



# Applicant's Comments on Responses to the Examining Authority's Further Written Questions

Applicant: Norfolk Boreas Limited Document Reference: ExA.FWQR.D6.V1 Deadline 6

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Photo: Ormonde Offshore Wind Farm





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# **Glossary of Acronyms**

AEOI	Adverse Effect on Integrity	
ALO	Agricultural Liaison Officer	
ASI	Accompanied Site Inspection	
BAT		
	Best Available Technique  Broadland District Council	
BDC	Broadland District Council  Business Environment and Industrial Strategy	
BEIS	Business, Environment and Industrial Strategy	
BoR	Book of Reference	
CAOS	Compulsory Acquisition Objections Schedule	
CGR	Counterfactual Growth Rate	
CfD	Contracts for Difference	
CIA	Cumulative Impact Assessment	
CSIMP	Cable Specification, Installation and Monitoring Plan	
Cm	Centimetres	
СоСР	Code of Construction Practice	
CPC	Cawston Parish Council	
CPS	Counterfactual Population Size	
CRM	Collision Risk Modelling	
DAS	Design and Access Statement	
DCO	Development Consent Order	
dDCO	Draft Development Consent Order	
DML	Deemed Marine Licence	
EA	Environment Agency	
EHO	Environmental Health Officer	
EIA	Environmental Impact Assessment	
EIFCA	Eastern Inshore Fisheries Conservation Authority	
EPS	European Protected Species	
ES	Environmental Statement	
ExA	Examining Authority	
FCS	Favourable Conservation Status	
FID	Financial Investment Decision	
FLCP	Fisheries Liaison and Co-existence Plan	
FWQ	Further Written Question	
GB	Great Britain	
GLVIA	Guidelines for Landscape and Visual Impact Assessment	
GP3	Groundwater Protection Principles and Practice	
HDD	Horizontal Directional Drilling	
HGV	Heavy Goods Vehicle	
HHW	Haisborough Hammond and Winterton	
HIS	Highways Intervention Scheme	
HoT	Heads of Terms	
HRA		
	Habitats Regulations Assessment  High Voltage Alternating Current	
HVAC	High Voltage Alternating Current	
HVDC	High Voltage Direct Current	
IDB	Internal Drainage Board	
IAQM	Institute of Air Quality Management	





IPMP	In Principle Manitoring Plan		
	In Principle Monitoring Plan		
JNCC	Issue Specific Hearing  Joint Nature Conservation Committee		
km	Kilowetres		
kV	Kilovolts Lowest Astronomical Tide		
LAT	Lowest Astronomical Tide		
LBBG	Lesser Black-backed Gulls		
LHA	Local Highways Agency		
LIG	Land Interest Group		
LLFA	Local Lead Flood Authority		
LMS	Landscape Management Scheme		
LPA	Local Planning Authority		
LSE	Likely Significant Effect		
LVIA	Landscape and Visual Impact Assessment		
M	Metres		
MCA	Maritime and Coastguard Agency		
MHWS	Mean High Water Springs		
MMMP	Marine Mammal Mitigation Protocol		
MMO	Marine Management Organisation		
MoU	Memorandum of Understanding		
MPH	Miles Per Hour		
MW	Megawatt		
NCC	Norfolk County Council		
NE	Natural England		
NERC	Natural Environment and Rural Communities		
NFFO	National Federation of Fishermen's Organisations		
NFU	National Farmers Union		
NNDC	North Norfolk District Council		
NMU	Non motorised user		
NRA	Navigational Risk Assessment		
NSAG	Necton Substation Action Group		
NPS	National Policy Statement		
NSIP	Nationally Significant Infrastructure Project		
NSR	Noise Sensitive Receptor		
OASIS	Online Access to the Index of Archaeological Investigations		
OCoCP	Outline Code of Construction Practice		
ОСР	Onshore Connection Point		
OFH	Open Floor Hearing		
OFTO	Offshore Transmission Owner		
OLEMS	Outline Landscape and Ecological Management Strategy		
OPC	Outlon Parish Council		
ORJIP	Offshore Renewables Joint Industry Programme		
ORM	Offshore Ring Main		
OS	Ordinance Survey		
OTMP	Outline Traffic Management Plan		
ОТР	Outline Travel Plan		
OWF	Offshore Wind Farm		





OVVCI	Outline Weither Colours of Investigation		
OWSI	Outline Written Scheme of Investigation		
PC	Parish Council		
PEIR	Preliminary Environmental Information Report		
PPA	Planning Performance Agreement  Public Rights of Way		
PRoW	Public Rights of Way		
PSR	Primary Surveillance Radar		
PTS	Permanent Threshold Shift		
PVA	Population Viability Analysis		
RAF	Royal Air Force		
RR	Relevant Representation		
RPA	Relevant Planning Authorities		
RSA	Road Safety Audit		
RSADL	Road Safety Audit Decision Log		
RSPB	Royal Society for The Protection of Birds		
RYA	Royal Yachting Association		
SAC	Special Area of Conservation		
SAR	Search and Rescue		
SCI	Site of Community Importance		
SIP	Site Integrity Plan		
SNCB	Statutory Nature Conservation Body		
SNH	Scottish National Heritage		
SoCG	Statement of Common Ground		
SoR	Statement of Reasons		
SoS	Secretary of State		
SoV	Service Operation Vehicles		
SPA	Special Protection Area		
SPZ	Source Protection Zone		
SSSI	Site of Special Scientific Interest		
SuDS	Sustainable Urban Drainage System		
SZ	Safety Zone		
TCE	The Crown Estate		
TH	Trinity House		
TMP	Traffic Management Plan		
TWT	The Wildlife Trusts		
UK	United Kingdom		
UKHO	UK Hydrographic Office		
UXO	Unexploded Ordnance		
VHF	VHF		
VWPL	Vattenfall Wind Power Limited		
WCS	Worst Case Scenario		
WDC			
WHO	Whale and Dolphin Conservation		
	World Health Organisation		
WQ	Written Question		
WSI	Written Scheme of Investigation		
ZTV	Zone of Theoretical Visibility		





# **Glossary of Terminology**

Array cables	Cables which link wind turbine to wind turbine, and wind turbine to offshore electrical platforms.	
Cable logistics area	Existing hardstanding area to allow the storage of cable drums and associated materials and to accommodate a site office, welfare facilities and associated temporary infrastructure to support the cable pulling works.	
Cable pulling	Installation of cables within pre-installed ducts from jointing pits located along the onshore cable route.	
Ducts	A duct is a length of underground piping, which is used to house electrical and communications cables.	
Evidence Plan Process	A voluntary consultation process with specialist stakeholders to agree the approach to the EIA and information to support the HRA.	
Interconnector cables	Offshore cables which link offshore electrical platforms within the Norfolk Boreas site.	
Jointing pit	Underground structures constructed at regular intervals along the onshore cable route to join sections of cable and facilitate installation of the cables into the buried ducts.	
Landfall	Where the offshore cables come ashore at Happisburgh South.	
Landfall compound	Compound at landfall within which HDD drilling would take place.	
Landfall compound zone	Area within which the landfall compounds would be located.	
Link boxes	Underground chambers or above ground cabinets next to the cable trench housing low voltage electrical earthing links.	
Mobilisation area  Areas approx. 100 x 100m used as access points to the running installation. Required to store equipment and provide welfare Located adjacent to the onshore cable route, accessible from I network suitable for the delivery of heavy and oversized mater and equipment.		
Mobilisation zone	Area within which a mobilisation area would be located.	
National Grid new / replacement overhead line tower	New overhead line towers to be installed at the National Grid substation.	
National Grid overhead line modifications	The works to be undertaken to complete the necessary modification to the existing 400kV overhead lines.	
National Grid overhead line temporary works	Area within which the work will be undertaken to complete the necessary modification to the existing 400kV overhead lines.	
National Grid substation extension	The permanent footprint of the National Grid substation extension.	
National Grid temporary works area	Land adjacent to the Necton National Grid substation which would be temporarily required during construction of the National Grid substation extension.	
Necton National Grid substation	The grid connection location for Norfolk Boreas and Norfolk Vanguard.	
Norfolk Boreas site	The Norfolk Boreas wind farm boundary. Located offshore, this will contain al the wind farm array.	
Norfolk Vanguard	Norfolk Vanguard offshore wind farm, sister project of Norfolk Boreas.	
Offshore service platform	A platform to house workers offshore and/or provide helicopter refuelling facilities. An accommodation vessel may be used as an alternative for housing workers.	
Offshore cable corridor	The corridor of seabed from the Norfolk Boreas site to the landfall site within	





Offshore electrical platform	A fixed structure located within the Norfolk Boreas site, containing electrical equipment to aggregate the power from the wind turbines and convert it into a suitable form for export to shore.		
Offshore export cables	The cables which transmit power from the offshore electrical platform to the landfall.		
Offshore project area	The area including the Norfolk Boreas site, project interconnector search area and offshore cable corridor.		
Onshore cable route	The up to 35m working width within a 45m wide corridor which will contain the buried export cables as well as the temporary running track, topsoil storage and excavated material during construction.		
Onshore 400kV cable route	Buried high-voltage cables linking the onshore project substation to the Necton National Grid substation.		
Onshore cables	The cables which take power and communications from landfall to the onshore project substation.		
Onshore infrastructure	The combined name for all onshore infrastructure associated with the project from landfall to grid connection.		
Onshore project area	The area of the onshore infrastructure (landfall, onshore cable route, accesses, trenchless crossing zones and mobilisation areas; onshore project substation and extension to the Necton National Grid substation and overhead line modifications).		
Onshore project substation	A compound containing electrical equipment to enable connection to the National Grid. The substation will convert the exported power from HVDC to HVAC, to 400kV (grid voltage). This also contains equipment to help maintain stable grid voltage.		
Onshore project substation temporary construction compound	Land adjacent to the onshore project substation which would be temporarily required during construction of the onshore project substation.		
Overhead Line	An existing 400kV power line suspended by towers.		
Pre sweeping	The practice of dredging the seabed to prepare it for foundation or cable installation. It is either used to provide a level surface on which to place foundations or to allow cables to be installed at a sufficient depth to minimise the chance of them becoming exposed.		
Project interconnector cable	Offshore cables which would link either turbines or an offshore electrical platform in the Norfolk Boreas site with an offshore electrical platform in one of the Norfolk Vanguard sites.		
Project interconnector search area	The area within which the project interconnector cables would be installed.		
Running track	The track along the onshore cable route which the construction traffic would use to access workfronts.		
Safety zones	An area around a vessel which should be avoided during offshore construction.		
Scour protection	Protective materials to avoid sediment being eroded away from the base of the foundations as a result of the flow of water.		
The Applicant	Norfolk Boreas Limited		
The Norfolk Vanguard OWF sites	Term used exclusively to refer to the two distinct offshore wind farm areas, Norfolk Vanguard East and Norfolk Vanguard West (also termed NV East and NV West) which will contain the Norfolk Vanguard arrays.		
The project	Norfolk Boreas Wind Farm including the onshore and offshore infrastructure.		
Transition pit	Underground structures that house the joints between the offshore export cables and the onshore cables		
Trenchless crossing compound	Pairs of compounds at each trenchless crossing zone to allow boring to take place from either side of the crossing.		





Trenchless crossing zone	Areas within the onshore cable route which will house trenchless crossing entry and exit points.
Workfront	A length of onshore cable route within which duct installation works will occur, approximately 150m.





# The Applicant's Responses to ExA's First Written Questions with regard to the Norfolk Boreas application

- 1. Following the issue of Further Written Questions by the Examining Authority (ExA) outlined in the Rule 8 Letter of 20 November 2019 to Norfolk Boreas Limited (the Applicant) and other Interested Parties, the Applicant subsequently responded to each of their relevant questions.
- 2. The Applicant's responses were detailed in numerical order in sections 1 to 16 of Norfolk Boreas's Deadline 5 submission Responses to the Examining Authority's Further Written questions [REP5-045].
- 3. This document provides the Applicant's comments on interested parties' responses to the ExA's written questions published at Deadline 5. All of the responses provided at Deadline 5 have been reviewed by the Applicant, and where a response is required it has been included within this document.





# 1 Archaeology and Heritage Assets

#### 1.0 Offshore and intertidal archaeology

PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question				
Number				
2.1.0.1	The Applicant	Clarification note on Archaeological Interests and Survey at the landfall site: Clarify how target drill depths and exit point for the 'long HDD' described in Section 3 para 9 of [REP4-021] is secured.	Requirement 17 of Schedule 1 ensures that works at the Landfall (4A, 4B and 4C) could not commence until a method statement is approved in writing by North Norfolk District Council in consultation with the relevant statutory nature conservation body.	
			17 (b) states that the method statement must include:	
			"Measures for long horizontal directional drilling below the coastal shore platform and cliff base at the landfall as well as measures for ongoing inspection of Work No. 4C and reporting of results to North Norfolk District Council during the operation of the authorised project."	
			Therefore, the use of a long Horizontal Directional Drilling (HDD) is secured through Requirement 17 (b). The onus would be on the Applicant to satisfy North Norfolk District Council that the final HDD design, as reported within the Method Statement, included suitable mitigation to avoid impacts to archaeological interests.	
			The Applicant considers that it is not appropriate to include specific dimensions such as the target depths and exit point locations within the Development Consent Order (DCO) as these would only be confirmed following further site investigation work and completion of the final detailed design. It could prove counter productive to secure the target depth and exit location within the DCO as this might restrict the ability to microsite around sensitive features (archaeological or otherwise) should these be identified within the pre-construction, or pre-commencement surveys.	
2.1.0.2	Historic England	Clarification note on Archaeological Interests and Survey at the landfall site:  Comment by Deadline 5 on the clarification note [REP4-021] provided by the Applicant at Deadline 4 with particular reference to archaeological investigation to inform selection of the subtidal zone drill exit locations.	We have reviewed the clarification note (as referenced above) and it is our advice that sufficient detail is provided about the archaeological investigations to be conducted at the proposed sub-tidal Horizontal Directional Drilling (HDD) exit location. We also acknowledge the attention given in section 4 (post-consent surveys) to a survey specific Archaeological Written Scheme of Investigation (WSI) to be produced in accordance with the Outline WSIs, both onshore and offshore. In reference to the possible sub-tidal HDD exit location for the electricity export cable(s), it is important to consider the archaeological interpretation of geophysical and geotechnical survey data acquired to date and whether or not any anomalies or features of possible archaeological interest are identifiable approximately 1km offshore. It is apparent from the clarification note that seabed anomalies could be located within the possible impact zone associated with HDD. It will therefore be the responsibility of the Applicant to determine whether or not any anomalies encountered are of archaeological interest or in any other way hazardous to the required drilling operation. We therefore acknowledge the attention given in paragraph 17 to micro-siting operations or, if unavoidable, to instigate further investigation strategies in accordance with any agreed WSI.	geophysical and geotechnical survey data acquired to date as well as a requirement to consider whether or not any anomalies or features of possible archaeological interest are identifiable within approximately 1km
2.1.0.3	Historic England	Archaeological analysis programmes: Is the completion of archaeological analysis programmes and provision of public access to data now adequately secured as	We acknowledge that the Applicant has produced a revised Outline archaeological WSI (Offshore) (Ref: Version 2, dated February 2020; PINs document Ref 8.6). We confirm that the Outline offshore WSI contains sufficient direction so that completion of analysis programmes (to	The Applicant notes this agreement and therefore does not propose any further updates to the outline WSI (offshore).





PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number				
		mitigation by the outline offshore Written Scheme of Investigation (WSI)?	established professional standards) should take place and for data and information generated to be placed within public archives, in reference to the conditions stipulated within the draft DCO.	
2.1.0.4	Marine Management Organisation	Clarification note on relationship of archaeology and reef features: Comment by Deadline 5 on the clarification note [REP4-022] provided by the Applicant at Deadline 4 'Optimising Cable Routing through the HHW SAC'.	The MMO welcomes the document as clarity to how the cable route takes into account both HHW SAC features and Archaeology features. The Document is well presented and provides a lot of detail.  However, the MMO still has concerns that micrositing may not be possible at the time of construction and would like this to be dealt with at consenting stage rather than post consent.  The MMO note that NE have queried how the MMO would make a decision between the potential impacts to Annex 1 reef and Archaeological interest features.  It would be the MMO's duty to protect as far as possible both these features and we would not envisage a scenario where one element is prioritised over another. This again highlights the difficulties the MMO would experience if confidence cannot be reach at this stage regarding micrositing.  The MMO defer to NE on matters of HRA and Adverse Effect on Integrity. The MMO defers to Historic England on the Archaeology features.  The MMO is in discussion with the Applicant and NE about the use of the HHW SAC SIP and the related condition (Schedule 11 & 12 9(1)(m)). The MMO has concerns that if the SoS makes a decision on AEoI as part of the Conservation of Habitats and Species Regulations 2010 on the HWW SAC then the condition is not fit for purpose as it does not take into account the Derogation process. Alongside this the Applicant has removed all sections relating to the HHW SAC from the Outline certified plans (such as the Outline Cable and Scour Protection Plan) and included this in the HHW SAC SIP document. The MMO is concerned that if the SoS were to make a decision (either no adverse effect or derogation route), condition 9(1)(m) could be removed from the DMLs and with this the HHW SAC SIP and all included information could be lost at the consenting stage as this information is only included in the SIP document.  The MMO is aware the Applicant will be proposing an alternative condition and document in relation to Norfolk Vanguard for this scenario. The MMO will work with the Applicant on	The Applicant notes the MMO's concerns however the Applicant is confident that micrositing is possible now and that there is unlikely to be any discernible difference in extent or location of the different constraints when final cable routing is undertaken (see section 2.1.1 of the Applicant's Haisborough Hammond and Winterton Special Area of Conservation Position Paper [REP5-057].  The Norfolk Boreas offshore cable corridor is not overly constrained and is no more constrained than export cable corridors for other offshore wind farms which have routed their cables to avoid sensitive features. The Norfolk Boreas offshore cable corridor is also as wide or wider than export cable corridors for many other offshore wind farms for example East Anglia THREE, Dogger Bank Cryeke Beck and Neart Na Gaoithe, and has been purposely designed to be wider (up to 4.7km) in the areas of higher constraint.  With regards to the MMO's concerns that commitments made in the Outline HHW SAC SIP would be lost if the related condition is removed, the Applicant has proposed at deadline 6 an alternative condition (ExA.AS-2.D6.V1 Alternative to the Grampian condition for the HHW SAC) which would secure a Cable Specification, Installation and Monitoring Plan that would contain all of the elements of the HHW SIP, but would not defer the conclusion of AEoI to post consent. Therefore the Applicant considers that this addresses the concern of the MMO
2.1.0.4	Natural England	Clarification note on relationship of archaeology and reef features: Comment by Deadline 5 on the clarification note [REP4-022] provided by the Applicant at Deadline 4 'Optimising Cable Routing through the HHW SAC'.	Natural England have provided a detailed response to 'Optimising Cable Routing through the HHW SAC' at Deadline 5	The Applicant's response to this document is provided in the Applicant's comments on Deadline 5 Submissions [ExA.ASR.D5.V1] also submitted at Deadline 6.
2.1.0.4	Historic England	Clarification note on relationship of archaeology and reef features: Comment by Deadline 5 on the clarification note [REP4-022] provided by the Applicant at Deadline 4 'Optimising Cable Routing through the HHW SAC'.	We have reviewed the above referenced document and we note the confidence expressed by the Applicant in section 3.1 (Micrositing in constrained areas) that there should be sufficient space to accommodate the seabed clearance and placement of the electricity export cables associated with the proposed Norfolk Vanguard and Norfolk Boreas projects. We noted the statement made in paragraph 19 regarding "preconstruction geophysical and drop down video surveys as outlined in the In Principle Monitoring Plan". We hereby acknowledge that the Applicant has produced a revised 'In Principle Monitoring Plan' (Ref: Version 3, dated February 2020; PINs document Ref 8.12), but we consider it important that reference should be to the revised Outline WSI (Offshore), as referenced above, and the commitment to produce a post-consent survey specific	The updated IPMP contains reference to the "Outline WSI (offshore) (Document reference 8.6, which would now be the revised version submitted at Deadline 5)". The Updated version of the Outline WSI (offshore), which is a certified document, commits the Applicant to produce a post-consent survey specific WSI along with the detail of how and when this would be produced. Therefore no further reference is required in the IPMP.





PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number				
			WSI. In particular, for the adoption of survey strategies as necessary to determine whether or not presently identified anomalies are of archaeological interest, but also to reveal the presence of presently unknown anomalies of possible interest, especially in locations of dynamic seabed conditions. In this regard, section 4.1 (Archaeology and the WSI) should have emphasised production of a post-consent surveys specific WSI.	
2.1.0.5	The Applicant	Compatibility of timescales in the IPMP and WSI:  Has the Applicant accepted the HBMCE request [REP2-072 para 14.3] that any revision of the IPMP makes clear within Table 4.6 (and Appendix 1) that the WSI is to be submitted for approval at least four months prior to the commencement of any survey works?	included within version 3 of the document which has been submitted at	Updates to section 4.10.1 and Table 4.6 of the In Principle Monitoring Plan (IPMP) have been discussed and agreed with Historic England. These are included within version 3 of the document which has been submitted at Deadline 5.

#### 1.1 Onshore archaeology

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question				
Number				
			No Questions	

# 1.2 Onshore heritage assets

PINS Question Number	Respondent:	Question:	Interested Parties Response	Applicant's Comments:
2.1.2.1	The Applicant	Cawston Conservation Area The Cawston Conservation Area Heritage Assessment for Norfolk Vanguard [REP2-, Appendix 1] refers to existing vegetation to be cut back within the highway boundary and verge clearance, citing a specific important tree. It also states that this will be captured in the final TMP. Reference to vegetation management does not appear in the Outline TMP in connection with Link 34. This should be added, if relevant, for Norfolk Boreas Scenario 2.	The information regarding the 'significant tree' within the Conservation Area and the need for any proposed lopping of branches to be discussed and agreed with Broadland District Council has been included in the updated Outline Traffic Management Plan (OTMP), submitted at Deadline 5.	
2.1.2.2	The Applicant	Cawston Conservation Area and Listed buildings Provide an update on any outstanding issues in relation to listed buildings and the Cawston Conservation Area following review of the revised Highway intervention scheme.	Broadland District Council had raised concerns with regards to the proposed widening of the footway outside No 6 The Street, Cawston which is the Grade II Listed Whitehouse Farm, increasing the risk of the property being hit by passing vehicles. This widening has been removed as part of the revised Highway Intervention Scheme and as such alleviates Broadland District Council's previous concern on this issue.  At the meeting held on the 12 <sup>th</sup> February Broadland District Council stated that they are still concerned about potential vibration effects on listed buildings from increased traffic flows.	
2.1.2.3	The Applicant	Bylaugh Park  1. Further to the response to Q1.2.6, the Outline Written Scheme of Investigation (OWSI) (Onshore) [APP-696, Appendix 4] should be updated with this and with any other additional heritage assets that become apparent.  2. At which Deadline is it proposed to submit the updated document?	The Outline Written Scheme of Investigation (OWSI) (Onshore) has been updated to include the additional heritage asset and has been submitted at Deadline 5 [Document reference 8.5, Version 2].	





# 2 Biodiversity, Biological Environment and Ecology

#### 2.0 Offshore benthic and marine mammals

PINS Question	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Number				
2.2.0.1	The Applicant	Post-consent engagement:  Update on discussions referred to in [REP3-029] and [REP4-011] relating to the development of a MoU for post-consent engagement.	The Wildlife Trusts (TWT) and Vattenfall Wind Power Ltd (VWPL) (including the Applicant as well as all other Vattenfall UK offshore wind developments) met on the 26 <sup>th</sup> November 2019 to discuss an initial draft of the Memorandum of Understanding (MoU) between the parties. TWT provided comments on the draft MoU to Vattenfall on the 28th November 2019. Vattenfall have since addressed these comments and the current drafting is now with TWT for further comment.  A further meeting was held with The Wildlife Trusts on the 25 <sup>th</sup> of February where the MoU was progressed further, and it is anticipated that this will be agreed and signed within the next few weeks  Section 3 'Scope of this MoU' is the most relevant to the question, dealing with Project Specific Engagement as follows: 3.1. Project Specific Engagement  1.1.1 VWPL recognises that TWT have an interest in the protection and conservation of marine mammals and benthic ecology and that they are an informed stakeholder that can contribute to discussions regarding mitigating impacts (during marine construction and maintenance works).  1.1.2 Specific areas of engagement between the Parties in relation to individual Projects will extend to the:  a) Marine Mammal Mitigation Protocol (MMMP)  b) Offshore Site Integrity Plan (SIP) (as appropriate)  c) In Principle Monitoring Plan (IPMP) (in relation to marine mammals and benthic ecology).	
2.2.0.1	The Wildlife Trusts	Post-consent engagement: Update on discussions referred to in [REP3-029] and [REP4-011] relating to the development of a MoU for post-consent engagement.	TWT is working positively with the applicant on the development of a MoU which covers post-consent engagement. We have agreed that the MoU will also be referred to in the Southern North Sea Site Integrity Plan. We aim to have the MoU signed off before the end of examination and would be happy to update you in due course. Securing mitigation for UXO clearance TWT would also like to raise the following with the Examination Panel: As outlined in TWT's Written Representation: "TWT holds the position that to ensure site integrity for the Southern North Sea SAC and Favourable Conservation Status (FCS) of European Protected Species (EPS), UXO clearance should be secured within the draft DCO alongside any mitigation required. East Anglia One North and East Anglia Two have secured a mitigation for UXO clearance within the draft DCO1. This has now set a precedent and best practice must be followed." We have agreed with the applicant that this issue will be discussed at a strategic level with Vattenfall, as it is recognised that this is an issue for not only Norfolk Boreas, but for all offshore wind farms developers seeking Development Consent Orders (DCO).  TWT continues to hold the position that UXO clearance and mitigation must be secured in the DCO. We would like to raise with the Planning Inspectorate that TWT have highlighted this issue for other offshore wind	The Applicant welcomes the progress made with regard to the MoU and looks forward to completing this in due course.  As identified by TWT the issue of securing mitigation for UXO clearance is an industry wide issue which should be discussed with Vattenfall and other developers at a strategic level. Currently the Applicant's position regarding this point remains as per the response provided to TWT within the Applicant's comments on Written Representations and Additional Submissions (REP3-007).  In summary the Applicant maintains the most appropriate approach is that a separate Marine Licence application will be completed preconstruction following the UXO surveys and once the nature and extent of UXO clearance is known. A Marine Mammal Mitigation Protocol for the UXO clearance works will be submitted with the Marine Licence application.  The Applicant does not consider that a precedent has been set by East Anglia One North and TWO and notes that this approach has not been agreed as appropriate by either the MMO as regulator nor by Natural England as advisor. As neither project is yet in 'live' examination this is a





PINS Question	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Number			farm DCO applications2, and we have seen no discussion at examination or progress at a strategic level. In order to ensure no adverse effect from UXO clearance in-combination with other activities on the Southern North Sea SAC, this issue must be resolved. We appreciate the regulation of this activity is complex, and we would like to work with regulators, SNCBs and developers to find a pragmatic solution.	developing discussion and it is not clear whether, or indeed if at all, this approach will be agreed as appropriate by either Natural England or the MMO in the near future. In any event, it is a matter for individual applicants to determine the consents to be included within and out with the DCO process, and this will depend on a number of project and site specific matters.  For example, East Anglia One North and Two have a much greater understanding of the extent of UXO clearance that may be required due to the fact that East Anglia ONE, which is located in their vicinity, has already undertaken UXO clearance in this area. This is not the position for Norfolk Boreas.
2.2.0.2	The Applicant	Environmental Statement and Worst-case scenarios:  The Applicant [REP4-011] states that the MMO has now agreed that updating the Environmental Statement (ES) may not be appropriate and that the MMO will provide suggestions on how documentation can be structured/referenced to help them as regulator. There is a relationship between the assessment in the ES (which would become a certified document) and the Conditions in the DMLs which would allow a variation/amendment to approved plans, protocols or statements so long as they are unlikely to give rise to any materially new or different effects from those assessed. Given that a number of parameters have changed/may change since the ES was submitted (eg cable protection and potentially turbine draught heights), the Applicant to explain why the current drafting of the DMLs is acceptable.	The Applicant accepts that a number of parameters have changed and that further parameters could change prior to the end of examination. However, every change has been captured either as an update to the DCO or within the certified documents. All changes have been made to reduce the magnitude of impacts and no changes have given rise to any new or different effects from those assessed within the Environmental Statement (ES). For example, following a reduction in the amount of cable protection from 10% to 5% within the Haisborough Hammond and Winterton (HHW) Special Area of Conservation (SAC) which was made for the 4th November 2019 Deadline, changes were made to Requirement 5(2) and (4) of Schedule 1 and Condition 2 of schedules 10 and 11 of the DCO which was submitted at the November 4th Deadline [AS-020]. The following documents were then also updated due to this change and submitted at Deadline 1.  • 6.7 the Environmental Impact Assessment (EIA) and DCO reconciliation document [REP1-017]  • 8.16 Outline Scour Protection and Cable Protection Plan [REP1-032]; and  • 8.20 Outline Norfolk Boreas HHW SAC Site Integrity Plan (SIP) [REP1-034].  This was discussed further with the Marine Management Organisation (MMO) and Natural England (NE) on the 17th February 2020 where the Applicant proposed that document 3.3 of the application, 'Note on Requirements and Conditions in the Development Consent Order' [REP4-005] could also be updated at the end of the examination to direct the regulator to the most up to date versions of each document. Please see the Applicants response to Written Question 2.5.5.1 below for further detail. Both the MMO and Natural England were in agreement that an update to the note on requirements would be helpful and that it should make clear that the DCO and certified documents override previous parameters if different from those presented in the Environmental Statement.	
2.2.0.2	Management Organisation	Environmental Statement and Worst-case scenarios:  The Applicant [REP4-011] states that the MMO has now agreed that updating the Environmental Statement (ES) may not be appropriate and that the MMO will provide suggestions on how documentation can be structured/referenced to help them as regulator. There is a relationship between the assessment in the ES (which would become a certified document) and the Conditions in the DMLs which would allow a variation/amendment to approved plans, protocols or statements so long as they are unlikely to give	The MMO's initial positon was that the ES should be updated to take into account any changes through the examination period. However, after further discussion and the Applicant's comments below the MMO is open to an alternative option (REP4-009): "ES is a record of what is assessed, not what is permitted and therefore does not require any updates." "relevant parameters consented are set out in the DCO/DML itself, and that is what should be relied upon post consent	The Applicant notes the MMO's position on this matter and has provided further comments in relation to Q2.5.1.1 and Q2.5.1.9 below.





PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number				
		rise to any materially new or different effects from those assessed. Given that a number of parameters have changed/may change since the ES was submitted (eg cable protection and potentially turbine draught heights), the Applicant to explain why the current drafting of the DMLs is acceptable.	The MMO agrees with the Applicant that the DCO/DML is the consent for the project and this will develop further from the ES, the MMO requires this to be made clear within the DCO/DML.  The MMO requires all the finalised and updated figures to be updated within the DCO/DML at consenting stage to highlight the need for a variation if any of these are amended.  Further comments have been provided in Q2.5.1.1 and Q2.5.1.9.	
2.2.0.2	Natural England	Environmental Statement and Worst-case scenarios:  The Applicant [REP4-011] states that the MMO has now agreed that updating the Environmental Statement (ES) may not be appropriate and that the MMO will provide suggestions on how documentation can be structured/referenced to help them as regulator. There is a relationship between the assessment in the ES (which would become a certified document) and the Conditions in the DMLs which would allow a variation/amendment to approved plans, protocols or statements so long as they are unlikely to give rise to any materially new or different effects from those assessed. Given that a number of parameters have changed/may change since the ES was submitted (eg cable protection and potentially turbine draught heights), the Applicant to explain why the current drafting of the DMLs is acceptable.	Natural England is aware that the applicant and MMO have discussed inclusion of a Plan of Plans as a certified document to contain all the final approved parameters. This approach may be an appropriate resolution to this issue, pending sight of updated DCO and the document. However, Natural England would also like to note that, while this approach may be acceptable, our preferred approach would be to update the ES at the end of examination to ensure the final ES reflects the parameters permitted.  The ES is currently a snap shot of the EIA at the beginning of examination and does not reflect the full EIA at the end of the examination process and therefore is no longer representative of the revised/agreed Worst Case Scenario (WCS). Due to the time lapse between consent and construction it is often the case that the project teams within each organization/company will change. And therefore at the time of construction there has been a tendency to defer back to the ES and not the examination technical documents. We would therefore welcome a mechanism that secures the revised assessments/technical documents/WCS as those in which a decision will have /has been made.	The Applicant agrees that the ES is a snapshot of the EIA at the start of Examination and the Applicant considers that this is appropriate as the ES is subsequently examined during the examination period. The Applicant acknowledges that the project design envelope has been reduced in some areas, at the request of Natural England and other stakeholders, and that further mitigation measures have also been included. However, although these may reduce the magnitude of some of the impacts within the ES they would not change the conclusions of significance and therefore do not require revised assessments. Furthermore, as stated previously all updates have been captured in the control documents and the draft DCO, all of which are being kept updated throughout the examination period.
2.2.0.3	The Applicant	Posts construction monitoring: Applicant/MMO to provide update of discussions on post-construction monitoring to assess long-term changes in benthic assemblages [REP2-051, REP3-017].	This has been discussed by the Applicant and the MMO at a number of meetings, most recently on the 17 <sup>th</sup> February where the Applicant proposed to include the following text within section 4.3 (Benthic Ecology) of the IPMP, which the Applicant understands has resolved the matter:  "If, at the time of completion of the final detailed plan, there is good, evidence based, justification for increasing the scope of the benthic surveys to include other benthic monitoring techniques then this will be agreed with the MMO and included within the final plans."  This proposed text has been included within Version 3 of the IPMP which has been submitted for Deadline 5.	
2.2.0.3	Marine Management Organisation	Posts construction monitoring: Applicant/MMO to provide update of discussions on post- construction monitoring to assess long-term changes in benthic assemblages [REP2-051, REP3-017].	The MMO has been in discussion with the Applicant and the MMO's technical advisors to find agreement on this point.  The Applicant has proposed amendments to the In Principle Monitoring Plan to allow for the discussion of increasing the scope of benthic monitoring to be discussed upon submission of the document.  The MMO is currently consulting with the MMO's technical advisors and will provide confirmation at Deadline 6.	The latest position is that this matter has been agreed, as presented in the final row of Table 4 of the Statement of Common Ground between the Applicant and the MMO.
2.2.0.3	Natural England	Posts construction monitoring: Applicant/MMO to provide update of discussions on post-construction monitoring to assess long-term changes in benthic assemblages [REP2-051, REP3-017].	Natural England is unclear if this question relates to securing post construction benthic monitoring on the face of the DCO/DML or the requirements of such a survey. If it is the latter, then we advise that NE should be party to any discussions.	As stated in the agreed Statement of Common Ground between the Applicant and Natural England [AS-028] "It is agreed by both parties that the In Principle Monitoring Plan (document 8.12), provides an appropriate framework to agree monitoring with the MMO in consultation with Natural England.





PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Number				The principles set out in the IPMP reflect that monitoring of all Annex 1 features will be required to demonstrate that the designated features within the SAC are not significantly impacted by the construction of the project and that the project has not inhibited recovery of the SAC toward favourable condition."
				Therefore, the Applicant considers that the monitoring requirements for Benthic ecology have been agreed by Natural England. Further to discussions with the MMO the Applicant also understands that these matters have now been agreed with the MMO (see line above).
2.2.0.4	The Applicant	Benthic habitats:  MMO and the Applicant to update on discussions relating to the potential for drill arisings to alter benthic habitat, marked as not agreed in the SoCG [REP2-051]	The issue of drill arisings altering the benthic environment has now been agreed between the Applicant and the MMO and this will be reflected within the Statement of Common Ground (SoCG) to be submitted at Deadline 6. The Applicant confirmed in its comments on Relevant Representations [AS-024] that the geophysical and geotechnical data does not indicate that any chalk is present and also that should drilling be required, which is unlikely and if does occur will only be in a few discrete locations, the volume of material brought to the seabed would be small relative to the volume of material naturally transported through the site and would therefore not result in a change to the benthic habitat. The MMO have accepted this position.	
2.2.0.4	Marine Management Organisation	Benthic habitats:  MMO and the Applicant to update on discussions relating to the potential for drill arisings to alter benthic habitat, marked as not agreed in the SoCG [REP2-051]	The MMO's technical advisors agree that there is no potential for drill arisings to alter the benthic habitat in light of the Applicant's response in Table 5 of AS-024. This will be reflected in the updated SoCG the Applicant will submit at Deadline 6.	The Applicant has no further comment.
2.2.0.4	Natural England	Benthic habitats:  MMO and the Applicant to update on discussions relating to the potential for drill arisings to alter benthic habitat, marked as not agreed in the SoCG [REP2-051]	Please see response to Q2.2.03 above.	The Applicant has no further comment.
2.2.0.5	The Applicant	Marine Mammal Monitoring:  NE, MMO and Applicant to provide an update regarding drafting of a condition for marine mammal monitoring	The Applicant's position is that given the low contribution of the project to marine mammal impacts any marine mammal monitoring should be undertaken at a strategic level. The wording provided within the IPMP allows for the participation of Norfolk Boreas in any strategic monitoring as required at the time of agreement of the final plans and therefore it is not necessary to include a specific condition within the DCO to commit the Applicant to marine mammal monitoring specifically. Furthermore, it is not appropriate to include a condition requiring a strategic approach to monitoring if equivalent conditions are not included within DCOs for other wind farm developments within the vicinity of Norfolk Boreas, which can contribute to that strategic approach. The Applicant is not aware of any other DCOs including such a condition. Therefore, if the Applicant were to include such a condition it could put the project in the position of having to undertake strategic monitoring without the participation of other projects. Notwithstanding this position the Applicant has discussed this with the MMO and Natural England (17th February 2020) and have agreed to consider proposed wording for a potential condition which will be provided by Natural England (in consultation with the MMO) for Deadline 6.	
2.2.0.5	Marine Management Organisation	Marine Mammal Monitoring:  NE, MMO and Applicant to provide an update regarding drafting of a condition for marine mammal monitoring	The MMO, NE and the Applicant had a joint meeting on 17 February 2020 to discuss this point further. NE has requested a marine mammal monitoring condition.	The Applicant will review the proposed condition once it has been submitted at Deadline 6.





PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number				
			The current action is on NE to provide an example condition. The MMO will continue discussions with NE and the Applicant on the addition of a condition.  A further update will be provided at Deadline 6.	
2.2.0.5	Natural England	Marine Mammal Monitoring:  NE, MMO and Applicant to provide an update regarding drafting of a condition for marine mammal monitoring	Natural England and the applicant have discussed the need for a monitoring condition. Currently the action is with Natural England to provide an example condition which we will do prior to Deadline 6. Further discussion on the need and wording of this condition is expected following production of the wording and examples of other projects with similar conditions.	The Applicant will review the proposed condition once it has been submitted at Deadline 6.
2.2.0.6	Natural England	Annex 1 habitats:  Natural England has made substantial comments about the effects to Annex I habitats within the Haisborough, Hammond and Winterton SAC throughout the Examination.  Natural England to confirm whether it agrees with the Applicant's assessment of effects on Annex I reef located outside of the SAC and whether any proposed mitigation measures are appropriate?	Natural England's advice on Sabellaria spinulosa reef outside of designated sites is as follows.  Sabellaria spinulosa reef is listed as a 'Habitat of Principal Importance' within the England Biodiversity List, published under the requirements of S41 of the Natural Environment and Rural Communities (NERC) Act 2006. Section 40 of the NERC Act 2006 places a general duty on all public authorities (which includes OWF developers who have a statutory instrument i.e. DCO/DML) to conserve and enhance biodiversity. Therefore we regularly advise both the MMO and developers during pre-construction discussions that impacts to Annex I reef should be avoided.  As with Sabellaria spinulosa reef within designated sites, without further evidence we cannot agree with the Applicant's certainty that reef will recover and therefore in relation to the potential impacts and the Applicant's assessment our concerns are the same i.e. 'reef' is 'reef' inside and outside of sites and there is no evidence to demonstrate that it would behave differently. The only difference is the legislation protecting it.	There is a significant difference between a general duty to have regard, so far as is consistent with the proper exercise of functions, to the purpose of conserving biodiversity (under the requirements of S40 of the Natural Environment and Rural Communities (NERC) Act 2006) and the protection of a designated feature in a Natura 2000 site under specific regulations transposed from the Habitats Directive. Reef which is not protected by HRA outside of Natura 2000 sites does not have the same level of protection as that within Natura 2000 sites.  Notwithstanding the level of protection afforded, the Applicant has had regard to the purpose of conserving biodiversity in that it has committed to the same level of micrositing outside of the SAC as within it. The Applicant is confident that, using the best available data, it would be possible to avoid current known areas where Annex 1 <i>S.spinulosa</i> reef is present (or has been in the past) and do not anticipate a significant increase in the extent of <i>S.spinulosa</i> reef prior to construction. This is especially so given there are no proposed management measures within the remainder of the offshore project area designed to enable recovery of reef. Therefore, the Applicant is confident in its conclusion that impacts would be of only minor adverse significance.  The focus during the examination has rightly been on the HHW SAC as that has been designated based on the presence (or highest confidence of presence now or in the past) of Annex I reef.
2.2.0.7	The Applicant	Sandeel: Applicant/MMO to provide an update regarding discussions around cumulative effects and monitoring of sandeel [REP2-051].	This has been discussed between the Applicant and the MMO at a number of meetings, most recently on the 17 <sup>th</sup> February where the Applicant proposed to include the following text within section 4.4 (Fish and Shellfish Ecology) of the IPMP which the Applicant believes should resolve the matter:  "As explained in section 4.3.2, if at the time of completion of the final detailed plan there is good, evidence based, justification for increasing the scope of the benthic surveys this will be agreed with the MMO and included within the final plans. If a scope increase for the benthic surveys included sediment sampling within the wind farm site, the data from that survey could be used to better understand any changes in habitat suitability for sandeels. This would be agreed with the MMO though the final plan."  This proposed text has been included within Version 3 of the IPMP which has been submitted for Deadline 5.	





PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.2.0.7	Marine Management Organisation	Sandeel: Applicant/MMO to provide an update regarding discussions around cumulative effects and monitoring of sandeel [REP2-051].	The MMO agrees with the conclusions in the ES that impacts to sandeel resulting from disturbance to habitat and temporary and permanent loss of habitat will be of minor adverse significance. The concern relates to the cumulative impact of minor adverse impacts to sandeel occurring across multiple wind farm sites in the southern North Sea, which is not currently being monitored.  The Applicant has proposed amendments to the In Principle Monitoring Plan to allow for the discussion of increasing the scope of benthic monitoring to be discussed upon submission of the document. The MMO is currently consulting with the its technical advisors and will provide confirmation at Deadline 6.	

# 2.1 Onshore ecology

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.2.1.1	Natural England	SSSI Consent:  NE [REP3-022] advise that the Applicant may need to include SSSI consent under The Wildlife and Countryside Act 1981 as amended. The Applicant [REP4-009] proposes inclusion of 'In the event that operations are required within a SSSI in response to an environmental incident, Natural England must be consulted and SSSI consent sought immediately as required' in the OCoCP. Is Natural England content that this satisfies its concern?	Natural England advises that the text is amended to the following 'In the event that operations are required within a SSSI (outside of the DCO boundary) in response to an environmental incident, Natural England must be consulted and SSSI assent sought immediately as required' in the OCoCP.  If an environmental incident occurs while undertaking agreed activities as part of the cable installation as agreed in the DCO/DML then NE is not the regulator as the activities are part of an existing plan or project. In this case the LPA and/or the MMO as the regulator must consult with NE immediately and seek our advice. But a separate assent is not required.	Noted. The OCoCP [REP5-010] Section 13 will be updated to include '(outside of the DCO boundary)' as advised by Natural England.
2.2.1.2	The Applicant	Norfolk Haker dragonfly: Applicant to clarify how the process described in response to Q2.2.4 [REP2—021] to mitigate any interaction with habitats is secured. Should this be secured in the OCoCP or OLEMS?	The process described in the Applicant's response to Q2.2.4 [REP2-021] with respect to mitigation for the Norfolk hawker dragonfly will only be required in the event that a trenched method was used to cross the River Bure. This is not permitted under the dDCO, which requires a trenchless technique to be used for this crossing (dDCO Requirement 16 (13) (d)) Accordingly, the process is not required and is not captured within the Outline Landscape and Ecological Management Strategy (OLEMS) or Code of Construction Practice (CoCP). The process provided in REP2-021 in response to Q2.2.4 was provided for information only, to indicate to the ExA the likely approach which would be adhered to if a trenched crossing was proposed.	

# 2.2 Onshore ornithology

PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question				
Number				
2.2.2.1	The Applicant	Population Viability Analysis:	The Applicant has discussed the planned updates to the Population	
		Can the Applicant either re-run the EIA scale PVA for gannet,	Viability Analysis (PVA) with Natural England. It has been confirmed by	
		kittiwake, Lesser Black Backed Gull and Greater Black Backed Gull	Natural England that these will be delayed until the end of February at the	
		for the Biologically Defined Minimum Population Scale and	earliest (these were originally due mid-January 2020).	
		biogeographic population scales using the updated NE		





PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number				
		commissioned Seabird PVA tool [REP4-040] or provide justification as to why this isn't necessary.	Natural England has also confirmed that their internal testing of the updated PVA has found the results (compared to the original version as used by the Applicant and reported in REP2-035) are not materially different and therefore the existing counterfactual estimates are robust and appropriate for assessment and Natural England will refer to these when reaching conclusions (so long as the models have been run using parameters as advised by Natural England).  Therefore, the Applicant proposes to attempt to re-run models where Natural England has indicated insufficient simulations were conducted (i.e. fewer than 1,000). However, it may be that the Applicant encounters the same issues as previously (i.e. the model failed to run with larger number of simulations), in which case this will be discussed with NE and a note submitted. The species and populations for which model re-runs for more simulations were requested were: kittiwake at the North Sea scale (CIA) and guillemot at the Flamborough and Filey Coast SPA scale.	
2.2.2.1	Natural England	Population Viability Analysis: Can the Applicant either re-run the EIA scale PVA for gannet, kittiwake, Lesser Black Backed Gull and Greater Black Backed Gull for the Biologically Defined Minimum Population Scale and biogeographic population scales using the updated NE commissioned Seabird PVA tool [REP4-040] or provide justification as to why this isn't necessary.	We note that the updates to the tool under phase 2 were expected by mid-January 2020; however there have been delays to this. At the time of writing Natural England is not in a position to share an updated link to the tool with the Applicant, although this is anticipated to be available in the near future.  However, Natural England can confirm that the testing that has been undertaken on the tool as part of phase 2 have largely concluded that the tool is running as expected and that the outputs are biologically plausible, although some bugs in the Shiny tool have been updated.  Natural England notes that during discussions with the Applicant since the ISH on 22nd January 2020, the Applicant indicated that their position is that time to update the PVA has now run out, but that they will give consideration to whether this can be done within the very tight timeframes following an update from NE on the tool (which was sent to the Applicant on 20.02.2020).  If it is not possible in the timeframes for Norfolk Boreas to run updated models once the updated version of the tool can be shared, then we are not aware that the updates will make a significant difference to the counterfactual metric outputs of models run using the previous/currently available version of the tool. This conclusion is on the basis that the testing undertaken has not thrown up any significant issues with the tool,. Therefore, we will use the counterfactual of population size (CPS) and counterfactual of growth rate (CGR) metric outputs from models run by the Applicant using the previous version of the tool as presented in the Deadline 2 updated assessments [REP2-035], provided these are set-up and parameterised in the way we have advised (i.e. sufficient simulations etc.) in our Deadline 4 response [REP4-040].	The Applicant has attempted to re-run the PVA models and the same errors have been encountered i.e. the model runs successfully for smaller numbers of simulations (e.g. 500) but fails for higher numbers (e.g. 1,000). The Applicant has contacted Natural England to discuss this matter and will provide updates when these are available.  The Applicant welcomes Natural England's agreement that the PVA outputs as presented in REP2-035 will not be materially affected by the updates to the PVA tool and that therefore conclusions can be based on the outputs in REP2-035.



# VATTENFALL 🛑

# **3 Compulsory Acquisition**

#### 3.0 Compulsory Acquisition

PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number				
2.3.0.1	The Applicant	Funding Statement: The Funding Statement [APP-025] provides the funding position and consolidated accounts of Vattenfall Wind Power Ltd for the year ended December 2017 at Annex 1. Provide a copy of the most recent accounts and an update on the funding position.	A copy of the most recent accounts of Vattenfall Wind Power Ltd for the year ended 31 December 2018 are provided at ExA.FWQR.D5.V1  The consolidated accounts for Vattenfall Wind Power Ltd for the year ending December 2018 show total fixed assets of £267,472,000.	
2.3.0.2	The Applicant	Funding Statement: The Funding Statement [APP-025] provides the consolidated accounts for the Vattenfall AB for the year ending December 2018 at Annex 2. Provide a copy of the most recent accounts and an update on how funding for the proposed development would take place.	The 2019 annual report of Vattenfall AB has not yet been published so the most recent published accounts for Vattenfall AB are those provided at Annex 2 of the Funding Statement [APP-025].  Given the substantial assets of Vattenfall Wind Power Ltd and Vattenfall AB in the most recent available published accounts, and their experience of financing renewable energy projects as set out in the Funding Statement [APP-025], the Applicant remains confident that it will have the ability to procure the required funding for the proposed development.	
2.3.0.3	The Applicant	Funding Statement: Why are no consolidated accounts for the Applicant provided?	The last published accounts for the Applicant are provided at ExA.FWQR.D5.V1. These state a total fixed assets of £2,673,000. As the Applicant does not have any subsidiary companies, it does not have any consolidated accounts.	
2.3.0.4	The Applicant	Funding Statement: The Funding Statement [APP-025] states that the Applicant (Norfolk Boreas Limited), the Company (Vattenfall Wind Power Limited) and the Parent Company (Vattenfall AB) have agreed that the Parent Company would shortly enter into an Agreement with the Applicant, which would be in substantially the same form as attached at Annex 3. Provide an update on the current position indicating when it is anticipated that it will be signed.	The Applicant is in the process of obtaining signatures on the Funding Agreement and will submit the completed version to the Examination	
2.3.0.5	The Applicant	Funding Statement:  The Funding Statement [APP-025] states that the Applicant has been advised that the total property cost estimates for the acquisition of the required interests in land should not exceed £1,700,000 in the event of scenario 1, and £6,800,000 in the event of scenario 2. Provide a breakdown of how the funding would be allocated in each scenario including whether this would be for purchase of land or only purchase of the freehold of land over which permanent rights are being sought; incentive payments; disturbance; injurious affections and related professional fees.	follows:	





PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number				
- Namber			- Purchase of permanent easement rights for duct installation and pull-through of Norfolk Boreas Cables, including crop loss and associated agents' and legal fees - £4,260,000.	
			The cost estimate for both scenarios includes a contingency % applied to the final figures.	
			These cost estimates are calculated on the basis of utilising compulsory acquisition powers; therefore there have not been any allowances made for incentive payments as these are only applicable to the approach adopted with seeking to enter into voluntary agreements.	
2.3.0.6	The Applicant	Funding Statement: What is the estimated cost of constructing the proposed development as separate from the funding of the acquisition of the interests in land described in the Book of Reference? How have these figures been derived?	The cost of the provision of combined goods and services to deliver an operational 1.8GW High Voltage Direct Current (HVDC) export infrastructure comprising two onshore HVDC/ High Voltage Alternating Current (HVAC) convertors; all necessary onshore and offshore HVDC transmission cables; two offshore platforms each for an HVDC/AC convertor; and all necessary metering and switch gear is estimated to be approximately £1 billion.	
			The cost of the provision of combined goods and services to deliver an operational 1.8GW wind farm comprising wind turbine generators; foundations and platforms; and interconnecting HVAC array cable is estimated to be approximately £3 billion.	
			The above estimates are outline indicative costs based on the Applicant's parent company's (Vattenfall Wind Power Ltd) extensive experience of constructing offshore wind farms in UK and European waters and on early commercially confidential negotiations for the delivery of the proposed authorised project.	
			In addition to the two principle capital costs set out above there will also be costs associated with setting up the operations and maintenance facilities, undertaking preconstruction surveys and project management costs. These are estimated to be approximately £500 million.	
			Overall therefore the estimated cost of constructing the proposed development is £4.5 billion.	
2.3.0.7	The Applicant	Funding Statement:  Provide further information relating to how the estimated costs of Compulsory Acquisition have been established for scenario 1 and scenario 2.	The estimated figures for compulsory acquisition have been calculated by the Applicant using market comparable evidence according to the various grading of land subject to compulsory acquisition powers (Grade 1, Grade	
		Scendi IO 2.	2, Grade 3). In addition, allowances have been made within the calculation for items such as replacement of fences, loss of subsidies as a result of the temporary possession of the land and surveyor and solicitor	
			fees. Under both scenarios, figure estimates for permanent acquisition have taken into account all associated costs (surveyor and solicitor fees) and losses (loss payments and injurious affections). The figures also	
			include a material and prudent level of contingency.	
			Under scenario 1 it is assumed that all of the ducts and the Norfolk  Vanguard cable pulling work has been completed by Norfolk Vanguard as authorised under that draft Development Consent Order; therefore only	





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			the costs of pulling the Norfolk Boreas cables along the cable corridor are	
			included in this estimate. Also under scenario 1 the mobilisation areas	
			identified along the cable route are not required since these are only	
			needed for duct installation. Therefore these have not been included in	
			the cost estimate under scenario 1.	
			Under Scenario 2, temporary occupation of mobilisation areas and the	
			working width of the easement corridor has been assessed on the basis of	
			existing use rental values and it has been assumed that crop loss would be	
			paid on the entry year for the established crop in place along with a loss	
			for each year that the land is occupied during construction.	
			Crop loss has been assessed along the route for the easement corridor on	
			the basis of a majority of cereals crops, and a minority of vegetable and	
			pasture land. Values have been calculated on a high crop sale value and	
			high output for these estimates. Crop loss has also been allowed for any	
			areas of severed fields during construction which would not be	
			economical to farm. Therefore a robust worst case position has been	
			adopted in calculating the estimate.	
			Under scenario 2, the estimate allows for compensation for the retained	
			presence of link boxes on completion of the project. These have been	
			applied at two rates: a lower rate for field boundaries and a higher one	
			for in the field. It is noted that the 'in field' higher rate is expected to be	
			required less frequently because it is the Applicant's intention to site link	
			boxes within field boundaries where ever reasonably possible. Rates have	
			been set at those agreed with the National Farmers Union (NFU) through	
			the negotiation of the voluntary Option Agreement terms.	
			Professional fees (for both surveyors and solicitors) have been based on a	
			flat rate per land interest and these have been set at a percentage level of	
			claim value.	
			The Applicant would prefer to keep specific values that have been applied	
			confidential at this stage given the commercially sensitive nature of the	
2200	TI A II .		figures due to ongoing negotiations.	
2.3.0.8	The Applicant	Funding Statement: Why are the total property costs estimated for scenario 1 and	As explained and detailed in the response to question 2.3.0.7 above, the Applicant has assessed each element of the likely compensation estimate	
		scenario 2 considered to be sufficient to meet the aggregate of	on a worst case scenario and utilised market evidenced comparable high	
		liabilities for compensation?	end values and costs for matters such as land market value and crop prices.	
			The Applicant has also added a % contingency to the figures to ensure the	
			total figures are robust. The costs are therefore considered to be sufficient.	
			However the Applicant remains confident that it will acquire the majority	
			of the land and rights required to deliver the project by agreement.	
2.3.0.9	The Applicant	Statement of Reasons: Crown Land	The Crown Land included in the Order comprises Plots 01/01, 01/02, 01/03,	
		Provide an update on the current position relating to obtaining written consent from the appropriate Crown authority for onshore	01/17 and 01/19 (the <b>Crown Plots</b> ). This is foreshore land owned by The Crown Estate ( <b>TCE</b> ) Commissioners. All interests held by TCE have been	
		land.	excluded from the Book of Reference ( <b>BoR</b> ) (document reference 4.3).	
			(201) (400411011010101010101010101010101010101	





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			There are no known third party interests scheduled in the Crown Plots, but the Applicant is in discussions with TCE to ensure that any unknown third party interests can be dealt with compulsorily if the need arises.	
			The Applicant has been engaged with TCE to negotiate a letter of consent for the inclusion of the Crown Plots in the dDCO. The Applicant is confident that this will be secured by the end of the examination.	
2.3.0.10	The Applicant	Statement of Reasons: Crown Land Provide written evidence of consent from the appropriate Crown authority for offshore land.	An Agreement for Lease was entered into on 9 February 2017 with the TCE and, as the Applicant outlines in response to 2.3.0.9 above, the Applicant is engaging with TCE to secure consent for the inclusion of the Crown Plots in the dDCO.	
2.3.0.11	The Applicant	Statement of Reasons: Crown Land Provide an explanation of how the project could proceed if Crown land were to be removed from the Order in the event of written consent not being forthcoming from the Crown Estate before the end of the Examination.	The interests held by TCE have been excluded from acquisition in the BoR (document reference 4.3) and there are no known third party interests or unknown interests scheduled in the Crown Plots. The consent being sought by the Applicant would provide certainty that if any unknown third party interests do arise, such interests can be subject to the acquisition of permanent new rights to ensure that there are no impediments to the authorised project proceeding. If written consent is not secured from TCE before the end of the Examination, the Applicant will continue to work with TCE to allow the imposition of the permanent new rights against TCE's interest in any case.	
2.3.0.12	The Applicant	Statement of Reasons: Highways England Provide an update on the current position relating to obtaining appropriate licences and property agreements.	It is anticipated that once the detailed design for the authorised project is complete, Highways England will need to review and approve those detailed designs and method statements prior to the start of construction. This will then allow them to issue any necessary licences. Regarding the property agreements, it is anticipated that these can only be progressed once detailed design and methodology has been approved by Highways England. The Applicant is in discussions with Highways England to confirm this approach.	
2.3.0.13	The Applicant	Statement of Reasons: Update Update the Statement of Reasons to include: missing reference at para 2.10; and an update to the plots currently identified in the Book of Reference as 'unknown'.	The missing reference at paragraph 2.10 of the Statement of Reasons [APP-025] should be to paragraph 2.9, and the Statement of Reasons has been updated accordingly.  The following plots are identified as 'unknown' in the Book of Reference: 01/11, 01/15, 02/03, 08/19, 15/03, 15/04, 22/10, 22/13, 23/13, 30/09, 30/11, 31/06, 35/08, 35/09, 40/31, 40/31a  The Applicant has undertaken diligent enquiries into ownership (e.g. through title investigations, Request for Information forms, site visits, discussions with local agents, posting of unknown owner notices, desktop research and land registry updates, but has been unsuccessful in tracing the remaining unknown owners. The Applicant is continuing to update the Book of Reference [APP- 026] as the examination progresses and if any persons are able to provide evidence of ownership of an unknown interest, the Applicant would update the Book of Reference accordingly.	
2.3.0.14	The Applicant	Statement of Reasons: Compulsory acquisition and temporary possession  Para 7.8.2 refers to the acquisition of permanent new rights and that this would only occur after temporary possession has first been taken of the surface and subsoil of the relevant Order Lands and construction of that part of the authorised Project is complete. Please indicate (and provide a schedule of such plots) the plots in respect of which both compulsory acquisition and temporary possession powers are sought. This can occur, for instance, where	The powers sought over the majority of the plots within the Order Lands are for both temporary possession and permanent rights (shaded Green and Yellow on the Onshore Land Plans (AS-006 to AS-011). Temporary possession is sought over these plots to allow construction activities on the land where cables are to be installed prior to any permanent rights to retain, operate and maintain those cables being acquired compulsorily. This allows the Applicant to complete the cable installation works, including any micro-siting of apparatus within the land, before	





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Number		an applicant can make a case for compulsory acquisition of a plot or plots, but subsequently finds that he can achieve what needs to be	committing to acquire permanent rights. In turn this should reduce the amount of land affected by permanent rights.	
		done on the land by the use of temporary powers only and does not need to actually acquire the land in question.	Those plots coloured pink are for permanent freehold acquisition only, with no additional temporary possession powers sought.	
			Only the plots listed below are identified for temporary occupation only:	
			Scenario 1: 40/13, 40/15, 40/15b, 41/14, 41/15, 41/26f	
			Scenario 2: 04/06, 04/07, 06/07, 06/12, 07/11, 08/01, 08/07, 08/09, 08/11, 08/14, 08/16, 08/18, 08/22, 08/24, 09/01, 09/02, 09/04, 09/05, 10/03, 10/06, 10/10, 10/12, 10/13, 12/08, 12/11, 13/03, 14/08, 14/10, 14/14, 14/21, 14/23, 14/25, 14/28, 15/01, 15/06, 15/09, 18/03, 18/15, 18/16, 20/21, 21/02, 21/06, 21/10, 21/11, 21/17, 23/04, 23/10, 23/12, 24/09, 24/12, 27/03, 27/12, 28/06, 28/07, 28/09, 28/10, 29/01, 29/03, 29/04, 29/06, 31/10, 33/05, 33/07, 33/09, 33/10, 33/13, 33/17, 34/02, 34/12, 35/02, 35/08, 35/10, 35/14, 36/19, 37/03, 37/04, 37/06, 37/10, 37/12, 37/15, 40/13a, 40/15c, 40/17a, 40/20, 40/26a, 40/27a, 40/28, 40/31a, 40/32, 40/33, 40/33b, 41/01, 41/01b, 41/12, 41/26c, 41/27, 41/30, 41/30e, 41/30f, 41/39, 41/40a, 41/41, 41/42, 41/43, 41/44, 41/45, 41/46, 41/47, 41/48, 42/04, 42/05, 42/06	
			42/03	
			These plots are required for temporary activities which will only be carried out during construction, or where construction plant, equipment and other apparatus need to be laid down but no cables or other apparatus are proposed to be installed.	
2.3.0.15	The Applicant	Statement of Reasons: Temporary use of land for carrying out the authorised project  Article 26 (3) refers to a maximum time limit of one year after the completion of the authorised project unless the undertaker gives notice under s 11 of the Compulsory Purchase Act 1965 Act, or a declaration is made under section 4 of the Compulsory Purchase (Vesting Declarations) Act 1981. What is the maximum time temporary possession powers could be in place for carrying out the authorised project in the absence of an agreement with the owners of the land to extend the time period beyond one year after completion? Update the Statement of Reasons as necessary.	Under Article 26, the Applicant may take temporary possession of the land specified in Schedule 8 to deliver those parts of the authorised project also specified in Schedule 8. The Applicant's period of temporary possession is restricted to being no longer than reasonably necessary and in any event (unless agreed with the owners of the land) not longer than 1 year from the date of completion of that part of the authorised project. The permitted length of temporary possession period for the authorised project is therefore split into the parts of the authorised project with each part being commenced on different dates, and therefore completed on different dates.  The Applicant anticipates that the longest construction period relevant for temporary possession in the event of scenario 1 would be for the duct installation at the landfall which is expected to take 3 months (within a 2 year period), followed by a further temporary possession period of 2 years for cable pulling, jointing and commissioning. Combining this period with the maximum period of one year from the date of completion of that part of the authorised project means that the Applicant would anticipate that for scenario 1, the maximum period temporary possession powers would be in place would be 2 years and 3 months. A further one year is then permitted for temporary possession once those works are complete.	
			temporary possession in the event of scenario 2 would be for the pre-	





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			construction, duct installation and cable pulling, jointing and commissioning works for the onshore cable route which is expected to take 6 years. Combining this period with the maximum period of one year from the date of completion of that part of the authorised project means that the Applicant would anticipate that the maximum period temporary possession powers would be in place would be 7 years. In any event, in accordance with Article 26(3) the Applicant would not remain in possession of any land for longer than reasonably necessary. The Applicant recognises that temporary possession does not necessarily mean a short period of time, and that would be reflected in any compensation payments.	
2.3.0.16	The Applicant	Statement of Reasons: Temporary use of land for maintaining the authorised project  Article 27(12) refers to a maximum length of time temporary possession powers could be in place for maintaining the authorised project as 5 years beginning the date on which the authorised project first exports electricity to the national electricity transmission network. Article 27(5) refers to the undertaker only remaining in possession of land for as long as may be reasonably necessary to carry out the maintenance of the part of the authorised project for which possession of the land was taken. Given this, what would prevent the temporary possession of land being taken for 5 years for all maintenance activities and not as long as may be 'reasonably necessary'? Update the Statement of Reasons as necessary.	Article 27 of the dDCO allows the Applicant on 28 days' notice (except in an emergency) to take temporary possession for maintenance of the authorised project for 5 years from the date on which the project first exports electricity. The Applicant is only permitted to remain in possession of land for so long as may be reasonably necessary to carry out the maintenance of the part of the authorised project for which the possession was taken.  The Applicant would compensate the owner or occupier for any proven loss or damage as a result of the Applicant's temporary possession of the land under Article 27(12). The Applicant would not want to occupy the land for longer than is necessary since this would increase its compensation payments. As a result, not only does the Applicant not want to deprive affected parties of possession of their land for any longer period than is necessary but there is an additional incentive to carry out the maintenance works as quickly as possible to minimise any compensation payments.	
2.3.0.17	The Applicant	Explanatory Memorandum:  The Explanatory Memorandum [REP4-008] refers extensively to Model Provisions. These are now out of date. Please update the Explanatory Memorandum including Schedule 1, so that it refers to the source of the provision by reference to a previous made DCO or Transport and Works Act Order or states clearly whether it is a novel provision. Other draft Orders do not provide justification / precedent for the drafting of this DCO (for example the justification for Article 38, Arbitration in Schedule 1.) Schedule 4 is helpful but provides a high level view only.		
2.3.0.18	The Applicant	Explanatory Memorandum:  Review the explanation provided in the Explanatory Memorandum [REP4-008] so that it sets out why the wording from other made DCOs is relevant, detailing what is factually similar for both the relevant consented NSIP and the proposed development. This to include any divergence in wording from the consented DCO drafting. Schedule 4 is helpful but provides a high level view only.	The Applicant is updating the Explanatory Memorandum and will submit a revised version at Deadline 6.	
2.3.0.19	The Applicant	Explanatory Memorandum: Review the explanation provided in the Explanatory Memorandum [REP4-008] so that it sets out how each provision is considered to be relevant and important / essential to the delivery of this proposed development. Schedule 4 is helpful but provides a high level view only.	The Applicant is updating the Explanatory Memorandum and will submit a revised version at Deadline 6. Only articles which are absolutely necessary for the delivery of the project have been included in the draft DCO.  Part 1 – Preliminary These are included in all DCOs. Part 2 – Principal powers	





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			These articles define the authorised development, set limits of deviation and allow the Applicant to construct and maintain the authorised development. They also modify and disapply certain sections of legislation which may otherwise hinder the delivery and operation of the authorised development.  Part 3 – Streets  These articles provide the necessary consents, which would usually have to be applied for separately under the New Roads and Street Works Act 1991, to deal with the temporary stopping up of streets and public rights of way, the carrying out of necessary street works and the alteration to existing and creation of new accesses.  Part 4 – Supplemental powers  These articles provide the Applicant with powers to connect to public drains and sewers, go on to land to carry out surveys and deal with human remains.  Part 5 - Powers of acquisition  These articles set out the powers of compulsory acquisition and associated provisions required by the Applicant to assemble the land necessary to deliver the authorised development.  Part 6 – Operations  These articles provide the Applicant with the power to operate the authorised development and grant the marine licences.  Part 7 – Miscellaneous and general  These additional articles secure various other consents and powers all of which are necessary to deliver the project as set out in Schedule 1, as well as securing various protections for Trinity House, Crown land and other parties benefitting from the protective provisions. This section also contains an article setting out an arbitration procedure if a dispute arises and a procedure for the discharge of requirements.	
2.3.0.20	The Applicant	Explanatory Memorandum:  Should the detail relating to compliance with Advice Note 15 in Schedule 4 be incorporated into the main text of the Explanatory Memorandum [REP4-008]?	Schedule 4 has been created as a signposting document and it draws out the details already included within the dDCO and draft Explanatory Memorandum. The Applicant does not therefore consider it necessary to update the Explanatory Memorandum further.	
2.3.0.21	The Applicant	Explanatory Memorandum:  The Explanatory Memorandum [REP4-008] refers respectively to Articles 24 and 25 of the Development Consent Order which enables acquisition of subsoil or airspace only, and rights under or over streets respectively. Please indicate by means of a schedule, which plots are affected by the two articles. Alternatively, if this information is collated in any of the application documents, please give the relevant references.	Article 24 applies to the entirety of the Order land as set out in the book of reference [APP-026] and shown on the Land Plans [APP-007 and APP-008].  Article 25 applies to any streets which fall within the Order limits as shown on the onshore Land Plan [APP-008].  The Applicant requires the flexibility to apply the articles across the authorised project in order to minimise the extent of the interests that are to be acquired from owners. The Applicant considers that this is appropriate in the context of subsoil for cables to be laid underground or in the context of subsoil and airspace for electricity lines to be installed overhead where the entire freehold interest may not be required.	
2.3.0.22	The Applicant	Explanatory Memorandum:  Remove references to model provisions in the Explanatory Memorandum [REP4-008] as these are out of date.	The Applicant is updating the Explanatory Memorandum and will submit a revised version at Deadline 6	
2.3.0.23	The Applicant	The Compulsory Acquisition Objections Schedule: Have all occupiers of land been contacted? If not, why not?	Throughout the informal consultation, formal consultation (s.42d) and application stage (s.56), the Applicant has involved the occupiers of the land (where they differ from the freeholders) in all discussions. The	





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Number			Applicant's land agents RSK Consents Solutions have made contact with occupiers in order to discuss the occupiers consent agreements. All third party occupiers have been contacted with the exception of those occupiers which are a) either a family run business owned and operated by the landowners, therefore discussions have been through the landowners or b) are landowners in their own right on other land contained in the Order and therefore are already aware of the content of the agreements and the process required.	
2.3.0.24	The Applicant	The Compulsory Acquisition Objections Schedule: Provide confirmation that the cross referencing relating to Objector No 40; 41; 45; 51 and 52d of the Compulsory Acquisition Objections Schedule [REP2-031] is accurate.	The Applicant considers that there is a typographical error in the question and the reference to objector no 52d should perhaps refer to Objector 35 (Mr and Mrs M Jones) which is linked to Objector 52 (Jones Household). The Applicant considers that the cross referencing of these objectors is appropriate from its assessment of the name the objection was submitted under. However the objections made are all identical and submitted by Savills on the objector's behalf and therefore without confirmation from Savills, the Applicant cannot be certain that they are the same parties. The parties identified are as below:  Objector 40 - Mr M and Mrs J Ditch Objector 41 - Trustees of WM & SJ Bulwer Long 1983 Settlement Objector 45 - Heydon Estate Objector 51 - Ditch Household Objector 52 - Jones Household Objector 35 - Mr and Mrs M Jones	
2.3.0.25	The Applicant	The Compulsory Acquisition Objections Schedule:  Do Affected Parties and / or their agents agree that the Compulsory Acquisition Objections Schedule [REP2-031] is an accurate representation of their or their clients position? If not, why not? Are there any inaccuracies with the schedule submitted at Deadline 2 [REP2-031]?	The Applicant notes that as raised in the deadline 3 submission by Colin King [REP3-030], the plots and rights thought to be held by objector 9 (Paul King) were omitted from the Compulsory Acquisition Objections Schedule as submitted at Deadline 2. These plots and rights replicate those of Colin King (Objector 55) in the schedule and will be included in the next updated version of the document to be submitted at deadline 9.	
2.3.0.24	National Farmers Union	The Compulsory Acquisition Objections Schedule: Provide confirmation that the cross referencing relating to Objector No 40; 41; 45; 51 and 52d of the Compulsory Acquisition Objections Schedule [REP2-031] is accurate.	The below answer was given in reference to Written Questions 2.3.0.24 and 2.3.0.25:  We can confirm that the cross referencing relating to Objector 40, 41, 45,	The Applicant notes the comments made by the NFU.
2.3.0.25	National Farmers Union	The Compulsory Acquisition Objections Schedule:  Do Affected Parties and / or their agents agree that the Compulsory Acquisition Objections Schedule [REP2-031] is an accurate representation of their or their clients position? If not, why not? Are there any inaccuracies with the schedule submitted at Deadline 2 [REP2-031]?	51 and 52 are accurate. The Compulsory Acquisition Objections Schedule (COAS) is not an accurate representation of their clients position as not all individual clients represented by LIG are listed and further formal Heads of Terms (HoTs) for an option agreement have been agreed and signed by both parties. Option and Deed documentation has been agreed although VF is seeking to amend and negotiations are currently on going.	
2.3.0.26	The Applicant	The Compulsory Acquisition Objections Schedule: What progress has been made in understanding the historic rights held by Objector 55 and what are the implications for the Development Consent Order?	The Applicant has explored the position further with its legal advisors. The position remains that the rights referred to as described in a 1972 Conveyance are not available to be viewed anywhere and therefore cannot be ascertained. The Applicant has made previous contact with Mr Colin King regarding these rights, however Mr King also does not hold a copy of the 1972 Conveyance and does not know to what it refers. Therefore the rights referred to in title NK440779 and benefitting Colin King, Jacqueline Claxton and Paul King have been included in those plots of land falling within this title as a precaution until any clarity on the rights is received. If Mr King is able to provide evidence of what type of rights	





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			exist over the affected land, the Applicant will seek to acquire these rights by agreement. If an agreement is unable to be reached, the Applicant will seek to utilise any compulsory powers awarded.	
2.3.0.27	The Applicant	The Compulsory Acquisition Objections Schedule: What progress has been made in reaching agreement with National Grid, Cadent Gas and Network Rail? If agreement has been reached, confirm the timescale for withdrawal of objections to the Norfolk Boreas application [REP1-041].	Cadent Gas Discussions are progressing well with Cadent Gas and the Applicant is confident that agreement will be reached before the end of the examination.  National Grid Discussions are ongoing with National Grid and the Applicant is confident that agreement will be reached before the end of the examination.  Network Rail The Applicant is in ongoing discussions with Network Rail and is in the process of final negotiations. The Applicant is confident that agreement will be reached before the end of examination.	
2.3.0.27	National Grid	The Compulsory Acquisition Objections Schedule: What progress has been made in reaching agreement with National Grid, Cadent Gas and Network Rail? If agreement has been reached, confirm the timescale for withdrawal of objections to the Norfolk Boreas application [REP1-041].	National Grid have now largely agreed protective provisions with the Promoter, which we understand now just await final promoter approval before insertion into the dDCO. In relation to issues as with National Grid Gas Pie the parties have reached a good level of agreement in relation to documentation which will enable the withdrawal of their objection. In relation to National Grid Electricity Pie the parties have further drafting remaining to be agreed in order to finalise the documentation addressing the interaction with their assets and to secure the withdrawal of their objection. However National Grid anticipate being able to deal with these points by way of agreement with the promoter in the near future and would anticipating having agreement by deadline 7 and completed documentation such that National Grid is able to withdraw their objections by deadline 8.	The Applicant concurs with this position.
2.3.0.28	The Applicant	The Compulsory Acquisition Objections Schedule: Following the meeting between the Applicant and Eni UK Limited on 7th October and the subsequent email received by the Applicant on 3rd December confirming that Eni UK Limited no longer holds an interest in land affected by Norfolk Boreas, provide written confirmation of Eni UK Limited withdrawal of objection to the application.	The Applicant considers that Eni UK Limited did not hold an objection to the project and the relevant representation received on 29 August 2019 explained that Eni UK were keen to ensure that the activities of both projects could interface safely. Eni UK Limited have since informed the Applicant that Eni UK Limited no longer hold an interest in land affected by Norfolk Boreas. The Applicant has included the relevant email correspondence confirming that Eni UK limited had relinquished the part of license P1964 that extends into the Norfolk Boreas Site in Appendix 3.3 Eni UK limited email correspondence.	
2.3.0.29	The Applicant	The Compulsory Acquisition Objections Schedule: The Environment Agency has made amendments to the Protective Provisions included in the updated dDCO at Deadline 4 [REP4-006]. Are there any other matters of dispute between the parties that would prevent agreement to these protective provisions? If not, when does the EA anticipate withdrawing its objection to the Norfolk Boreas application?	The Applicant understood that the Protective Provisions were agreed as they are based on the version agreed through the Norfolk Vanguard dDCO. However, the Applicant understands that the Environment Agency have two further points on the Protective Provisions, and the Applicant is in contact with the Environment Agency and is confident that these points will be agreed before the close of examination.	
2.3.0.29	The Environment Agency	The Compulsory Acquisition Objections Schedule: The Environment Agency has made amendments to the Protective Provisions included in the updated dDCO at Deadline 4 [REP4-006]. Are there any other matters of dispute between the parties that would prevent agreement to these protective provisions? If not,	'In relation to the draft protective provisions for the benefit of the Environment Agency we have a couple of drafting points. In paragraph 71 (3) (b) provision is made for deemed consent in the event approval has not been given within two months. When negotiating protective provisions we always insist on this provision being for deemed refusal as the protective	In relation to paragraph 71(3)(c) of Schedule 17, Part 7, the Applicant has included the requested change within the latest version of the dDCO submitted at Deadline 5 [REP 5-004].





Enhancing Society				
PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
		when does the EA anticipate withdrawing its objection to the Norfolk Boreas application?	provisions effectively replace the need to seek an environmental permit and the equivalent provisions in the Environmental Permitting Regulations 2016 provide for deemed refusal. Our reasoning on this point has been accepted in previous decisions on applications for Development Consent Orders. Our understanding was that this point was already agreed with the Applicant? Also we would suggest the insertion of "also" after 'Environment Agency' in paragraph 71 (3) ( c ) as the existing drafting is unclear and seems to indicate these issues are instead of rather than in addition to the purpose of protection of land drainage works, which we are sure is accidental. Subject to these two minor amendments the EA can now agree the protective provisions as they appear in the current version of the draft DCO (the Deadline 4 version)'.	In relation to paragraph 71(3)(b), the Applicant does not consider that it is appropriate to remove the deemed discharge process and replace with a deemed refusal process as to do so could place the Applicant in a position of limbo without an appropriate decision. The Applicant considers that any delays in approvals, or a repeated cycle of deemed refusal, could lead to significant project delays.  Paragraph 71(1) provides that the undertaker must submit plans to the drainage authority of the specified works (i.e. those works within 16 metres of a watercourse and/or likely to affect any watercourse) prior to commencing the specified works; the drainage authority then has a period of 28 days to request such further particulars as they reasonably require. There is a two month period for the Environment Agency to discharge the plans which begins either (a) on the day the plans were first submitted, or (b) if the drainage authority requests further information, the day of submission of further particulars. In the event that further information is required, the Environment Agency will therefore have a period of approximately three months from first submission to review the plans and consider whether or not to discharge.  The Applicant also understands that this approach has been accepted and included on the Hornsea Two Offshore Wind Farm Order 2016, the Triton Knoll Electrical System Order 2016, the draft Hornsea Project Three Order, and the draft Norfolk Vanguard Order.  In view of the tight construction programmes and the need to unlock nationally significant renewable energy projects, there is a strong public interest argument in favour of approvals in a timely manner and ensuring that renewable energy projects are not unduly delayed. In particular, minimising delays post consent for offshore wind projects is especially important in the context of meeting CfD milestones. The Applicant therefore considers that the timeframe for consideration and discharge of plans in relation to specified works under Part 7 of Sche
2.3.0.31	National Farmers	, , ,	Please see the list of individual objectors and members that NFU and LIG	The Applicant will discuss this point further with the Environment Agency.  The Applicant notes the comments made by the NFU. However is unable to
	Union	The Outline Representation prepared by the Land Interest Group (LIG) and NFU submitted as a Relevant Representation for a number of different clients and members states: "each landowner or occupier has submitted an outline representation highlighting specific issues to the business and has made reference to this outline representation which highlights the main issues of all landowners concerned." The Outline Representation indicates that the LIG represents approximately 60 clients who own, or lease land affected by the application, and that full written representations would be lodged in due course.  Written representations have subsequently been received by Savills on behalf of Mr C Allhusen notifying of potential locations for site inspections at Deadline 1 [REP1-062] and the NFU at Deadline 3 and 4. The Applicant has responded to the NFU's submissions at Deadlines 2, 3 and 4. No other representations have been submitted by LIG or NFU at this stage in the Examination.	are representing in the separate document submitted with this document for deadline 5. The objections still outstanding that NFU and LIG raised in their Outline Representation are highlighted in their Statement of Common Ground with Vattenfall which will be submitted again at deadline 6.	comment on the content of the additional submission due to the redaction.





PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number				
		<ol> <li>Provide details of the individual objectors represented by NFU and LIG for the purpose of this examination.</li> <li>Provide full details of the objection in relation to their clients' specific land/rights that would be affected by Compulsory Acquisition or cross refer to Q2.3.0.27.</li> </ol>		
2.3.0.32	The Applicant	Co-operation Agreement: Is it the intention of the Applicant to agree and finalise the Co-operation Agreement with Ørsted Hornsea Project Three (UK) Limited, Ørsted Wind Power A/S, Cerulea Limited, Norfolk Vanguard Limited and Vattenfall Wind Power Limited within the timeframe of the Examination? If not, what are the factors that determine the timescale for reaching such an agreement?	The Applicant is in ongoing discussions with Ørsted Hornsea Project Three United Kingdom (UK) Limited, Ørsted Wind Power A/S, Cerulea Limited, Norfolk Vanguard Limited and Vattenfall Wind Power Limited with a view to agreeing the terms of the cooperation agreement (and agreed form crossing agreements) between the parties as soon as possible. The nature of agreement, the number of parties and the future role of Offshore Transmission Owners (OFTO) in respect of the cables means the form of agreement is complex.  Therefore whilst it is the intention of the Applicant to agree the Cooperation Agreement with Ørsted Hornsea Project Three (UK) Limited, Ørsted Wind Power A/S, Cerulea Limited, Norfolk Vanguard Limited and Vattenfall Wind Power Limited within the timeframe of the Examination, given the complexity of the arrangement and the number of parties, at this stage the Applicant is currently unable to guarantee a date by which the agreement will be finalised.	
2.3.0.32	Ørsted Hornsea Project Three (UK) Limited	Co-operation Agreement: Is it the intention of the Applicant to agree and finalise the Co-operation Agreement with Ørsted Hornsea Project Three (UK) Limited, Ørsted Wind Power A/S, Cerulea Limited, Norfolk Vanguard Limited and Vattenfall Wind Power Limited within the timeframe of the Examination? If not, what are the factors that determine the timescale for reaching such an agreement?	Orsted and the Applicant continue to discuss the terms of the cooperation agreement (and agreed form crossing agreements) and are looking to conclude discussions as soon as possible.  The nature of agreement, the number of parties and the future role of Offshore Transmission Owners (OFTO) in respect of the cables means the form of agreement is complex. Given the complexity of the arrangement and the number of parties, at this stage Orsted is unable to guarantee a date by which the agreement will be finalised. However it is mindful of the ongoing examination being held into the Norfolk Boreas project and the associated timeframes.  Consistent with the scope set out in the Statement of Common Ground between the two parties (REP2-056) Hornsea Project Three is already bound by relevant (draft) DCO requirements and a number of management plans that require the consideration of each projects in their delivery. Matters pertaining to construction management are not therefore then subsequently relied upon through the completion of the Co-operation Agreement. For example:  - At the crossing point, common commitments around archaeological investigations to ensure that the approach to targeted geophysical survey and trial trenching is undertaken in a way which manages archaeological impacts from any interaction of the projects at the crossing point.  - Consistent approaches to the management of Reepham footpaths FP18 and FP34 — managed through Hornsea Project Three Outline Code of Construction Practice (OCoCP).  - Consistent approaches to traffic management through the village of Cawston and along Oulton Street - managed through Hornsea Project Three Outline CTMP. Hornsea Project Three is aware of the ongoing development of the Cawston intervention scheme and will continue to	Noted.





PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number				
			work with Vattenfall to ensure that consistent approaches to any physical intervention schemes are applied to all projects.	
			- Both parties have both committed to community liaison through the construction phase.	
2.3.0.33	The Applicant	Ivy Todd Campsite:  Necton Substation Action Group refer to a campsite owned by Mr Paul King in Ivy Todd [REP4-050]. Has this land / business been identified in the Book or Reference?	The Applicant notes that Mr Paul King is listed in the Book of Reference in relation to historic rights as referred to in the response to question 2.3.0.26, however the campsite business has not been referred to within the Book of Reference as it is not included within the Order limits.	
2.3.0.34	The Applicant	Access Routes:  NFU indicates that not all access routes are agreed between landowners and the Applicant given that some access routes are physically impossible [REP3-018]. The Applicant confirms that it is still working with the landowners to agree preferred alternative operations accesses and that these would be included in private agreements [REP4-011].  1. Identify by reference to the Compulsory Acquisition Objections Schedule [REP2-031] the landowners that are in discussion over these matters.  2. Are other landowners not identified in the Compulsory Acquisition Objections Schedule also in discussion over these matters?  3. Provide a summary of the outstanding matters that are still under discussion between the parties or otherwise indicate where the only outstanding issue on a particular topic pertains to commercially confidential matters.  4. If agreement is not reached with these landowners before the end of the Examination, how would operational access be provided?  5. In the absence of such agreement, what would be the consequences for the Development Consent Order?	<ol> <li>Objector 27, Objector 34 &amp; Objector 39</li> <li>David Edward Brown, Kate Alice Paul and William David Winslow Barr (Bawdeswell Estate), however these outstanding issues over access are close to being resolved and signed heads of terms documenting the agreement reached should be received shortly.</li> <li>The only outstanding points in relation to the above mentioned HoTs is the discussion around the access points. The Applicant is continuing to assess these options. Where other accesses are required to be amended, the Applicant has explained that it is happy to consider these through the drafting of the Option Agreement stage.</li> <li>The Applicant would continue to negotiate with the affected land interests to secure the required rights by agreement up until the commencement of construction. In the eventuality that an agreement cannot be reached to secure the required rights, the Applicant will seek to acquire these rights through compulsory acquisition powers.</li> <li>The Applicant has applied for compulsory acquisition powers to be used over land where an agreement cannot be reached with the affected parties.</li> </ol>	
2.3.0.34	National Farmers Union	Access Routes:  NFU indicates that not all access routes are agreed between landowners and the Applicant given that some access routes are physically impossible [REP3-018]. The Applicant confirms that it is still working with the landowners to agree preferred alternative operations accesses and that these would be included in private agreements [REP4-011].  1. Identify by reference to the Compulsory Acquisition Objections Schedule [REP2-031] the landowners that are in discussion over these matters.  2. Are other landowners not identified in the Compulsory Acquisition Objections Schedule also in discussion over these matters?  3. Provide a summary of the outstanding matters that are still under discussion between the parties or otherwise indicate where the only outstanding issue on a particular topic pertains to commercially confidential matters.  4. If agreement is not reached with these landowners before the end of the Examination, how would operational access be provided?  5. In the absence of such agreement, what would be the	CAOS are as follows: Q34.1: Landowners in discussion over access matters  • Paduli – row 27  • Siely – row 14	The Applicant notes the response made by the NFU. The Applicant is engaging with the relevant land agents and professional representatives of those additional parties identified by the NFU.  Of those parties listed by the NFU, the Applicant believes it has now agreed a way forward in relation to the accesses in question, with; Paduli, Dillington, Mutimer, James Keith and Bawdeswell. Heads of Terms (HoTs) have already been signed with Dillington, Mutimer and James Keith. Responses have been provided by the Applicant to the questions and concerns raised by Siely and Carrick through on going engagement.
2.3.0.35	The Applicant	consequences for the Development Consent Order?  Cumulative impact assessment and NFU:	The Applicant met with the NFU on the 20 <sup>th</sup> February 2020 to discuss the outstanding matters on the SOCG. Discussions are still continuing on this	





PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
		Provide an update on the matter which is stated still to be under discussion in the SoCG between the Applicant and NFU [REP2-046, page 8] regarding the cumulative impact assessment on agricultural productivity, taking account of other projects, specifically Norfolk Vanguard and Hornsea Project Three.	point and an updated version of the SOCG will be submitted at Deadline 6.	
2.3.0.35	National Farmers Union	Cumulative impact assessment and NFU: Provide an update on the matter which is stated still to be under discussion in the SoCG between the Applicant and NFU [REP2-046, page 8] regarding the cumulative impact assessment on agricultural productivity, taking account of other projects, specifically Norfolk Vanguard and Hornsea Project Three.	The cumulative impact was discussed further with Vattenfall at the meeting on the 20th February 2020 to seek confirmation from Vattenfall that the cables will be constructed in such a way that they are thermally efficient and least disruptive to agricultural land during construction and after construction once all cables are installed and up and running. Vattenfall have confirmed in the SoCG with NFU that the most thermally efficient crossing design and the least disruptive are key to Norfolk Vanguard and Norfolk Boreas. We have yet to have this confirmed from Orsted Hornsea 3.	The Applicant notes the comments made by the NFU.
2.3.0.36	The Applicant	Notification of Landowners:  How would all persons affected by the use of powers of acquisition be informed of timings of different parts of the construction of the proposed development? Should there be a specific communications plan? If not, why not?	The Outline Code of Construction Practice (OCoCP) [REP1-018] secures a communications plan under Section 2.4 which will include a proactive public relations campaign keeping local residents informed of the type and timing of works involved. Furthermore, the OCoCP secures an Agricultural Liaison Officer (ALO) under Appendix B who will utilise the communications plan to inform landowners.  The role of the ALO (as appointed by the contractor), is to be the main point of contact with those landowners affected by the construction of the proposed development. Where option agreements have been completed, the Applicant will serve an entry notice on those landowners advising of the date on which they will access the land included in the entry notice. For those landowners where Option Agreements have not been concluded, the Applicant will serve a minimum of 14 days' notice (and longer where practicable to do so) for temporary possession under the powers in the dDCO. Through the role of the ALO and wider project communications, all those land interests who own/occupy land directly affected by the project will be kept up to date throughout the process and provided with advanced warnings of expected construction commencement dates.	
2.3.0.36	National Farmers Union	Notification of Landowners:  How would all persons affected by the use of powers of acquisition be informed of timings of different parts of the construction of the proposed development? Should there be a specific communications plan? If not, why not?	The NFU would like landowners who are to be affected by powers of acquisition to be informed of timings of different parts of the construction of the proposed development by Vattenfall and their contractors liaising through the ALO to Landowners. This has been addresses in Appendix B in the Outline CoCP version 2, November 2019. If Vattenfall do set out a Plan of Works then we would like this to be implemented and communicated to persons affected by the ALO.	The Applicant notes the comments made by the NFU. As set out in the Applicant's previous response, The Outline Code of Construction Practice (OCoCP) [REP1-018] secures a communications plan under Section 2.4 which will include a proactive public relations campaign keeping local residents informed of the type and timing of works involved. Furthermore, the OCoCP secures an Agricultural Liaison Officer (ALO) under Appendix B who will utilise the communications plan to inform landowners.

# 4 Cumulative effects of other proposals

#### 4.0 General cumulative effects, including phasing

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:	
Question					
Number					
No Questions					





# 4.1 Onshore cumulative effects of other proposals (construction)

		effects of other proposals (construction)						
PINS Question	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:				
Number								
2.4.1.1	The Applicant	Construction effects at the Crossover with Hornsea Project Three north of Reepham:  The Interested Parties Response to Q1.4.1(1) provides some clarity. In response to Q1.4.1(2), it is stated that the potential overlap of Hornsea Project Three onshore cable works with Scenario 2 duct installation of the proposed development is considered the worst-case scenario.  1. Could an alternative view be that activities happening at the same time which would reduce the length of time over which the impacts occurred, could be deemed preferable to local communities and therefore the worst-case scenario might be one that extends over the longest time period of time?  2. Has the Applicant considered the potential to compress works over the shortest period of time possible and has this been a topic of discussion in the terms of the Cooperation Agreement with Ørsted [REP2-056, section 2.4]?  3. Would it be possible to require programming which has the least adverse cumulative effects (should both projects be consented), which would impose time limits over which works were undertaken in this Co-operation Agreement and for that to be secured in the proposed development's dDCO or OCoCP?	<ol> <li>The construction works at the crossing point are limited in time, with a worst case requirement for Norfolk Boreas, under Scenario 2, of trenchless crossing for duct installation at this location, with a period of 5 weeks. If open cut trenching method is applied in this location, the period will be approximately 1 week to cross the 80m Hornsea Project Three Order Limits as a result of the sectionalised duct installation method. Therefore the total duration of works at the crossing point will be short, relatively, even if conducted sequentially.</li> <li>The Applicant has compressed the works over the shortest time period practicable to minimise the length of impacts in isolation and cumulatively. This includes the embedded mitigation relating to the sectionalised method of duct installation (under Scenario 2) which limits the period and location of impacts along the cable route so far as possible to 150m/week, resulting in works at the crossing point being limited to an approximate 1 week period. In the worst case, in terms of works period, a trenchless crossing of the crossing point may be required with a typical period of 5 weeks. The sharing of information, including construction programmes as they become refined, is a key aspect of the Cooperation Agreement.</li> <li>The cumulative impact assessment [APP-246] has not identified an increase in effects as a result of construction at the crossing point beyond those identified for Norfolk Boreas alone under Scenario 2. Therefore there is no identified requirement for programming of the works to mitigate cumulative effects.</li> <li>The co-operation agreement is a private contractual agreement between the parties and it is therefore not appropriate to refer to it in any of the certified documents under the DCO. Where cumulative impacts have been identified outwith the crossing point construction, the Applicant has sought to mitigate those by, for example, capping peak traffic flows (as opposed to programming) and this is captured in the</li></ol>					
2.4.1.1	Norfolk County Council	Construction effects at the Crossover with Hornsea Project Three north of Reepham:  The Interested Parties Response to Q1.4.1(1) provides some clarity. In response to Q1.4.1(2), it is stated that the potential overlap of Hornsea Project Three onshore cable works with Scenario 2 duct installation of the proposed development is considered the worst-case scenario.  1. Could an alternative view be that activities happening at the same time which would reduce the length of time over which the impacts occurred, could be deemed preferable to local communities and therefore the worst-case scenario might be one that extends over the longest time period of time?  2. Has the Applicant considered the potential to compress works over the shortest period of time possible and has this been a topic of discussion in the terms of the Cooperation Agreement with Ørsted [REP2-056, section 2.4]?	Any highway related matters related to most appropriate timing of works on part of an ongoing discussion between the applicant and NCC highways.	The Applicant continues to work with NCC highways with regard to highways related matters.				





Enhancing Societ	y logether			
PINS Question	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Number				
2411	Oulton Parish	3. Would it be possible to require programming which has the least adverse cumulative effects (should both projects be consented), which would impose time limits over which works were undertaken in this Co-operation Agreement and for that to be secured in the proposed development's dDCO or OCoCP?	For communities at or near to the crossover between HOW3 and	The Applicant notes the concerns raised regarding cumulative traffic
2.4.1.1	Council	Construction effects at the Crossover with Hornsea Project Three north of Reepham:  The Interested Parties Response to Q1.4.1(1) provides some clarity. In response to Q1.4.1(2), it is stated that the potential overlap of Hornsea Project Three onshore cable works with Scenario 2 duct installation of the proposed development is considered the worst-case scenario.  1. Could an alternative view be that activities happening at the same time which would reduce the length of time over which the impacts occurred, could be deemed preferable to local communities and therefore the worst-case scenario might be one that extends over the longest time period of time?  2. Has the Applicant considered the potential to compress works over the shortest period of time possible and has this been a topic of discussion in the terms of the Cooperation Agreement with Ørsted [REP2-056, section 2.4]?  3. Would it be possible to require programming which has the least adverse cumulative effects (should both projects be consented), which would impose time limits over which works were undertaken in this Co-operation Agreement and for that to be secured in the proposed development's dDCO or OCoCP?	Aranguard/Boreas, ALL scenarios are worst case, because of the traffic impacts. A shortened time frame would in the case of Cawston and Oulton cause the traffic to be more concentrated than currently proposed, and this would extend to the wider highway network. Currently all projects are proposing a joint traffic management plan for cumulative traffic, whilst coordinating with agricultural traffic specifically at 'harvest' periods. OPC already view the likelihood and feasibility of this "coordinated" approach with some doubt, without the added issue of concentrated traffic from introducing a narrower construction period; the highway congestion and dysfunction caused would have an even more detrimental effect on local communities' ability to access road routes to work, schools, health services etc. without requiring lengthy detours. If all the proposed projects' (HOW3/Vanguard/Boreas) construction period extends to the 8-10 years window, as is currently proposed, then this will also be problematic to local communities. 8-10 years is a long time for communities to be expected to 'put up' with disruption and, with further projects even now preparing to go through the examination process, this adds even more uncertainty, anxiety and disruption for even more years. Local communities have been told by developers that this level of disruption from constant HGV traffic is "acceptable" in planning terms because the construction period is "only temporary". But Norfolk is being bombarded with several more so-called "temporary" But Norfolk is being bombarded with several more so-called "temporary" projects, and communities currently cannot see the light at the end of the tunnel. 8 – 10 years (and more projects in the pipeline) is a very lengthy concept of "temporary". Hornsea Project Three, which is awaiting decision, has chosen a more protracted approach to their construction, as they are using HVAC and phased trenching, without ducting at phase 1 for phase 2, requiring more cables than those proposed by Vanguard or Borea	inpacts. The Applicant has committed to a HVDC transmission solution and a sectionalised duct installation process (Scenario 2 only) with subsequent cable pulling to minimise the period of construction and quantity of construction traffic so far as practicable. The Applicant further notes that the Norfolk Vanguard application has also committed to a HVDC transmission solution and sectionalised duct installation process which would include installing ducts for Norfolk Boreas at the same time as Norfolk Vanguard, minimising the overall period of construction for those projects so far as practicable, resulting in Norfolk Boreas cable pulling only (Scenario 1).  The Applicant continues to work with Hornsea Project Three to seek to further refine cumulative traffic profiles, timescales and numbers.  The Applicant refers to its comments on deadline 4 submissions [REP5-051] in response to the NFU [REP4-036] regarding the impracticality of installing cables for all circuits and all projects at the same time and as such cables for Norfolk Boreas would not be installed at the same time as Norfolk Vanguard. This is reflected in the worst-case assessment for cable pulling which includes for the installation of all cables for Norfolk Boreas to be installed in a single year, but does not allow for Norfolk Vanguard cable pulling at the same time. Therefore if both Norfolk Vanguard and Norfolk Boreas were to progress to construction, there would be a minimum of two cable installations across two years.





PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question				
Number			SCENARIO 1 + HOW3 Boreas scenario 1 105 all vehicles/65 HGV AND	
			HOW3 248 all vehicles/118 HGV's Total = 353 all vehicles/183 HGV's	
			It should be noted that if Norfolk Vanguard goes ahead as planned, then the ducting for Boreas would have been installed at that stage. OPC questions whether there might be a scenario where Boreas cables might be installed at the same time as those for Vanguard? If so, such a scenario would increase the HGV and all-traffic numbers for Link 68. Finally, OPC would like to remind the ExA that the Planning Inspector in 2014 (Appeal on refusal of an Anaerobic Digester using Link 68 as its access route) dismissed the Appeal on the grounds that Link 68 was unsuitable for regular use, even with Passing Places, by HGV traffic in two directions. The Inspector judged that such use would lead to highway dysfunction and danger.	
2.4.1.1	Cawston Parish Council	Construction effects at the Crossover with Hornsea Project Three north of Reepham:  The Interested Parties Response to Q1.4.1(1) provides some clarity. In response to Q1.4.1(2), it is stated that the potential overlap of Hornsea Project Three onshore cable works with Scenario 2 duct installation of the proposed development is considered the worst-case scenario.  1. Could an alternative view be that activities happening at the same time which would reduce the length of time over which the impacts occurred, could be deemed preferable to local communities and therefore the worst-case scenario might be one that extends over the longest time period of time?  2. Has the Applicant considered the potential to compress works over the shortest period of time possible and has this been a topic of discussion in the terms of the Cooperation Agreement with Ørsted [REP2-056, section 2.4]?  3. Would it be possible to require programming which has the least adverse cumulative effects (should both projects be consented), which would impose time limits over which works were undertaken in this Co-operation Agreement and for that to be secured in the proposed development's dDCO or OCoCP?	The Applicant's response to Q1.4.1(1) provides some clarity. In response to Q1.4.1(2), it is stated that the potential overlap of Hornsea Project Three onshore cable works with Scenario 2 duct installation of the proposed development is considered the worst-case scenario. 1. Could an alternative view be that activities happening at the same time which would reduce the length of time over which the impacts occurred, could be deemed preferable to local communities and therefore the worst-case scenario might be one that extends over the longest time period of time? Our focus has been on the peak traffic flows since the early stages of the H3 examination, when peaks were forecast in the 3-400 HGV range. We appreciate that the Applicants have taken some measures to address this, lowering the peak to 239 as a result, but at the cost of extending the periods involved so that the overall number of vehicles changes little. On this basis it could be suggested that a different worst case scenario is being created, which also undermines the suggestion that the adverse impacts are "temporary but reversible". The consolidated periods involved are hardly temporary in the generally used sense of the word, and the impacts on local businesses and the quality of life of residents will not be reversible. CPC's position remains that there is no compromise level of construction traffic that is feasible in practice and acceptable to residents, due to the impacts on road safety, noise, vibration, air quality and local businesses. An alternative route avoiding Cawston should be developed.	The Applicant notes the concerns raised regarding cumulative traffic impacts. The Applicant has committed to a HVDC transmission solution and a sectionalised duct installation process (Scenario 2 only) with subsequent cable pulling to minimise the period of construction and quantity of construction traffic so far as practicable. The Applicant further notes that the Norfolk Vanguard application has also committed to a HVDC transmission solution and sectionalised duct installation process which would include installing ducts for Norfolk Boreas at the same time as Norfolk Vanguard, minimising the overall period of construction for those projects so far as practicable, resulting in Norfolk Boreas cable pulling only (Scenario 1).  The Applicant continues to work with Hornsea Project Three to seek to further refine cumulative traffic profiles, timescales and numbers.

# 5 Development Consent Order and Deemed Marine Licences

#### 5.0 General

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.5.0.1	The Applicant	End of Construction: Considering Natural England's concerns, based on an example of an operating offshore windfarm [REP3-021] regarding the need for a clean line between the end of construction and the beginning of operation and the Applicant's comments regarding seeking further	The Applicant discussed this matter with the MMO and NE on a conference call held on 17 February 2020.  The Applicant explained the notification requirements within Condition 9 of Schedule 9-10 and Condition 4 of Schedule 11-12 and Condition 3 of Schedule 13 which provides that the Applicant must notify the MMO (including Kingfisher Information Service of Seafish and the UK	





PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number				
		information from NE in [REP4-009, No.4], the Applicant to state when it will be able to respond.	Hydrographic Office) upon completion of licensed activities (for example, Condition 9 (Schedule 9-10)). In the case of the Kingfisher Information Service of Seafish notification, this must be no later than 24hours from completion of construction of all offshore activities.	
			The Applicant considers that the matter is agreed in principle.	
2.5.0.2	Marine Management Organisation	Outstanding matters on the dDCO: The Applicant has provided responses to matters raised by the relevant planning authorities and other post-consent approval bodies at Deadlines 2, 3 and 4. Aside from the matters questioned below, set out any outstanding concerns with the dDCO submitted at Deadline 4 [REP4-004].	All outstanding issues not included in the ExA questions are within the SoCG that will be submitted at Deadline 6 by the Applicant.  A summary of ongoing issues (not including Arbitration/Appeals as there will be no movement on these issues) is provided below:  - Cable Crossings  The Applicant has provided further comments and the MMO is currently discussing this internally – the MMO will provide an update at Deadline 6.  - Disposal Sites  The MMO is working closely with the Applicant and the MMO's technical advisors to resolve outstanding queries and provide the disposal site references as soon as possible.  - Definition of Inert  The MMO still requires the inclusion of a definition of inert – the MMO has sent further comments to the Applicant, has received a response and is	The Applicant notes this and will continue to engage with the MMO to discuss these outstanding items. The Applicant also looks forward to receiving the MMO's comments at Deadline 6.
2.5.0.2	Natural England	Outstanding matters on the dDCO: The Applicant has provided responses to matters raised by the relevant planning authorities and other post-consent approval bodies at Deadlines 2, 3 and 4. Aside from the matters questioned below, set out any outstanding concerns with the dDCO submitted at Deadline 4 [REP4-004].	reviewing this internally. The MMO will provide an update at Deadline 6.  All Natural England's outstanding concerns are detailed in Natural England's risks and issues log or are raised elsewhere in this response to Examiners' further questions.	The Applicant notes this.
2.5.0.2	North Norfolk District Council	Outstanding matters on the dDCO: The Applicant has provided responses to matters raised by the relevant planning authorities and other post-consent approval bodies at Deadlines 2, 3 and 4. Aside from the matters questioned below, set out any outstanding concerns with the dDCO submitted at Deadline 4 [REP4-004].	Without prejudice, based on DCO (Version 4 – Jan 2020) and a review of Schedule 1 Part 3 (Requirements) relating to onshore matters, NNDC considers the following outstanding matters need to be addressed:  Detailed design parameters onshore: Requirement 16 (13) should be amended to include passing under Colby Road, Banningham via trenchless installation techniques.  Provision of landscaping: Requirement 19(2) should be amended to reflect the different replacement planting periods for North Norfolk and other LPA areas away from the coast. This could be achieved via amending 19 (2) and adding a new 19 (3) as suggested below:  19 (2) Any tree, hedge or shrub planted within the District of North Norfolk as part of an approved landscaping management scheme that, within a period of five ten years after planting, is removed, dies or becomes, in the opinion of the relevant planning authority, seriously damaged or diseased must be replaced in the first available planting season with a specimen of the same species and size as that originally planted unless a different species is otherwise first agreed in writing with the relevant planning authority.	Requirement 16(3): The Applicant has outlined its reasoning for not adding Colby Road to the list of trenchless crossing at Deadline 4 in the Clarification Note - Trenchless Crossings B1149 and Church Road, Colby [REP4-017].  Landscaping: The Applicant refers NNDC to its response to FWQ 2.5.3.6 [REP5-045].  Tourism: The Applicant refers NNDC to its response to FWQ 2.13.2.1 [REP5-045].





PINS Question	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
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			19 (3) Any tree, hedge or shrub planted outside the District of North Norfolk as part of an approved landscaping management scheme that, within a period of five years after planting, is removed, dies or becomes, in the opinion of the relevant planning authority, seriously damaged or diseased must be replaced in the first available planting season with a specimen of the same species and size as that originally planted unless a different species is otherwise first agreed in writing with the relevant planning authority.	
			Tourism and Associated Businesses  NNDC still maintains that an additional requirement securing a tourism and associated business impact mitigation strategy is justified and necessary as set out in the Council's Local Impact Report [REP2-087]. Specific suggested wording for the additional requirement is enclosed within that document at §14.21.	
2.5.0.2	Norfolk County Council	Outstanding matters on the dDCO: The Applicant has provided responses to matters raised by the relevant planning authorities and other post-consent approval bodies at Deadlines 2, 3 and 4. Aside from the matters questioned below, set out any outstanding concerns with the dDCO submitted at Deadline 4 [REP4-004].	Requirement 16 needs to be expanded to include the crossing point on the B1149. The County Councils reasons are set out in full within our written response to the applicant's clarification note on trenchless crossings submitted at deadline 5.	The Applicant has outlined its reasoning for not adding the B1149 to the list of trenchless crossing at Deadline 4 in the Clarification Note - Trenchless Crossings B1149 and Church Road, Colby [REP4-017]. The Applicant has also responded to Norfolk County Council's (NCC) deadline 5 submission through its document titled Applicant's Responses to Deadline 5 Submissions [ExA.ASR.D6.V1], submitted at Deadline 6.
2.5.0.3	North Norfolk District Council	Discharging requirements and conditions:  Provide a response to Q5.0.4 [PD-008] or indicate where in the documentation this has previously been provided.	NNDC did not previously respond to this question because the premise of the question related to any suggested corrections or amendments. The ExA should be aware that, during the Norfolk Vanguard examination (Deadline 3), NNDC played a key role in suggesting amendments to the drafting of the applicant's proposed Procedure for discharge of Requirements set out within Schedule 15 of the Norfolk Vanguard DCO [REP3-055]. The applicant and NNDC subsequently worked together to finalise an acceptable scheme.	The Applicant notes and concurs with this position.
			The underpinnings of the scheme agreed between the applicant and NNDC for Norfolk Vanguard is, in effect, mirrored within Schedule 16 of the Norfolk Boreas DCO. NNDC have no further corrections or amendments to suggest at this time in relation to Schedule 16.	

## 5.1 Articles

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.5.1.1	The Applicant	Article 2: Interpretation: Environmental Statement: The Applicant has stated that the "ES is a record of what is assessed, not what is permitted and therefore does not require any updates." [REP4-009, No.1]. 1. Are consenting authorities content with this position? 2. The Applicant is invited to consider an extension to the definition of the ES in Article 2 to clarify the fixed point in time nature of the ES assessment. 3. Consenting authorities to comment if they think this clarification is necessary.	The Applicant is content that the current definition of the ES in Article 2 is suitable in its current form, which reads as follows:  "environmental statement" means the document certified as the environmental statement by the Secretary of State for the purposes of this Order;  Once the Applicant has therefore provided the environmental statement to the Secretary of State for certifying in accordance with Article 37 then it is secured as the certified "environmental statement". The Applicant does not consider a change to the definition to refer to a fixed point in time would alter the meaning or purpose of the definition.  The Applicant, however, recognises that a number of examination documents – for instance, updated Collision Risk Models – can be	





PINS Question	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Number 2.5.1.1	Marine	Article 2: Interpretation: Environmental Statement:	considered as an element of the environmental statement. The Applicant therefore proposes to update the Note on Requirements (document reference: 3.3) at the end of the Examination to make this clear. As the Applicant outlines in response to WQ 2.5.1.9 below, the Applicant also considers that it would be helpful to insert a new Schedule to the dDCO outlining the certified documents – including those documents considered to form part of the environmental statement - and the respective versions of each document.  1. Please refer to Q2.2.0.2 for detailed comments	The Applicant notes this response and also refers the MMO to the
	Management Organisation	The Applicant has stated that the "ES is a record of what is assessed, not what is permitted and therefore does not require any updates." [REP4-009, No.1]. 1. Are consenting authorities content with this position? 2. The Applicant is invited to consider an extension to the definition of the ES in Article 2 to clarify the fixed point in time nature of the ES assessment. 3. Consenting authorities to comment if they think this clarification is necessary.	3. The MMO welcomes clarity within the interpretation and believes this would provide comfort to the MMO that the ES is a snapshot in time and is used to inform consent. It does not represent consent in of itself.	Applicant's response to this question 2.5.1.1 below, as submitted at Deadline 5 [REP5-045].
2.5.1.1	Natural England	Article 2: Interpretation: Environmental Statement: The Applicant has stated that the "ES is a record of what is assessed, not what is permitted and therefore does not require any updates." [REP4-009, No.1]. 1. Are consenting authorities content with this position? 2. The Applicant is invited to consider an extension to the definition of the ES in Article 2 to clarify the fixed point in time nature of the ES assessment. 3. Consenting authorities to comment if they think this clarification is necessary.	<ol> <li>Natural England does not support this position as the DCO and DMLs both cross reference to the ES which in this case is now incorrect due to changes in scour protection and turbine types and heights, which Natural England notes were proposed as mitigation.</li> <li>However, subject to the review of the Plan of Plans document and any proposed changes to the DCO/DML Natural England agrees the proposed approach may address these concerns.</li> <li>Natural England agrees that clarification is necessary.</li> </ol>	The Applicant disputes NE's comment that the environmental statement (ES) is now incorrect. The ES is a record of what is assessed. It is not, therefore, appropriate to suggest that the ES is incorrect as a result of the Applicant reducing impacts further within the Rochdale Envelope of the environmental statement. The DCO and the control plans (secured by the DCO) are the "live" elements that are updated in line with further mitigation.  In addition, the Applicant refers Natural England (NE) to the Applicant's response to this question 2.5.1.1 below, as submitted at Deadline 5 [REP5-045].
2.5.1.1	Norfolk County Council	Article 2: Interpretation: Environmental Statement: The Applicant has stated that the "ES is a record of what is assessed, not what is permitted and therefore does not require any updates." [REP4-009, No.1]. 1. Are consenting authorities content with this position? 2. The Applicant is invited to consider an extension to the definition of the ES in Article 2 to clarify the fixed point in time nature of the ES assessment. 3. Consenting authorities to comment if they think this clarification is necessary.	NCC are content with this position. The ExA will be aware of the ongoing discussion relating to outstanding highway matters and the ES will need to be updated to reflect progress made on this matter.	The Applicant notes this. Should any further assessment be needed as part of an agreed position on the highway matters then the Applicant would undertake an additional assessment which would be included as a subsequent document considered to form part of the environmental statement (under Part 1 of Schedule 18), rather than an update to the original environmental statement.
2.5.1.1	North Norfolk District Council	Article 2: Interpretation: Environmental Statement:  The Applicant has stated that the "ES is a record of what is assessed, not what is permitted and therefore does not require any updates." [REP4-009, No.1]. 1. Are consenting authorities content with this position? 2. The Applicant is invited to consider an extension to the definition of the ES in Article 2 to clarify the fixed point in time nature of the ES assessment. 3. Consenting authorities to comment if they think this clarification is necessary.	1. In the context of this DCO, NNDC is of the opinion that the Environmental Statement represents a snapshot in time based on the assessments that were carried out by the applicant on the basis of the worst-case scenario or the maximum extents of the Rochdale Envelope for this project. The decision to accept or challenge the conclusions within the ES ultimately rest with the decision maker, that being the Secretary of State guided by the advice of the ExA. Whilst NNDC have raised some questions about the extent of survey work undertaken, where information has been absent, NNDC understand that the applicants have assumed the worst-case scenario. The only time where an update to the ES would be necessary is where the extent of the project shifts beyond the scope set out in the original ES which might occur through changes to the 'red line' of the DCO extent or where other elements of the project substantially change to take them outside of the current Rochdale Envelope of this project.  2. For Applicant	The Applicant notes and concurs with this position.





PINS Question	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
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			3. What purpose would there be in referring to the fixed point in time nature of the ES assessment. This is the same for all ES. This only becomes an issue if the passage of time (or variations to the project) between completion of the ES and the final DCO decision is such that the underpinning evidence can no longer be relied upon. In any event, many concerns about data capture will surely be captured within the Requirements, especially those requiring further survey work before work commences. We have to accept that large projects like this always carry an element of risk in respect of the age/quality/relevance of underpinning evidence supporting the ES.	
2.5.1.2	The Applicant	Article 2: Interpretation: Schedule of Mitigation: Further to points under Article 37 in these questions, the ExA considers a definition of the Schedule of Mitigation [REP2-006] would be helpful.	The Schedule of Mitigation is primarily a signposting document, outlining all proposed mitigation within the ES for the ease of reference for any interested party. It is does not contain any new information about the Project and it does not secure any mitigation. Mitigation is either secured in the dDCO or in the outline plans. Accordingly, the Schedule of Mitigation is not referred to in the dDCO and the Applicant does not therefore consider it appropriate or necessary to define this document within the dDCO.	
2.5.1.3	The Applicant	Article 2: Interpretation: Noise sensitive receptors: Following the response to ExA's Written Questions [REP2-021, Q5.3.12], the Applicant to explain why noise sensitive receptors (NSR) should not be defined in Article 2 and included in Requirement 27.	The Applicant has incorporated the definition of 'noise sensitive location' into Article 2 of the dDCO submitted at Deadline 4 [REP4-004].	
2.5.1.4	The Applicant	Article 2: Interpretation (in relation to onshore decommissioning plan):  Review whether onshore decommissioning plan [currently defined as a plan to decommission Work No. 4B to Work No. 12B] should be amended for clarification, because 4B is defined as work between MHWS and MLWS and is therefore 'offshore' in relation to other definitions; and because landfall cable ducts are now proposed to extend into Work 4A to about 1km. seaward of MLWS.	The Applicant agrees and has amended the definition of 'onshore decommissioning plan' to read as follows:  "onshore decommissioning plan" means a plan to decommission Work No.  4C to Work No. 12B which includes a programme within which any works of decommissioning must be undertaken;  This is included in the dDCO submitted at Deadline 5.	
2.5.1.5	The Applicant	Article 2: Interpretation: Onshore 'phase' and 'stage':  1. The ExA considers that the explanation given for onshore phase by the Applicant [REP4-019] adds to clarity. Would it be helpful for a brief description to be provided in a secured document, but not the DCO itself – eg the OCoCP?  2. The explanation of onshore stage seems less clear cut, as it appears an onshore stage could be geographical or temporal. For this reason, do parties consider there would be any benefit in setting this out in a definition, such as that in the Richborough Connection Project made Development Consent Order under the interpretation for Requirements? This would read as "stage' means a defined stage of the authorised development, the extent of which is shown in a scheme submitted to and approved by the relevant planning authority pursuant to Requirement 15"  3. The ExA considers that the DAS would be relevant to all three districts [REP4-019, Table 4] for example for link boxes.  The ExA agrees that "it is likely that this would need to be refined further based on the work elements and dependent on contractor appointment and approach". [REP4-019, para 14]. It is this point, that the ExA raised previously, and considers a process to allow	1. The OCoCP has been updated to include the description of the phases as detailed in the Clarification Note [REP4-019] and has been submitted at Deadline 5 [Document Reference 8.1, Version 3).  2. The OCoCP has been updated to include the description of the stages as detailed in the Clarification Note [REP4-019]. The Applicant is content to include a definition in the dDCO as follows:  'stage' means a defined stage of the authorised development, as described in a scheme submitted to the relevant planning authority pursuant to Requirement 15.  The Applicant considers that it is not appropriate for the scheme to be subject to the approval of the relevant planning authorities given that the stages will be linked to the final design and the procurement strategy for the appointment of contractors.	





PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Number		greater flexibility in terms of sequential submissions for post-consent approvals for stages defined under R15 might be helpful.  4. Are the post-consent discharging local authorities content with the way in which all matters pertaining to one stage (potentially district-wide except for substation and landfall) and all requirements (Schedule 16 1.(1)) would be submitted and need approval within the specified 8 week time period prior to works being able to be commenced?  5. Do parties consider that further clarification under R15, that enabled the contractor to submit proposals for partial approvals of stages be helpful?	information which is relevant to them. However, this will be determined post consent.  The Applicant will look to include flexibility into the stages to account for any potential temporal elements when the scheme detailing the stages is submitted under dDCO Requirement 15. This will allow for sequential post-consent approvals for stages if required. For example, separate stages may be defined for the duct installation (stage x) and cable pulling (stage y) in the different districts to reflect the different timings and allow sequential post-consent discharge documents. However, if separate documents are not required then a document will be drafted to discharge both stages (for x and y).  4 and 5. Notwithstanding the above the Applicant considers that it may be helpful to insert flexibility to allow for the sequential submission of post consent approvals/ partial discharges within stages for the onshore transmission works. The Applicant will consider potential drafting for this within Requirement 15.	
2.5.1.5	Norfolk County Council	Article 2: Interpretation: Onshore 'phase' and 'stage':  1. The ExA considers that the explanation given for onshore phase by the Applicant [REP4-019] adds to clarity. Would it be helpful for a brief description to be provided in a secured document, but not the DCO itself – eg the OCOCP?  2. The explanation of onshore stage seems less clear cut, as it appears an onshore stage could be geographical or temporal. For this reason, do parties consider there would be any benefit in setting this out in a definition, such as that in the Richborough Connection Project made Development Consent Order under the interpretation for Requirements? This would read as "stage' means a defined stage of the authorised development, the extent of which is shown in a scheme submitted to and approved by the relevant planning authority pursuant to Requirement 15"  3. The ExA considers that the DAS would be relevant to all three districts [REP4-019, Table 4] for example for link boxes.  The ExA agrees that "it is likely that this would need to be refined further based on the work elements and dependent on contractor appointment and approach". [REP4-019, para 14]. It is this point, that the ExA raised previously, and considers a process to allow greater flexibility in terms of sequential submissions for post-consent approvals for stages defined under R15 might be helpful.  4. Are the post-consent discharging local authorities content with the way in which all matters pertaining to one stage (potentially district-wide except for substation and landfall) and all requirements (Schedule 16 1.(1)) would be submitted and need approval within the specified 8 week time period prior to works being able to be commenced?  5. Do parties consider that further clarification under R15, that enabled the contractor to submit proposals for partial approvals of stages be helpful?	The County Council welcomes as much clarity as possible relating to the definition of terms in the DCO. 4. The specified 8 week approval time period will be tight for the County Council but is something that can be worked to. The County Council would note that under the SLA our Natural environment team are going to be doing a lot of work to assist the districts in discharging requirements but will not be recognised as formal consultees. The County Council suggests that the 20 day and 42 day deadlines for requesting further information in S2 of Schedule 16 is removed or loosened to ensure the relevant information required for discharging requirements is provided. If information is not provided within this tight timescale the only other option is to refuse the application and go into an appeal. This concern was previously raised by the County Council in our response to written questions for deadline 2 (see REP2-084 Q5.7.1).	The OCoCP [REP5-045] submitted at Deadline 5 has been updated to include the description of the phases and stages as detailed in the Clarification Note.  The Applicant considers that the time periods for discharge are proportionate and needed in order to unlock nationally significant renewable energy infrastructure projects. In any event, the Applicant notes that Schedule 16 of the dDCO [REP5-004] provides an element of flexibility for both parties to agree an extension of time (paragraph 1(3)(c)).
2.5.1.5	North Norfolk District Council	Article 2: Interpretation: Onshore 'phase' and 'stage':  1. The ExA considers that the explanation given for onshore phase by the Applicant [REP4-019] adds to clarity. Would it be helpful for a	1. NNDC considers REP4-019 is helpful and aids clarity regarding both 'stage' and 'phase'. NNDC agrees with the ExA proposal to secure a brief description within the OCoCP.	The OCoCP [REP5-045] submitted at Deadline 5 has been updated to include the description of the phases and stages at detailed in the Clarification Note.





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PINS Question	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
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Number		brief description to be provided in a secured document, but not the DCO itself – eg the OCoCP?  2. The explanation of onshore stage seems less clear cut, as it appears an onshore stage could be geographical or temporal. For this reason, do parties consider there would be any benefit in setting this out in a definition, such as that in the Richborough Connection Project made Development Consent Order under the interpretation for Requirements? This would read as "stage' means a defined stage of the authorised development, the extent of which is shown in a scheme submitted to and approved by the relevant planning authority pursuant to Requirement 15"  3. The ExA considers that the DAS would be relevant to all three districts [REP4-019, Table 4] for example for link boxes.  The ExA agrees that "it is likely that this would need to be refined further based on the work elements and dependent on contractor appointment and approach". [REP4-019, para 14]. It is this point, that the ExA raised previously, and considers a process to allow greater flexibility in terms of sequential submissions for post-consent approvals for stages defined under R15 might be helpful.  4. Are the post-consent discharging local authorities content with the way in which all matters pertaining to one stage (potentially district-wide except for substation and landfall) and all requirements (Schedule 16 1.(1)) would be submitted and need approval within the specified 8 week time period prior to works being able to be commenced?  5. Do parties consider that further clarification under R15, that enabled the contractor to submit proposals for partial approvals of stages be helpful?	and specify page numbers so as to avoid wasted time? It is assumed that the ExA is actually referring to Schedule 3 'interpretations' on page 43 within the Richborough Connection Project made Development Consent Order and not that under Article 2 'interpretation' on page 7. It is assumed that the proposed wording defining stage for Boreas would go in to the interpretations section across pages 5-11 of the Boreas draft DCO (Version 4)? If so, NNDC would have no objection to its inclusion but question whether this additional definition really adds anything to clarify what a stage is any more that was is required under Requirement 15? In many ways, what would be more helpful for the relevant planning authorities is for Requirement 15 setting out Phases and Stages to happen as early as possible (once contractors are appointed for the project) and for there to be a project timetable submitted which considers when Requirement discharges are expected to be submitted and when works are envisaged to take place for each phase/stage. This will allow relevant planning authorities to 'gear-up' for expected requirement discharge processes, brief politicians at a local level and help deliver better outcomes. It is suggested that Requirement 15 be amended after paragraph (4) to read:  (5) The written scheme required under paragraph (4) shall also include a timetable for the expected submission of information to discharge relevant Requirements associated with each stages of the onshore transmission works together with an indication as to when each stage is expected to commence and complete. (6) The written scheme must be implemented as notified under paragraphs (4) and (5).  3. Not sure what question the ExA is asking?  4. Not a problem subject to suggested changes to Requirement 15 set out above to secure an expected timetable.  5. Yes, see answers to 4) and 2). However, NNDC are keen to avoid 'bitty' and 'disjointed' submissions which add to cost/time of discharge of Requirements. Applicant needs to clarify how they think the	As detailed in the OCoCP [REP5-045] detail and number of stages only be finalised once contractors have been appointed and have determined the detailed construction process.  Details of the stages will be submitted to the local planning authorities as required by dDCO Requirement 15 and the Applicant will engage with them to agree an approach to discharging requirements.  In relation to the Requirement 15 drafting suggestions, the Applicant refers NNDC to the Applicant's response to FWQ 2.5.1.5 submitted at Deadline 5 [REP5-045]. In addition, the Applicant does not consider that Requirements in the dDCO are the appropriate place to set out the detail and timetable associated with the discharge process. The Applicant considers that programmes for submission and timetables for discharge are better dealt with in the PPA (and the Applicant refers NNDC to response to FWQ 2.5.7.1 in this respect).
n/a	The Applicant	Article 7: Application and modification of legislative provisions: See below question in Section Q2.15 Water Resources and Flood Risk.	The Applicant notes this and has responded under Section 2.4	
2.5.1.6	The Applicant	Article 16: Authority to survey and investigate land: Further to the Interested Parties Response to NFU's comments [REP4-011] would parties be content with an addition which included landowners being given an estimate of how long the surveying would be likely to take, and an indication of what equipment would be likely to be used?	The Applicant's position remains as set out in the response to Q5.1.7 [REP4-011]. The Applicant will, however, consider any novel suggestions put forward by the NFU in response to this question.	
2.5.1.6	National Farmers Union	Article 16: Authority to survey and investigate land: Further to the Interested Parties Response to NFU's comments [REP4-011] would parties be content with an addition which included landowners being given an estimate of how long the surveying would be likely to take, and an indication of what equipment would be likely to be used?	The NFU as requested under response to first written questions would like to see the following wording included in this Article as was requested:  • A new paragraph (3) The notice required under paragraph (2) must indicate the nature of the survey or investigation that the undertaker intends to carry out.  • Further to highlight any equipment to be used for the survey, an estimate of how long the surveys are expected to take. As stated above the NFU has	As the Applicant explains in the Applicant's response to FWQ2.5.1.6 above [REP5-045], the Applicant's position remains as set out in the response to Q5.1.7 [REP4-011].





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			only asked for an estimate of how long the surveys would take so this wording is acceptable. It is not acceptable that Vattenfall only provide an indication of what equipment is likely to be used. The NFU has now agreed this wording within two other DCO applications under the Article covering Authority to Survey. Due to the amount of surveys that take place it is paramount that landowners know what surveys are being carried out, who is on their land and for how long. The NFU would still like boreholes to be added in if they are to be carried out. A borehole is not a trial pit.	
2.5.1.7	National Farmers	Article 26: Temporary Use of Land:	The request by the NFU that all DCOs going forward should give 28 days	The Applicant refers the NFU to its response to FWQ2.5.1.8 submitted at
2.3.1.7	Union	NFU to set out why on this particular project it considers that the proposed 14 day notice period should be extended to 28 days for temporary possession to survey and investigate the land onshore.	notice for temporary possession is not for surveying purposes but to cover working areas and compounds as an example. As stated before taking land for temporary possession and only giving 14 days notice has become an issue on other infrastructure schemes and as stated 28 days notice has now been agreed on two DCO application by Highways England for the A30 Chiverton to Carland Cross and A303 Stonehenge Scheme. Therefore the NFU would like to see the notice period at paragraph (2) of Article 26 changed to 28 days. The NFU understands that the relevant provision under the Neighbourhood Planning Act 2017 is not inforce but these are powers to be agreed under a standalone DCO consent. As stated above this is now becoming the standard practice.	Deadline 5, as outlined below [REP5-045].
2.5.1.8	The Applicant	Article 26: Temporary Use of Land:	The relevant provisions (sections 18 to 23) of the Neighbourhood Planning	
		Provide further justification beyond what is stated at Deadline 4, as to why 14 days is the preferred notice period.	Act 2017 (for this question only, the Act) are not yet in force and it is unclear whether or when they will be brought into force, and whether further regulations will be introduced to provide more detail on the operation of the temporary possession regime. As the Act is not yet in force, the Applicant is of the view that it is not currently possible to understand or reflect accurately the temporary possession provisions as intended by Parliament in respect of DCOs. It is not yet known whether the provisions will apply to DCOs or whether there will be any transitional arrangements. The Applicant has therefore applied the 'tried and tested' temporary possession regime that has been included in numerous DCOs to date, and is well understood by practitioners, agents and contractors. Similar provisions were included in the Silvertown Tunnel Order 2018 (article 3(1)(p) and article 29), the Eggborough Gas Fired Generating Station Order 2018 (article 26(12)) and the A19/ A184 Testo's Junction Alteration Development Consent Order 2018 (article 2(7) and article 29).  In contrast to the HS2, A30 Chiverton to Carland Cross and A303 Stonehenge Scheme projects cited by the National Farmers' Union, there are no residential properties within the land identified as subject to compulsory acquisition powers under the dDCO, and the Applicant considers that a 14 day notice period as set out in Article 26 of the dDCO remains appropriate for this project.	
2.5.1.8	The Applicant	Article 26: Temporary Use of Land: Provide further justification beyond what is stated at Deadline 4, as to why 14 days is the preferred notice period.	The relevant provisions (sections 18 to 23) of the Neighbourhood Planning Act 2017 (for this question only, the Act) are not yet in force and it is unclear whether or when they will be brought into force, and whether further regulations will be introduced to provide more detail on the operation of the temporary possession regime. As the Act is not yet in force, the Applicant is of the view that it is not currently possible to understand or reflect accurately the temporary possession provisions as intended by Parliament in respect of DCOs. It is not yet known whether the provisions will apply to DCOs or whether there will be any transitional arrangements. The Applicant has therefore applied the 'tried and tested' temporary	





PINS Question	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
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			possession regime that has been included in numerous DCOs to date, and is well understood by practitioners, agents and contractors. Similar provisions were included in the Silvertown Tunnel Order 2018 (article 3(1)(p) and article 29), the Eggborough Gas Fired Generating Station Order 2018 (article 26(12)) and the A19/ A184 Testo's Junction Alteration Development Consent Order 2018 (article 2(7) and article 29).	
			In contrast to the HS2, A30 Chiverton to Carland Cross and A303 Stonehenge Scheme projects cited by the National Farmers' Union, there are no residential properties within the land identified as subject to	
			compulsory acquisition powers under the dDCO, and the Applicant considers that a 14 day notice period as set out in Article 26 of the dDCO remains appropriate for this project.	
2.5.1.9	The Applicant	Article 37: Certification of Plans:  The ExA notes the Interested Parties Response in its Written Summary of Oral Case submitted at the DCO ISH [REP1-041] to its point regarding the need for ensuring the final DCO relates to updated documents. The Guide [REP3-002] as mentioned, captures version updates on a deadline by deadline basis, which includes many documents which would not be certified. The ExA considers there is a need to capture the versions of the documents and plans to be certified, in a document which is itself certified, so that future users (such as post consenting discharging authorities) can readily ensure that they are using the right version of a document. [REP1-041] also states that the Applicant will submit an update to the Note on Requirements and Conditions in the Development Consent Order [APP-022] at the end of the Examination to capture the latest (and final draft) version of each relevant plan or document. Including this as the overall reference could also benefit from the diagrammatic representations of the relationships between plans.  1. Clarity is requested about the level of detail the Applicant is considering in its updating of [APP-022]. The ExA considers that all documents or plans would need their versions citing.  2. The Applicant to set out how it proposes to ensure that all documents which were updated could be captured in its updating process and to comment on the desirability of this document [APP-022] being certified.  3. Following on from the Applicant's position regarding the fixed point in time assessment provided by the ES and its position that the "relevant parameters consented are set out in the DCO/DML itself, and that is what should be relied upon post consent" [REP4-009, No.1], the ExA considers that the Schedule of Mitigation, which provides the link between the ES and the DCO/DML should be certified. The Applicant is invited to comment.	1. The Applicant intends to include a further Annex within the Note on Requirements which will include a table with columns for (1) the document, (2) the document reference number, (3) the final version number, and (4) the stage or deadline in which the document was submitted to the Examination.  2. As the Applicant explains in response to WQ 2.5.1.1 above, the Applicant proposes to update the Note on Requirements at the end of the Examination to capture the necessary examination documents and to make clear the latest version. The Applicant does not consider that the Note on Requirements should be a certified document. However, the Applicant does propose to capture the information within a new Schedule to the dDCO.  3. The Applicant refers the ExA to its response to Q2.5.1.2.	
2.5.1.9	Marine Management Organisation	above.  Article 37: Certification of Plans:  The ExA notes the Interested Parties Response in its Written Summary of Oral Case submitted at the DCO ISH [REP1-041] to its point regarding the need for ensuring the final DCO relates to updated documents. The Guide [REP3-002] as mentioned, captures version updates on a deadline by deadline basis, which includes many documents which would not be certified. The ExA considers	authorities) can readily ensure that they are using the right version of a document.	All of the certified plans - together with the dDCO - capture the parameters and mitigation being taken forward for the authorised project, which is within the worst case assessment. The Applicant does not therefore consider it necessary to create a separate document to show the changes to ES chapters from when the ES was completed.





- Immuning section	y Together			
PINS Question	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Number		there is a need to capture the versions of the documents and plans to be certified, in a document which is itself certified, so that future users (such as post consenting discharging authorities) can readily ensure that they are using the right version of a document. [REP1-041] also states that the Applicant will submit an update to the Note on Requirements and Conditions in the Development Consent Order [APP-022] at the end of the Examination to capture the latest (and final draft) version of each relevant plan or document. Including this as the overall reference could also benefit from the diagrammatic representations of the relationships between plans.  1. Clarity is requested about the level of detail the Applicant is considering in its updating of [APP-022]. The ExA considers that all documents or plans would need their versions citing.  2. The Applicant to set out how it proposes to ensure that all documents which were updated could be captured in its updating process and to comment on the desirability of this document [APP-022] being certified.  3. Following on from the Applicant's position regarding the fixed point in time assessment provided by the ES and its position that the "relevant parameters consented are set out in the DCO/DML itself, and that is what should be relied upon post consent" [REP4-009, No.1], the ExA considers that the Schedule of Mitigation, which provides the link between the ES and the DCO/DML should be certified. The Applicant is invited to comment.  4. Views are requested from discharging authorities on the points	The MMO agrees in principle that rather than updating the ES one or more certified documents could show the changes to ES chapters from when the ES was completed.  The MMO request a version of this document prior to Deadline 7 of Examination to review and provide further comments.	In addition, the Applicant refers the MMO to its response to FWQ2.5.1.9 submitted at Deadline 5 [REP5-045] which explains that the Applicant will include a further Annex within the Note on Requirements to outline each relevant application/examination document and its final version number. The Applicant has also included a new Schedule 18 within the dDCO [REP5-004] to provide a more clear and transparent list of documents to be certified.
2.5.1.9	Natural England	Article 37: Certification of Plans:  The ExA notes the Interested Parties Response in its Written Summary of Oral Case submitted at the DCO ISH [REP1-041] to its point regarding the need for ensuring the final DCO relates to updated documents. The Guide [REP3-002] as mentioned, captures version updates on a deadline by deadline basis, which includes many documents which would not be certified. The ExA considers there is a need to capture the versions of the documents and plans to be certified, in a document which is itself certified, so that future users (such as post consenting discharging authorities) can readily ensure that they are using the right version of a document. [REP1-041] also states that the Applicant will submit an update to the Note on Requirements and Conditions in the Development Consent Order [APP-022] at the end of the Examination to capture the latest (and final draft) version of each relevant plan or document. Including this as the overall reference could also benefit from the diagrammatic representations of the relationships between plans.  1. Clarity is requested about the level of detail the Applicant is considering in its updating of [APP-022]. The ExA considers that all documents or plans would need their versions citing.  2. The Applicant to set out how it proposes to ensure that all documents which were updated could be captured in its updating process and to comment on the desirability of this document [APP-022] being certified.  3. Following on from the Applicant's position regarding the fixed point in time assessment provided by the ES and its position that the "relevant parameters consented are set out in the DCO/DML itself,	captured within the DCO/DML not all changes are. For example minimum/maximum turbine capacity is not captured; however, the Applicant has proposed removal of several smaller turbine sizes from construction. A change to the DCO/DML would be required to capture details or they may be recorded within the Plan of Plans.	The Applicant has revised the maximum number of turbines from 180 to 158 and this is secured within the dDCO at Schedule 1 Part 1 (Work No 1(a)), Schedule 1 Part 3, Requirement 3(1), Paragraph 2(1)(a) Part 3 of the Generation DMLs (Schedule 9-10), and Condition 8(1)(b) Part 4 of the Generation DMLs (Schedule 9-10) of the dDCO submitted at Deadline 5 [REP5-004].  The maximum export capacity of 1,800MW is also secured within the dDCO at Schedule 1 Part 1 (Work No 1(a)), Paragraph 2(1)(a) Part 3 of the Generation DMLs (Schedule 9-10), and Condition 8(1)(a) Part 4 of the Generation DMLs (Schedule 9-10).  The project is fundamentally defined by the maximum 1,800 MW export capacity together with the maximum number of turbines. It is not, therefore, necessary to state the minimum/maximum turbine capacity for each wind turbine generator.





PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
		and that is what should be relied upon post consent" [REP4-009, No.1], the ExA considers that the Schedule of Mitigation, which provides the link between the ES and the DCO/DML should be certified. The Applicant is invited to comment.  4. Views are requested from discharging authorities on the points above.		
2.5.1.9	North Norfolk District Council	Article 37: Certification of Plans:  The ExA notes the Interested Parties Response in its Written Summary of Oral Case submitted at the DCO ISH [REP1-041] to its point regarding the need for ensuring the final DCO relates to updated documents. The Guide [REP3-002] as mentioned, captures version updates on a deadline by deadline basis, which includes many documents which would not be certified. The ExA considers there is a need to capture the versions of the documents and plans to be certified, in a document which is itself certified, so that future users (such as post consenting discharging authorities) can readily ensure that they are using the right version of a document. [REP1-041] also states that the Applicant will submit an update to the Note on Requirements and Conditions in the Development Consent Order [APP-022] at the end of the Examination to capture the latest (and final draft) version of each relevant plan or document. Including this as the overall reference could also benefit from the diagrammatic representations of the relationships between plans.  1. Clarity is requested about the level of detail the Applicant is considering in its updating of [APP-022]. The ExA considers that all documents or plans would need their versions citing.  2. The Applicant to set out how it proposes to ensure that all documents which were updated could be captured in its updating process and to comment on the desirability of this document [APP-022] being certified.  3. Following on from the Applicant's position regarding the fixed point in time assessment provided by the ES and its position that the "relevant parameters consented are set out in the DCO/DML itself, and that is what should be relied upon post consent" [REP4-009, No.1], the ExA considers that the Schedule of Mitigation, which provides the link between the ES and the DCO/DML should be certified. The Applicant is invited to comment.  4. Views are requested from discharging authorities on the points above.	1-3 – Applicant to respond.  4. NNDC agree that it is important for all parties to readily and easily be able to access all relevant plans and documents, especially at Requirement discharge stage. NNDC welcomes the approach to document management used by PINS for NSIP projects with an Examination Library. NNDC would envisage a similar approach being used to bring together all the final versions of documents that form the basis of the final DCO decision and which could include the Note on Requirements and Conditions in the Development Consent Order. This would at least allow a good and consistent starting place at the point of DCO consent. However, Requirements discharge will fall to each separate relevant authority to manage within their existing systems and procedures and experience suggests that this is where divergence to procedures and practice is likely. Perhaps the Applicant can explain how they intend to refer to existing and still relevant documents when discharging Requirements and include sets of up to date lists of documents they are relying on for each stage of the projects so that all parties know the basis for works being undertaken. This requires robust document management by all parties. Could this be secured under further amendments to Requirement 15 in terms of holding an up to date document library relevant to each stage of the onshore transmission works.	The Requirements at Part 3 of Schedule 1 of the dDCO secure the outline plans and make clear that the final plan must be in accordance with the outline plan. For example, Requirement 20(1) provides that:  "No stage of the onshore transmission works may commence until for that stage a code of construction practice has been submitted to and approved by the relevant planning authority, in consultation with Norfolk County Council, the Environment Agency and the relevant statutory nature conservation body."  Accordingly, prior to commencement of each stage of the project, a final plan will have to be submitted in accordance with the Requirements at Part 3 of Schedule 1. Following approval, these final plans will form the suite of documents to be relied upon for that particular stage of the project.  The Applicant has also amended the dDCO at Deadline 5 [REP5-004] to include a new Schedule 18 which will capture the latest versions of the control plans and documents considered to form part of the environmental statement at the end of the examination.  The Applicant does not, therefore, consider that Requirement 15 needs amending further in this regard.
2.5.1.9	Norfolk County Council	Article 37: Certification of Plans:  The ExA notes the Interested Parties Response in its Written Summary of Oral Case submitted at the DCO ISH [REP1-041] to its point regarding the need for ensuring the final DCO relates to updated documents. The Guide [REP3-002] as mentioned, captures version updates on a deadline by deadline basis, which includes many documents which would not be certified. The ExA considers there is a need to capture the versions of the documents and plans to be certified, in a document which is itself certified, so that future users (such as post consenting discharging authorities) can readily ensure that they are using the right version of a document. [REP1-041] also states that the Applicant will submit an update to the Note on Requirements and Conditions in the Development Consent Order [APP-022] at the end of the Examination to capture the latest (and	The County Council welcomes the suggestion for a certified set of plans and documents, which would assist in the discharging of the DCO.	The Applicant refers NCC to its response to FWQ2.5.1.9 submitted at Deadline 5 [REP5-045].





PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
		final draft) version of each relevant plan or document. Including this as the overall reference could also benefit from the diagrammatic representations of the relationships between plans.  1. Clarity is requested about the level of detail the Applicant is considering in its updating of [APP-022]. The ExA considers that all documents or plans would need their versions citing.  2. The Applicant to set out how it proposes to ensure that all documents which were updated could be captured in its updating process and to comment on the desirability of this document [APP-022] being certified.  3. Following on from the Applicant's position regarding the fixed point in time assessment provided by the ES and its position that the "relevant parameters consented are set out in the DCO/DML itself, and that is what should be relied upon post consent" [REP4-009, No.1], the ExA considers that the Schedule of Mitigation, which provides the link between the ES and the DCO/DML should be certified. The Applicant is invited to comment.  4. Views are requested from discharging authorities on the points above.		

#### 5.2 SCHEDULE 1 PART 1: Authorised Development

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.5.2.1	The Applicant	Parameters for individual structures:  Should parameters for individual structures be stated explicitly in the dDCO because of ongoing concerns regarding the clarity and enforceability of plans; noting the explanation given at Deadline 2 that the EIA parameters in the dDCO do not match those in the ES because some of the infrastructure secured within the DMLs crosses between different geographical areas:  • offshore disposal volumes for either total disposal or drill arisings;  • volumes for cable protection;  • volumes and areas of scour protection.	The Applicant included revisions at Deadline 4 within the dDCO [REP4-004] to cross-refer to the appropriate table in the outline scour protection and cable protection plan. This makes clear that the individual distributions of scour protection and cable protection must not exceed the area and volumes set out within this document (see Requirement 5, Requirement 11, Condition 3 and 8 (Schedules $9-10$ ), Condition 2 and 8 (Schedule $11-12$ ), and Condition 2 (Schedule $13$ )). The Applicant has since discussed this with the MMO and the Applicant understands that this position is agreed between the parties.	
2.5.2.1	Marine Management Organisation	Parameters for individual structures: Should parameters for individual structures be stated explicitly in the dDCO because of ongoing concerns regarding the clarity and enforceability of plans; noting the explanation given at Deadline 2 that the EIA parameters in the dDCO do not match those in the ES because some of the infrastructure secured within the DMLs crosses between different geographical areas:  • offshore disposal volumes for either total disposal or drill arisings;  • volumes for cable protection;  • volumes and areas of scour protection.	The MMO believes that individual structures should be on the face of the licence.  Further discussions with the applicant have led to an update to the DCO/DML below provided at Deadline 4 (REP4-004):  - Schedule 1, Part 3, Requirements 4(5)(4) and 11  - Schedule 9 & 10 Part 4 Condition 3 and Condition 8(1)(g)  - Schedule 11 & 12 Part 4 Condition 2  These include the reference to two tables within the Outline Scour and Cable Protection Plan that set out the parameters for individual structures.  The MMO request that Schedule 11 and 12 Condition 3(1)(b) is updated with similar wording to Schedule 9 Condition 8(1)(g).  Once this is updated the MMO, on this occasion only, are content that this secures the parameters for individual structures.	Condition 3(1)(a) and (b) of Schedule 11 and 12 read as follows:  "3.—(1) Taken together with works authorised and proposed to be constructed pursuant to licence 2 (transmission)—  (a) the total number of offshore electrical platforms forming part of the authorised scheme must not exceed two;  (b) the total amount of scour protection for the offshore electrical platforms forming part of the authorised scheme must not exceed 20,000m2 and 100,000 m3;"  Given that there are only two offshore electrical platforms, the Applicant considers that this position is different to the breakdown of scour protection for wind turbine generators (in which there are 158 turbines). The Applicant does not, therefore, consider it is wholly necessary to cross refer to the outline scour protection and cable protection plan to show the breakdown of the individual figures for the offshore electrical





PINS Question	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Number				
				platforms. Notwithstanding this, the Applicant is content to agree with the MMO's request and add the following wording (in red) to Condition 3(1)(b) of Schedule 11 and 12:
				"the total amount of scour protection for the offshore electrical platforms forming part of the authorised scheme must not exceed 20,000m² and 100,000 m³ and must not exceed the distributed quantities of scour protection set out in Table 1 of the outline scour protection and cable protection plan."
				The Applicant will include this wording in the next draft of the DCO.
2.5.2.1	Natural England	Parameters for individual structures: Should parameters for individual structures be stated explicitly in the dDCO because of ongoing concerns regarding the clarity and enforceability of plans; noting the explanation given at Deadline 2 that the EIA parameters in the dDCO do not match those in the ES because some of the infrastructure secured within the DMLs crosses between different geographical areas:  • offshore disposal volumes for either total disposal or drill arisings;  • volumes for cable protection;  • volumes and areas of scour protection.	We would welcome the maximum of each structure being included in the DCO to ensure clarity on the WCS situation and provide clarity during later phases.  The Applicant has proposed that the Plan of Plans may be a certified document and could include this information to allow certainty post consent. Natural England agrees with this approach in principle, though we need to see the document in context with updates to the DCO/DML to confirm this solution is appropriate.  With regard to cable and scour protection Natural England is content that the amendments to Requirement 5(4), and condition 3 and 8 in schedules 9 and 10 and Condition 2 in schedules 11-13 ensure these parameters stay within the assessments.	The Applicant notes this.
2.5.2.2	NSAG	Work No. 10A: At the Onshore Matters ISH on Tuesday 21 January 2020 [EV6-001 to EV6-004] views were sought on whether Work No. 10A should be controlled further and if so in what way. This referred to the Secretary of State's request for comment in the Norfolk Vanguard letter as set out in paragraph 18 [REP3-012]. In both cases, Work No. 10A comprises a proposed extension to the National Grid substation at Necton. The Applicant's explanation of Work No. 10A given at the ISH can be found in its written summary of oral record [REP4-013, Item 4b)iii].  Any IP who was not present at the ISH who wishes to comment is invited to do so in response here.	The National Grid Extensions are very worrying because they will be seen by everyone in the vicinity, both public and residents and yet we are in danger of the developer being able to do just what they want in the DAS which will be very detrimental as these constructions tend to be underestimated, while people concentrate on the obvious substations. We would like to add the wording, "The datum level for the National Grid south-east extension should be 65 metres at the point it leaves the existing National Grid substation. After that the ground level drops sharply and the extension should not be any more than 13m above the natural ground level as it drops. The ground level must not be raised. (At the ASI the Applicant's representative, Rob Driver, told us that it is not a difficult job to erect the extension on sloping ground.) To the north-west the National Grid extension will use the same datum level as the existing Dudgeon/National Grid substation. And the north-west extension is limited to 13 metres above the existing Dudgeon substation/National Grid substation datum. The new pylon should be the National Grid T design. The replaced pylon should be the National Grid T design. 10 metre high earth banks should be placed along the 65 metre contour line, so that it sits between Necton and Ivy Todd, and the National Grid substations. This earth bank to be planted with trees." Illustration of bank contour line attached. Image of T pylon attached.	been the basis of the landscape and visual assessment.  The new National Grid tower will be required to be compatible with the existing overhead line circuit which may preclude the use of alternative
2.5.2.2	Necton Parish Council	Work No. 10A: At the Onshore Matters ISH on Tuesday 21 January 2020 [EV6-001 to EV6-004] views were sought on whether Work No. 10A should be controlled further and if so in what way. This referred to the Secretary of State's request for comment in the Norfolk Vanguard letter as set out in paragraph 18 [REP3-012]. In both cases, Work No. 10A comprises a proposed extension to the National Grid	Necton Parish Council are concerned about control of the National Grid extensions. We would like the following words to be included in the DAS: "The datum for the National Grid extensions will be set as follows:  1. 62 metres for the south east extension. Alternatively, the installation can follow the slope of the ground but cannot exceed 13 metres above ground level at any point.	The Applicant notes this response and also refers Necton Parish Council to the Applicant's response to NSAG under FWQ 2.5.2.2 above.





PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
		substation at Necton. The Applicant's explanation of Work No. 10A given at the ISH can be found in its written summary of oral record [REP4-013, Item 4b)iii].  Any IP who was not present at the ISH who wishes to comment is invited to do so in response here.	2. The north west extension will use the same datum level as the Dudgeon substation. The height of the National Grid extensions will be limited to 13 metres above the applicable datum level." We would prefer both the pylons to be of the National Grid 'T' design. To screen the new installation (recognising that the new pylon cannot be screened) we would like 10 metre earth banks to be placed along the 65 metre contour line between Necton and the substations. The bank should be run between 20 metres away from the A47 and the sugar beet pad track on Necton Farm that runs from Ivy Tod road and is marked as a double dotted line on the ordinance survey map. This earth bank to be planted with trees.	

#### 5.3 SCHEDULE 1 PART 3: Requirements

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.5.3.1	The Applicant	Requirement 16(4) Design and Access Statement; Link boxes: The ExA notes the commitment by the Applicant to include the wording from [AS-024, table 2, row 3] in the updated Design and Access Statement (DAS). 1. Submit the updated Design and Access Statement at Deadline 5; 2. The Applicant to advise whether this point also be included in the Schedule of Mitigation [REP2-006].	<ol> <li>The wording agreed with the Land Interest Group and the National Farmer's Union regarding locations of link boxes has been included in Section 5.2.1 of the updated DAS submitted at Deadline 5 [Document reference 8.3, version 3].</li> <li>The Applicant does not feel this needs to be included in the Schedule of Mitigation, as the Schedule of Mitigation is to capture mitigation identified in the Environmental Statement and this is a specific agreement captured and secured in the Deed of Easement and subsequently the DAS.</li> </ol>	
2.5.3.2	The Applicant	Requirement 16 (4):  Should Requirement 16(4) make reference to the design process and Design Guide which would be prepared for approval post consent?	As detailed within the Issue Specific Hearing 1 and 2 Action Points Tracker submitted at Deadline 2 (REP2-033), the Applicant has agreed with Breckland Council that the design parameters secured on the DCO are suitably detailed and the design process – including reference to a Design Guide - has been secured through an update to the Design and Access Statement (DAS) (REP2-007). The Applicant does therefore not consider any additional amendments to R16 are required given that the DAS incorporates the design process and any subsequent Design Guide.	
n/a	The Applicant	Requirement 16 (5) and (8):  Note questions below under Section Q2.9.	Noted.	
2.5.3.3	The Applicant	Requirement 16 (9):  Breckland Council has requested powder coating of electrical equipment in Work No. 10A to minimise any light reflection and glare shining from the new aluminium and steel [REP4-026]. 1. Is it possible to specify this? 2. If so, should it be secured in R16(9) or is such consideration of sensitive use of materials a matter for the project substation as well? If so where could this be secured?	1. and 2. Powder coating of electrical equipment cannot be secured due to technical reasons. As for other finishes, the materials used for the electrical equipment, primarily aluminium, steel and ceramics/polymers, are dictated by the electrical and structural performance characteristics required to safely and efficiently operate the equipment at 400 kV. Therefore, it is not possible to alter the appearance and finishes of the electrical equipment, or secure the finish of the equipment within Requirement 16 (9) or elsewhere.	
2.5.3.4	The Applicant	Requirement 17 Landfall Method Statement: Requirement 17 secures approval in writing by North Norfolk District Council in consultation with the relevant statutory nature conservation body prior to commencement of Works 4C, 4B and 4A. As Works 4B and 4A (as defined in the dDCO) are seaward of MHWS does the landfall method statement also need the approval in	Requirement 17 and the associated method statement, ensures that the impact of the landfall works is minimised in line with the assessment and commitments contained in the Application.  The Requirement also stipulates the need for ongoing inspection of the cables at the landfall (Work No 4C) and reporting of results to North Norfolk District Council (NNDC), in consultation with Natural England,	





PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
		writing of MMO in consultation with the relevant historic body (HBMCE) prior to commencement?	during the operation of the authorised project. In the event of cable exposure (at Work No 4C) throughout the operation of the Project, the Applicant must submit proposals to NNDC (in consultation with Natural England for remedial measures to protect the cables at the landfall.  The reason why Works No 4A and 4B are referred to within Requirement 17(1) is due to the nature of the long HDD involving and connecting Work No. 4A to Work No. 4C. It is therefore necessary to impose a precommencement restriction on Work No. 4A given that the landfall HDD connects Work No. 4C to Work No. 4A.  Notwithstanding this, the control in which Requirement 17 is seeking to provide is in relation to concerns over landfall erosion and monitoring of cables at the landfall. The Applicant therefore considers that this is within the appropriate jurisdiction of NNDC, in consultation.	
2.5.3.4	Marine Management Organisation	Requirement 17 Landfall Method Statement: Requirement 17 secures approval in writing by North Norfolk District Council in consultation with the relevant statutory nature conservation body prior to commencement of Works 4C, 4B and 4A. As Works 4B and 4A (as defined in the dDCO) are seaward of MHWS does the landfall method statement also need the approval in writing of MMO in consultation with the relevant historic body (HBMCE) prior to commencement?	As the works are described, there are no intertidal elements which require the approval of the MMO. If there were to be changes in how the HDD works are developed (i.e. a short method) or other impacts on the intertidal then the MMO would wish to be consulted on any variation to this effect.	The Applicant notes this.
2.5.3.5	The Applicant	Requirements 18 and 24:  The responses to Q9.3.2, Q9.3.3, Q9.3.4 and Q9.3.5 raise uncertainties regarding how the hedgerow replacement planting would be approved and secured. The response to Q9.3.4 says it would be via the Hedgerow Mitigation Plan which is a part of the Ecological Management Plan (EMP), secured via R24 and the response to Q9.3.5 states it would be via R18. The Schedule of Mitigation [REP2-006] shows R18, R19 and R24.  1. The Applicant to provide clarity on what it considers would be approved by which plan.  2. The ExA considers that clarity on this needs to be given in the dDCO, Outline plan(s) and the Schedule of Mitigation.	1. Hedgerow replacement planting is secured through Requirements 18, 19 and 24.  Requirements 18 and 19 relate to landscape mitigation and the production of a Landscaping Management Scheme (in accordance with document 8.7 Outline Landscape and Ecological Management Strategy) which will provide details of all planting removed and the location, number, species, size and planting density of the proposed replacement planting to mitigate landscape effects.  Requirement 24 relates to ecological mitigation, which includes hedgerow planting to replace hedgerow habitat that has been removed. A Hedgerow Mitigation Plan, which will sit as part of the final Ecological Management Plan, will detail the reinstatement approach specific for replacement of hedgerow habitat and any monitoring and maintenance requirements.  As such the details of the hedgerow replacement will be captured in both the Landscape Management Scheme and the Hedgerow Mitigation Plan (part of the final Ecological Management Plan) to ensure it meets the requirements in terms of landscape mitigation and ecological mitigation as the replacement has a dual purpose. There will be collaborative working between both the landscape and ecological specialists to ensure the hedgerow replacement satisfies all requirements.  2. Text clarifying this has been added to the updated OLEMS submitted at Deadline 5, [Document 8.7, Version 3].	
2.5.3.6	The Applicant	Requirement 19: Implementation and maintenance of landscaping: The Applicant has committed to a ten-year aftercare period for trees replaced within the North Norfolk District Council (NNDC)	Whilst the Applicant acknowledges the request from North Norfolk District Council to have a ten year period of aftercare for both trees and shrubs planted in North Norfolk, due to the evidence of challenging growing conditions closer to the coast, this can only be agreed by the Applicant	





PINS  Question	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Number				
		area, set out in the SoCG [REP2-052] and the response to NNDC's LIR [REP3-011, section 13]. The Applicant therefore to amend the dDCO Requirement 19(2), the introduction to the OLEMS [REP1-021] (and any other relevant documents) for the avoidance of doubt, to reflect the ten year after-care period for trees in the NNDC area. This is referred to the Secretary of State's request for comment in the Norfolk Vanguard letter as set out in paragraph 18 [REP3-012].  1. The Applicant and NNDC to set out their positions regarding the difference in aftercare period for trees (ten years) and other plant material such as shrubs (assumed to be five years).  2. What is the proposed aftercare period for tree species planted small as hedge replacement material?  3. Are the soil conditions which justify the extended aftercare period for trees different for shrubs?	subject to landowner consent. This was included in previous versions of the OLEMS for trees, and the OLEMS submitted at Deadline 5 [Document reference 8.7, Version 3] has subsequently been updated to also refer to hedgerows.  The permanent rights that the Applicant can acquire over the land (Schedule 6 of the dDCO) do not extend to replacement planting outside of activities connected to cable maintenance. Therefore, where freehold land is not acquired (i.e. along the cable route), the Applicant will be reliant on temporary possession powers under Article 27 of the dDCO to maintain landscaping during the aftercare period. Article 27(12) of the dDCO limits the exercise of temporary powers in relation to any part of the authorised project to 5 years from the first export of electricity to the network. As such, the Applicant would not have rights or powers under the dDCO to maintain landscaping after the expiry of this 5 year period unless landowner consent is separately obtained. It is for this reason that the Applicant has only agreed to a 10 year period subject to landowner consent, and for this reason that this is appropriately secured in the OLEMS and not in the dDCO.	
2.5.3.6	North Norfolk District Council	Requirement 19: Implementation and maintenance of landscaping:  The Applicant has committed to a ten-year aftercare period for trees replaced within the North Norfolk District Council (NNDC) area, set out in the SoCG [REP2-052] and the response to NNDC's LIR [REP3-011, section 13]. The Applicant therefore to amend the dDCO Requirement 19(2), the introduction to the OLEMS [REP1-021] (and any other relevant documents) for the avoidance of doubt, to reflect the ten year after-care period for trees in the NNDC area. This is referred to the Secretary of State's request for comment in the Norfolk Vanguard letter as set out in paragraph 18 [REP3-012].  1. The Applicant and NNDC to set out their positions regarding the difference in aftercare period for trees (ten years) and other plant material such as shrubs (assumed to be five years).  2. What is the proposed aftercare period for tree species planted small as hedge replacement material?  3. Are the soil conditions which justify the extended aftercare period for trees different for shrubs?		The Applicant refers to the response provided to Q2.5.3.6.  The Applicant acknowledges the request by NNDC for a ten year aftercare period for both trees and shrubs, due to the evidence of challenging growing conditions. This can only be agreed by the Applicant subject to landowner consent, and for this reason this is appropriately secured in the OLEMS, submitted at Deadline 5 [REP-022].
2.5.3.7	The Applicant	Requirement 19: Implementation and maintenance of landscaping:  The ExA is not persuaded by the Applicant's response to Q5.3.6 provided in the written summary of Applicant's oral submission [REP1-041] regarding "agreement in writing" for replacement planting rather than "approved by". The ExA agrees there is little difference and considers that sufficient flexibility could be achieved through an approval process. The Applicant is requested to reconsider amending this wording in Requirement 19(2) such that it follows other requirements.	This wording was requested by the Norfolk Vanguard examining authority. The Applicant is, however, content to change Requirement 19(2) accordingly:  (2) Any tree or shrub planted as part of an approved landscaping management scheme that, within a period of five years after planting, is removed, dies or becomes, in the opinion of the relevant planning authority, seriously damaged or diseased must be replaced in the first available planting season with a specimen of the same species and size as that originally planted unless a different species is otherwise agreed in writing with approved by the relevant planning authority.	





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			The Applicant has included this wording in the dDCO submitted at Deadline 5.	
2.5.3.8	The Applicant	Requirement 20: Code of Construction practice (CoCP):  The Applicant confirms that it is considering further the additional wording for the CoCP proposed by NFU and not currently fully agreed [REP4-011]. What are the matters that prevent agreement over the wording to be reached in these instances, whereas agreement has been reached regarding Irrigation and Agricultural Field Drainage.	The Applicant has received further proposed wording for the OCoCP from the NFU with respect to private water supplies and soil aftercare.  With regard to the additional wording provided on private water supplies, the Applicant considers the principle agreeable but proposes to provide greater flexibility on the methods in which an adverse impact to a private water supply would be addressed.  With regard to the additional wording provided on soil aftercare, the Applicant also considers the principle agreeable but proposes to provide greater clarity on the period in which the aftercare is applicable.  The Applicant has proposed additional wording which has been presented to the NFU for consideration. An agreement on the final wording from both the NFU and the Applicant is anticipated as part of the next submission of the NFU SoCG at Deadline 6 and if agreed, will be incorporated in a future version of the OCoCP.	
2.5.3.8	National Farmers Union	Requirement 20: Code of Construction practice (CoCP): The Applicant confirms that it is considering further the additional wording for the CoCP proposed by NFU and not currently fully agreed [REP4-011]. What are the matters that prevent agreement over the wording to be reached in these instances, whereas agreement has been reached regarding Irrigation and Agricultural Field Drainage.	The NFU covered the outstanding areas at the meeting on 20th February 2020 which are Soil Aftercare and Private Water Supplies and ALOs. The wording in regard to Soil Aftercare has now been agreed in regard to the wording supplied in the SoCG as received at the meeting on 20.2.2020. Further the wording requested to cover Private Water supplies has agreed and accepted as at 20.2.2020. This wording has not yet been included in a Oultine CoCP and this will need to be confirmed.  • Agricultural Liaison Officer – wording agreed except would like to see the following wording added as a bullet point under paragraph 180 at Appendix B of the Outline CoCP. o Liaise with landowners prior to any proposed discharges to existing drains if any such discharge is necessary.  • Requirement 20: Code of Construction practice: The NFU would like to see the contact details of the ALO added to the list of details to be submitted prior to commencement.	
2.5.3.9	The Applicant	Requirement 20: Code of Construction practice (CoCP): Clarify whether there is any site preparation work that could take place precommencement, that would not be secured by Requirement 20(4). If so, set out how these works could be secured.	The Applicant does not consider that there are specific precommencement site preparation works beyond those that are already covered by the wording within Requirement 20(4) relating to "screening, fencing and site security works".  The Applicant therefore considers that the pre-commencement works are secured and, in accordance with Requirement 20(4), must be carried out in accordance with a specific plan or scheme previously approved by the relevant planning authority.	
2.5.3.1	The Applicant	Requirement 20: Code of Construction Practice: pre- commencement works: Consider either incorporating the pre-commencement plans on the onshore diagram in Note on Requirements and Conditions in the Development Consent Order [APP-022] or provide a separate	The Applicant will produce a separate diagram within Annex 1 of the Note on Requirements [APP-022] to reference the pre-commencement plans.	





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		version.		
n/a	The Applicant	Requirement 20: Code of Construction Practice:	The Applicant notes this and has responded accordingly within Section	
		See below questions in Section Q2.15 Water Resources and Flood	Q2.15.	
		Risk.		
n/a	The Applicant	Requirement 20: Code of Construction Practice:	The Applicant notes this and has responded accordingly within Section	
- /-	The Analisant	See below questions in Section Q2.16 Environmental Statement.	Q2.16.	
n/a	The Applicant	Requirement 25: Watercourse crossings:  See below questions in Section Q2.15 Water Resources and Flood	The Applicant notes this and has responded accordingly within Section Q2.15.	
		Risk.	Q2.13.	
2.5.3.2	The Applicant	Revision to drafting of Requirement 25 (3) to include "is not":	The Applicant has amended the wording of Requirement 25(3) accordingly	
		Should Requirement 25 (3) be revised to include "is not" as follows:	in the updated dDCO submitted at Deadline 5.	
		'Unless otherwise permitted under paragraph (1) all ditches,		
		watercourses, field drainage systems and culverts must be		
		maintained throughout the period of construction such that the		
		flow of water is not impaired or the drainage onto and from adjoining land is not rendered less effective.'		
2.5.3.3	The Applicant	Requirement 27: Control of noise during operational phase:	As the Applicant explains in response to WQ2.5.1.3 above, the Applicant	
2.3.3.3	The Applicant	Further to the Interested Parties Response to Q5.2.13, should the	has incorporated the definition of 'noise sensitive location' into Article 2	
		definition from the ES of noise sensitive location be incorporated in	of the dDCO submitted at Deadline 4 [REP4-004].	
		this requirement?		
2.5.3.4	The Applicant	Requirement 29: Onshore decommissioning:	The Applicant notes that this question is predominantly addressed to the	
		Are local authorities satisfied with the decision period for this	relevant planning authorities (RPAs) and the Applicant can respond	
		requirement being 8 weeks (as set out in Schedule 16) as for all other requirements?	accordingly to any points raised by the RPAs.	
		other requirements:	The Applicant considers that the Schedule 16 process should apply equally	
			to Requirement 29 as it does for the other listed Requirements. The	
			Applicant also understands that the RPAs are content with the procedure	
			at Schedule 16.	
2.5.3.4	Norfolk County	Requirement 29: Onshore decommissioning:	The specified 8 week approval time period will be tight for the County	The Applicant notes that Schedule 16 of the dDCO [REP5-004] provides an
	Council	Are local authorities satisfied with the decision period for this	Council but is something that can be worked to. The County Council would	element of flexibility for both parties to agree an extension of time
		requirement being 8 weeks (as set out in Schedule 16) as for all other requirements?	note that under the SLA our Natural environment team are going to be doing a lot of work to assist the districts in discharging requirements but	(paragraph 1(3)(c)).
		other requirements:	will not be recognised as formal consultees. The County Council suggests	
			that the 20 day and 42 day deadlines for requesting further information in	
			S2 of Schedule 16 is removed or loosened to ensure the relevant	
			information required for discharging requirements is provided. If	
			information is not provided within this tight timescale the only other	
			option is to refuse the application and go into an appeal. This concern was	
			previously raised by the County Council in our response to written questions for deadline 2 (see REP2-084 Q5.7.1).	
2.5.3.4	North Norfolk	Requirement 29: Onshore decommissioning:	1. NNDC is content with an 8-week determination period in relation to	The Applicant notes this.
	District Council	Are local authorities satisfied with the decision period for this	onshore decommissioning. Schedule 16 does afford some flexibility, for	
		requirement being 8 weeks (as set out in Schedule 16) as for all	example, under 1(3)(c) to agree, in effect, an extension of time provided	
		other requirements?	both parties are agreeable and act reasonably in agreeing to any such	
			requests.	
			If an 9 week period is considered too short to discharge Descriptions 20	
			If an 8-week period is considered too short to discharge Requirement 29 then an alternative timescale could be considered but this would require	
			additions/amendments to Schedule 16 to, in effect, mirror Article 39	
			paragraphs 1 and 2 but with the alternative timescale relevant to	
			Requirement 29. NNDC considers this change unnecessary and, in all	





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			likelihood, may never be needed for this DCO if a re-powering proposal comes forward in the future.	
2.5.3.5	The Applicant	Requirement 31: Amendments to approved details:	As the Applicant explains in its comments on NE's response [REP3-003],	
		NE states that "Natural England is content with the principle behind	the dDCO makes clear that any amendments to, or deviations from, the	
		requirement 31. However, questions if it is appropriate for non-	approved details must be in accordance with the principles set out in the	
		material changes to be made through amended plans and not through requesting a non-material change to the DCO." Provide	Environmental Statement and the relevant planning authority must be	
		further justification for the approach, indicating any divergence in	satisfied that the amendment will not give rise to any new or materially	
		wording from previous made Orders and why it is considered	different environmental effects. The changes would have to be minor in	
		essential to enable this proposed development.	scale.	
			Requirement 31 is to govern changes to previously approved details; it is	
			not a mechanism to make a change to the description of the authorised	
			development or the parameters secured but, rather, pursuant to the	
			wording within Requirement 31(1) it may be used to update or supplement	
			a previously approved plan (with the agreement of the discharging	
			authority). The Requirement is, therefore, by no means a mechanism to	
			circumvent the statutory non-material change process, which is governed	
			by a procedure controlled by the Secretary of State (under Schedule 6 to	
			the Planning Act 2008 and Part 1 of the Infrastructure Planning (Changes	
			to, and Revocation of, Development Consent Orders) Regulations 2011,	
			together with Guidance on Planning Act 2008: Guidance on Changes to	
			Development Consent Orders (December 2015)).	
			As the Applicant highlighted in response to Q5.3.13 (REP2-021), this	
			drafting follows the precedent set by other offshore wind DCOs and	
			dDCOs, namely:-	
			1.The East Anglia ONE Offshore Wind Farm Order 2014;	
			2.The East Anglia THREE Offshore Wind Farm Order 2017;	
			3.The draft Norfolk Vanguard Offshore Windfarm Order;	
			4.The draft Hornsea Three Offshore Windfarm Order;	
			5.The Rampion Offshore Wind Farm Order 2014 (Rampion);	
			6.The Dogger Bank Creyke Beck Offshore Wind Farm Order 2015 (Doggerbank); and	
			7.The principle set out in The Hornsea Two Offshore Wind Farm Order 2016 (Hornsea Two);	
			The current dDCO differs from those at 1-4 above only in the omission of the word 'immaterial' from the second sentence of Requirement 31(2):	
			'Such agreement may only be given in relation to [immaterial] changes	
			where it has been demonstrated to the satisfaction of the relevant planning	
			authority or that other person that the subject matter of the agreement	
			sought is unlikely to give rise to any materially new or materially different	
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			environmental effects from those assessed in the environmental	
			statement.'	
			The Applicant considered that the addition, or omission, of 'immaterial'	
			did not alter the meaning or principle of the Requirement and the	
			Applicant considered the wording 'immaterial' to be superfluous given that	
			it is followed by reference to [not] giving rise to 'materially new' or	
			'materially different' environmental effects.	
			In relation to Rampion, the wording (at Requirement 42 of the Rampion	
			Order) is the same as the Applicant's Requirement 31 save that the	
			Rampion drafting does not include the extra element that agreement may	
			only be given in relation to changes that do not give rise to any materially	
			new or materially different environmental effects. Requirement 42 of the	
			Rampion Order therefore reads as follows:	
			" (2) Any amendments to or variations from the approved details shall be	
			in accordance with the principles and assessments set out in the	
			environmental statement."	
			Department follows the same arisaids and includes the following at	
			Doggerbank follows the same principle and includes the following at	
			Requirement 33:	
			33.—(1) Where a Requirement requires the authorised development to be	
			carried out in accordance with details approved by the relevant planning	
			authority or another person, the approved details must be taken to include	
			any amendments that have been approved in writing by the relevant	
			planning authority or other person.	
			(2) Any amendment to or variation from the approved details must be in	
			accordance with the principles and assessments set out in the	
			environmental statement.	
			With regard to Hornsea Two (2016), amendments to approved details are	
			dealt with by the H2 Requirement 27, as set out below: -	
			'(1) Where a Requirement requires the authorised development to be	
			carried out in accordance with a plan, scheme, code or details approved by	
			the local planning authority or any other person (the "approved plan"), the	
			approved plan must be taken to include any amendments that may	
			subsequently be approved by the local planning authority or other person.	
			(2) Any amendments to the approved plan must be in accordance with the	
			principles and assessments set out in the environmental statement; and	
			approval for such amendments may be given only where it has been	
			demonstrated to the satisfaction of the local planning authority or other	
			person that the amendments are unlikely to give rise to any materially new	





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			or materially different environmental effects from those assessed in the environmental statement.	
			(3) Where the approved plan is required to be approved after consultation with another person, any amendments may be approved only after consultation with that person.'	
			The substance and principle of Hornsea Two is consistent with the Applicant's Requirement 31. Both make clear that any amendments to or deviations from the approved plan/approved details must be in accordance with the principles set out in the Environmental Statement, and that the planning authority must be satisfied that the amendment will	
			not give rise to any new or materially different environmental effects.	
			With respect to non-offshore wind DCOs, the drafting of Requirement 31 is also consistent with the principle of corresponding requirements in the following made orders: -	
			The National Grid (Richborough Connection Project)     Development Consent Order 2017 (Requirement (1)(2));	
			<ol> <li>The National Grid (Hinkley Point C Connection Project) Order 2016 (Requirement 1(2));</li> </ol>	
			3. The Northampton Gateway Rail Freight Interchange Order 2019 (Article 44(2)).	
			Each of these above orders make clear that any amendments to or deviations from the approved details must be in accordance with the	
			principles set out in the Environmental Statement, and must not give rise to any materially new or different environmental effects.	
2.5.3.6	The Applicant	Requirement 31: Amendments to approved details:	As the Applicant explains in its response to Q2.5.3.5, this Requirement is	
		NNDC recognise "Requirement 31 is to enable minor variations to the proposal (akin to a non-material amendment under Section 96A of the TCPA 1990). Without this, any deviations from the approved	not a mechanism to circumvent the statutory process set out for (non) material changes under the Planning Act 2008. The Requirement relates only to amendments of previously approved details by the relevant	
		plans or details would either be unlawful or need a new DCO consent. NNDC is happy to consider very minor changes under Requirement 31 but has set out its position on more fundamental amendments to the DCO in Section 4 of its Local Impact Report	planning authority (or other discharging authority) through the approved plans; it could not therefore extend to changes to the Works Description at Schedule 1 or to parameters that are not the subject of later approval (for instance Boguisaments 2.11 which stimulate amongst other things	
		related to Choice of Transmission System. Perhaps to aid clarity, the Applicant could set out some scenarios or examples of the sort of changes envisaged to be agreed under Requirement 31."	(for instance Requirements 2-11 which stipulate, amongst other things, maximum cable protection areas and volumes). The Relevant Planning Authority will also have the discretion at the time as to whether to approve the proposed change.	
		Whilst the Applicant has provided some examples of the type of amendment or variation at Deadline 3, what would prevent more extensive changes to the Order being made via this requirement?	In relation to the Requirements that are for subsequent approval, some examples of details that might be subject to the mechanism under Requirement 31 (amendments to approved details) are as follows:	
			1. Requirement 18/19 – Landscaping and details of trees to be planted and details of the maintenance of landscaping. In the event that a tree or shrub did not take well to the new environment then it may be appropriate to agree to an amendment to the approved details under the Landscape	





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			Management Scheme in order for the Applicant, in consultation with the relevant planning authority, to select a new species of tree. Equally, the details for cultivation, and the importing of materials to ensure plant establishment might need to be amended.	
			2. <b>Requirement 20</b> (Code of Construction Practice) — Requirement 31 might be used to seek approval for changes to any of the local community liaison responsibilities as a result of, for example, feedback from the local communities and/or councils that the role needed to change. In addition, the soil management measures might need to be updated to reflect new aspects of management not envisaged at the point of discharge following	
			ongoing engagement with landowners.  3. Requirement 27 (Control of noise) — the Applicant might consider it appropriate to amend (with approval) the noise monitoring locations, and/or to introduce additional monitoring locations once Work No.8A is operational. As a result, the scheme submitted prior to commencement would need updating and Requirement 31 could be an appropriate avenue for this.	
			4. <b>Requirement 33</b> (Skills & Employment) – it might become apparent, following discharge and during construction, that there are new initiatives and/or schemes with which Vattenfall wish to support and capture as part of the skills and employment strategy. Requirement 31 could therefore be used to amend the previously approved details within the Skills and Employment Strategy.	
2.5.3.7	The Applicant	Requirement 31: Amendments to approved details:  1. Explain how the fixed point in time assessment provided by the ES would work with this requirement. Could further assessment be required?  2. Provide clearer definition for 'another person' in R31(1) and 'that other person' in R31(1), (2) and (3).	1. As the Applicant explains in its response to WQ 2.5.3.5 and 2.5.3.6 above, the amendment to approved details would not be material or give rise to materially new or materially different environmental effects and, therefore, not require any further environmental assessment (save for any assessment to demonstrate that the change is non-material). Furthermore, Requirement 31 is not relevant for changes to the parameters fixed in the DCO.	
			2. The Applicant has amended reference to 'another person' and changed it to 'other discharging authority' within the latest version of the dDCO submitted at Deadline 5.	
n/a	The Applicant	Requirement 32: Operational Drainage Plan: See below questions in Section Q2.15 Water Resources and Flood Risk.	The Applicant notes this and has responded accordingly within Section Q2.15.	

## **5.4 OTHER REQUIREMENTS**

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			No questions	





## 5.5 SCHEDULES 9 to 13: Deemed Marine Licences

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Question Number				
2.5.5.1	The Applicant	DML Schedule 9/10/13 Part 4 Condition 15 (4):  The Applicant (REP4-009) maintains that four months is appropriate for submissions. Considering that a 6 month period has been accepted in other recent applications and the Applicant's acceptance that in some cases it has taken longer than 4 months to discharge certain DML conditions, why is the Applicant resistant to increasing the approval period from 4 to 6 months?	The proposed time period is contained on a number of other Offshore Wind Farm (OWF) DCOs (including The East Anglia Three Offshore Wind Farm Order 2017, the Hornsea Two Offshore Wind Farm Order 2016, The Dogger Bank Creyke Beck Offshore Wind Farm Order 2015, The Rampion Offshore Wind Farm Order 2014, The Dogger Bank Teesside A and B Offshore Wind Farm Order 2014, The Dogger Bank Teesside A and B Offshore Wind Farm Order, and the draft Hornsea Project Three Offshore Wind Farm Order, and the draft Hornsea Project Three Offshore Wind Farm Order, and the draft Hornsea Project Three Offshore Wind Farm Order, and the draft Hornsea Project Three Offshore Wind Farm Order). Four months is, therefore, well-established as an appropriate time frame for OWF schemes and one that ensures a balance is struck between the expedient discharge of the relevant conditions attached to the Deemed Marine Licence (DML) whilst allowing a reasonable period of time for consideration by the MMO and its consultees.  The Applicant is aware that it has, in some recent cases, taken much longer than four months to discharge certain DML conditions on other OWF projects and it should be recognised that with no mechanism to encourage the determination of applications within a reasonable period (such as arbitration or appeal) the developer is then left in a position which is wholly unsatisfactory. With highly competitive and fixed Contracts for Difference (CfD) milestones, and where offshore construction can only be undertaken in safe and optimal weather conditions, wind farm developers need the certainty and confidence of a reliable and consistent approval process. This is also one of the reasons why the Applicant sought to insert an appeal provision within the dDCO, as previously there was no longstop period or mechanism in the event of non-determination. In view of the fact that the DML appeal mechanism is still an outstanding area of agreement between the Applicant and the MMO (and is likely to remain so pending the outcome of the Norfolk Vangua	





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			If successful, the CfD will contain a number of key contractual milestones which must be met by the developer. These Milestone Delivery Requirements are designed to demonstrate commitment and progression of the projects to achieve generation by the dates stated in the CfD contract. By 12 months of signing a CfD, generators must meet the Milestone Delivery Date criteria. These evidence commitment to a project by either spending 10% of precommissioning costs or taking a Financial Investment Decision (FID). It would not be possible to evidence these requirements without minimising post-consent delays.	
			Discharging the consent conditions for Norfolk Boreas at the earliest opportunity and minimising delays post consent is imperative to meet the Milestone Delivery Date of a CfD in order to make a FID and fulfil other subsequent contractual obligations (e.g. the Operational Conditions Precedent, commissioning during the Target Commissioning Window, meeting obligations before the Longstop Date) associated with the construction and operation of the wind farm.	
			In conclusion, the Applicant considers that the dDCO strikes the balance between allowing the MMO (and Natural England) to properly discharge their statutory duties whilst ensuring renewable energy development is unlocked in a timely manner. There is a strong public interest argument in favour of approvals in a timely manner and ensuring that nationally significant infrastructure projects are not unduly delayed. In particular, minimising delays post consent for offshore wind projects is especially important in the context of meeting CfD milestones.	
			In view of the above, the Applicant does not consider it necessary or appropriate to adjust the time periods for discharge within the DML conditions. The Applicant considers that a 4 month timescale, which is also subject to extension by agreement, is acceptable as this maintains flexibility, is consistent with existing/ previous decisions and provides certainty for all parties.	
2.5.5.1	Natural England	DML Schedule 9/10/13 Part 4 Condition 15 (4):  The Applicant [REP4-009] maintains that four months is appropriate for submissions. Considering that a 6 month period has been accepted in other recent applications and the Applicant's acceptance that in some cases it has taken longer than 4 months to discharge certain DML conditions, why is the Applicant resistant to increasing the approval period from 4 to 6 months?	Natural England's position has not changed regarding this issue, and still advises that a 6 month period would be more suitable.	The Applicant notes this and refers NE to the Applicant's response to FWQ2.5.5.1 submitted at Deadline 5 [REP5-045].





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PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.5.5.2	The Applicant	DML Schedule 9/10 Part 4, condition 14 (1) (I):  NE [REP3-021] requires the approval of the Ornithological Monitoring Plan (OMP) to be linked to a different timing requirement than 4 months prior to construction. The Applicant has proposed clarifying the wording in the IPMP to ensure pre- construction surveys are sufficient in the context of any monitoring subsequently agreed in the OMP.  1. Submit the revised wording for the updated OMP.  2. Is Natural England content?	The Applicant has updated the wording on the (IPMP) as following and the updated IPMP is being submitted at Deadline 5:  "Vattenfall (as the parent company of Norfolk Boreas Limited) has a proven commitment to ornithological monitoring of offshore wind farms and improving understanding of potential impacts (e.g. through the European Offshore Wind Deployment Centre research projects) and will maintain this commitment in relation to Norfolk Boreas.  The aims of monitoring should be to reduce uncertainty for future impact assessment and address knowledge gaps. To this end, Norfolk Boreas Limited will engage with stakeholders and the methodology would be developed initially through an outline plan and later through the Ornithological Monitoring Plan (as required under Condition 14(1)(ii) and (ii) of Schedule 9 and 10 of the DCO). "  As for marine mammals (section 4.5), there may be little purpose or advantage in any site specific monitoring for ornithology and therefore a strategic approach may be more appropriate in providing answers to specific questions where significant environmental impacts have been identified at a cumulative/in-combination level. Aspects for consideration will include post-construction monitoring of collision risks (e.g. improvements to modelling, options for mitigation and reduction), displacement (e.g. understanding the extent and consequences of displacement) and improving reference population estimates and colony connectivity.  Furthermore the Applicant has worked with Natural England to produce revised wording for this condition. The current wording and proposed wording is reproduced below.  Current condition:  (I)An ornithological monitoring plan setting out the aims, objectives and methods for ornithological monitoring as agreed in consultation with the MMO (in consultation with the relevant statutory nature conservation body) at least four months prior to the first preconstruction survey (as referred to in Condition 14(1)(b)(aa)), and (ii)An ornithological monitoring plan setting out	





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PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.5.5.2	Marine Management Organisation	DML Schedule 9/10 Part 4, condition 14 (1) (I):  NE [REP3-021] requires the approval of the Ornithological  Monitoring Plan (OMP) to be linked to a different timing requirement than 4 months prior to construction. The Applicant has proposed clarifying the wording in the IPMP to ensure pre- construction surveys are sufficient in the context of any monitoring subsequently agreed in the OMP.  1. Submit the revised wording for the updated OMP.  2. Is Natural England content?	The Applicant has provided the proposed wording to the MMO which is currently being reviewed. Further discussions will be required between the applicant, Natural England and the MMO to ensure the condition is clear, robust and enforceable.	The Applicant notes this.
2.5.5.2	Natural England	DML Schedule 9/10 Part 4, condition 14 (1) (I):  NE [REP3-021] requires the approval of the Ornithological  Monitoring Plan (OMP) to be linked to a different timing requirement than 4 months prior to construction. The Applicant has proposed clarifying the wording in the IPMP to ensure pre- construction surveys are sufficient in the context of any monitoring subsequently agreed in the OMP.  1. Submit the revised wording for the updated OMP.  2. Is Natural England content?	Natural England agreed an approach with the Applicant to resolve this issue at a meeting on 17th February 2020. We agreed draft updated condition wording via email on 20th February 2020. Subject to the inclusion of this agreed wording Natural England see this issue as resolved.	The Applicant welcomes the agreement from Natural England on the wording and confirms that this wording has been included in the revised DML Schedule submitted at Deadline 5 (REP5-003).
2.5.5.3	The Applicant	Schedules 11 and 12 definition of 'phase' in relation to offshore development:  Clarify the use of the word 'Phase' in relation to DML titles 'Schedule 11 Licence 1 Phase 1' and Schedule 12 Licence 2 Phase 2 and in relation to commissioning of offshore WTGs in a single phase or two phases as noted in REP4-019 para 16 and at Part 1, Article 2 Interpretation Section 'Single offshore phase' and 'two offshore phases'.	Phase in this context is temporal and related to the construction phase, pursuant to the definitions within the DMLs (Schedule 9-13):  "single offshore phase" means carrying out all offshore works as a single construction operation;  "two offshore phases" means carrying out the offshore works as two separate construction operations.  The number of generation and transmission DMLs are relevant to the phases in which the Project may be constructed. For example, if the Project is constructed in two phases, two separate generation DMLs and then two separate transmission DMLs can be used to enable the transmission assets for each phase to be transferred separately to an Offshore Transmission Owner (OFTO) at different points in time and, if relevant, to different OFTOs. This is why there are two Generation DMLs (Schedule 9-10) and two Transmission DMLs (Schedule 11-12). The phasing offshore will relate to the phasing onshore; for instance, if two offshore phases are undertaken, the onshore cables will be pulled through the ducts in two separate onshore phases and the onshore project substation will be constructed in two separate phases. The approach to phasing of onshore construction works is set out more fully in the Project Description chapter (Chapter 5) of the Environmental Statement (document 6.1) (APP-218).  It is not yet known how the phases will be constructed in terms of export capacity. The drafting approach used allows for flexibility whilst also restricting what can be constructed to what has been assessed in the Environmental Statement. For example, the drafting permits the Applicant to install:  (a) A single phase with an export capacity of 1,800 MW. In this case only one generation DML and one transmission DML would be used under the Order, in addition to a DML for the Project Interconnector (as relevant for Scenario 1); or  (b) Two phases with a maximum export capacity of 1,800MW which, for example, may be comprised as two phases with an export capacity of	





PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
			900MW each or two phases with an export capacity of 1,200 MW and 600MW respectively. In this case both sets of generation and transmission DMLs may be used under the Order in addition to the Project Interconnector DML (as relevant for Scenario 1).  The DMLs are not prescriptive as to the amount of export capacity which must be brought forward under each phase, provided that the total export capacity does not exceed 1,800MW and the maximum parameters across both sets of DMLs (as assessed in the Environmental Statement) are not exceeded.  The DMLs also include a notification procedure under Condition 8(2)	
			(Generation DMLs, Schedule 9-10) and Condition 3(2) (Transmission DML, Schedule 11-12) to ensure that the MMO is informed prior to commencement of construction as to whether a single phase or a two phase approach will be followed.	
2.5.5.4	The Applicant	Schedules 11 and 12 Part 4, Conditions:  Note questions above in Section Q2.1.0 Offshore and intertidal archaeology.	The Applicant notes this and has responded under Section Q2.1.0.	
2.5.5.5	The Applicant	Schedules 9, 10, 11, 12, 13 Part 4, Conditions:  Note questions above in Section Q2.2.0 Offshore benthic and marine mammals.	The Applicant notes this and has responded under Section Q2.2.0.	
2.5.5.6	The Applicant	Schedules 9, 10, 11, 12, 13 Part 4, Conditions:  Note questions below in Section Q2.8.0 Habitats Regulation Assessment.	The Applicant notes this and has responded under Section Q2.8.0.	
2.5.5.7	The Applicant	Schedules 9, 10, 11, 12, 13 Part 4, Conditions:  Note questions below in Section Q2.11.0 Marine Navigation and Shipping.	The Applicant notes this and has responded under Section Q2.11.0.	

## 5.6 SCHEDULE 15: ARBITRATION RULES

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
n/a	Polly Brockis	No question provided by the ExA, however a general comment on Schedule 15: Arbitration Rules was provided.	Once a scheme is passed who will arbitrate for the residents in disputes about traffic movements, impacts, noise etc. I understand there are exclusions for traffic noise in the EHO's remit. Who is accountable if a threshold is exceeded, who monitors, who arbitrates, and who enforces restrictions? A widely available Communications Plan and team to disperse easily understandable information are needed.	The OCoCP provides a key mechanism, enforceable via DCO Requirement 20, through which the relevant regulatory authorities and local community can be assured that environmental impacts associated with the construction of the onshore infrastructure will be formally controlled and mitigated. A final detailed CoCP will be produced prior to construction of the project. A number of environmental plans and strategies for construction management relevant to the project will be prepared and implemented; these are detailed within Section 2.4 of the OCoCP [REP5-010]. A key management plan within this will be the Community Liaison Procedure, enforced through Requirement 20 (2)(b).  The Applicant will ensure effective and open communication with local residents and businesses that may be affected by noise or other aspects affecting amenity caused by the construction works. Communications will be co-ordinated on site by a designated member of the construction management team. A proactive public relations campaign will be maintained, keeping local residents informed of the type and timing of works involved, paying particular attention to potential evening and night





PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
				time works and activities which may occur in close proximity to receptors. A combination of communication mechanisms such as information boards, posters and parish meetings will be employed to keep local residents informed. A designated local community liaison officer will respond to any public concerns, queries or complaints in a professional and diligent manner as set out by a project community and public relations procedure which will be submitted for comment to the Local Authorities. Parish Councils in the relevant area will be contacted (in writing) in advance of the proposed works and ahead of key milestones. This information will include indicative details for timetable of works, a schedule of working hours, the extent of the works, and a contact name, address and telephone number in case of complaint or query. Enquiries will be dealt with in an expedient and courteous manner. Any complaints will be logged, investigated and, where appropriate, rectifying action will be taken. The above will be captured in a communications plan as part of the final CoCP.

## 5.7 SCHEDULE 16: PROCEDURE FOR DISCHARGE OF REQUIREMENTS

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.5.7.1	The Applicant	Discharge of requirements:  During the Onshore ISH [EV6-005], the potential use of Planning Performance Agreements (PPA) was discussed. The Applicant asserted that a smooth discharge process is necessary for fast-moving projects such as this and therefore properly resourced approval mechanisms are in its best interests. The Applicant also cited discharge of requirements on a consistent basis across authorities is important and, in this regard a possible approach would be to appoint a co-ordinator.  1. The ExA acknowledges the prematurity of a PPA being in place prior to consent, but in order to give any weight it would assist if the Applicant could set out the thinking in more detail than currently provided in the written summary of oral case [REP4-014].  2. Local authorities are invited to set out how expertise of the kind necessary to assess post consent approval designs and details for discharging requirements could be accessed, secured and assured.	The Applicant considers that the Planning Performance Agreement (PPA) would cover the following:  1. Resource: following discussions and feedback from the councils during the Norfolk Vanguard application process, the Applicant understands that the RPAs wish to maintain the authority to discharge plans for their administrative area, rather than delegate function to a lead local discharge authority such as Norfolk County Council. Accordingly, the Applicant considers that the most appropriate approach - together with the one that ensures efficiency and consistency - would be for the RPAs to have a single appointed coordinator or identified point of contact who could discharge, or coordinate the discharge of, certain Requirements on behalf of all RPAs. The coordinator (funded through the PPA) would have delegated powers to discharge the Requirements providing that there was evidence that the affected RPAs and other named stakeholders were in agreement with the technical content of the submissions. The coordinator would also corroborate this with the affected RPAs before any Requirements were formally discharged. Alternatively, the Applicant could consider putting forward individual PPAs for each respective discharging authority; the Applicant, however, would be eager to ensure efficiency and consistency of decision making across RPAs as far as possible.  2. Procedure and timetable for discharge: given that the cable route spans across all three RPA boundaries (and NCC as LHA and LLFA), the Applicant considers that it would be prudent to split the cable route into stages to coincide with the RPA administrative areas. There may also be separate stages for certain works such as the landfall and the onshore project substation. The PPA would set out the project plan and programme for the timely discharge of Requirements across the "stages" (supported by PPA funded resource (as per item 1)).	





PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number				
			3. Apportionment of Requirements: linked to the above, the PPA would set out the apportionment of requirements, for instance – the landfall method statement to be discharged by NNDC with the support of the appointed co-ordinator; whereas the CoCP (or each respective CoCP for the stages) would need to be discharged by each respective RPA with support from the appointed coordinator. The Applicant is engaging with the RPAs to discuss whether such an approach would be acceptable together with the further detail of the PPA.	
2.5.7.1	North Norfolk District Council	Discharge of requirements:  During the Onshore ISH [EV6-005], the potential use of Planning Performance Agreements (PPA) was discussed. The Applicant asserted that a smooth discharge process is necessary for fast-moving projects such as this and therefore properly resourced approval mechanisms are in its best interests. The Applicant also cited discharge of requirements on a consistent basis across authorities is important and, in this regard a possible approach would be to appoint a co-ordinator.  1. The ExA acknowledges the prematurity of a PPA being in place prior to consent, but in order to give any weight it would assist if the Applicant could set out the thinking in more detail than currently provided in the written summary of oral case [REP4-014].  2. Local authorities are invited to set out how expertise of the kind necessary to assess post consent approval designs and details for discharging requirements could be accessed, secured and assured.	1. Whilst this question is for the Applicant to respond to, the ExA should be aware that on 21 Feb 2020, NNDC (together with Norfolk County Council and Breckland) were sent an email from Jake Laws on behalf of Vattenfall which, in effect, sought to set out the applicant's position on discharging requirements and approach to PPAs. This put forward, amongst other things, the idea of a single coordinator role for discharging requirement a across all LPA authorities. A copy of this email is attached at Appendix A. NNDC responded back to Vattenfall on the same day stating that:  'at no stage has NNDC agreed 'in principle' to the approach to a PPA set out at point 1) in your email through a single coordinator role across all LPAs. Such a role is likely to be ultra-vires unless authority is delegated by the relevant planning authority to that coordinator. To date, such an approach has not been supported by NNDC and I see no reason why that position should or will change.'  Subsequent discussion with the Council Leader at NNDC has confirmed that NNDC would be opposed to the idea of a single-coordinator role on the basis that 'we need to have ability to act in our own best interests at all times'. A singlecoordinator role idea is therefore strongly opposed.  2. NNDC set out its position with regard to Discharge of Post Consent Approval in Section 6 of its Deadline 4 submission [REP4-031].  NNDC welcomes the suggestion of a Planning Performance Agreement but certainly not in the form of a single coordinator role set out in 1) above.  The wider public interest, not to mention the interests of the applicant, are best served through having an effective and timely post consent requirement discharge process.  For this to happen, it will be important that all those with a need to participate in the discharge of requirements processed are effectively recompensed for their time and to ensure that adequate resources in place for parties to achieve the timescales set out in Schedule 16 – Procedure for Discharge of Requirements	The Applicant refers NNDC to the Applicant's response to this question submitted at Deadline 5 [REP5-045].  By way of further explanation, the Applicant considers that a single coordinator would by no means be acting ultra vires and would, instead, act more as a point of liaison and conduit between the Applicant's project team and the Relevant Planning Authority (RPA) in order to co-ordinate the discharge of Requirements. The RPAs would need to be in agreement with the technical content of the plan for discharge. It would not therefore be a case of the single co-ordinator discharging plans without authority.  The Applicant considers that a single co-ordinator is likely to be the most efficient and practical way to discharge plans across RPAs. Notwithstanding this, the Applicant is open to discussing alternative approaches including individual PPAs for each respective discharging authority.  The Applicant is engaging with the RPAs to set up a meeting to discuss this matter further.





PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
			For all Requirements where consultation is required, for example with the Highway Authority, Environment Agency, relevant statutory nature conservation body, Historic England, each of these bodies would also need their own PPAS to reflect those involved and with commitments to be made to meet the timescales set out in Schedule 16.  NNDC would be happy to share its ideas further on how a series of PPAs could be developed and will seek to provide further information for Deadline 6.	
2.5.7.1	Norfolk County Council	Discharge of requirements:  During the Onshore ISH [EV6-005], the potential use of Planning Performance Agreements (PPA) was discussed. The Applicant asserted that a smooth discharge process is necessary for fast-moving projects such as this and therefore properly resourced approval mechanisms are in its best interests. The Applicant also cited discharge of requirements on a consistent basis across authorities is important and, in this regard a possible approach would be to appoint a co-ordinator.  1. The ExA acknowledges the prematurity of a PPA being in place prior to consent, but in order to give any weight it would assist if the Applicant could set out the thinking in more detail than currently provided in the written summary of oral case [REP4-014].  2. Local authorities are invited to set out how expertise of the kind necessary to assess post consent approval designs and details for discharging requirements could be accessed, secured and assured.	1. A PPA or equivalent mechanism with the applicant would be an appropriate way forward. Any such PPA or mechanism would need to include all authorities involved in the discharge of the requirements in the DCO, including the County Council. The County Council in its role as lead local flood authority, highway authority, historic environment and green infrastructure will be providing information to the District Councils that will enable them to discharge the DCO. Financial reimbursement will be necessary in order for NCC to deliver this responsibility.  Whilst the Local Highway Authority are not the discharging authority, nevertheless we do feed into the process. To ensure compliance with the Construction Traffic Management Plan, we envisage a significant requirement to co-ordinate traffic management works on the ground. We are happy to work with the applicants as soon as possible to explore how this can best be achieved to ensure a seamless approach.	

# 5.8 CONSENTS, LICENCES AND OTHER AGREEMENTS

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.5.8.1	The Applicant	Consents and licences: (REP2-004): Provide a track change update of [REP2-004].	The Applicant provided a clean version of the Consents and Licences Required Under Other Legislation (REP2-003) (Consents and Licences) and a tracked changes version of the Consents and Licences (REP2-004) at Deadline 2.  The Applicant does not consider that there are any further updates to make to the Consents and Licences document at this stage given that the applications for consent are scheduled to take place following DCO consent.	
2.5.8.2	The Applicant	Consents and licences: (REP2-004): Explain the reference to the proposed application for Crown Consent post DCO [REP2-004].	As the Applicant explains in response to WQ2.3.0.9-11 above, the interests held by TCE have been excluded from acquisition in the BoR (document reference 4.3) and there are no known third party interests or unknown interests scheduled in the Crown Plots. The consent being sought by the Applicant post DCO would be confirmation that no other third party interests exist in the Crown Plots. If such interests do in fact exist at that point, the Applicant would then work with TCE to either acquire the necessary permanent new rights by agreement with the third party, or through compulsory acquisition powers.	





## 6 Fishing

## 6.0 Fishing

PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
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Number				
2.6.0.1	The Applicant	Implications of new Fisheries ByeLaws:  Update the likely timeframes for implementation of the proposed fisheries byelaws and the Applicant's commitment to work with the EIFCA to understand the possible implications of each parties' plans on the other.	The Applicant has a good working relationship with the EIFCA and both parties have been and will continue to work together to understand the implications of each parties' plans on the other.  As part of the commitment to working with the Eastern Inshore Fisheries Conservation Authority (EIFCA) to reduce potential impacts on Annex I S.spinulosa reef within proposed byelaw Area 36, the Applicant has undertaken work to identify where cable protection is more likely to be required (Appendix 3 of the outline HHW SAC SIP [REP1-033]). This study demonstrates that cable protection is not likely to be required within proposed byelaw area 36. As a result of this study the Applicant has committed to avoiding the placement of cable protection within Natural England and the Joint Nature Conservation Committee's (JNCC) priority areas to managed as S.spinulosa reef. One of these areas is within proposed Byelaw Area 36.  Furthermore, as there is some uncertainty regarding the extent and location of Annex I S.spinulosa reef the Applicant has committed to undertake a survey in 2020 to map the current extent within the section of the offshore cable corridor which overlaps with the HHW SAC, this area includes much of proposed Byelaw Area 36. The Applicant will share the findings of these surveys with EIFCA once they are available.	
2.6.0.1	Eastern IFCA	Implications of new Fisheries ByeLaws: Update the likely timeframes for implementation of the proposed fisheries byelaws and the Applicant's commitment to work with the EIFCA to understand the possible implications of each parties' plans on the other.	On 15th May 2019 Eastern IFCA agreed to make the Marine Protected Areas Byelaw 2019. This byelaw includes spatial closures to towed demersal fishing in three areas in the inshore part of Haisborough, Hammond and Winterton Special Area of Conservation (as previously advised in Eastern IFCA's Deadline 2 submission). At Deadline 2, we reported that the byelaw was due for submission to the Marine Management Organisation (MMO) for quality assurance at the end of 2019 or very start of 2020. The updated situation is that Eastern IFCA has not yet submitted the byelaw to the MMO, because we are still resolving an issue that emerged during the public consultation on the byelaw. Eastern IFCA does intend to submit the byelaw to MMO as soon as possible; we anticipate this will be within the next two months. Eastern IFCA have been working closely with the Applicants with the intention of encouraging the Applicant to microsite around Restricted Area 36. We will continue to work together throughout the examination to ensure we fully understand the implications of each party's plans on the other. While we recognise the commitments made this far by the Applicant and are aware that there are other constraints in the area that are preventing the Applicant from fully committing to micrositing around Restricted Area 36 at this stage, Eastern IFCA maintain that we do not consider it appropriate for electricity cables to be laid within Restricted Area 36 because of the impacts on the reef feature and the consequent impacts on the ability of the HHW SAC to meet its conservation objectives. As always, Eastern IFCA are keen to ensure parity by encouraging regulators of non-fishing activities that could damage or disturb sensitive features (including cable laying, remedial works and cable protection) to prevent or at least	The Applicant notes the change in timeline for submission of the Area 36 Byelaw and will continue to engage with the EIFCA to understand when further progress is made.  The Applicant has made the commitment not to place any cable protection within the priority areas to be managed as <i>S.spinulosa</i> reef which cover most of the byelaw area, however the Applicant has not committed to avoiding cable installation altogether within Area 36. The primary reason for not making this further commitment is that the results of the preconstruction surveys may show that there is no or limited Annex I <i>S.spinulosa</i> reef within the Byelaw area and yet there is Annex I reef in the area to the south of the Byelaw. Under this scenario cable installation within Area 36 would not affect the conservation objectives, of restore and maintain, of the site however if the cable were routed to the south the objectives of the site could be affected.





PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
			minimise such activities in areas closed to fishing for the protection of these features.	
2.6.0.2	Eastern IFCA	Cefas' investigation of the impact of seals: Advise the status of Cefas' investigation of the impact of seals on commercial fishing.	At Deadline 2, Eastern IFCA reported that Cefas are currently undertaking work to investigate the impact of seals on commercial fishing. Eastern IFCA has not been involved in this work other than one officer attending a workshop in November 2018. We have reviewed the information from that workshop and have identified that several organisations, but not Cefas, were involved in work examining interactions between seals and fishing. The project is being implemented by the marine consultancy ABPmer and the National Federation of Fishermen's Organisation for Defra and the MMO1. The ABPmer website, in an article dated 6th August 2019, reported that the project is underway; a survey of fishing/seals interactions has been completed and trials of a seal deterrent are ongoing.	The Applicant has no further comment.
2.6.0.3	Eastern IFCA	Assessment of potential effects of windfarm service vessel traffic: Further to the Applicant's explanation given at the ISH4 [REP4-014] is Eastern IFCA satisfied regarding the assessment of potential effects of windfarm service vessel traffic on fishing gear and safety of fishing vessels?	Eastern IFCA are satisfied regarding the assessment of potential effects of windfarm service vessel traffic on fishing gear and safety of fishing vessels. As mentioned at ISH4 Eastern IFCA wanted to highlight the need for effective communication between developers and the fishing industry to the Applicant. This needs to be a strong commitment that is upheld by the Applicant and any contractors if the proposal is accepted.	The Applicant welcomes the Eastern IFCA's comment and notes that consultation between the Applicant and the fishing industry is on-going and will continue post-consent.  The Applicant's strategy to facilitating co-existence between the project and commercial fishing interests and an outline of the approach to fisheries liaison is included in the Outline Fisheries Liaison and Co-existence Plan (FLCP) submitted with the Application (APP-710). This will be further developed in the FLCP which will be produced post-consent as required under Schedules 9 and 10, Part 4, Condition 14 (d) (v), Schedules 11 and 12 Part 4, Condition 9(d) (v) and Schedule 13, Part 4, Condition 7(d)(v) of the draft DCO.

## **7** Grid Connection

#### 7.0 Grid Connection

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.7.0.1	The Applicant	Offshore Ring Main (ORM): Ofgem, in its recently published "Ofgem decarbonisation programme action plan" [February 2020] undertakes to "explore, with government and industry, options for a more coordinated offshore transmission system to connect offshore wind generation, to achieve a rapid and economic expansion of the offshore network". As a first step, Ofgem and the electricity system operator will undertake an option assessment for offshore transmission.  1. Accepting that any decision relating to an ORM will be beyond this Examination's timeframe, the Applicant to update its response [AS-024, REP4-011], to include options for any future connection into an ORM.  2. Do IPs wish to comment further, in the light of Ofgem's action plan?	1. Whilst the Applicant notes the undertaking in Ofgem's recent "decarbonisation programme action plan", this does not change the Applicant's previous response to representations on the subject of the Offshore Ring Main (ORM) [AS-024, REP4-011].  This exploration workstream is in extremely early stages, with significant progress to be made before concrete proposals can be put forward for consent, let alone before the point of certainty that they will be implemented. As the expected construction time-frame for Norfolk Boreas is between 2025 and 2030, the Applicant considers that it would be impossible for the ORM to be developed, consented and delivered in time to facilitate connection to the Great Britain (GB) transmission system to suit the project construction time-line	
2.7.0.1	Marine Management Organisation	Offshore Ring Main (ORM): Ofgem, in its recently published "Ofgem decarbonisation programme action plan" [February 2020] undertakes to "explore, with government and industry, options for a more coordinated	The MMO welcomes the strategic idea of this proposal that could facilitate development of offshore wind projects whilst reducing the potential impacts of multiple intertidal connections.	Noted.





PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number				
		offshore transmission system to connect offshore wind generation, to achieve a rapid and economic expansion of the offshore network". As a first step, Ofgem and the electricity system operator will undertake an option assessment for offshore transmission.  1. Accepting that any decision relating to an ORM will be beyond this Examination's timeframe, the Applicant to update its response [AS-024, REP4-011], to include options for any future connection into an ORM.  2. Do IPs wish to comment further, in the light of Ofgem's action plan?	The MMO notes that for Norfolk Boreas the Applicant would have to submit a variation to alter their project to use any Offshore Ring Main if this was available at the time of construction, this would have to include a detailed impact assessment.	
2.7.0.1	Natural England	Offshore Ring Main (ORM): Ofgem, in its recently published "Ofgem decarbonisation programme action plan" [February 2020] undertakes to "explore, with government and industry, options for a more coordinated offshore transmission system to connect offshore wind generation, to achieve a rapid and economic expansion of the offshore network". As a first step, Ofgem and the electricity system operator will undertake an option assessment for offshore transmission.  1. Accepting that any decision relating to an ORM will be beyond this Examination's timeframe, the Applicant to update its response [AS-024, REP4-011], to include options for any future connection into an ORM.  2. Do IPs wish to comment further, in the light of Ofgem's action plan?	2. NE supports the consideration of a more coordinated offshore transmission system to connect offshore wind generation to the grid. Natural England welcomes, in principle, any proposals to reduce impact to the environment. At this juncture it is not possible to comment further on these plans. We acknowledge that there is currently insufficient certainty to take this into consideration during the Boreas examination	Noted.
2.7.0.1	NSAG	Offshore Ring Main (ORM): Ofgem, in its recently published "Ofgem decarbonisation programme action plan" [February 2020] undertakes to "explore, with government and industry, options for a more coordinated offshore transmission system to connect offshore wind generation, to achieve a rapid and economic expansion of the offshore network". As a first step, Ofgem and the electricity system operator will undertake an option assessment for offshore transmission.  1. Accepting that any decision relating to an ORM will be beyond this Examination's timeframe, the Applicant to update its response [AS-024, REP4-011], to include options for any future connection into an ORM.  2. Do IPs wish to comment further, in the light of Ofgem's action plan?	NSAG believe that the National Grid Electrical Transmissions Business Plan 2021 – 2026, which details the future Near Shore Loop strategy, should be considered by the Examining Authority as well as the Ofgem recent decarbonisation Action Plan dated February 2020. (Copy of National Grid Transmissions Business Plan 2021 – 2026 link attached - file too large.) The cost to the consumer is a leading factor in the UK National Infrastructure Policy. The NG document sets out a 15% saving to the consumer will be accomplished by using the near shore loop strategy. If the Secretary of State delays Hornsea 3, Vanguard, Boreas, Dudgeon Extension, Sheringham Shoal Extension (and other Round 3 projects in other areas), so that they can come within the near shore loop plan, the consumer will gain a huge amount more of this predicted saving, and this will ensure the best value infrastructure is implemented	Noted. The Applicant also notes in a previous submission cost efficiencies that can be derived by adopting more efficient and coordinated approaches to transmission of offshore wind power to the National Grid. The 15% saving denoted in the document referred to derives in turn from information published in a report by Redpoint Energy for Ofgem in 2011. Since 2011 the cost of offshore wind has reduced spectacularly, by two thirds. The Applicant will work with all stakeholders taking an interest in the Offshore Wind Sector Deal to ensure cost reductions continue to be sought where possible, while also seeking to maintain the momentum of the Sector, and it's role in driving forward our Net Zero commitment, as well as contributing to the Government's Industrial Strategy and Clean Growth Challenge.
2.7.0.1	Cawston Parish Council	Offshore Ring Main (ORM): Ofgem, in its recently published "Ofgem decarbonisation programme action plan" [February 2020] undertakes to "explore, with government and industry, options for a more coordinated offshore transmission system to connect offshore wind generation, to achieve a rapid and economic expansion of the offshore network". As a first step, Ofgem and the electricity system operator will undertake an option assessment for offshore transmission.  1. Accepting that any decision relating to an ORM will be beyond this Examination's timeframe, the Applicant to update its response [AS-024, REP4-011], to include options for any future connection into an ORM.  2. Do IPs wish to comment further, in the light of Ofgem's action plan?	Ofgem, in its recently published "Ofgem decarbonisation programme action plan" [February 2020] undertakes to "explore, with government and industry, options for a more coordinated offshore transmission system to connect offshore wind generation, to achieve a rapid and economic expansion of the offshore network". As a first step, Ofgem and the electricity system operator will undertake an option assessment for offshore transmission. 1. Accepting that any decision relating to an ORM will be beyond this Examination's timeframe, the Applicant to update its response [AS-024, REP4-011], to include options for any future connection into an ORM. 2. Do IPs wish to comment further, in the light of Ofgem's action plan? CPC would suggest that the ORM is just one possible solution to the issue of onshore delivery of power from offshore wind farms. We may not have the technical background to compare the alternatives, but we do have the practical sense to recognise that the current proposals for uncoordinated cable trenches will do irreparable damage to the	The Applicant responded to this at Deadline 5, see Q2.0.7.1 above, answered by The Applicant.





PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
			environment. We argue that all current applications which propose to dig trenches across East Anglia should be put on hold until a Strategic Review has been carried out and a coordinated system agreed by all stakeholders	
2.7.0.1	Necton Parish Council	Offshore Ring Main (ORM):  Ofgem, in its recently published "Ofgem decarbonisation programme action plan" [February 2020] undertakes to "explore, with government and industry, options for a more coordinated offshore transmission system to connect offshore wind generation, to achieve a rapid and economic expansion of the offshore network". As a first step, Ofgem and the electricity system operator will undertake an option assessment for offshore transmission.  1. Accepting that any decision relating to an ORM will be beyond this Examination's timeframe, the Applicant to update its response [AS-024, REP4-011], to include options for any future connection into an ORM.  2. Do IPs wish to comment further, in the light of Ofgem's action plan?	Necton Parish Council believe that the National Grid Electrical Transmissions Business Plan 2021 – 2026, which details the future Near Shore Loop strategy, should be considered by the Examining Authority as well as the Ofgem recent decarbonisation Action Plan dated February 2020. The cost to the consumer is a paramount factor in the UK National Infrastructure Policy. The NG document sets out a 15% saving to the consumer through the near shore loop strategy. This will be diluted and reduced if the current wind farm DCOs are approved using cable corridors across Norfolk. The timescale for these installations are far enough into the future that the alternative connection to the grid should be considered as part of the Examining Authority process to ensure the best value infrastructure is implemented.	The Applicant responded to this at Deadline 5, see Q2.0.7.1 above, answered by The Applicant.

# 8 Habitats Regulation Assessment

## 8.0 River Wensum SAC

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.8.0.1	The Applicant	Trenchless Crossings:  NE [REP3-022] considers that direct effects on the Wensum SAC and its features, due to trenchless crossing, should be screened in.  Does the Applicant agree and if so, can it update the screening and integrity matrices for the River Wensum SAC?	As detailed in the REP4-010, Table 1, item 8 the Applicant has agreed to update the Screening matrices [REP1-012] and Integrity matrices [REP1-014] to reflect Natural England's view that due to the risk of bentonite breakout within the River Wensum during construction, potential direct effects upon the River Wensum SAC should be screened in. Updated Screening and Integrity Matrices will be submitted at Deadline 6.	
2.8.0.2	Natural England	Air Quality: At Deadline 2, Natural England [REP2-080] raised concerns regarding air quality impacts to the River Wensum SAC. Based on the information available at this stage, Natural England to advise whether it considers there to be a LSE and if so, whether an AEOI can be excluded.	Natural England welcome that the Applicant will include reference to locations of designated sites within the OTMP and include a commitment that if final traffic numbers change from that assessed than the EIA of air quality impacts will be revisited (REP4-010). If the documents are updated as stated Natural England are content that there will be no LSE on designated sites.	The OTMP (Section 3.2) submitted at Deadline 5 [REP5-025] includes the reference to local designation and changes to traffic numbers as agreed with Natural England.

# 8.1 Norfolk Valley Fens SAC

PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number				
2.8.1.1	Natural England	In-combination Effects:  To provide the information on in-combination effects of the cable route and Hornsea 3 cable route in proximity to Booton Common SSSI/Norfolk Valley Fen SAC that was submitted in the Norfolk Vanguard Examination and referred to by Natural England [REP2-079].	The Applicant submitted the Clarification Note, as submitted in the Norfolk Vanguard Examination, in to the Norfolk Boreas Examination in Rep AS-025 Comments on Relevant Representations Appendices Page 19.	Noted.





PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.8.1.2	The Applicant	Screening matrix: To provide a revised screening matrix to correct errors in relation to the screening in of narrow-mouthed whorl snail and semi natural dry grassland [REP2-021]	The screening matrices will be updated to amend the errors in relation to narrow-mouthed whorl snail and semi natural dry grassland and will be submitted at Deadline 6.	

# 8.2 Onshore Ornithology

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Response:
2.8.2.1	Natural England	Non-seabird migrants:  NE to confirm its position in relation to non-seabird migrants of North Norfolk Coast SPA, Broadland SPA and Breydon Water SPA.	Natural England welcomes screening in of Broadland SPA and Ramsar features for direct and indirect effects on ex situ habitats for swan, goose and assemblage species during construction and decommissioning (at Deadline 3). We also note that Broads SAC though not included in Table is included in screening Matrices (Site 183).  We note the updated Integrity Matrices for Broadland SPA and Ramsar (onshore).  We welcome inclusion of preconstruction monitoring or mitigation for Broadland SPA as outlined in 10.3.2 of within Norfolk Boreas OLEMS (as agreed for Vanguard Examination).  Natural England is content that with the further information and mitigation within the OLEMS that there will not be an adverse effect on integrity of the Broadland SPA features.  Natural England does not have any outstanding concerns regarding Norfolk Boreas and non-seabird migrants of North Norfolk Coast SPA, Broadland SPA and Breydon Water SPA.	Updated Screening Matrices and Integrity Matrices incorporating comments from Natural England have been submitted at Deadline 6 [Document References 5.3.5.3 and 5.3.6.1, Version 4 ).

## 8.3 Haisborough, Hammond and Winterton SAC

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.8.3.1	The Applicant	Sediment disposal: Applicant, MMO and NE to provide update on discussions relating to the wording of a condition for sediment disposal.	This was discussed with the MMO and Natural England on the 17th February. Currently neither the MMO nor Natural England have been able to provide an example of such a condition. The Applicant is confident that the additional mitigation proposed to ensure that sediment is disposed of as close to its origin as possible negates the requirement for such a condition. The mitigation as stated in the outline HHW SAC SIP [REP1-034] site integrity plan is:  Dispose of any material dredged from the seabed for sandwave levelling (also referred to as pre-sweeping) in a linear "strip" along the cable route.  Dispose of material as close as possible to cable route (and therefore as close as possible to where it was dredged from  Dispose of material updrift of where it was dredged from to allow infill through natural processes.  Dispose of material close to the seabed. This will be achieved through the use of fall pipe (also referred to as a down pipe) employed by the dredging vessel. The MMO response at Deadline 4 [REP4-35] states:	





PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number				
			The MMO agreed with the Applicant and Natural England on the details of where the material will be disposed of and how the Applicant will provide details of the disposal locations. And The MMO understands Natural England have ongoing concerns in relation to particle size and will continue discussions on the practicalities and potential wording of a condition.	
2.8.3.1	Marine Management Organisation	Sediment disposal: Applicant, MMO and NE to provide update on discussions relating to the wording of a condition for sediment disposal.	The MMO is working closely with NE, the Applicant and Norfolk Vanguard to progress some draft disposal principles (to be referenced in the DCO/DML) which will ensure similarity in particle size between clearance and disposal locations.	The Applicant confirms that it is willing to continue to explore this issue with NE and the MMO. However, it should be noted that the Applicant has already committed to a number of design principles which will ensure that sediment will be disposed close to the dredged location (see the Applicant's response to 2.8.3.1 above) and therefore would inherently be of the same sediment profile as the material on which it was being deposited.
2.8.3.1	Natural England	Sediment disposal: Applicant, MMO and NE to provide update on discussions relating to the wording of a condition for sediment disposal.	Natural England continues to work with the MMO, Boreas and NVG to progress some draft disposal principles (to be referenced in the DCO/DML) which will ensure similarity in particle size between clearance and disposal locations.	
2.8.3.2	Marine Management Organisation	Sea bed mobility study:  MMO to provide comments on the Applicant's hydrodynamic modelling for sediment disposal [REP1-040] that was requested at the November Environmental Matters ISH.	The MMO's technical advisors have reviewed the Sea bed mobility study and are content that the information provided does not contradict the conclusions made within the ES. This will be reflected in the updated SoCG the Applicant will submit at Deadline 6.	The Applicant welcomes this agreed position, which is reflected within the SOCG with the MMO submitted at Deadline 6 [ExA.SoCG-10.D6.V3]
2.8.3.3	The Applicant	Scour Protection Plan: With reference to NE's response to WQ 8.12.9 [REP2-080], the Applicant and NE to update on the need for the outline Scour Protection and Cable Protection Plan to cover the HHW SAC.	The Applicant agrees with Natural England's response to WQ 8.12.9 [REP2-080] that the SIP and the Scour protection and Cable Protection Plan serve different purposes. The SIP should be a document dedicated to the HHW SAC and the "cable and scour protection plan is for the whole project in which methodologies, areas, locations and amount are considered holistically as required under a DCO/DML."  The Outline HHW SAC SIP [REP1-34] contains a commitment to produce the following documents in support of the SIP:  • Technical specification of the offshore export cables (including fibre optic cables)  • A detailed cable (including fibre optic cables) installation plan for the Order limits, including:  • Proposed cable installation vessel and equipment  • A burial risk assessment to ascertain suitable burial depths and cable laying techniques, including cable protection  • Export cable installation schedule  Therefore, the Applicant is of the opinion that there is adequate commitment within the SIP for the provision of the relevant information and nothing further needs to be added to the outline Scour Protection and Cable Protection Plan to cover the HHW SAC.  This was discussed further with Natural England on the 17th February and although Natural England do not agree with the principle of the SIP it was agreed that the commitments made in that document sufficiently cover the HHW SAC and therefore there is no requirement to add anything further to the outline Scour Protection and Cable Protection Plan to cover the HHW SAC.  Natural England also commented during the meeting on the 17th February that if a SIP were not taken forward then an equivalent document capturing all the commitments made in the SIP would still be required. The Applicant agrees with Natural England on this point.	





PINS Question	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Number 2.8.3.3	Marine Management Organisation	Scour Protection Plan: With reference to NE's response to WQ 8.12.9 [REP2-080], the Applicant and NE to update on the need for the outline Scour Protection and Cable Protection Plan to cover the HHW SAC.	The MMO understand that this is also related to the HHW SAC SIP condition.  The MMO are in discussion with the Applicant and NE about the use of the HHW SAC SIP and the related condition (Schedule 11 & 12 9(1)(m)).  The MMO has concerns that if the SoS makes a decision on AEoI on the HWW SAC then the condition is not fit for purpose as it does not take into account for the Derogation process. Alongside this the Applicant has removed all sections relating to the HHW SAC from the Outline certified plans (such as the Outline Cable and Scour Protection Plan) and included this in the HHW SAC SIP document.  The MMO is concerned that if the SoS were to make a decision (either no adverse effect or derogation route), condition 9(1)(m) could be removed from the DMLs and with this the HHW SAC SIP and all included information could be lost at this the consenting stage as this information is only included in the SIP document.	To address the MMO and Natural England's concerns the Applicant has proposed an alternative condition should the condition securing the HHW SIP not be accepted (see section 6 of the Applicant's Haisborough Hammond and Winterton Special Area of Conservation Position Paper [REP5-057]). The alternative condition would secure a Cable Specification, Installation and Monitoring Plan (CSIMP) for the HHW SAC, to be submitted to the MMO (in consultation with NE) in advance of commencement of licensed activities. The CSIMP would contain the same mitigation measures as the SIP but without the subsequent need to satisfy the MMO on the question of AEol.  Further information on the conditions and control documents is provided in the Applicant's Additional information for the HHW SAC position paper [ExA.AS-2.D6.V1] which has been submitted at Deadline 6.
2.8.3.3	Natural England	Scour Protection Plan: With reference to NE's response to WQ 8.12.9 [REP2-080], the Applicant and NE to update on the need for the outline Scour Protection and Cable Protection Plan to cover the HHW SAC.	The MMO is aware the Applicant will be proposing an alternative condition and document in relation to Norfolk Vanguard for this scenario. The MMO will work with the Applicant on the wording of this condition and provide comments once this is submitted into the Norfolk Boreas examination.  It was discussed with the Applicant on the 17th February 2020 that whilst NE does not agree with the Site Integrity Plan for legislative reasons, we do recognize that the SIP document includes all outline requirements of a Scour Protection and Cable Protection Plan within HHW. If the SIP is no longer taken forward due to mitigation and/or compensation removing AEoI this document effectively would become the Cable Specification and Installation Plan for the HHW SAC, which on other projects has also included the any scour and or cable protection within a designated site. Therefore the SIP, or equivalent document, would be become the Scour Protection and Cable Protection Plan.	
2.8.3.4	The Applicant	Cable protection: The Applicant [REP4-014] committed to "no cable protection in the priority areas to be managed as reef within the HHW SAC". How is this secured?	The Outline HHW SAC SIP (Document 8.20) has been updated and	
2.8.3.4	Natural England	Cable protection: The Applicant [REP4-014] committed to "no cable protection in the priority areas to be managed as reef within the HHW SAC". How is this secured?	Please note that whilst Natural England supports this mitigation we have advised the Applicant that the fisheries management areas are considered to be 'higher confidence' areas where reef is likely to be present but all reefs within the site has the same protection, with no priority areas. This mitigation is currently not secured as Natural England object to the SIP. As this is vital mitigation it should be secured in the DCO and not a plan.	The term priority areas was taken from Natural England's Relevant Representation [RR-099]  "This is because this area has been selected as one of two top priority sites for management of reef due to the good evidence base and likelihood for reef to recover".  The Applicant will endeavour to provide further context in future documents to explain Natural England's definition of these areas.
2.8.3.5	The Applicant	Monitoring sandwave recovery:  The SoCG with the MMO [REP2-051] highlights a disagreement regarding the need for monitoring of sandwave recovery following sweeping. Applicant and MMO to provide an update on this matter.	This has been discussed between the Applicant and the MMO at a number of meetings, most recently on the 17 <sup>th</sup> February where it was agreed that this matter is now resolved in the Statement of common ground. The MMO are satisfied that due to the inclusion of the following text within the IPMP	





PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number				
			there is sufficient security that sand waves will be monitored to ensure that recovery has occurred:  "further surveys may be required at a frequency to be agreed with the MMO (e.g. 3 years non-consecutive e.g. 1, 3 and 6 years or 1, 5 and 10 years). If evidence of recovery is recorded and agreed with the MMO, monitoring will cease".	
2.8.3.5	Marine Management Organisation	Monitoring sandwave recovery:  The SoCG with the MMO [REP2-051] highlights a disagreement regarding the need for monitoring of sandwave recovery following sweeping. Applicant and MMO to provide an update on this matter.	The MMO and the Applicant are in agreement that the In Principle Monitoring Plan provides an appropriate framework to agree monitoring requirements with the MMO subject to any developments or amendments pre-construction.	
2.8.3.6	The Applicant	Site Integrity Plan: Without prejudice to the ExA's recommendation, the Applicant to comment on NE's suggestion [REP4-041] to amend condition 9(1)(m) of Schedules 11 and 12 of the dDCO. Are there any concerns regarding the implementation of such an amendment, irrespective of whether the ExA recommends an AEOI can or cannot be ruled out?	The Applicant has provided a full response to Natural England's position paper [REP4-041] within the Applicant's position paper submitted at Deadline 5 [ExA.AS-6.D5.V1]. With regards to this specific issue the Applicant does not consider it necessary to change the wording of the proposed condition as suggested by Natural England. As drafted the formulation of the condition:  • Follows an accepted approach used for mitigation relating to the Southern North Sea Site Integrity Plan, and the Applicant sees no reason to depart from this; and  • Does not preclude the MMO from undertaking an appropriate assessment at that point in time if considered necessary by the MMO, but includes flexibility for the MMO by not requiring an appropriate assessment to be undertaken.  In relation to this latter point, for example, to the extent that there is no or limited change in the extent and distribution of the sabellaria across the cable corridor at the point of construction, such that the Applicant is able to demonstrate that it remains possible to microsite the cables to avoid sabellaria, it would not be necessary to undertake a further appropriate assessment beyond that undertaken at the consenting stage.	
2.8.3.6	Natural England	Site Integrity Plan: Without prejudice to the ExA's recommendation, the Applicant to comment on NE's suggestion [REP4-041] to amend condition 9(1)(m) of Schedules 11 and 12 of the dDCO. Are there any concerns regarding the implementation of such an amendment, irrespective of whether the ExA recommends an AEOI can or cannot be ruled out?	The current drafting of the SIP condition doesn't allow for a project to go forward under derogation. Given the concerns highlighted this is a	As the Applicant explains in its Haisborough Hammond and Winterton Position Paper [REP5-057] submitted at Deadline 5 and its Additional Information for the HHW SAC position paper [ExA.AS-2.D6.V1] submitted at Deadline 6, the Applicant is proposing an alternative condition for document 8.20 which secures a Cable Specification, Installation and Monitoring Plan for the HHW SAC. This contains the same mitigation but does not require further considerations of AEoI by the MMO and Natural England at the point of construction, and could be used in place of the Grampian condition and HHW SAC SIP if considered appropriate by the SoS.  Notwithstanding this, if the Grampian condition and HHW SAC SIP is retained, and post-consent the Applicant is not able to discharge the condition (because it cannot satisfy the MMO accordingly), then it would be necessary to amend the DCO or to seek a new Marine Licence. This process is explained in the HHW SAC SIP.
2.8.3.7	The Applicant	Consideration of Alternatives: What alternative solutions were considered by the Applicant and would any of these have avoided adverse effects on the integrity of the sites?	The Applicant's firm position is that adverse effect on integrity (AEOI) as a result of the project, both alone and in-combination, can be ruled out. However, the Applicant acknowledges that, for the Norfolk Vanguard 'sister' project, the Secretary of State has requested evidence as to whether there are feasible alternative solutions which could lessen or avoid AEOI, 'in addition, or alternatively' to further mitigation in respect of offshore ornithology impacts, and in 'the absence of any identifiable mitigation	





PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
			measures' in the case of impacts resulting from cable protection. The Applicant has submitted further mitigation in relation to both offshore ornithology impacts (Offshore Ornithology Assessment Update, Project Alone submitted at Deadline [ExA.AS-8.D5.V1] and impacts as a result of cable protection [The HHW SAC SIP (Document 8.20 updated for Deadline 5)], which provide further confidence in the Applicant's assessment that there will be no AEOI either alone or in-combination. Notwithstanding this, the Applicant is preparing evidence for a derogation case which, in the event that the Secretary of State concludes that AEOI cannot be ruled out, will confirm that there are no feasible alternative solutions for the project which could avoid or lessen AEOI. This will be submitted to the Examination as soon as possible.	
2.8.3.8	The Applicant	Compensatory Measures: Following on from Q2.8.4.5 what compensatory measures could be proposed to ensure that the overall coherence of the network of Natura 2000 sites is protected?	As set out in response to WQ 2.8.3.7 above the Applicant is currently preparing evidence for a derogation case, in the event that the Secretary of State cannot rule out AEOI, notwithstanding the Applicant's clear position that AEOI can be ruled out. The Applicant is working closely with Natural England and Norfolk Vanguard Limited to agree in-principle compensatory measures. Norfolk Vanguard will be providing details of in-principle compensatory measures to the Secretary of State on 28 February 2020. The derogation case being prepared by the Applicant will also include details on in-principle compensatory measures. As set out above, this will be submitted to the Examination as soon as possible.	

# 8.4 Offshore Ornithology

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.8.4.1	The Applicant	Collision Risk Modelling: The Applicant intend to provide more CRM data at D6 [REP4-014]. Given the tight timescales for Natural England to review the assessment before D7 and the issuing of the RIES it is imperative the Applicant conforms to this deadline. Can the Applicant provide assurance that it will meet this deadline?	The Applicant confirms that the offshore ornithology updates discussed at the ISH on the 22 <sup>nd</sup> January (project alone updated collision impacts at Deadline 5 and cumulative and in-combination updated collision impacts at Deadline 6) will be submitted as agreed.	
2.8.4.1	Natural England	Collision Risk Modelling: The Applicant intend to provide more CRM data at D6 [REP4-014]. Given the tight timescales for Natural England to review the assessment before D7 and the issuing of the RIES it is imperative the Applicant conforms to this deadline. Can the Applicant provide assurance that it will meet this deadline?	Following discussion with the Applicant since the ISH on 22nd January 2020, Natural England understands that the Applicant will be submitting updated CRM for Norfolk Boreas alone at Deadline 5 and updated cumulative/in-combination CRM and assessment at Deadline 6. In discussions with the Applicant since the ISH on 22nd January 2020, the Applicant has indicated that the updated cumulative/in-combination collision assessments will include new figures for Norfolk Vanguard (available 28th Feb) and potentially for Hornsea 3 (available 14th Feb). Natural England has recommended to the Applicant (in email dated 20.02.2020) that with regard to the figures for Hornsea 3, at the time of writing Natural England has not as yet seen the final submission from Hornsea 3 made the 14th February 2020, but we note that whilst any amendments to the Hornsea 3 project design envelope (i.e. lower tip height and reduction in turbine numbers) would result in a proportional reduction in the collision estimates, Natural England will most likely be unable to agree on what the absolute level of reduction for Hornsea 3 will be as we believe the issues with the underlying baseline data have not been resolved. Therefore, we have advised Boreas continue with using the numbers used to date for Hornsea 3 in their assessments, but to also	The Applicant confirms that updated project alone collision risks were presented at Deadline 5 (REP5-059) which reflect project design changes to minimise collision risks.  The Applicant welcomes Natural England's guidance on this matter and can confirm that the advised approach has been used in the updated cumulative and in-combination assessment submitted at Deadline 6 (ExA.AS-1.D6.V1). The cumulative and in-combination tables present the revised figures for Norfolk Boreas and Norfolk Vanguard, as well as the originally consented figures for Dogger Bank Creyke Beck (replacing the non-material change application figures used in REP2-035). The updated Hornsea Project Three figures (submitted by the project on the 14 <sup>th</sup> February 2020) have not been included in the cumulative/in-combination tables (i.e. in accordance with Natural England advice), however the revised figures and the implications for assessment are discussed in the report.





PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number				
			present cumulative/in-combination collision totals for including and excluding Hornsea 3.	
2.8.4.2	The Applicant	Revised matrices: The Applicant has said [REP4-014] it will submit revised integrity matrices for any revised ornithological assessment submitted at D6. The Applicant to provide these in Word format to enable drafting of the RIES.	The Applicant notes this request and will provide the integrity matrices in the formats requested at Deadline 6.	
2.8.4.3	The Applicant	Turbine draught height:  To provide an update on the consideration of raising the draught height of turbines.	The Applicant has undertaken detailed investigations into options for raising draught heights in tandem with consideration of other mitigation measures which could reduce potential collision impacts. This investigation has identified that a key constraint for the Norfolk Boreas project is the maximum height to which available construction vessels can install turbines, which, when combined with the length of rotor blade for associated turbine models, determines the draught height. The Applicant can confirm that the minimum draught height for the project has been increased from 22m to 30m (from Mean High Water Springs, MHWS) for turbines rated at 14.7MW and higher and increased to 35m from MHWS for turbines rated at up to 14.6MW. In addition, the smaller capacity turbines (10MW and 11MW) have been removed from the design envelope, with the 11.55MW now the smallest wind turbine model which could be installed. Thus, the maximum number of turbines to be installed has been reduced from 180 to 158 (11.55MW) or 124 (14.7MW). The turbine revision on its own achieves a reduction in collision impacts equivalent to an increasein draught height of 5m for the original 10MW scenario. Together these design revisions (increase in draught height and turbine model) substantially reduce collisions risks, with reductions, of 74% for gannet, 73% for little gull, 72% for kittiwake, 64% for lesser black backed gull, 63% for herring gull and great black backed gull(these are for the 14.7MW turbine at 30m which is the new project worst case option for collision risk). Details of the project alone CRM have been submitted at Deadline 5 (ExA.AS-8.D5.V2).	
2.8.4.3	Natural England	Turbine draught height:  To provide an update on the consideration of raising the draught height of turbines.		The Applicant confirms that this update was submitted at Deadline 5 (REP5-059) and the design changes are secured in the updated draft DCO submitted at Deadline 5 (REP5-003).
2.8.4.4	Natural England	Level of precaution in the assessment:  Natural England to comment on the potential for the combination of individual components of precaution to result in over-precaution as a whole, as discussed at the ISH of 22 January 2020 [REP4-014].	During the ISH on 22nd January 2020, the Applicant noted that while individual components of precaution are generally reasonable in isolation, it is the accumulation of these that leads the overall assessment to become over-precautionary. As noted in our Deadline 4 response [REP4-040], Natural England's understanding is that in the collision assessments the central predicted value (i.e. those for the mean bird density, mean/central avoidance rate, mean/central flight height) from each individual project assessment is carried forward into cumulative and in-combination assessments, rather than upper figures for of any predicted range based on	The Applicant notes that Natural England has provided comments on individual elements of precaution and the justifications for their use. However, as noted by the Applicant in their response to this question, it is the combination of these individual elements in reaching an overall conclusion on the potential impact that is the Applicant's key concern.





Enhancing Society		Question	Interested Parties Response at Deadline 5:	Applicant's Comments
PINS Question	Respondent:	Question:	interested Parties Response at Deadline 5:	Applicant's Comments:
Number				
Trumber			OFO/ confidence limits on input data. For displacement assessments, the	
			95% confidence limits on input data. For displacement assessments, the mean bird abundance data from each individual project are taken through	
			to the cumulative/in-combination assessments, rather than upper figures	
			based on 95% confidence limits. In any event, for all Round 1 and Round 2	
			projects the use of upper 95% confidence limits is simply not possible,	
			because earlier windfarm Environmental Statements did not present such	
			information. Therefore, we do not agree with the Applicant's assertion that	
			the 'over precaution in the approach is particularly apparent in the	
			cumulative and in-combination assessments and that the conclusions	
			greatly over-estimate the impact magnitudes'.	
			With regard to the use of density dependent versus density independent	
			PVA models, we agree that density dependence is likely to be operating at	
			seabird colonies. Our position regarding density dependent versus density	
			independent PVA outputs is that if there is clear evidence of the form and	
			strength of density dependence operating on the focal population (colony),	
			then we would (depending on the evidence provided) consider the outputs	
			from density dependent models. Accordingly it is important to consider	
			whether there is any actual evidence that density dependence is acting on the focal population at the present time. We recommend using a density	
			independent model where there is no information on population	
			regulation for the focal population. In the case of the colonies relevant for	
			Norfolk Boreas (e.g. kittiwake at FFC SPA and LBBG at Alde-Ore Estuary	
			SPA), we have considered the density independent model outputs to be	
			the most appropriate in previous offshore wind farm assessments as there	
			is no clear evidence to support the application of any particular form or	
			magnitude of density dependence operating.	
			Without having good evidence to support what form and strength of	
			density dependence to add to a model we have no way of knowing whether	
			the predictions from a density dependent model are robust or accurate,	
			which is why we advise use of the density independent models in such	
			circumstances. If an Applicant has acceptable evidence to support the use	
			of density dependence in the models then Natural England would of course consider these outputs, but there should be a justification of the density	
			dependent terms used and presentation of a range of outputs, which hasn't	
			tended to be the case with previous submissions.	
			The state of the s	
			In any event, the use of the counterfactual metrics recommended by	
			Natural England (counterfactual of growth rate and counterfactual of	
			population size) does make the metrics less sensitive to mis-specifying	
			density dependence or density independence.	
			As stated in our Deadline 4. [DED4.010]	
			As stated in our Deadline 4 response [REP4-040], we again note that the	
			lack of robust site-specific information on flight heights has led to the use of generic Option 2 data that may not reflect flight height behavior within	
			the survey area and may lead to underestimates of potential collisions, and	
			hence assessments may be lacking in precaution in this aspect. For	
			example, using the mean values of the input parameters, the Option 1	
			collision risk modelling outputs (i.e. using the site-specific flight height	
			data) predict over 1,000 kittiwake collision per annum at an EIA scale,	
			compared to 203 per annum for Option 2 (generic flight height data from	
	1			





PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question				
Number				
			Johnston et al. 2014), though we appreciate the Applicant's reservations regarding the Option 1 data.	
			This uncertainty highlights the need for consideration of mitigation through raising turbine draught heights by as much as is possible. In the context of post-construction monitoring, this also indicates a pressing need to collect empirical evidence on actual collisions e.g. through cameras deployed on turbines, together with surveys to establish numbers of birds at the site.	
2.8.4.5	Natural England	As-built vs consented turbine numbers:  Natural England to comment on the Applicant's worked example of how headroom can be modelled using Hornsea Project One [REP4-014].	Natural England is also reviewing this issue in response to queries raised on the Vanguard application. In order to ensure a consistent response we are unable to provide a response to this question at Deadline 5, however, we will provide a full response at Deadline 6.	The Applicant welcomes Natural England's willingness to consider this aspect.
2.8.4.6	Marine Management Organisation	As-built vs consented turbine numbers:  MMO to provide update on its consideration of the Applicant's suggestion of how collision risk headroom can be taken into account in the assessment [REP4-035].	It is the understanding of the MMO that this is for the SoS to take into account within the HRA assessment. The MMO defer to NE in relation to HRA aspects.	The Applicant notes that the MMO's position appears to be inconsistent with the MMO's and NE's advice on cable protection - that new areas of cable protection following construction will require a new marine licence. The Applicant refers to its previous submissions at Deadline 4
			If the MMO was to conduct the in combination assessment, the MMO approach would be to discharge the obligation on the worst case consented parameters. The MMO would require comfort there was no mechanism for the elevation of the as-built figures to the consented figures.	[REP4-014] for further information on this point.  The Applicant has also submitted a position paper – including a worked example – on headroom at Deadline 6 (document reference: ExA; AS-4.D6.V1).
2.8.4.7	The Applicant	Number of construction vessels:  The Applicant's assessment of effects of displacement [APP-201] has assumed a maximum of two construction vessels, how is this secured?	The Applicant provided a response to a similar question in the Examiner's first written questions at Deadline 2 (REP2-021, Qu. 8.9.5) which is reproduced below and provides details of how this will be secured.	
			Q8.9.5 The Applicant to explain how it would ensure that there would not be more than two construction vessels in use in any one non-breeding season.	
			In the Habitats Regulations Assessment [APP-201] the Applicant stated that the worst case impact for disturbance of red-throated diver due to cable installation through the Greater Wash SPA would result from the presence of a maximum of two main cable laying vessels during the non-breeding season. In the draft DCO submitted at Deadline 1 (Norfolk Boreas Updated draft DCO Version 3, REP1-008) it has been stated at pt. (4) Condition 19: During the months of January to March inclusive, construction activities consisting of cable installation for Work No. 4A and Work No. 4B must only take place with one main cable laying vessel.	
			This commitment in the DCO thereby ensures that during the potentially most sensitive period of the year for red-throated diver disturbance, the maximum level of impact will in fact be half that which was assessed as the precautionary worst case (of two main cable laying vessels) in the original assessment [APP-201]. Furthermore, this commitment mirrors that proposed and agreed with Natural England for Norfolk Vanguard.	





## 8.5 Alde-Ore Estuary SPA

PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number				
2.8.5.1	Royal Society for the Protection of Birds, Natural England	Lesser black-backed gull:  The RSPB [REP3-028] would prefer a wider range of apportioning values for lesser blackbacked gull during the breeding season of up to at least 40%, in order to fully capture the uncertainty inherent in the apportioning exercise and therefore incorporate a proportionate degree of precaution. Why is this precaution needed by the RSPB? Does NE have any views?	The Applicant considers that the lesser black-backed gull apportioning rates already contain a high degree of precaution, given the distance between the Alde-Ore Estuary SPA and the Norfolk Boreas wind farm (minimum of 115km), and evidence available from tracking studies (it is of note that a recent review of seabird foraging ranges has recommended a reduction in the foraging range estimates for this species, from 72km to 43km for the mean range and 141km to 127km for the mean maximum range; Woodward et al. 2019).  Furthermore, the Applicant considers this to be an illustration of the overprecaution in individual elements of the assessment that results in the final estimates being over-precautionary to a potentially substantial degree (see REP4-014 for more details of the Applicant's position on this matter).  Woodward, I., Thaxter, C.B., Oewn, E. and Cook, A.S.C.P. (2019). Deskbased revision of seabird foraging ranges used for HRA screening. BTO Research Report No. 724.	
2.8.5.1	Natural England	Lesser black-backed gull:  The RSPB [REP3-028] would prefer a wider range of apportioning values for lesser blackbacked gull during the breeding season of up to at least 40%, in order to fully capture the uncertainty inherent in the apportioning exercise and therefore incorporate a proportionate degree of precaution. Why is this precaution needed by the RSPB? Does NE have any views?	The Applicant's calculated breeding season apportionment rate of 21% for LBBGs to Alde-Ore Estuary SPA has been calculated using the SNH apportionment tool. As we have previously noted to the Applicant during the Evidence Plan Process, we note that the SNH tool uses the term 1/distance2 as a weighting factor. This approach means that for a colony of a given size, the further it is away from the development site, the lower its overall weighting factor will be and so too will its estimated contribution to the birds present at the development site, which makes sense. However, the underlying assumption here is that the likelihood of an individual travelling 1km from its colony or 181km (in the case of maximum foraging range of LBBG) is identical, such that the density of birds declines with increasing distance from the colony solely because within each concentric 1km ring around a colony the area within it will increase as a linear function of its distance from the colony. This fails to take account of the fact that seabirds are central place foragers that must forage away from their nest but return to it to feed their chicks. This places strong advantages in terms of reducing both time spent away from the nest and energy expended in foraging if birds can forage as close to their colony as possible. As such, the likelihood of each individual foraging closer to their colony than further away will not be equal, and so the density of birds is likely to decline more rapidly with increasing distance from a colony than the simple geometric relationship based on the square of distance would suggest.  From the information provided by Norfolk Boreas in APP-201, there are other LBBG colonies located closer to the Boreas site (e.g. urban colonies). We also welcome the information indicates just how variable the ecology of this species can be, both between individuals within a colony and between seasons and years. As a result it is difficult to have much confidence in pinning down an actual figure for use in apportionment. The	The Applicant acknowledges Natural England's comments on these aspects of the assessment and welcome that they have confirmed their agreement with the approaches presented by the Applicant.





PINS Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question			
2.8.5.1 Royal Society for the Protection of Birds	Lesser black-backed gull:  The RSPB [REP3-028] would prefer a wider range of apportioning values for lesser blackbacked gull during the breeding season of up to at least 40%, in order to fully capture the uncertainty inherent in the apportioning exercise and therefore incorporate a proportionate degree of precaution. Why is this precaution needed by the RSPB? Does NE have any views?	assessment via a matrix approach (such as the approach undertaken for displacement assessments), which could potentially be up to 100% in multiples of 10%. However, in the case of LBBGs from the Alde-Ore Estuary SPA and Norfolk Boreas, we noted that 100% would be highly over-precautionary and invited Boreas to focus their assessment on rates between 10% and 30% to provide a realistic worst case scenario of the proportion of birds from the SPA.  As noted in our Deadline 4 response [REP4-040], Natural England does acknowledge that a breeding season apportionment rate of 30% is likely to be overly precautionary, given the proportion of the East Anglian LBBG population that the Alde-Ore Estuary SPA currently holds, and that there are other colonies (town colonies) located closer to Norfolk Boreas than the Alde-Ore.  Therefore, whilst we agree with the RSPB that the uncertainty in the apportionment should be considered, we do not consider that further precaution of considering up to 40% apportionment is required in addition to the approach taken by the Applicant.  The RSPB outlined our position with respect to apportionment of lesser black-backed gulls to the Alde-Ore Estuary SPA in our Written Representations (REP2-096). We highlighted that apportionment is an inherently uncertain process and that appropriate consideration needed to be made by the Applicant about the different behaviours that likely exist between urban birds and coastal breeding birds on the Alde-Ore Estuary SPA when urban birds were removed from the Applicants' data that 38.8% of lesser black-backed gulls could be apportioned to the Alde-Ore Estuary SPA when urban birds were removed from the calculations. We therefore recommended that apportionment up to 35% should be modelled, but 40% apportionment would capture the potential full extent of the population from the Alde-Ore Estuary SPA foraging within the Norfolk Boreas and other wind farm footprints. Setting the range appropriately is important to ensure that the worst-case scenario has been accu	The Applicant considers that the lesser black-backed gull assessment is already over-precautionary with respect to the number of collisions apportioned to the Alde-Ore Estuary SPA, and that given the distance between the SPA and the wind farm (a minimum of 111km) the likelihood that up to 40% of the birds recorded on the site during the breeding season, originate from the Alde-Ore Estuary SPA, is extremely low. As can be seen in Natural England's response to this question, they also do not agree that this level of precaution is justified. Furthermore, since the Applicant has now committed to additional mitigation which has reduced the collision risk for this species by 64% (REP5-059), with the consequence that using Natural England's preferred methods (30% breeding season apportioning rate) the number of SPA mortalities has been reduced from 6 to 2. Thus, even at the RSPB's more precautionary rate of 40% the magnitude of impact for the SPA is now reduced to less than 3 individuals per year. Therefore the Applicant considers that even with this additional precaution, there will be no risk of an adverse effect on the integrity of the SPA due to project alone collision risk.  Updated in-combination totals have been submitted at Deadline 6 (ExA.AS-1.D6.V1), which includes the reduction for Norfolk Boreas discussed here, and a similar reduction for Norfolk Vanguard (following the same design revision, submitted on 28th February 2020). The incombination total has been reduced compared with that in REP2-035 (the total was 57 and is now 54). For context, the Appropriate Assessment for the consented Galloper wind farm considered the in-combination risk to this population was between 135 (Galloper's estimate) and 357 (Natural England's estimate) with Galloper contributing between 44 and 119 to these totals respectively (Defra 2013). It is clear that the current prediction for Norfolk Boreas of 2 collisions (Natural England estimate) and the in-combination total of 54 is considerably below the values on which the Galloper





PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
PINS Question Number				
Number				

## 8.6 Alde-Ore Estuary SPA, Flamborough and Filey Coast SPA and Greater Wash SPA

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.8.6.1	The Applicant	Consideration of Alternatives: Notwithstanding the Applicant's exploration of further mitigation for in-combination effects as described at the ISH on 22 January [REP4-014], in the event that no AEOI cannot be concluded what feasible alternative solutions to avoid or lessen any adverse effects on the integrity of these sites could be considered?	The Applicant's firm position is that AEOI as a result of the project, both alone and in-combination, can be ruled out. However, the Applicant acknowledges that, for the Norfolk Vanguard 'sister' project, the Secretary of State has requested evidence as to whether there are feasible alternative solutions which could lessen or avoid AEOI, 'in addition, or alternatively' to further mitigation in respect of offshore ornithology impacts, and in 'the absence of any identifiable mitigation measures' in the case of impacts resulting from cable protection. The Applicant has submitted further mitigation in relation to both offshore ornithology impacts and impacts as a result of cable protection, which provide further confidence in the Applicant's assessment that there will be no AEOI either alone or in-combination. Notwithstanding this, the Applicant is preparing evidence for a derogation case which, in the event that the Secretary of State concludes that AEOI cannot be ruled out, will confirm that there are no feasible alternative solutions for the project which could avoid or lessen AEOI. This will be submitted to the Examination as soon as possible.	
2.8.6.1	Natural England	Consideration of Alternatives:  Notwithstanding the Applicant's exploration of further mitigation for in-combination effects as described at the ISH on 22 January [REP4-014], in the event that no AEOI cannot be concluded what feasible alternative solutions to avoid or lessen any adverse effects on the integrity of these sites could be considered?	It is for the Applicant to suggest alternative solutions and supply the evidence. The role of Natural England is to provide advice to the developers and competent authorities on the adequacy of any compensatory measures that are proposed by the Applicant and whether they will be sufficient to ensure that the overall coherence of the Natura 2000 network is protected.  It should be noted that provision of compensation in the offshore environment has very little precedent so options will need careful consideration in order to ascertain if they might be suitable. We will however, be happy to consider and comment on any options that Vattenfall may wish to propose and may also be able to assist in signposting to relevant guidance on mitigation and/or compensatory measures.	The Applicant notes this. The Applicant has submitted a Position Statement on Derogation [ExA.AS-3.D6.V1] at Deadline 6.
2.8.6.2	The Applicant	Compensatory Measures: Following on from Q2.8.7.1 what compensatory measures could be proposed to ensure that the overall coherence of the network of Natura 2000 sites is protected?	As set out in response to WQ 2.8.6.1 above the Applicant is currently preparing evidence for a derogation case, in the event that the Secretary of State cannot rule out AEOI, notwithstanding the Applicant's clear position that AEOI can be ruled out. The Applicant is working closely with Natural England and Norfolk Vanguard Limited to agree in-principle compensatory measures. Norfolk Vanguard will be providing details of in-principle compensatory measures to the Secretary of State on 28 February 2020. The derogation case being prepared by the Applicant will also include details on in-principle compensatory measures. As set out above, this will be submitted to the Examination as soon as possible.	





PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.8.6.2	Natural England	Compensatory Measures: Following on from Q2.8.7.1 what compensatory measures could be proposed to ensure that the overall coherence of the network of Natura 2000 sites is protected?	Natural England advises that potential measures to avoid, reduce and mitigate the impacts in question need to be fully explored prior to any consideration of compensatory measures.  Please see comments to Q2.8.6.1	The Applicant agrees with Natural England that efforts to reduce impacts are the first priority. This is reflected in the Applicant's commitment to an increase in draught height from 22m to a minimum of 30m from Mean High Water Springs and a reduction in the number of turbines from 200 to a maximum of 158 (secured in the draft DCO, REP5-003). These changes have reduced collision risk by up to 74% for the Project (REP5-059) and further reinforces the Applicant's position that there will be no adverse effects on the integrity of SPA populations due to the project alone or incombination and therefore that there is no requirement to consider options for compensation.  The Applicant agrees with this approach and the Applicant's primary position is that the extensive mitigation measures put forward by the Applicant mean that a conclusion can be reached during the consenting stage that the Norfolk Boreas project would have no Adverse Effect on Integrity (AEoI) on any Natura 2000 sites.

#### 8.7 Flamborough and Filey Coast SPA

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.8.7.1	The Applicant	Population Viability Analysis:  Can the Applicant either re-run the PVA for gannet, kittiwake, razorbill and guillemot at the FFC SPA using the updated NE commissioned Seabird PVA tool or provide justification as to why this isn't necessary.	Please note our response to question Q2.2.2.1 above regarding Natural England updates on the PVA tool.	

## 9 Landscape and Visual Effects

# 9.0 The Applicant's landscape and visual assessment

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.9.0.1	The Applicant	Substations: lighting: Respond to the points made by NSAG regarding dark skies and the lighting of the proposed National Grid substation extension [REP4-045], and also include reference to the proposed project substation.	As detailed in Document 8.1 OCoCP [REP1-019] Section 3.7, the Applicant has committed to the preparation of an Artificial Light Emissions Management Plan in accordance with Requirement 20(2)(c) of the draft Development Consent Order (DCO). The plan will detail the mitigation measures to be taken to manage emissions from artificial light in accordance with Bats and Lighting in the UK guidance (Bat Conservation Trust, 2018), such as the use of directional beams, non-reflective surfaces and barriers and screens, to avoid light nuisance whilst maintaining safety and security obligations. Site lighting will be positioned and directed to minimise skyglow so far as reasonably practicable.  During construction at the onshore project substation, as detailed in para 369 of Chapter 5 Project Description [APP-218] and in para 393 at the National Grid Substation Extension. Perimeter and site lighting would be required during working hours in the winter months and a lower level of	





PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
			lighting would remain overnight for security purposes. Construction working hours are secured in Requirement 26 of the dDCO. The impacts of construction lighting are also considered within the Chapter 29 Landscape and Visual Impact Assessment [APP-242] and explicitly noted for the most impacted viewpoints as detailed in Table 29.11. 'Construction lighting would add to the prominence of the project in winter months when working days would extend into hours of darkness'.	
			During operation of the onshore project substation, as detailed in para 371 of Environmental Statement (ES) Chapter 5 Project Description [APP-218], the onshore project substation would not be manned; however, access would be required periodically for routine maintenance activities, estimated at an average of one visit per week. Normal operating conditions would not require lighting at the onshore project substation, although low level movement detecting security lighting may be utilised for health and safety purposes. Temporary lighting during working hours will be provided during maintenance activities only.	
			With reference to Table 29.7 Chapter 29 Landscape and Visual Impact Assessment (LVIA) [APP-242], the lighting requirements detailed within Chapter 5 Project Description [APP-218], are referenced as embedded mitigation measures, 'The onshore project substation has been designed so that it does not require permanent lighting' and have been noted as part of the visual impact assessment.	
			Similarly, during operation of the National Grid substation extension as detailed in para 395 and 396 of ES Chapter 5 Project Description [APP-218], the Necton National Grid substation would be unmanned. Maintenance of the substation would be undertaken approximately every three years, involving electrical isolation of equipment before it is worked on. Visual checks would be undertaken on a monthly inspection visit to the site. During operation, the Necton National Grid substation would not be illuminated under normal operating conditions. Temporary site lighting would be provided during working hours when conducting maintenance activities only.	

## 9.1 The Applicant's visual assessment

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.9.1.1	The Applicant	Distance: susceptibility of a receptor and magnitude of change: The response to Q9.1.4 justifies including distance as a factor influencing both susceptibility of a receptor and magnitude of change. If this is a divergence from the guidance for landscape and visual methodology which has been used (such as Guidelines for Landscape and Visual Impact Assessment Third Edition) this should be explained.	In 'Guidelines for Landscape and Visual Impact Assessment Third Edition' at Paragraph 3.26 under the heading "Assess against agreed criteria" it states; "The initial step should be to consider each effect in terms firstly of its sensitivity, made up of judgements about; the susceptibility of the receptor to the type of change arising from the specific proposal; and the value attached to the receptor" One of the aims of the 2013 update of the previous GLVIA Second Edition was to ensure that judgements regarding sensitivity were not arbitrary, but instead were considered with reference to the specific proposal. This was in order to make sure that the assessment reflected as much of the particular detail of the proposal as possible. Whilst there is no reference in GLVIA3 made to location in respect of visual receptors, at Paragraph 5.39, in respect of the sensitivity of landscape receptors, the following statement is made; "In LVIA"	





PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number				
Turnisci.			sensitivity is similar to the concept of landscape sensitivity used in the wider arena of landscape planning, but it is not the same as it is specific to the particular project or development that is being proposed and to the location in question." It is this relationship between the assessment of sensitivity and the location of the specific proposal, made in GLVIA3, that has led to the consideration of distance having an influence as one of a number of criteria in the assessment of sensitivity. In light of this definition, we can assume that a receptor located 10km from the proposed development will be less sensitive to that specific proposal than a receptor at 1km. It is, therefore, considered appropriate to include distance as one of the broad range of criteria considered in the assessment of sensitivity and this approach is not considered to be a divergence from guidance presented in GLVIA3.	
2.9.1.2	The Applicant	Public and private views:  1. Further to the comments arising from the ASI [REP4-055] and [REP-4-045], set out how the LVIA methodology you have adopted has taken account of views, picking up the points made regarding public and private. It is requested that this be in a way that a lay person can appreciate, rather than referring back to the LVIA methodology statement in the ES.  2. Explain in this public/ private context how Necton is a principal receptor for visual impact. Also, seemingly contrary to the impression gained by IPs on the ASI (above) explain how residential visual amenity has been included, which appears to have been assessed [APP-242, Table 29.13, Viewpoints VP8, VP9, VP10, VP12].  3. Included in this explain how the viewpoints were selected and agreed with whom.  4. Is there a viewpoint assessed which would represent the views from the camp site referred to by NSAG [REP4-050]? 5. Confirm whether visualisations of what would be seen from peoples' homes were used at consultation events.	1. The Applicant has never stated that the proposed development would not be visible from Necton or Ivy Todd nor that the views of private individuals have not been considered. The key findings of the LVIA are that effects would be limited insofar as only localised parts of the surrounding settlements would be affected and where visibility would occur, the proportion of the onshore project substation and National Grid substation extension that would be visible, would be limited.  As set out in the ES Chapter 29 [APP-242, Table 29.13, Viewpoints VP8, VP9, VP10] the assessment considers the views of residents in Necton, Ivy Todd and Holme Hale. Using the visualisations accurately produced to SNH standards and making the assessment on site, both at the specific viewpoints and surrounding areas, an assessment has been drawn based on the level of change that residents would experience as a result of these additional developments in their local area. While the viewpoints are located in the public domain, they have been used to represent the views of residents in both public and private spaces.  2. GLVIA3 sets out the requirement that settlements should be considered as principal visual receptors and residents as visual receptors in the visual assessment of a proposed development. In the case of Necton, the eastern edge of the village is most likely to be affected as this is the closest edge to the proposed development and, beyond this, the screening effect of the houses and the gentle fall in landform prevent visibility from extending further into the village. The assessment has, therefore, focused on the potential effects experienced between Chapel Road and St. Andrews Lane, as represented by Viewpoint 8 and Viewpoint 9. The potential visual effect on people in the public domain, that is driving along or walking in the public streets, would be limited owing to either full or partial screening by intervening houses, vegetation and/or landform. Viewpoint 8 and Viewpoint 9 have, therefore, been used to represent the po	





PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question				
Number				
			partly screened, but that it was recognised that the more open and	
			elevated location of Lodge Cottage could potentially lead to the onshore	
			project substation being more readily visible.	
			3. The selection of viewpoints is based on a combination of studying Zone	
			of Theoretical Visibility (ZTV) maps to understand initially where there is	
			potential for visibility to arise and then extensive field work to find	
			suitable viewpoints within these areas, where clear and open views	
			towards the proposed development occur and are not screened, by trees, hedgerows or buildings. Suitable viewpoints are considered to be those	
			that represent the most sensitive locations and in this settled landscape,	
			these are the settlements where people live, as well as local roads and	
			footpaths. Suitable viewpoints also show the fullest visibility from an	
			accessible location in the public domain, and again in this settled	
			landscape, this would be those locations most frequently visited or	
			experienced by members of the local community. Following this process	
			of selection, an original eight viewpoints were selected by the landscape architects at OPEN and agreed with the council officers representing	
			North Norfolk District Council, Breckland Council, Broadland District	
			Council and Norfolk County Council who were involved in the Expert Topic	
			Group Meetings. A further four viewpoints were subsequently added by	
			OPEN to ensure that the settlements of Necton and Ivy Todd were being	
			more fully represented and that middle range views from Holme Hale and	
			Hale Road were also being represented. No further viewpoints were suggested by the statutory consultees listed above.	
			4. The Applicant is unclear what camp site is being referred to and are not	
			aware of a camp site in Ivy Todd. There is no camp site marked on	
			Ordinance Survey (OS) mapping, no signs in the village to indicate the presence of a camp site and no references to a camp site on the internet.	
			5. At consultation events, the computer modelling company, 3d Webtech	
			presented a computer model which enabled attendees to request a view of the model from their property. While the main areas of vegetation,	
			such as Necton Wood and Great Wood, were included in the model,	
			hedgerows were not, and this gave the bare earth impression in views	
			generated, as commented upon in an Necton Substation Action Group	
			(NSAG) representation [REP4-044].	
2.9.1.3	The Applicant	Photomontages: digital terrain mapping:	OS 5 data provides a three dimensional model of the bare earth surface. It	
		Is it possible that hedges or tree belts could be read as landform	does not include surface features, such as hedgerows, trees or buildings.	
		[REP4-044] and [REP4- 052]?	There can, however, occasionally be processing anomalies in the landform	
			data, whereby, ground digital terrain models can incorporate some surface features by mistake and therefore over or under-estimate the ground	
			surface. This is relatively uncommon and would typically involve a small	
			feature being incorporated but not a whole hedgerow or stand of trees.	
			This is the most likely explanation for the potential anomaly in the terrain	
			model which is thought to have occurred in Viewpoint 3 from Lodge Lane	
			north.	





### 9.2 Alternatives considered

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.9.2.1	The Applicant	HVDC/ HVAC:  1. Is it correct, as stated by Necton Substation Action Group (NSAG) in response to the Interested Parties Response to Q9.2.4 [REP3-025], that the change to HVDC from HVAC has resulted in a proposed substation that would be taller than if HVAC had been used?  2. If so, what is the worst case increase in height?	1. The Applicant's commitment to High Voltage Direct Current (HVDC) technology results in an onshore project substation maximum building height of 19m and maximum external electrical equipment height (lightning protection) of 25m. An High Voltage Alternating Current (HVAC) onshore project substation, as outlined in the Scoping Report, was consulted on as a maximum height of 10.1m for external electrical equipment.  2. The worst case increase in height at the onshore project substation is 14.9m.	

#### 9.3 Landscape Effects

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.9.3.1	The Applicant	Adverse construction stage landscape and visual effects at landfall and cable installation in North Norfolk area:  1. Report on progress of the discussions to resolve differences set out in the SoCG with North Norfolk District Council (NNDC) regarding how construction stage landscape and visual impacts would be addressed [REP2-052, Table 10].  2. Provide any additional wording for the dDCO or any other document which is under discussion.	As set out in response to Q2.5.3.6, the Applicant agrees to the request from North Norfolk District Council, subject to landowner consent, a ten year period of aftercare for both trees and shrubs planted in North Norfolk. Given, the ten year aftercare period is subject to landowner agreement no changes to the dDCO are proposed. However, the OLEMS, submitted at Deadline 5 [Document reference 8.7, Version 3] has been updated to reflect this.	
2.9.3.1	North Norfolk District Council	Adverse construction stage landscape and visual effects at landfall and cable installation in North Norfolk area:  1. Report on progress of the discussions to resolve differences set out in the SoCG with North Norfolk District Council (NNDC) regarding how construction stage landscape and visual impacts would be addressed [REP2-052, Table 10].  2. Provide any additional wording for the dDCO or any other document which is under discussion.	<ul> <li>1. The Landscape matters held as 'under discussion' in the SoCG [REP2-052 Table 10] primarily relate to two ongoing issues: <ul> <li>a) Agreeing the appropriate aftercare period for all planting types in North Norfolk – NNDC evidenced the need for a ten-year period but the applicant only wishes to apply this to new trees; and</li> <li>b) Resolving the trenchless crossing issue at Colby – NNDC considers and agrees with the applicant's LVIA conclusions that 'loss of any trees here would have a significant effect'. During a recent teleconference with the applicant on 21 Feb 2020, NNDC proposed an alternative solution to enable trenchless crossing under Colby Road. In landscape terms this enables trees above the cable route to be saved and replacement trees planted where the new road way would be inserted. More detail on this alternative is set out in response to Q2.12.0.3 below and at Appendix B.</li> </ul> </li> <li>NNDC considers that, in light of limited progress, the topics in Table 10 'Approach to Mitigation' and 'Wording of Requirement(s) currently indicated as 'Agreed' should actually be moved back to the status of 'under discussion'.</li> <li>2. In respect of further DCO amendments, NNDC has provided amended wording for Requirements 16 and 19 in response to Q2.5.0.2 above.</li> </ul>	An updated SoCG with NNDC has been submitted at Deadline 6 identifying maters which are still under discussion.  As indicated in the Applicant's comment on Q2.8.2.1 the Applicant has agreed to the 10 year aftercare period for trees and shrubs, subject to landowner consent and this is included in the OLEMS [REP5-022].  With regards to Church Road, Colby, during a call between the Applicant and NNDC on 21 February 2020, the Council acknowledged that some tree losses are unavoidable in order to access the land between Colby Road and King's Beck and suggested that a preferred approach would be to introduce the construction accesses in proximity to the existing Hall Farm access (approximately 200m north of the currently proposed crossing of Colby Road). Whilst the Council acknowledge that this will still result in some tree losses on the eastern side of Church Road, it indicated that this may be preferable as there are already trees missing from the western side of Church Road in this location (due to the presence of Hall Farm and its associated farm access). The Applicant has considered this suggestion but does not feel that this option is a suitable alternative as:  • It does not avoid tree losses on Church Road (3-4 trees would still need to be removed but at a different location).  • This would introduce two construction accesses 20m from the main Hall Farm residential property. Construction traffic along this part of the running track, for duct installation works east of Chruch Road, would represent approximately 48 daily HGV movements for a period of 8-10 weeks to access the works from west to east, with associated potential noise and air quality impacts to the Hall Farm residence.





PINS Question	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number	The Applicant	Hedgerow replacement: Following on from responses to O9 3.2 O9 3.3 and O9 3.4 [REP2-	Along the onshore cable route hedgerow removal is only required for Scenario 2 as under Scenario 1 the hedgerows will be removed by Norfolk	
		Following on from responses to Q9.3.2, Q9.3.3 and Q9.3.4 [REP2-021] and the Ecological Clarification Note [REP2-028], the ExA notes that replacement hedgerows would be replanted to an improved ecological standard that aligns with the Norfolk Biodiversity Partnership guidance of hedgerow planting [REP2-028].  1. Would the total replacement hedgerow length (excluding the substations site) equal the length lost for Scenarios 1 and 2?  2. Does the reinstatement of the cable corridor hedgerows make allowance for planting elsewhere to compensate for the gaps that would need to be left over the cable corridor easement?  3. Would the compensation planting at the substations site amount to a similar length of hedgerow or connected vegetation (240m for Scenario 1 and 390m for Scenario 2) from that removed?  4. Why does the commitment to replace trees that need to be removed along the cable route as close as practicable to the position from which they were removed apply only in North Norfolk District as set out in the Schedule of Mitigation [REP2-006, ref 212], OLEMS [REP1-021, para 142, bullet 5]?  5. Broadland District Council points out in its LIR, that if sections of hedgerows and trees are removed and cannot be replaced after installation of the cables, then replacement planting on adjacent land could be a suitable form of mitigation [REP3-010]. How would this be achieved in the other two districts?  6. How is the certainty of being able to deliver and retain this mitigation planting assured when subject to landowner agreement? What agreements would be in place to prevent future removals of such trees?	Scenario 2, as under Scenario 1 the hedgerows will be removed by Norfolk Vanguard. Under Scenario 2 on the onshore cable route all hedgerow will be reinstated, so yes the total length replaced will equal the total length lost.  2. Hedgerow plants can and will be reinstated fully across the onshore cable route, even over the cable easement, so no gaps will be present.  3. For Scenario 1 the hedgerow loss is total of 1,166m length, the replacement planting comprises of 457m of hedgerow plus 1,749m length of additional woodland planting (866m (core) + 883m (nurse)), total length of replanting 2,206m. So, the total length of replanting is greater (+1,040m) than vegetation removed and has been designed to connect existing habitats.  For Scenario 2 the hedgerow loss is total of 707m length, the replacement planting comprises of 50m of hedgerow plus 4,021m length of additional woodland planting (1,983m (core) + 2,038m (nurse)), total length of replanting 4,071m. So the total length of replanting is significantly greater (+3,364m) than vegetation removed. and has been designed to connect existing habitats.  Note: the area of woodland is much greater than length provided above but has been calculated as a length to provide a comparison with hedgerow loss.  Replacement of hedgerows with woodland is proposed for the following reasons; 1) Woodland both provides and enables higher levels of biodiversity to be achieved. 2) Woodland allows a more substantial and robust landscape framework to be achieved. 3) Woodland will achieve a greater sequestration of Carbon Dioxide from the atmosphere.  4. The commitment to replace trees as close as practicable to the location there where removed but outside the cable easement was made following a request from North Norfolk District Council. However the Applicant will seek to replace trees as close as practicable to the location	





PINS Question	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Number				
			been removed but outside the cable easement in all districts, subject to landowner permission. The OLEMS has been updated to reflect this and updated documents submitted at Deadline 5. The Schedule of Mitigation will also be updated and submitted at Deadline 6.  5. As stated in point 4 the Applicant will seek to replace trees as close to their removal location as possible and within the Order Limits, any planting on adjacent land outside the Order Limits would be subject to consultation and agreement with landowners.  6. Along the cable route the Applicant will be reliant on temporary possession powers under Article 27 of the dDCO to maintain landscaping during the aftercare period. Article 27(12) of the dDCO provides temporary powers for maintenance of the authorise project, which would include landscaping, for a period of 5 years from the first export of electricity to the network. Where planting is outside the order limits or requires a longer period of aftercare then a separate agreement will be sought with specific landowners once the details of the planting and aftercare are known to secure rights for planting and maintenance.	
2.9.3.3	The Applicant	Topography: Proposed substation and National Grid substation extension sites:  The contour plan submitted in the Applicant's written summary of the oral case of the Onshore ISH [REP4-014, Appendix 3] demonstrates the watershed pointed out on the ASI. It illustrates the Scenario 2 footprint of the proposed project substation.  1. Provide a similar plan with the Scenario 1 footprint (with contours beneath the substation shading and hatching clearly marked).  2. Provide a plan which extends the detailed contours over a wider area to indicate:  • the further extent of the watershed (east and north east);  • land further south and east to include Ivy Todd Lane east of Ivy Todd, VP7 and the track from Ivy Todd Lane northwards (east of VP7);  3. Provide two cross sections that demonstrate the points made in your comments on written representations [REP3-007] through viewpoints VP3 and VP7, taking into account the points made in the scaled side elevations for these two viewpoints [REP4-052].  4. Provide two further plans with the same contour intervals, one each for Scenarios 1 and 2, which extend further north and west to include Top Farm to the north and the existing National Grid and Dudgeon substations to the A47 to the north west.  5. Provide two cross sections from St. Andrew's Lane which pass through the proposed site for the Norfolk Boreas National Grid substation(s)/ extension(s) to the contour at which Top Farm is located which demonstrate the points made regarding the slope of the land adjacent to Top Farm.	Additional plans have been produced and are presented in Appendix 9.1. In order to enable a better understanding of the landform in the area of the onshore project substation, the National Grid substation extension and the local area surrounding these proposals, larger plans at A1 size have been provided that include all the areas requested. It was felt this would be more helpful than a series of smaller plans which would potentially fragment the overall picture.  Four A1 plans (Figures 1a, 1b Scenario 1 and Figures 2a, 2b for Scenario 2) are provided, representing both the elevation and slope of the landform for both Scenario 1 and Scenario 2. The elevation plans (Figures 1a and 2a) illustrate the difference in elevation of the Ordnance Survey contours across the local area. The slope plans (Figures 1b and 2b) illustrate the steepness of the slopes, that is the relative distance between the Ordnance Survey contours, across the local area.  Figure 1a and Figure 2a show the location of the three cross sections requested.  The cross sections are shown on two separate A1 sheets, one representing Scenario 1 (Figure 1c) and the other Scenario 2 (Figure 2c). Cross Section 1 extends from St Andrews Lane to Ivy Todd Farm, passing through the National Grid substation extension. Cross Section 2 extends from Viewpoint 7 to the onshore project substation. Cross Section 3 extends from Viewpoint 3 to the onshore project substation.	
2.9.3.4	The Applicant	'Existing ground level': Requirement 16(5) and (8): Considering the more detailed contour information provided [REP4-014, Appendix 3], to build the required footprints at 'existing ground level' of 73m AOD for Scenario 1 and 72m AOD for Scenario 2, it appears that fill could need to be imported. The project description refers only to grading and removal of excess material, not bringing in fill [APP-218, para 363]. The Assumed Construction Materials and	1. An indicative cut and fill assessment of the onshore project substation footprints has been conducted to understand the uniform platform level which can be achieved with a neutral cut and fill assessment. I.e. no material is imported or exported from the site and the platform level is achieved by moving higher ground within the footprint to the lower ground level. This cut and fill assessment has informed the 'existing ground level' of the onshore project substation footprints, as secured in the dDCO. This approach has been taken to recognise that the existing land is not currently	





PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
		import of any fill for the project substation.	of the creation of attenuation ponds and other landscaping surrounding the onshore project substation footprint if necessary.	

### 9.4 Visual effects

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.9.4.1	The Applicant	Substations: agricultural style:  1. Provide photograph(s) of example(s) of buildings (a cluster of buildings would be useful) in the "agricultural style" typology at 19m high or similar, which is proposed for the proposed project substation converter halls, with some indicator of scale in the photographs and a description which includes location/surroundings, height, width and length, and materials.  2. Superimpose a worst-case scenario (in terms of dimensions) illustrative outline of the proposed substation converter hall building(s) on a photograph (taken from a public viewpoint) of the agricultural buildings at the proposed cable logistics area site at Oulton Street.	<ol> <li>The design intention is that the converter halls reflect the style, rather than the scale, of the agricultural buildings which characterise the rural Norfolk landscape. There are, therefore, no exact matches in terms of examples of clusters of agricultural buildings of the scale proposed for the converter halls. In order to reflect the specific characteristics and requirements of the site, a bespoke design will need to be developed. The attached photos in Appendix 9.2, however, show some ideas in terms of architectural styles and features that may help to inform the iterative design process.</li> <li>There are a number of concerns regarding the request to produce a visualisation showing the converter halls superimposed on the agricultural building on Oulton Road. Context is a critical and integral consideration in the assessment of the visual impacts of the onshore project substation. The visualisations from the twelve agreed viewpoints represent the proposed development in respect of its local context. The understanding and perception of scale relates to how the converter halls are seen in this context and is largely based on a comparison with the scale of the landform and other landscape features. A key feature of the site is that there are few settlements, roads or paths within close proximity, and this has been one of the most important determining factors in site selection. This means that there are no especially close range viewpoints and the converter halls will not be experienced at close proximity – a deliberate intention achieved through the site selection process.</li> <li>By producing a visualisation in which the converter halls are placed in a context in which they would never be seen is misleading. There is no agricultural building adjacent to the converter halls with which a direct scale comparison could be drawn. There are also no roads that come close to the converter halls there is no better substitute than the LVIA visualisations which have been prepared following best pr</li></ol>	





PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question	·			
Number				
			and standards and illustrating the proposed development in the exact context in which it would be experienced.	
2.9.4.2	The Applicant	Fencing at substations:  1. Would the proposed fencing material result in "sun-sparkle"? If so could a dull finish be secured?  2. Is it appropriate for the fencing to be the same as that surrounding the existing Dudgeon substation site? If so, could or should the finish be specified in the DAS or OLEMS for consistency with that on the contiguous site?  3. Is the 2.4m palisade fence with the further 1.0m electrical pulse fencing mounted upon the palisade fence illustrated in response to Q9.4.6 shown on the photomontages such as that for VP3 [APP-511] and [APP-523], VP5 etc?	<ol> <li>Fencing material would likely be galvanised steel, as used for overhead line towers and would not result in 'sun-sparkle'.</li> <li>It is likely that the fencing finish for the National Grid substation extension would be the same as the existing National Grid substation perimeter fence. However, flexibility in the fencing finish is required to ensure the latest industry standards and materials can be applied at the time of construction.</li> <li>The photomontages include a 2.4m palisade fence with 1.0m further electrical pulse fencing around the perimeter of the onshore project substation and National Grid substation extension models.</li> </ol>	
2.9.4.3	The Applicant	Substations: lightning conductors: Further to Necton Substation Action Group's (NSAG) points [REP2-107, response to Q5.3.3]:  1. is a lightning conductor required for each building, are they located adjacent to or on buildings and are they connected to each other with mesh?  2. do they need to be at the periphery of the Rochdale envelope?  3. is the material inevitably subject to "sun-sparkle" and do they become duller in time?  4. are more lightning conductors required because of local conditions?	<ol> <li>The design of the lightning protection at the onshore project substation will be determined to industry standard requirements during detailed design following the appointment of a HVDC supplier. Lightning protection up to 25m in height above existing ground level has been included in the Rochdale Envelope for potential worst case requirements. Lightning conductors may be required on top of buildings or on steel masts adjacent to buildings. In a worst case, fine wiring between conductors may be required.</li> <li>Lightning protection conductors may be required on steel masts at the periphery of the onshore project substation footprint to protect the outdoor electrical equipment. The lightning protection design will be determined in line with industry standard requirements.</li> <li>Lightning protection conductors are required to comprise of highly conductive materials such as aluminium and copper to provide the necessary protection performance and as dictated by industry standards. The lightning protection conductors are narrow and slender rods which will limit visual impact and light reflectivity.</li> <li>The lightning protection design is informed by an industry standard risk assessment of the impacts of a lightning strike on the operational equipment within the onshore project substation and the necessary mitigation from those impacts. The number or design of lightning</li> </ol>	

## 9.5 Outline Landscape and Ecological Management Strategy (OLEMS)

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.9.5.1	Natural England	OLEMS: Local authorities dealing with post consent approvals to confirm whether they are content with the Interested Parties Response to Q9.5.5 [REP2-021]. This includes retention of the current OLEMS terminology and lack of certainty, as this would be dealt with post consent, in more detail scale in the Landscape Management Scheme.	Natural England note updated OLEMS submitted at Deadline 1 and welcome that preconstruction survey mitigation will adhere to Forestry Commission and Natural England's Standing Advice regarding buffers for ancient woodland.	Noted.





PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number				
2.9.5.1	North Norfolk District Council	OLEMS: Local authorities dealing with post consent approvals to confirm whether they are content with the Interested Parties Response to Q9.5.5 [REP2-021]. This includes retention of the current OLEMS terminology and lack of certainty, as this would be dealt with post consent, in more detail scale in the Landscape Management Scheme.	NNDC have reviewed the updated OLEMS [REP1-021] and note the wording set out on Page 6 para 20:  'It is expected that the schemes of planting and aftercare for the onshore cable route would be delivered by contractors who can demonstrate appropriate experience and capacity to deliver effective and robust aftercare and provide a consistent quality of work across the whole project. Norfolk Boreas Limited would seek to work collaboratively with Breckland Council, North Norfolk District Council, Broadland District Council and Norfolk County Council to develop planting specifications for tendering for this work;'  NNDC has no immediate concerns about the words highlighted above in para 20.  The alternative is for the paragraph to be more affirmative that 'schemes of plantingwill be delivered by contractors who can demonstrate appropriate experience' and that 'Norfolk Boreas Limited will work collaboratively ' but, at the end of the day it is the wording in Requirement 24 that bites and it is what is submitted in the final LEMS	As detailed in the OLEMS the Applicant intends to work collaboratively will the local planning authorities to develop the landscaping schemes and is committed to ensuring that they are delivered by appropriately experienced contractors.
			that is to be approved, not the outline document.  Can relevant planning authorities or the Secretary of State actually prevent Vattenfall or any other wind development from employing contractors who can't demonstrate appropriate experience and capacity to deliver effective and robust aftercare and provide a consistent quality of work across the whole project? How can we compel applicants to work collaboratively with relevant planning authorities? This comes down to issues of ethos and ethics of the applicant and contractors they employ and strays outside of planning merit in a DCO application and into areas that would need to be included in future contracts for difference funding requirements for offshore wind projects, something which NNDC would welcome further discussion in the future with the relevant Secretary of State.	
2.9.5.2	The Applicant	Wording in OLEMS and OCoCP regarding buffers for ancient woodland:  1. The Applicant to update on progress of agreeing wording to be included in the OLEMS and the OCoCP, as indicated by Natural England in its response to Q12.0.5 [REP2- 080] and the Applicant in its response to responses [REP3-003].  2. The Applicant to update documents if agreement is reached. If not agreed, both parties to set out areas which are not resolved.	1. and 2. The wording in OLEMS Version 2 [REP1-020] has been agreed with Natural England. This position is reflected in the Natural England Risk and Issues log submitted at Deadline 3 [REP3-024] where this issue (Onshore Ecology Page 7) is identified as green (Natural England supports the Applicant's approach) and Natural England state 'We note updated OLEMS submitted at Deadline 1 welcome that preconstruction survey mitigation will adhere to Forestry Commission and Natural England's Standing Advice.'	1. and 2. The wording in OLEMS Version 2 [REP1-020] has been agreed with Natural England. This position is reflected in the Natural England Risk and Issues log submitted at Deadline 3 [REP3-024] where this issue (Onshore Ecology Page 7) is identified as green (Natural England supports the Applicant's approach) and Natural England state 'We note updated OLEMS submitted at Deadline 1 welcome that preconstruction survey mitigation will adhere to Forestry Commission and Natural England's Standing Advice.'
2.9.5.2	Natural England	Wording in OLEMS and OCoCP regarding buffers for ancient woodland:  1. The Applicant to update on progress of agreeing wording to be included in the OLEMS and the OCoCP, as indicated by Natural England in its response to Q12.0.5 [REP2- 080] and the Applicant in its response to responses [REP3-003].  2. The Applicant to update documents if agreement is reached. If not agreed, both parties to set out areas which are not resolved.	Natural England note updated OLEMS submitted at Deadline 1 and welcome that preconstruction survey mitigation will adhere to Forestry Commission and Natural England's Standing Advice regarding buffers for ancient woodland.	Noted.
2.9.5.3	The Applicant	OLEMS wording regarding replacement tree planting in North Norfolk:	The wording in the OLEMS (submitted at Deadline 5, Document reference 8.7, Version 3) has been updated to reflect, subject to landowner consent,	The wording in the OLEMS (submitted at Deadline 5, Document reference 8.7, Version 3) has been updated to reflect, subject to landowner consent,





PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
		1. In the opinions of the Applicant and NNDC, does the wording in the updated OLEMS [REP1-021, para 142, bullet 5] overcome the matter not agreed in the SoCG with NNDC regarding replacement tree planting for hedgerow trees that are removed after micro-siting of the cable corridor has taken place?  2. If not, what is being done to resolve this matter? NNDC to submit its proposed alternative wording if this remains as a point of difference.	a ten year aftercare period for both shrubs and trees within North Norfolk. As such it is understood the matter of tree replacement is now agreed with North Norfolk District Council.	a ten year aftercare period for both shrubs and trees within North Norfolk. As such it is understood the matter of tree replacement is now agreed with North Norfolk District Council.
2.9.5.3	North Norfolk District Council	OLEMS wording regarding replacement tree planting in North Norfolk:  1. In the opinions of the Applicant and NNDC, does the wording in the updated OLEMS [REP1-021, para 142, bullet 5] overcome the matter not agreed in the SoCG with NNDC regarding replacement tree planting for hedgerow trees that are removed after micro-siting of the cable corridor has taken place?  2. If not, what is being done to resolve this matter? NNDC to submit its proposed alternative wording if this remains as a point of difference.	1. NNDC welcomes the commitment from the applicant at OLEMS paragraph 142 bullet 5 that:  'Any trees removed along the cable route within North Norfolk will be replaced as close as practicable to the location where they were removed, but outside of the operational easement. This would be subject to landowner agreements'.  The key issue is to understand the process that Norfolk Boreas Limited would go through to secure that landowner consent for replacement planting and what happens if, for whatever reason(s), this consent cannot be secured and there is a net loss of trees within hedgerows in North Norfolk as a result of the proposal. In this scenario, could additional tree planting be delivered/secured in a location or locations where landowner agreement has been secured? This is not necessarily ideal as replacement should be as close as possible to where removal occurs but this may help to avoid net loss in the worst case scenario.  2. NNDC suggest a further bullet point be added to OLEMS paragraph 142 as follows:  • Where landowner agreement cannot be secured for replacement tree planting as close as practicable to the location where they were removed, Norfolk Boreas limited and/or its appointed contractor will provide an alternative scheme or schemes for replacement tree planting ensuring no net loss of trees within hedgerows in North Norfolk, which are an important landscape characteristic in this area.	The Applicant refers to the response provided to Q2.9.3.2.  The Applicant seek will seek to replace trees as close to their removal location as possible and within the Order Limits, any planting on adjacent land outside the Order Limits would be subject to consultation and agreement with landowners.  Along the cable route the Applicant will be reliant on temporary possession powers under Article 27 of the dDCO to maintain landscaping during the aftercare period. Article 27(12) of the dDCO provides temporary powers for maintenance of the authorised project, which would include landscaping, for a period of 5 years from the first export of electricity to the network. Where planting is outside the Order Limits or requires a longer period of aftercare, such as the additional 5 years in North Norfolk, then a separate agreement will be sought with specific landowners once the details of the planting and aftercare are known to secure rights for planting and maintenance.  The Applicant acknowledges that such agreements may not be possible and agrees to update the OLEMS with the following:  'Where required, if landowner agreement cannot be secured for replacement tree planting as close as practicable to the location where they are removed, Norfolk Boreas Limited and/or its appointed contractor will provide an alternative scheme or schemes for replacement tree planting ensuring no net loss of trees within any district.'

#### 9.6 Good Design

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.9.6.4	The Applicant	Substations: integration into local landscape:  1. In order to integrate into the local landscape as stated in the DAS [REP2-010, para 80 and 82], has the Applicant considered subterranean buildings as asked by NSAG [REP4-049] and/ or building into the slope as mentioned by NFU [REP4-036. Section 3.1].  2. In considering the topography in more detail, once the detailed technical and operational requirements and physical separation of the equipment are known, how could the commitment to integrating into local topography in terms of siting be written into the design process and/ or the outline topics for the Design Guide?	1. The Applicant has considered the lowering of buildings into the ground. In terms of landscape and visual considerations, the options of lowering the ground level or lowering buildings into the ground / slope were considered and discounted. In order to ensure a design is responsive to the unique characteristics and attributes of a local landscape, the best approach is generally to work with the landform, in order to minimise the magnitude of change. While the landform is gently undulating, it falls more steeply towards the south-east. In order to cut a level platform of 250m x 300m at a lower ground level or excavate	1. The Applicant has considered the lowering of buildings into the ground. In terms of landscape and visual considerations, the options of lowering the ground level or lowering buildings into the ground / slope were considered and discounted. In order to ensure a design is responsive to the unique characteristics and attributes of a local landscape, the best approach is generally to work with the landform, in order to minimise the magnitude of change. While the landform is gently undulating, it falls more steeply towards the south-east. In order to cut a level platform of 250m x 300m at a lower ground level or excavate





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		The Applicant and other Interested Parties to suggest wording. The Interested Parties Response to consider both Scenarios 1 and 2.	subterranean buildings would require a huge amount of earthworks and would fundamentally alter the character of the local landscape.	subterranean buildings would require a huge amount of earthworks and would fundamentally alter the character of the local landscape.
			2. The Design and Access Statement [Document Reference 8.3, Version 3] has been updated to provide further information on the Design Guide including integration into the local landscape. The most effective way to integrate into the local topography is to minimise cut and fill by establishing the median in terms of site levels and using this to construct a level platform.	2. The Design and Access Statement [Document Reference 8.3, Version 3] has been updated to provide further information on the Design Guide including integration into the local landscape. The most effective way to integrate into the local topography is to minimise cut and fill by establishing the median in terms of site levels and using this to construct a level platform.
2.9.6.4	National Farmers Union	Substations: integration into local landscape:  1. In order to integrate into the local landscape as stated in the DAS [REP2-010, para 80 and 82], has the Applicant considered subterranean buildings as asked by NSAG [REP4-049] and/ or building into the slope as mentioned by NFU [REP4-036. Section 3.1].  2. In considering the topography in more detail, once the detailed technical and operational requirements and physical separation of the equipment are known, how could the commitment to integrating into local topography in terms of siting be written into the design process and/ or the outline topics for the Design Guide? The Applicant and other Interested Parties to suggest wording. The Interested Parties Response to consider both Scenarios 1 and 2.	The NFU is still to receive further information as requested in our SoCG and as listed by the Examiners at this question from the Applicant	The Applicant refers to the response to Q2.9.6.4 above.
2.9.6.4	NSAG	Substations: integration into local landscape:  1. In order to integrate into the local landscape as stated in the DAS [REP2-010, para 80 and 82], has the Applicant considered subterranean buildings as asked by NSAG [REP4-049] and/ or building into the slope as mentioned by NFU [REP4-036. Section 3.1].  2. In considering the topography in more detail, once the detailed technical and operational requirements and physical separation of the equipment are known, how could the commitment to integrating into local topography in terms of siting be written into the design process and/ or the outline topics for the Design Guide? The Applicant and other Interested Parties to suggest wording. The Interested Parties Response to consider both Scenarios 1 and 2.	NSAG would like the following wording to be included in the DAS: "The datum level for the converter halls will be set at the 65 metre contour line. All buildings higher than 13 metres above the datum should be sunk into the ground such that their height above the datum level (65m) does not exceed 13 metres. Earth banks of 15 metres height should be placed around all exterior sides of the converter hall site (Vanguard and Boreas if both are built) which will hide the lightning conductor towers. Trees will be planted on the earth banks to stabilise them and provide additional screening. The land should be levelled down to 65m, not up, and the soil waste created should be used for the proposed bunds/banks." Communication masts appear to be a material change as they have not been mentioned before the ISH on 21 January 2020. Please could the Examining Authority ask the applicant for details on this late addition to the plans? If they are considered to be a material change, then a new DCO may be required. If they are not considered a material change then their height and position may require extra mitigation to that mentioned above. We would also like additional planting and smaller earth banks between the converter hall area and both Ivy Todd and Necton villages, which will soften the views. Earth banks are a very common sight across Norfolk, commonly used to hide unwelcome, unfitting, and ugly, installations. The area around Necton is in a particularly undulating part of Norfolk, and mounds and rises and small hills are natural to it.	The Applicant refers to the response to Q2.9.6.4 with respect to consideration of subterranean buildings and how this was considered and discounted.  The lower the elevation of the platform level, the greater the extent of land around the platform that will require remodelling to ensure the proposed levels tie up with the existing levels, unless large concrete retaining walls are used to overcome the difference in height. This remodelling could potentially lead to an additional loss of existing hedgerows and trees in the surrounding area, with an approximate 4m minimum strip of land lost for every metre lower the platform goes (assuming a maximum 1:4 gradient to still allow access and maintenance), although potentially greater in sections of greater level difference. In addition, to create 15m high bunds, assuming a 1:4 gradient, an additional 120m strip around the onshore project substation would be required and all existing vegetation in this area would be lost.  The Applicant does not propose any communications masts as referenced in the response. The onshore project substation will include the lightning protection masts however these have always been a requirement of the onshore project substation and considered in the EIA and the application. The height of which must not exceed 25m above existing ground level as secured by dDCO Requirement 16 (5).
2.9.6.4	Necton Parish Council	Substations: integration into local landscape:  1. In order to integrate into the local landscape as stated in the DAS [REP2-010, para 80 and 82], has the Applicant considered subterranean buildings as asked by NSAG [REP4-049] and/ or building into the slope as mentioned by NFU [REP4-036. Section 3.1].	Necton Parish Council are concerned about the height of the converter halls with respect to their surroundings. We would like the following wording to be included in the DAS: "The datum level for the converter halls will be set at the 65 metre contour line. All buildings higher than 13 metres above the datum should be sunk into the ground such that their height above the datum does not exceed 13 metres. Earth banks of 15 metres height should be placed around all exterior sides of the converter	See comment provided above on the response from NSAG to Q2.9.6.4.





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Number		2. In considering the topography in more detail, once the detailed technical and operational requirements and physical separation of the equipment are known, how could the commitment to integrating into local topography in terms of siting be written into the design process and/ or the outline topics for the Design Guide? The Applicant and other Interested Parties to suggest wording. The Interested Parties Response to consider both Scenarios 1 and 2.	hall site (Vanguard and Boreas if both are built) which will hide the lightning conductor towers. Trees will be planted on the earth banks to stabilise them and provide additional screening." Communication masts appear to be a material change as they have not been mentioned before the ISH on 21 January 2020. Please could the Examining Authority ask for details on this late addition to the specification.  The Parish Council supports additional planting on earth banks between the converter hall area and both Ivy Todd and Necton villages. This should be a mandatory part of the design process	
2.9.6.4	Chris Allhusen	Substations: integration into local landscape:  1. In order to integrate into the local landscape as stated in the DAS [REP2-010, para 80 and 82], has the Applicant considered subterranean buildings as asked by NSAG [REP4-049] and/ or building into the slope as mentioned by NFU [REP4-036. Section 3.1].  2. In considering the topography in more detail, once the detailed technical and operational requirements and physical separation of the equipment are known, how could the commitment to integrating into local topography in terms of siting be written into the design process and/ or the outline topics for the Design Guide? The Applicant and other Interested Parties to suggest wording. The	The below points were general responses to written questions 2.9.6.4 – 2.9.6.7:  1. I farm at Bradenham Hall Farms. Not only are Vanguard/Boreas planning to dive their corridor through 15 of our fields, but also part of the substation may be sited on our land.  2. I understand that serious consideration is being given to the use of an offshore ring main to avoid having to tear up the Norfolk countryside by taking the Boreas connection to Necton. I would fully support this.  3. If the sub-station is to come to Necton, then the proposed siting of the Boreas substation in the Necton area is seriously misguided, as was Vanguard's. The proposed site is the highest of the four original	<ol> <li>Currently, for Bradenham Hall Farms, only the HoT for the Cable Corridor are signed. For the substation site the HoT have not been signed, the Applicant is currently progressing these discussions with the landowners.</li> <li>Noted</li> <li>In the Applicant's response to the Open Floor Hearing [REP1-036] the Applicant has responded on the issue of site selection and onshore project substation siting. The issue of site selection was also responded to in the Applicant's Comments on Responses to the Examining Authority's Written Questions [REP3-003]: As detailed in section 4.13 of ES Chapter 4 [APP-217] (Identification of the onshore project substation</li> </ol>
2.9.6.5	Substations: layout, masterplanning, zoning and bunding:  1. Different views have been expressed about the effectiveness of bunding. If the detailed technical and operational requirements led to a layout needing less land, would there be potential for incorporating more natural mounding as part of the mitigation?  2. Would it be the intention to consider options for the layout of the buildings, their footprints and the electrical equipment and the ground modelling required from various viewpoints, and consult  4. Boreas have never explained by the land enabling it to be better even better site, which you have and existing sub-station, as well option sites. Boreas have never these far lower sites cannot be used.	proposals and in fact 17 metres above the one destined for the stream valley. This stream site would take advantage of the natural screening of the land enabling it to be better landscaped and hidden. Alternatively, an even better site, which you have visited is Top Farm, adjacent to the A47 and existing sub-station, as well as being even lower than any of the four option sites. Boreas have never given good reasons as to why either of these far lower sites cannot be used.  4. Boreas have never explained how they intend to landscape these enormous buildings. It would take 40 years for trees to either hide them or reduce the sound impact of their operation.	location) in order to minimise the distance between the onshore connection point, the existing Necton National Grid substation, and the onshore project substation a 3km substation search area was identified. Distances beyond 3km were considered unacceptable due to transmission losses and included consideration of National Grid's Guidelines on Substation Siting and Design (The Horlock Rules) which prioritise the grouping of existing electrical infrastructure. This 3km study area was consulted on as part of the Scoping Report, through formal and informal community consultation, and during community drops in, meetings with landowners, stakeholders and regulators.	
2.9.6.6		Substations: post consent design process and Design Guide: At the Onshore ISH on Tuesday 21 January 2020 [EV6-001 to EV6-004], the Applicant's proposed additional wording to the Design and Access Statement (DAS) was discussed. Arising from that there are actions [EV6-001] for the Applicant to work with Breckland Council to update the DAS to include greater clarity on the process (including consultation), fuller content for the proposed Design Guide and whether a form of wording could secure a masterplanning approach to zoning and massing of buildings [REP4-014, response to 4b)IV], to be submitted at Deadline 5.  1. Any Interested Party which has comments or suggestions to make in this regard is invited to comment.  2. NFU is specifically invited to comment because this is relevant to points still under discussion in its SoCG with the Applicant [REP2-046, pages 5 and 6] and raised further in its Deadline 4 submission [REP4-036].	5. In one of Boreas's scenarios, part of the sub-station buildings seems to have crept onto our land. This has never been mentioned or discussed with me.  6. I met with Boreas on the 14th November and asked a lot of questions about the sub-station as it impacts on our land, namely detailed layout of the site, design and colour of the buildings, landscape intrusion mitigation, tree planting, the possibility of part burying the buildings to name a few. I have had no reply to any of our questions. We asked similar questions of Vanguard, also with no reply nor any information provided. 7. At that meeting, Boreas claimed that I had refused to negotiate with them. This is totally untrue, but I believe their strategy is that once they have DCO permission from PINS, they will use their CPO powers to do whatever they wish rather than entering into a voluntary agreement where I can have some input and influence of the significant	The site at Top Farm is addressed in the Consultation Report (document reference 5.1; APP-027, pages 138 and 139 and section 28.11), and the Applicant's response to the Open Floor Hearing [REP1-036]. Within REP1-036, the main reasons for ruling out the Top Farm site were detailed: The substation footprint would be closer to more residential properties, including within the currently excluded residential buffer zones, and [would require] significant earthworks in order to level the footprint, prior to commencement of construction works.  4. The Applicant has discussed details of the mitigation planting plans with the landowner and has offered to review the proposed screening from the landowner's property. The proposed landscaping for the substation is presented in Chapter 29 of the ES, Landscape and Visual Impact Assessment, and the development of a detailed Landscape Management Scheme post-consent is secured through Requirement 18 of the dDCO [REP5-003].
2.9.6.7		Substations: post consent design process stakeholder involvement:	effect of the scheme on my historic estate.  8. At the site visit that you had on the 23rd January 2020, Boreas were not at all clear what had in fact been marked out, nor could I do so from the various plans I have. I have asked this question of them but have not	5. The Order limits for Boreas have remained consistent. Currently, the Applicant is unable to be definitive about the precise location and form of any buildings and infrastructure within the Order limits. It is a possible outcome that part of the convertor buildings for the onshore project





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		Respond to the NFU's query about the landowners' involvement in the landscape design such as hedgerow species selection [REP4-036, section 3.1].	had any reply. However, I see in the report of the inspection, and to quote "Bradenham Hall Farm, corner of small copse, position north east of north east corner of proposed site of Norfolk Boreas project substation (Scenario 1). Existing features observed/ pointed out: hedge line boundary between landownerships, Necton Wood to the north west, rich sandy soil. Project features pointed out: pegged out north east corner of proposed project substation, sites for temporary works area, cable route and landscape", that they seem to admit that the pegged-out site has buildings on it. They also claim that the site is a "rich sandy soil". This admirably demonstrates their lack of knowledge as it is medium to heavy clay!  9. I would suggest another site visit should be conducted, with detailed plans submitted by Boreas and pegged out, and in better weather then the visual effect of the site could be seen. This should include some physical evidence of the proposed height of the buildings and installations.  10. Despite having plenty of time to do so, Vattenfall have failed to request to be done or conduct any surveys over our land covering the selected route to see if there are any archaeological features, rare species etc.  11. No noise surveys have been requested or conducted to assess the background noise of the land. I would consider this of the highest importance if the sub-station is to be built at Necton.  12. I am very concerned about both the noise and light pollution from the site, both during construction and operation, as being on a high point, both the light and noise will carry a considerable distance. During the construction and early operation of the existing sub-station, this became a serious concern and nuisance for local people.  13. It is a great concern to me that Vattenfall are requesting DCO powers without providing sufficient information on their intentions. In reality I do not believe that they have answers to some of the questions which have been asked of them. I very strongly object to the princ	substation could be located on Bradenham Hall Farm's land and the Applicant has committed to meet with the Landowner on the week commencing 9th March to discuss this.  6. As mentioned above, the Applicant has committed to meet with the landowner on the week commencing 9th March to address questions surrounding the onshore project substation. The Applicant has focussed on refining any physical aspects of the onshore project substation's design over which decisions can be made at this time, and will discuss these with the landowner directly. The Applicant has maintained regular contact with the landowner's agent throughout.  The updated Design and Access Statement (DAS) [REP5-012] details the design process which will be followed once the detailed design parameters are known. As part of the design process a a Design Guide will be developed which will set out the mitigation measures to be applied in respect of the onshore project substation. It is also recognised that the local community have experience of growing trees and other plants in this local area. Through consultation on the Design Guide, the Applicant would welcome the opportunity to share local knowledge on native species that are suited to local conditions. This would ensure that the 'palette' of species selected would present the best opportunity for successful establishment and growth. The DAS [REP5-012] details that relevant landowners are identified as stakeholders to be consulted on the Design Guide.  7. The Applicant is committed to securing the voluntary consent of the landowner.  8 and 9. The Applicant has had a discussion with the landowner subsequent to the ASI but considered the landowner's position on what was pegged out as a statement, not as a question. This issue is on the agenda to be discussed at the meeting to take place week commencing 9th March. The queries around the area pegged out for the ASI were addressed in the Applicant's Responses to the Examining Authorities Further Written Questions [REP5-045]: The area pegged out on the g





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Number				developed post consent and approved by the relevant planning authority, and will detail mitigation measures relating to noise and light emissions.
2.9.6.5	The Applicant	Substations: layout, masterplanning, zoning and bunding:  1. Different views have been expressed about the effectiveness of bunding. If the detailed technical and operational requirements led to a layout needing less land, would there be potential for incorporating more natural mounding as part of the mitigation?  2. Would it be the intention to consider options for the layout of the buildings, their footprints and the electrical equipment and the ground modelling required from various viewpoints, and consult upon these as part of the design process? If so how could this be set out in the explanation of the design process?	1. In terms of landscape and visual consideration, the introduction of large scale bunds would appear out of character in this traditional, rural landscape and at variance with the gently undulating landform. Therefore, if the layout required less land, then it would be in the best visual interest to maintain the existing landform over as wide an extent as possible. The option to use some subtle earth bunding in appropriate areas would be considered, where a slight rise in ground levels could contribute to the mitigation afforded by the proposed planting.  2. The layout of buildings, footprints and electrical equipment is principally pre-determined by the function of the onshore project substation and associated interfaces. Therefore, these factors would not be open for influence. However previous studies have been carried out to better understand which aspects or parts of the onshore project substation would have the greatest effect on the key views from the local area. This information would be used to ensure that the ground modelling and tree planting was most effective in mitigating the visual effects on these key views. During the Design Process, plans could be used to show the view cones from the key views to the most prominent aspects and parts of the onshore project substation and detailed plans of these areas to show the special treatment in the landform modelling and planting that would enhance the mitigation potential.  The DAS has been updated and submitted at Deadline 5 to include this [Document Reference 8.3, Version 3].	
2.9.6.6	National Farmers Union, Interested Parties	Substations: post consent design process and Design Guide: At the Onshore ISH on Tuesday 21 January 2020 [EV6-001 to EV6-004], the Applicant's proposed additional wording to the Design and Access Statement (DAS) was discussed. Arising from that there are actions [EV6-001] for the Applicant to work with Breckland Council to update the DAS to include greater clarity on the process (including consultation), fuller content for the proposed Design Guide and whether a form of wording could secure a masterplanning approach to zoning and massing of buildings [REP4-014, response to 4b)IV], to be submitted at Deadline 5.  1. Any Interested Party which has comments or suggestions to make in this regard is invited to comment.  2. NFU is specifically invited to comment because this is relevant to points still under discussion in its SoCG with the Applicant [REP2-046, pages 5 and 6] and raised further in its Deadline 4 submission [REP4-036].	The Applicant has worked with Breckland Council and has updated the Design and Access Statement to provide further clarity on the consultation process, content of the Design Guide and zoning. The updated DAS has been submitted at Deadline 5 [Document reference 8.3, Version 3].  The Applicant continues to engage with the NFU and has informed the NFU of the Design Guide and associated wording within the DAS for consideration. The latest position with the NFU on this item will be included in the NFU SoCG at Deadline 6.	
2.9.6.6	National Farmers Union	Substations: post consent design process and Design Guide: At the Onshore ISH on Tuesday 21 January 2020 [EV6-001 to EV6-004], the Applicant's proposed additional wording to the Design and Access Statement (DAS) was discussed. Arising from that there are actions [EV6-001] for the Applicant to work with Breckland Council to update the DAS to include greater clarity on the process (including consultation), fuller content for the proposed Design Guide and whether a form of wording could secure a masterplanning approach to zoning and massing of buildings [REP4-014, response to 4b)IV], to be submitted at Deadline 5.  1. Any Interested Party which has comments or suggestions to make in this regard is invited to comment.	NFU and LIG would like to see the Design and Access Statement that will be submitted at deadline 5 to see what wording has been included to cover greater clarity on the process that will have been discussed with Breckland Council before it can comment further. The landowner affected directly by the siting of the substation will also want to comment on the process which is hopefully to be identified.	The Applicant has submitted the Design and Access Statement at Deadline 5 and awaits further comment from the NFU





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Number				
		2. NFU is specifically invited to comment because this is relevant to points still under discussion in its SoCG with the Applicant [REP2-046, pages 5 and 6] and raised further in its Deadline 4 submission [REP4-036].		
2.9.6.6	NSAG	At the Onshore ISH on Tuesday 21 January 2020 [EV6-001 to EV6-004], the Applicant's proposed additional wording to the Design and Access Statement (DAS) was discussed. Arising from that there are actions [EV6-001] for the Applicant to work with Breckland Council to update the DAS to include greater clarity on the process (including consultation), fuller content for the proposed Design Guide and whether a form of wording could secure a masterplanning approach to zoning and massing of buildings [REP4-014, response to 4b)IV], to be submitted at Deadline 5.  1. Any Interested Party which has comments or suggestions to make in this regard is invited to comment.  2. NFU is specifically invited to comment because this is relevant to points still under discussion in its SoCG with the Applicant [REP2-046, pages 5 and 6] and raised further in its Deadline 4 submission [REP4-036].	NSAG believe that Necton Parish Council should be included in consultation on the DAS. There is no precedent for electrical infrastructure buildings of this size in the UK and therefore all local authorities including Necton Parish Council should be included in the DAS consultation. It has come to our attention that District councils (including Breckland) stand to gain significant income from these kind of projects through untaxed business rates [Nondomestic rating (renewable energy projects) Regulations 2013], (attached) and are therefore possibly going to give a different response to them than they otherwise would. Necton is going to be left with permanent damage. We felt the results of the above with the Dudgeon substation. What we felt were significant changes were made to the original plans without any consultation with NPC (for example datum level).	The Design and Access Statement (DAS) submitted at Deadline 5 [RE5-012] provided further details on the design process and the development of the Design Guide for the onshore project substation. Once the onshore project substation designer and contractor have been appointed the provisional details on the layout, scale and design can be developed. Through the Design Guide relevant stakeholders will be given the opportunity to provide feedback on the proposals and enable some involvement in terms of local preferences to colour options for the convertor buildings and to share local knowledge on native species that are suited to local conditions. As detailed in the DAS [REP5-012] such engagement could take place with, for example, relevant landowners, Necton PC, Holme Hale PC, closest residents, and other residents / resident's groups likely to have an interest in determination of aspects that can help mitigate visual impacts as far as possible.
2.9.6.6	Breckland Council	Substations: post consent design process and Design Guide: At the Onshore ISH on Tuesday 21 January 2020 [EV6-001 to EV6-004], the Applicant's proposed additional wording to the Design and Access Statement (DAS) was discussed. Arising from that there are actions [EV6-001] for the Applicant to work with Breckland Council to update the DAS to include greater clarity on the process (including consultation), fuller content for the proposed Design Guide and whether a form of wording could secure a masterplanning approach to zoning and massing of buildings [REP4-014, response to 4b)IV], to be submitted at Deadline 5.  1. Any Interested Party which has comments or suggestions to make in this regard is invited to comment.  2. NFU is specifically invited to comment because this is relevant to points still under discussion in its SoCG with the Applicant [REP2-046, pages 5 and 6] and raised further in its Deadline 4 submission [REP4-036].	'The Applicant has worked with Breckland Council to provide further clarity on the consultation process and content of the Design Guide. The Design and Access Statement (submitted at Deadline 5) has been updated to reflect discussions and provide further information, these updates have been agreed with Breckland Council.'	Noted.
2.9.6.6	Necton Parish Council	Substations: post consent design process and Design Guide: At the Onshore ISH on Tuesday 21 January 2020 [EV6-001 to EV6-004], the Applicant's proposed additional wording to the Design and Access Statement (DAS) was discussed. Arising from that there are actions [EV6-001] for the Applicant to work with Breckland Council to update the DAS to include greater clarity on the process (including consultation), fuller content for the proposed Design Guide and whether a form of wording could secure a masterplanning approach to zoning and massing of buildings [REP4-014, response to 4b)IV], to be submitted at Deadline 5.  1. Any Interested Party which has comments or suggestions to make in this regard is invited to comment.  2. NFU is specifically invited to comment because this is relevant to points still under discussion in its SoCG with the Applicant [REP2-046, pages 5 and 6] and raised further in its Deadline 4 submission [REP4-036].	Necton Parish Council would welcome additional consultation on the DAS. There is no precedent for buildings of this magnitude and therefore all local authorities including Necton Parish Council should be included in the consultation process. Unfortunately, district councils stand to gain significant income, through untaxed business rates [Nondomestic rating (renewable energy projects) Regulations 2013], from this infrastructure project and are therefore unlikely to apply as rigorous an approach as parish councils who could be left with significant unwelcome effects. Our concern with Boreas and Vanguard is that it will replicate our experience with the Dudgeon substation. Significant changes were made to the original plans without any consultation (eg datum level).	Please see response provided above on the response from NSAG to Q2.9.6.6.





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2.9.6.7	The Applicant	Substations: post consent design process stakeholder involvement: Respond to the NFU's query about the landowners' involvement in the landscape design such as hedgerow species selection [REP4-036, section 3.1].	The Applicant would welcome the opportunity to engage with landowners regarding the selection of hedgerow and tree species to be used in mitigation planting. From past experience, shared local knowledge of species best suited to local conditions has proved invaluable.  The Design and Access Statement has been updated to reflect this being undertaken during the Design Process. The updated DAS has been submitted at Deadline 5 [Document reference 8.3, Version 3].	
2.9.6.8	The Applicant	Design and Access Statement:  1. Would any of the wording such as the commitments table and illustrative material such as the Terminology and Defined Maximum Height Controls be useful additions to the DAS?  2. The DAS should be updated to include use of Mobilisation Areas in Scenario 1 [APP2-009, Table 3.1].	1. Section 5.3 of the DAS has been updated to include the commitments table and information on terminology and maximum heights. The image has also been updated to reflect that used in the visualisations and at Issue Specific Hearing 3.  2. On the onshore cable route the mobilisation areas are not required under Scenario 1. Only MA1a at the onshore project substation is required under Scenario 1 and Table 3.1 in the DAS has been updated to reflect this. The updated DAS has been submitted at Deadline 5 [Document reference 8.3, Version 3].	

## 9.7 Matters arising from the accompanied site inspection (ASI) on Thursday 23 January 2020

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.9.7.1	The Applicant	Age of existing screen planting:  1. When and of what size was the planting along the National Grid and Dudgeon substations access track planted?  2. When and of what size was the planting on the south side of the A47 opposite Spicer's Corner planted?	1. There is a mix of planting lining the track, with woodland planting, hedgerow planting and 'light standard' trees (which means planted at a height of 2.5 to 3.0m). The date of this planting is not known but is thought to have taken place in the winter of 2017/2018 (at the same time as the A47 planting) making it approximately 2 years old.	
			2. The photographs taken at Spicer's Corner are dated March 2018 and show, what appears to be, relatively recently planted whips in protective sleeves. It is therefore assumed that this mitigation planting was implemented in the winter of 2017/2018 making it approximately 2 years old. It comprises woodland panting of whips planted at a height of approximately 70-90cm.	
			In response to concerns regarding the limited growth on the existing mitigation planting, this is to be expected. Growth rates of young plants are typically slow as they are initially recovering from the shock of being transplanted and are developing their root systems to ensure they have stability and can tap into the water and nutrients in the soil. This is why the growth on young planting can be very limited in the first couple of years. Visible growth above ground is proportional to the amount of leaves or needles on the plant as this determines levels of photosynthesis and therefore the amount of energy the plant has to enable growth. After the first couple of years, growth then increases exponentially as the plant's capacity to grow increases, until it approaches maturity and growth starts to level off. Growth rates are, therefore, not constant and the sensitive design of planting and its careful management in the early years is critical to ensure healthy and successful establishment.	
2.9.7.2	The Applicant	Trees at Lodge Farm: What height are the trees at Lodge Farm, which were used as a location identifier during the ASI?	It is not possible to give an accurate answer without measuring the trees on site. An estimate has been calculated by extracting the difference in	





PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
			height between the Digital Surface Model and the Digital Terrain Model.	
			This estimate is 14.05m in the west and 14.29m in the east.	
2.9.7.3	The Applicant	Queries regarding ASI pegging out:	The area pegged out on the ground for the Accompanied Site Inspection	
		Clarify the points made by Necton Parish Council [REP4-030] and the	(ASI) was the north east corner of the Norfolk Boreas onshore project	
		NFU [REP4-036] points regarding what precisely was pegged out on	substation footprint under Scenario 1, as shown in Work No. 8a on Works	
		the ground for the ASI. The ExA understood the pegs and tape to be	Plan sheet 40a [REP1-007].	
		the north east corner of the Scenario 1 footprint of the proposed		
		Boreas project substation. It appears that the NFU's drawing may	For clarity, under Scenario 2, no part of the Norfolk Boreas onshore project	
		show the Scenario 2 footprint.	substation footprint extends into the land holding viewed on the ASI, as	
			illustrated by the National Farmers Union (NFU) drawing [REP4-036] and	
			shown in Work No. 8a on Works Plan sheet 40b [REP1-007].	

### **10** Marine and Coastal Processes

### **10.0** Marine and Coastal Processes

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.10.0.1	The Applicant	Landfall entry: Provide details of how the location of the Horizontal Directional Drilling (HDD) entry point, set back from the existing cliff-line by 125m, provides adequate protection for the drilled cable or transition pits from natural coastal erosion (predicted to be between 50m to 110m by 2065).	The landfall compound zone is setback from the current cliff edge by a minimum of 125m to accommodate current forecasts of erosion between 50m to 110m beyond the lifetime of the project, but also extends a further 200m inland (325m from current cliff edge) to allow further flexibility in the siting of the landfall entry point, to accommodate the most up to date information and forecasts of coastal erosion.	

## 11 Navigation

## 11.0 Marine Navigation and Shipping

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.11.0.1	The Applicant	Safety Assessment for fishing vessels: Is safety assessment for fishing vessels in ES Ch 14 section 14.7.4.6 methodologically suitable, with reference to NFFO/VisNed comments in [REP2-043]?	The following summarises the Applicant's understanding of the history behind this question and notes that as standard for EIAs there is overlap between Chapter 14 Commercial Fisheries (APP- 227) and Chapter 15 Shipping and Navigation (APP-228) which cover all impacts related to fishing vessels (both from a commercial and navigation safety remit). Further to the impact assessments currently undertaken within Chapter 14 and Chapter 15 it is noted that an embedded mitigation is included to manage the risk of cable snagging, under keel clearance and risk of anchor interaction. This mitigation is the Cable Specification, Installation And Monitoring Plan which will be undertaken post consent when the final position of cable and the burial or protection used is understood (as per standard industry practice). This plan is secured in <i>Schedule 9 Part 4 14</i> (1)(g) <i>Schedule 10 Part 4 14</i> (1)(g) , <i>Schedule 11 Part 4 9</i> (1)(g) , <i>Schedule</i>	





PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number				
			12 Part 4 9(1)(g) and Schedule 13 Part 4 1(1)(g) and is relevant to	
			elements of the application.	
			NFFO / Visned made reference to this in their Written Reps (REP2-076:	
			"With respect to the assessment of Impact 6 - safety issues for fishing	
			vessels (Ch 14 section 14.7.4.6) - there is no probabilistic assessment	
			similar to that completed for other navigation related impact risks (Ch	
			15). It is not clear whether and how "frequency of occurrence" and "soverity of consequence" criteria used in the paying tional impact	
			"severity of consequence" criteria used in the navigational impact assessment (Ch 15) have been applied, and what data, if any, has been	
			used. The assessment appears to conclude that safety issues are within	
			acceptable limits based solely on listing inbuilt mitigation (safety zones,	
			advisory safety zones, communications with the fishing industry,	
			appropriate deployment of guard vessels and offshore fisheries liaison	
			officers). Such an approach does not constitute a methodical assessment"	
			The Applicant responded to this as follows in the Applicant's Comments on Written Representations and Additional Submissions" (REP3-007):	
			on written representations and Additional Submissions (REFS-007).	
			The potential impacts of the project with regards to navigational issues	
			are assessed in Chapter 15 Shipping and Navigation (Document Reference	
			6.1.15, APP-228), including consideration of potential risks to fishing	
			vessels (as well as other vessels) and supported by a Navigational Risk	
			Assessment (NRA) in agreement with the Maritime and Coastguard	
			Agency's (MCA) requirements. Further to the assessment presented in	
			Chapter 15, and recognising that vessels engaged in fishing may be	
			subject to additional safety issues other than those strictly related to	
			navigation (i.e. manoeuvrability issues when gear is deployed and	
			snagging risks), an additional assessment covering these aspects was	
			presented in ES Chapter 14 Commercial Fisheries. The assessment	
			identifies the potential risks and highlights the measures proposed by the	
			Applicant to minimise safety issues. Measures to minimise safety issues in	
			this regard are noted in Chapter 14 Commercial Fisheries, including	
			embedded mitigation measures (Section 14.7.1), such as the removal of	
			floating foundations from the design envelope, cable burial, the undertaking of appropriate liaison and information sharing and the	
			production of a Fisheries Liaison and Co-existence Plan (FLCP) post-	
			consent in line with the Outline FLCP submitted with the application	
			(Document reference 8.19, APP-710). Taking account of the proposed	
			measures to minimise impacts, and through on-going liaison with	
			fishermen and information distribution, and with the required compliance	
			from fishermen, the assessment concluded that safety issues for fishing	
			vessels would remain within acceptable limits. It is the Applicant's view	
			that the information provided within ES Chapter 14 Commercial Fisheries	
			is robust and supports appropriately the conclusions reached in the	
			chapter with regards to safety issues.	





PINS Question	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Number				
2.11.0.1	Marine and Coastguard Agency (MCA)	Safety Assessment for fishing vessels: Is safety assessment for fishing vessels in ES Ch 14 section 14.7.4.6 methodologically suitable, with reference to NFFO/VisNed comments in [REP2-043]?	The MCA generally does not assess the Commercial Fisheries chapter of an Environmental Statement, rather the focus is on the Navigation Risk Assessment (NRA) and the Shipping and Navigation chapter where fishing vessels are included as part of assessing the risks to surface navigation. Noting that in ES Ch.14 section 14.4.3.1 (Safety Risks) it states: "Where Norfolk Boreas poses a potential safety risk to fishing vessels and crews, the significance criteria outlined previously are not considered appropriate. In these instances, impacts are assessed in terms of potential risks in line with the parameters used in Chapter 15 Shipping and Navigation (Table 14.8)." It is noted that the mitigation measures identified in section 14.7.4.6, to which the NFFO/VisNed comments refer, are those identified in the Navigation Risk Assessment which was carried out in accordance with MCA guidelines and is considered acceptable. It is noted in Table 14.12 Worst Case Assumptions, that the key design parameters for Impact 6 & Impact 13: Safety Issues for Fishing Vessels includes cable burial, cable protection and cable crossings for both the array and export cables and the safety risks identified are manoeuvrability and snagging of fishing gear. Manoeuvrability risks (collisions and allisions) were assessed in the NRA and Ch.15 where the approach is acceptable. Snagging risks will be addressed in the Cable Burial Risk Assessment which is normally carried out post-consent and is a condition of the Deemed Marine Licence. As part of this MCA would expect identification of likely changes to charted depths as a result of cable protection measures and associated changes to vessel grounding risk. Section 14.7.4.6, Paragraph 160 states that "safety issues for fishing vessels should be within acceptable limits" and it is MCA's interpretation that the applicant expects the risks will be within acceptable limits once all separate post-consent assessment has been concluded.	The Applicant has no further comments.
2.11.0.2	The Applicant	Safety Zones triggered by SOVs during major maintenance:  Explain the implications to fishing and navigational safety of the comment in REP3-007: 'safety zones triggered by the use of SOVs during major maintenance are currently not supported by the MCA'.	The Applicant believes that there are two different positions related to this question. The MCA's position relates to application of the guidance and the NFFO/VisNed's position relates to access to existing fishing grounds. Both are explained below.  Summary of the MCA's position:  The sentence "safety zones triggered by the use of Service Operation Vehicles (SOVs) during major maintenance are currently not supported 'was added to the SoCG (MCA SoCG REP2-049) at the request on the MCA due to concerns raised within the industry in general and not related specifically to Norfolk Boreas or the Norfolk Boreas Safety Zone Statement [APP-691]. It is noted that safety zones for SOVs during major maintenance are supported by the Department for Business, Environment and Industrial Strategy (BEIS) and are currently being used effectively at operational sites to manage safe operations during major maintenance. The Applicant is content that a case for SOV Safety Zones will need to be made (if required) post consent as part of the Safety Zone application process.  Summary of NFFO/VisNEd position (written representations REP3-007).	





PINS Question	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Number				
			NFFO/VisNed stated 'The use of SOVs and application of what appears to be a proposed 500m statutory safety zones, when they are attached to turbines, appears not to be factored into the worst-case scenario. We consider the use of such large safety zones for such purposes to be disruptive and unnecessary'.  The Applicant responded to state 'The worst case scenario presented in Chapter 14 Commercial Fisheries makes reference to the implementation of 500m safety zones during operation associated with major maintenance works. These are as defined in Part 1, Regulation 2 of The Electricity (Offshore Generating Stations) (Safety Zones) (Application Procedures and Control of Access) Regulations 2007. As described in the Statement of Common Ground (SoCG) with the MCA (Document Reference ExA.SoCG11.D2.V1F, REP2-049) safety zones triggered by the use of SOVs during major maintenance are currently not supported by the MCA and a case would need to be included and considered as part of the safety zone application phase post consent, should the Applicant consider using this	
2.11.0.2	Marine and Coastguard Agency (MCA)	Safety Zones triggered by SOVs during major maintenance: Explain the implications to fishing and navigational safety of the comment in REP3-007: 'safety zones triggered by the use of SOVs during major maintenance are currently not supported by the MCA'.	As part of the Statement of Common Ground between MCA and the applicant, we included a comment that although Safety Zones (SZ) are considered on a case by case basis as part of the SZ application phase post consent, we wanted it noted with the applicant that a SZ triggered by the use of Service Operation Vessels (SOVs) during major maintenance are currently not supported by the MCA. The MCA supports the use of a SZ during construction, major maintenance and decommissioning, where large construction vessels are used. However, as clear case would need to be made as part of the SZ application for the inclusion of the SOV during routine maintenance. This is because we believe that there is a difference between a large construction vessel conducting major works for a long period of time, compared to very short term works undertaken by the SOV, in multiple locations throughout the day, where the Walk to Work system could be disconnected relatively quick in an emergency. Some of the justification seen in previous applications is questionable, i.e. lifting components up to 4 tonnes, which is likely to only be undertaken once or twice a year. Whilst we understand and acknowledge that the SOV will potentially have up to 60 personnel onboard, and the inherent risks with the Walk to Work system to personnel, there are many vessels carrying similar activities every day in terms of risk. They utilise effective practice of good seamanship, with appropriate lookouts able to utilise ships' VHF (very high frequency) radios to warn/apprise errant or unsuspecting marine craft in the vicinity, Safety Management System practices and procedures, and risk assessment, to ensure the risk is suitably mitigated and remains ALARP, without the need for further legislative requirements such as instituting additional safety zones. Other vessels should automatically keep clear as per COLREGs, practice of good seamanship, and the SOV can broadcast requests for vessels to avoid the area. We understand that it is a preference to include a SZ for	The Applicant has no further comments.





Enhancing Society				
PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.11.0.3	The Applicant	Risk mitigation for fishing vessels: Is the Fisheries Co-existence and Liaison Plan as drafted sufficient to mitigate risk to Fishing vessels in the vicinity of service vessels related to Norfolk Boreas survey, construction and maintenance activities?	The outline FLCP submitted with the application provides a high-level description of the Applicants' approach to fisheries liaison and to facilitating co-existence. Further detail will be included in the FLCP which will be produced post-consent for MMO approval once the project details are better defined (and as required under Schedules 9 and 10, Part 4, Condition 14(1)(d) (v), Schedules 11 and 12 Part 4, Condition 9(1)(d) (v) and Schedule 13, Part 4, Condition 7(1)(d)(v) of the draft DCO).	
			The main purpose of the FLCP will be to establish an appropriate framework to allow engagement and communication between the Applicant and fisheries stakeholders and to identify relevant measures to minimise impacts on fishing and facilitate co-existence.	
			<ul> <li>The outline FLCP includes consideration of various measures of relevance to minimising potential interactions between fishing and construction/maintenance vessels. For instance, the following aspects are included in the outline FLCP:</li> <li>Development of a code of good practice for contracted vessels;</li> <li>Development of a fisheries guidance document to reduce interaction with fishing activity and provide response procedures;</li> <li>The provision of procedures for the safe recovery of lost or snagged fishing gear; and</li> <li>The development of procedures for claims of loss or damage of fishing gear.</li> <li>In this context it should be noted that the outline FLCP submitted with the Application and the FLCP which will be produced post-consent) are not required as a mitigation to navigation safety impacts contained within the</li> </ul>	
			Navigation Risk Assessment [APP-569], the technical document which supports Chapter 15 Shipping and Navigation [APP-228]. As noted in the SoCG with the MCA [REP2-049] it is agreed that in accordance with the outcome of the assessment presented in Chapter 15 of the ES that the adopted measures for minimising impacts on shipping and navigation receptors are sufficient to bring risks to tolerable levels (or in other terms As Low as Reasonably Practicable).  It should also be noted that NFFO and VisNed have not raised specific concerns with regard to safety issues related to service vessels.	





PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.11.0.3	Marine and Coastguard Agency (MCA)	Risk mitigation for fishing vessels:  Is the Fisheries Co-existence and Liaison Plan as drafted sufficient to mitigate risk to Fishing vessels in the vicinity of service vessels related to Norfolk Boreas survey, construction and maintenance activities?	therefore only have an interest where there was an impact on safety and not commercial interests. The Fisheries Co-existence and Liaison Plan is one	The Applicant has no further comments.

### 11.1 Aviation and Radar

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question				
Number				
			No questions	

### **12 Onshore Construction Effects**

## 12.0 Cable Corridor and Ducting

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.12.0.1	The Applicant	Cable duct installation:  1. Notwithstanding the response to ExA's Written Question Q12.0.1 [REP2-021], explain the exclusions that might apply in the Outline Landscape and Ecological Management Scheme (OLEMS), which only secures 150m workfronts "where possible" in the onshore cable duct installation.  2. Provide an indicative alternative strategy should the proposed strategy not be viable in certain locations.	<ol> <li>'Where possible' is included to appreciate that the 150m length of a workfront may not be the most appropriate length at all locations and at all times during the duct installation. For example, in open agricultural land with no features, a workfront length of 200m may be more appropriate as this is achievable within the 1-2 week excavate, install and reinstate period. Conversely, in an area with multiple field drains, hedgerows and utility crossings a workfront length of 100m may be more appropriate to maintain achievability of the excavate, install and reinstate period.</li> <li>At all times the sectionalised duct installation workfront strategy (save for trenchless crossing locations) will be employed. The length of the workfront may however differ from the notional 150m during the construction process to maintain the principle of the mitigation (excavate, install and reinstate within a 1-2 week period) whilst appreciating some sections of the cable route will be more or less complex.</li> </ol>	
2.12.0.2	The Applicant	Significant adverse effects on hedgerows: The OCoCP states that it would be noted in the OCoCP where hedgerow crossings would be at an angle, increasing the maximum width of the gap to a possible 16.5m.	1.The reference made in the OCoCP is an error. The Important Hedgerows Plans [APP-018] provides detail of the angle of hedgerows in relation to the onshore cable route, however this is subject to final design and micro-siting of the cables within the route. It is not possible at this stage to indicate the exact angle at which the cables will cross each hedgerow. However, the	





Enhancing Societ				
PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
		<ol> <li>Advise where these crossings are listed or displayed update the OCoCP to include them.</li> <li>Provide a construction method statement and plan(s), suitable for inclusion in the OCoCP as an example for one of the specific hedgerow crossings which would result in significant adverse effects (not Church Road, Colby, as this is dealt with in a separate question regarding trenchless crossings).</li> </ol>	Applicant has provided an indicative list in the updated OCoCP provided at Deadline 5 to identify which hedgerows are likely to crossed at an angle.  2. The Applicant has included the outline hedgerow crossing methodology detailed in Section 5.7.2.3.1 of ES Chapter 5 Project Description [APP-218] as an Appendix to the OCoCP submitted at Deadline 5, which will inform future development of Construction Method Statements as secured under Requirement 20(2)(g) of the dDCO following the appointment of construction contractors. This outline method includes the key controls of minimising the width of the onshore cable route so far as possible (up to 16.5m) during duct installation, the timing of removal of the hedgerow, and reinstatement works. Furthermore, the additional wording in the Appendix to the OCoCP will include 'Where possible, considering technical constraints, micrositing of the ducts and location of the running track within the cable route shall be conducted to minimise the impacts to hedge trees.' The hedgerow crossing method shall be applicable to all hedgerow crossings.	
2.12.0.3	North Norfolk District Council	Trenchless crossing at Church Lane, Colby:  NNDC to consider its position regarding the pros and cons of a trenchless crossing at Church Lane, Colby in response to the Applicant's explanation [REP4-017].	· · · · · · · · · · · · · · · · · · ·	The Applicant refers to the comments provided on the responses to Q2.9.3.1 with regards to the consideration of the alternative proposed by NNDC.  The number of hedgerow crossings has been minimised as far as possible, taking constraints into account. Under Scenario 2 when crossing hedgerows, the width of the cable easement will be reduced to the running track and cable trenches only to minimise the amount of hedgerow removal. The maximum size of the hedgerow gap created during the two-year duct installation phase would be 13m (or up to 16.5m where the cable route crosses a hedgerow at an oblique angle) at any one location during duct installation under Scenario 2. Where hedgerow gaps are required for the cable pulling phase (Scenario 1 and Scenario 2), the number of gaps required will be minimised as far as possible and the retained gap for the cable pulling will be no wider than 6m. The removal of hedgerows has been fully assessed in the Environmental Statement in Chapter 24 Onshore Ecology and Chapter 29 LVIA. All hedgerows will be replaced on completion of the works.





PINS Question	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Number				
			trenchless crossing under Colby Road and thus negating the need to remove sections of three Important Hedgerows No.77, 78 and 79.	
			NNDC fully recognise that this alternative proposal carries additional considerations, namely those related to impacts to residents living nearby at Colby Hall Farm, Hall Farm, Hall Farm Cottages and Banningham Hall, amongst others who use the existing road network. These impacts have not been assessed by the applicant and fall outside the red line area of the DCO application.	
			Ultimately it is a matter of planning judgment for the ExA. The applicant is reluctant to consider alternatives beyond what they have considered within the ES, but this is not in itself justification for the existing option they are pursuing. What is at stake here is avoiding disturbance of three out of six Important Hedgerows along this part of the route as well as the integrity of the tree lined road. The character of Colby Road would be permanently affected by the open cut trenching option proposed by the applicant with permanent easements preventing replacement trees being planted in the same or similar locations. Acknowledging that there will be some additional short term noise disturbance to neighbouring residents from the alternative proposed by NNDC, the benefits of saving the trees and Important Hedgerows are considered to more than outweigh any temporary harm to residential amenity.	
2.12.0.4	The Applicant	Cable corridor working width, running track and permanent	The OCoCP sets out the maximum working width of the cable corridor of	
2.12.0.4	тне Аррисанс	accesses:  1. Should the OCoCP set the 35m working width of the cable corridor as the maximum width for the fencing alignment for Scenario 2 [REP1-019, section 3.3]?  2. Explain when the running track would be removed for both scenarios. Is this set out in a document which is secured? If not, should it be?  3. Why would there be a reinstallation of 12kms of temporary running track under Scenario 1?  4. What would the surface material of the permanent accesses be?	35m under Section 3.3, specifically 'during construction of the <i>onshore cable route</i> , fencing will be installed to demarcate the working area.' The definition of <i>onshore cable route</i> in the glossary of terminology is 'The up to 35m working width within a 45m wide corridor'.  2. Under Scenario 2, the running track would be removed once duct installation for a cable route section which the running track was supporting had been completed.  Under Scenario 1, any short sections of running track required to be temporarily reinstated for cable pulling will be removed once the cable has been pulled.  3. With reference to Section 5.6.2.1 of ES Chapter 5 Project Description [APP-218], the reinstallation of up to 12km of temporary running track during cable pulling activities (relevant to Scenario 1 and Scenario 2) has	
			been identified to access remote areas of the cable route in which joint bays may need to be located (cable lengths limited to approximately 1km) which are not directly accessible from construction side accesses or crossings of the cable route with the public highway. During detailed design and appointment of the cable supplier, the cable joint locations will be identified.  4. The permanent access surface material (access to onshore project substation from A47) will be asphalt or similar.	





### 12.1 Mobilisation areas

PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number				
2.12.1.1	The Applicant	Mobilisation Areas and Trenchless Crossing Compounds:  To follow up on the Interested Parties Response s to Q5.2.2 (regarding limits to heights of temporary facilities) and Q12.1.1 in respect of Mobilisation Areas near to residential properties [REP2-021].  1. What is the predicted full length of time Mobilisation areas and Trenchless crossing compounds would be disturbed from the start of any pre-commencement works on these sites through to reinstatement, as added in the updated OCoCP [REP1-019, Section 3.8, para 71]? Is this longer than the establishment, use and demobilisation shown in [APP-637]. Does demobilisation include reinstatement?  2. It would add consistency if the OLEMS were to be updated with reference to the reinstatement of areas used temporarily during construction.	1. Each mobilisation area will be in place for as long as the duct installation in the respective cable route section(s) which the mobilisation area serves is being conducted. This is up to 2 years, including establishment and demobilisation of the mobilisation area, but will typically be less and is a bespoke length of time for each mobilisation area due to each cable route section not being fully equal in length. The notional bespoke length of time for each mobilisation area is shown in [APP-637]. This reflects the statement in the OCoCP that 'all areas used temporarily during construction, such as mobilisation areas, must be reinstated as soon as reasonably practicable'. For clarity, demobilisation includes reinstatement of the land.  Similarly, trenchless crossing compounds will be in place for as long as the trenchless crossing takes to construct, typically up to 5 weeks including establishment and demobilisation as shown in [APP-637]. The trenchless crossing compound will be demobilised as soon as the trenchless crossing is completed, as reflected in the statement in OCoCP.  2. For consistency, the statement 'all areas used temporarily during construction, such as mobilisation areas, must be reinstated as soon as reasonably practicable' from the OCoCP will be included in the updated OLEMS submitted at Deadline 5 (document Reference 8.7, version 3).	
2.12.1.2	The Applicant	Reinstatement of Mobilisation Areas: The revision to the Schedule of Mitigation regarding reinstatement of mobilisation areas [REP2-006, ref 236] is unclear where this commitment is secured because it names Provision of Landscaping, but cites Requirement 24. The Applicant to clarify.	As indicated in response to ExA Q2.12.1.1 the commitment to reinstate all temporary construction areas, including the mobilisation areas is secured in the OCoCP [REP1-020] which is secured by dDCO Requirement 20. Specific replanting measures will be set out within the Ecological Management Plan (EMP), secured by dDCO Requirement 24. The Schedule of Mitigation will be updated to remove reference to 'provision of landscaping' and refer to the Requirement 20 CoCP and Requirement 24 EMP and submitted at Deadline 6.	
2.12.1.3	The Applicant	Temporary facilities:  The ExA is not persuaded by the Interested Parties Response to Q5.2.2 [REP2-021] and [REP2- 030] in the matter of restricting heights of temporary facilities in the dDCO, although it acknowledges that each location would be different in terms of sensitivity of receptors, and micro-siting within the mobilisation zones would take place at a later date.  1. If the worst-case scenario assessed is that the height of welfare facilities and storage units would be 3m [REP2-030, para 11], where is this secured? Why would this not be included in the dDCO?  The ExA is not convinced that the Best Practical Means in the OCoCP [REP1-019, section 9.1] gives enough certainty that adverse construction effects on visual and other amenity would be addressed in an holistic way for sensitive receptors in proximity to mobilisation areas.  2. The Applicant and local planning authorities to comment on whether there should be a process set out and secured in the dDCO, which post consent, would identify those construction areas where consideration needs to be given to adverse effects on neighbouring communities (not just for noise and vibration).  3. If so, where would this be best located, and should it set out layout/ mitigation principles for specific compounds which go	technique (e.g. HDD) compounds, onshore project substation temporary works area and National Grid substation extension temporary works area and the main features of these sites. As such these will be subject to a review and approval process by the relevant planning authority as part of the discharge of Requirement 20. Further information on the process for ensuring measures are in place to minimise any effects on neighbouring communities relating to these elements has been included in Section 3.2 of the OCoCP.	





PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:	
		further than the mitigation currently set out in the OCoCP [REP1-019]?			
2.12.1.3	North Norfolk District Council	Temporary facilities:  The ExA is not persuaded by the Interested Parties Response to Q5.2.2 [REP2-021] and [REP2- 030] in the matter of restricting heights of temporary facilities in the dDCO, although it acknowledges that each location would be different in terms of sensitivity of receptors, and micro-siting within the mobilisation zones would take place at a later date.  1. If the worst-case scenario assessed is that the height of welfare facilities and storage units would be 3m [REP2-030, para 11], where is this secured? Why would this not be included in the dDCO?  The ExA is not convinced that the Best Practical Means in the OCoCP [REP1-019, section 9.1] gives enough certainty that adverse construction effects on visual and other amenity would be addressed in an holistic way for sensitive receptors in proximity to mobilisation areas.  2. The Applicant and local planning authorities to comment on whether there should be a process set out and secured in the dDCO, which post consent, would identify those construction areas where consideration needs to be given to adverse effects on neighbouring communities (not just for noise and vibration).  3. If so, where would this be best located, and should it set out layout/ mitigation principles for specific compounds which go further than the mitigation currently set out in the OCoCP [REP1-019]?	·	Noted.	

# 12.2 Noise and Vibration

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.12.2.2	The Applicant	Old Railway Gatehouse:  1. Broadland District Council to explain concerns relating to the cumulative impacts on The Old Railway Gatehouse, referred to in the Statement of Common Ground (SoCG) [REP2-047, Table 5].  2. The Applicant to explain what additional information that has been provided to Broadland DC in relation to noise and vibration from construction traffic.	1. n/a 2. Norfolk Vanguard undertook an assessment of cumulative impacts of the combined traffic with Hornsea Project Three, and proposed mitigation. The assessment included cumulative noise and vibration and air quality impacts specifically at Old Railway Gatehouse, including idling and accelerating Heavy Goods Vehicle's (HGV) in proximity. These assessments are detailed in Position Statements provided by Norfolk Vanguard and are included as Appendix 1 to the Norfolk Boreas Broadland District Council SoCG. The proposed mitigation has been adopted by Norfolk Boreas to address any potential cumulative impact at Old Railway Gatehouse and are captured within section 4.3.2 of the Outline Traffic Management Plan [REP1-022] and secured through DCO Requirement 21.	
2.12.2.3	The Applicant	Ivy Todd Farm: Respond to the request [REP3-030] to include Ivy Todd Farm as an NSR.	The Applicant refers to ES Chapter 25 Noise and Vibration [APP-238] and ES Figure 25.2 [APP-470] which shows noise sensitive receptors used in the assessment, which includes SSR2 at Ivy Todd Farm.  These locations and methodology were discussed and agreed in consultation with Breckland Council and Norfolk County Council throughout the Evidence Plan Process with the Expert Topic Group, and	





PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
			detailed in the relevant Statement of Common Ground [REP2-039 and REP2-050].	
2.12.2.3	NSAG	Ivy Todd Farm: Respond to the request [REP3-030] to include Ivy Todd Farm as an NSR.	We note that in the ExA have asked the Applicant to "respond to the request [REP3-030] to include Ivy Todd Farm as an NSR". First NSAG would like to thank the ExA for asking this question, and remind the Applicant that the residents of Ivy Todd Farm have been promised many things, including hedge mitigation close to their land, which have fallen by the wayside. [Redacted name] in the farm, and the noise levels and stress of the situation, which is ruining her lifetime, peaceful home, would certainly in our eyes make her a NSR. Earth banks are very good sound insulators, and those requested in the wording above would help the noise levels considerably, so that is another very good reason for using them.	The Applicant refers to the response provided to Q2.12.2.3 on the inclusion of Ivy Todd Farm as a NSR.
2.12.2.4	The Applicant	Noise levels: Respond to the concerns raised in [REP4-052] regarding the noise levels and compliance with the 32dB(Z) 100hz limit agreed by the Applicant with Breckland Council.	The Applicant refers to ES Chapter 25 Noise and Vibration [APP-238], which details the results of noise modelling and mitigation proposed at the substation site. Examples of noise mitigation (acoustic enclosure/shielding) are also presented within the modelled scenarios. These show that the onshore project substation under Scenario 1 with the Norfolk Vanguard onshore substation operating with additional noise mitigation, will fall within the 32dC(Z) 100hz condition limit, and will result in no impact at identified receptor locations, including SSR2 Ivy Todd Farm, the location of which is shown in ES Figure 25.2 [APP-470]. Compliance with this limit is secured via the draft DCO under Requirement 27.	
2.12.2.5	The Applicant	Enhanced mitigation: In the response to ExA Written Questions [REP2-021, Q1.12.2.4] and the updated OCoCP [REP1-018], there is reference to need for enhanced measures at certain receptors.  1. Applicant to clarify how it would be determined whether enhanced mitigation would be required during construction? Would there be any consultation with the LPAs to determine this?  2. Are LPAs confident that the enhanced mitigation measures identified by the ES Chapter 25 [APP-238] would achieve the noise reductions identified in Tables 25.34, 25.36, 25.37 and 25.39 of the ES?	1. The Applicant refers to OCoCP Version 2 [REP1-018], paragraph 118 and ES Chapter 25 Noise and Vibration, section 25.8.5.7 [APP-238]. These documents identify the receptors that require enhanced mitigation during construction in the day time (CRR1E, CRR3F, CRR10), which can be identified on ES Figure 25.2 (APP-470]. CRR1, CRR2, CRR3, CRR5, CRR26, CRR30, and CRR31 require enhanced mitigation in the event that night working is required during trenchless crossings.  Mitigation measures utilised during construction will be discussed with and approved by the local planning authority via the final Code of Construction Practice and Construction Noise (and Vibration) Management Plan.	
2.12.2.5	North Norfolk District Council	Enhanced mitigation: In the response to ExA Written Questions [REP2-021, Q1.12.2.4] and the updated OCoCP [REP1-018], there is reference to need for enhanced measures at certain receptors.  1. Applicant to clarify how it would be determined whether enhanced mitigation would be required during construction? Would there be any consultation with the LPAs to determine this?  2. Are LPAs confident that the enhanced mitigation measures identified by the ES Chapter 25 [APP-238] would achieve the noise reductions identified in Tables 25.34, 25.36, 25.37 and 25.39 of the ES?	Due to the timing of school holidays and annual leave, working patterns and other workload commitments, a view from the Council's Environmental Protection Team has not been possible to include here to meet the timescale for Deadline 5. The view of NNDC in respect of this question will be provided to the ExA either soon after Deadline 5 or by no later than Deadline 6.	Noted.

## **12.3** Construction Hours

PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question				
Number				
2.12.3.6	The Applicant	Construction Hours:	1. The determination of suitable construction hours (as defined as 0700-	
			19:00 Monday to Friday and 07:00-13:00 Saturday with no activity on	





PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number				
		Provide further clarity on the types of locations that are considered sensitive receptors when determining construction	Sundays or bank holidays) have been considered and assessed based on various factors including:	
		hours; are areas of importance to local community and local economy considered sensitive receptors? For instance, has regard been given to tourist areas in Happisburgh and North Walsham as sensitive receptors when determining construction hours?  2. NNDC to comment.  b) as	a) Consideration to minimising overlap with periods of high traffic such as for commuters and schools by allowing deliveries prior to and post these periods;	
			b) Allowing the overall duration of works and period of interruption to be as short as possible. Limiting working hours further, including at sensitive areas, will extend programme time and impact length; and	
			c) Consideration of daytime hours with respect to noise and associated assessments, as defined in BS5228.	
			Certain works may require works outside of the normal construction hours and these are detailed in Requirement 26 of the dDCO and will be subject to approval by the relevant planning authorities.	
			As outlined above, specific sensitive receptor locations are not considered in determining the construction hours. However, sensitivities have been considered such as high traffic periods and noise. The determined construction hours are assessed in the Environmental Impact Assessment for all the onshore chapters and the locations of sensitive receptors are identified based on each topic being assessed, including in ES Chapter 30 Tourism and Recreation [APP-243].	
2.12.3.6	North Norfolk District Council	Construction Hours:  1. Provide further clarity on the types of locations that are considered sensitive receptors when determining construction hours; are areas of importance to local community and local economy considered sensitive receptors? For instance, has regard been given to tourist areas in Happisburgh and North Walsham as sensitive receptors when determining construction hours?  2. NNDC to comment.	Due to the timing of school holidays and annual leave, working patterns and other workload commitments, a view from the Council's Environmental Protection Team has not been possible to include here to meet the timescale for Deadline 5. The view of NNDC in respect of this question will be provided to the ExA either soon after Deadline 5 or by no later than Deadline 6.	Noted.
2.12.3.7	The Applicant	Non-standard Construction Hours: Explain the provisions made for the mitigation for impacts arising from non-standard construction hours and how is this secured in the dDCO.	In accordance with the revised wording proposed by the Secretary of State letter for Norfolk Vanguard Requirement 26 (4) of the dDCO [REP4-003] on Construction Hours secures 'full details, including but not limited to type of activity, vehicle movements and type, timing and duration and any proposed mitigation, of all essential construction activities under paragraph (2) and undertaken outside of the hours specified in paragraph (1) must be agreed with the relevant planning authority in writing in advance, and must be carried out within the agreed time.'	

# 13 Socio-economic Effects

# 13.0 Skills and Employment Strategy

PINS Respondent: Question: Question Number	Interested Parties Response at Deadline 5:	Applicant's Comments:	
Question			
Number			
	No questions.		





#### 13.1 Jobs

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question				
Number				
			No questions.	

#### 13.2 Tourism

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.13.2.1	The Applicant	Tourism Requirement:  Provide further reasoning in response to NNDC's request for a new tourism requirement set out in 14.20-14.23 of [REP 2-087] NNDC's Local Impact Report ("LIR") and at [REP4-031] where NNDC states: "Were such a requirement to be included in the DCO, then complaints or issues raised through the mechanisms set up by the Communications Plan could be addressed under the Tourism Mitigation Strategy, by being brought to the attention of the strategy administrator, who would then be able to take the relevant steps."	The Applicant has responded to the points NNDC raised on the proposed requirement through REP3-011 and through the Position Statement at Appendix 1 titled 'Position Statement North Norfolk District Council Requested Requirement to Address Perceived Tourism Impacts'.  In relation to NNDC's position in REP4-031 that complaints could be raised to a Tourism Strategy Manager, the Applicant does not consider that this is appropriate or indeed necessary. The OCoCP [REP1-018] already commits the Applicant to fund a local community liaison officer to engage with local residents and businesses that may be affected by noise or other aspects affecting amenity caused by the construction works; the designated officer will then be responsible for responding to the concerns, queries, or complaints. It should be noted that this role extends across the whole of the cable route, beyond that of NNDC's administrative area. A Tourism Strategy Manager could not, therefore, replace the role of the local liaison officer across the whole route as to do so would go beyond the purpose intended by the proposed tourism compensation measures. In any event, given that the Applicant has already committed to fund a community local liaison officer, funding a Tourism Strategy Manager would amount to double counting.  As the Applicant has previously explained in REP3-011, the Applicant considers that there is no evidential link that the short-term construction presence for an offshore wind farm in North Norfolk would lead to an actual or perceived impact on tourism. The Applicant has fully assessed this in the ES (Chapter 30) [APP-243]. The Applicant is not aware of any precedent for mitigation on tourism impacts as a result of temporary construction impacts from offshore wind farms, and it would be wholly unreasonable and lack precision to require mitigation by way of an unquantified financial payment with no agreed or adopted mechanism for its calculation post consent.	
2.13.2.2	Norfolk County Council	Compensation Fund:  1. NCC to elaborate on its request for a compensation fund for residents and businesses affected by construction in the Relevant Representations [RR-037] and in the LIR [REP2-085].	1. The County Council are aware of arrangements the applicant will have in place for appropriate compensation to be provided to those directly impacted by the proposal. The County Council also understands that in the longer term the applicant is willing to develop a wider community benefit fund, which will be outside of the DCO process, see REP2-050 Table 9 Approach to mitigation.	The Applicant notes this.

### 13.3 Land use and agriculture

PINS		Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Que	tion			
Num	ber			
			No questions.	





### 13.4 Public Health

PINS Question	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Number				
2.13.4.1	Polly Brockis	Effects of electromagnetic fields (EMF):  1. Are you content with the Applicant's assumptions and assessment regarding EMF in ES Chapter 27 Human Health [APP-240], especially at the location where the underground cables of Hornsea Project Three would cross with Norfolk Boreas? The Applicant states at [REP1-036] that "HVDC technology to transmit power from the wind farm to the national grid eliminates many potential impacts associated with EMF emissions. The available evidence from studies of humans and animals has been reviewed by Public Health England and internationally by the World Health Organisation and the International Agency for Research on Cancer. None of these expert bodies has identified any health risk for humans or animals exposed to DC magnetic fields." Do you agree with this statement? If not, why not?	There are still so many unanswered questions about noise and vibration levels for Cawston. Our property was one of the four that were used for the three-day survey of noise and vibration and left us deeply concerned. The effects of noise are significant for our family. I repeat multi agency requests that monitoring and calculations should be made again with the revised proposals of traffic flow, size, and mitigation measures, averaging data over traffic operational hours rather than eighteen hour smoothing.	The Applicant provided clarification on the Noise and Vibration Assessment undertaken by Hornsea Project Three in the Applicant's Comments on Response to the Examining Authority Written Questions Q14.0.6 [REP3-003] which states that the data gathered for the Hornsea Project Three assessment [REP3-005] regarding duration and number of locations is deemed reasonable in order to determine the effects at receptors along Link 34 Cawston from scheme related traffic. This approach for noise and vibration represents a worst case scenario (conservative approach), is location specific and determined the impacts based on measured noise and vibration levels from HGV pass-bys at each of the four locations.  In addition, it is standard practice to measure at a selection of receptor locations which are deemed representative of groups of receptors. Therefore, it is appropriate (and standard practice) to extrapolate these assessed levels to other nearby receptors along the same road link (Link 34). For these reasons, it is not necessary to measure at every receptor along a road link.  Therefore, it is not considered necessary to undertake a further noise and vibration survey along Link 34 in Cawston because the data presented in the Hornsea Three examination response [REP3-005] and subsequently reviewed and presented as part of the Norfolk Vanguard and Norfolk Boreas schemes examination response is considered representative and conservative.
2.13.4.2	Polly Brockis	Human Health:  1. In light of the evidence submitted by Corpusty and Saxthorpe Parish Council [REP2- 068], and other IPs [REP4-053] and [REP4-056], do you have further concerns to add to your Local Impact Report [REP2-065, paragraphs 5.1 and 5.2]?  2. Comments also invited from other District Councils	Professor Barnett touched on wellbeing in a submission from Corpusty and Saxthorpe Parish Council, stating that the process of infrastructure planning is beyond most of our knowledge base. We are trying to engage in a decision that has huge impacts on our future without a base of experience from which to do this. A stressful position to be in. As an individual involved I can say the impact on residents should not be underplayed. There are many like me, attempting to stay up to date with information and repeating our consistent offerings to the different projects. Over time our focus has become limited to the elements that directly affect us, therefore minimising our wider view of the schemes, our county or neighbours – this is an isolating experience. With deadlines being postponed people are left hanging in fight/ flight mode, many have expressed a wish to move rather than live in a village which will become a construction corridor. Some have already left. I do not think this is personal to our village. In effect the application process is beginning to break down communities - before decisions on the projects are made. The need for community in a person's wellbeing is high. Living with so many unknown factors, and fluctuating information, the lack of control is creating a heightened level of anxiety. I am merely a receptor in this plan, however I believe the applicants statements re implications on Human Health needs more consideration.	ES Chapter 27 Human Health (APP-240) provides an assessment which follows best practice guidance (Cave et al., 2017a), in considering health effects with regard to the general population and vulnerable population groups. Populations are considered at both regional and local levels and the assessment follows the World Health Organisation (WHO) definition of health as a state of physical, mental and social wellbeing, as well as the absence of disease or infirmity.
2.13.4.2	North Norfolk District Council	Human Health: 1. In light of the evidence submitted by Corpusty and Saxthorpe Parish Council [REP2- 068], and other IPs [REP4-053] and [REP4-056], do you have further concerns to add to your Local Impact Report [REP2-065, paragraphs 5.1 and 5.2]?	NNDC note this question is directed to Broadland District Council in respect of their Local Impact Report.      NNDC recognises that to date it has not, either individually or cumulatively in relation to NSIP projects for Norfolk Vanguard, Norfolk Boreas or Ørsted Hornsea Project Three, raised concerns about	ES Chapter 29 Air Quality [APP-239] provides an assessment of potential impacts associated with construction phase dust and fine particulate matter emissions, in accordance with the Institute of Air Quality Management (IAQM) guidance (IAQM, 2014) for Norfolk Boreas Scenario 1 and Scenario 2 and cumulatively with Hornsea Project Three. With the





PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number				
		2. Comments also invited from other District Councils	particulate matter associated with construction of these projects. Comments raised by NNDC in relation to matters of Environmental Health have primarily focussed and noise and vibration disturbances associated with construction.	implementation of the appropriate mitigation measures, the residual impacts from construction are expected to be not significant, in accordance with IAQM guidance.  The mitigation measures, recommended by the IAQM, regarding dust
			The applicant has sought to provide comment on the subject of Construction phase dust and fine particulate matter within Chapter 26 of the ES in relation to Air Quality [APP-239] and impacts on Human Health within ES Chapter 27. NNDC note that the applicant has indicated at ES Chapter 27 para 315 that:	suppression and requirement to carry out visual inspection are detailed in OCoCP [REP5-010] Section 10.1.1, secured through dDCO Requirement 20. In advance of construction commencing a final CoCP will be submitted detailing appropriate air quality management measures to be employed. The measures included will be agreed with the local authority prior to
			'After consideration of potential health effects during the construction and operation phases of the project, there are not predicted to be any significant effects on physical or mental health as a result of the project under either Scenario 1 or Scenario 2.	construction commencing.  The potential health effects of reduction in air quality are further assessed in ES Chapter 27 Human Health (APP-240), which concludes that there are not predicted to be any significant effects on physical or mental health as a result of the project under either Scenario 1 or Scenario 2 or
			NNDC acknowledges the representation made on the subject of human health including by Professor Tony Barnett on behalf of Corpusty and Saxthorpe Parish Council [REP2-068]. Professor Barnett, through his association with the London School of Hygiene and Tropical Medicine, is understood to have a wealth of knowledge on the subject of particulate matter and its potential impacts on human health.	cumulatively with Hornsea Project Three.
			NNDC's position is that, if there is evidence to demonstrate a link between adverse health impacts associated with particulate matter from construction of the Norfolk Boreas scheme and cumulatively in relation to the construction of other NSIP projects including Norfolk Vanguard and Ørsted Hornsea Project Three, then these impacts must weigh against the grant of the Development Consent Order. The weight that this issue should attract is a matter for the decision maker, in this case the ExA and the Secretary of State.	
			NNDC considers that, notwithstanding the position of the applicant, any such adverse impacts evidenced from poor air quality on human health associated with the construction of the project should be recorded as a ground for concern for NNDC within Section 11 of its Local Impact Report.	
2.13.4.3	The Applicant	Fire Hazard: Respond to [REP4-056] regarding the need for further assessment of the probability and potential impacts arising from accidental, engineering (equipment / system failure) or terrorism related incidents, and any related mitigation measures.	The Applicant addressed the concerns raised in REP4-056 in REP3-007, Table 1.7 and 2.6. National Grid have 342 substations across the UK like that proposed at Necton, and because these substations are Nationally Significant Infrastructure Projects, they have very high levels of electrical systems protection and security.	
			The very low fire risk most associated with higher voltage substations, like the one proposed at Necton, is on transformers. Within this development, unlike most urban distribution substations, the transformers are protected by blast wall design features which have been proven to effectively mitigate the risk. Furthermore, any potentially flammable assets are not located near the perimeter of the infrastructure, and the ground materials and other physical barriers included in the design (such as blast walls) will contain any fire to within the compound.	
			Potential fires would not be able to travel along any cables as they are not oil filled.	





### 13.5 Other offshore industries and activities

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question				
Number				
			No questions.	

# 14 Traffic and transportation

### 14.0 Outline Traffic Management Plan (OTMP)

PINS Respondent: Question Number	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
All questions in Section 14 Polly Brockis	All questions in Section 14 – Traffic and Transport generally	My comments and questions cross over most of the subsections in question 14 and therefore are written as one statement. As a Cawston resident my focus here is on our village, specifically the central conservation area. From the Document reference; ExA.AS-2.D4.V1 (Technical Note Revised Cawston Highway Intervention Scheme – hereafter detailed as HIS) and the site visit on 24.01.20 I am aware this is still "a work in progress" with further detail due at deadline 5. Many of the initial mitigation measures proposed have been disguarded. Pavement widening has been abandoned because OS plans do not relate to site measurements. A speed restriction of 20 miles an hour seemingly deemed sufficient to offer protection to pedestrian amenity. Even at 20 miles per hour the stopping distance of a HGV is twelve metres, the length of three parked cars, safety of pedestrians is not assured. Point 16. HIS: It is also considered that at the narrowest points of the footpath protection is afforded by parked vehicles. One of the narrowest (and lengthy) sections of pavement, 90cm wide, is opposite our home, there is no protection from parking offered here, a pedestrian is sandwiched between the kerb edge/ vehicle and a high wall. On the drawing TP-PB5640-DR019 at the same position the note reads Potential two-way Articulated HGV and car conflict area This is reworded from the Orstead Hornsea 3 HIS REP4 – 028 that stated HGVs cannot pass simultaneously here, as the person who lives adjacent to this point I can state the "potential" should be struck though. There is conflict if a bus and car attempt to pass here.  The HGV measurements detailed on drawing TP-PB5640-DR018 state overall width of a UIO articulated vehicle as 2.55 metres. I understand this is the measurement excluding wing mirrors. The mirrors would protrude a further 0.2 metres on either side, with close proximity mirrors being a necessity to see pedestrians or cyclists. On plans that have already shown tight margins, that negated pavement widening, shouldn't all calculatio	In their role as Local Highway Authority, Norfolk County Council (NCC) have classified the High Street through Cawston as the B1145, a 'Main Distributor'. The Main Distributor category indicates a route linking Primary Distributors (i.e. linking significant settlements to A roads serving the County) and are not subject to any restrictions on Heavy Goods Vehicles (HGV).  This is reflected in the baseline daily average HGV traffic flows of 207 movements [REP5–055] which evidences the use of the route by the Agri-Industry and local businesses. The HIS design has developed to maintaining the route functionality, accommodating Project traffic demand and mitigate pedestrian amenity impact.  Deadline 5 Submission; Revised Cawston Highway Intervention Scheme Road Safety Audit Decision Log (RSADL) [REP5-055] contains the Applicant's response to an independent Road Safety Audit (RSA), and confirms the agreement with all RSA recommendations and details minor scheme amendments. The document also contains an evaluation of pedestrian risk examining the HIS design elements and current amenity and road safety baselines.  As noted by the RSA, the likelihood of pedestrian/vehicle conflicts has been minimised by the HIS key design principles of:  Providing adequate road space for HGVs to traverse the High Street without the requirement to mount or project over the pavement;  Protecting adequate road space for the HGV routes with the introduction of formal parking controls;  Advance sign warning of 'pinch points'; and  The introduction of a mandatory 20mph limit.  The RSADL evidences:  Amenity impacts above baseline are for a limited duration and of limited magnitude;  The is no historic evidence of pedestrian collisions (accidents) in Cawston;  National studies have determined a significant reduction in severity of pedestrian accidents with a reduction in speeds from 30mph to 20mph.





PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number				
			diversions been considered for a primary route? I do not think the HIS mitigates the Boreas scheme alone, or scenario 1.  I continue to advocate that a transport route through Cawston is not practicable or safe and an alternative should be sought. I have made submissions to previous examinations which I feel should be expressed within the following question points	Evaluating the evidence provided the RSADL concludes that the probability of the perceived pedestrian risk manifesting into an incident is low.  As noted in the Technical Note Revised Cawston Highway Intervention Scheme [REP4–016] the scheme design is now informed by topographical data and therefore is an accurate reflection of highway space. The HIS has been designed cognisant of standard vehicle size including wing mirror projections.
				Section 3.3.5 of the technical note sets out the rational for removing the single width priority working noting that for this measure, there is a mandatory requirement to restrict the carriageway to single vehicle width, thus compromising the available roadspace for all highway users. The HIS adopts an alternative of providing hazard warning signs depicting oncoming vehicles in the middle of the road, supplemented by UK standard stopping sight distance <sup>1</sup> and a reduced speed limit to enable HGV drivers to react to the highway environment. This form of treatment is more typical for a rural highway environment and can be evidenced throughout Norfolk.
				The B1145 is designated a 3A2 – Main Distributor Others and as such is rated for a gross laden vehicle with weights of up-to 44 tonnes. The majority of the Project's HGV loads will be significantly under this threshold.
				The Outline Traffic Management Plan [REP5-026, Section 3.9] sets out a strategy for monitoring the condition of the Highway Asset and repairing all damage to the satisfaction of NCC. In the unlikely event that a closure of the road was required for repairs, HGV deliveries could be suspended until the road was re-opened. The mobilisation area (MA5) supporting duct installation construction for the cable route section in this area provides for storage and stockpiling of necessary construction materials such that construction works along the onshore cable route could continue for a short duration. Furthermore, the duct installation programme allows for an up to 2 year period of works across the onshore cable route. The duct installation works from MA5 are forecast to be completed within a 42 week period [APP-655], therefore, there is contingency available within the overall programme to accommodate temporary suspension of deliveries if required. If the closure of the road was likely to be of a long duration, alternative temporary diversion routes could be agreed with NCC
2.14.0.1	Norfolk County Council	1. Response to ExA's Written Questions [REP2-084, Q14.0.1] states that, "The OTMP was updated by the applicants at Deadline 1 but is still not acceptable." After the Issue Specific Hearing 3 Onshore effects on 21 January 2020 [EV6-001 – EV6-006], and subsequent discussions with the Applicant, are there matters in the OTMP that remain unresolved?  2. Do IPs wish to comment?	Two issues were raised: -  1. Whether or not the proposed method of working for open cut trenching to the B1149 is safe. Our previous concerns are addressed within the applicant's clarification note on trenchless crossings. However, in resolving the previous issue, the solution simply presents further problems as detailed within our response at deadline 5. Accordingly, the underlying problem remains.	The Applicant has provided a response to Norfolk County Council submission at Deadline 5 on the Trenchless Crossing Clarification Note in ExA.ASR.D6.V1.      Noted

<sup>&</sup>lt;sup>1</sup> Table 7.1 of the Manual for Streets (DfT, 2007)





PINS Respondent: Question Number	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
		2. Clarification re the use of the cable logistics area along link 68 The applicant's clarification note addresses our concerns.	

# 14.1 Highways Intervention Scheme for Link 34 (B1145 through Cawston)

PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number				
2.14.1.2	The Applicant	Mobility scooter and non motorised users:  Confirm that the proposed street sign on the footway [REP4-016] would not restrict non motorised users.	All proposed signage is to be attached to either existing street furniture or installation of new post and signs. In respect to new post and signs they have been located so as not to interfere with the pedestrian desire lines and will allow for adequate footpath width for pedestrians, mobility scooters and other non motorised users where located.	
2.14.1.3	The Applicant	Trimming and pruning regime: Provide further details about the trimming and pruning regime for vegetation in the revised Highway Intervention Scheme [REP4-016].	The Applicant would comply with Norfolk County Council policy for the grass cutting visibility splays. The policy sets out a maintenance regime of five cuts between May and September in urban areas (defined as roads subject to a speed limit of less than 40mph).	
2.14.1.4	The Applicant	Speed restriction: Provide further detail about the location of change to speed from 50mph to 30mph for traffic approaching Cawston Village.	[REP4-016], Drawing TP-PB5640-DR015 (Cawston Highway Intervention Approach Driver Awareness Works on B1145) details the relocation of the 30mph reduction. The relocation of the 30 mph speed limit change has been undertaken for the following reasons:	
			<ol> <li>To increase the distance between the 30mph speed limit change and the built-up areas of Cawston Village with the aim of providing more time to drivers to reduce vehicle speeds through Cawston Village;</li> <li>To increase the distance between the 30mph speed limit change and the proposed '20mph Zone' signs, thereby managing the reduction in vehicle speeds throughout the built-up areas of Cawston Village to ensure better driver compliance;</li> <li>To incorporate the 30mph speed limit signs ahead of the 'Road Narrows' and 'S bend signs';</li> <li>To provide adequate space on both carriageway verges to install the proposed 'Village Gateway' feature incorporating the relocated 30mph speed limit change; and</li> <li>To provide increased forward visibility of the proposed 'Village Gateway' feature and associated 30mph speed limit change when travelling from the east.</li> </ol>	
2.14.1.5	The Applicant	Cumulative traffic effects in Cawston:  The Secretary of State's letter [REP3-012, paragraphs 15 and 16] regarding the Norfolk Vanguard scheme, states that the highway mitigations for B1145 Cawston link 34 would not be "sufficient to offset any potential harm from in-combination traffic effects arising from the proposed Norfolk Vanguard project and Hornsea Three in the event that both were granted development consent".  1. Do all parties agree that the revised Highway Intervention Scheme [REP4-016] would mitigate the cumulative effects of the Proposed Development Scenario 1 (Norfolk Vanguard and Norfolk Boreas) and Hornsea Project Three?	1. As set out in [REP4-016] the Highway Intervention Scheme (HIS) was initially developed by Hornsea Project Three to address the cumulative impacts of Hornsea project Three with Norfolk Vanguard. The scheme was adopted by the Applicant and the concept informed the Cumulative Impact Assessment contained in ES Chapter 24 [APP-237]. The CIA identified the HIS as part of a package of mitigation measures to reduce the initial traffic impact from moderate to a minor residual impact (i.e. the mitigation proposed on Link 34 was specifically designed to mitigate cumulative impacts associated with Norfolk Boreas (Scenario 1 or Scenario 2) and Hornsea Project Three. The HIS has subsequently been refined to address road safety audit concerns but has not deviated from the assessed concept. The Applicant therefore confirms that the HIS [REP4-016] is	





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PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
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		2. Applicant to confirm that if Hornsea Project Three is not given consent, how is the Highway Intervention Scheme secured in the dDCO?	suitable mitigation for Norfolk Vanguard (and Norfolk Boreas Scenario 1) or Norfolk Boreas Scenario 2) in combination with Hornsea Project Three.	
			The Position Statement submitted by the Applicant at Deadline 5 [ExA.AS-	
			2.D5.V1] details all parties positions on the HIS.	
			2.The Outline Traffic Management Plan (submitted at Deadline 5, document reference 9.8, version 3) is secured under Requirement 21 of the dDCO. Section 4.3.2 includes the design of the proposed scheme of highway mitigation along Link 34 through Cawston (including plans of the HIS in Appendix 6), which captures the package of mitigation identified within the CIA. Section 4.3.2 also confirms "Norfolk Boreas Limited is committed to adopting the scheme under both scenarios" as well as for cumulative impacts with Hornsea Project Three.  Requirement 21 of the dDCO states that a final Traffic Management Plan is required for each stage of the works and must be produced in accordance with the outline Traffic Management Plan. The final Traffic	
			Management Plan would include the final detailed design of the scheme	
			of highway mitigation through Cawston to be approved by Broadland	
			District Council in consultation with the local highway authority (Norfolk	
			County Council).	
			The Applicant has reflected on the Secretary of State's (SoS) letter to the	
			Norfolk Vanguard Applicant dated 6 December 2019 and, in order to	
			clarify that the HIS will deal with relevant cumulative impacts, suggests	
			that the proposed Requirement is amended as follows:	
			"(4) The traffic management plan referred to at sub-paragraph (1)(a)	
			must include the final detailed scheme of traffic mitigation for impacts of	
			the authorised development alone, and any relevant cumulative impacts	
			identified, in respect of Link 34 as referred to in Chapter 24 of the	
			environmental statement ( <b>Link 34</b> ). The final scheme must be approved	
			in writing by the relevant planning authority in consultation with the	
			highway authority".	
			The Applicant considers this to be appropriate given that the HIS has been	
			identified to specifically address cumulative construction traffic impacts	
			associated with Hornsea Project Three. In this way, it is not envisaged that a "revised" scheme of traffic mitigation would be submitted (as proposed	
			in the SoS suggested drafting in the letter of 6 December 2019), which	
			implies that the existing scheme of mitigation does not specifically	
			consider cumulative traffic impacts and that additional mitigation is	
			required in the event that both projects progress.	
2.14.1.5	Norfolk County	Cumulative traffic effects in Cawston:	We have received revised drawings from the applicants which are broadly	The Applicant submitted the Road Safety Audit for the Revised Highways
	Council	_ · · · · · · · · · · · · · · · · · · ·	in line with our expectations. However, we have not yet received an	Intervention Scheme and an accompanying Decision Log at Deadline 5
		regarding the Norfolk Vanguard scheme, states that the highway mitigations for B1145 Cawston link 34 would not be "sufficient to	updated road safety audit (RSA) from the applicants. We understand that an updated RSA was due to be submitted to the applicants by their	[REP5-055].
			auditors on 14 February 2020, but we have not yet been provided with a	
		from the proposed Norfolk Vanguard project and Hornsea Three in	copy. Until such time as an acceptable RSA is received, we cannot agree	
		the event that both were granted development consent".	that a suitable mitigation scheme exists.	





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PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:	
Question	Cawston Parish Council	1. Do all parties agree that the revised Highway Intervention Scheme [REP4-016] would mitigate the cumulative effects of the Proposed Development Scenario 1 (Norfolk Vanguard and Norfolk Boreas) and Hornsea Project Three?  2. Applicant to confirm that if Hornsea Project Three is not given consent, how is the Highway Intervention Scheme secured in the dDCO?  Cumulative traffic effects in Cawston:  The Secretary of State's letter [REP3-012, paragraphs 15 and 16] regarding the Norfolk Vanguard scheme, states that the highway mitigations for B1145 Cawston link 34 would not be "sufficient to offset any potential harm from in-combination traffic effects arising from the proposed Norfolk Vanguard project and Hornsea Three in the event that both were granted development consent".  1. Do all parties agree that the revised Highway Intervention Scheme [REP4-016] would mitigate the cumulative effects of the Proposed Development Scenario 1 (Norfolk Vanguard and Norfolk Boreas) and Hornsea Project Three?  2. Applicant to confirm that if Hornsea Project Three is not given consent, how is the Highway Intervention Scheme secured in the dDCO?	The Secretary of State's letter [REP3-012, paragraphs 15 and 16] regarding the Norfolk Vanguard scheme, states that the highway mitigations for B1145 Cawston link 34 would not be "sufficient to offset any potential harm from in-combination traffic effects arising from the proposed Norfolk Vanguard project and Hornsea Three in the event that both were granted development consent". 1. Do all parties agree that the revised Highway Intervention Scheme [REP4-016] would mitigate the cumulative effects of the Proposed Development Scenario 1 (Norfolk Vanguard and Norfolk Boreas) and Hornsea Project Three? CPC does not agree with the statement above.  CPC's position remains that it is simply not possible to route any level of construction traffic safely through the village centre. Particular concerns are pedestrian safety, noise and vibration impacts and air quality degradation from stationary traffic, together with the effects on local businesses. Due to the width of the road being too narrow in places for two large vehicles to pass safely it is inevitable that wing mirrors will overhang the pavement. Observation at the ASIs showed how common it is for larger vehicles actually to mount the pavement as well. The latest version of the Highway Intervention Scheme removes features from previous versions which were claimed to improve pedestrian safety. It	As noted in the Technical Note Revised Cawston Highway Intervention Scheme [REP4–016] the scheme design is now informed by topographical data and therefore is an accurate reflection of highway space. The HIS has been designed cognisant of standard vehicle size including wing mirror projections.  As noted by the RSA [REP5-055], the likelihood of pedestrian/vehicle conflicts has been minimised by the HIS key design principles of:  - Providing adequate road space for HGVs to traverse the High Street without the requirement to mount or project over the pavement;  - Protecting adequate road space for the HGV routes with the introduction of formal parking controls;  - Advance sign warning of 'pinch points'; and  - The introduction of a mandatory 20mph limit.  These principles manifest in a HIS design that enforces single way HGV working through the High Street, ensuring there is enough adequate road space for HGVs to traverse without the requirement to mount or project over the pavement. For the sections of the HIS where two-way flows are encouraged there two distinct HGV pinch points at the eastern and western entry to the High Street where there would be a risk of HGVs	
			argues that "protection is afforded by parked vehicles", which suggests that pedestrians will be expected to scuttle from vehicle to vehicle like soldiers in a war movie! Woe betide the resident caught on the wrong side of the road, with only a yellow line to hide behind. The scheme will also bring traffic closer to properties; the changes from the original H3 scheme are so wide ranging that we feel that previous assessments on Noise, Vibration and Air Quality (regardless of what you may think of their	western entry to the High Street where there would be a risk of HGVs mounting or oversailing the pavement. To mitigate this risk, the HIS adopts the design principles of providing hazard warning signs depicting oncoming vehicles in the middle of the road, supplemented by UK standard stopping sight distance <sup>2</sup> and a reduced speed limit to enable HGV drivers to safely react to the highway environment and 'yield' to oncoming HGVs as required.	
			reliability) are now irrelevant. We consider that all these studies should be done again, independently, thoroughly and using up to date criteria, if ever a Scheme is accepted by NCC and passes a RSA. As drawn in the HIS, vehicle tracks suggest the wheelbase of the vehicle is used as a measure of vehicle width. The potential impact of wing mirrors on pedestrians and passing traffic seems to be disregarded.	The HIS scheme has been designed to accommodate the baseline traffic and the Projects' cumulative construction traffic as set out in the Revised Cawston Highway Intervention Scheme Road Safety Audit Decision Log (RSADL) [REP5-055].	
			We attach a photo of five of Norfolk Highways' own gritting fleet showing the problem. It seems that Norfolk Highways, in common with other truck operators in Norfolk, have a problem with wing mirrors being damaged as they pass other vehicles and roadside obstructions. Norfolk Highways have mitigated these impacts by providing wing mirrors with a fetching stainless steel cover.	The Technical Note Revised Cawston Highway Intervention Scheme [REP4–016] introduces a number of key revisions to the HIS to protect the road space for the HGV routes and minimise the occurrences of HGVs blocking traffic flows. These include:  - The reallocation of roadspace by optimising parking bay allocation to free up additional HGV stacking space;  - Formalisation of parking controls to ensure vehicles park within designated areas and	

<sup>&</sup>lt;sup>2</sup> Table 7.1 of the Manual for Streets (DfT, 2007)

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PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number				
			Pedestrians and cyclists in Cawston do not have the benefit of stainless steel head protection as the wing mirrors of passing traffic overlap the narrow pedestrian footways in the centre of the village - where such footways exist at all.  The HIS makes no provision for large vehicles arriving in Cawston on the B1145 from both east and west with a stream of traffic following, which results in vehicles being unable to manoeuvre in the confines of the centre of Cawston. Such traffic would also be likely to fill the intended passing spaces being designated in the village centre as places where HGVs might be able to pass each other. Following traffic is not necessarily construction traffic and its drivers are unlikely to be endowed with the magical powers required to see around the corners by the Old Forge and at the Chapel Street junction, which seem to be an essential ability in the selection of	<ul> <li>Introduction of a 20 mph speed limit to afford more time for yield manoeuvres (where forward visibility may be otherwise compromised by the existing speed limit).</li> <li>The assessments undertaken for noise and vibration and air quality, have assessed the potential effects as a result of changes from the existing baseline conditions and not the conditions following the implementation of the HIS. Therefore, the outcomes of these assessments are not changed by the revisions to the HIS and are still relevant.</li> </ul>
2.14.1.6	The Applicant	Alternative traffic movement through Cawston At the Issue Specific Hearing into Onshore Matters, Norfolk County Council indicated that it would be willing to consider access for a haul road from the B1149, whereas previously it had considered this was not a feasible option.  1. Without prejudice to the ongoing dialogue between relevant parties in relation to traffic movements at Cawston, set out the implications for the application should an alternative access from the B1149 be agreed. What would be the effect on the Environmental Statement, Order limits, compulsory acquisition powers etc?  2. How could such an alternative option be considered within the remaining months of the Examination?	the applicant's sub-contractors and permanent staff.  1. A review of a number of proposed options for traffic movements through Cawston was undertaken prior to the meeting on the 12th February and is presented in Appendix 2 of the Position Statement [ExA.AS-2.DS.V1]. The table in Appendix 2 of the Position Statement identifies the constraints and benefits of the options from an overall environmental impacts assessment perspective, including construction methodology, traffic and transport, land or order limits and the environment.  Four alternative options were reviewed (Option 1 being the existing proposal to use the B1145 and the Highways Intervention Scheme);  Option 2 (Norfolk Boreas Scenario 2 only) a full bypass from the B1149 requiring a new separate haulage route parallel to the cable corridor;  Option 3 (Norfolk Boreas Scenario 2 only) light bypass where traffic uses the running track when not in use for duct installation;  Option 4 (Norfolk Boreas Scenario 2 only) moving mobilisation MA6 adjacent to the B1149; and  Option 5 (Norfolk Boreas Scenario 1 and 2) Implementing a one-way system using Heydon Road.  Option 2 has additional significant constraints relating to construction methodology, traffic demand, the environment and additional land requirements. It would require significant additional land to extend the cable route footprint, outside the order limits and affect multiple landowners where head of terms have already been signed. It also would require an additional 50 weeks and around 9,000 additional HGV movements to construct and subsequently remove the new road. Environmentally there would be additional impacts not considered within the existing EIA: it increases the impact in respect of both footprint and duration on the River Wensum catchment, protected species and habitats, and it goes against the agreed principles with Natural England and increases the risk to groundwater by extending the footprint of the works into a Source Protection Zone 1. There are also potential impacts to noise and	





PINS Question	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Number			location or new compound adjacent to the B1149. Both options also	
			increase the duration of the works in this area (from approximately 58 weeks to 108 weeks for Option 3 and 96 weeks for Option 4) and requires a higher specification of running track (so use of less impactful alternatives such as trackway would not be possible) to be installed for a longer duration. This does not comply with the Applicant's principle of embedded mitigation to minimise impact on land and reinstate lands as soon as possible. Further assessment of associated air quality and noise would be required as a result of increased HGV movements along the running track. There would also be additional habitat loss at the B1149 entrance, however this could be mitigated and would not change the significance of the findings of the EIA.	
			Option 5, the implementation of a one-way system would not require any changes to the order limits or require a change to the construction methodology and, therefore, would not change the EIA. As such it could also be implemented by Norfolk Vanguard.	
			<ul> <li>2. As detailed above, options 2, 3 and 4 would require additional land outside of the Order Limits. There are three ways that land can be authorised for compulsory acquisition (CA) within a DCO (s.123 Planning Act 2008 (PA08)): <ul> <li>The original application includes that land for CA powers;</li> <li>All persons with an interest in the land (including third party interests) consent to the inclusion of the provision; or</li> <li>The prescribed procedure is followed (where a person with an interest in the additional land does not consent to the inclusion of the provision).</li> </ul> </li></ul>	
			The prescribed procedure is set out in separate regulations – The Infrastructure Planning (Compulsory Acquisition) Regulations 2010 (CA Regs). The CA Regs state:	
			<ol> <li>The request for the proposed CA powers over additional land is submitted to the Secretary of State with:         <ul> <li>a supplement to the book of reference;</li> <li>a land plan identifying the land required as additional land, or affected by the proposed provision;</li> <li>a statement of reasons as to why the additional land is required; and</li> <li>an updated funding statement to indicate how the additional land is proposed to be funded.</li> </ul> </li> </ol>	
			<ol> <li>The Secretary of State has 28 days to decide whether to accept the request for the proposed CA powers.</li> <li>If accepted then the Applicant must notify:         <ul> <li>Local authorities as identified in s.43 of the PA08;</li> <li>Greater London Authority – not applicable here;</li> <li>Those parties in s.57 of PA08 – all those with interests in land on the same basis as notified under s.56 PA08 of the original acceptance of the DCO application; and</li> <li>Statutory bodies – as outlined in Schedule 2 of the CA Regs.</li> </ul> </li> </ol>	





PINS Question	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Number			The Applicant must also publish a notice in two successive weeks in required publications.  4. The notices have set requirements and must include a minimum 28 day period for making representations to the Secretary of State.  5. The Applicant has 10 working days after the end of the 28 day representation period to send a certificate of compliance in respect of the notification requirements.  6. The Examining Authority must then make an initial assessment of the issues within 21 days of the deadline for making representations and then set the timetable for examination.  7. A minimum of 21 days' notice must be given of any hearings (but	
			could be shortened if the parties consent in circumstances where a CA hearing has already been set).  The Applicant considers that the process within the CA Regulations could take between 12-16 weeks, which would be very difficult to accommodate within the current examination timetable.  In summary, the Applicant does not consider that Options 2, 3 and 4 are feasible or proportionate alternatives and only Options 1 and 5 should be considered further within the remaining months of the Examination.	
2.14.1.7	The Applicant	Traffic movements in Cawston The Position Statement [REP4-020] to be submitted at Deadline 5 to include a list of all matters that are not yet agreed.	A Position Statement on Cawston Traffic following the meeting held on the 12 <sup>th</sup> February has been submitted at Deadline 5 [ExA.AS-2.D5.V1] and includes a list of all matters not yet agreed.	
2.14.1.7	Norfolk County Council	Traffic movements in Cawston The Position Statement [REP4-020] to be submitted at Deadline 5 to include a list of all matters that are not yet agreed.	To be submitted at deadline 5.	The Applicant submitted the Position Statement on Cawston Traffic at Deadline 5 [REP5-054].
2.14.1.7	Cawston Parish Council	Traffic movements in Cawston The Position Statement [REP4-020] to be submitted at Deadline 5 to include a list of all matters that are not yet agreed.	The Position Statement [REP4-020] to be submitted at Deadline 5 to include a list of all matters that are not yet agreed. We understand that the Applicant will submit a consolidated Position Statement, but would reiterate here that our position remains that it is simply not possible to route any level of construction traffic safely through the village centre, for the reasons noted above (Q2.14.1.5).  We attended the recent meeting with the Applicant, NCC and BDC. Much the meeting was concerned with the applicant presenting the latest revision of their Highway Intervention Scheme and discussion of its omissions and inadequacies which might be revealed, it was suggested, when it is submitted at Deadline 5. Limited time was available to discussthe opportunities to divert construction traffic away from Cawston by using alternative routes. Vattenfall presented five options which they had generated, together with their assessment of their own suggestions. As time ran out at the end of the meeting Vattenfall invited those present to "choose the least bad from a set of options we did not like", presumably later be told "this is the one you chose", a classic window/kitchen sales trick. We consider both options 1 (existing scheme) and 5 (one way system using Heydon Road) of those offered to be unacceptable as they continue to route construction traffic through the village. This also applies to option 4 (move M6 to B1149) in its present form.  Option 2(a fully specified bypass) is much more desirable from our point of view, but seems to bring serious administrative problems (of their own	The Applicant submitted the Position Statement on Cawston Traffic at Deadline 5 [REP5-054] which provided details of the meeting held on 12 <sup>th</sup> February 2020 and documents the position of all parties including that provided by Cawston Parish Council on the 18 <sup>th</sup> February 2020. The agenda for the meeting was agreed by all parties prior to the submission at Deadline 4 [REP4-020]. As requested by the ExA, the agenda included the two main items 1). Revised Highway Intervention Scheme and 2). Consideration of Alternatives. Relevant documents highlighting technical and EIA perspectives on 1) and 2), as well as maps were also circulated to participants in advance of the meeting, as soon as these were available, with the purpose of facilitating constructive discussions with respect to the Revised HIS and the proposed alternatives. Parties were invited to provide edits or comments in relation to these working documents, before, during and after the meeting. Where provided, comments and submissions from parties are presented in the Position Statement [REP5-054].  The Applicant refers to the comments on Q2.14.1.5 regarding adequate road space





PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
			making) for the Applicants who claim to have already negotiated detailed	
			agreements with landowners in advance of consent, as does option 3	
			("bypass light"). Therefore, with some reluctance, we would be prepared	
			to consider option 4 as a basis for development of a solution which would	
			need to remove all construction traffic from the centre of Cawston. Any	
			solution must also include Hornsea 3 and have the potential to apply to	
			future schemes such as the Dudgeon & Sheringham Shoal extensions. We	
			argue that the best solution would be for all current applications which	
			propose to dig trenches across East Anglia to be put on hold until a	
			Strategic Review has been carried out and a coordinated system agreed	
			by all stakeholders. At the meeting the Applicants admitted that previous	
			Highway Intervention Schemes had been based on OS mapping using	
			inaccurate measurements. Apparently the latest Scheme is based on	
			topographic data with accurate road measurements; even then it appears	
			to use track width rather than the full width to indicate HGVs. This is	
			misleading as wing mirrors will add around 500mm to this width. We do	
			not see why the residents of Cawston should be put at risk because of the	
			lack of rigour in desk based modelling of the successive schemes.	

### 14.2 Cable Logistics Area (CLA) along Link 68 in Oulton

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.14.2.8	The Applicant	1. It was stated at the ISH Hearing [EV6002 – EV6-005] and in the post hearing note [REP4-013, page 10] that "Traffic and use of the cable logistics area is limited to the purposes described in the clarification note [REP2-027] and HGV movements to the CLA are limited to 5 arrivals and 5 departures per day." Where and how is the proposed limit to per day HGV movements secured?  2. Could harvest and other events mean that HGV movements are concentrated at certain times of the day? What are the potential implications and how would these be mitigated?	<ol> <li>[REP1-022] Outline Traffic Management Plan (OTMP) purpose is "to capture and secure the mitigation principles that, for the construction phase of the onshore elements of the project, are to be included in the final Traffic Management Plan (TMP) to be submitted pursuant to the discharge of Requirement 21(a) of the Draft DCO." Section 3.2 of the OTMP introduces Appendix 1 and Appendix 2, HGV distribution for Scenario 1 and Scenario 2 respectively. Paragraph 73. sets out "The daily HGV demand set out in Appendix 1 and 2 represents the maximum HGV level for the project alone not to be exceeded by the appointed contractor."</li> <li>Appendix 1 contains a maximum daily HGV demand for link 68 (The Street/Heydon Road) of 65 and Appendix 2 sets out a maximum daily HGV demand of 80 for the same link. These numbers are inclusive of the 10 HGV movement demand for the Cable Logistics Area. However, for clarity a footnote has been added to Appendix 1 and Appendix 2 to reflect this.</li> <li>Potential HGV peaks associated with harvest and other events can be accommodated in the Applicant's HGV controls.</li> </ol>	
			[REP1-022] Outline Traffic Management Plan (OTMP), Section 3.3 sets out the controls for HGV numbers and includes a commitment to a contractor booking system for HGVs.	
			The booking system will enable a daily profile of deliveries to be maintained within the assessed daily maximum thresholds and allow the contractor to ensure that the required deliveries are regularly forecast and planned. This in turn, allows the hourly profile of HGVs to be controlled by allocating timeslots. By controlling hourly arrival and	





PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number				
			departure time the potential for the Project's HGVs to add to delays at 'pinch-points' is substantially reduced.	
			Norfolk Boreas HGV traffic demand for Heydon Road would be a maximum of 4 arrivals and 4 departures per hour. This low frequency of HGV movement could be readily co-ordinated with the Agricultural Industry by utilising the booking system to ensure the assessed daily maximum HGV is not exceeded.	
			OTMP Table 3.5 contains the further commitments to ensure 'highway network resilience' including the commitment to event management and engaging with the Agricultural Industry.	
2.14.2.9	The Applicant	Cycle Routes The ExA observed at the USI on 20 January 2020 [EV2-003] a number of cyclists using Link 68 The Street and Heydon Road.  1. What assessment has been undertaken of the use of Link 68 by Non-Motorised Users (NMU) including cyclists?  2. What mitigation is proposed to ensure the safe passage of NMUs at this location and where is this secured?	1. All 108 highway links contained within the traffic and transport study area have been assessed and assigned sensitivity. The assessment includes the consideration of all user groups including pedestrians and cyclists. Details of the rational for the applied sensitivity are contained in ES Chapter 24, Appendix 24.2 [APP-639]. It can be observed that links with evidence of cycle routes or pedestrian use with limited facilities, are identified and assigned a greater degree of sensitivity. This in turn informs the significance of impacts and the appropriate mitigation for the user groups. This could be a reduction in construction vehicles, or improved/diverted pedestrian/cycle routes.	
			The assessment established that Link 68 has no national, regional or local designation as a cycle route/walking route and therefore is not a sensitive link with respect to those user groups. Therefore, the mitigation proposed for Link 68 was not specific to NMU but developed for all modes.  2. [REP1-022] OTMP, Section 4.3.3 sets out the highway mitigation scheme for Link 68 which has been developed to accommodate all road users and approved by NCC.	
			The OTMP Table 4.2 gives more details of the highway mitigation scheme, measures that will secure safe passage of NMUs include:	
			<ul> <li>Up to 8 passing places along The Street for HGV opposing traffic;</li> <li>A means of priority work for southbound vehicles in the vicinity of The Old Railway Gatehouse;</li> <li>Temporary lowering of the existing 60mph speed limit to 30mph; and</li> <li>Temporary signage along the B1145 and The Street as agreed with the Highway Authority to provide driver awareness and enforcement.</li> </ul>	
			The OTMP (para 96) confirms highway mitigation scheme measures will be supplemented with an induction for contractor HGV drivers that will establish a clear set of responsibilities that drivers will be required to follow including:  • Timings, pre-booked slots; • Clarification of approved HGV routes; • Awareness of highway safety concerns;	
			<ul> <li>Awareness of fighway safety concerns;</li> <li>Adherence to speed limits;</li> <li>Instructions on when to pull over safely to alleviate platoons;</li> <li>Safe driving techniques for over-taking manoeuvres; and</li> </ul>	





PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
			Details of reporting accidents and 'near misses'.	
2.14.2.10	The Applicant	Non-standard Construction Hours	1. No activities are proposed at the cable logistics area outside of normal	
		1. Oulton Parish Council seeks clarity on the Cable Logistics Area	working hours. The text regarding essential activities in the cable logistics	
		clarification note [REP2-027] which states that working outside the	area clarification note [REP2-027] was included to highlight that	
		working hours secured in the draft DCO Requirement 26 is only	agreement with the planning authority in advance would be required	
		permitted for essential activities. What type of activities, other than	should an essential activity be identified.	
		the those listed in dDCO Requirement 26, could constitute	2. Cable drums would not require night time delivery and will not be	
		"essential activities" for this specific location?	abnormal loads. The OTMP [REP1-022] Section 3.5 states that the delivery	
		2. Confirm that cable drums would not require nighttime delivery?	of materials and plant would occur in normal working hours (7am to 7pm	
		Where and how would this be secured?	Monday to Friday and Saturday 7am to 1pm).	

# 14.3 Link 69 Little London Road in North Walsham from the B1145 Lyngate Road to an access point 210m east

PINS Question Number	Respondent:	Question:	Interested Partie	es Response at De	eadline 5:		Applicant's Comments:
2.14.3.11	The Applicant	Cable crossing of Little London Road  1. Explain the effects of street closures 8a-8b, 8c-8d, 8e-8f and 8g-8h [APP-013, sheet 9] on nearby residents and local traffic movements. Please provide details of timing and duration of closures and re-routing of traffic.  2. Provide a method statement to explain the cable crossing of Little London Road (TC14a/b, TC14a, TC15), and associated land drainage and streams, works access and road closure; to expand on Works Plan [APP-010] Sheet 8. How would this be secured?	which are identife the DCO.  Schedule 2 allow facilitate Street was for a number of route from the pincluding open to	ied in Schedule 2 s for a range of tr vorks, including a reasons, such as c ublic highway or i rench construction highway. The tal	- Streets Subject affic managemen full road closure. onstructing an ac for cable route cr n or trenchless cr	Street works can be coess to the cable ossing methods	
			8e – 8f	Little London Road	crossing with potential option for trenchless crossing via TC#15 under Hall Lane Access AC37  Open trench crossing with option for trenchless	Road closure with diversion routes	





Enhancing Society Togeth							
PINS Question	Respondent:	Question:	Interested Partic	es Response at Do	eadline 5:		Applicant's Comments:
Number			8g – 8h	B1145	crossing via TC#14 under Little London Road Access AC38	Single Lane closure requiring traffic management such as traffic	
					TC#14 under the B1145	signals.  No Impacts to traffic	
			Due to the narro Little London Ro allow construction undertaken off to to the existing ro Where practicab provided throug	ow carriageway with ad (AC37), road connection of the accesses the live carriageway and would require the and safe to do the the road closure to circumnavigat	ay and only the last a full road closur so, local residenti	AC34, AC35) and to be required to access works will st section of 'tieing e.  al access will still be will utilise signed	; in'
			routing north on Hall Lane, then t heading south o	Bd – Hall Lane e with an origin fr the B1145, turniourning right at the	e junction with Ha ds the road closur	amed road leading	
			routing west alo Edingthorpe Gre	ng North Walshar en and utilising th d closures. This ro	rom the east can I m Road and turnin ne local roads to ro oute is likely to imp	ng right at e-join Hall Lane to	the
			through the Villa via Lyngate Road before re-joining The reverse of th	re on Little Londo age of North Wals d, Mundeseley Ro g Little London Ro ne route would all London Road. Thi	ham can be achied ad, Crow Road an ad from the east of low access to the	ative diversion rout ved from the B114 d onto Bacton Roa of the road closure west of the road require a delay of	5 d
			Access construct		ie B1145 would re	equire a single lane ' construction to th	





Enhancing Society Togeth	er			
	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Number				
Number			existing carriageway. The single lane closure would be managed by two way traffic signals during the working day in accordance with applicable traffic sensitive street timing restrictions and in full compliance with Traffic Signs Manual - Chapter 8 – Part 1. Restrictions would be removed outside of the working hours where it is safe and practicable to do so. Baseflows of the B1145 are within the Chapter 8 thresholds of 900 vehicles per hour one-way working for traffic signal control presenting a minimal impact to traffic flows in regards to driver delay.  Duration of road closures and diversion routes For the construction of the accesses it is likely that duration of the road closures would be short term for a maximum of one week.	
			Likewise for open trench crossings of the cable route, it is likely that road	
			closures would be required for a maximum of one week.	
			2. A method statement explaining the crossing of features in the vicinity of Little London Road including committed trenchless crossings of Paston Way and Knapton Cutting County Wildlife Site and the North Walsham and Dilham Canal is provided in ExA.AS-9.V1.D5. The method statement includes discussion of works access and road closure requirements.	
			The trenchless crossing of the Paston Way and Knapton Cutting County Wildlife Site and North Walsham and Dilham Canal is secured under dDCO Requirement 16. The access points and associated traffic mitigation for Little London Road, including aspects such as the positioning of drill exit compounds within the area accessed from Little London Road to minimise materials requirements delivered on Link 69 is detailed in Table 4.3 of the OTMP which is secured under Requirement 21 of the dDCO.	
2.14.3.12	The Applicant	Communications Plan  1. Provide details on the contents of the Communications Plan referred to in the Interested Parties Response to ExA Written Questions [REP2-021, Table 14], including who would be consulted, how and when?  North Norfolk District Council states that [REP4-031]: "It is important that the Communications Plan include both a Complaints System and a Community Liaison Committee. The	<ol> <li>Norfolk Boreas Limited will ensure effective and open communication with local stakeholders i.e. residents and businesses that may be affected by noise or other aspects affecting amenity caused by the construction works.</li> <li>The Applicant will draw up a communications plan to be submitted for comment to the Local Authorities as part of the final CoCP. This plan will be tailored to meet the needs of local stakeholders in relation to the</li> </ol>	
		appointment of a Community Liaison Officer would also form part of the Communication Plan, secured by the Requirement. One of the reasons that NNDC considered these matters to be important, and would be open to greater detail being provided by the Appellant, is that the Communications Plan will be an aspect of addressing the impact of construction activities on tourism and recreation, as well as residential and local amenity."  2. How does the Applicant propose these matters should be	works to be undertaken. The communications plan will mirror the construction programme, and its geographic focus of work – for example taking into account that construction may be undertaken contemporaneously in North Norfolk, Broadland and Breckland. Communications will proactively share relevant aspects of the construction plan – in order to keep local authorities and local residents informed of the type and timing of works involved, in advance, to facilitate planning ahead as far as possible.	
		addressed?  3. How would the implementation of the Communications Plan reduce pedestrian severance and amenity in relation to Link 69?	Communications will be co-ordinated on site by a designated member of the construction management team. Previous construction activities undertaken by the Applicant's parent company (Vattenfall Wind Power Ltd) have convened one or more Community Liaison Committees, to ensure effective two-way communications between local representatives and the Applicant. We envisage similar arrangements	
			will be made in relation to the Project. A combination of communication mechanisms such as making use of existing channels of communication, like Parish and community information boards, magazines and meetings,	
			as well as establishing new ones such as Community Liaison Committee	





PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
			meetings and digital tools will be employed to keep local residents informed.	
			The type of information that will be shared will include indicative details for timetable of works, a schedule of working hours, the extent of the works, and a contact name, address and telephone number in case of complaint or query.  A designated Norfolk Boreas Limited local community liaison officer will deliver the proactive elements of the Communications Plan, as well as responding to any public concerns, queries or complaints in a professional and diligent manner. Enquiries will be dealt with in an expedient and courteous manner. Any complaints will be logged, investigated and, where appropriate, rectifying action will be taken.	
			2. There will be limited flexibility in terms of influencing local work programmes, but mechanisms such as the Local Liaison Committee would enable open dialogue on local work programmes as far as possible. Already, the works programme takes into account local sensitivities and interests and needs regarding the role of tourism in supporting the local economy, as far as is possible, and will seek to limit interaction with tourism activity further, once detailed plans are drawn-up.	
			Efforts will also be made to work with local stakeholders to explore opportunities where the local association with the development of offshore wind, a cornerstone of the UK's energy transition programme, enabling Net Zero by 2050, and the local policies developed in response to Climate Change can serve as a source of local pride, and potentially contribute to the local appeal and sense of place. Any enhanced local understanding derived from Project activities, such as Site Investigation work or archaeological assessments, which can contribute to local initiatives like the Deep History Coast programme, will also be shared and communicated with local stakeholders.	
			3. The implementation of a Communications plan would reduce severance by enabling the contractor to be informed of the most sensitive period for pedestrian activity and allow the contractor to tailor HGV deliveries accordingly to minimise impact.	
			Noting material is being stockpiled at MA10 and transferred to smaller vehicles, delivery management to Little London Road can be precisely controlled to tightly defined delivery windows.	
			A further benefit is that residents would be appraised of delivery windows and HGV quantum so would be less susceptible to the severance anxiety associated with unexpected impacts.	





### 15 Water Resources and Flood Risk

#### 15.0 Water Resources and Flood Risk

PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number				
2.15.0.1	North Norfolk District Council	Proposed disapplication of secondary consent, in relation to drainage:  The Applicant provides an explanation in [AS-024] table 15 item 5 for the proposed disapplication under dDCO Article 7 (3) of secondary/ additional consents, with reference to representations by Water Management Alliance [RR-104] and by Norfolk CC [RR-037]. Are parties content? If not, why not?	If disapplication of secondary consent in relation to drainage is to be applied then NNDC would maintain the view that those parties normally involved in the secondary consent process should be afforded the opportunity to participate in the discharge of related requirements. In this case Requirement 25, in relation to watercourse crossings, refers specifically to some but not all secondary consent bodies and it may be necessary to be clear who is expected to be involved so that they can be party to any Planning Performance Agreements related to consultees and the discharge of Requirements.	All parties who would be involved in the secondary consenting associated with watercourse crossings are captured and consulted under Requirement 25, these are the Environment Agency, Norfolk County Council as Lead Flood Authority and Internal Drainage Board (captured under relevant drainage authorities).
2.15.0.2	Environment Agency	Cumulative residual adverse impacts to Water Resources and Flood Risk:  Are you satisfied with Applicant response at [REP3-003] to Q16.1.1 regarding residual effects to Water Resources and Flood Risk, with particular reference to cumulative adverse effects of permanent culverts in Scenario 2?	The Applicant's response outlines the worst case and describes the adverse effects arising from this but has not addressed the ecological impacts. It is necessary for the Applicant to set out the worst case scenario but it is our understanding that culverting will be avoided wherever possible. We appreciate that it is not possible for the Applicant to provide detailed design for each section of the project at this stage and that the Rochdale Envelope approach is being applied, but we expect refined conceptual site models for each watercourse crossing to be included in each site specific CoCP. Environment Agency policy strongly discourages building new culverts because of the adverse ecological, flood risk, geomorphological, human safety and aesthetic impacts. Watercourses are important linear features of the landscape and should be maintained as continuous corridors to maximise their benefits to society. In addition, we actively pursue the restoration of culverted watercourses to open channels. We expect the Applicant to demonstrate why culverting is both necessary and the only reasonable and practicable alternative. The length of any culvert should be restricted to the minimum necessary to meet the applicant's objective. When designing the culvert, the Applicant should take into account the predicted impacts of climate change and natural channel geomorphology. All mitigation measures should be incorporated within the design and the work should be carried out using best working practice to minimise environmental impacts. Table 20.22 in Chapter 20 does not appear to outline mitigation and compensation for new permanent culverts and the Applicant's response at [REP3-003] does not address the ecological impacts of permanent culverts. If permanent culverts are required then impacts caused by the ecological discontinuity (e.g. for adult flying stages of invertebrates and other animals that do not like to move through culverts) are compensated for by enhancing marginal and inchannel habitats in the vicinity.	The Applicant reiterates the statement from [REP3-003] to Q16.1.1, that permanent culverts will only be required where it may not be possible to use the temporary dam and divert technique for example for watercourses that are 1.5m or deeper.  Within Section 11 of the updated OCoCP [REP5-010], the Applicant has committed to develop a scheme and programme for each watercourse crossing, diversion and reinstatement, which will include site specific details regarding sediment management, and pollution prevention measures, any appropriate enhancements and post-construction monitoring. A visual inspection and photographic survey will be undertaken at each crossing location in advance of construction to ensure that there is an accurate record of baseline conditions geomorphological (physical habitat) and ecology at each crossing location. Details of the survey will be provided in the scheme of watercourse crossings.  This scheme will be submitted to and approved by the relevant planning authority in consultation with Natural England, which is secured through Requirement 25 (Watercourse Crossings) of the DCO. The site specific measures set out within the scheme of watercourse crossings, referred to in Requirement 25, will be the principal mechanism for protecting watercourses at crossings, and will be transferred across to the final CoCP to ensure consistency.  Section 11.5.1 of the OCoCP [REP5-010 details measures that would be implemented along the onshore cable route at watercourse crossings to minimise changes to surface water runoff and flood risk during construction resulting from the use of culverts at watercourse crossings. Where possible, localised improvements to the geomorphology and in channel habitats will be considered where they are crossed using trenched techniques e.g. by replacing resectioned banks with more natural profiles that are typical of the natural geomorphology of the watercourse improvements would be limited to within the project Order limits.
2.15.0.3	Environment Agency	Update on the EA concerns about potential impacts on water environment:  Referring to Applicant responses at Deadlines 3 and 4, EA to provide update on its concerns regarding:	1. The Applicant has issued a clarification note regarding methodology for trenchless crossings and we have requested sight of refined conceptual site models for our approval once post-consent ground investigations have been undertaken. We are satisfied that trenchless crossing can be undertaken in a manner that will not alter the current hydraulic continuity between aquifers/aquifers and watercourses and without contamination;	1. Noted. The Applicant understands the Environment Agency require sight of the refined Conceptual Site Models for approval once post-consent Ground Investigations have been undertaken, this is detailed in Section 6.1 of the OCoCP [REP5-010].





PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number				
		<ol> <li>Potential construction impacts on groundwater quality for example from trenchless crossing and piling, including consideration of where groundwater and surface waters converge;</li> <li>How to secure groundwater abstractor's formal consent to derogate, before works begin, irrespective of whether or not they have access to mains;</li> <li>Potential for significant impact at any shallow wells in close proximity to the excavations.</li> </ol>	<ol> <li>The applicant should report all abstractions within 250 m of the works to the EA along with an Hydrogeological Risk Assessment. If it is concluded that the works will derogate an abstraction, the EA will issue the applicant with consent to derogate forms. The applicant must agree suitable mitigation measures with the abstractor who should then submit their completed consent to derogate form to the EA.</li> <li>Norfolk Boreas undertake to investigate the presence of so far unknown private groundwater abstractors when they commence work. As noted in 2 above, the applicant should report all abstractions within 250 m of the works to the EA along with a Hydrogeological Risk Assessment; the assessment will determine whether or not there is a potential for a significant impact at any nearby shallow wells and whether the impact will be permanent or temporary. The HRAs should be submitted to the EA for review; monitoring work may be stipulated as well as / instead of mitigation works. We are satisfied that the applicant will be able to identify</li> </ol>	supply (both licensed and unlicensed and including shallow wells) within the construction area will be identified prior to construction. The location of private water supplies within the construction area will be identified through discussions with landowners and during the pre-construction land survey, as detailed in Appendix B. Details of any groundwater abstractors identified along with a risk assessment for the works, a groundwater monitoring proposal if appropriate, or an evidence-based justification of the reasons why a risk assessment and monitoring are not required will be submitted to the Environment Agency prior to construction.'  Following discussions on Environment Agency SoCG [ExA.SoCG-7.D6.V3] it has been agreed that OCoCP Section 6.1.2 [REP-010] will be further updated with the details on the groundwater abstractions provided by the Environment Agency in response to Q2.15.03. This will be captured in a future update to the OCoCP.
			sufficient mitigation measures should any significant likely impacts be identified at any local abstractions.	
2.15.0.4	The Applicant	Identification of groundwater abstractors, risk assessment and monitoring:  Explain [REP3-003 table 16.2]:  1. How does the OCoCP secure compliance with the EA's request that the Applicant provides the EA with 'details of any groundwater abstractors identified along with a risk assessment for the works, along with a groundwater monitoring proposal if appropriate, or an evidence-based justification of the reasons why a risk assessment and monitoring are not required'.  2. Does Requirement 20 (2)d of the dDCO need to be clarified regarding securing consultation with the EA prior to construction on further investigations and refined Conceptual Site Model for ground conditions and contamination?		
2.15.0.5	The Applicant	Cable crossings in Source Protection Zones: Clarify if construction method for any cable crossings in SPZs is likely to be changed, and if so, explain if and how this would change the assessment of significant effects presented in the ES Chapter 20 [APP-233].		
2.15.0.6	The Applicant	SuDS drainage design and management principles across various plans: Should the content for the Design Guide to be included in the DAS, and the OLEMS be updated to contain cross-referencing to drainage	The DAS has been updated to provide further details on the Design Guide including reference to the operational drainage design.  Table 4.3 of the DAS which sets out the Design Principles and includes the development of the SuDS drainage strategy, a cross reference to the	





PINS	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Question Number				
		design, maintenance and management to SuDS principles as established through the outline Operational Drainage Plan? There seems to be no mention of operational drainage design, maintenance and management in the note on Design Principles for the substation appended to the SoCG with Breckland Council [REP2-039].	Outline Operational Drainage Plan has been included. Reference has also been included in the Design Guide Outline, presented as Appendix 1 to the updated DAS (Document reference 8.2, Version 3).  Section 3 of the OLEMS details the objectives including reference to the SuDs requirements, a cross reference to the Outline Operational Drainage Plan has been included.  Updated documents have been submitted at Deadline 5.	
2.15.0.7	The Applicant	Flood Risk Assessment on proposed National Grid substation extension  Does the Flood Risk Assessment need to be amended to reflect any increased area of the proposed National Grid substation extension, whether for Scenario 1 or Scenario 2?	The Applicant refers to ES Appendix 20.1 Flood Risk Assessment [APP-586]. The dimensions of the proposed National Grid substation extension under Scenario 1 and 2 are accurately assessed within the Environmental Statement. The parameters as assessed in the Flood Risk Assessment reflect the dimensions for Scenario 1 and Scenario 2 as detailed in ES Chapter 5 Project Description [APP-218].	
2.15.0.8	The Applicant	Reinstatement of small watercourse channels to pre-construction depths:  Chapter 20 of the ES [APP-233, para 193] specifies that backfilling of cable trenches would be 'well compacted to prevent the cable corridor acting as a conduit for water'. Confirm where this methodology is secured.	This is secured in the OCoCP [RER1-018] which refers to 'stabilised backfill', and which has been updated to provide further detail. The updated OCoCP has been submitted at Deadline 5 [Document reference 8.1, Version 3].	
2.15.0.9	The Applicant	Flood Warning and Evacuation Plan:  The Flood Risk Assessment [APP-586] para 247 states that 'it is anticipated that the project will require a comprehensive Flood Warning and Evacuation Plan'. Has this Plan been drafted and if so, indicate where in the documentation it is and whether it is proposed that it would be a certified document? If it hasn't been prepared, explain why and the process for preparing it.	The OCoCP [REP1-018] details the controls adhered to for flood risk. The document states that contractors will be required to sign up to the Environment Agency (EA) 'Floodline' service, and that during construction staff must be made aware of works in flood zones and the process to follow in the event of a flood, with any Flood Warning Systems to be subscribed to.  The OCoCP has been updated to refer specifically to a Flood Warning and Evacuation Plan, which will be produced as part of the Environmental Emergency/Incident and Response Plan post-consent.	
2.15.0.10	The Applicant	DCO]:	1. A visual inspection and photographic survey will be undertaken at each crossing location in advance of construction to ensure that there is an accurate record of baseline conditions geomorphological (physical habitat) and ecological at each crossing location. This survey will be detailed in the site specific watercourse crossings plan which are secured through Requirement 25 and detailed in the OCoCP. An updated OCoCP has been submitted at Deadline 5 which captures this further detail in Section 11. Note that the baseline geomorphological and ecological condition of the larger watercourses that would be crossed by the proposed development has already been established as part of the pre-consent geomorphological survey that were undertaken to inform the DCO submission, detailed in ES Appendix 20.3 [APP-588]. The pre-construction survey will be used to update and augment this survey where appropriate.  2. The most appropriate approach to reinstatement and enhancement at each crossing location will be agreed with the Environment Agency (for Main Rivers), the Internal Drainage Board (for Ordinary Watercourses within an Internal Drainage District) and Lead Local Flood Authority (for all other Ordinary Watercourses) in advance of construction through the scheme of watercourse crossings secured by dDCO Requirement 25.  3. Details of the enhancements that are appropriate for each crossing location will be set out in a site specific watercourse crossing plan, secured by dDCO Requirement 25. The plans will outline proposals for the scope of the enhancements that can be realistically achieved at each location, taking	





PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
			into account the prevailing geomorphological and ecological characteristics	
			of each reach (as determined by the pre-construction survey) and	
			constraints on channel capacity and flow conveyance. These proposals will	
			be discussed and agreed with the relevant authority (EA, IDB or LLFA) in	
			advance of construction.	
2.15.0.11	The Applicant	Monitoring of residual adverse impacts on the water environment:	Post-construction monitoring will be undertaken at each crossing location	
		What monitoring of residual adverse impacts on the water	to identify any residual adverse impacts. This will include monitoring of the	
		environment is proposed and how would it be secured?	predominant geomorphological characteristics (bank form, substrate	
			conditions, flow type, and evidence of instability, erosion or deposition)	
			and ecological characteristics of each location. This will enable the	
			effectiveness of the reinstatement to be evaluated, with comparison to the	
			results of the pre-construction surveys secured under the OCoCP. The	
			post-construction monitoring requirement will be detailed in the site	
			specific watercourse crossing plans and the OCoCP has been updated and	
			submitted at Deadline 5 to reflect this commitment.	

# **16 General and Cross-topic Questions**

#### 16.0 General

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.16.0.1	The Applicant	Climate Change Adaptation: Accepting that climate change is discussed in ES Chapters 8 and 20, provide a statement on how climate change adaptation has been considered both onshore and offshore, with particular reference to resilience of offshore infrastructure to storms.	To ensure long term resilience in the face of climate change, the Applicant has embedded mitigation into the design of the project to account for predicted climate change scenarios both onshore and offshore. For example, through the use of culverts which include an allowance for potential increases in winter flows as a result of predicted climate change to prevent flooding. At landfall, allowance has been made for coastal erosion as a result of climate change through selection and design of the HDD method, burial depth and set back transition pit location. Seaward of landfall, burial of export cables to 5.5.m below LAT will ensure cables remained buried following storm events.  The offshore infrastructure associated with the Project will also be designed to ensure resilience to both climate change and storm events. Accepted long-term climatic trends such as sea-level rise and increasing sea and air temperatures will be taken into account when defining load cases for structures and electrical infrastructure. Offshore structures will be designed in accordance with accepted design standards e.g. DNVGL-ST-0145. The 'ultimate limit state' load case will be based on a 100-year storm event. Subsea cables will be protected from storm action throughout the lifetime of the project as they will be installed 1-2m below seabed level, and will be surveyed on a routine basis to identify (and rebury) any sections that are becoming unburied due to seabed mobility.	





PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.16.0.2	The Applicant	SoCG with Breckland Council:  The Applicant and Breckland Council are requested to update their SoCG to reflect the adoption of its Local Plan during the examination in 2019.	The Breckland Local Plan sets the strategic context for development in the District, governing the decisions made on planning applications and what types of development are suitable for each area. It is a key document that guides development in the District over the next 20 years.	
			The modifications made to the Local Plan are summarised here: <a href="https://breckland.gov.uk/media/14546/Report-of-the-Inspector-2019/pdf/Report_of_the_Inspector_2019.pdf?m=637078649603070000">https://breckland.gov.uk/media/14546/Report-of-the-Inspector_2019.pdf?m=637078649603070000</a>	
			All issues, including those relating to the modifications made to the Local Plan from the most recent draft Plan, are agreed with Breckland Council in their Statement of Common Ground submitted at deadline 2 [REP2-039]. This was agreed after Breckland's adoption of their Local Plan.	
			The Breckland Local Plan was adopted on 28 <sup>th</sup> November 2019, and the final correspondence between the Applicant and Breckland regarding the Statement of Common Ground was on the 4 <sup>th</sup> December 2019, therefore the Applicant has already included, discussed and resolved any areas of concern with Breckland Council and these are reflected in the Statement of Common Ground (SoCG) submitted at Deadline 2.	
2.16.0.3	The Applicant	Interested Parties Response to Relevant Representations:  To enable the ExA to easily locate responses to each Relevant Representation, reorder the document [AS-024] so that it is organised by each Interested Party (IP), rather than a summary response to the topics raised in the Relevant Representations.	The Applicant has provided a reordered document as requested by the ExA and this has been submitted at Deadline 5 [ExA.RR.D5.V2]. The Applicant initially structured the document by topic to avoid duplication and because many issues were best addressed with a single response. The Applicant wishes to note that some of the topics and positions contained within the document have progressed since it was originally produced for the 4 <sup>th</sup> November deadline and therefore the document in some respects is now outdated.	

# 16.1 Environmental Statement (ES)

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.16.1.1	The Applicant	Additional trenchless crossing and assessment of significant effects in the ES:  One more trenchless crossing (A1067) is being proposed in the DCO than in Table 24.14 (Embedded Mitigation) of ES Chapter 24 [APP-237] and Table 5.40 ES Chapter 5 [APP218] and dDCO Requirement 16(13). How does this additional crossing influence the assessment of significant effects presented in the ES and how, if necessary, should any discrepancies be addressed?	In response to the request from Norfolk County Council for an additional trenchless crossing of the A1067, during the Norfolk Vanguard examination, Norfolk Vanguard completed an assessment to consider whether the revised construction methodology would give rise to any potentially significant impacts beyond those already assessed. This is presented in the 'Norfolk Vanguard Technical Note Responding to Norfolk County Council's Request for Trenchless Crossing of the A1067 and B1149', included as Appendix 2 of the Norfolk Boreas Statement of Common Ground with Norfolk County Council [REP2-050].  The assessment identified that the predicted noise levels at the nearest noise sensitive receptor (CRR20) associated with a trenchless crossing of the A1067 represent an impact of negligible significance during the daytime, evening and weekend reference periods. The predicted noise levels at the nearest noise sensitive receptor (CRR20) associated with a trenchless crossing of the A1067 represents an impact of major adverse significance during the night-time reference period. A requirement for further 'enhanced mitigation' was therefore identified. No changes were identified for other relevant onshore environmental topics associated with the proposed trenchless crossing of the A1067. The findings of the	





PINS Question	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
Number			submitted Environmental Statement therefore remain valid for those topics.	
			As the same construction methodology would be applied for Norfolk Boreas this assessment is also considered applicable to Norfolk Boreas and the requirement for enhanced mitigation at CRR20 is captured in the Norfolk Boreas OCoCP (Section 9.1.2) [REP1-018].	
2.16.1.2	The Applicant	Types of mitigation: The ES EIA Methodology [APP-219, para 37] explains the difference between "embedded mitigation" and "additional mitigation". The updated Schedule of Mitigation [REP2-006] brings in to use the terms "standard mitigation" (for noise) (also in the Interested Parties Response to Q12.0.1 [REP2-021]), "further mitigation" (for wintering birds) and "enhanced mitigation" (for noise and traffic). The updated OCoCP uses "enhanced mitigation" [REP1-019, section 9.1.2]. In places "additional mitigation" used in the OCoCP would seem to have the common language meaning of 'additional' not that defined in the EIA methodology. Ensure that there is consistency of terminology in references to mitigation; provide any necessary updates to documents and resubmit the updated documents to the Examination. All documents or plans that ensure mitigation is in place must be clear about the definition of mitigation and how that mitigation is secured in the dDCO.	As detailed in the ES EIA Methodology the two main areas of mitigation are "embedded mitigation" and "additional mitigation". Where mitigation is "embedded mitigation" and has been identified and adopted as part of the evolution of the project, this is clearly stated for each topic in the ES and in the Outline plans. The "additional mitigation" is that which has been identified during the EIA process specifically to reduce or eliminate any predicted significant impacts. For certain topics this "additional mitigation" is referred to in different terms such as "standard", "enhanced" or "further" but all refer to "additional" mitigation identified during the EIA process to be employed and is secured in the Outline management plans.  As indicated the terminology used is specific to the topic e.g. noise, which refers to "standard" and "enhanced" mitigation, to identify the different levels of "additional mitigation" which are applicable to noise. With the "standard" mitigation referring to the Best Practicable Means and where the ES has identified that this mitigation is not sufficient to reduce impacts to non-significant levels then "enhanced" mitigation is required.  The terminology is a result of the nuances in the different assessments for each topic. Therefore, this terminology has subsequently been used in the Schedule of Mitigation and the OCoCP to reflect the assessment within the ES. The Applicant feels that this is most appropriate to allow traceability and consistency with the ES. However, the OLEMS has been updated to refer to remove reference 'further' and replace with 'additional' mitigation for clarity.  The OTMP and OCoCP have been updated to clarify what is considered 'additional mitigation.'	
2.16.1.3	Marine Management Organisation	Decommissioning: Interested Parties are invited to set out any comments they may have on the way decommissioning would be addressed. The Project Description [APP-218] sets out the future processes, which would be in accordance with best practice, rules and legislation of the time. Requirement 14 (offshore) and Requirement 29 (onshore) secure future decommissioning plans.	The MMO acknowledges the Rochdale Envelope is large for offshore wind farms and therefore assessing the decommissioning of everything proposed to be built at this stage would be inappropriate, as there is not enough information on what final design will be built. In addition to the Offshore wind technology is changing rapidly, it would be onerous to	The Applicant concurs with this approach. The Applicant also notes that Requirement 14 provides that no offshore works may commence until a written decommissioning programme in compliance with section 105(2) of the Energy Act 2004 has been submitted to the Secretary of State for approval.
2.16.1.3	Natural England	Decommissioning: Interested Parties are invited to set out any comments they may have on the way decommissioning would be addressed. The Project Description [APP-218] sets out the future processes, which would be in accordance with best practice, rules and legislation of the time. Requirement 14 (offshore) and Requirement 29 (onshore) secure future decommissioning plans.	Natural England notes that decommissioning is not a consented activity under the DMLs and that there will be a need to seek a new Marine Licence prior to decommissioning. This will ensure environmental impacts are assessed and appropriately mitigated prior to the works.	The Applicant notes that – in accordance with Part 1, Paragraph 1 of the DMLs – the DML licence remains in force until the authorised scheme has been decommissioned in accordance with a programme approved by the Secretary of State. The Applicant, however, recognises that there will be a need to seek a further marine licence for decommissioning works.
2.16.1.3	North Norfolk District Council	Decommissioning: Interested Parties are invited to set out any comments they may have on the way decommissioning would be addressed. The Project Description [APP-218] sets out the future processes, which would be		The OFTO would be bound by the burden and obligations in the DCO, including Requirement 29 which provides as follows:





PINS Respondent: C Question Number	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
F	in accordance with best practice, rules and legislation of the time. Requirement 14 (offshore) and Requirement 29 (onshore) secure future decommissioning plans.	'No decision has been made regarding the final decommissioning policy for the onshore cables, as it is recognised that industry best practice, rules and legislation change over time. It is likely the cables would be removed from the ducts and recycled, with the jointing pits and ducts capped and sealed then left insitu.'  For North Norfolk, the key issue is ensuring that the cost of decommissioning does not fall to the public purse, in particular for elements at landfall which may, at a future point in time, become exposed and fall onto the beach. Whilst Requirement 17 does seek to address works becoming exposed during the operation of the authorised project, this requirement would cease to take effect at the point where notice is served under Requirement 29 (3) notifying the relevant planning authority in writing of the permanent cessation of commercial operation of the onshore transmission works.  With this issue in mind, NNDC consider that Requirement 29 could be amended/refined specifying the details that would need to be submitted as part of a decommissioning plan This has some legal complexities for the onshore cable route in relation to ownership as NNDC understands that Norfolk Boreas Limited would be required to sell off this onshore cable asset after construction which raises the question as to who has legal responsibility and what happens if subsequent companies are wound up to avoid the responsibility of decommissioning works? NNDC would welcome further advice from the applicant on this matter.	"29(1) Within six months of the permanent cessation of commercial operation of the onshore transmission works an onshore decommissioning plan must be submitted to the relevant planning authority for approval. (2) The decommissioning plan must be implemented as approved"  Any OFTO is also bound by the requirements under the Energy Act 2004 as well as regulated by OfGEM, who would ensure that the OFTO had strong financial standing and covenant strength. OfGEM provides protection for future adjustments for certain events through the OFTO regime and it is therefore the Applicant's understanding that if an OFTO ceased then the responsibilities would fall to OfGEM as the regulator.

### 16.2 Ground Conditions and Contamination

PINS Question Number	Respondent:	Question:	Interested Parties Response at Deadline 5:	Applicant's Comments:
2.16.2.4	Environment Agency	Response to contents of the Terra Land reports:  Do the contents of the Terra Land reports submitted to Examination at Deadline 2 [REP2- 014 to 019 inclusive] affect the EA's previous representations?	The Applicant has not yet carried out a risk assessment based on the chemical testing detailed in the Terra Land Ground Investigation reports. This should be undertaken in line with appropriate guidance https://www.gov.uk/guidance/land-contamination-how-to-manage-the-risks to determine whether any substances represent a risk to groundwater from trenchless crossings and piling. This assessment should be undertaken prior to any construction on site. The groundwater testing showed frequent detections of low level hydrocarbons which is unexpected given the land uses in the area of the crossings. The Applicant should also consider the origin/source of these hydrocarbons.	The Applicant notes this response. Section 6.1.1 of the updated OCoCP submitted at Deadline 5 [REP5-010] outlines the Applicant's commitment to additional groundwater protection and undertaking more detailed hydrogeological risk assessments meeting the requirements of Groundwater Protection Principles and Practice (GP3) (Environment Agency, 2017). The outcomes of the hydrogeological risk assessment will be discussed with the Environment Agency and additional mitigation agreed if necessary, including excavations to be designed to minimise groundwater disturbance and the use of best available techniques (BAT) in accordance with the Energy Network Association Guidance to be adopted. Additionally, for all areas where piling works are proposed a pilling risk assessment in accordance with the guidance by the Environment Agency 'Piling and Penetrative Ground Improvement Methods on Land Affected by Contamination: Guidance Pollution Prevention NC/99/73 (EA, 2201) will be undertaken and discussed with the Environment Agency.  Under Scenario 2 ground investigations and a hydrogeological risk assessment are to be undertaken at each trenchless crossing (e.g. HDD)





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				site and will be discussed with the Environment Agency and additional mitigation agreed if necessary. Trenchless crossing techniques in these locations will ensure that a sufficient thickness of glacial material is present to prevent migration of contaminants into the protected principal aquifer beneath.
2.16.2.5	The Applicant	Consultation with the EA on contamination assessment and any remedial works:  Does the OCoCP adequately secure the need for and timescales for consultation with the EA on any spills and suspected contamination encountered during construction or disturbance of land in preparation for construction?	The wording in OCoCP submitted at Deadline 5 has been updated to include that 'The Environment Agency will be consulted on any proposed ground investigation and further assessment and any refined Conceptual Site Model prior to construction.' The Environmental Agency will review and approve the process and proposed mitigation with respect to any contaminated land as part of the discharge of the final CoCP. As such the Applicant considers the wording is sufficient.	
2.16.2.5	Environment Agency	Consultation with the EA on contamination assessment and any remedial works:  Does the OCoCP adequately secure the need for and timescales for consultation with the EA on any spills and suspected contamination encountered during construction or disturbance of land in preparation for construction?	The OCoCP does not detail timescales in respect of consultation for any spills or suspected contamination. However, as secured by Requirement 20 and detailed in the OCoCP at section 6.1 paragraph 76 the Applicant will submit a written scheme to the Local Planning Authority to deal with any contamination, the Environment Agency should be consulted on this. In the event of a unexpected contamination being detected, then no further development shall be carried out until the Applicant has submitted a remediation strategy to the Environment Agency detailing how this unsuspected contamination shall be dealt with and obtained written approval. The remediation strategy shall be implemented as approved.	Noted. Updated wording in the OCoCP submitted at Deadline 5 [RE5-010], now refers to this within Section 6.1 paragraph 100 that 'The Environment Agency will be consulted on any proposed ground investigation and further assessment and any refined Conceptual Site Model prior to construction.'  Following discussions on Environment Agency SoCG [ExA.SoCG-7.D6.V3] it has been agreed that OCoCP Section 13 Environmental Incident and Response and Contingency will be updated to include that the 'Environment Agency incident response teams must be notified where an environmental incident could cause spillage or contamination into a watercourse including drains'. This will be captured in a future update of the OCoCP.