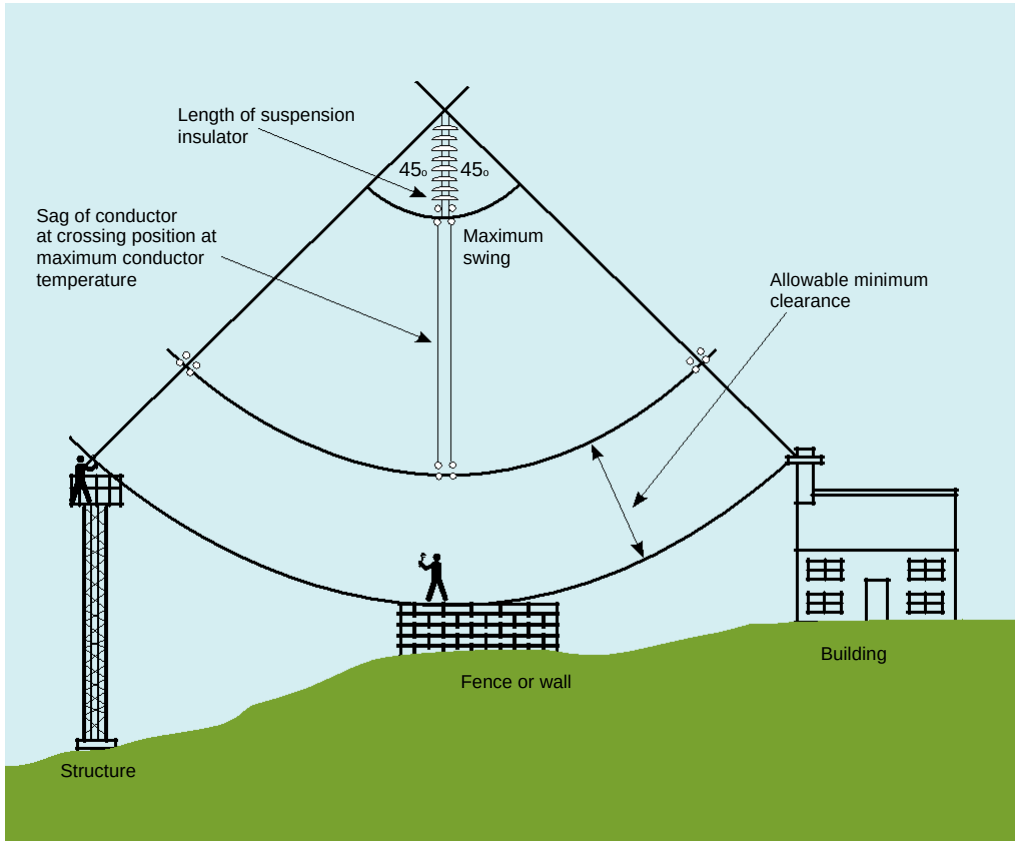
The clearance distances referred to in this section are specific to 400kV overhead lines. National Grid can advise on the distances required around different voltages i.e. 132kV and 275kV.

As we explained earlier, *Electrical Networks Association TS 43-8* details the legal clearances to our overhead lines. The minimum clearance between the conductors of an overhead line and the ground is 7.3m at maximum sag. The sag is the vertical distance between the wire's highest and lowest point. Certain conditions, such as power flow, wind speed and air temperature can cause conductors to move and allowances should be made for this.

The required clearance from the point where a person can stand to the conductors is 5.3m. To be clear, this means there should be at least 5.3m from where someone could stand on any structure (i.e. mobile and construction equipment) to the conductors. Available clearances will be assessed by National Grid on an individual basis.

National Grid expects third parties to implement a safe system of work whenever they are near Overhead Lines.

Diagram not to scale



There should be at least 5.3m between the conductors and any structure someone could stand on

We recommend that guidance such as *HSE Guidance Note GS6 (Avoiding Danger from Overhead Power Lines)* is followed, which provides advice on how to avoid danger from all overhead lines, at all voltages. If you are carrying out work near overhead lines you must contact National Grid, who will provide the relevant profile drawings.

7.3m

The required minimum clearance between the conductors of an overhead line, at maximum sag, and the ground

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The undergrounding of electricity cables at Ross-on-Wye

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Underground cables Underground cables operating at up to 400kV are a significant part of the National Grid Electricity Transmission network. When your works will involve any ground disturbance it is expected that a safe system of work is put in place and that you follow guidance such as *HSG 47 (Avoiding Danger from Underground Services)*.

You must contact National Grid to find out if there are any underground cables near your proposed works. If there are, we will provide cable profiles and location drawings and, if required, on-site supervision of the works. Cables can be laid under roads or across industrial or agricultural land. They can even be layed in canal towpaths and other areas that you would not expect.

Cables crossing any National Grid high-voltage (HV) cables directly buried in the ground are required to maintain a minimum seperation that will be determined by National Grid on a case-by-case basis. National Grid will need to do a rating study on the existing cable to work out if there are any adverse effects on either cable rating. We will only allow a cable to cross such an area once we know the results of the re-rating. As a result, the clearance distance may need to be increased or alternative methods of crossing found.

For other cables and services crossing the path of our HV cables, National Grid will need confirmation that published standards and clearances are met.

Impressed voltage

Any conducting materials installed near high-voltage equipment could be raised to an elevated voltage compared to the local earth, even when there is no direct contact with the high-voltage equipment. These impressed voltages are caused by inductive or capacitive coupling between the high-voltage equipment and nearby conducting materials and can occur at distances of several metres away from the equipment. Impressed voltages may damage your equipment and could potentially injure people and animals, depending on their severity. Third parties should take impressed voltages into account during the early stages and initial design of any development, ensuring that all structures and equipment are adequately earthed at all times.

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Earth potential rise

Under certain system fault conditions – and during lightning storms – a rise in the earth potential from the base of an overhead line tower or substation is possible. This is a rare phenomenon that occurs when large amounts of electricity enter the earth. This can pose a serious hazard to people or equipment that are close by.

We advise that developments and works are not carried out close to our tower bases, particularly during lightning storms.

Noise

Noise is a by-product of National Grid's operations and is carefully assessed during the planning and construction of any of our equipment. Developers should consider the noise emitted from National Grid's sites or overhead lines when planning any developments, particularly housing. Low-frequency hum from substations can, in some circumstances, be heard up to 1km or more from the site, so it is essential that developers find adequate solutions for this in their design. Further information about likely noise levels can be provided by National Grid.

Maintenance access

National Grid needs to have safe access for vehicles around its assets and work that restricts this will not be allowed.
In terms of our overhead lines, we wouldn't want to see any excavations made, or permanent structures built, that might affect the foundations of our towers. The size of the foundations around a tower base depends on the type of tower that is built there. If you wish to carry out works within 30m of the tower base, contact National Grid for more information. Our business has to maintain access routes to tower bases with land owners. For that reason, a route wide enough for an HGV must be permanently available. We may need to access our sites, towers, conductors and underground cables at short notice.

30m

If you wish to carry out work within this distance of the tower base, you must contact National Grid for more information

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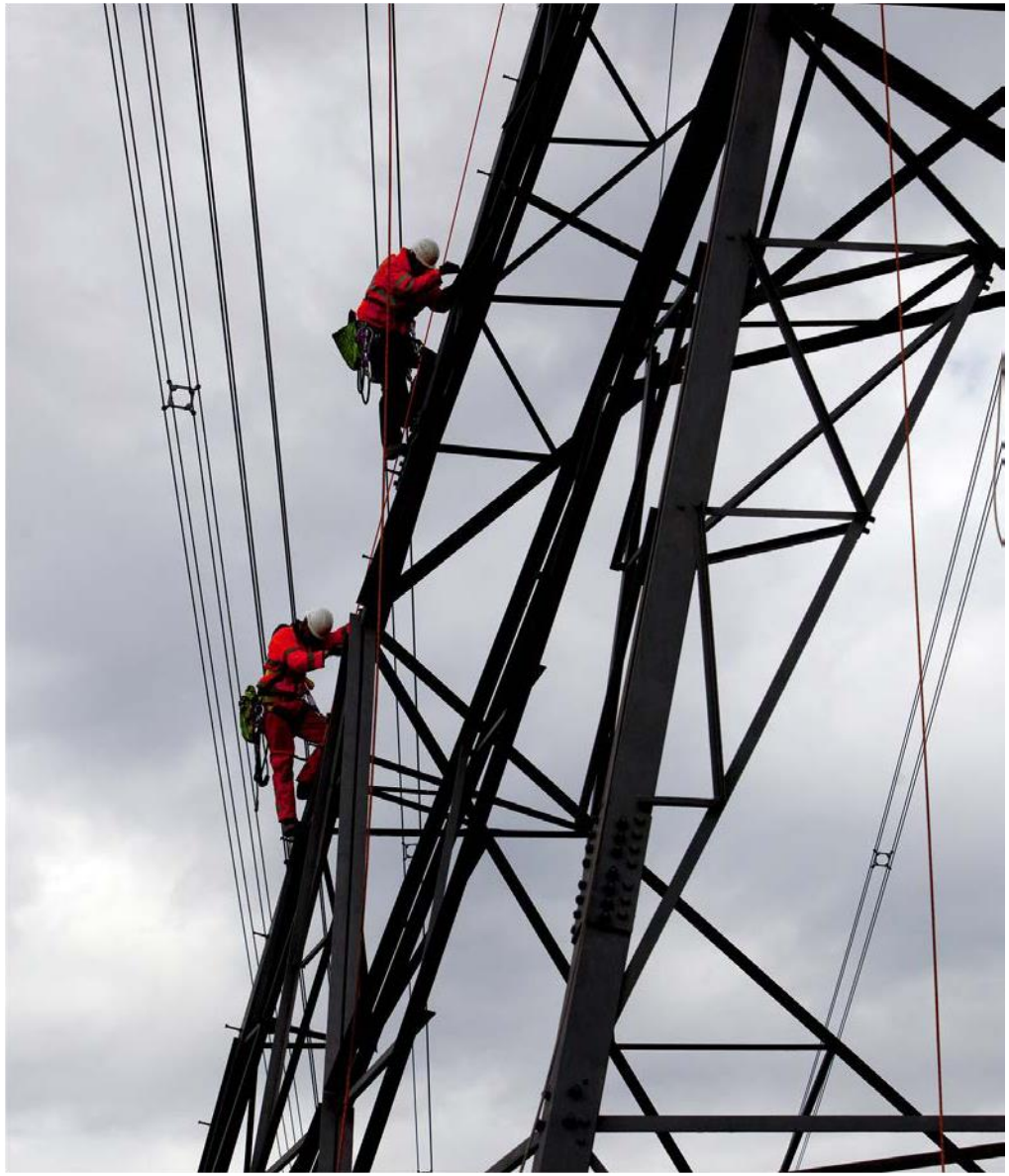

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Fires and firefighting

National Grid does not recommend that any type of flammable material is stored under overhead lines. Developers should be aware that in certain cases the local fire authority will not use water hoses to put out a fire if there are live, high-voltage conductors within 30m of the seat of the fire *(as outlined in ENA TS 43-8)*.

In these situations, National Grid would have to be notified and reconfigure the system – to allow staff to switch out the overhead line – before any firefighting could take place. This could take several hours.

We recommend that any site which has a specific hazard relating to fire or flammable material should include National Grid's emergency contact details (found at the beginning and end of this document) in its fire plan information, so any incidents can be reported.

Developers should also make sure their insurance cover takes into account the challenge of putting out fires near our overhead lines.

Excavations, piling or tunnelling

You must inform National Grid of any works that have the potential to disturb the foundations of our substations or overhead line towers. This will have to be assessed by National Grid engineers before any work begins.

BS ISO 4866:2010 states that a minimum distance of 200m should be maintained when carrying out quarry blasting near our assets. However, this can be reduced with specific site surveys and changes to the maximum instantaneous charge (the amount of explosive detonated at a particular time).

All activities should observe guidance layed out in *BS 5228-2:2009*.

Microshocks

High-voltage overhead power lines produce an electric field. Any person or object inside this field that isn't earthed picks up an electrical charge. When two conducting objects – one that is grounded and one that isn't – touch, the charge can equalise and cause a small shock, known as a microshock. While they are not harmful, they can be disturbing for the person or animal that suffers the shock.

For these reasons, metal-framed and metal-clad buildings which are close to existing overhead lines should be earthed to minimise the risk of microshocks. Anything that isn't earthed, is conductive and sits close to the lines is likely to pick up a charge. Items such as deer fences, metal palisade fencing, chain-link fences and metal gates underneath overhead lines all need to be earthed.

For further information on microshocks please visit **www.emfs.info.**

200m

The minimum distance that should be maintained from National Grid assets when quarry blasting

Specific development guidance

Wind farms

National Grid's policy towards wind farm development is closely connected to the *Electricity Networks Association Engineering Recommendation L44 Separation between Wind Turbines and Overhead Lines, Principles of Good Practice.* The advice is based on national guidelines and global research. It may be adjusted to suit specific local applications.

There are two main criteria in the document:

(i) The turbine shall be far enough away to avoid the possibility of toppling onto the overhead line

(ii) The turbine shall be far enough away to avoid damage to the overhead line from downward wake effects, also known as turbulence

The toppling distance is the minimum horizontal distance between the worst-case pivot point of the wind turbine and the conductors hanging in still air. It is the greater of:

- the tip height of the turbine plus 10%
- or, the tip height of the turbine plus the electrical safety distance that applies to the voltage of the overhead line.

To minimise the downward wake effect on an overhead line, the wind turbine should be three times the rotor distance away from the centre of the overhead line.

Wake effects can prematurely age conductors and fittings, significantly reducing the life of the asset. For that reason, careful consideration should be taken if a wind turbine needs to be sited within the above limits. Agreement from National Grid will be required.

Commercial and housing developments

National Grid has developed a document called *Design guidelines for development near pylons and HVO power lines*, which gives advice to anyone involved in planning or designing large-scale developments that are crossed by, or close to, overhead lines.

The document focuses on existing 275kV and 400kV overhead lines on steel lattice towers, but can equally apply to 132kV and below. The document explains how to design large-scale developments close to high-voltage lines, while respecting clearances and the development's visual and environmental impact.

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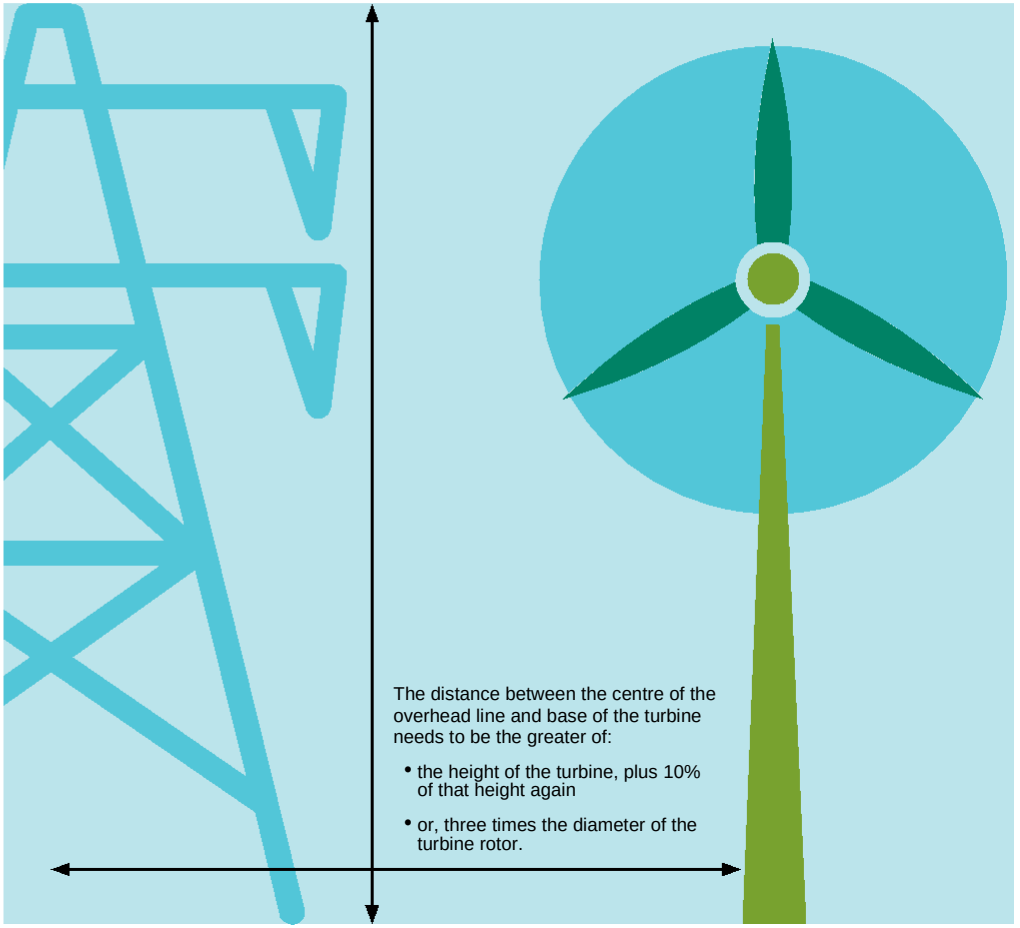
Diagram not to scale



Turbines should be far enough away to avoid the possibility of toppling onto the overhead line

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The advice is intended for developers, designers, landowners, local authorities and communities, but is not limited to those organisations.

Overall, developers should be aware of all the hazards and issues relating to the electrical equipment that we have discussed when designing new housing.

As we explored earlier, National Grid's assets have the potential to create noise. This can be low frequency and tonal, which makes it quite noticeable. It is the responsibility of developers to take this into account during the design stage and find an appropriate solution.

Solar farms

While there is limited research and recommendations available, there are several key factors to consider when designing Solar Farms in the vicinity of Overhead Power Lines.

Developers may be looking to build on arable land close to National Grid's assets. In keeping with the safety clearance limits that we outlined earlier for solar panels directly underneath overhead line conductors, the highest point on the solar panels must be no more than 5.3m from the lowest conductors.

This means that the maximum height of any structure will need to be determined to make sure safety clearance limits aren't breached. This could be as low as 2m. National Grid will supply profile drawings to aid the planning of solar farms and determine the maximum height of panels and equipment.

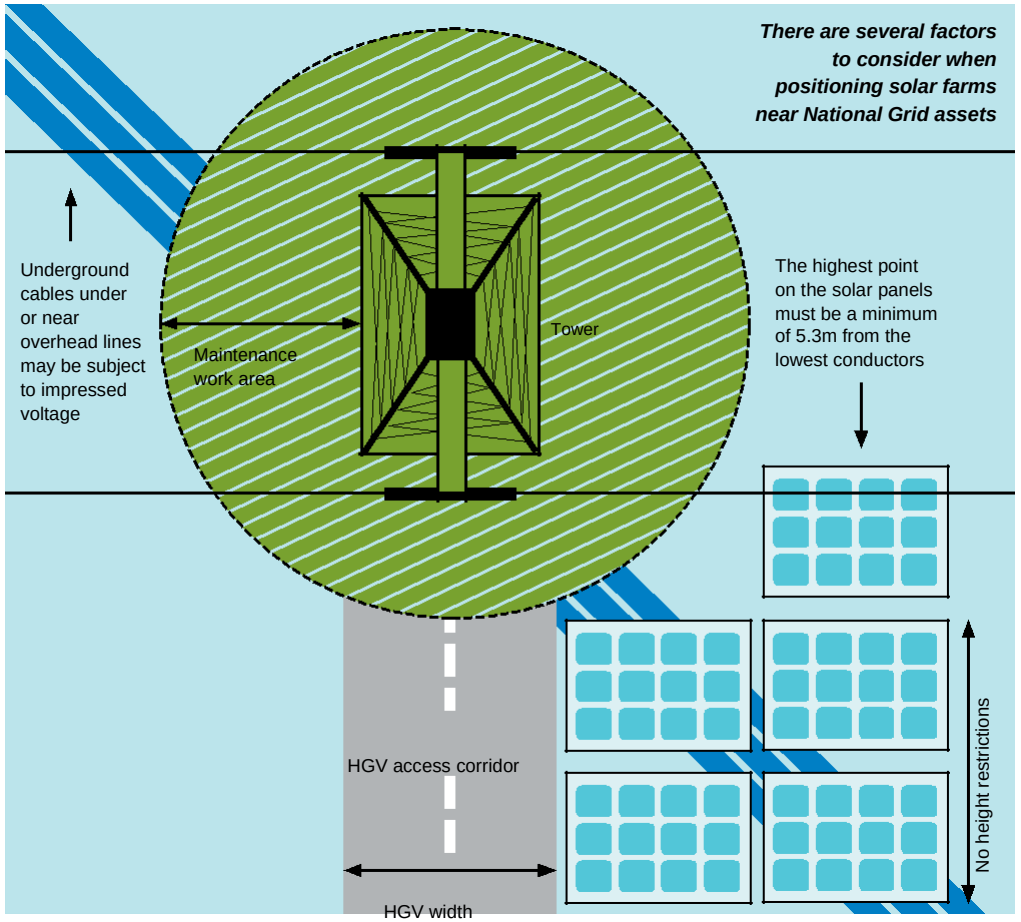
Solar panels that are directly underneath power lines risk being damaged on the rare occasion that a conductor or fitting falls to the ground. A more likely risk is ice falling from conductors or towers in winter and damaging solar panels.

There is also a risk of damage during adverse weather conditions, such as lightning storms, and system faults. As all our towers are earthed, a weather event such as lightning can cause a rise in the earth potential around the base of a tower. Solar panel support structures and supply cables should be adequately earthed and bonded together to minimise the effects of this temporary rise in earth potential.

Any metallic fencing that is located under an overhead line will pick up an electrical charge. For this reason, it will need to be adequately earthed to minimise microshocks to the public.

For normal, routine maintenance and in an emergency National Grid requires unrestricted access to its assets. So if a tower is enclosed in a solar farm compound, we will need full access for our vehicles, including access through any compound gates. During maintenance – and especially re-conductoring – National Grid would need enough space near our towers for winches and cable drums. If enough space is not available, we would require solar panels to be temporarily removed.

Diagram not to scale



Asset protection agreements

In some cases, where there is a risk that development will impact on National Grid's assets, we will insist on an asset protection agreement being put in place. The cost of this will be the responsibility of the developer or third party.

Contact details

Emergency situations

If you spot a potential hazard on or near an overhead electricity line, do not approach it, even at ground level. Keep as far away as possible and follow the six steps below:

- Warn anyone close by to evacuate the area
- Call our 24-hour electricity emergency number: 0800 404 090 (Option 1)[1]
- Give your name and contact phone number
- Explain the nature of the issue or hazard
- Give as much information as possible so we can identify the location – i.e. the name of the town or village, numbers of nearby roads, postcode and (ONLY if it can be observed without putting you or others in danger) the tower number of an adjacent pylon
- Await further contact from a National Grid engineer

[1] It is critically important that you don't use this phone number for any other purpose. If you need to contact National Grid for another reason please use our Contact Centre at www2.nationalgrid.com/contact-us to find the appropriate information or call 0800 0014282.

Routine enquiries

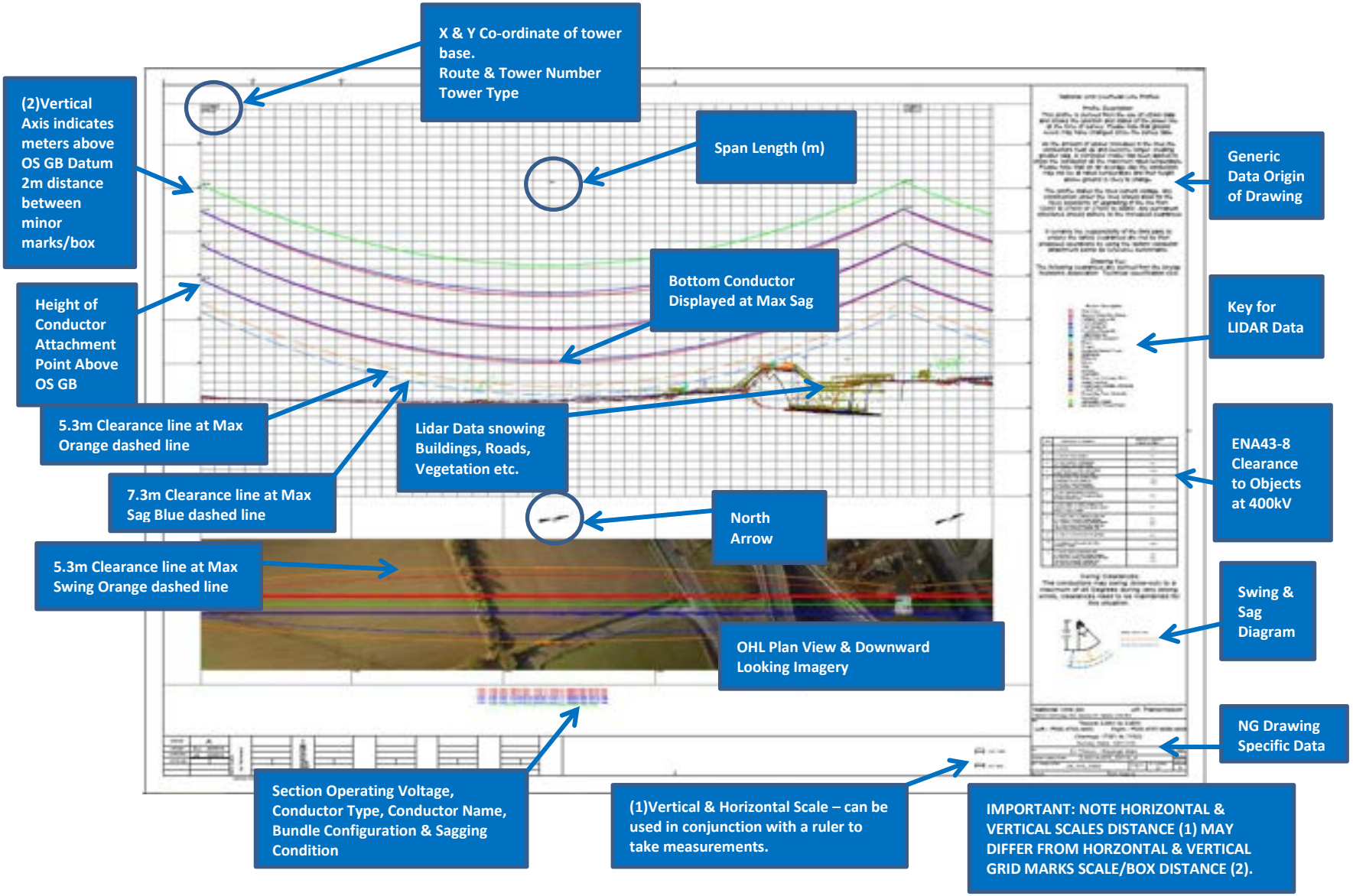
Email:
assetprotection@nationalgrid.com

Call Asset Protection on:
0800 0014282

Opening hours:
Monday to Friday 08:00-16:00

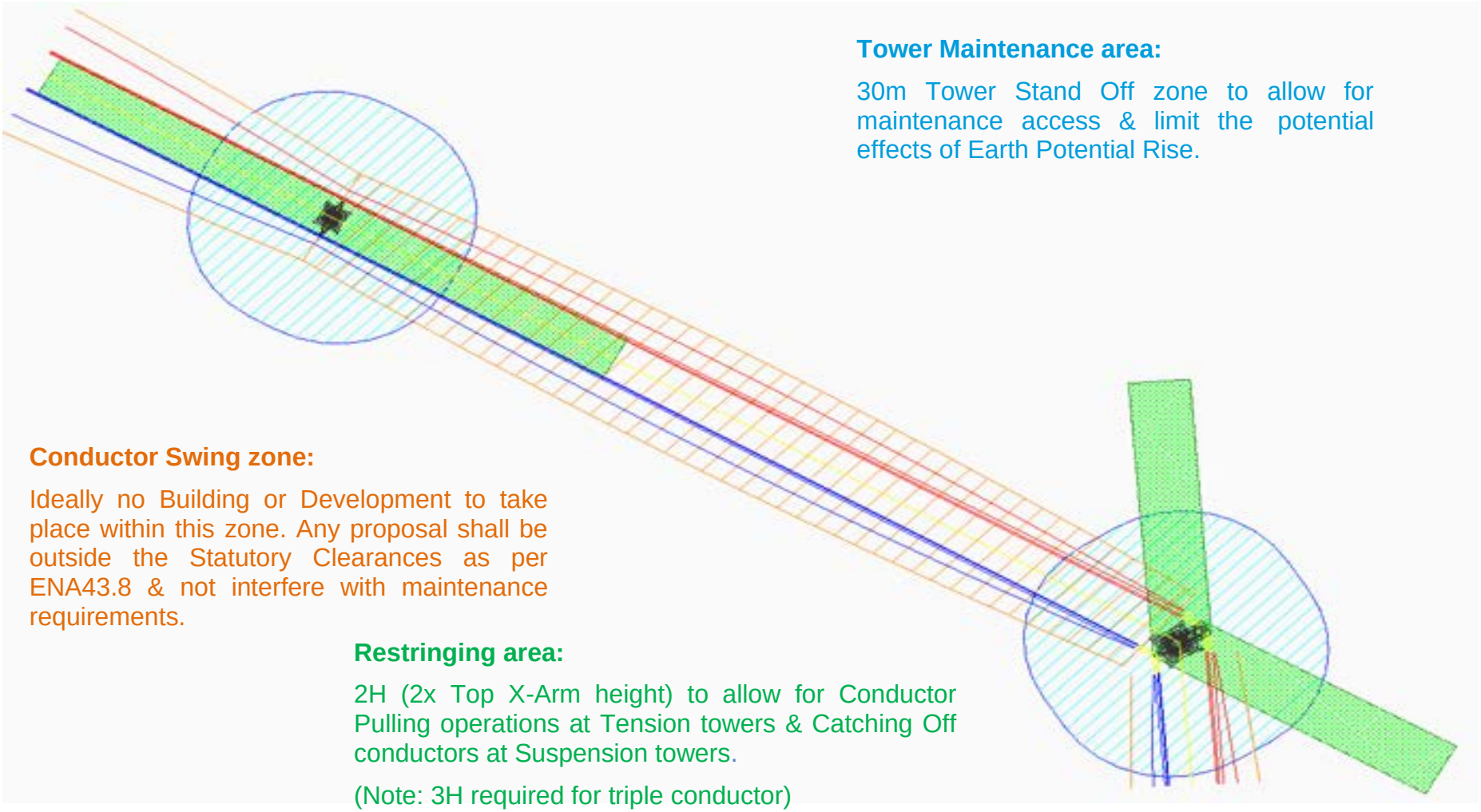
14 APPENDIX A

OHL Profile Drawing Guide



15 APPENDIX B

OHL Tower Stand Off & Reconductoring Area



Tower Maintenance area:

30m Tower Stand Off zone to allow for maintenance access & limit the potential effects of Earth Potential Rise.

Conductor Swing zone:

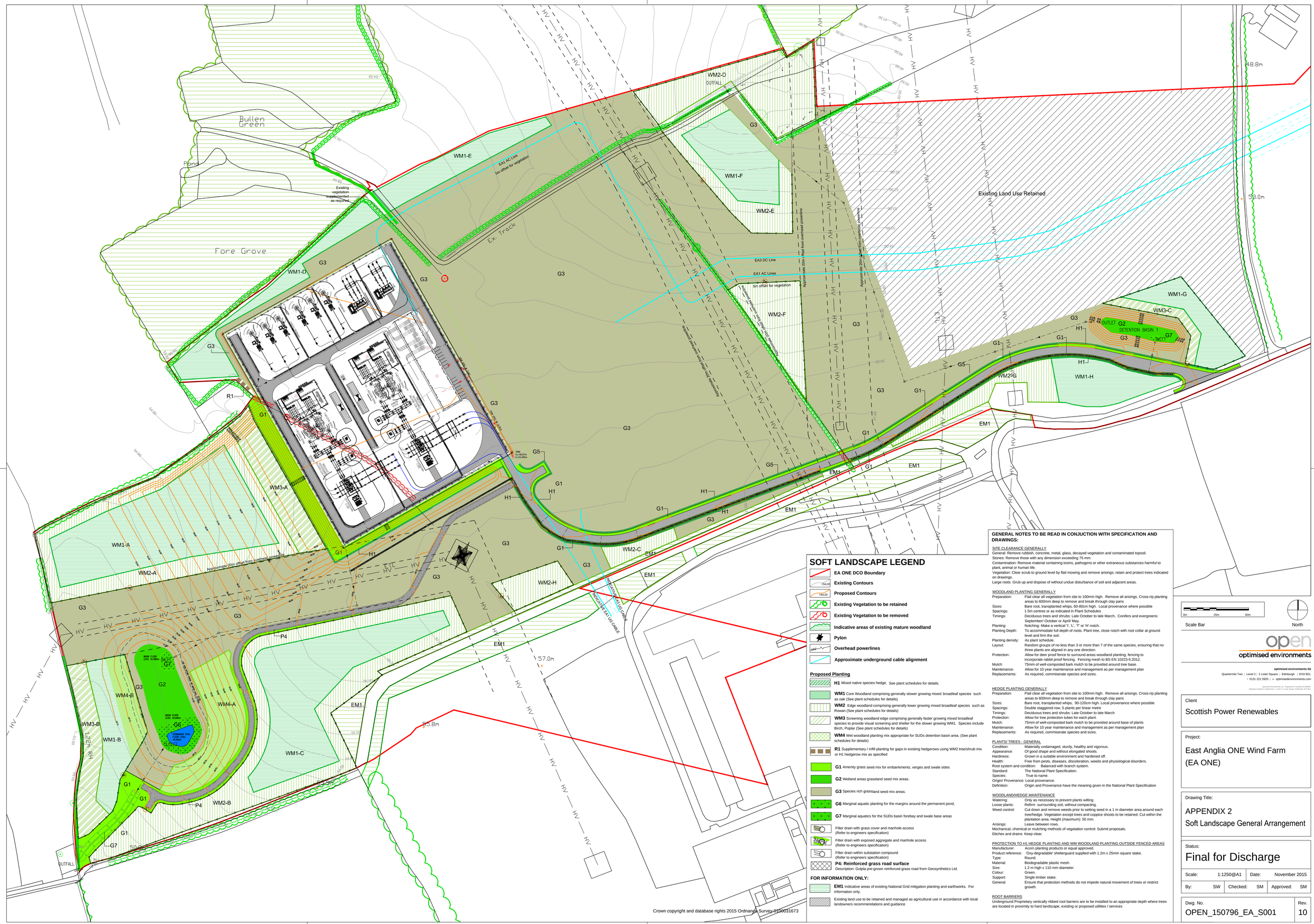
Ideally no Building or Development to take place within this zone. Any proposal shall be outside the Statutory Clearances as per ENA43.8 & not interfere with maintenance requirements.

Restringing area:

2H (2x Top X-Arm height) to allow for Conductor Pulling operations at Tension towers & Catching Off conductors at Suspension towers.

(Note: 3H required for triple conductor)

Appendix C: East Anglia ONE DCO Approved Landscaping



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SOFT LANDSCAPE LEGEND

- **EA ONE DCO Boundary**
- **Existing Contours** (+54.00)
- **Proposed Contours** (+54.00)
- **Existing Vegetation to be retained**
- **Existing Vegetation to be removed**
- **Indicative areas of existing mature woodland**
- **Pylon**
- **Overhead powerlines** (HV)
- **Approximate underground cable alignment**

Proposed Planting

- **H1** Mixed native species hedge. See plant schedules for details.
- **WM1** Core Woodland comprising generally slower growing mixed broadleaf species such as oak (See plant schedules for details)
- **WM2** Edge woodland comprising generally lower growing mixed broadleaf species such as Rowan (See plant schedules for details)
- **WM3** Screening woodland edge comprising generally faster growing mixed broadleaf species to provide visual screening and shelter for the slower growing WM1. Species include Birch, Poplar (See plant schedules for details)
- **WM4** Wet woodland planting mix appropriate for SUDs detention basin area. (See plant schedules for details)
- **R1** Supplementary / infill planting for gaps in existing hedgerows using WM2 tree/shrub mix or H1 hedgerow mix as specified
- **G1** Amenity grass seed mix for embankments, verges and swale sides
- **G2** Wetland areas grassland seed mix areas.
- **G3** Species rich grassland seed mix areas.
- **G6** Marginal aquatic planting for the margins around the permanent pond.
- **G7** Marginal aquatics for the SUDs basin forebay and swale base areas
- Filter drain with grass cover and manhole access (Refer to engineers specification)
- Filter drain with exposed aggregate and manhole access (Refer to engineers specification)
- Filter drain within substation compound (Refer to engineers specification)
- **P4: Reinforced grass road surface** Description: Golpla pre-grown reinforced grass road from Geosynthetics Ltd.

FOR INFORMATION ONLY:

- **EM1** Indicative areas of existing National Grid mitigation planting and earthworks. For information only.
- Existing land use to be retained and managed as agricultural use in accordance with local landowners recommendations and guidance

GENERAL NOTES TO BE READ IN CONJUCTION WITH SPECIFICATION AND DRAWINGS:

SITE CLEARANCE GENERALLY
General: Remove rubbish, concrete, metal, glass, decayed vegetation and contaminated topsoil.
Stones: Remove those with any dimension exceeding 75 mm.
Contamination: Remove material containing toxins, pathogens or other extraneous substances harmful to plant, animal or human life.
Vegetation: Clear scrub to ground level by flail mowing and remove arisings; retain and protect trees indicated on drawings.
Large roots: Grub up and dispose of without undue disturbance of soil and adjacent areas.

WOODLAND PLANTING GENERALLY
Preparation: Flail clear all vegetation from site to 100mm high. Remove all arisings. Cross-rip planting areas to 600mm deep to remove and break through clay pans
Sizes: Bare root, transplanted whips, 60-80cm high. Local provenance where possible
Spacings: 1.5m centres or as indicated in Plant Schedules
Timings: Deciduous trees and shrubs: Late October to late March, Conifers and evergreens: September/ October or April/ May.
Planting: Notching: Make a vertical 'T', 'L', 'T' or 'H' notch.
Planting Depth: To accommodate full depth of roots. Plant tree, close notch with root collar at ground level and firm the soil.
Planting density: As plant schedule.
Layout: Random groups of no less than 3 or more than 7 of the same species, ensuring that no three plants are aligned in any one direction.
Protection: Allow for deer proof fence to surround areas woodland planting, fencing to incorporate rabbit proof fencing. Fencing mesh to BS EN 10223-5:2012.
Mulch: 75mm of well-composted bark mulch to be provided around tree base.
Maintenance: Allow for 10 year maintenance and management as per management plan
Replacements: As required, commiserate species and sizes.

HEDGE PLANTING GENERALLY
Preparation: Flail clear all vegetation from site to 100mm high. Remove all arisings. Cross-rip planting areas to 600mm deep to remove and break through clay pans
Sizes: Bare root, transplanted whips, 90-120cm high. Local provenance where possible
Spacings: Double staggered row, 5 plants per linear metre
Timings: Deciduous trees and shrubs: Late October to late March
Protection: Allow for tree protection tubes for each plant.
Mulch: 75mm of well-composted bark mulch to be provided around base of plants
Maintenance: Allow for 10 year maintenance and management as per management plan
Replacements: As required, commiserate species and sizes.

PLANTS' TREES - GENERAL
Condition: Materially undamaged, sturdy, healthy and vigorous.
Appearance: Of good shape and without elongated shoots.
Hardiness: Grown in a suitable environment and hardened off.
Health: Free from pests, diseases, discoloration, weeds and physiological disorders.
Root system and condition: Balanced with branch system.
Standard: The National Plant Specification.
Species: True to name.
Origin/ Provenance: Local provenance.
Definition: Origin and Provenance have the meaning given in the National Plant Specification

WOODLAND/HEDGE MAINTENANCE
Watering: Only as necessary to prevent plants wilting
Loose plants: Refirm surrounding soil, without compacting.
Weed control: Cut down and remove weeds prior to setting seed in a 1 m diameter area around each tree/hedge. Vegetation exept trees and coppice shoots to be retained: Cut within the plantation area. Height (maximum): 50 mm.
Arisings: Leave between rows.
Mechanical, chemical or mulching methods of vegetation control: Submit proposals.
Ditches and drains: Keep clear.

PROTECTION TO H1 HEDGE PLANTING AND WM WOODLAND PLANTING OUTSIDE FENCED AREAS
Manufacturer: Acorn planting products or equal approved.
Product reference: 'Oxy-degradable' shelterguard supplied with 1.2m x 25mm square stake.
Type: Round.
Material: Biodegradable plastic mesh.
Size: 1.2 m high x 110 mm diameter.
Colour: Green.
Support: Single timber stake.
General: Ensure that protection methods do not impede natural movement of trees or restrict growth.

ROOT BARRIERS
Underground Proprietary vertically ribbed root barriers are to be installed to an appropriate depth where trees are located in proximity to hard landscape, existing or proposed utilities / services

0m 25m 50m
Scale Bar

North

optimised environments

optimised environments ltd
Quartermile Two | Level 2 | 2 Lister Square | Edinburgh | EH3 9GL
t: 0131 221 5920 | w: optimisedenvironments.com
Optimised Environments Ltd. Registered in Scotland SC358995.
Registered address: Quartermile 2, Level 2, 2 Lister Square, Edinburgh, EH3 9GL.

Client
Scottish Power Renewables

Project:
East Anglia ONE Wind Farm (EA ONE)

Drawing Title:
APPENDIX 2
Soft Landscape General Arrangement

Status:
Final for Discharge

Scale:	1:1250@A1	Date:	November 2015
By:	SW	Checked: SM	Approved: SM

Dwg. No.	Rev.
OPEN_150796_EA_S001	10

Computer File: P:\2015\150796_EastAng\CAD\SHEET\00Plot

Appendix D: Table of Public General Legislation to be Applied, Modified and Excluded under the Draft Development Consent Order

Appendix D: Table of Public General Legislation to be applied, modified and excluded under the draft Development Consent Order (DC1.6.113)

1.1 Introduction

1.1.1 In Written Question DC1.6.113, the Examining Authority requested a table be submitted, which sets out the following information in respect of the public general legislation to be applied, modified and excluded under Schedule 15 of the draft DCO (**document 3.1(C)**):

- why the specified provisions are being discharged;
- how the equivalent protections are provided for in the draft DCO, and if they are not provided for, provide justification of the approach; and
- relevant provisions of the draft DCO.

1.1.2 This Appendix summarises the public general legislation to be applied, modified and excluded under Schedule 15 of the draft DCO, including a summary of the provisions and justification for such treatment (including equivalent provisions provided for in the draft DCO).

Table 10.1 – Table of Public General Legislation

Title	Provision and summary of its usual effect	Effect of Schedule 15	Justification (including equivalent provisions provided for in the dDCO)
Hedgerow Regulations 1997 (the "**1997 Regulations**")	Regulation 6(1) (Permitted work) of the 1997 Regulations allows for the removal of all or a part of a hedgerow in particular circumstances without first being required to notify and seek the consent of the local planning authority pursuant to Regulation 5.	Paragraph 1 of Schedule 15 makes clear that the removal of any hedgerow to which the 1997 Regulations apply is a 'permitted work' if it is required for the purposes set out in Article 48 of the draft DCO (**document 3.1(C)**).	The Applicant has sought development consent for the authorised development under Article 3 of the draft DCO. As part of that application, consideration has been given to the removal of hedgerows and relevant plans are provided at Schedule 2,

Title	Provision and summary of its usual effect	Effect of Schedule 15	Justification (including equivalent provisions provided for in the dDCO)
	These are considered 'permitted works'. The range of permitted works under Regulation is broad and includes, at Regulation 6(1)(e), the removal of any hedgerow *"….for carrying out development for which planning permission has been granted or is deemed to have been granted, except development for which permission is granted by article 3 of the Town and Country Planning General Permitted Development Order 1995 in respect of development of any of the descriptions contained in Schedule 2 to that Order other than Parts 11 (development under local or private Acts or orders) and 30 (toll road facilities);"*	The practical effect of Paragraph 1 is to ensure alignment with Regulation 6(1)(e) of the 1997 Regulations which makes clear that operational development carried out pursuant to a planning permission is a 'permitted work'. Paragraph 1 therefore seeks to apply the same principles in the context of Article 48 so as not to create an enhanced burden to the project which is above and beyond what the 1997 Regulations contemplate for planning permissions generally.	Part 5 of the draft DCO (Trees and hedgerows to be removed or managed plans). Article 48 makes specific provision regarding the power to remove hedgerows as part of the authorised development, including also the constraints on exercise of that power. ES Chapter 7 Biodiversity [**APP-075**] and ES Appendix 7.5 Important Hedgerows Assessment [**APP-115**] set out the extent of environmental assessment undertaken in respect of hedgerows (including important hedgerows). Once granted, the draft DCO will itself be secondary legislation (the 1997 Regulations likewise being secondary legislation), and the Applicant believes that it would be unnecessary to require further consent to be sought under the 1997 Regulations when acting in accordance with the provisions of Article 48, as the matters would already be subject to control pursuant to the draft DCO. Hence the public policy objective, of controlling such works in respect of hedgerows, would already have been fulfilled.
Local Government (Miscellaneous Provisions) Act 1976 (the "1976 Act")	Section 42 (Certain future local Acts etc. to be subject to the planning enactments etc. except as otherwise provided) of the 1976 Act provides that certain future Acts will have effect subject to the listed planning enactments.	Section 42 will not apply to the draft DCO (**Document 3.1(C)**) to the extent that section 42 would make provisions of the draft DCO authorising the authorised development subject to other provisions. This modification is necessary to avoid any future local enactments undermining the powers and rights under the draft DCO.	The Applicant has sought development consent for the authorised development under Article 3 of the draft DCO. Once granted, the draft DCO will be secondary legislation. Any public interest objectives underlying the excluded provisions should be satisfied, where appropriate, through the ongoing examination process into the grant of the development consent. Consequently, the Applicant considers that it would be inappropriate for subsequent local legislation to impose controls and consent

Title	Provision and summary of its usual effect	Effect of Schedule 15	Justification (including equivalent provisions provided for in the dDCO)
			requirements which are not considered necessary at the point the draft DCO is made by the Secretary of State. The Applicant notes that the modification of section 42 of the 1976 Act has been included in other recent DCOs including, for example, the West Midlands Rail Freight Interchange Order 2020 (see Paragraph 4 of Schedule 14) and the Sizewell C (Nuclear Generating Station) Order 2022 (see Paragraph 5 of Schedule 25).
Town and Country Planning Act 1990 (the "**1990 Act**")	Section 106(1) (Planning obligations) of the 1990 Act provides that any person interested in land may enter into a section 106 agreement with the local planning authority. Section 106(3)(a) (Planning obligations) provides that a planning obligation entered into under that section is enforceable against the person entering into that obligation.	The undertaker is to be deemed to be a person interested in the land falling within the order limits, or any part of it. This would enable the Applicant to bind planning obligations to the Order land even where it does not have ownership. Should any planning obligations be entered into by the undertaker under section 106 of the 1990 Act, they will be enforceable against any transferee under Article 7 of the draft DCO. The 'undertaker' in relation to the authorised development is the Applicant, and in relation to the UKPN Works, includes UKPN.	This ensures that, should it be necessary, the Applicant (and UKPN in relation to the UKPN Works) has standing to enter into planning obligations with the local planning authority under the 1990 Act. Article 7 of the draft DCO provides consent for the benefit of that Order to be transferred to a third party. Should this occur, the burden of any pre-existing planning obligations will pass, ensuring the local planning authority can take enforcement action against the relevant party if necessary.
Neighbourhood Planning Act 2017 (the "**2017 Act**")	The provisions of the 2017 Act insofar as they relate to temporary possession of land under Articles 26 (Temporary use of land by National Grid), 27 (Temporary use of land by UKPN) and 28 (Temporary use of land for maintaining the authorised development) of the draft DCO (**Document 3.1(C)**). These provisions, when they come into force, will make temporary possession of land available to be sought as a statutory right, including in respect of a CPO.	The relevant provisions of the 2017 Act will not apply when they come into force.	As is noted in Paragraph 3.59.3 of the Explanatory Memorandum (**Document 3.2(B)**), the Applicant considers the exclusion of these temporary possession provisions under the 2017 Act necessary as they are yet to be brought into force and no subsidiary regulations have been made. Consequently, there is currently a lack of certainty around the requirements of the new temporary possession regime.

Title	Provision and summary of its usual effect	Effect of Schedule 15	Justification (including equivalent provisions provided for in the dDCO)
			By excluding these provisions, the temporary possession regime created by Articles 26 to 28 of the draft DCO will continue to be applied should the 2017 Act provisions come into force. This approach to temporary possession in a DCO and TWAO context is well-established and conventional, and this provision removes uncertainty in the future.
Building Act 1984 (the "**1984 Act**")	Part 1 of the 1984 Act deals with the power to make building regulations relating to the design and construction of buildings, the demolition of buildings and the services, fittings and equipment provided in or in connection with buildings.	Those provisions will be excluded, meaning nothing in Part 1 of the 1984 Act with respect to building regulations, and nothing in any building regulations, will apply in relation to a building used, altered or demolished, or intended for use, alteration or demolition, by the undertaker for the purposes of the authorised development before completion of construction.	The draft DCO and its associated controls already address the substantive matters which would normally be the subject of such consents and authorisations. Further, the Applicant itself is subject to various standards and obligations, pursuant to its statutory duties under the Electricity Act 1989, its transmission licence (and conditions) from Ofgem, and other applicable obligations (for example the statutory clearance regulations as referred to in paragraph 3.9.5 (d) of the Explanatory Memorandum (**document 3.2 (B)**)). Any works undertaken before completion of construction that may have fallen within the scope of Part 1 of the 1984 Act will need to be conducted in accordance with the provisions of the Order, and particularly Schedule 1 (Authorised Development), Schedule 2 (Plans) and Schedule 3 (Requirements). The combined effect of these controls in the draft DCO will ensure the objectives underlying Part 1 of the 1984 Act are satisfied, whilst avoiding any undue interference to the implementation of the project that may be caused if Part 1 of the 1984 Act were to also apply.

Appendix E: Copies of the Eastern Union and Hadleigh Junction Railway Act 1846 (the 1846 Act) and the Eastern Union and Hadleigh Junction Railway Sale Act 1847 (the 1847 Act)

Eastern Union and Hadleigh Junction Railway Act 1846

Jurisdiction: UK Non-devolved

Citation: 1846 c. liii

ANNO NONO

VICTORIÆ REGINÆ.

Cap. liii.

An Act for making a Railway from the *Eastern Union* Railway in the Parish of *Bentley* to the Town of *Hadleigh*, all in the County of *Suffolk*, to be called "The *Eastern Union and Hadleigh Junction* Railway." [18th *June* 1846.]

WHEREAS the making of a Railway commencing by a Junction with the *Eastern Union* Railway in the Parish of *Bentley* to the Town of *Hadleigh*, both in the County of *Suffolk*, would be of great public Advantage: And whereas the Persons hereafter named, together with other Persons, are willing, at their own Expence, to carry such Undertaking into execution; but the same cannot be effected without the Authority of Parliament: May it therefore please Your Majesty that it may be enacted; and be it enacted by the Queen's most Excellent Majesty, by and with the Advice and Consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the Authority of the same, That the several Acts of Parliament following, (that is to say,) the "Companies Clauses Consolidation Act, 1845," "the Lands Clauses Consolidation Act, 1845," and the "Railways Clauses Consolidation Act, 1845," shall be incorporated with and form Part of this Act; and the Provisions of the said several Acts shall be applicable to the

8 & 9 Vict. cc. 16. & 18. incorporated with this Act.

the Purposes of this Act, except so far as the same Provisions or any of them are inconsistent with the Provisions of this Act, or are hereinafter declared not to extend thereto.

Short Title.

II. And be it enacted, That in citing this Act in other Acts of Parliament, and in legal Instruments, it shall be sufficient to describe it as "The *Eastern Union and Hadleigh Junction* Railway Act, 1846."

Subscribers incorporated.

III. And be it enacted, That *Rowland Hill*, *James Allen Ransome*, *John Chevallier Cobbold*, *Edward Crowley*, *John Footman*, *John Cobbold*, *Edward Driver*, *John Biddle Alexander*, *Thomas Langton*, *Jeremiah Head*, *Richard Dykes Alexander*, *William May*, *John George Hart*, *John Josselyn*, *Charles May*, *William Rodwell*, *Isaac Everett*, *John Bawtree*, and *William Warwick Hawkins*, and all other Persons and Corporations who have already subscribed or shall hereafter subscribe to the Undertaking, and their Executors, Administrators, Successors, and Assigns respectively, shall be united into a Company for the Purposes of the said Undertaking, according to the Provisions of the said recited Acts and of this Act, and for other the Purposes herein and in the said recited Acts contained; and for the Purposes aforesaid such Company shall be incorporated by the Name of "The *Eastern Union and Hadleigh Junction* Railway Company," and by that Name shall be a Body Corporate, with perpetual Succession, and shall have Power to purchase and hold Lands for the Purposes of the Undertaking, within the Restrictions herein and in the recited Acts contained.

Capital.

IV. And whereas the estimated Expence of making the Railway is Seventy-five thousand Pounds; be it enacted, That the Capital of the Company shall be Seventy-five thousand Pounds.

Number and Amount of Shares.

V. And be it enacted, That the Number of Shares into which the Capital shall be divided shall be Seven thousand five hundred, and the Amount of each Share shall be Ten Pounds.

Calls.

VI. And be it enacted, That Two Pounds *per* Share shall be the greatest Amount of any One Call which the Company may make on the Shareholders, and Three Months at the least shall be the Interval between each Call.

Power to borrow Money.

VII. And be it enacted, That it shall be lawful for the Company to borrow on Mortgage or Bond any Sums not exceeding in the whole the Sum of Twenty-five thousand Pounds, but no Part of such Sum shall be borrowed until the whole of the said Capital or Sum of Seventy-five thousand Pounds shall have been subscribed for, and One Half thereof shall have been actually paid up.

Appointment of a Receiver in the event of Mortgages not being paid.

VIII. And be it enacted, That it shall be lawful for the Mortgagees of the Company to enforce the Payment of the Arrears of Interest or the Arrears of Principal and Interest due on any such Mortgages by the Appointment of a Receiver; and in order to authorize the Appointment of such Receiver, in the event of the Interest or Principal

Monies due on such Mortgages not being duly paid, the Amount owing to the Mortgagees by whom Application for such Receiver shall be made shall not be less than Five thousand Pounds in the whole.

First and other Meetings.

IX. And be it enacted, That the first Ordinary Meeting of the Company shall be held within Eight Months next after the passing of this Act, and the subsequent Ordinary Meetings of the Company shall be held once in every Year in the Month of *August*; and all Meetings, whether ordinary or extraordinary, shall be held in *Ipswich*, or in such other convenient Place as the Directors of the Company for the Time being shall appoint.

Quorum of General Meetings.

X. And be it enacted, That the Quorum for every General Meeting of the Company shall be Twelve Shareholders holding in the aggregate not less than Ten thousand Pounds in the Capital of the Company.

Shareholders may convene Extraordinary Meetings.

XI. And be it enacted, That the Number of Shareholders on whose Requisition an Extraordinary Meeting may be required to be convened shall be Ten Shareholders holding in the aggregate not less than Eight thousand Pounds in the Capital of the Company.

Number and Qualification of Directors.

XII. And be it enacted, That the Number of Directors shall be Nine, and the Qualification of a Director shall be the Possession in his own Right of Fifty Shares in the Undertaking.

Number of Directors may be varied.

XIII. And be it enacted, That it shall be lawful for the Company to reduce the Number of Directors, provided that the reduced Number be not less than Five.

First Directors.

XIV. And be it enacted, That *Rowland Hill*, *James Allen Ransome*, *John Chevallier Cobbold*, *Edward Crowley*, *John Footman*, *John Cobbold*, *Edward Driver*, *John Biddle Alexander*, and *Thomas Langton* shall be the first Directors of the Company.

Such Directors to continue in Office until first Meeting after passing of Act.

XV. And be it enacted, That the Directors appointed by this Act shall continue in Office until the first Ordinary Meeting to be held after the passing of this Act, and at such Meeting the Shareholders present, personally or by Proxy, may either continue in Office the Directors appointed by this Act, or any Number of them, or may elect a new Body of Directors, or Directors to supply the Places of those not continued in Office, the Directors appointed by this Act being eligible as Members of such new Body; and at the first Ordinary Meeting to be held in every Year thereafter the Shareholders present, personally or by Proxy, shall elect Persons to supply the Places of the Directors then retiring from Office agreeably to the Provisions in the said Companies Clauses Consolidation Act, 1845, and in this Act, contained; and the several Persons elected at any such Meeting, being neither removed nor disqualified nor having resigned, shall continue to be Directors until others are elected in their Stead in manner provided by the said [redacted] t [redacted], and in this Act, or either of them.

XVI. And

Quorum of Directors.

XVI. And be it enacted, That a Quorum of a Meeting of Directors shall be Three.

Committee of Directors, and Quorum.

XVII. And be it enacted, That the Number of Directors of which Committees appointed by the Directors shall consist shall be not less than Three; and the Quorum of such Committees shall be such as the Directors shall at the Time of appointing the said Committee prescribe.

Newspapers for Insertion of Advertisements.

XVIII. And be it enacted, That all Advertisements relating to the Affairs of the Company shall be inserted in at least One Newspaper published in the County of *Suffolk*.

Power to make Railway according to deposited Plans.

XIX. And whereas Plans and Sections of the Railway, showing the Line and Levels thereof, and also Books of Reference, containing the Names of the Owners, Lessees, and Occupiers, or reputed Owners, Lessees, and Occupiers of the Lands through which the same is intended to pass, have been deposited with the Clerk of the Peace of the County of *Suffolk*; be it enacted, That, subject to the Provisions in this and the said recited Acts contained, it shall be lawful for the Company to make and maintain the Railway and Works in the Line and upon the Lands delineated on the said Plans and described in the said Books of Reference, and to enter upon, take, and use such of the said Lands as shall be necessary for such Purpose.

Company not to take certain Lands, without Consent.

XX. And be it enacted, That nothing in this Act contained shall authorize the Company to make any lateral Deviation into any Lands not numbered upon the said Plans, or, being numbered thereon, not described in the said Books of Reference, without the Consent in Writing of the Owner and Occupier thereof.

Line of Railway.

XXI. And be it enacted, That the Railway shall commence by Two separate Junctions with the *Eastern Union* Railway in the Parish of *Bentley* in the County of *Suffolk*, and shall pass through the following Places, (that is to say,) *Bentley*, *Copdock* otherwise *Cobdock*, *Capel Saint Mary* otherwise *Caple Saint Mary*, *Little Wenham* otherwise *Wenham Parva*, *Great Wenham* otherwise *Wenham Magna*, *Raydon Saint Mary* otherwise *Reydon* otherwise *Roydon*, and *Hadleigh*, all in the County of *Suffolk*, and shall terminate in the said Parish of *Hadleigh*.

Board of Trade may compel Company to lay down additional Line of Rails.

XXII. And whereas it is proposed in the first instance to lay down a single Line of Rails on the said Line of Railway, but it is the Intention of the Company to purchase Land, and to construct the Tunnels and Bridges of Dimensions sufficient to admit hereafter of a double Line of Rails being laid down throughout the whole Line of Railway; be it therefore enacted, That if at any Time after Twelve Months from the opening of the Railway to the Public it shall appear to the Lords of Her Majesty's Committee of Council for Trade and Foreign Plantations, that an additional Line of Rails is required for the proper Accommodation of the Public using the Railway, then and in such Cases the Company shall and they are hereby required, upon receiving an Order in Writing to that Effect from the Lords of the

the said Committee, to lay down such additional Line of Rails, and to execute all other necessary Works for effecting such Purpose, within such reasonable Time as shall be fixed by the Lords of the said Committee, having reference to the Extent of the Works to be executed under such Order; and if such Order shall be made, and the Works thereby required to be done shall not be executed within the Time specified in such Order, it shall not be lawful for the Company to take any Toll or Fare for the Use of the said Railway until the Works required to be made by such Order shall have been completed.

Lands for extraordinary Purposes.

XXIII. And be it enacted, That the Quantity of Land to be taken by the Company for extraordinary Purposes shall not exceed Twenty Acres.

Certain public Roads may be crossed on the Level.

XXIV. And be it enacted, That it shall be lawful for the Company to construct the said Railway on the Level across the several Roads numbered on the Plans deposited as aforesaid; *viz.*, Numbers 17 and 71 in the Parish of *Bentley*, Number 1 in the Parish of *Copdock*, 13 in the Parish of *Caple Saint Mary*, 13 in the Parish of *Little Wenham*, and 11 in the Parish of *Raydon*, all in the said County of *Suffolk*.

Compulsory Purchase of Lands limited.

XXV. And be it enacted, That the Powers of the Company for the compulsory Purchase of Lands for the Purposes of this Act shall not be exercised after the Expiration of Three Years from the passing of this Act.

Period for Completion of Works.

XXVI. And be it enacted, That the Railway shall be completed within Four Years from the passing of this Act; and on the Expiration of such Period the Powers by this or the recited Acts granted to the Company for executing the Railway, or otherwise in relation thereto, shall cease to be exercised, except as to so much of the Railway as shall then be completed.

Communication with the Eastern Union Railway to be made under Superintendence.

XXVII. And be it enacted, That the Junctions with the *Eastern Union* Railway hereby authorized to be made, and all such Openings in the Ledges or Flanches of the said Railway as may be necessary or convenient for effecting such Communications shall be made under the Direction and Superintendence of the Engineer for the Time being of the said *Eastern Union* Railway Company.

Not to take Lands, &c. of the Eastern Union Railway Company without Consent.

XXVIII. And be it enacted, That nothing in this Act contained shall extend to authorize or enable the Company hereby incorporated to take or enter upon any of the Lands or Grounds now belonging to the *Eastern Union* Railway Company, or to alter, vary, or interfere with the said *Eastern Union* Railway, or any of the Works thereof respectively, further or otherwise than is hereby expressly authorized, without the Consent in Writing of the said Company in every instance for that Purpose first had and obtained.

Saving the Rights of the Eastern Union Railway Company.

XXIX. Provided always, and be it enacted, That nothing in this Act contained shall extend to prejudice, diminish, alter, or take away, further or otherwise than is herein expressly authorized, any of the Rights,

Rights, Privileges, Powers, or Authorities vested in the *Eastern Union* Railway Company.

Tolls.

XXX. And be it enacted, That it shall be lawful for the Company to demand any Tolls for the Use of the Railway not exceeding the following; (that is to say,)

Tonnage of Articles of Merchandize.

In respect of the Tonnage of all Articles conveyed upon the Railway or any Part thereof, as follows:

For all Dung, Compost, and all Sorts of Manure, Lime and Limestone, and all undressed Materials for the Repair of public Roads or Highways, *per* Ton *per* Mile not exceeding One Penny; and if conveyed by Carriages belonging to the Company, an additional Sum *per* Ton *per* Mile not exceeding One Halfpenny:

For all Coals, Coke, Culm, Charcoal, and Cinders, all Stones for building, pitching, and paving, all Bricks, Tiles, Slates, Clay, Sand, Ironstone and Iron Ore, Pig Iron, Bar Iron, Rod Iron, Hoop Iron, and all other similar Descriptions of Wrought Iron and Iron Castings not manufactured into Utensils or other Articles of Merchandize, *per* Ton *per* Mile not exceeding Three Halfpence; and if conveyed in Carriages belonging to the Company, an additional Sum *per* Ton *per* Mile not exceeding One Halfpenny:

For all Sugar, Grain, Corn, Flour, Hides, Dyewoods, Earthenware, Timber, Staves, Deals, Metals (except Iron), Nails, Anvils, Vices, and Chains, *per* Ton *per* Mile Two-pence; and if conveyed in Carriages belonging to the Company, an additional Sum *per* Ton *per* Mile not exceeding Three Farthings:

For all Cotton and other Wools, Drugs, manufactured Goods, and all other Wares, Merchandize, Fish, Articles, Matters, or Things, *per* Ton *per* Mile not exceeding Three-pence; and if conveyed in Carriages belonging to the Company, an additional Sum *per* Ton *per* Mile not exceeding One Penny:

For every Carriage, of whatever Description, and not being a Carriage adapted and used for travelling on a Railway, and not weighing more than One Ton, carried or conveyed on a Truck or Platform, *per* Mile not exceeding Sixpence:

And a Sum of Two-pence *per* Mile for every additional Quarter of a Ton or fractional Part of a Quarter of a Ton which any such Carriage may weigh; and if conveyed on a Truck or Platform belonging to the Company, an additional Sum *per* Mile not exceeding Two-pence.

Tolls for Passengers and Cattle.

In respect of Passengers and Animals conveyed in Carriages upon the Railway as follows:

For any Person conveyed in or upon any such Carriage, *per* Mile not exceeding Two-pence; and if conveyed in or upon any Carriage belonging to the Company, an additional Sum *per* Mile not exceeding One Penny:

For every Horse, Mule, Ass, or other Beast of Draught or Burden, and for every Ox, Cow, Bull, or Neat Cattle, conveyed in or upon any such Carriage, *per* Mile not exceeding Three-pence; and if conveyed in or upon any Carriage belonging to the Company, an additional Sum *per* Mile not exceeding One Penny:

For every Calf, Pig, Sheep, Lamb, or other small Animal conveyed in or upon any such Carriage, *per* Mile not exceeding One Penny; and if conveyed in or upon any Carriage belonging to the Company, an additional Sum *per* Mile not exceeding One Farthing.

Tolls for propelling Power.

XXXI. And be it enacted, That the Toll which the Company may demand and receive for the Use of Engines for propelling Carriages on the Railway shall not exceed One Penny *per* Mile for each Passenger or Animal, or for each Ton of Goods or other Articles, in addition to the several other Tolls or Sums by this Act authorized to be taken.

Regulations as to the Tolls.

XXXII. And be it enacted, That the following Provisions and Regulations shall be applicable to the fixing of such Tolls; (that is to say,)

For Articles or Persons conveyed on the Railway for a less Distance than Six Miles the Company may demand the said Tolls as for Six Miles:

For a Fraction of a Mile beyond Six Miles, or beyond any greater Number of Miles, the Company may demand Tolls on Merchandize for such Fraction in proportion to the Number of Quarters of a Mile contained therein, and if there be a Fraction of a Quarter of a Mile such Fraction shall be deemed a Quarter of a Mile; and in respect of Passengers every Fraction of a Mile beyond an integral Number of Miles shall be deemed a Mile:

For a Fraction of a Ton the Company may demand Toll according to the Number of Quarters of a Ton in such Fraction, and if there be a Fraction of a Quarter of a Ton such Fraction shall be deemed a Quarter of a Ton:

With respect to all Articles, except Stone and Timber, the Weight shall be determined according to the usual Avoirdupois Weight:

With respect to Stone and Timber, Fourteen Cubic Feet of Stone, Forty Cubic Feet of Oak, Mahogany, Teak, Beach, or Ash, and Fifty Cubic Feet of any other Timber, shall be deemed One Ton Weight, and so on in proportion for any smaller Quantity.

Tolls for small Parcels and great Weights.

XXXIII. And with respect to small Packages, and single Articles of great Weight, be it enacted, That, notwithstanding the Rate of Tolls prescribed by this Act, the Company may lawfully demand the Tolls following; (that is to say,)

For the Carriage of small Parcels (that is to say, Parcels not exceeding Five hundred Pounds Weight each) the Company may demand any Sum which they think fit: Provided always, that Articles sent in large aggregate Quantities, although made up of separate Parcels, such as Bags of Sugar, Coffee, Meal, and the like, shall not be deemed small Parcels, but such Term shall apply only to single Parcels in separate Packages:

For the Carriage of any One Boiler, Cylinder, Bob, or single Piece of Machinery, or single Piece of Timber or Stone, or other single Article, the Weight of which, including the Carriage, shall exceed Four Tons but shall not exceed Eight Tons, the Company

pany may demand such Sum as they from Time to Time may think fit, not exceeding Sixpence *per* Ton *per* Mile:

For the Carriage of any single Piece of Timber, Stone, Machinery, or other single Article, the Weight of which with the Carriage shall exceed Eight Tons, the Company may demand such Sum as they think fit.

Passengers Luggage.

XXXIV. And be it enacted, That every Passenger travelling upon the Railway may take with him his ordinary Luggage, not exceeding One hundred Pounds in Weight for First Class Passengers, Sixty Pounds in Weight for Second Class Passengers, and Forty Pounds in Weight for Third Class Passengers, without any Charge being made for the Carriage thereof.

Maximum Charges for Conveyance of Passengers.

XXXV. And be it enacted, That it shall not be lawful for the Company to demand or receive any greater Sum in respect of the Carriage of Passengers conveyed on the Railway than Three-pence *per* Passenger *per* Mile in respect of any Passenger travelling in a First Class Carriage, Two-pence *per* Passenger *per* Mile in respect of any Passenger travelling in a Second Class Carriage, and One Penny Halfpenny *per* Passenger *per* Mile in respect of any Passenger travelling in a Third Class Carriage, including the Charges for the Use of Carriages and locomotive Power, and all other Charges incidental to such Conveyance.

For Conveyance of Goods and Cattle.

XXXVI. And be it enacted, That it shall not be lawful for the Company to charge, in respect of the several Articles, Matters, and Things, and of the several Descriptions of Animals herein-after mentioned, conveyed on the Railway, any greater Sum, including the Charges for the Use of Carriages, Waggons, or Trucks, and for locomotive Power, and all other Charges incident to such Conveyance (except a reasonable Charge for the Expence of loading and unloading, where such Service is performed by the Company), than the several Sums herein-after mentioned; (that is to say,)

For all Dung, Compost, and all Sorts of Manure, Lime and Limestone, and all undressed Materials for the Repair of public Roads or Highways, *per* Ton *per* Mile Two-pence:

For all Coals and Culm, the Sum of Two-pence *per* Ton *per* Mile:

For all Coke, Charcoal, and Cinders, all Stones for building, pitching, and paving, all Bricks, Tiles, Slate, Clay, Sand, Ironstone and Iron Ore, Pig Iron, Bar Iron, Rod Iron, Hoop Iron, and all other similar Descriptions of Wrought Iron and Iron Castings not manufactured into Utensils or other Articles of Merchandize, *per* Ton *per* Mile Two-pence Three Farthings:

For all Sugar, Grain, Corn, Flour, Hides, Dyewoods, Earthenware, Timber, Staves, Deals, Metals (except Iron), Nails, Anvils, Vices, and Chains, *per* Ton *per* Mile Three-pence Halfpenny:

For all Cotton and other Wools, Drugs, manufactured Goods, and all other Wares, Merchandize, Fish, Articles, Matters, or Things, *per* Ton *per* Mile Four-pence Halfpenny:

For

For every Carriage, of whatever Description, and not being a Carriage adapted and used for travelling on a Railway, and not weighing more than One Ton and a Half, *per* Mile Sixpence:
For every Horse, Mule, Ass, Ox, Cow, Bull, or Neat Cattle, *per* Mile Four-pence Halfpenny:
For every Calf, Pig, Sheep, Lamb, or other small Animal, *per* Mile One Penny Halfpenny.

Tolls for separate Trucks for Cattle, &c.

XXXVII. Provided always, and be it enacted, That if any Person shall desire to hire and retain a separate Waggon or Truck for the Conveyance of Cattle or Sheep belonging to him, it shall not be lawful for the Company to charge any greater Sum, including all the Charges aforesaid, than One Shilling *per* Mile for every Waggon or Truck capable of containing conveniently Six Beasts of an ordinary Size, or Thirty Sheep.

Restriction as to Charges not to apply to special Trains.

XXXVIII. Provided always, and be it enacted, That the Restriction as to the Charges to be made for Passengers shall not extend to any special Train which may be required to be run upon the Railway, but shall apply only to the ordinary Trains appointed or to be appointed from Time to Time by the Company for the Conveyance of Passengers and Goods upon the Railway.

Company may take increased Charges by Agreement.

XXXIX. Provided always, and be it enacted, That nothing herein contained shall be held to prevent the Company from taking any increased Charges, over and above the Charges herein-before limited, for the Conveyance of Goods of any Description, by Agreement with the Owners of or Persons in charge of such Goods, either in respect of the Conveyance thereof by Passenger Trains, or by reason of any other special Service performed by the Company in relation thereto.

Railway to be subject to Provisions of 1 & 2 Vict. c. 98., 3 & 4 Vict. c. 97., 5 & 6 Vict. c. 55., and 7 & 8 Vict. c. 85.

XL. And whereas an Act was passed in the Second Year of the Reign of Her present Majesty, intituled *An Act to provide for the Conveyance of the Mails by Railway;* and another Act was passed in the Fourth Year of the Reign of Her said Majesty, intituled *An Act for regulating Railways;* and another Act was passed in the Sixth Year of the Reign of Her said Majesty, intituled *An Act for the better Regulation of Railways, and for the Conveyance of Troops;* and another Act was passed in the Eighth Year of the Reign of Her said Majesty, intituled *An Act to attach certain Conditions to the Construction of future Railways authorized or to be authorized by any Act of the present or succeeding Sessions of Parliament; and for other Purposes in relation to Railways;* be it enacted, That nothing in this Act contained shall be held to exempt the said Railway or the said Company from the Provisions of the said several Acts respectively, but that such Provisions shall be in force in respect to the said Railway and Company, so far as the same shall be applicable thereto.

Railway not exempt from Provisions of any future general Act.

XLI. Provided always, and be it enacted, That nothing herein contained shall be deemed or construed to exempt the Railway by this Act authorized from the Provisions of any general Act relating to

to this Act, or of any general Act relating to Railways, which may pass during the present or any future Session of Parliament, or from any future Revision and Alteration, under the Authority of Parliament, of the maximum Rates of Fares and Charges authorized by this Act.

Public Act. XLII. And be it enacted, That this Act shall be a Public Act, and shall be judicially taken notice of as such.

LONDON: Printed by GEORGE E. EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty. 1846.

ANNO DECIMO

VICTORIÆ REGINÆ.

****

Cap. xix.

An Act for authorizing the Sale of the *Eastern Union and Hadleigh Junction* Railway to the *Eastern Union* Railway Company.

[8th *June* 1847.]

WHEREAS an Act was passed in the Session of Parliament held in the Seventh and Eighth Years of the Reign of Her present Majesty, intituled *An Act for making a Railway from* Colchester *to* Ipswich, whereby a Company was incorporated by the Name of "The *Eastern Union* Railway Company:" And whereas another Act was passed in the Session of Parliament held in the Eighth and Ninth Years of the Reign of Her said present Majesty, intituled *An Act to amend the Act relating to the* Eastern Union *Railway Company, and to raise a further Sum of Money for the Purposes of the said Undertaking:* And whereas an Act was passed in the last Session of Parliament, intituled *An Act to empower the* Eastern Union *Railway Company to complete the* Eastern Union *Railway, from the Junction thereof with the Line of the* Eastern Counties *Railway at* Ardleigh, *to* Colchester: And whereas another Act was passed in the last Session of Parliament, called "The *Eastern Union and Hadleigh Junction* Railway Act, 1846," whereby a Com-

7 & 8 Vict. c. 85.

8 & 9 Vict. c. 94.

9 & 10 Vict. c. 97.

9 & 10 Vict. c. 53.

pany was incorporated by the Name of "The *Eastern Union and Hadleigh Junction* Railway Company:" And whereas the Railway authorized to be constructed by the said last-mentioned Act is intended to unite with and will form a Branch of the *Eastern Union* Railway, and might be constructed and worked by the said *Eastern Union* Railway Company with greater Ease and Economy, and consequently with greater Advantage to the Public, than by the said *Eastern Union and Hadleigh Junction* Railway Company: And whereas the last-named Company have agreed to sell, and the said *Eastern Union* Railway Company have agreed to purchase, the Undertaking authorized by the last-recited Act; but the same cannot be effected without the Authority of Parliament: May it therefore please Your Majesty that it may be enacted; and be it enacted by the Queen's most Excellent Majesty, by and with the Advice and Consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the Authority of the same,

Power to sell Eastern Union and Hadleigh Junction Railway to Eastern Union Railway Company.

That it shall be lawful for the said *Eastern Union and Hadleigh Junction* Railway Company, by and with the Authority of Three Fifths of the Votes of the Shareholders thereof who may be present, either personally or by Proxy, at some Extraordinary Meeting of such Company specially called for the Purpose, to sell, transfer, and dispose of, and for the *Eastern Union* Railway Company, by and with the like Authority of the Shareholders thereof, to purchase or accept, the Undertaking by the said *Eastern Union and Hadleigh Junction* Railway Act, 1846, authorized, whether before or after the Construction of the last-mentioned Railway, for such Consideration and upon such Terms and Conditions as have been or may be agreed upon between the said Companies, subject to the existing Liabilities affecting the said Undertaking, and subject also to the Provisions of the *Eastern Union and Hadleigh Junction* Railway Act, 1846, and of this Act, and of the "Lands Clauses Consolidation Act, 1845," and the "Railways Clauses Consolidation Act, 1845," and the Agreement between the said Companies in reference to the said Sale and Purchase bearing Date the Twenty-sixth Day of *August* One thousand eight hundred and forty-six, and confirmed by the *Eastern Union* Railway Company at an Extraordinary General Meeting thereof held on the Eighth Day of *December* One thousand eight hundred and forty-six, and by the *Eastern Union and Hadleigh Junction* Railway Company at an Extraordinary General Meeting thereof held on the Thirteenth Day of *January* One thousand eight hundred and forty-seven, shall be valid and binding.

Form and Effect of Conveyance of Undertaking.

II. And be it enacted, That the Conveyance or Assignment of the said Undertaking may be in the Form in the Schedule to this Act annexed, or to the like Effect, with such Alterations therein or Additions thereto as the Circumstances of the Case and the Terms of the Purchase or Transfer may render necessary, or as may be agreed upon between the said Companies; and such Conveyance shall state the Consideration, and shall be duly stamped (for denoting the Payment of the full and proper Stamp Duty by Law payable in respect of the whole of the Purchase Money), and shall be under the Common Seals of both the said Companies, and shall, when so executed, be effectual to vest the said Undertaking, and all the

Rights, Privileges, Powers, and Authorities by the said *Eastern Union and Hadleigh Junction* Railway Act, 1846, and the "Lands Clauses Consolidation Act, 1845," and the "Railways Clauses Consolidation Act, 1845," and also all Works belonging to the said Undertaking, and the Ground and Soil belonging thereto, and all and every other the Lands, Tenements, and Hereditaments, Rights, Easements, and Appurtenances whatsoever; and all Books, Maps, Plans, and other Documents, and also, if so expressed, all the Personal Property, Monies, and Effects of or to which the said *Eastern Union and Hadleigh Junction* Railway Company may be seised, possessed, or entitled, at Law or in Equity, in and over the said *Eastern Union and Hadleigh Junction* Railway at the Time of the Execution of such Conveyance, absolutely in the *Eastern Union* Railway Company; and the said Undertaking shall thenceforth become and form Part of the *Eastern Union* Railway, subject, nevertheless, and without Prejudice, to any Mortgages, Charges, or Incumbrances which at the Time of the Execution of such Conveyance may be upon or affect the said *Eastern Union and Hadleigh Junction* Railway Company.

Notice of Execution of Conveyance to be given in the Gazette.

III. And be it enacted, That Notice of the Execution of the said Conveyance shall be inserted within Twenty-one Days after the Date thereof in the *London Gazette*, and also in a Newspaper usually circulated in the County of *Suffolk*, and that a Copy of such Conveyance, under the Common Seals of the said Companies, shall be deposited at the Office of the Clerk of the Peace for the same County within the before-mentioned Period, and such Clerk of the Peace shall receive and retain the same, and permit the Inspection thereof, and the making Copies thereof or Extracts therefrom, in the like Manner and subject to the like Terms and Penalties as in an Act passed in the First Year of the Reign of Her present Majesty, intituled *An Act to compel Clerks of the Peace for Counties and other Persons to take the Custody of such Documents as shall be directed to be deposited with them under the Standing Orders of either House of Parliament*, are expressed in relation to the Documents referred to in the same Act. 7 W. 4. & 1 Vict. c. 83.

On Execution of Conveyance, Powers of the Eastern Union and Hadleigh Junction Railway Company over their Railway to cease.

IV. And be it enacted, That when and as soon as the said Conveyance shall have been executed by both of the said Companies, and the Execution thereof shall have been so advertised, and a Copy thereof shall have been so deposited as aforesaid, all the Powers of the *Eastern Union and Hadleigh Junction* Railway Company shall cease and determine, and such Company shall be dissolved and cease to exist, and all the Rights, Privileges, Powers, and Authorities by the said *Eastern Union and Hadleigh Junction* Railway Act, 1846, and by the "Lands Clauses Consolidation Act, 1845," and the "Railways Clauses Consolidation Act, 1845," conferred on or given to the said *Eastern Union and Hadleigh Junction* Railway Company touching the said Undertaking, shall apply to and be vested in the *Eastern Union* Railway Company, and may lawfully be used, exercised, and enjoyed by the last-mentioned Company or the Directors thereof, or their Officers, Agents, or Servants, under the same Penalties, Provisions, and Restrictions as are applicable to or imposed upon the said *Eastern*

Eastern Union and Hadleigh Junction Railway Company, and the Corporate Seal of the *Eastern Union* Railway Company may be used, when necessary, in reference thereto, in like Manner in every respect as though the said *Eastern Union and Hadleigh Junction* Railway had originally formed Part of the Undertaking of the *Eastern Union* Railway, and the *Eastern Union* Railway Company had been originally authorized to carry the same into effect, instead of the said *Eastern Union and Hadleigh Junction* Railway Company.

Contracts not to be affected.

V. And be it enacted, That all Contracts, Agreements, Conveyances, Mortgages, Bonds, and Securities which have been made or entered into with, to, or in favour of or by or for the *Eastern Union and Hadleigh Junction* Railway Company, previously to the Execution of such Conveyance, shall from and after the Execution thereof be and remain as good, valid, and effectual in favour of, against, and in reference to the *Eastern Union* Railway Company, and may be proceeded on and enforced in the same Manner, by or against the last-named Company, to all Intents and Purposes as if such Company had been a Party to and had executed the same, or had been named or referred to therein instead of the *Eastern Union and Hadleigh Junction* Railway Company.

Actions, &c. not to abate.

VI. And be it enacted, That no Action, Suit, Prosecution, or other Proceeding whatsoever, commenced either by or against the said *Eastern Union and Hadleigh Junction* Railway Company previously to the passing of this Act shall abate or be discontinued or prejudicially affected by reason of the vesting of the said Undertaking in the *Eastern Union* Railway Company, but, on the contrary, the same shall continue and take effect, but in favour of and against the said *Eastern Union* Railway Company, in the same Manner in all respects as the same would or might have continued and taken effect in favour of or against the said *Eastern Union and Hadleigh Junction* Railway Company if this Act had not been passed.

Enabling Eastern Union Railway Company to raise Money by Creation of new Shares.

VII. And be it enacted, That for the Purpose of the Purchase and Execution of the *Eastern Union and Hadleigh Junction* Railway it shall be lawful for the *Eastern Union* Railway Company, if they see fit, by and with such Authority as aforesaid, to create such an additional Number of Shares and to borrow such Sum of Money as may be necessary for completing such Purchase, or for constructing and working the said Undertaking, provided that the Amount to be raised by such additional Shares shall not exceed the Sum of One hundred thousand Pounds, and provided that the Amount to be so borrowed shall not exceed One Third of the last-mentioned Sum, and no Money whatever shall be so borrowed until the whole of the Money which the *Eastern Union* Railway Company are authorized by this and the said recited Acts to raise by Shares shall have been subscribed, and One Half thereof actually paid up: Provided also, that it shall be lawful for the said *Eastern Union* Railway Company to allot any Portion of the said Shares to the Shareholders in the said *Eastern Union and Hadleigh Junction* Railway Company by way of Compensation for their Interest in the *Eastern Union and Hadleigh Junction* Railway, and to give Credit for all or any Part of the Sums represented

represented by or of the Calls payable in respect of such Shares, as may be agreed on with the Parties accepting the same.

Money to be raised in conformity to 8 & 9 Vict. c. 16.

VIII. And be it enacted, That, subject as aforesaid, the Money to be raised by Shares and to be borrowed by the *Eastern Union* Railway Company for the Purposes of the Undertaking so purchased by them shall be raised and borrowed in conformity with the Provisions of the "Companies Clauses Consolidation Act, 1845," with respect to the borrowing of Money, and with respect to the Conversion of borrowed Money into Capital.

Existing Mortgages to have Priority.

IX. Provided always, and be it enacted, That all Mortgages already granted by the *Eastern Union* Railway Company shall have Priority over all Mortgages by this Act authorized to be granted.

Dividends on new Shares.

X. Provided always, and be it enacted, That in calculating the Dividends upon the Shares to be created under the Powers granted by this Act reference shall be had to any Difference between the Amount of Calls paid thereon, or agreed to be considered as paid thereon, and the Amount of Calls paid upon the original Shares of the *Eastern Union* Railway Company at the Time of the Declaration of such Dividend.

Eastern Union and Hadleigh Junction Railway Shareholders may receive Shares in Eastern Union and Ipswich and Bury Saint Edmunds Railways when amalgamated, in lieu of Shares in Eastern Union Railway to which they may be entitled.

XI. And whereas a Bill is now pending before Parliament for uniting the said *Eastern Union* Railway Company with the *Ipswich and Bury Saint Edmunds* Railway Company; be it enacted, That if such Bill shall pass into a Law in the present Session every Proprietor in the said *Eastern Union and Hadleigh Junction* Railway Company who by virtue of any subsisting Agreement between that Company and the said *Eastern Union* Railway Company for the Sale of the said *Eastern Union and Hadleigh Junction* Railway to the said last-mentioned Company might, but for the Union of the said *Eastern Union and Ipswich and Bury Saint Edmunds* Railway Companies, have elected to have been paid in Shares of the said *Eastern Union* Railway Company all or any Portion of the Price or Compensation payable to him by the said last-mentioned Company in respect of his Interest in the said *Eastern Union and Hadleigh Junction* Railway, shall and may elect to demand and receive in lieu thereof the like Number of Shares of the said *Eastern Union and Ipswich and Bury Saint Edmunds* Railway Companies, when united, as any Holder of a Number of Shares of the *Eastern Union* Railway Company equal in Number to those which such Proprietor might, but for such Union, have elected to have received in the *Eastern Union* Railway Company, may be entitled to demand and receive of the said *Eastern Union and Ipswich and Bury Saint Edmunds* Railway Companies when united.

Railway to be subject to the Provisions of 1 & 2 Vict. c. 98., 3 & 4 Vict. c. 97.,

XII. And whereas an Act was passed in the Second Year of the Reign of Her present Majesty, intituled *An Act to provide for the Conveyance of the Mails by Railway;* and another Act was passed in the Fourth Year of the Reign of Her said Majesty, intituled *An Act for regulating Railways;* and another Act was passed in the Sixth Year of the Reign of Her said Majesty, intituled *An Act*

5 & 6 Vict. c. 55., and 7 & 8 Vict. c. 85.

Act for the better Regulation of Railways, and for the Conveyance of Troops; and another Act was passed in the Eighth Year of the Reign of Her said Majesty, intituled *An Act to attach certain Conditions to the Construction of future Railways authorized or to be authorized by any Act of the present or succeeding Sessions of Parliament; and for other Purposes in relation to Railways;* and Two Acts were passed in the last Session of Parliament, the one intituled *An Act for regulating the Gauge of Railways*, and the other intituled *An Act for constituting Commissioners of Railways;* be it enacted, That nothing in this Act contained shall be held to exempt the said *Eastern Union and Hadleigh Junction* Railway or the said *Eastern Union* Railway Company from the Provisions of the said several Acts respectively, but that such Provisions shall be in force in respect to the said Railway and Company, so far as the same shall be applicable thereto.

Railway to be subject to Provisions of any future general Act.

XIII. Provided always, and be it enacted, That nothing herein contained shall be deemed or construed to exempt the said *Eastern Union and Hadleigh Junction* Railway from the Provisions of any general Act relating to such Railway, or of any general Act relating to Railways, which may pass during the present or any future Session of Parliament, or from any future Revision and Alteration, under the Authority of Parliament, of the maximum Rates of Fares and Charges authorized to be collected on such Railway.

Short Title of Act.

XIV. And be it enacted, That in citing this Act in other Acts of Parliament, and in legal and other Instruments, it shall be sufficient to use the Expression "The *Eastern Union and Hadleigh Junction* Railway Sale Act, 1847."

Expences of Act.

XV. And be it enacted, That all the Costs, Charges, and Expences of and attending the applying for, promoting, and obtaining of this Act, or incident thereto, shall be paid and discharged out of the Funds of the said *Eastern Union* Railway Company, in preference to all other Payments whatsoever.

Public Act.

XVI. And be it enacted, That this Act shall be a Public Act, and shall be judicially taken notice of as such.

SCHE-

SCHEDULE.

Form of Conveyance of Railway.

THIS Indenture, made the Day of in the Year of our Lord between the Eastern Union and Hadleigh Junction Railway Company of the one Part, and the Eastern Union Railway Company of the other Part, witnesseth, That the Eastern Union and Hadleigh Junction Railway Company, in consideration of the Sum of to them paid by the Eastern Union Railway Company, the Receipt whereof is hereby acknowledged, and by virtue and in pursuance and under the Authority of "The Eastern Union and Hadleigh Junction Railway Sale Act, 1847," do hereby convey all that the Undertaking authorized by the Eastern Union and Hadleigh Junction Railway Act, 1846, and the Powers and Authorities conferred on them by the said Act with relation to such Undertaking, unto the Eastern Union Railway Company, absolutely and for ever, and subject to all existing Liabilities affecting the same, and subject also to the Provisions of the said Eastern Union and Hadleigh Junction Railway Sale Act, 1847; and the said Eastern Union Railway Company do hereby accept and take the same Undertaking, subject to the said Liabilities and Provisions. In witness whereof the said Companies have hereunto set their Common Seals, the Day and Year first above written.

LONDON: Printed by GEORGE E. EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty. 1847.

Appendix F: Table of Local Legislation to be disapplied under the dDCO

Appendix F: Table of Local Legislation to be disapplied under the draft Development Consent Order (DC1.6.114)

1.1 Introduction

1.1.1 In Written Question DC1.6.114(b), the Examining Authority requested a table be submitted, which sets out the following information in respect of the local legislation intended to be disapplied under Schedule 16 of the draft DCO (**Document 3.1(C)**):

- the provisions of both chapters;
- why each is being disapplied;
- how the equivalent protections are provided for in the draft DCO;
- if they are not provided for, provide justifications of the approach; and
- relevant provisions of the draft DCO.

1.1.2 This Appendix summarises the local legislation to be disapplied under Schedule 16 of the draft DCO, including a summary of the provisions and justification for disapplication (including equivalent provisions provided for within the draft DCO).

Table 30.1 – Table of Local Legislation

Title	Section	Corresponding provision	Summary of provision	Justification (including equivalent provisions provided for in the dDCO)
Eastern Union and Hadleigh Junction Railway Act 1846 (the "**1846 Act**")	All	A copy of the 1846 Act can be found at **Appendix E** (Local Legislation to be disapplied under the draft Development Consent Order).	The 1846 Act incorporates the Eastern Union and Hadleigh Junction Railway Company and establishes the Hadleigh Railway. The Hadleigh Railway was a 7-mile-long single-track branch line that connected Hadleigh to the main line railway network at Bentley junction.	The Hadleigh Railway is now disused. Since its closure in 1965, a 2-mile section between Hadleigh and Raydon has been used as a footpath and cycleway. This section of the former line crosses the draft Order Limits to the North East of Upper Layham.

Title	Section	Corresponding provision	Summary of provision	Justification (including equivalent provisions provided for in the dDCO)
			Clause XIX includes a power to *"maintain the Railway and Works in the Line…"*. It is unclear on the face of the 1846 Act the geographical and physical scope of the definition of *"Works"*, but absent information to the contrary it seems possible that works to the trackbed would be included.	Since it cannot be confirmed whether works to the trackbed would be included in the definition of *"Works",* there is a risk that Clause XIX could be relied upon in order to carry out future maintenance work to the footpath and cycleway (and the immediate surrounding area). Any such exercise of the powers could interfere with and adversely affect the works to construct and subsequently operate and maintain the project. The Applicant acknowledges that it appears unlikely that such powers will be exercised, but since this cannot be guaranteed, the Applicant considers that the risk of interference with the project justifies the disapplication of the 1846 Act. The Applicant notes that the disapplication sought pursuant to Article 56 is expressly only to the degree that the enactment is inconsistent with a provision or, or a power conferred, by the draft DCO. Given the unlikely use of such powers, no equivalent protections have been provided for within the draft DCO (**Document 3.1(C)**), save that there is provision in Article 56(4) for notification where any person takes issue with this and an obligation on the Applicant to respond.
Eastern Union and Hadleigh Junction Railway Sale Act 1847 (the "**1847 Act**")	All	A copy of the 1847 Act can be found at **Appendix E** (Local Legislation to be disapplied under the draft Development Consent Order).	The 1847 Act authorised the sale of the Eastern Union and Hadleigh Junction Railways Company to the Eastern Union Railway Company. All rights and powers under the 1846 Act transferred to the Eastern Union Railway Company pursuant to Clause IV.	Please refer to the Applicant's assessment in relation to the 1846 Act. The 1847 Act operated to transfer the rights and powers under the 1846 Act to the Eastern Union Railway Company.

Appendix G: Design Manual for Roads and Bridges Vol.11, Section 3, Part 8

VOLUME 11 SECTION 3 PART 8 PEDESTRIANS, CYCLISTS, EQUESTRIANS AND COMMUNITY EFFECTS

CONTENTS

1. INTRODUCTION

1.1 This part of the Advice Note gives guidance on assessing a scheme's impact on the journeys which people make in its locality. It considers journeys made by people as pedestrians (including ramblers), cyclists and equestrians. For ease of reference, the term `pedestrians and others' is used below to describe this group. However, impacts on local vehicle traffic should also be assessed where relevant using the same principles.

1.2 Where existing travel patterns within the locality would be broadly unaffected, the assessment will concentrate on any changes in journey length or amenity experienced by pedestrians and others (CHAPTERS 3 and 4).

1.3 Considerations of road safety contribute to the overall assessment of amenity. The design of facilities for Pedestrians, Cyclists and Equestrians are addressed in DMRB 2, 6 and 8. In some cases, a scheme may cause community severance - significant changes in journey lengths or travel patterns within a community. This may occur, for example, if a new road acts as a barrier which deters people from using certain facilities. If a new road diverts traffic and makes an existing road easier for people to cross, community severance may be reduced (CHAPTERS 5, 6 and 7).

2. JOURNEY LENGTH, LOCAL TRAVEL PATTERNS

2.1 As a first step in assessing how a scheme might affect the duration or distance of pedestrians' and others' journeys, existing local travel patterns should be established. The method described below may need to be adjusted depending on the complexity of existing travel patterns, the likely impact of the scheme and the assessment stage reached. The methodology should therefore be read in conjunction with CHAPTER 9, which gives advice on the level of assessment generally needed at each key stage.

Method for establishing existing local travel patterns of journeys on foot

2.2 Two alternative methods are described:

(A) for cases where travel patterns are likely to be reasonably straightforward.

(B) for cases where travel patterns are considered to be complex.

A. The steps to take are:-

Identify key community facilities and draw their catchment areas on a map. The following key facilities and their catchment areas should be covered by the assessment, where relevant:-

(a) Doctors' surgeries;

(b) Hospitals;

(c) Aged persons homes;

(d) Schools;

(e) Shops;

(f) Post Offices;

(g) Churches;

(h) Parks, play areas, sport centres etc.

2.3 In some cases it may be necessary to assess other important facilities (for example, libraries, railway/tube stations, bus services, riding schools). In determining the importance of these additional facilities, the following factors should be taken into account:-

- level of use;
- use by vulnerable groups, such as the aged, disabled people or children;
- availability of alternative facilities;
- importance in its own right (for example, a hospital may be visited infrequently, but the need to do so could be vital).

2.4 In estimating the number of users within a catchment area, it should be assumed that people will use the nearest available facility unless there is evidence to the contrary. Where applicable, this assumption can be tested by asking for information from owners and managers about the number and home location of their customers or users.

2.5 Origin/destination surveys should be considered in cases where pedestrians' and others' travel patterns are complex and a scheme could have a major impact.

B. In these cases the steps to take are:-

Take counts of user flow (ie, number of travellers, with their direction specified) to determine more precisely the number of people likely to be affected. Vulnerable groups - for example, the elderly, disabled people and children - should be separately identified where they constitute a disproportionate number of the users of a route or community facility. Care should be taken in choosing the days on which counts are made to ensure that samples are representative (for example, recreational routes should be assessed at weekends and routes to work during the week). Typical roads and streets which are likely to be heavily used by pedestrians and others which may need to be included in any count are those which are part of a bus route, or along which are found places of work, or schools or other community facilities. Counts should also be made for footpaths, bridleways and cycle routes where it is known (or believed) that they are frequently used. Advice on methods of counting pedestrians is at

ANNEX 1, and similar methods are applicable to cyclists and equestrians as well. If it is known that new developments in the locality are due to take place, then an estimate should be made of likely increases in flows of pedestrians and others.

3. PREDICTING CHANGES IN JOURNEY LENGTHS

3.1 The following method can be used for predicting changes in journey lengths and patterns. `Journey length' here is used to cover both the distance travelled and the time taken. It extends the method used for determining existing travel patterns of pedestrians and others.

3.2 In the absence of local data, the following assumptions should be made about average journey speeds: 5 km/hr for people on foot, 10 km/hr for equestrians and 20 km/hr for cyclists. For delays at road crossings, approximate correlations between mean pedestrian delays, traffic flows and the main types of crossing facility, are shown in Figure 1. This Figure can be used to assess changes in journey time caused either directly by a scheme, or indirectly by changes in traffic flows on existing roads. Cyclist delays at crossings will be the same as those experienced by motor vehicle traffic, except in the case of specific crossings associated with cycle tracks, etc.. By adding the figures for time spent moving and waiting for particular journeys, the total additional time for pedestrians' and others' journeys can be calculated.

3.3 Vulnerable groups - for example, the aged, disabled and children - should be separately identified where they constitute a disproportionate number of the users of a route or community facility. Where this is the case a reduced average journey speed of 3km/hr for people on foot should be used. This is because elderly people and disabled people are more easily dissuaded from making a journey due to longer travelling times than are other adults, yet they are likely to be more dependent on community contacts to maintain their quality of life. Children are also particularly vulnerable, as their parents may feel the need to prevent them using or crossing certain roads.

3.4 Although the physical severance due to roads is permanent, the perceived disbenefit from the new road diminishes with time as people move in or out of the area affected. Thus the disbenefits are most evident during construction and in the first few years of operation. In taking account of changes in pedestrians' and others' journey lengths due to traffic flow, therefore, opening year traffic figures should be used. In exceptional cases - for example, where the road will have a sharp increase in traffic a few years after opening but a very light flow initially - a different year should be selected (for example, the year with the greatest forecast increase in traffic).

3.5 When making predictions of changes in journey lengths the following steps should be taken:-

(i) draw on a map the important routes used by pedestrians and others and the catchment areas for each key facility;

(ii) draw a possible alternative route on the map, along with existing roads which are forecast to experience increases or reductions in traffic levels of more than 30%;

(iii) include on the map likely mitigation measures (principally points where pedestrians can cross the possible route);

For increased traffic flow

(iv) calculate increases in journey length for pedestrians and others using important routes. Also calculate typical journey length changes for people living in community facility catchment areas severed by the possible route, or by an existing road with traffic flows 30% or more higher;

(v) for each severed part of a catchment area, locate the nearest alternative facility. Estimate the change in journey length which people would experience in the following two scenarios: if they continued to use their present facility and if they changed their trip pattern to use the nearest alternative;

For reduced traffic flow

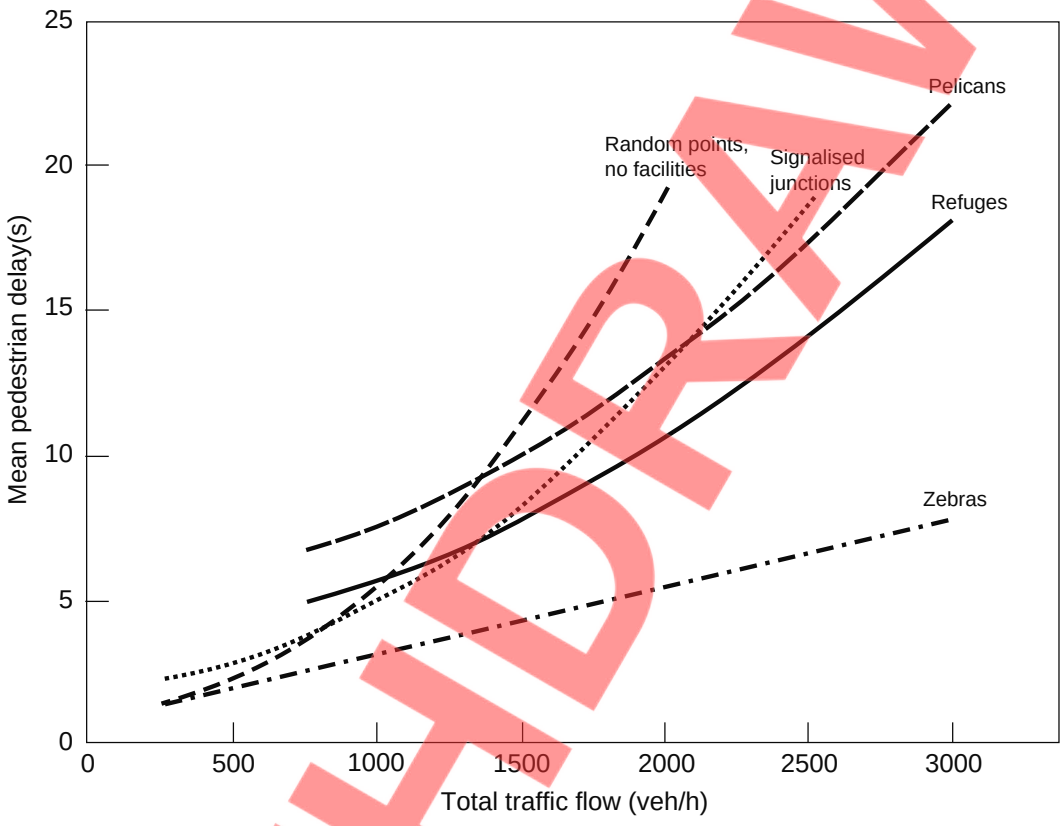
(vi) calculate reductions in journey length for pedestrians and others using important routes which would be relieved of more than 30% of their traffic. Also calculate typical journey length changes for parts of a community facility catchment area which would be relieved of more than 30% of their traffic;

(vii) for each part of a catchment area which would benefit from a route being relieved of more than 30% of its traffic, locate the nearest alternative facility.

Estimate the change in journey length which people would experience in the following two scenarios, firstly if they continued to use their present facility and secondly if they changed their trip pattern to use the nearest alternative;

(viii) repeat steps (iv) to (vii) for all routes used by pedestrians and others and for all parts of catchment areas which would be affected by a scheme.

3.6 Using this method a schedule should be produced showing changes in typical journey lengths and likely changes in travel patterns, with an estimate of the number of people affected in each case (where relevant, identifying those in vulnerable groups). This information can also be used as the starting point for assessing changes in amenity for pedestrians and others, and community severance.



Mean pedestrian delays associated with different road crossing situations

Source: TRRL SR 356

Figure 1

4. CHANGES IN AMENITY

4.1 The value of a route should not be considered solely in terms of the quantity and frequency of use. Amenity is defined as the relative pleasantness of a journey. It is therefore concerned with changes in the degree and duration of people's exposure to traffic - fear/safety, noise, dirt and air quality - and the impact of the road itself - primarily any visual intrusion associated with the scheme and its structures. Whilst the volume and composition of traffic are very important determinants of amenity, other factors should also be taken into account. For pedestrians, these factors include footpath width and distance from traffic, any barriers between pedestrians and vehicle traffic, and the quality of any street furniture and planting. For ramblers, changes in the quality of the landscape or townscape will also be relevant. For cyclists, they include positive factors, such as the clear signing of alternative routes for cyclists, and subways or cycle crossings, and negative factors, such as junctions where cyclists and vehicles are not separated. For equestrians, landscape quality will generally be an important factor, as may some of those affecting cyclists, depending on the existing and proposed provision for riders. Safety for equestrians crossing a proposed route is a particularly important consideration, given that horses can react unpredictably and may stop suddenly in such situations.

4.2 Therefore, in assessing amenity for the routes used by pedestrians and others, a descriptive approach should be employed which gives an overall indication of the change in amenity and the number of journeys affected, and also cites the reasoning behind the judgement. The description of amenity impacts should include a reference to forecast traffic flows. For the reasons stated in paragraph 3.4 opening year traffic figures should always be used. In exceptional cases - for example, where the road will have a sharp increase in traffic a few years after opening but a very light flow initially - a different year should be selected (for example, the year with the greatest forecast increase in traffic).

The following examples illustrate the way in which changes in amenity should be described:-

`Whitecroft Lydney High Street:

Published Scheme: Improvement in amenity for around 800 pedestrian and 40 cyclist journeys per day. AADT (1996, high growth) forecast to fall by 90%, to 2,000 (HGV flows by 95%, to 50).

Do Minimum: On existing A54 in village centre, there is a 1-2m footpath on one side of the road, adjacent to the carriageway and fronting houses and shops. The resulting amenity is very poor, and would deteriorate further without the scheme.'

`Cavendish Road:

Published Scheme: Some reduction in amenity for around 500 pedestrian and 10 cyclist journeys per day. AADT (1995, high growth) forecast to increase by 60%, to 5,000 (HGVs by 50%, to 350), as some traffic diverts to this road to join the A28 at Redhill roundabout. Although pavements are typically 2m wide, they are adjacent to the carriageway. An alternative route is available for the cyclists using this road as a through route.

Do Minimum: No change to existing good amenity.'

`Bridleway A7:

Published Scheme: Reduction in amenity for around 50 equestrian journeys and 100 journeys by ramblers each week. AADT (1996, high growth) 17,000 for proposed route where crosses bridleway. Proposed diversion is within 10m of carriageway; views would be significantly impaired by new road and equestrian crossing.

Do Minimum: Existing good amenity unchanged.'

5. COMMUNITY SEVERANCE

5.1 Changes in journey times and amenity for pedestrians and others may be such that they affect, adversely or beneficially, the degree to which a locality is subject to `community severance'. In such cases, the assessment should be extended in scope to consider such effects.

5.2 Community severance is defined here as the separation of residents from facilities and services they use within their community caused by new or improved roads or by changes in traffic flows. The correlation between the degree of severance and the physical barrier of the road and its traffic is not straightforward. However, previous studies have established that severance is seen as an important consequence of the presence of new trunk roads.

5.3 In addition to changes in community severance caused by changes in pedestrians' and others' ability to travel in the locality of a scheme, severance may sometimes be caused by the demolition of a community facility or the loss of land used by members of the public. It is important that the assessment takes account of such impacts.

5.4 Community severance effects are not evenly spread amongst the people in the area around the road. As noted in CHAPTER 2, aged people, the disabled and children are particularly vulnerable to disruption of their travel patterns. The assessment of journey times and travel patterns will already have identified vulnerable groups and the assessment of changes in community severance should pay particular attention to routes and facilities used by them.

6. NEW SEVERANCE

6.1 New severance should be described using a three point scale, viz, Slight, Moderate or Severe severance. These descriptions should be coupled with an estimate of the numbers of people affected, their location and the community facilities from which they are severed.

When using the guidelines for describing community severance given below, the following factors should be taken into account:-

(a) assessments should be conducted for the opening year. In exceptional cases - for example, where the road will have a sharp increase in traffic a few years after opening but a very light flow initially - a different year should be selected (for example, the year with the greatest forecast increase in traffic);

(b) the guidelines are applicable both to the direct effects of a scheme, and to effects caused by increases in traffic levels on existing roads. In all cases, it is important to take account of other important factors, such as:-

- the number of people whose journey will be affected;
- the presence of particularly vulnerable groups, such as children, the aged or the disabled;
- the fact that crossing at-grade will take longer during peak hours;
- the type of road involved;
- the provision of mitigation (see CHAPTER 8).

(c) the guidelines apply specifically to pedestrians; cyclists and equestrians are less susceptible to severance because they can travel more quickly than people on foot, although they may still be deterred from making journeys which require them to negotiate additional roads and especially junctions.

Slight: In general the current journey pattern is likely to be maintained, but there will probably be some hindrance to movement for example:

- pedestrian at-grade crossing of a new road carrying below 8,000 vehicles per day (AADT); or
- a new bridge will need to be climbed or a subway traversed; or
- journeys will be increased by up to 250 m.

Moderate: Some residents, particularly children and elderly people, are likely to be dissuaded from making trips. Other trips will be made longer or less attractive, for example:

- two or more of the hindrances set out under `Slight' applying to single trips; or
- pedestrian at-grade crossing of a new road carrying between 8,000-16,000 vehicles per day (AADT) in the opening year.
- journeys will be increased by 250-500 m; or

Severe: People are likely to be deterred from making trips to an extent sufficient to induce a re-organisation of their habits. This would lead to a change in the location of centres of activity or in some cases to a permanent loss to a particular community. Alternatively, considerable hindrance will be caused to people trying to make their existing journeys. Such effects can be brought about by, for example:

- pedestrian at-grade crossing of a new road carrying over 16,000 vehicles per day (AADT) in the opening year.
- an increase in length of journeys of over 500 m; or
- three or more of the hindrances set out under `slight' or two or more set out under `moderate'.

7. RELIEF FROM EXISTING SEVERANCE

7.1 Relief from existing severance can be described using the terms Slight, Moderate or Substantial. A guide to the extent of the relief can be gained by considering the reduction in traffic on the existing highway network in the opening or selected year. This needs to be seen in the context of the size of the community affected, the presence of vulnerable groups and the existing road standards. For example, a modest reduction in heavy goods vehicles through a small village with a tortuous main street and narrow pavements can be a substantial relief to the community. However a similar reduction on the edge of a conurbation, where there is little or no desire to cross the road, may be of little consequence. The guidelines therefore suggest different levels of traffic flow changes for the same extent of relief in rural and peripheral areas. Both a minimum traffic flow and a minimum reduction in traffic must be expected before any relief can be claimed as there is little evidence to show that low traffic flows on existing roads produce community severance.

7.2 Where traffic reductions would be sufficient to produce substantial relief of severance, it may be possible for the local authority to pedestrianise an area. If this seems likely to occur the local authority should be consulted and their views included in the environmental assessment.

7.3 Estimates of the numbers of people who may benefit from the relief of severance should be made, with special reference to those in vulnerable groups, and an indication given of the geographical location of the relief.

7.4 The following guidelines should be borne in mind when choosing the descriptions to be given to any appreciable relief of existing severance. Given that relief of severance is not significant where traffic flows are already relatively low, the guidelines do not apply to roads with an existing AADT flow of less than 8,000 vehicles. Where particularly vulnerable groups are relieved from severance, the description may need to be amended to reflect this change.

Table 1. Categorising Relief from Severance by Reductions in Existing Traffic Levels

	Level of Relief from Severance		
	Slight	Moderate	Substantial
Built up Area	c.30%	30-60%	60%+
Rural Area	60-75%[1]	75-90%[2]	90%+[3]

[1] Where the existing road is passing through a village or on the perimeter of a built up area use c.30%.

[2] Where the existing road substantially bisects a village or small town this figure may be halved.

[3] Where the existing road substantially bisects a village or small town this figure may be reduced to 60%.

8. POSSIBLE MITIGATION MEASURES

8.1 The assessment of pedestrian, cyclist, equestrian and community effects reported at each key stage should be based on the scheme with mitigation as agreed with the Overseeing Department's Project Manager.

8.2 Examples of possible mitigation techniques are described below:-

- facilities for pedestrians, such as at - grade crossings, underpasses, central reservations and footbridges;

- crossing facilities, such as footbridges, pedestrian underpasses, central reservations and crossing sites for equestrians;

- facilities for equestrians, such as crossing sites;

- barriers separating pedestrians from traffic, those may improve amenity but add to journey length and severance;

- facilities for cyclists, such as cycle lanes, or clear signing of alternative routes for cyclists.

8.3 DMRB 6.3 TA 57/87, `Roadside Features', gives advice on aspects of route design which affect pedestrians, cyclists and equestrians.

8.4 In taking such mitigation into account in scheme assessment, the degree to which vulnerable groups will benefit should be considered. For example, a pedestrian footbridge may substantially reduce journey times and prevent considerable community severance, but some aged people may be unable to use it.

8.5 Reducing the impact of a road on pedestrians and other travellers is just one of the factors to be considered in route choice and design, and conflicts can exist. For example, a footbridge may increase visual intrusion. In addition, any mitigation measure must perform to an acceptable level in traffic, road safety and economic terms.

9. STAGES IN THE ASSESSMENT OF IMPACTS ON PEDESTRIANS, OTHER TRAVELLERS AND COMMUNITIES

9.1 The following levels of detail will generally be appropriate at the key stages. However, where a scheme has no impact on pedestrians or other non-motor vehicle travellers - for example, a widening scheme on an existing motorway - or where the impact is insignificant, no assessment is required once this fact has been established.

9.2 In very exceptional cases, where time savings or delays to pedestrians and others are substantial or appreciably different between options, they should be evaluated using the appropriate current economic values of time and included with the other monetary benefits.

Stage 1

9.3 The objective at Stage 1 is to undertake sufficient assessment to provide an appreciation of the likely effects on pedestrians, cyclists and equestrians and for people's ability to move around their local community, and to identify the relevant constraints associated with particular broadly defined routes, or corridors, as developed by the Design Organisation and agreed with the Overseeing Department's Project Manager.

9.4 The steps to take are:-

(i) identify existing and proposed routes, rights of way and important community facilities used by pedestrians and others which may be affected by a possible route corridor. Particular attention should be paid to routes used by pedestrians and others for visiting important community facilities;

(ii) assess in broad terms whether pedestrians' and others' journeys would be lengthened or reduced by a possible route, whether the amenity value of such journeys would increase or diminish, and whether some people would be deterred from making journeys which they currently make. Also assess whether their exposure to risk is likely to be made worse. At this stage it is not necessary to calculate increased journey times.

9.5 The result of the assessment at this Stage to be described in the Stage 1 report should consist of a statement illustrated by a map showing possible route corridors and routes and important community facilities used by pedestrians and others.

Stage 2

9.6 The objective at this Stage is to undertake sufficient assessment to identify the routes used by pedestrians and others, the community facilities and the effects upon these two categories to be taken into account by the Design Organisation in developing and refining route options, in agreement with the Overseeing Department's Project Manager.

9.7 The steps to take at this stage are described below. When carrying out investigations into usage and journey patterns, it is important to bear in mind that consideration of possible route options at this stage should not lead to unnecessary anxiety amongst local people, and even the blighting of properties. Members of the public should therefore not be asked for information on usage of community facilities, nor should origin/destination surveys be undertaken.

(i) assess existing usage of community facilities and routes used by pedestrians and others; the changes to journey times associated with possible route options; and whether their safety and amenity is likely to be prejudiced Counts of pedestrians and others should be undertaken where this is necessary to achieve the objective of this stage in the assessment. Vulnerable groups should be taken into account either by including them as separate categories in pedestrian counts, or by estimating likely usage of different routes from the proximity of community facilities, such as primary schools or old people's homes;

(ii) assess any changes in the safety and amenity value of routes used by pedestrians and others which might be affected by a possible route options;

(iii) where journey lengths would be increased, or where journey amenity would

be reduced, assess likely changes in community severance;

(iv) where cyclists will be significantly affected, obtain the views of the local highway authority officer responsible for cycling provision on the implications of different routes. The views of the Overseeing Department's Regional Cycling Officer should then be obtained through the Overseeing Department's Project Manager.

9.8 The results of the assessment at Stage 2, to be described in the Stage 2 report should consist of:-

(a) a map showing community facilities and their estimated catchment areas, the main routes used by pedestrians and others, the existing road network and the possible route options (with any mitigation measures which have been assumed clearly indicated). In some cases, it may be necessary to present the information on separate maps for each possible route option, or to annotate the maps;

(b) a report on the routes, including estimates of the number of pedestrians and others experiencing changed journey times, the extent of any change after allowing for agreed mitigation, the impact on pedestrians' and others' safety and amenity of the possible route options, and any changes in community severance. Particular attention should be paid to impacts on vulnerable groups.

Stage 3

Much of the assessment of the preferred route will already have been conducted prior to Stage 2. At this stage, therefore, the steps to take are:-

(i) refine the information on facilities and their catchment areas by asking for information from owners and managers of community facilities about the number and home area of their customers or users. In cases where pedestrians' and others' travel patterns are complex and a scheme could have a major impact, origin/destination surveys should be considered. Where relevant, it is important to estimate separately the numbers of people in vulnerable groups who will be particularly affected. This will usually be done either by including these groups as separate categories if pedestrian counts are made (see ANNEX 1), or by obtaining estimates of the number of users or residents of vulnerable facilities (for example, a primary school, community centre or old people's home);

(ii) verify the earlier assessment of changes in journey length and amenity and community severance, allowing for any subsequent modifications (for example, to traffic forecasts, or the route alignment or mitigation on which the earlier assessment was based);

(iii) where cyclists will be significantly affected, obtain the views of the Cycle Touring Club (CTC), and local cycling groups and the local highway authority officer responsible for cycling provision on the implications of the preferred route. The views of the Overseeing Department's Regional Cycling Officer should then be obtained through the Overseeing Department's Project Manager;

9.10 The result of the assessment at Stage 3, to be described in the Environmental Statement should comprise a report assessing the number and location of pedestrians and others and their community facilities affected by the preferred route, taking proposed agreed mitigation into account. The report should also describe any benefits to pedestrians and others from the reductions in traffic along the existing route network. A map should be included which shows the community facilities, their catchment areas and routes used by pedestrians and others which are affected by the scheme.

10. FURTHER READING

10.1 The Appraisal of Community Severance
Hutton B, Clark J, Barnett N, Hathway T and Harrison T
TRL CR135 (1991)

10.2 The Measurement and Prediction of Pedestrian Numbers May Hopkinson and Turvey (1991) TRL CR 149

10.3 Community Effects of Traffic Congestion : A review of the London Assessment Study Data Travers Morgan TRL CR 314

COUNTING PEDESTRIANS

1. Counts of pedestrian flows should be arranged so that the results are as representative as possible of typical flows. They should generally take place over two days, preferably spread out over a number of months, to avoid variations caused by the weather or local factors. Spring or autumn are likely to be the most appropriate times of year. In residential areas, counts taken on a weekday during school term time are likely to be most typical. In shopping areas, counts conducted on a Wednesday (if not early closing day) and a Saturday may be most representative. In holiday or recreational areas, counts during the summer months will probably be required. All pedestrian journeys between 8am and 6pm should be counted and their direction indicated (in exceptional circumstances, longer hours may be needed to reflect local factors).

2. Where necessary, pedestrian counts should identify separately the numbers of people in vulnerable groups who will be particularly affected (such as young children, the elderly and the disabled).

3. There are two main types of street survey which can be used to measure pedestrian flow:-

(a) Spot Counts. These should be undertaken by an observer who makes a manual count of pedestrians walking past in one direction (or both directions for quiet routes). This method should be used in simple situations and may also be necessary if pedestrians need to be classified into groups (for example, under 12s, adults, and people over 65).

(b) Video Monitoring. This method requires a video camera to scan and record pedestrian movements. The maximum range for counting pedestrians clearly using this technique is about 100m. In most cases, a video camera mounted at a first floor vantage point with a good view of both sides of the street will suffice. Indoor vantage points are generally more secure, but may involve difficulties of access for changing video cassettes. Providing that sufficiently robust equipment and secure locations can be obtained, an outside filming location may be preferable. In more complex situations - for example, at a busy intersection of three or more routes - a camera which is mounted on a van and can rotate through 360 degrees may be used. If the design organisation wishes to conduct video monitoring, permission should be sought from the overseeing Department's project manager. Where it is intended to use a rotating camera, specialist advice should be sought on the equipment required.

4. Existing predictive models of the number of pedestrians walking along and crossing a street are poor predictors and should not be used.

5. Further details of pedestrian count techniques can be found in TRL Contractor Report 149 (May, Hopkinson and Turvey, 1991).

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