

The Planning Inspectorate
National Infrastructure Directorate
Temple Quay House
Temple Quay
Bristol
BS1 6PN

Our ref: AE/2019/124323

Your ref: EN010087

Date: 26 February 2020

Via email:

Dear Sir/Madam

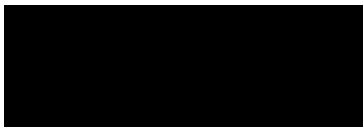
**APPLICATION BY NORFOLK BOREAS LIMITED FOR THE NORFOLK BOREAS
OFFSHORE WINDFARM
THE EXAMINING AUTHORITY'S FURTHER WRITTEN QUESTIONS AND
REQUESTS FOR INFORMATION (EXQ2)**

I write in response to the Examining Authority's further written questions and requests for information – ExQ2 issued 12 February 2020.

As requested, we are presenting our response in a table which is appended to this letter.

Please do not hesitate to contact me if you require any further information.

Yours faithfully



MRS BARBARA MOSS-TAYLOR

Sustainable Places - Planning Specialist

Direct dial 020847 48010

Direct e-mail barbara.moss-taylor@environment-agency.gov.uk

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Q2.3.0.29	<p>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?</p>	<p>'In relation to the draft protective provisions for the benefit of the Environment Agency we have a couple of drafting points.</p> <p>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 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?.</p> <p>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.</p> <p>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)'.</p>
Q2.15.0.2	<p>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?</p>	<p>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.</p> <p>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.</p> <p>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.</p> <p>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 in-channel habitats in the vicinity.</p>
Q2.15.0.3	<p>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:</p> <ol style="list-style-type: none"> 1. Potential construction impacts on groundwater quality for example from trenchless crossing and 	<ol style="list-style-type: none"> 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; drilling fluids can be inert and 'breakout' monitoring in place to stop any breakout of drilling fluids as soon as possible. 2. 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

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	<p>piling, including consideration of where groundwater and surface waters converge;</p> <p>2. How to secure groundwater abstractor's formal consent to derogate, before works begin, irrespective of whether or not they have access to mains;</p> <p>3. Potential for significant impact at any shallow wells in close proximity to the excavations.</p>	<p>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.</p> <p>3. 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 sufficient mitigation measures should any significant likely impacts be identified at any local abstractions.</p>
Q2.16.2.4	<p>Response to contents of the Terra Land reports:</p> <p>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?</p>	<p>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.</p>
Q2.16.2.5	<p>Consultation with the EA on contamination assessment and any remedial works:</p> <p>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?</p>	<p>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.</p> <p>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.</p>