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Sent: 08 February 2019 21:17

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Subject: Hornsea Project Three (UK) Ltd response to Deadline 6 (Part 8)

Dear Kay, K-J

Please find attached the 8th instalment of documents.

Best regards,

Dr Dominika Chalder PIEMA

Environment and Consent Manager



Environmental Management UK; Wind Power
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Hornsea Project Three
Offshore Wind Farm



Hornsea Project Three Offshore Wind Farm

Appendix 24 to Deadline 6 submission - Proposed Use of
Temporary Working Areas for Micrositing: Implications for
Environmental Statement

Date: 8th February 2019

Hornsea 3
Offshore Wind Farm

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Front cover picture: Kite surfer near a UK offshore wind farm © Ørsted Hornsea Project Three (UK) Ltd., 2019.

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1. Review of Environmental Impact Assessment Implications

- 1.1 In response to concerns raised by Natural England in their written representation at Deadline 1 (REP1-213) and at Issue Specific Hearing 3 (REP3-076) in relation to the feasibility of micrositing offshore cables around Annex I reef features, the Applicant is proposing an adjustment to the Work Plans to extend a short section of the Hornsea Three offshore cable corridor into the adjacent temporary working areas (see Figure 1.1) to enable cable installation works to occur within the temporary working area. The Applicant is confident that there will be adequate space to install cables within the offshore cable corridor, whilst micrositing around any Annex I reef features identified during pre-construction surveys, however, in order to provide reassurance to Natural England on this matter, this proposed adjustment to the Work Plans provide additional space for micrositing, while also avoiding the vast majority of the areas shown in the latest Annex I reef layer (see Figure 1.2).
- 1.2 The DCO allows for “up to six cable circuits between Work No. 2 and Work No. 3, and between Work No. 3 and Work No.5 consisting of offshore export cables along routes within the Order limits seaward of MLWS including one or more cable crossings” and “a temporary work area associated with Work No. 2 and work No. 3 for vessels to carry out intrusive activities alongside Work No. 2 and Work No. 3” (i.e. temporary working areas; Work No 4).
- 1.3 As shown in Figure 1.1 and Figure 1.2 between KP95.5 and KP103.5 of the offshore cable corridor, cables may be installed within the temporary working areas to the north and south of the offshore cable corridor. The southern boundary has been aligned with the boundary of the licenced aggregate extraction area 484.
- 1.4 This change will not result in an extension of the temporary works area to the north or south. All cable installation will therefore occur within the Development Consent Order (DCO) boundary and therefore there will be no change in the order limits for the project. This proposed change is also shown in the Draft Work Plans presented in Annex A to this document. This change will not necessitate a change to the footprint of the cable installation or any other project parameters (e.g. maximum length of offshore cables, seabed disturbance from cable installation or volumes/footprint of cable protection measures)
- 1.5 Table 1.1 considers the implications of this change to the project description for the conclusions of the Hornsea Three impact assessments presented in Volume 2, Chapters 1 to 11. In conclusion, this proposed change to the Work Plans would not result in any new significant effects nor would it result in any changes to previously identified significant effects and assumptions related to these conclusions.

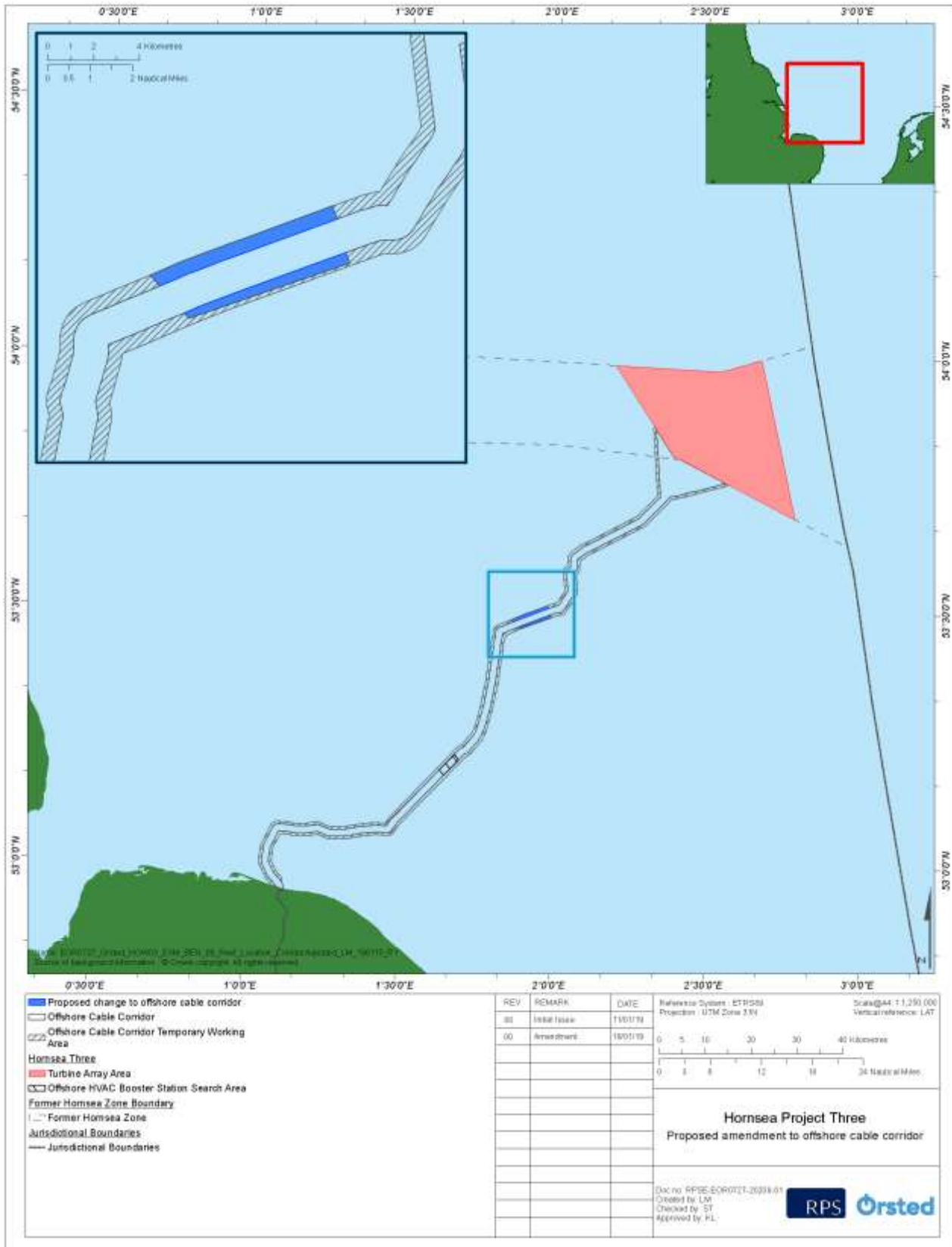


Figure 1.1: Proposed Change to Offshore Cable Corridor.

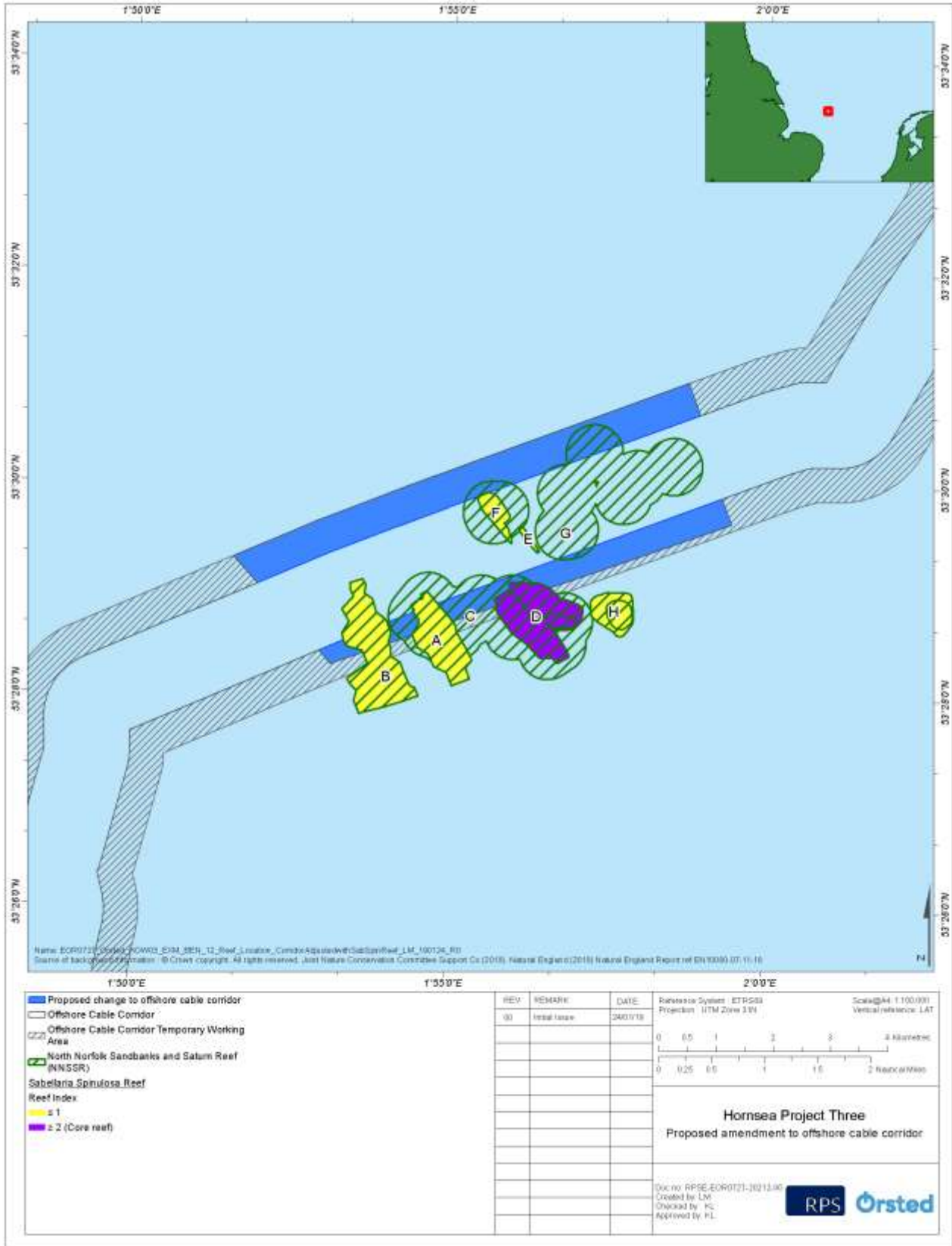


Figure 1.2: Proposed Change to Offshore Cable Corridor to allow micro-siting around Sabellaria reefs, with historic records of Annex I reef shown (from Figure 2.9 of Volume 2, Chapter 2: Benthic Ecology of the Environmental Statement) and latest Annex I reef layer provided by Natural England.

Table 1.1: Consequence of proposed change to offshore cable corridor on offshore EIA topics.

Relevant Impacts	Implications for impact assessment
Volume 2, Chapter 1: Marine Processes of the Environmental Statement (APP-061)	
<p>Increases in SSC and deposition of disturbed sediment to the seabed due to cable installation/decommissioning within the Hornsea Three offshore cable corridor.</p> <p>Increases in SSC and deposition of disturbed sediment to the seabed due to sandwave clearance within the Hornsea Three offshore cable corridor.</p> <p>Removal of sandwaves impacting sandbank systems within proximity of the Hornsea Three array area and offshore cable corridor.</p> <p>Scour of seabed sediments.</p> <p>Changes to sediment transport and sediment transport pathways with associated potential impacts to sandbanks.</p> <p>Increase in SSC and deposition of disturbed sediment to the seabed due to cable maintenance within the Hornsea Three offshore cable corridor.</p>	<p>The assessments presented in Volume 2, Chapter 1: Marine Processes of the Environmental Statement assumed that all direct seabed disturbance (temporary and long-term) arising from cable installation activities would occur within the area of seabed mapped within the Hornsea Three DCO limits as shown in Figure 1.1 of Volume 2, Chapter 1: Marine Processes of the Environmental Statement. With respect to these assessments, the baseline environment is effectively the same in the adjacent parts of the Hornsea Three offshore cable corridor temporary working area as in the Hornsea Three offshore cable corridor, as detailed in Section 1.7.1 of Volume 2, Chapter 1: Marine Processes of the Environmental Statement. More specifically, the same is also true for the seabed affected directly or indirectly by sandwave clearance and boulder clearance during the pre-construction phase, increased suspended sediment concentrations (SSC) and sediment deposition arising from export cable installation during construction and decommissioning, and potential impacts of cable protection during the operation and maintenance phase.</p> <p>On the basis of the text above (i.e. that the environmental conditions are the same within the relevant section of the offshore cable corridor as the adjacent temporary working areas) and as the nature of the local cable installation does not change, the proposed change to install export cables within the Hornsea Three offshore cable corridor temporary working area will not result in any change to the predicted nature, extent, magnitude or duration of potential disturbances and associated impacts. The proposed change to install export cables within the Hornsea Three offshore cable corridor temporary working area will similarly not result in any additional/different seabed area, sedimentary features, or sediment transport processes being affected (e.g. by increased SSC, sediment deposition or impacts associated with sandwave and boulder clearance or cable protection).</p> <p>As there will be no change to the nature, extent, magnitude or duration of the potential pathways of effect and/or the sensitive receptors that might be potentially impacted, this proposed change to the offshore cable corridor would have no effect on the conclusions of the Environmental Statement. The assessments of temporary and long-term, direct and indirect potential impacts would be unchanged.</p>

Relevant Impacts	Implications for impact assessment
Volume 2, Chapter 2: Benthic Ecology of the Environmental Statement (APP-062)	
<p>Temporary habitat loss/disturbance (construction, O&M and decommissioning) and long term habitat loss¹.</p> <p>Temporary increases in suspended sediment concentrations and deposition (construction and decommissioning).</p> <p>Colonisation of cable protection.</p>	<p>The assessments presented in Volume 2, Chapter 2: Benthic Ecology of the Environmental Statement and the RIAA (APP-051) assumed that all habitat loss/disturbance (temporary and long-term) arising from cable installation activities, including pre-construction activities (e.g. sandwave clearance and boulder clearance), would occur within the biotopes mapped within the Hornsea Three DCO limits as shown in Figure 2.5 of Volume 2, Chapter 2: Benthic Ecology of the Environmental Statement. This figure shows that the same biotopes were mapped within the Hornsea Three offshore cable corridor temporary working area as within the Hornsea Three offshore cable corridor. The same is also true for the seabed affected by increased (SSC) and sediment deposition arising from export cable installation during construction and decommissioning and for the colonisation of cable protection (including the risks associated with the introduction of invasive non-native species) during the operation and maintenance phase.</p> <p>The proposed change to install export cables within the Hornsea Three offshore cable corridor temporary working area will not result in any change to the predicted extents of habitat loss/disturbance and on the basis of the text above (i.e. that the benthic characterisation within the relevant section of the offshore cable corridor is the same in the adjacent temporary working areas) there will be no change to the associated proportions of biotopes affected or the proportion of Annex I 'Sandbanks which are slightly covered by seawater all the time' habitat affected within the SAC. With respect to any Annex I <i>Sabellaria spinulosa</i> reef that may develop prior to export cable installation, the Applicant has put forward measures to avoid direct impacts to these features (see Table 2.18 of Volume 2, Chapter 2: Benthic Ecology of the Environmental Statement). This change in the offshore cable corridor will provide additional space to allow additional flexibility for micro-siting around Annex I reef habitats identified during pre-construction surveys, further reducing the potential for direct effects on these features.</p> <p>The proposed change to allow for installation of export cables within the Hornsea Three offshore cable corridor temporary working area will similarly not result in any additional/different biotopes being affected by increased SSC and sediment deposition or from impacts associated with cable protection colonisation.</p>

¹ As per the Deadline 4 response, the Applicant has committed to decommissioning all scour and cable protection, if considered appropriate with regulators and nature conservation bodies, and therefore, permanent habitat loss extending beyond the operation and maintenance phase is not predicted.

Relevant Impacts	Implications for impact assessment
	<p>As there will be no change to the magnitude of the impacts of temporary and long term habitat loss, no change to the biotopes affected by any of the impacts across all phases of the project or the sensitivity of these biotopes, this proposed change to the offshore cable corridor would have no effect on the conclusions of the Environmental Statement or the RIAA. The assessments of temporary and long-term habitat loss, increased SSC and sediment deposition and colonisation of cable protection would be unchanged.</p>
<p>Volume 2, Chapter 3: Fish and Shellfish Ecology of the Environmental Statement (APP-063)</p>	
<p>Temporary habitat loss/disturbance (construction, O&M and decommissioning) and long term habitat loss². Temporary increases in suspended sediment concentrations and deposition (construction and decommissioning). Electromagnetic field (EMF) effects Colonisation of cable protection (i.e. reef effects).</p>	<p>The assessments presented in Volume 2, Chapter 3: Fish and Shellfish Ecology of the Environmental Statement assumed that all habitat loss/disturbance (temporary and long-term) arising from cable installation activities, including pre-construction activities (e.g. sandwave clearance and boulder clearance), would occur within the habitats predicted within the Hornsea Three DCO limits. The Applicant can confirm that the fish and shellfish habitats present within the Hornsea Three offshore cable corridor temporary working area are the same as those within the Hornsea Three offshore cable corridor. The same is also true for the fish and shellfish habitats affected by increased SSC/ sediment deposition arising from export cable installation and sandwave clearance activities during construction and decommissioning, by reef effects associated with the colonisation of cable protection and by EMF effects during the operation and maintenance phase.</p> <p>The proposed change to install export cables within the Hornsea Three offshore cable corridor temporary working area would not result in any change to the predicted extents of habitat loss/disturbance and on the basis of the text above (i.e. that the fish and shellfish habitats are the same within the relevant section of the offshore cable corridor as in adjacent temporary working areas) there will be no change to the associated proportions of fish and shellfish habitats affected. The proposed change to the offshore cable corridor will similarly not result in any additional/different fish and shellfish habitats being affected by increased SSC/ sediment deposition or from impacts associated with cable protection colonisation (i.e. reef effects) and EMF.</p> <p>As there will be no change to the magnitude of the impacts of temporary and long term habitat loss, no change to the fish and shellfish habitats affected by any of the impacts across all phases of the project or the sensitivity of the habitats</p>

² As per the Deadline 4 response, the Applicant has committed to decommissioning all scour and cable protection, if considered appropriate with regulators and nature conservation bodies, and therefore, permanent habitat loss extending beyond the operation and maintenance phase is not predicted.

Relevant Impacts	Implications for impact assessment
	and associated fish and shellfish species, the proposed change to the offshore cable corridor would have no effect on the conclusions of the Environmental Statement. The assessments of temporary and long-term habitat loss, increased SSC/ sediment deposition, colonisation of cable protection (i.e. reef effects) and EMF would be unchanged.
Volume 2, Chapter 4: Marine Mammals of the Environmental Statement (APP-064)	
<p>Temporary increases in suspended sediment concentrations</p> <p>Changes in fish & shellfish community (prey resource)</p> <p>EMF effects</p>	<p>The assessments presented in Volume 2, Chapter 4: Marine Mammals of the Environmental Statement assumed that all habitat loss/disturbance (temporary and long-term) arising from cable installation activities, including pre-construction activities (e.g. sandwave clearance and boulder clearance), would occur within the sediments predicted within the Hornsea Three DCO limits.</p> <p>The proposed change to install export cables within the Hornsea Three offshore cable corridor temporary working area would not result in any change to the predicted level or nature of sediment disturbance and therefore, there will be no change to the associated proportions of marine mammals affected. The proposed change to the offshore cable corridor will similarly not result in any additional/different effects on fish and shellfish receptors (as identified above) or from electromagnetic fields (EMF).</p> <p>As there will be no change to the magnitude of the impacts of temporary and long term habitat loss, no change to the assessments on marine mammal prey resource (i.e. fish and shellfish ecology) or the sensitivity of the marine mammal receptors in question, the proposed change to the offshore cable corridor would have no effect on the conclusions of the Environmental Statement. The assessments of temporary and long-term habitat loss, increased SSC/ sediment deposition, effects on prey resource and EMF would be unchanged.</p>

Relevant Impacts	Implications for impact assessment
<i>Volume 2, Chapter 5: Offshore Ornithology of the Environmental Statement (APP-065)</i>	
<p>Direct disturbance or displacement from important foraging and habitat areas of seabirds due to construction activities such as increased vessel activity and underwater noise</p> <p>Indirect effects, such as changes in habitat or abundance and distribution of prey resulting in potential effect on seabirds</p>	<p>A change to the Hornsea Three offshore cable corridor in the location proposed is not considered to have any implications to the assessments presented in Volume 2, Chapter 5: Offshore Ornithology or the RIAA. The magnitude of the predicted impacts, the receptors affected, the populations of those receptors and the significance of any predicted impacts are all considered to be the same.</p>

Relevant Impacts	Implications for impact assessment
Volume 2, Chapter 6: Commercial Fisheries of the Environmental Statement (APP-066)	
<p>Reduction in access to, or exclusion from, established fishing grounds.</p> <p>Displacement leading to gear conflict and increased fishing pressure on adjacent grounds.</p> <p>Displacement or disruption of commercially important fish and shellfish resources.</p> <p>Physical presence of the export cable and infrastructure within the Hornsea Three offshore cable corridor leading to gear snagging.</p>	<p>The assessments presented in Volume 2, Chapter 6: Commercial Fisheries of the Environmental Statement assumed that reduction in access to, or exclusion from fishing grounds and any associated displacement (temporary and long-term) arising from cable installation activities, including pre-construction activities (e.g. sandwave clearance and boulder clearance), would occur within the seabed grounds predicted within the Hornsea Three DCO limits.</p> <p>For the area under consideration, the Applicant can confirm that the fishing grounds and fishing opportunities present within the Hornsea Three offshore cable corridor temporary working area are consistent to and representative of those within the adjacent Hornsea Three offshore cable corridor.</p> <p>The same is also true for the fish and shellfish resources affected during construction and decommissioning, and the risk associated with gear snagging the offshore cable during the operation and maintenance phase.</p> <p>The proposed change to install export cables within the Hornsea Three offshore cable corridor temporary working area would not result in any change to the predicted extents of the reduction in access to or exclusion from established fishing grounds and any associated displacement. On the basis of the text above (i.e. that the fishing grounds are consistent / representative across the DCO limits for the area under consideration) there will be no change to the associated proportions of grounds affected.</p> <p>As there will be no change to the magnitude of the impacts of reduction in access or exclusion from fishing grounds, no change to the fish and shellfish resources affected by any of the impacts across all phases of the project or the sensitivity of the commercial fishing fleets, the proposed change to the offshore cable corridor would have no effect on the conclusions of the Environmental Statement. The assessments of reduction in access, or exclusion from fishing grounds, associated displacement leading to gear conflict, disruption to fish and shellfish resources and risk of gear snagging would be unchanged.</p>

Relevant Impacts	Implications for impact assessment
Volume 2, Chapter 7: Shipping and Navigation of the Environmental Statement (APP-067)	
<p>Construction activities within the Hornsea offshore cable corridor may displace vessels leading to increased journey times or distances during periods of adverse weather.</p> <p>Presence of pre commissioned cables (which may be exposed or partially buried) may present an increased risk of gear snagging for commercial fishing vessels with mobile gear.</p> <p>Presence of cables may present an increased risk of gear snagging for commercial fishing vessels with mobile gear.</p> <p>Decommissioning activities within the offshore cable corridor may displace vessels leading to increased journey times or distances during periods of adverse weather.</p>	<p>As the proposed amendment, to install export cables within the Hornsea Three offshore cable corridor temporary working area, will not result in a change to the footprint of the cable installation or any other project parameters (e.g. maximum length of offshore cables) there are not anticipated to be changes to the impact assessment undertaken for shipping and navigation receptors.</p>
Volume 2, Chapter 8: Aviation, Military and Communication of the Environmental Statement (APP-068)	
<p>All Aviation assessments for all project phases</p>	<p>The location of cables within the Hornsea Three offshore cable corridor and temporary working area were not considered in any aviation assessment and so there will be no effect on any aviation assessments within the Environmental Statement.</p>

Relevant Impacts	Implications for impact assessment
Volume 2, Chapter 9: Marine Archaeology of the Environmental Statement (APP-069)	
<p>Construction activities/cable removal within the Hornsea Three offshore cable corridor causing the removal or disturbance of sediments resulting in a potential effect on near-surface prehistoric land surfaces.</p> <p>Construction activities/cable removal within the Hornsea Three offshore cable corridor resulting in a potential effect on shipwrecks and aircraft wrecks.</p> <p>Seabed preparation in connection with sand wave clearance causing sediment deposition on the seabed resulting in a potential effect on a variety of heritage assets.</p> <p>Maintenance operations which may affect prehistoric land surfaces through the removal or disturbance of sediments.</p> <p>Maintenance operations may affect may affect shipwrecks and aircraft wrecks.</p>	<p>The assessments presented in Volume 2, Chapter 9: Marine Archaeology of the Environmental Statement considered impacts within both the Hornsea Three offshore cable corridor and temporary working areas.</p> <p>A large body of project and non-project specific data is available and has been used in the assessment. Together, these combined datasets provide sufficient detail to enable robust characterisation of the Hornsea Three offshore cable corridor and temporary working areas in terms of marine archaeology.</p> <p>Although a geophysical survey has been undertaken of the Hornsea Three array area and offshore cable corridor, no geophysical survey was undertaken within the temporary working area, nor within those areas where the Hornsea Three offshore cable corridor was rerouted between the PEIR and Environmental Statement. The results of the geophysical survey undertaken to date, combined with SeaZone data and other publicly available data sources, provides a sufficient characterisation of marine archaeology baseline environment to inform the EIA.</p> <p>The proposed change to install export cables within the Hornsea Three offshore cable corridor temporary working area would not result in any change to the magnitude of the impacts on marine archaeology across all phases of the project or the sensitivity of the marine archaeology itself. As such, the proposed change to the offshore cable corridor would have no effect on the conclusions of the Environmental Statement.</p>
Volume 2, Chapter 10: Seascape and Visual Resources of the Environmental Statement (APP-070)	
<p>The temporary change in the existing visual scenario during the construction phase may cause effects experienced by a variety of visual receptors</p>	<p>The assessments presented in Volume 2, Chapter 10: Seascape and Visual Resources of the Environmental Statement considered all impacts on visual resources arising from cable installation and decommissioning within both the cable corridor and adjacent temporary working areas. The assessments (moderate) for the visual impact of cable installation and decommissioning is effectively the same in adjacent parts of the Hornsea Three offshore cable corridor temporary working area and the Hornsea Three offshore cable corridor.</p>

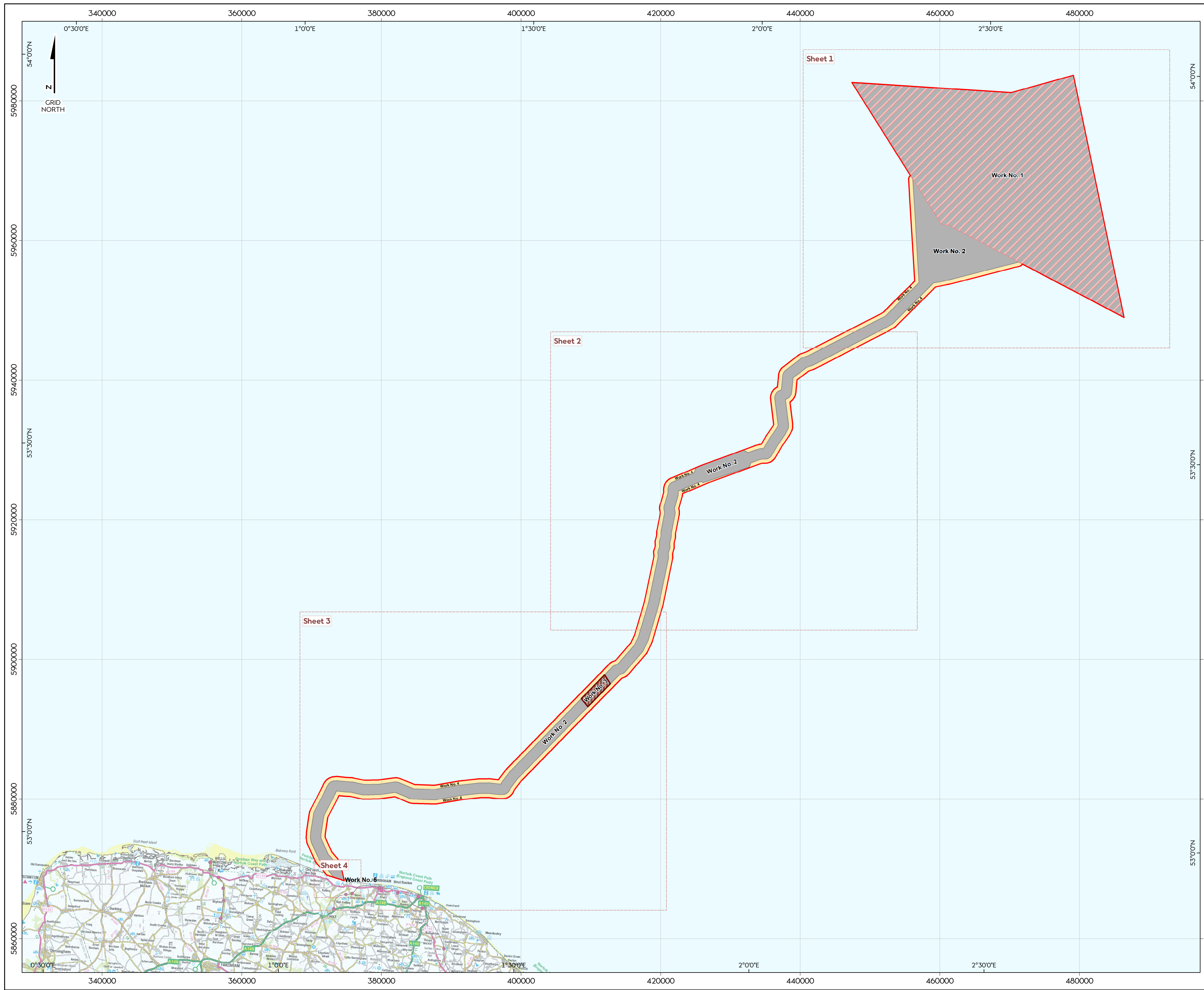
Relevant Impacts	Implications for impact assessment
	<p>The proposed change to install export cables within the Hornsea Three offshore cable corridor temporary working areas will not result in any change to the predicted impacts on visual resources and on the basis of the text above (i.e. that the visual conditions are the same across the DCO limits) there will be no change to any of the predicted nature, extent, magnitude or duration of potential disturbances and associated impacts on visual receptors as a result of cable installation.</p> <p>As there will be no change to the nature, extent, magnitude or duration of the potential pathways of effect and/or the sensitive receptors that might be potentially impacted, this proposed change to the offshore cable corridor would have no effect on the conclusions of the Environmental Statement. The assessments of moderate (not significant in EIA terms) impacts would be unchanged.</p>
<p>Volume 2, Chapter 11: Infrastructure and Other Users of the Environmental Statement (APP-071)</p>	
<p>Hornsea Three infrastructure, safety zones and advisory safety distances associated with activities within the Hornsea Three array area and along the offshore cable corridor may displace recreational craft and recreational fishing vessels resulting in a loss of recreational resource</p>	<p>This assessment considered the displacement of recreational craft and recreational fishing vessels from the temporary advisory safe passing distances around construction vessels operating within the Hornsea Three cable corridor. Construction vessels will be operating within the temporary working area which will result in the temporary advisory safe passing distances extending outside of the offshore cable corridor along this stretch.</p> <p>The assessment considered the potential for the vessel advisory safe passing distances extending outwards for to a maximum distance of 1 km in the assessment and so the proposed change is within the maximum design scenario already assessed.</p> <p>The significance of effect of Hornsea Three infrastructure, safety zones and advisory safe passing distances associated with activities within the Hornsea Three array area and along the offshore cable corridor may displace recreational craft and recreational fishing vessels resulting in a loss of recreational resource, will therefore remain unchanged.</p> <p>For the same reasons there will be no change for the operation phase and decommissioning phase assessments.</p>
<p>Installation of Hornsea Three infrastructure may affect existing cables and pipelines or restrict access to cables and pipelines.</p>	<p>This assessment considered the proximity of the Hornsea Three offshore cable corridor to existing cables and pipelines, and the proximity of construction vessels existing cables and pipelines.</p> <p>The proposed change will not result in the Hornsea Three offshore cable corridor being located within 500 m of any additional pipelines. The proposed change will result in the Hornsea Three export cables being located within 500 m of two disused cables, the Stratos and Weybourne to Esbjerg cables. The crossing of these disused cables is already</p>

Relevant Impacts	Implications for impact assessment
	<p>considered in the assessments and so this is not considered a significant change. Installation of Hornsea Three infrastructure may affect existing cables and pipelines or restrict access to cables and pipelines.</p> <p>The significance of effect of the Installation of Hornsea Three infrastructure may affect existing cables and pipelines or restrict access to cables and pipelines, will therefore remain unchanged.</p> <p>For the same reasons there will be no change for the operation phase and decommissioning phase assessments</p>
<p>Installation of infrastructure has the potential to lead to increased suspended sediment concentrations and deposition, which could cause a change in aggregate resource in aggregate extraction areas</p>	<p>The assessments presented in Volume 2, Chapter 11: Infrastructure and Other Users of the Environmental Statement assumed that all direct seabed disturbance arising from cable installation activities would occur within the area of seabed mapped within the Hornsea Three DCO limits as shown in Figure 11.1 of Volume 2, Chapter 11: Infrastructure and Other Users of the Environmental Statement.</p> <p>The seabed affected by increased SSC and sediment deposition arising from export cable installation during construction and decommissioning is effectively the same in adjacent parts of the Hornsea Three offshore cable corridor temporary working area and the Hornsea Three offshore cable corridor (see Marine Processes text above).</p> <p>The proposed change to install export cables within the Hornsea Three offshore cable corridor temporary working area will not result in any change to the predicted extents of suspended sediments and on the basis of the text above (i.e. that the environmental conditions is the same within the offshore cable corridor as within the adjacent temporary working areas) there will be no change to any of the predicted nature, extent, magnitude or duration of potential disturbances and associated impacts on aggregate extraction sites as a result of suspended sediments.</p> <p>As there will be no change to the nature, extent, magnitude or duration of the potential pathways of effect and/or the sensitive receptors that might be potentially impacted, this proposed change to the offshore cable corridor would have no effect on the conclusions of the Environmental Statement. The assessments of negligible impacts would be unchanged.</p>

Relevant Impacts	Implications for impact assessment
<p>Safety zones around the offshore HVAC booster stations and advisory safety distances associated with activities underway along the offshore cable corridor may restrict potential seismic survey activity.</p>	<p>This assessment, presented in Volume 2, Chapter 11: Infrastructure and Other Users of the Environmental Statement, considers the parameters that represent the largest area over which seismic survey activities may be restricted. The assessment considered the potential for the construction vessel advisory safe passing distances extending outwards for up to 1 km and so the proposed change is within the maximum design scenario already assessed.</p> <p>The significance of effect of Hornsea Three infrastructure, safety zones and advisory safe passing distances associated with the Hornsea Three array area may restrict potential seismic survey activity, will therefore remain unchanged.</p> <p>For the same reasons there will be no change to the operation phase and decommissioning phase assessments.</p>
<p>Drilling and the placement of infrastructure has the potential to be restricted within the offshore cable corridor and within 1 km from the boundary of the offshore cable corridor</p>	<p>This assessment, presented in Volume 2, Chapter 11: Infrastructure and Other Users of the Environmental Statement, considers parameters that create the greatest disruption to drilling and the siting of infrastructure in terms of area affected. The Area affected was calculated as the percentage of overlap of the Hornsea Three offshore cable corridor (excluding the temporary working area) with the licence block. As the proposed change will result in the cables being moved to the temporary working area along a section of the Hornsea Three cable corridor, the percentage of overlap with licence blocks along this area will change. This will result in a change to the licence blocks 48/20a currently operated by Shell and 48/15 a currently operated by ConocoPhillips.</p> <p>The area of overlap of the cable route corridor and Block 48/20a was 15%. Due to the change in licence area this has changed to 5.7% since the DCO application. The proposed change to the offshore cable corridor will increase the area 8.9%. This is considered to be of negligible magnitude. The overall significance of effect due to the proposed change is therefore considered negligible.</p> <p>The magnitude of the effect on Block 48/15a was not previously assessed as the licence expiry was prior to construction of Hornsea Three. This block is now licenced under P130 which does not have an expiry date. Block 48/15a is subdivided into three areas two of which are operated by Spirit Energy under the same licence. The total area of the block that will be affected by the offshore cable corridor within the DCO application is 0.4%. This would change to 3.8% due to the proposed change to the offshore cable corridor. The magnitude is considered to be negligible. The overall significance of effect due to the proposal change is therefore considered negligible</p>

Relevant Impacts	Implications for impact assessment
<p>Wind turbines and associated infrastructure will form a physical obstruction and may disrupt vessel access to oil and gas platforms and subsea infrastructure.</p>	<p>This assessment, presented in Volume 2, Chapter 11: Infrastructure and Other Users of the Environmental Statement, considers the parameters that create the greatest disruption to vessel access in terms of area affected (during the operations phase).</p> <p>The assessment considered the potential for the maintenance vessel advisory safe passing distances extending outwards for up to 1 km and so the proposed change is within the maximum design scenario already assessed.</p> <p>The significance of effect associated with this impact will therefore remain unchanged</p>
<p>Effect of Hornsea Three on oil and gas decommissioning activities</p>	<p>The effect of Hornsea Three on oil and gas decommissioning activities was not considered in the assessments as there was no potential spatial and temporal overlap between Hornsea Three and known decommissioning activities. A distance of 1 km from the offshore cable corridor (not temporary working area) was considered in the assessment. There are no platforms within 1 km of the revised area of relevant section of the offshore cable corridor temporary working areas. This assumption therefore remains valid.</p>

Annex A - Draft Works Plan - Offshore

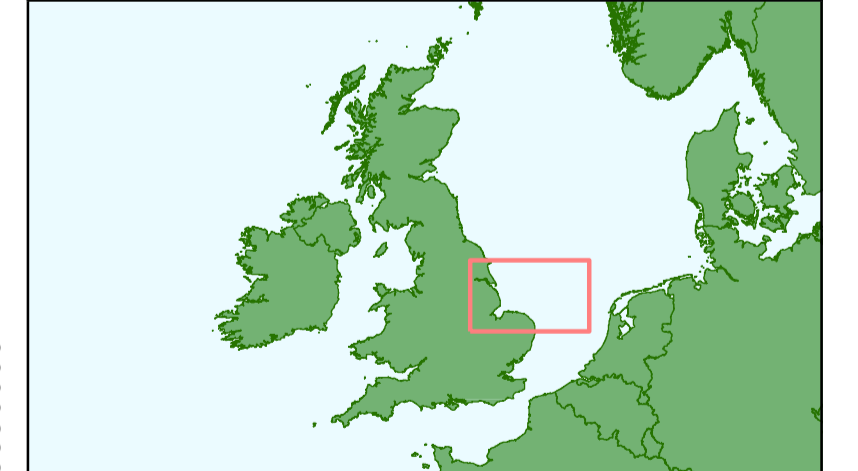
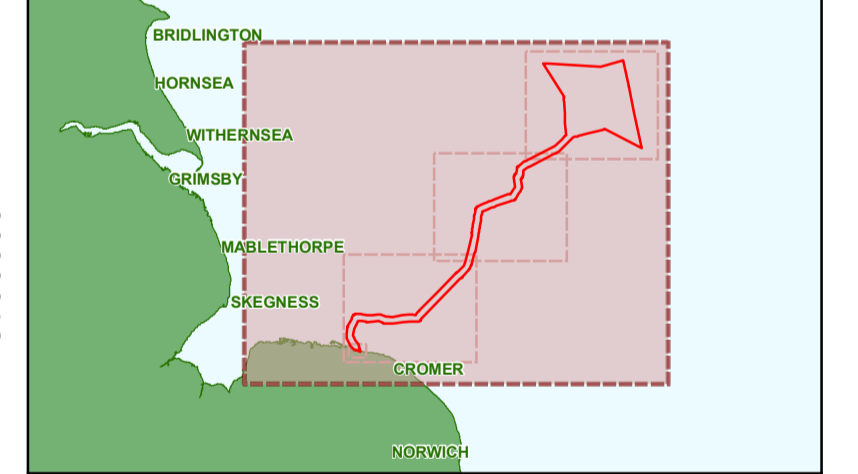


Hornsea Project Three Offshore Wind Farm Works Plan - Offshore Index Sheet

APFP Regulations Reference : S(2)(1) Application Document Number : A2.4.1

- Hornsea Project Three**
- Order Limits (offshore)
 - Work No. 1
 - Work No. 2
 - Work No. 3
 - Work No. 4
 - Work No. 5*
- *Work No. 5 is not visible on this sheet, please refer to sheet 4 for clear view

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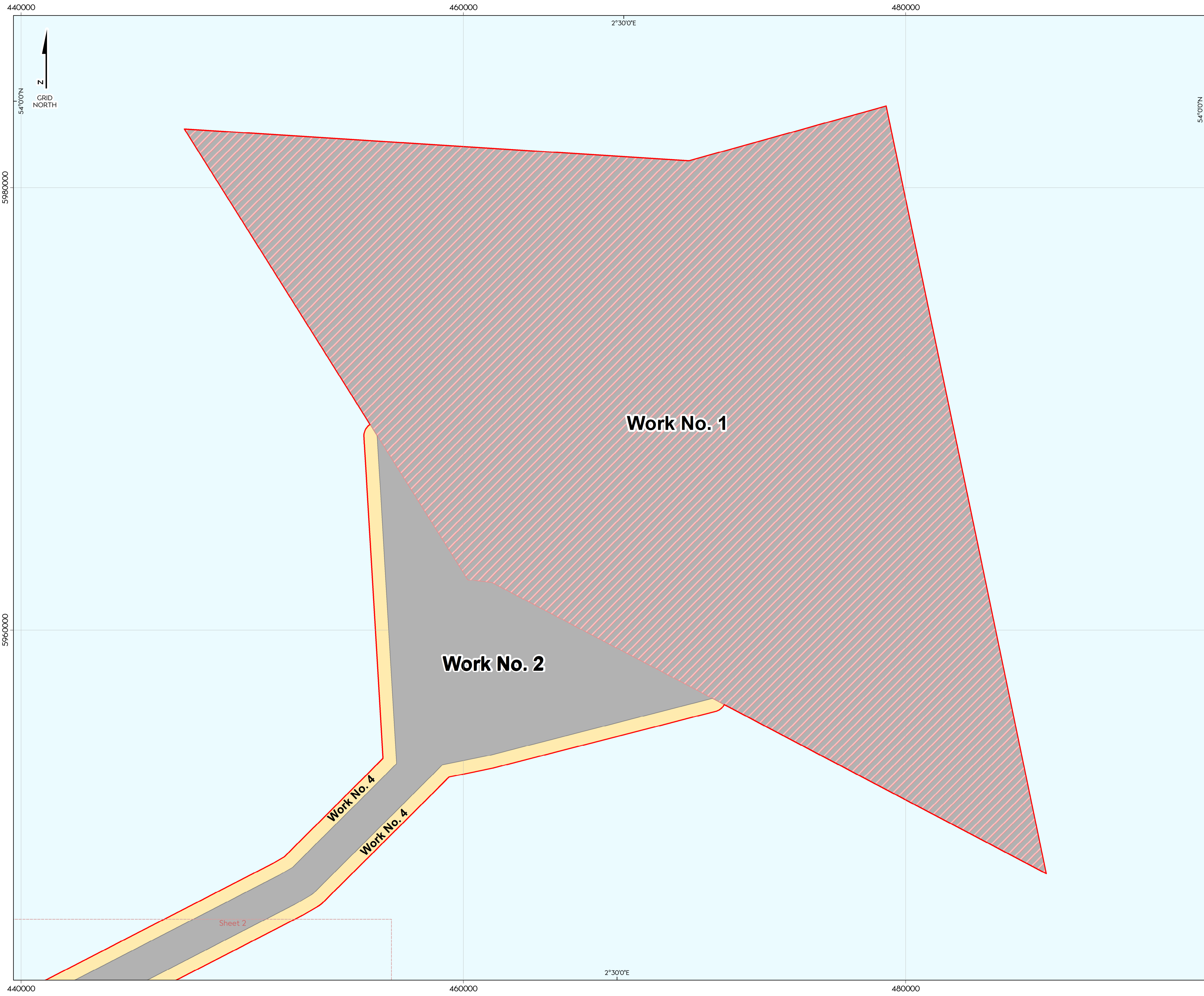


Coordinate system: ETRS 1989 UTM Zone 31N
Vertical reference: LAT
Scale @ A1: 1:250000

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0 1 2 4 6 8 10 Nautical Miles

REV	REMARK	DATE
00	First Issue	May 2018
01	Second Issue (work no. 2 & 4 updated on sheet 2)	January 2019
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Hornsea Project Three Offshore Wind Farm
APFP Regulations Reference : S(2)(1)
Application Document Number : A2.4.1
Document no: HORNSEAAPP11
Created by: XAM/J
Checked by: XW/LC
Approved by: ANGL/JY



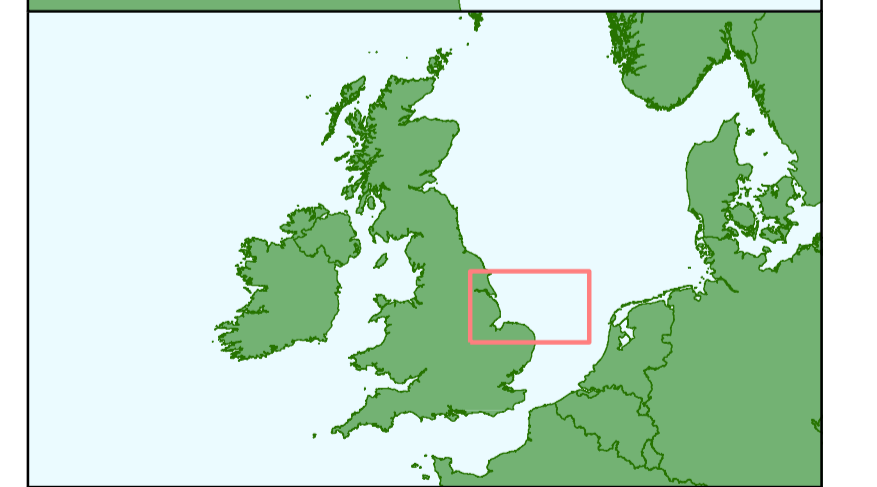
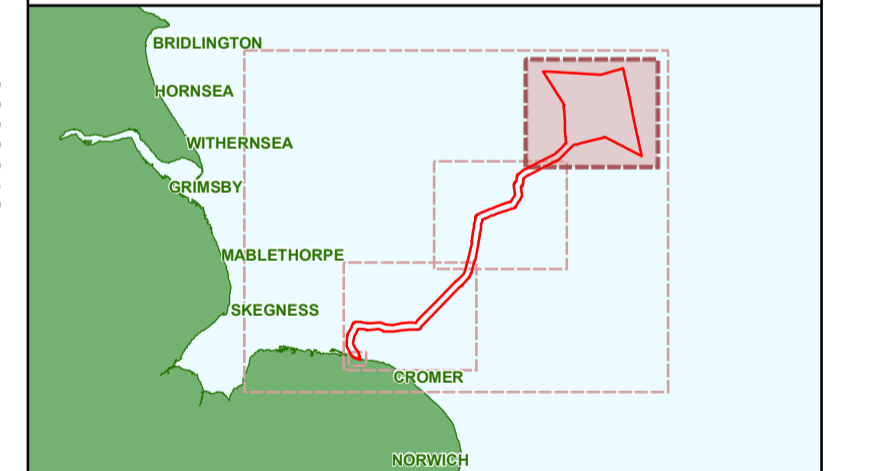
Hornsea Project Three Offshore Wind Farm Works Plan - Offshore Sheet 1

APFP Regulations Reference: S2(1) Application Document Number: A2.4.1

Hornsea Project Three

-  Order Limits (offshore)
-  Work No. 1
-  Work No. 2
-  Work No. 4

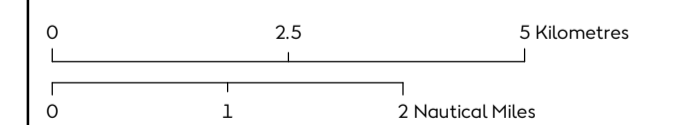
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Vertical reference: LAT

Scale @ A1: 1:80000



REV	REMARK	DATE
00	First Issue	May 2018
01	Second Issue (work no. 2 & 4 updated on sheet 2)	January 2019
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Hornsea Project Three Offshore Wind Farm
APFP Regulations Reference: S2(1)
Application Document Number: A2.4.1
Document no: HORN3/APFP1
Created by: XAMJ
Checked by: XWILC
Approved by: ANGLY

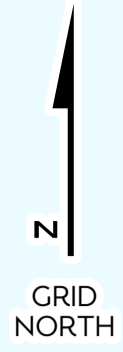


420000

440000

2°00'E




Sheet 1



Hornsea Project Three Offshore Wind Farm Works Plan - Offshore Sheet 2

APPF Regulations Reference : S2(I) Application Document Number : A2.4.1

Hornsea Project Three

-  Order Limits (offshore)
-  Work No. 2
-  Work No. 4

5940000

5940000

53°30'0"N

53°30'0"N

5920000

5920000



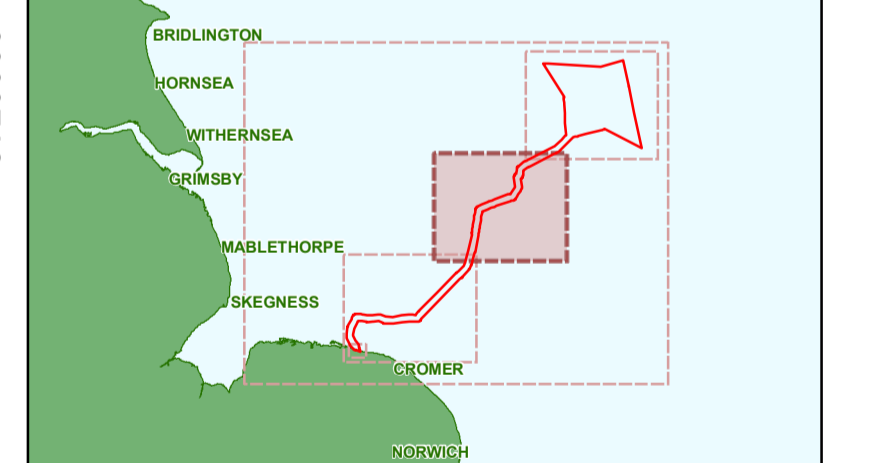
Sheet 3

2°00'E

440000

420000

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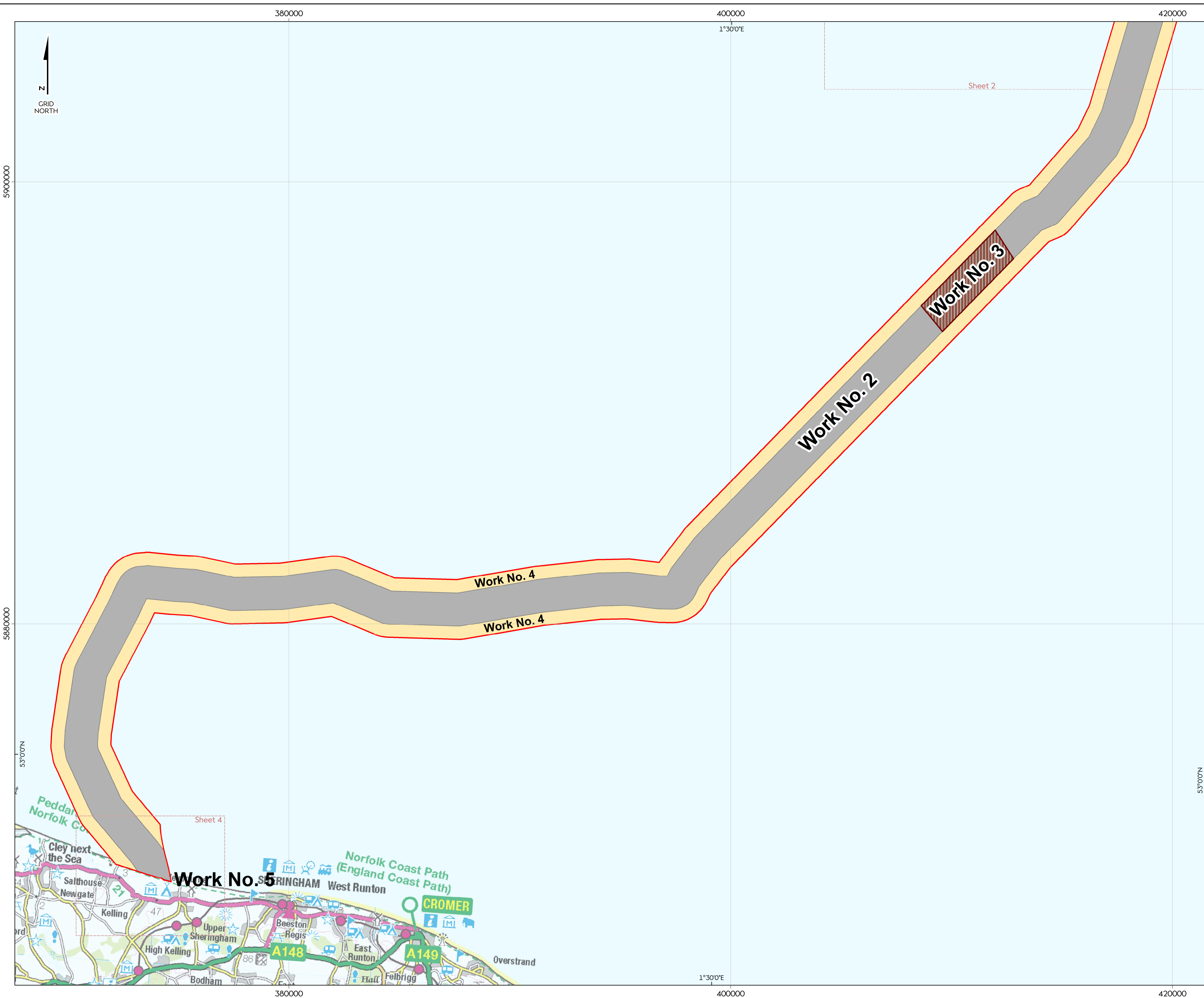


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REV	REMARK	DATE
00	First Issue	May 2018
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Hornsea Project Three Offshore Wind Farm
 APPF Regulations Reference: S2(I)
 Application Document Number: A2.4.1
 Document no: HORN3APP11
 Created by: XAMJ
 Checked by: XWILG
 Approved by: ANGLY



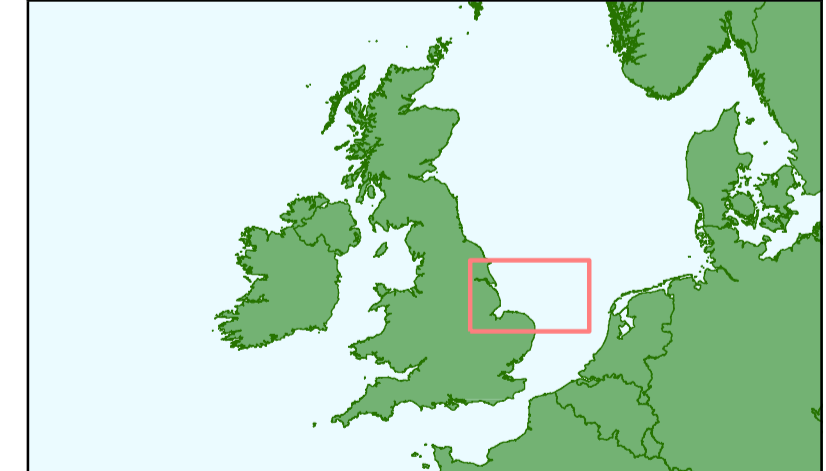
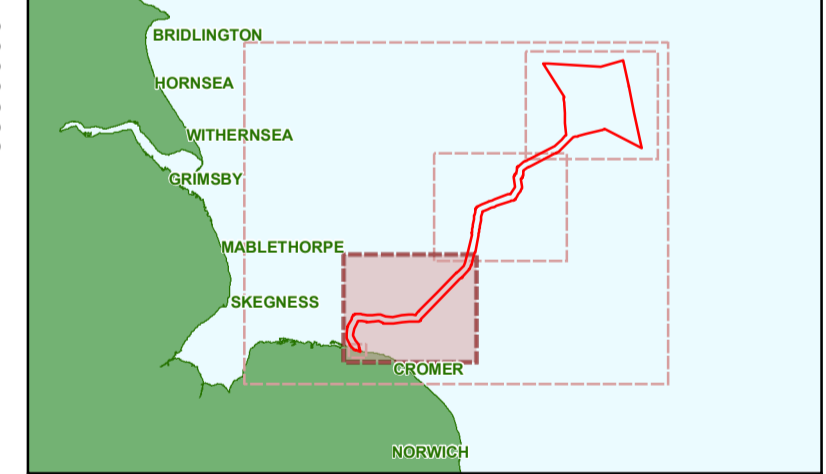


Hornsea Project Three Offshore Wind Farm Works Plan - Offshore Sheet 3

APPF Regulations Reference: S2(I) Application Document Number: A2.4.1

- Hornsea Project Three**
- Order Limits (offshore)
 - Work No. 2
 - Work No. 3
 - Work No. 4
 - Work No. 5*
- *Work No. 5 is not visible on this sheet, please refer to sheet 4 for clear view

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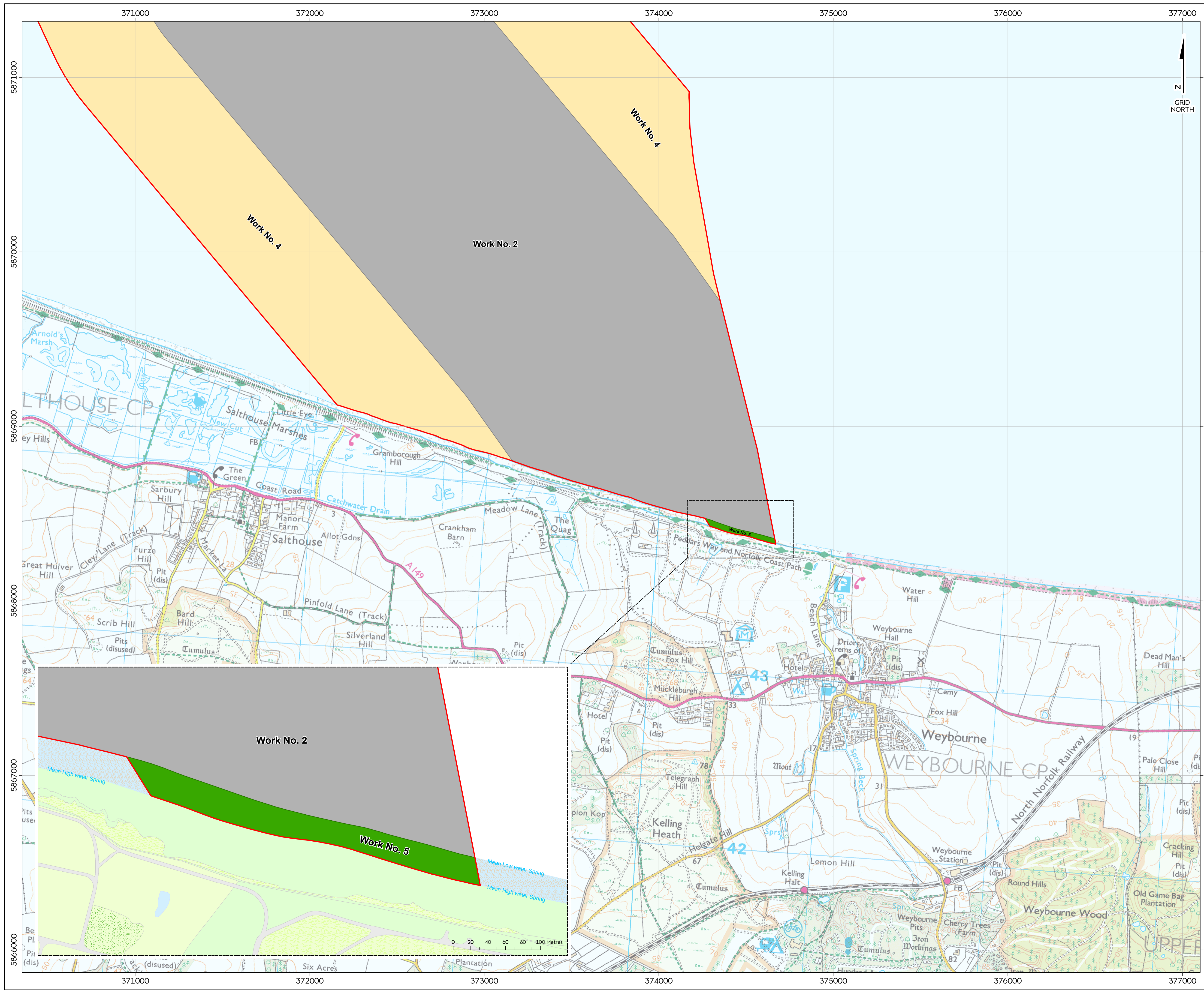


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Vertical reference: LAT
Scale @ A1: 1:800000

REV	REMARK	DATE
00	First Issue	May 2018
01	Second Issue (work no. 2 & 4 updated on sheet 2)	January 2019
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APPF Regulations Reference: S2(I)
Application Document Number: A2.4.1
Document no: HORNSEAAPP11
Created by: XAM/J
Checked by: XWIL/C
Approved by: ANGL/Y



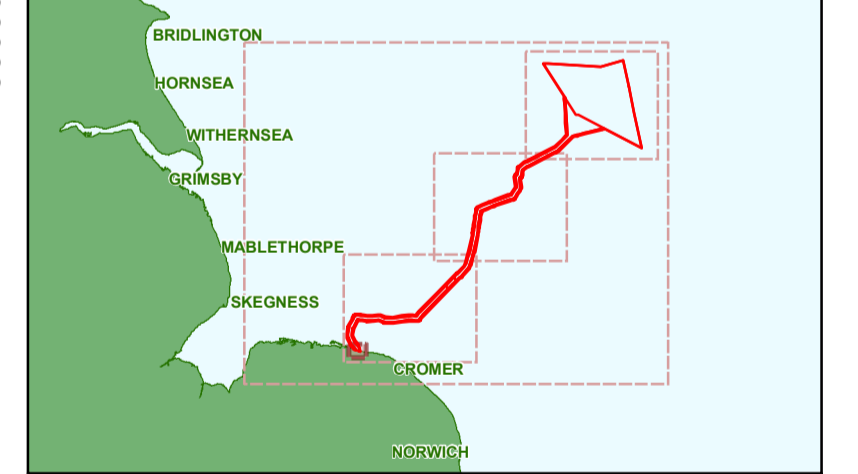


Hornsea Project Three Offshore Wind Farm Works Plan - Offshore Sheet 4

APPP Regulations Reference : S2(1) Application Document Number : A2.4.1

- Hornsea Project Three**
- Order Limits (offshore)
 - Work No. 2
 - Work No. 4
 - Work No. 5

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Coordinate system: ETRS 1989 UTM Zone 31N
Vertical reference: LAT
Scale @ A1: 1:10000
0 0.1 0.2 0.4 0.6 0.8 Kilometres
0 0.1 0.2 0.4 Miles

REV	REMARK	DATE
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Hornsea Project Three Offshore Wind Farm
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Document no: HORNSEAAPP13
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Checked by: XAMU
Approved by: ANGLY

