From: <u>Jane Kenny</u>

To: Norfolk Vanguard; Norfolk Vanguard
Cc: Louise Staples (Louise.Staples@nfu.org.uk)
Subject: NFU/LIG Submission for Deadline 9

Date: 06 June 2019 16:55:29

Attachments: <u>image005.png</u>

Rep1-SOCG-5.1 Norfolk Vanguard SoCG - NFU - Updated for D8 PG1 PG2.pdf

Dear Sirs

Please find attached the draft Statement of Common Ground. This is NFU and LIG's current position and we are waiting comments back from Vattenfall.

If you need any further information please contact me.

Yours faithfully

Jane

Jane Kenny DipSurv MRICS FAAV Rural Surveyor Associate Director

Savills, Lawrence House, 5 St Andrews Hill, Norwich NR2 1AD

Tel :+44 (0) 1603 229 224

Email :jkenny@savills.com

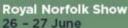
Email :jkenny@savills.co.uk



Before printing, think about the environment



Visit us at the following shows this summer Essex Young Farmers Country Show 19 May Suffolk Show 30 - 31 May





NOTICE: This email is intended for the named recipient only. It may contain privileged and confidential information. If you are not the intended recipient, notify the sender immediately and destroy this email. You must not copy, distribute or take action in reliance upon it. Whilst all efforts are made to safeguard emails, the Savills Group cannot guarantee that attachments are virus free or compatible with your systems and does not accept liability in respect of viruses or computer problems experienced. The Savills Group reserves the right to monitor all email communications through its internal and external networks.

Savills plc. Registered in England No 2122174. Registered office: 33 Margaret Street, London, W1G 0JD.

Savills plc is a holding company, subsidiaries of which are authorised and regulated by the Financial Conduct Authority (FCA)

Savills (UK) Limited. A subsidiary of Savills plc. Registered in England No 2605138. Registered office: 33 Margaret Street, London, W1G 0JD.

Savills Commercial Limited. A subsidiary of Savills plc. Registered in England No 2605125. Registered office: 33 Margaret Street, London, W1G 0JD.

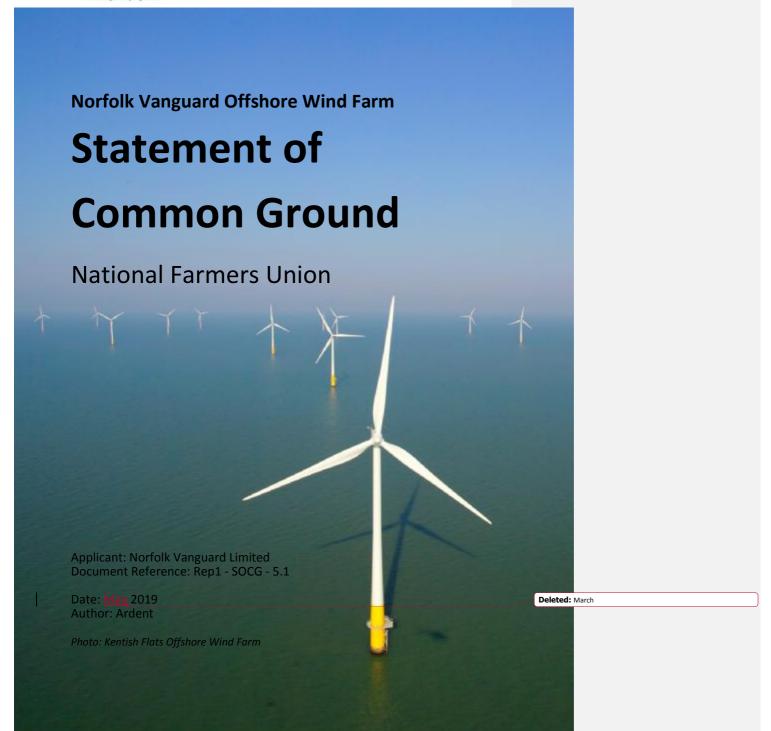
We are registered with the Scottish Letting Agent Register, our registration number is LARN1902057.

Please note any advice contained or attached in this email is informal and given purely as guidance unless otherwise explicitly stated. Our views on price are not intended as a formal valuation and should not be relied upon as such. They are given in the course of our estate agency role. No liability is given to any third party and the figures suggested are in accordance with Professional Standards PS1 and PS2 of the RICS Valuation – Global Standards 2017 incorporating the IVSC International Valuation Standards issued June 2017 and effective from 1 July 2017. Any advice attached is not a formal ("Red Book") valuation, and neither Savills nor the author can accept any responsibility to any third party who may seek to rely upon it, as a whole or any part as such. If formal advice is required this will be explicitly stated along with our understanding of limitations and purpose.

BEWARE OF CYBER-CRIME: Our banking details will not change during the course of a transaction. Should you receive a notification which advises a change in our bank account details, it may be fraudulent and you should notify Savills who will advise you accordingly.











Date	Issue No.	Remarks / Reason for Issue	Author	Checked	Approved
11/12/2018	01D	First draft for Norfolk Vanguard Limited review	PG	RS	RS
01/03/2019	02D	Update draft for deadline 4	PG	RS	RS
13/03/2019	03D	Final version for Deadline 4	PG	RS	RS
20/05/19	<u>04D</u>	Update for deadline 8	<u>PG</u>	<u>PG</u>	





Table of Contents

1	Introduction	1
1.1	The Development	1
1.2	Consultation with NFU	
2	Statement of Common Ground	3
2.1	Land Use and Agriculture	3

Appendix A Document submitted by NFU at deadline 3 with the Applicant's comments included.





Glossary

CAAV	The Central Association of Agricultural Valuers - Local group formed of all the majority of the land agents representing affected land interests, collectively known as the Land Interest Group (LIG).			
CLA	Country Land and Business Association Limited			
DCO	Development Consent Order			
EIA	Environmental Impact Assessment			
ES	Environmental Statement			
HOTs	Heads of Terms			
LIG	Land Interest Group			
OWF	Offshore Wind Farm			
NFU	National Farmers Union			
PEIR	Preliminary Environmental Information Report			
SoCG	Statement of Common Ground			





1 INTRODUCTION

- A Statement of Common Ground (SoCG) with the NFU and Norfolk Vanguard Limited (hereafter 'the Applicant') was requested by the Planning Inspectorate in the Norfolk Vanguard Rule 6 Letter (dated 9 November 2018).
- 2. The Planning Inspectorate asked that the SoCG include impacts on farming and land use.
- 3. This Statement of Common Ground has been prepared by the Applicant to set out the areas of agreement and disagreement with the National Farmer's Union (NFU) in relation to the Development Consent Order (DCO) application for the Norfolk Vanguard Offshore Wind Farm (hereafter 'the project') based on consultation to date.
- 4. This SoCG comprises an agreement log which has been structured to reflect topics of interest to NFU on the Norfolk Vanguard DCO application (hereafter 'the Application'). Topic specific matters agreed, not agreed and actions to resolve between NFU and the Applicant are included.
- 5. The Applicant has had regard to the Guidance for the examination of applications for development consent (March 2015) when compiling this SoCG. Points that are not agreed will be the subject of ongoing discussion wherever possible to resolve, or refine, the extent of disagreement between the parties.

1.1 The Development

- 6. The Application is for the development of the Norfolk Vanguard Offshore Wind Farm (OWF) and associated infrastructure. The OWF comprises two distinct areas, Norfolk Vanguard (NV) East and NV West ('the OWF sites'), which are located in the southern North Sea, approximately 70km and 47km from the nearest point of the Norfolk coast respectively. The location of the OWF sites is shown in Chapter 5 Project Description Figure 5.1 of the Application. The OWF would be connected to the shore by offshore export cables installed within the offshore cable corridor from the OWF sites to a landfall point at Happisburgh South, Norfolk. From there, onshore cables would transport power over approximately 60km to the onshore project substation and grid connection point near Necton, Norfolk.
- 7. Once built, Norfolk Vanguard would have an export capacity of up to 1800MW, with the offshore components comprising:
 - · Wind turbines;
 - Offshore electrical platforms;
 - Accommodation platforms;
 - Met masts;





- Measuring equipment (LiDAR and wave buoys);
- Array cables;
- Interconnector cables; and
- Export cables.
- 8. The key onshore components of the project are as follows:
 - Landfall;
 - Onshore cable route, accesses, trenchless crossing technique (e.g. Horizontal Directional Drilling (HDD)) zones and mobilisation areas;
 - Onshore project substation; and
 - Extension to the existing Necton National Grid substation and overhead line modifications.

1.2 Consultation with NFU

- 9. The NFU is the national body representing the interests of landowners and farmers across the United Kingdom.
- 10. This section briefly summarises the consultation that the Applicant has had with NFU. For further information on the consultation process please see the Consultation Report (document reference 5.1 of the Application).
- 11. Table 1 provides an overview of meetings and correspondence undertaken with NFU.

1.2.1 Pre-Application

- 12. The Applicant has engaged with NFU on the project during the pre-Application process, both in terms of informal non-statutory engagement and formal consultation carried out pursuant to Section 42 of the Planning Act 2008.
- 13. There has also been over 50 rounds of individual correspondence via phone and email between the NFU/Land Interest Group (LIG) and the Vattenfall Land Manager, regarding the drafting of the Heads of Terms (HoTs) between January 2018 and May 2018.

1.2.2 Post-Application

- The NFU submitted a Relevant Representation to the Planning Inspectorate on 14th September 2018.
- 15. Discussions with the NFU are on-going in the post-application phase and this SoCG is a live document that will be updated as consultation on the project progresses. This updated draft takes into account the NFU's written submission at Deadline 3 and is submitted for Deadline 4 in accordance with the Rule 8 letter.





2 STATEMENT OF COMMON GROUND

16. Within the sections and tables below, the different topics and areas of agreement and disagreement between NFU and the Applicant are set out.

2.1 Land Use and Agriculture

- 17. The project has the potential to impact upon farm land and farming businesses. Chapter 21 of the Norfolk Vanguard ES (document reference 6.1.21 of the Application) provides an assessment of the significance of these impacts.
- 18. Table 2 provides an update on the points raised through the relevant representation submitted by the NFU and the areas of agreement (common ground) and disagreement.

Table 1 Summary of Consultation with NFU

Date	Contact Type	Recipients	Topic
Pre-Applicat	tion		
07.09.16	Meeting	NFU	Project introduction
23.09.16	Email	NFU	Update in relation to Scoping Report & Public Information Day (PID's)
12.10.16	Email	CAAV	Introduction to project and copy of newsletter with PID details
13.10.16	Email	CLA	Introduction to project and copy of newsletter with PID details
06.01.17	Email	NFU/CLA/ CAAV	Project update
20.01.17	Email	NFU/CLA/ CAAV	Project update, copy of survey letter and possible route plan
08.03.17	Email	NFU/CLA/ CAAV	Project update re RFI letters, copy of referencing and meeting letter & newsletter
27.03.17	Meeting	NFU	Attendance at NFU meeting at Barnham Broom to advise on project
24.04.17	Email	NFU/CLA/ CAAV	Update on project, PID's, landowner meetings and surveys
15.06.17	Email	NFU/CLA/ CAAV	Update on consultations with landowners, forthcoming newsletter and link to project website.
28.09.17	Email	NFU/CLA/ CAAV	Letter re. geophysical surveys

Commented [JK1]: The project 'WILL' impact on farm land and businesses





Date	Contact Type	Recipients	Topic
10.02.10	Mantina	NELL/CA AV	Manking with land annua with NEU groups
19.02.18	Meeting	NFU/CAAV	Meeting with land agent group with NFU present.
28.02.18	Email	NFU/CLA/	Copy of proposed Heads of Terms (HOT's) & Payment
		CAAV &	schedule
		Agents	
16.03.18	Email	NFU/CLA/	Information on updates to the Order limits following
		CAAV &	consultation, letter re. HVDC onshore cable solution and
		Agents	requesting agents details.
16.03.18	Email	NFU/CLA/	Copy of Landowner Pack issued
		CAAV &	
		Agents	
02.05.18	Email	NFU/CLA/	Update on consultations and advise of negotiations with
		CAAV &	agents group re HOT's
		Agents	
Post-Applicati	on		
17.08.18	Email	NFU/CLA/	Update to all parties regarding application submission and
		CAAV &	acceptance.
		Agents	
14.09.18	Representation	PINS	NFU submitted a relevant representation to PINS.
06.11.18	Call	NFU	Applicant called NFU to attempt to arrange a meeting but
			mailbox full and unable to leave a message.
13.11.18	Call	NFU	Applicant called NFU to attempt to arrange a meeting but
13.11.10	Call	NFO	mailbox full and unable to leave a message.
			manbox fail and anable to leave a message.
19.11.18	Email	NFU	VF email NFU to attempt to arrange a meeting.
22.11.18	Email	Applicant	NFU response stating they have been away and would like
			some dates for meeting.
22.11.18	Email	NFU	Applicant response asking for suggested dates.
22.11.10	Elliali	INFO	Applicant response asking for suggested dates.
24.01.19	Meeting	NFU	A meeting held with the NFU and LIG lead to discuss the
		Applicant	SOCG and points raised in the NFU Rep.
		LIG	·
14.02.19	Email	Applicant	Applicant emails NFU with copy of documents submitted at
			deadline
15.02.19	Email	NFU	NFU respond to email with copy of documents submitted
13.02.19	Elliali	INFU	on behalf of NFU / LIG.
			on senan or wro / Elg.





Date	Contact Type	Recipients	Topic
08.03.19	Email	Applicant	Applicant emails NFU and LIG regarding SoCG.
12.03.19	Email	NFU / LIG	NFU emails Applicant regarding SoCG.
12.03.19	Email	Applicant	Applicant emails NFU and LIG regarding SoCG.
13.03.19	Email	NFU / LIG	NFU emails Applicant regarding SoCG.
22.03.19	Meeting	NFU Applicant LIG	A meeting held with the NFU and LIG lead to discuss the SOCG and points raised in the NFU Rep.

Deleted: rch

SoCG Ma<u>v</u> 2019 Norfolk Vanguard Offshore Wind Farm

Page 5





Table 2 Statement of Common Ground





Topic	Summary of NFU position	Summary of Norfolk Vanguard Limited position	Final position
Consultation and Engagement	Requested further specific details of scheme; information not forthcoming	HOTs were issued by the Project in January 2018, with on-going discussions held with the working group until agreement of the HOTs in May 2018. Construction timescales have previously been discussed with the working group. Chapter 5 of the Environmental Statement (ES) provides an indicative onshore construction programme including a summary of the main construction activities and sequence associated with installation of the Norfolk Vanguard onshore infrastructure. Final project timings cannot be provided until post-consent and subject to a Financial Investment Decision for the Project.	See Appendix A and updated CoCP Is it possible to state the earliest commencement date?
	No progression in negotiations in the last month (September 2018) Draft option and easement still not sent out to agents or landowners	HOTS negotiation are on-going and there have been a number of recent queries raised e.g. access and Agricultural Holdings Act (AHA) Tenancies. HOTs continue to be progressed with those outstanding parties and Norfolk Vanguard expect a number of further terms to be completed by close of examination. Option agreements have not yet been completed. Once completed, these will be sent to the landowners who have already agreed HOTs with Vattenfall. Meetings and calls have taken place between the acting solicitors and Vattenfall's legal counsel / solicitors. The option agreements will reflect the detail of the HoTs and discussions are still ongoing to finalise the wording in Option and Easement	Ongoing HoTs were agreed 12 months ago and some terms need amending to reflect passage of time
Compulsory Acquisition and Compelling Case Requirement	Failure to conduct negotiations	Letters have been issued to landowners offering meetings since early 2017. Vattenfall and its agents have been negotiating with all landowner interests who have requested meetings and Vattenfall's in-house Land Manager has had a large number of rounds of negotiation with the LIG in particular with their lead representative. A select number of parties have refused meetings / made no contact, despite a number of communications and reminders of offers to meet with them. Consultation with landowners is ongoing and HOTs are being agreed where possible.	Ongoing The majority of clients have engaged with Vattenfall. Mr Carrick was not consulted with regard to proposed route access until March 2019. NFU and LIG are still seeking greater detail

Deleted: Agreed¶





Topic	Summary of NFU position	Summary of Norfolk Vanguard Limited position	Final position
	No meaningful negotiations have taken place regarding the site for the converter substation and access routes	The landowners affected by the proposed substation and access are not represented by the LIG.	Ongoing. Not acting directly for landowner affected by the Vanguard converter substation. Acting for adjoining landowner Mr Allhusen who will be affected by the Norfolk Boreas converter substation which is to be sited contiguous to the Vanguard substation. This matter can not be considered in isolation
HVDC Cables and Converter Station	Laying of HVDC cables will hopefully reduce the impact on land operations and farm businesses	The commitment to HVDC technology minimises environmental impacts through a reduction in the cable working width and permanent easement, removes the requirement for a cable relay station and reduces the maximum duration of the cable pull phase thereby reducing the impact on land operations and farm businesses.	Agreed The timeline stated will be up to 4 years to pull cables. We understand that this is worst case scenario and the cables for both schemes will be pulled at same time if DCO and funding are in place.

Deleted: Outstanding

Deleted: Agreed





Topic	Summary of NFU position	Summary of Norfolk Vanguard Limited position	Final position
	Information requested on the size of the converter substation building, as well as appearance and external cladding.	 This information is available in the following DCO application documents: Design and Access Statement, section 6.3, doc ref 8.3, also ES Chapter 4 Site Selection and Assessment of Alternatives ES Chapter 5 Project Description, ES Chapter 29 Landscape and Visual Impact Assessment. 	Detail is still lacking, NFU and LIG would like to see detailed drawings and to be consulted on detailed mitigation as there is concern on the time it will take to screen the building due to height

Deleted: Agreed





Why has such a prominent elevated site been chosen due to its visibility, particularly from the south and the west

The Applicant will work to ensure that mitigation proposed is proportional to the scale of the substation infrastructure, and that it mitigates the overall impact on the local area. The key mitigation in relation to landscape and visual impacts of the project substation is its location. The proposed location for the onshore project substation makes effective use of topographic undulations and existing natural screening in the form of Necton Wood and existing hedgerows. The process of identifying the preferred onshore project substation site is set out in ES Chapter 4 Site Selection and Alternatives, and a detailed assessment of visual impacts is presented in ES Chapter 29 Landscape and Visual Impact Assessment (both DCO doc ref. 6.1). Chapter 29 also provides details of the mitigation that has been committed to in order to further reduce potential visual impacts. This includes:

Additional mitigation planting to enhance the screening effect of existing hedgerows and woodland blocks in the local area. The location of this planting and photomontages/visualisations are provided in Chapter 29 of the Environmental Statement.

Bunds, or earth mounds, will be constructed where possible to increase the base height and maximise the effectiveness of mitigation planting as screening.

Mitigation planting will comprise faster growing 'nurse' species and slower growing 'core' species. Core species with an average growth rate of 250mm per annum will provide 5m to 7m of growth after 20 years which will characterise the woodland structure over the long term. Nurse species would be faster growing (350mm per annum) to provide 7m to 8m of screening after 20 years.

Where advanced planting can be achieved (in areas not affected by the construction works), this will commence in 2020 which will provide a minimum 3 years of growth prior to commencement of operation which equates to approximately 1.2m of additional growth.

This information was also made available pre-examination in the information sheet – Onshore project Substation, accessible via the project website:

https://corporate.vattenfall.co.uk/contentassets/bf0e5e31bbab467eaf02040c7b17513a/180-vattenfall-substation-info-sheet.pdf

Issues related to visual impact and mitigation have been considered in part or in full in the following submission documents:

The mitigation provisions are not adequate due to the size and proposed location of the building.

The photomontages provided are not a true reflection

The bunds will need to be graduated appropriately for trees to be able to be planted on the side and ensure stability





Topic	Summary of NFU position	Summary of Norfolk Vanguard Limited position	Final position	
		Chapter 4 of the ES Site Selection and Alternatives (doc ref 6.1 – all ES chapters) Chapter 29 of the ES – Landscape and Visual Impact Assessment Section 17 of the Consultation Report – Overview of Non-Statutory Consultation and influence on the Project (doc ref 5.1) Section 23 of the Consultation Report – Summary of responses Received under Section 47 of the 2008 Act Appendix 4.2 of the Consultation Report – FAQ Documents Appendix 12.7 of the Consultation Report – Phase I Non-Statutory Exhibition Materials Appendix 12.8 of the Consultation Report – Phase II Non-Statutory Exhibition Materials Appendix 14.1 of the Consultation Report – June 2017 Newsletter Appendix 14.8 of the Consultation Report – Necton Substation Workshop Presentations Appendix 20.10 of the Consultation Report – Formal Consultation Public Exhibition Boards Appendix 20.14 of the Consultation Report – February 2018 Newsletter Appendix 22.1 of the Consultation Report – Section 42 Responses and regard had by the Applicant Design and Access Statement, section 5.2 (doc ref 8.3).		
	Questions as to why	Appendix 4.9 of the ES Chapter 4 Site Selection and Alternatives - Onshore Project Substation	<u>Site selection was</u>	Deleted: Outstanding
	site is not close to the	Site Selection (doc ref 6.2.4.9)	determined by risk profile	
	National Grid substation, which is not as visible	(see response above)	of selected areas. These areas were determined by physical factors on the ground rather than technical reasons. It is questionable if the same outcome would have resulted if undertaken on a technical basis	





Topic	Summary of NFU position	Summary of Norfolk Vanguard Limited position	Final position	
	Screening provided by land form and existing features has not been taken advantage of	Appendix 4.9 of the ES Chapter 4 Site Selection and Alternatives - Onshore Project Substation Site Selection (doc ref 6.2.4.9) (see response above)	<u>As above</u>	 Deleted: Outstanding
Construction and funding	Further clarification needed on timings of construction and how construction will take place for the Boreas scheme	Final project timings for both Norfolk Vanguard and Norfolk Boreas cannot be provided until post-consent and subject to a Financial Investment Decision for the projects. Further information will be detailed in the Option Agreement. This has been discussed with the LIG and detailed in the HOTs regarding compensation for compounds and working areas.	Discussions ongoing	 Deleted: Outstanding
	Confirmation is sought whether Vattenfall have the funding required for both schemes.	The details on funding are provided in the Funding Statement (Document Reference 4.2).	We now understand that Vattenfall will be seeking CFD's when we had been led to believe it was not subject to CFD's as the scheme would be privately funded	Deleted: Outstanding





Topic	Summary of NFU position	Summary of Norfolk Vanguard Limited position	Final position
Cumulative Impact	Confirmation is sought for whether a cumulative affect assessment has been addressed of both Vanguard and Boreas schemes along with the Orsted Scheme Hornsea 3.	Cumulative impacts have been considered in all the onshore ES chapters (19 to 31) and Chapter 33 provides a summary of all onshore cumulative impacts. The assessment methodology for the CIA considers whether impacts on a receptor may occur on a cumulative basis between Norfolk Vanguard and other projects, activities and plans (either consented or forthcoming) in the onshore study area. This includes both Norfolk Boreas and Hornsea Project Three. The scope of the CIA (in terms of relevant issues and projects) has been agreed with relevant consultees during the pre-application process. In addition, cumulative impacts are discussed within the following other submission documents. Section 23 of the Consultation Report – Responses received under Section 47 of the 2008 Act Appendix 14.4 of the Consultation Report – Cable Relay Station Workshop Presentation Appendix 14.8 of the Consultation Report – Necton Substation Workshop Presentation Appendix 22.1 of the Consultation Report – Section 42 Responses and regard had by the Applicant	still waiting for information on the practicalities of the formation of the construction at the crossing point between Vattenfall and Orsted
Jointing bays and Link Boxes	How many HVDC cables required are likely to be for the link boxes, as well as the link box locations. Preference is that all link boxes are located within field boundaries	Vattenfall have given commitments in the HOTs that where possible the link boxes will be located at field boundaries. However, where this is not possible, consultation will take place with the landowner to discuss the potential locations of the link boxes. In some cases, there may be no other option but to have these outwith field boundaries. Landowners will be compensated appropriately for these as detailed and agreed in the HOTs. Details of the design considerations associated with link boxes is included within the Design and Access Statement, section 6.2, doc ref 8.3	See Appendix A and updated CoCP. We would like to understand why the project cannot be designed to take into account specified cable lengths so that link boxes are located in field boundaries

Deleted: Outstanding





Topic	Summary of NFU position	Summary of Norfolk Vanguard Limited position	Final position
Field Drainage	Insufficient detail received by LIG in regard to how reinstatement of field drainage will take place	Initial information regarding land drainage has been set out in the Outline COCP as submitted as part DCO application (Section 8 of the COCP, Doc ref 8.1). This includes commitment for a local specialised drainage contractor to undertake surveys to locate drains and create drawings both pre- and post-construction, and ensure appropriate reinstatement in consultation with landowners and occupiers. The pre-construction drainage plan will include provisions to minimise water within the working area and ensure ongoing drainage of surrounding land. (Section 8.1 and 11.1.4 of the Outline CoCP, document 8.1).	See Appendix A <u>and</u> <u>updated CoCP</u>
		Land drainage systems would be maintained during construction, where possible, and reinstated on completion. Following construction, field drainage systems and ditches would be fully reinstated where possible in consultation with landowners / occupiers.	
		A Surface water and Drainage Plan is secured through Requirement 20(2)(i) of the draft DCO.	
		Since DCO submission, the Applicant has conducted a full onshore cable route engineering visual inspection (where access allowed – approximately 85% of cable route length) to gather information of existing above ground drainage arrangements and have requested details of existing drainage arrangements (particularly subsurface) from landowners. This information will be used to develop the Surface Water and Drainage Plan in due course, which will form part of the final CoCP and is secured through DCO Requirement 20.	
	No details provided on how any increase in surface run off water from the haul road or construction compounds will be dealt with, therefore there is a flood concern	The Outline CoCP (document 8.1) provides details of the principles of construction drainage, with an acknowledgement that a detailed Surface Water and Drainage Plan (Requirement 20 (2)(i)) will be developed, agreed with the relevant regulators and implemented.	See Appendix A <u>and</u> updated CoCP.





Topic	Summary of NFU position	Summary of Norfolk Vanguard Limited position	Final position
Soils	Limited detail regarding the treatment and reinstatement of soil during and after construction Specific details on soil management during construction and access routes to be supplied by contractor once appointed	Chapter 21 of the ES identifies the soil resource potentially affected by the project. Initial information regarding soil management during construction has been set out in the Outline Code of Construction Practice (COCP) as submitted as part DCO application (Section 8 of the COCP, Doc ref 8.1) to ensure required mitigation measures will be implemented on site to minimise any effects. This has been discussed with landowners and agreed ahead of the HOTs being issued. While all information is not available at this time, it has been agreed that full records of condition will take place pre- and post-instalment. Soil management is secured through Requirement 20(2)(f) of the draft DCO.	See Appendix A and updated CoCP. See Appendix A and updated CoCP
Dust/Irrigation	No clarification on how issues such as dust will be controlled and how the effect on irrigation can be minimised	Impact of dust has been assessed within ES Chapter 26 Air Quality (section 26.7.5.1). The Outline CoCP (document 8.1) sets out control measures in relation to air quality to ensure that any potential effects are adequately mitigated and details the proposed dust management measures for the construction works. This is secured through Requirement 20(2)(II) of the draft DCO. Issues related to dust, noise and disturbance have been considered in part or in full in the following submission documents: Chapter 25 of the ES - Noise Chapter 26 of the ES - Air Quality Chapter 27 of the ES - Human Health Chapter 30 of the ES - Tourism and Recreation Chapter 31 of the ES - Socio-Economics	See Appendix A and updated CoCP.





Topic	Summary of NFU position	Summary of Norfolk Vanguard Limited position	Final position
Access Routes to the Order Limits	Issues have been raised that some of the access routes are not physically possible on the ground due to differing ground levels, and it is unsure whether all the access routes highlighted are needed.	Meetings were held during October and November 2018 with Vattenfall's agents, Consents Solutions, and land agents on an individual basis to discuss and agree the Operational & Maintenance access options for specific clients. Accesses required for construction have been assessed individually to provide access to complete the construction works and these are secured within the Order Limits submitted as part of the application of the projects and therefore are not able to be changed. Where construction accesses are planned to also be used as O&M accesses and there are better alternatives, these will be considered on a case-by-case basis. Issues related to access have been considered in part or in full in the following submission documents:	Agreed HoTs provide for the location of access routes to be agreed by separate negotiation due the issues identified in our summary of position
Access to land and the Haul Road	Insufficient detail has been provided on how landowners will access land severed by construction works and whether they can access the haul road during construction. Also can haul road be constructed with tracking laid on the land, and how long the	Design and Access Statement, section doc ref 8.3. Landowners will be given an access point across the haul road as long as there are no concerns from an HSE perspective. Details on the length of construction times are detailed within ES Chapter 5 and the Outline Code of Construction Practice (CoCP) (Doc ref 8.1). Construction teams would work on a short length (approximately 150m section) and once the cable ducts have been installed, the section would be back filled and the top soil replaced before moving onto the next section. This would minimise the amount of land being worked on at any one time. Temporary means of access will be provided to severed fields for vehicles and machinery in order to ensure access is maintained wherever practicable and appropriate planning and timing of works will be agreed with landowners and occupiers, subject to individual agreements, to reduce conflicts.	Assume Agreed Landlords consent is to be
	haul road will be in place	A commitment of no more than 20% of the haul road will need to be left in situ or reinstated during the construction phase of the Project. Vattenfall's preferred position is to strip the top soil and use the subsoil to track over. Where this is not possible, trackway may be used. In some extreme cases Type 1 hardcore may be required for a period of time however, this is seen as the worst case scenario.	sought should Type 1 hardcore be required

Deleted: Outstanding





APPENDIX A

Deleted: rch

SoCG Ma<u>v</u> 2019 Norfolk Vanguard Offshore Wind Farm

/ Page 17





DΙ	ΔΙ	N۱	JIN	G	Δ	CT	20	าก	Ω

INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES 2010

WRITTEN SUBMISSIONS OF NFU AND LIG REGARDING THE NORFOLK VANGUARD
OFFSHORE WIND FARM DEVELOPMENT CONSENT ORDER 201 [...]
PLANNING INSPECTORATE REFERENCE NO EN010079

SUBMISSIONS OF NATIONAL FARMERS UNION AND THE LAND INTEREST GROUP ON THE – ONSHORE ENVIRONMENTAL MATTERS ON 5 FEBRUARY 2019

DATE 14th FEBRUARY 2019





1.0 Introduction

- 1.1 Submissions on behalf of the National Farmers Union ("NFU") and the Land Interest Group (LIG) in respect of the application for a Development Consent Order (DCO) by Norfolk Vanguard Limited for the Norfolk Vanguard Offshore Wind Farm. The NFU is making a case on behalf of its members and LIG its clients, who are affected by the DCO.
- 2.0 Land Use and Recreation: Update on discussion between Applicant and those with Farming Interests
- **2.1 Voluntary Negotiations:** NFU and LIG confirmed that voluntary negotiations are ongoing and that Heads of Terms have been signed by the majority of landowners and occupiers. We are though still waiting to see a draft Option and Easement to progress voluntary negotiations further.
- **2.2** It was confirmed that a meeting took place with the Applicant to discuss the issues in the Statement of Common Ground on Thursday 24th January 2019.
- **3.0 Compulsory Acquisition Issues:** NFU and LIG raised concerns on the use of HVDC cables, the site of the Converter Station and Funding for the development. These issues will be raised further at the Compulsory Acquisition hearing.
- **4.0 Timeline/Timings of Construction:** The NFU and LIG raised the question that they would like to receive a detailed timeline and timings of the different parts of construction for both the Vanguard and Boreas projects. The Applicant during the hearing directed us to look at the table 5.3.6 included in Chapter 5: Project Description. This table is very high level and provides no detail of how construction will take place. It makes it clear that pre-construction works could start in 2020 and take two years, this is followed by duct installation which takes a further two years and then a further two years are required for the cable pull, joint and commission. Further that Phase 1 will happen in 2024 and Phase 2 in 2025. There is no key to the diagram and we are not actually sure what Phase 1 and 2 is referring to? This timeline taken as it is set out could mean that agricultural land could be taken out of production for 6 years.

APPLICANT'S RESPONSE:

Phase 1 and Phase 2 reflect the potential annual subdivisions of the up to 2 year 'cable pull, joint and commission' works at the landfall and the onshore cable route and 'electrical plant installation and commission' works at the onshore project substation, as shown in Table 5.36 of Chapter 5 Project Description of the ES. As noted in Section 5.5.8.5 and 5.5.8.6 the cables and onshore project substation electrical plant would be supplied and installed in up to two phases, in line with up to two phases of offshore development.

Works across the onshore project area will occur over a 6 year period, however works in any specific location will be for much shorter periods within that timescale, such that individual agricultural land parcels are unlikely to be taken out of production for this entire duration. Paragraph 134 of Chapter 21 Land Use and Agriculture of the ES notes that "during construction it is unavoidable that land along the onshore cable route would temporarily be taken out of its existing land use, however the embedded mitigation measures reduce the potential impacts as far as practicable."

The following section outlines the construction methods and works associated with each element of the 6 year onshore construction programme and outlines how impacts on a single location will be limited to short periods within the overarching 6 year programme.





- 2 year pre-construction: During this period, works will only be conducted where required and as required based on the types of works as detailed in Section 5.5.8.1 e.g road modifications, hedge cutting, ecological preparations, archaeological preparations and pre construction drainage. Any works at a single location during this period are likely to be completed within short periods of time (in the order of weeks). The 2 year elapsed period for pre-construction allows consideration that some of the works can only be conducted in specific seasons e.g hedge cutting and removal
- 2 year duct installation: During this period, excavations to install the ducts will advance from mobilisation areas at a rate of approximately 150m/week including reinstatement of subsoil and topsoil, with exception of the running track and any associated temporary drainage channels. The running track will be retained between the workfront and mobilisation area for access until duct installation for that section (notional duct installation sections are illustrated in Figure 24.07a of Chapter 24 of the ES) is complete. The running track will then be removed and the land reinstated. In some locations, isolated sections of the running track may be left in place to support the cable pulling works (see below) or be reinstated at the time of the cable pulling works.
- Up to 2 year cable pulling: During this period works will be limited to joint pits (notionally 800m separated) and the temporary access to the joint pits (through reinstatement of short sections of running track and/or construction accesses). As detailed in Section 5.5.2.4.1, any one joint pit could be open for up to 10 weeks per annum.
- **4.1** We understand from the voluntary discussions that the Applicant is intending to lay the ducts and reinstate approximately 150m sections at a time. This means that areas of land may be able to come back in to agricultural use within the second two year period when ducting is carried out. Further questions raised included:
- Detail on how field drainage will be reinstated before the sub and top soil is reinstated on these
 150m sections?
- When will the joint bays be constructed and what is the land area required for this construction?
- · What happens if there is a fault on the cables during testing?
- When will the cables for the Boreas project be pulled through the ducts and the joint bays for this project be constructed?

APPLICANT'S RESPONSE:

- i) The most appropriate reinstatement method and timing will be dependent on the type of field drainage in question, however subsurface drainage will likely be reinstated as part of the subsoil reinstatement process as the 150m section is being completed.
- ii) Joint bays are likely to be constructed at the time of the cable pulling phase of the works (post duct installation) to maximise the flexibility in their location. With reference to Table 5.33 of Chapter 5 of the ES, a joint bay is a concrete floor of up to 6m x 15m installed at a depth of up to 2m under the ground surface and serves as a stable platform for cable pulling and jointing activities. Joint bays are not required for duct installation activities.
- iii) Cables will be installed in the two year period post duct installation. If there is a fault on the cables during testing the faulted cable section can be cut and pulled from the duct and a new cable section pulled into the duct and jointed.
- iv) Norfolk Boreas cables will be pulled through the pre-installed ducts in a subsequent up to two year period after Norfolk Vanguard's up to two year cable pulling period. Joint bays for Norfolk Boreas would be constructed at the time of the Norfolk Boreas cable pulling.

Deleted: rch

SoCG Ma<mark>v</mark> 2019 Norfolk Vanguard Offshore Wind Farm

Page 20





5.0 Link Boxes: NFU and LIG highlighted they understood that with HVDC cables there were fewer link boxes needed than with HVAC cables. Landowners would like these to be located if possible in field boundaries so that they do not impact on day to day agricultural operations.

Further information is required:

. How and when will discussions take place with landowners and occupiers on the

location of the link boxes?

- · If link boxes are grouped together what will the configuration be?
- That all link boxes will be manhole covers and no cabinets above ground to be installed.
 A cabinet design will greatly interfere with agricultural operations and is likely to get damaged by large farm machinery.

APPLICANT'S RESPONSE:

- Discussions on siting of link boxes will take place following a cable contractor being appointed for the project and the design of the cable specifications confirmed, including length of cables, location of joint pits, technical requirements for link boxes, and therefore providing indicative siting of link boxes.
- ii) The configuration of the link boxes may be discussed with the landowner/occupier on any preferences of configuration once detailed design is completed, within the bounds of practicality and engineering requirements.
- A cabinet design has been included within the design envelope of the ES and this may be preferential to some landowners.

6.0 Outline Code of Construction: NFU and LIG would like to see an outline soil management plan (SMP) being drafted which includes details of the Agricultural liaison Officer (ALO) and the role that will be undertaken, general principles of how soil will be treated and aftercare carried out and for the main principles of how field drainage will be reinstated to be clarified. The detail included at Chapter 8 of the Outline CoCP is very brief and gives no assurance to landowners and occupiers. We would like this detail to be agreed in an outline SMP and linked to the CoCP so that it is binding under the DCO.

APPLICANT'S RESPONSE:

The final SMP will be produced by a competent soil science contractor and agreed with the relevant regulator in advance of the works. This would be completed pre-construction once an earthworks contractor has been appointed and detailed earthworks phasing information is available. The SMP will include construction method statements for soil handling. The contractor would be required to comply with the SMP.

A local specialist drainage contractor will be used to ensure that existing field drainage is managed appropriately during the works and reinstated appropriately. The specialist contractor will undertake surveys to locate drains and create drawings both pre- and post-construction, and ensure appropriate reinstatement.

Commented [JK3]: Certainty is required that cabinets will only be included if requested by the Landowner





The Outline CoCP commits the Applicant to producing the SMP which must be approved by the relevant planning authority and is secured through Requirement 20(f) of the draft DCO.

Further details of the ALO role, general principles of how soil will be treated and aftercare carried out, and how field drainage will be reinstated will be included in an updated outline CoCP to be submitted into the examination at an appropriate deadline. The updated information will take into account the information provided by the NFU in Appendix A, B, C and D of their Deadline 3 submission.

- **6.1 Agricultural Liaison Officer (ALO):** The wording that NFU and LIG would like to see being included to cover the role and responsibilities of the ALO. Please see Appendix A.
- **6.2 Agricultural Field Drainage:** The wording that the NFU and LIG would like to see being included to cover how field drainage will be treated pre and post construction. Please see at Appendix B. NFU and LIG are in agreement with the detail that has been highlighted for field drainage at paragraphs 89 and 90 under Part 8: Soil Management and paragraph 119 under Part 11, 11.1.4 Surface Water Drainage but further detail and clarity is sought.
- **6.3 Irrigation:** The NFU and LIG have highlighted at the beginning of Appendix B how they would like to see to irrigation systems on landholdings recorded and treated if the construction of the cables is likely to interfere with any water supplies to irrigation systems.
- **6.4 Soil Management:** The NFU and LIG would like to state how important it is that a preconstruction record of condition and soil survey is undertaken to form a soil report/soil statement. This soil report/statement can then be used to inform what aftercare requirements are needed to bring the soil back into agricultural use and to bring the soil back to its original condition. We would also expect annual monitoring of physical soil characteristics and soil nutrient levels to be carried out. The NFU and LIG would expect to see aftercare carried out over a five year term. The NFU and LIG would like to see the wording at Appendix C in regard to the pre-construction survey of soils and the detail to be included in a record of condition and form part of the CoCP.
- **6.5 Soil Storage and Treatment:** NFU and LIG note the detail that has been included at paragraph 32 under Part 2: General Principles, at paragraph 87 under Part 8: Soil Management and paragraph 103 under Part 11: Control Measures but further detail and clarity is sought. NFU and LIG have set out in Appendix D the reasons for the requirements they would like to see carried out for soil storage and reinstatement. Further it states the NFU and LIGs working methodology for reinstatement. We would like this to be included in the outline SMP and linked to the CoCP.
- **7.0 Restrictive Covenants:** An issue was raised as to how a landowner would contact the Applicant once the development is constructed and in operation to seek permission to carry out activities such as mole ploughing as this cultivation will be deeper than normal every day agricultural operations.

APPLICANT'S RESPONSE:





Once the project has been constructed the assets will be handed over to the operator to manage and contact details will be made available to the landowners within 3 months of the OFTO transfer.

8.0 Compound Sites: The NFU and LIG would like to see specific details recorded in the DCO as to what each compound site/mobilisation unit will be used for. The use will then be binding under the DCO and this will prevent an activity taking place which is not authorised.

Commented [JK4]: 3 months is to long for a Landowner not to know who to contact should there be an issue. Suggest 2 weeks is more appropriates

Commented [JK5]: Facilities required for construction

other facilities may be

clarification is needed on what these

APPLICANT'S RESPONSE:

Mobilisation area is fully defined in the draft DCO as "an area associated with the onshore transmission works including hard standings, lay down and storage areas for construction materials and equipment, areas for spoil, areas for vehicular parking, bunded storage areas, areas for welfare facilities including offices and canteen and washroom facilities, workshop facilities and temporary fencing or other means of enclosure and areas for other facilities required for construction purposes;".

9.0 Haul Road/Running Track: The NFU and LIG would like further clarification on whether the running track will remain in place after the 150m sections of ducting have been reinstated or will the running track be removed at the same time? If it is to remain in place how long will this be for? It is not clear and there seems to be conflicting statements in Chapter 5: Project Description as well as the outline CoCP paragraph 2.5.5.

APPLICANT'S RESPONSE:

The running track requirements for duct installation are detailed in Chapter 5 paragraph 320 and 321 which states that "During the duct installation process, each work team would use the running track to travel from the mobilisation area to the work front. The running track would also be used for transport of plant and materials between the mobilisation area and the work front. The running track would be extended piece-wise as the work front moves outward from the mobilisation area. When duct installation is completed, the running track would be taken up and the topsoil replaced. All recovered stone and other materials would be removed from site via the mobilisation area."

To clarify, where reference to 'when duct installation is completed' is provided in the above this refers to the completion of the entire duct installation section (notional duct installation sections are illustrated in Figure 24.07a of Chapter 24 of the ES), not just the individual 150m workfront section. As such, in terms of timescales, the running track closest to the mobilisation area could be in place for 12-18 months within the two year duct installation period with the running track at the end of the duct installation section (furthest from the mobilisation area) being in place for one week (associated with the last 150m work section).

This approach is secured in the CoCP under Section 3.8 "Once all the trenching for the onshore cable route is completed and back-filled, the stored topsoil will be re-distributed over the area of the relevant work section, with the exception of the running track and any associated drainage. Long-term storage of topsoil in bunds or heaps will be avoided where possible. However, some topsoil will have to be reserved for re-covering the final area when the running track is removed at the end of the duct installation phase."





The Applicant will update the CoCP to correct the term 'onshore cable route' above to 'approximate 150m workfront section.'

CoCP section 2.5.5 refers to running track requirements during cable pulling, which are not applicable to the 150m ducting sections and reference should be made to Section 3.8 as outlined above which is relevant to this period of the works.

10.0 Please see Appendix E of the plan showing the vantage points re the Converter Station as requested by the ExA.

11.0 Crossing Point Orsted/Vattenfall: The NFU and LIG believe that it has still not been stated clearly how construction of the different cables will take place at the crossing point with the Orsted development in two phases and the Vanguard and Boreas proposed developments.

APPLICANT'S RESPONSE:

The Applicant has submitted a SoCG with Orsted Hornsea Project Three (UK) Ltd (Rep1 – SOCG – 18.1). The document notes, in response to Q1.13.3 of the ExA's first written questions to the Hornsea Project Three examination, that as part of the co-operation agreement, the parties will agree a mechanism to determine the method and design at the point of crossing incorporating the principle that one project would install using open cut, and one through HDD.

The SoCG also notes that with respect to the co-operation agreement "both parties will design the cable installation works so as to ensure that the other parties can still install their cables – for example, if the first project installs the cables by way of open cut trench, that section of trenching will include enhanced thermal conductivity backfill to reduce any potential future thermal interactions with the second project." Furthermore, "parties will share design specifications when known to help facilitate the design of the other party's cables at the point of crossing".





Appendix A: Agricultural Liaison Officer

- **1.1** The Agricultural Liaison Officer (ALO) will be appointed by the Applicant prior to the commencement of pre-construction activities and will be the prime contact for ongoing engagement about practical matters with landowners, occupiers and their agents before and during the construction process. There may be more than one ALO if required.
- **1.2** The ALO will have relevant experience of working with landowners and agricultural businesses and will have knowledge of the compulsory acquisition process (if required) and working on a linear infrastructure project.
- **1.3** The ALO (or their company) will be contactable from 7am to 7pm during the construction phase to landowners, agents and occupiers and will provide 24-hour team or company contact details for use in the event of emergency.
- **1.4** Post-construction the ALO will remain in place for up to one year in order to manage remediation issues.

APPLICANT'S RESPONSE:

The Applicant is content with the detail included below and this will be updated within the CoCP.

1.5 After that year the Applicant will ensure that ongoing contact details are provided in order for landowners and occupiers to seek consent, if required, in respect of restrictive covenants for the lifetime of the project or to highlight any defects. Information in relation to the process of management of restrictive covenants will be issued to landowners and occupiers upon any change in the person/s responsible for the process on behalf of the Applicant or the OFTO.

APPLICANT'S RESPONSE:

The owner of the assets will be the company to contact for ongoing concerns. These details will be available once the project has been constructed and the assets handed over to the operator.

- **1.6** The ALO will have responsibility for liaising with landowners, agents and occupiers in respect of the following:
 - Coordinating drainage surveys and sharing pre and post-construction drainage schemes with landowners or occupiers in advance for their consideration;
 - Discussing the location, grouping and marking of link boxes, including why they are subject to overriding constraints (such as cable lengths and environmental constraints), with the landowner/occupier;
 - Coordinating the provision of a detailed pre-construction condition survey to include a soil survey, to be included in CoCP, as well as a record of condition of the following elements:
 - existing crop regimes;
 - the position and condition of field boundaries;
 - the condition of existing access arrangements;
 - the location of private water supplies (as far as reasonable investigations allow);

Deleted: rch

SoCG

Norfolk Vanguard Offshore Wind Farm





- the type of agricultural use taking place;
- the yield of crops;
- the quality of grazing land; and
- the existing weed burden.
- Advising on risks relating to the translocation of soil diseases and ensuring appropriate protective provisions are implemented;

APPLICANT'S RESPONSE:

The Applicant will update the CoCP to ensure that the scope of the pre-construction soil survey aligns with the NFU's expectations.

- Ensuring that landowners and occupiers are consulted in respect of requirements relating to field entrances and accesses across the construction strip and land-locked or severed land parcels;
- · Arrange quarterly meetings with agent representatives of landowners;
- · Undertake pre-construction and day-to-day discussions with affected parties to minimise disruption, where possible, to existing farming regimes and timings of activities;
- Undertake site inspections during construction to monitor working practices and ensure landowners' and occupiers' reasonable requirements are fulfilled;
- \cdot $\;$ Discussing and agreeing reinstatement measures following completion of the works.





Appendix B: Field Drainage

APPLICANT'S RESPONSE:

The Applicant is content with the below position and notes that much of this information is already included in the Outline CoCP.

Irrigation

- 1.0 Details of the irrigation system on each land holding will be gathered during the detailed design stage and irrigation plans will be developed to inform the management of agricultural land drainage during construction. The Agricultural Liaison Officer will be responsible for consulting with each individual landowner to obtain the relevant information and to be a point of contact to report concerns regarding irrigation systems during construction. The plans will include the following information:
 - Location of boreholes and water supplies used by each farmer:
 - Irrigation or impoundment licence granted by the EA; and
 - System of irrigation applied and the location of irrigation network for each field.

Agricultural Land Drainage

- 2.0 Particular care will be taken to ensure that the existing land drainage system is not compromised as a result of construction. Land drainage systems will be maintained during construction and reinstated on completion.
- 2.1 The ALO will coordinate drainage surveys to establish the existing drainage position including any related farm drainage that may be affected by the scheme. The services of a suitably qualified drainage consultant will be employed by the Applicant to act as a drainage expert during the detailed design process and liaise with landowners or occupiers (through the ALO) to consult on the pre and post drainage schemes required. This will include the design of any land drainage works required during construction, and on the design and timing of any land drainage works required for the subsequent restoration of the land. This process will take due regard of any local and site-specific knowledge.
- 2.2 Subject to the consultation existing agricultural land drains, where encountered during the construction of each phase, will be appropriately marked. The location of drains cut or disturbed by the construction works will be photographed, given a unique number and logged using GPRS coordinates. The actual condition and characteristics (e.g. depth of installation, pipe type and diameter) of the existing drainage will also be recorded upon excavation.
- 2.3 During the construction works, temporary drainage will be installed either side of the cable trenches, within the onshore cable corridor working width, to intercept existing field drains and ditches in order to maintain the integrity of the existing field-drainage system during construction and ensure existing flow is not channelled by the onshore cable corridor. Such measures will also assist in reducing the potential for wet areas to form during the works, thereby reducing the impact on soil structure and fertility. Drainage systems however will not be installed into areas where they are not currently present, e.g. environmental wetlands.
- 2.4 Any field drainage intercepted during the cable installation will either be reinstated following the





installation of the cable or diverted to a secondary channel. Landowners and occupiers will be informed of the design of drainage works required during construction and following installation of the cables and associated works, including: pipe layout, falls, dimensions and outfalls (if required). The drainage would be reinstated in a condition that is at least as effective as the previous condition and will follow best practice for field drainage installations taking into account site specific conditions.

- 2.5 Where it is reasonable for the reinstatement of drainage to involve works outside of the order limits it will be done subject to the agreement of the landowner.
- 2.6 Landowners and occupiers will be provided with the opportunity to inspect land drainage works as they progress, subject to health and safety considerations. Furthermore, records of existing and remedial drainage will be maintained by the Applicant with copies provided to the Landowner (and the Occupier, if applicable) following the completion of construction works in each phase.
- 2.7 A dispute resolution process will be established including the appointment of a jointly agreed Independent Expert for drainage design and implementation, where required. Where agreement cannot be reached on the appointment of the expert the matter will be referred to the President of the Institution of Civil Engineers.





Appendix C: Soil Survey and Record of Condition

APPLICANT'S RESPONSE:

The Applicant is content with the detail included below and this will be updated within the CoCP.

- 1.1 Pre-construction detailed soil survey work will be undertaken by a competent person (e.g. a soil scientist) in order to produce specific soil resource topsoil and subsoil unit plans and restoration specifications for areas of agricultural land within individual land holdings that will be occupied by Vanguard. These surveys will form the basis of the pre-construction condition assessments of the land prior to soil stripping operations and will be used to monitor the progress of soil handling and restoration operations.
- 1.2 The survey work will include the identification of the physical characteristics of profiles at a standard density of 100 m intervals (with additional profiles examined where the 100 m grid sampling does not enable a suitable density of sampling in an agricultural enclosure that will otherwise be missed.). Soil pits will also be examined at appropriate locations to provide additional detail on soil structure and stoniness. The survey will provide information on the following soil physical characteristics:
 - Soil horizon depths for topsoil and subsoil horizons;
 - Soil textures of all horizons;
 - Soil colour;
 - Stone contents, estimated from augering, confirmed by soil pit excavation/and or sample analysis;
 - Presence and characteristics of mottling, a soil wetness indicator;
 - Presence of manganese concretions, a soil wetness indicator;
 - Identification of gleyed horizons;
 - Identification of slowly permeable layers; and
 - Identification of impenetrable rock layers.
- 1.3 Record of Condition will be undertaken and will include the following:
 - Existing crop regimes
 - The position and condition of existing field boundaries
 - The condition of existing access arrangements
 - The location and type of existing private water supplies
 - The yield of crops
 - The quality of grazing land
 - The existing weed burden

Photographs and section drawings should be included in the record of condition and it should be provided to the landowner and occupier, for agreement, prior to entry to the landholding.





Appendix D: Soil Storage and Treatment

APPLICANT'S RESPONSE:

The Applicant will update the outline CoCP with further details on the content of the SMP. This will include further information on the principles of soil storage and treatment based on the information provided by the NFU in Appendix D. It should be noted that the Applicant's proposed way of working will avoid long-term storage of topsoil in bunds or heaps, with works undertaken on 150m sections and the time taken between topsoil strip to reinstatement of each 150m section taking approximately 2 weeks.

Reasoning

- · When soil is stored in a bund it is hard to stop surface erosion and control weed growth
- Soil takes time to recover its structure and settle into a workable medium with reasonable drainage properties. The sooner it is restored to the working width the sooner the recovery process can start.
- · Over the entire length of the route this would be a significant area of land being returned to good
- condition at earliest opportunity with option to crop, by agreement between the parties, and this avoid business disruption and reduce claims against the Applicant.
- Cover cropping the restored topsoil with specialist soil structuring cover crops will help draw moisture from the soil, improve structure, reinstate natural drainage channels and retain
- Long term exposure of the subsoil to rain can cause damage and smearing of the upper layers
 and compaction in the lower layers. This element of the soil profile would normally be protected
 by topsoil and it is not in its nature to be directly exposed to rain.
- Impeded drainage on an exposed subsoil surface can result in ponding of rainwater leading to excessive periods of wetness making the soil more vulnerable to damage.
- · Cables will be pulled in from the joint bays and if they fail they will be pulled out at the joint bays.
- The only reason for accessing the duct run between the joint bays should be if the cable fails and melts the ducts, or if the cable won't install properly due to a blockage in the duct. The following comments apply:
 - In the event of a heat event resulting in a damaged duct it is accepted that localised repair would be needed using the same working methodology of strip, store, replace, restore, albeit on a smaller scale and using the haul road for access.
 - If the ducts are installed properly there should be no issues with pulling the cables through
 - If a duct needs to turn a tight bend and there is a risk of installation problems this
 area can remain open as there would be good technical and engineering reasons for
 doing so.
 - The topsoil would not be reinstated within an agreed distance of each side of joint bay giving room to work at the point.
- The provision for the topsoil to remain in a bund where there are good technical and engineering reasons allows the Applicant to avoid reinstating where they reasonably believe there could be need to access the ducts during cable installation and testing.





Provisions for Long Term Strip and Bund

- Dudgeon Offshore Wind and East Anglian One have shown that long term storage of topsoil can lead to loss of topsoil via surface runoff into the working area and surrounding land.
- Weed infestation of the bunds has also been a problem that requires use of non-selective herbicides to control and mechanical weeding.
- Stabilisation of the bund with a green cover is a good way to stabilise the soil surface and create a
 dominant green cover to supress weeds.
- Establishing a green cover is difficult due to the recently disturbed nature of the soil, the profile
 of the bunds (high risk of seed wash off) and increased vulnerability to climatic conditions.
- Hydroseeding has been shown to effectively combat the problems noted above, particularly when used in conjunction with biodegradable hessian type erosion control blankets.
- Ensuring the green cover is topped regularly and not allowed to see can achieve stabilisation of the bund cover and avoids problems with weed inundation to valuable arable land.
- Vertically entrenched silt fences protect the bund from surface runoff onto the exposed subsoil working area, the surrounding farmland and surrounding watercourses.

Soil Specialist

- Provision of a soil specialist to act as a 3rd party referee between contractors and the landowner ensures work can proceed in a timely way whilst long term soil damage can be minimised.
- The landowner and contractors will at times have directly competing interests and each party is liable to take an entrenched point of view. The soil specialist can give an independent view so the landowner knows that if the soil is damaged he will have a valid and justified claim, and the contractor can avoid situations where they are interrupted because the landowner perceives the conditions to be unsuitable to work.

APPLICANT'S RESPONSE:

The Applicant has committed to appointing a soil scientist for pre-construction surveys and to produce the SMP. The SMP will set out the approaches for soil handling and storage and define the conditions when it is not suitable for works to take place (specifically in relation to rainfall). The ALO and the contractor will be responsible for undertaking the works in accordance with the approved SMP. In the event of a dispute the matter shall be determined in accordance with the Arbitration Act 1996 by a single arbitrator to be agreed between them the parties (within ten (10) Working Days after the dispute or difference in question has arisen).

Preferred Working Methodology

NFU and LIG's preferred working methodology is as follows:

- · Topsoil stripped and stored in a bund
- Subsoil trenched and stored in separate bund to topsoil
- · Plastic ducts installed
- · Subsoil replaced

Commented [JK6]: Not agreed – in the event of a dispute it should be determined by an Expert

Deleted: rch

SoCG Ma<mark>v</mark> 2019 Norfolk Vanguard Offshore Wind Farm

Page 31





- · Topsoil replaced within 3 months of stripping where following conditions are met:
 - o Subsoil is dry and in a suitable condition to take topsoil reinstatement
 - o Landowner does not reasonably object to reinstatement
- Restored working width will be seeded with a cover crop of an agreed species mix for the soil type, land use and time of year.
- Applicant will not be obliged to restore the working area within an area at an agreed distance
 either side of a jointing bay, HDD launch area, or any other area where for good technical and
 engineering reasons it is not appropriate to do so. Such as where cables go around a bend, or
 archaeology, or cross existing/proposed infrastructure.

Following partial restoration of the working width Applicant will not:

- Be obliged to install the post scheme drainage works until such time as programmed on the wider scheme
- Be obliged to hand back possession of the working area if they do not reasonably consider it appropriate to do so.
- Be obliged to pay crop loss or any other loss arising from the farmer choosing to commercially crop the partially restored working area.
- The restoration of the topsoil will not be full restoration and the conditions associated with full restoration do not have to be met until the appropriate time as agreed.
- In the event that the topsoil will be stored store in excess of 3 months NFU and LIG would like the following conditions to be included:
- · Topsoil and subsoil are kept separate
- Entrenched vertical entrapment fences (Silt Fences) to be installed around the bund as per EA/SEPA Pollution Prevention Guidelines.
- Hydroseeding of bunds with an agreed/appropriate grass mix at soonest opportunity recommended by specialist contractors.
- Installation of biodegradable Geo-Jute Erosion Control Blanket to stabilise the surface and give a 'key' for the Hydroseeding growing medium.
- Assessment to be carried out of where water may pond on subsoil in the stripped working area
 and, where appropriate, means to drain this water away installed through the bund if
 necessary.
- Dewatering pits to be located on the haul road side of the working area.
- Applicant has confirmed that a soil specialist would be appointed as stated in paragraph 87 of
 the outline CoCP. NFU and LIG request that ALO works along side the soil expert. Furthermore
 NFU and LIG request the Drainage Consultant is also party to this monitoring during the works
 to have an input into the preparation, installation and reinstatement of the option area with a
 brief as follows:
 - To agree when conditions in the option area are suitable for operation of the works specifically required at the time of assessment.
 - To assess when work can recommence in the following situation:

Commented [JK7]: This point is not applicable to this scheme

Deleted: rch

SoCG Ma<u>v</u> 2019

Norfolk Vanguard Offshore Wind Farm

Page 3





- There has been more than 12mm of rain falling on the corridor in any preceding 24 hour period.
- There has been more than 20mm of rain falling on the corridor in any preceding 96 hour period.
- Where the thresholds specified above have not been met but long term adverse weather conditions have lead to cumulative wetting of the option area.
- Where the Grantor considers the conditions to be unsuitable for working without unavoidable long term soil damage.
- The advice of the soil specialist will be binding on both parties.

Commented [JK8]: This point has been omitted from CoCP





The undersigned agree to the provisions within this SOCG

Signed	
Printed Name	
Position	
On behalf of	NFU
Date	

Signed	R Sherwood
Printed Name	Rebecca Sherwood
Position	Norfolk Vanguard Consents Manager
On behalf of	Norfolk Vanguard Ltd (the Applicant)
Date	XX, May, 2019

Deleted: 13
Deleted: rch

Deleted. Tell

Deleted: rch

SoCG Ma<u>v</u>2019 Norfolk Vanguard Offshore Wind Farm

/ 'age 3/