26th August 2021

Marine Management Organisation
Lancaster House
Hampshire Court
Newcastle upon Tyne
NE4 7YJ

Our Ref: 416.01148.00005
Your Ref: TBC

Dear Sir/Madam

RE: APPLICATION FOR A VARIATION TO THE ABLE MARINE ENERGY PARK (AMEP) DEVELOPMENT CONSENT ORDER DEEMED MARINE LICENCE UNDER SECTION 72(3)(D) OF THE MARINE AND COASTAL ACCESS ACT

1.0 BACKGROUND

The Development Consent Order (DCO) for the Able Marine Energy Park (AMEP) was made on 13th January 2014, laid before Parliament on 10th February 2014 and subsequently came into force on 29th October 2014 (Statutory Instrument 2014 No. 2935).

The DCO permits, inter alia, the development of a new quay and associated development at Killingholme in North Lincolnshire, on the south bank of the Humber Estuary. Briefly, the development on the south bank comprises a quay, reclaimed estuarine habitat and the provision of onshore facilities for the manufacture, assembly and storage of components relating to the offshore renewable energy sector. The DCO further permits other associated development including environmental habitat on the north bank of the Humber in the East Riding of Yorkshire authoritative area.

The Deemed Marine Licence (DML) at Schedule 8 of the DCO has been varied twice by the Marine Management Organisation (MMO). Variation No. 1 was issued on 23rd June 2017 and Variation No. 2 was issued on 16th September 2020. These amendments to the DML, inter alia, extended the time limits in the licence to allow the construction and capital dredge activities. A copy of the 2020 variation, which is the extant DML for the DCO, is provided as an enclosure to this letter.

A further submission for a non-material amendment to the DCO was submitted to the Secretary of State in August 2018. This submission sought to move an area proposed for ecological mitigation (Area A) to a new site outside the order limits next to two other areas being utilised for ecological mitigation (Halton Marshes Wet Grassland Scheme), thereby allowing all three areas to operate as a single unit. This submission was determined by the Secretary of State in early 2021, with The Able Marine Energy Park Development Consent (Amendment) Order 2021 (the Amendment Order) being made on 13th May 2021 and coming into force on 14th May 2021. This DCO (Amendment) Order did not further alter the DML as varied in 2020 (as enclosed with this letter).

2.0 PROPOSED MATERIAL CHANGE 2

Following the making of the DCO, and its subsequent non-material amendment in May 2021, it has become apparent that a number of minor amendments are desirable for the AMEP scheme to be implemented in full. These minor amendments can be summarised as follows:

- Changes to the proposed quay layout to reclaim the specialist berth at the southern end of the quay, and to set back the quay line at the northern end of the quay to create a barge berth;
- The addition of options to the form of construction of the quay whereby the piled relieving slab to the rear of the quay could be raised or omitted entirely (subject to detailed design), and the quay wall piles could be restrained with more conventional steel anchor piles and tie bars in lieu of flap anchors;
- A change to the approved diversion of footpath FP50 in North Lincolnshire to avoid crossing over the existing rail track at the end of the Killingholme Branch Line;
- Provision of a third cross dam within the reclamation area to enable greater flexibility for staged completion, and early handover of sections of the quay;
- A change to the consented deposit location for 1.1M tonnes of clay to be dredged from the berthing pocket, to permit its disposal at HU081 and HU082 (see Figure 1-1 below); and
- An amendment to the sequencing of the quay works (as illustrated on the consented DCO drawings AMEP_P1D_D_101 to 103; Indicative Sequence Plan View[s]) to enable those works to commence at the southern end of the quay and progress northwards.

On this basis, a further proposed material amendment application to the made DCO ('Material Change 2') has been submitted to the Planning Inspectorate for determination (PINS ref. TR030006). This submission, including an Updated Environmental Statement (UES), is available to view via the Planning Inspectorate website: https://infrastructure.planninginspectorate.gov.uk/projects/yorkshire-and-the-humber/able-marine-energy-park-material-change-2/

A more detailed description of the proposed material amendment (Material Change 2) is contained within Section 4 of this letter.

3.0 DEEMED MARINE LICENCE VARIATION

To effect the necessary changes to implement the Material Change 2 scheme, amendments will need to be made to the DML (Schedule 8 to the 2014 Order). Under paragraph 5(6) of Schedule 6 to the 2008 Planning Act the Secretary of State cannot make changes to a deemed marine licence or the conditions attached to a deemed marine licence. This submission therefore constitutes an application to the MMO for a variation of the DML under section 72 of the Marine and Coastal Access Act 2009.

The proposed variations to the DML to support the Material Change 2 application are detailed within Section 3.1 / Table 1 below, whilst an Explanatory Memorandum (prepared by BDB Pitmans) is enclosed with this letter and includes a tracked changes copy of the DML as contained within Schedule 8 of the DCO for comparison purposes. Please note the tracked changes version of DML submitted

herein supersedes that submitted in support of the Material Change 2 application made to PINS. The updated version of the DML variation, as provided with this submission, will also be submitted to PINS in due course.

A Supporting Statement, including cross reference to the submitted UES (Table 2), is provided within Section 4 of this letter.

3.1 Table of Proposed Amendments

ABLE UK wishes to request a variation to the deemed Marine Licence ("DML") within Schedule 8 of the Able Marine Energy Park Development Consent Order 2014 (No. 2935) (as amended) in relation to the following provisions:

Table 1: Proposed Amendments to DML

DML Provision	Original Text	Amended / Proposed Text
Part 1 – 1(1) Interpretation	N/A	Inclusion of the following definitions: "BHD" – means backhoe dredger "CSD" – means cutter suction dredger "HU081" – means the area bounded by co-ordinates (53°37.12'N, 00°02.80'W), (53°37.45'N, 00°03.77'W), (53°37.13'N, 00°03.79'W) and (53°37.44N, 00°03.14'W) "TSHD" – means trailing suction hopper dredger.
Part 2 – 4(1) (c) Construction of the quay	no more than 750 flap anchor piles may be fixed to the landward face of the perimeter piles and seated in a trench on the bed of the estuary, to be installed from named vessels moored in the estuary;	no more than 850 anchor piles may be tied to the landward face of the perimeter piles;
Part 2 – 4(1) (d) Construction of the quay	no more than 100 steel anchor piles may be driven into the bed of the estuary and fixed to perimeter piles, to be installed from named vessels moored in the estuary;	the anchor piles referred to in sub-paragraph 4(1)(c) may consist of either – i. flap anchor piles seated in a trench on the bed of the estuary, to be installed from named vessels moored in the estuary; or ii. tubular steel anchor piles driven into the bed of the estuary;
Part 2 – 4(1) (f) Construction of the quay	the remaining area of estuary enclosed by the quay perimeter piles and the two return walls may be reclaimed using marine dredged sands and gravels by constructing two granular dams that extend from the existing flood defence wall to the area reclaimed under paragraph (e), so that the dams divide the remaining reclaim area into three approximately equal cells, after which named vessels are to pump fluidised granular material into each cell in sequence, allowing estuarine water that is retained within each cell	the remaining area of estuary enclosed by the quay perimeter piles and the two return walls may be reclaimed using marine dredged sands and gravels by constructing up to three granular dams that extend from the existing flood defence wall to the area reclaimed under paragraph (e), so that the dams divide the remaining reclaim area into up to four approximately equal cells, after which named vessels are to pump fluidised granular material into each cell in sequence, allowing estuarine water that is retained within each cell to

<table>
<tr><th>DML Provision</th><th>Original Text</th><th>Amended / Proposed Text</th></tr>
<tr><td></td><td>to overflow the dams as the fluidised material is deposited and settles within the cell, such activity to continue until all cells attain their design levels; and</td><td>overflow the dams as the fluidised material is deposited and settles within the cell, such activity to continue until all cells attain their design levels; and</td></tr>
<tr><td>Part 2 – 6
Berthing pocket infill</td><td>Following or during the dredging of the berthing pocket, the licence holder is permitted to deposit up to 250,000 tonnes of gravel and rock from named vessels into the berthing pocket up to a maximum level of -11.5 metres chart datum and must not undertake maintenance dredging below the level of -11 metres chart datum.</td><td>Following or during the dredging of the berthing pocket and inset berth, the undertaker is permitted to deposit up to 250,000 tonnes of gravel and rock from named vessels into the berthing pocket and inset berth up to a maximum level of -11.5 metres chart datum and must not undertake maintenance dredging below the level of -11 metres chart datum.</td></tr>
<tr><td>Part 2 – 11 (1) (a)
Capital dredging</td><td>the area within the quay limits to a depth of -6.5 metres Chart Datum;</td><td>the area within the quay limits to a depth of -7 metres Chart Datum;</td></tr>
<tr><td>Part 2 – 11 (1) (b)
Capital dredging</td><td>the berthing pocket to a depth of -14.5 metres Chart Datum;</td><td>the berthing pocket and inset berth to a depth of -14.5 metres Chart Datum;</td></tr>
<tr><td>Part 2 – 11 (2)
Capital dredging</td><td>
<table>
<tr><th>Location</th><th>Material</th><th>Maximum tonnage per year</th><th>Deposit location</th><th>Total licensed tonnage</th></tr>
<tr><td>Area within the quay limits</td><td>Gravel</td><td>50,000</td><td rowspan="3">HU080</td><td rowspan="4">725,000</td></tr>
<tr><td>Sand</td><td>110,000</td></tr>
<tr><td>Silt</td><td>390,000</td></tr>
<tr><td></td><td>Clay</td><td>175,000</td><td>HU082</td></tr>
<tr><td>The berthing pocket</td><td>Gravel</td><td>5,000</td><td rowspan="3">HU080</td><td rowspan="4">1,835,000</td></tr>
<tr><td></td><td>Sand</td><td>50,000</td></tr>
<tr><td></td><td>Silt</td><td>145,000</td></tr>
<tr><td></td><td>Clay</td><td>535,000</td><td>HU082</td></tr>
<tr><td></td><td>Clay</td><td>1,100,000</td><td>The terrestrial area landward of the existing Killingholme Marshes flood defence wall</td></tr>
<tr><td>The approach channel</td><td>Gravel</td><td>150,000</td><td>Within the quay limits</td><td>1,650,000</td></tr>
<tr><td></td><td>Gravel</td><td>150,000</td><td rowspan="3">HU080</td><td rowspan="4">1,650,000</td></tr>
<tr><td></td><td>Sand</td><td>600,000</td></tr>
<tr><td></td><td>Silt</td><td>500,000</td></tr>
<tr><td></td><td>Clay</td><td>250,000</td><td>HU082</td></tr>
<tr><td>The turning area</td><td>Gravel</td><td>35,000</td><td rowspan="3">HU080</td><td rowspan="4">250,000</td></tr>
<tr><td></td><td>Sand</td><td>95,000</td></tr>
<tr><td></td><td>Silt</td><td>80,000</td></tr>
<tr><td></td><td>Clay</td><td>40,000</td><td>HU082</td></tr>
<tr><td>The pumping station outfall</td><td>Sand</td><td>500</td><td>HU080</td><td>8,000</td></tr>
<tr><td></td><td>Silt</td><td>7,500</td><td rowspan="2"></td><td rowspan="2"></td></tr>
<tr><td>The Cherry Cobb Sands breach</td><td>Sand</td><td>2,000</td><td rowspan="2">If the dredged material is suitable, the area within the proposed managed realignment site</td><td rowspan="2">10,000</td></tr>
<tr><td></td><td>Silt</td><td>8,000</td></tr>
</table>
</td><td>
<table>
<tr><th>Location</th><th>Material</th><th>Maximum tonnage per year</th><th>Deposit Location</th><th>Total licensed tonnage</th></tr>
<tr><td>Area within the quay limits</td><td>Gravel</td><td>60,500</td><td rowspan="3">HU080 for material dredged by TSHD;

Equally into HU081 and HU082 for material dredged by BHD or CSD</td><td rowspan="4">605,000</td></tr>
<tr><td></td><td>Sand</td><td>181,500</td></tr>
<tr><td></td><td>Silt</td><td>211,750</td></tr>
<tr><td></td><td>Clay</td><td>151,250</td></tr>
<tr><td>The berthing pocket</td><td>Gravel</td><td>183,500</td><td rowspan="3">HU080 for material dredged by TSHD;

Equally into HU081 and HU082 for material dredged by BHD or CSD</td><td rowspan="4">1,835,000</td></tr>
<tr><td></td><td>Sand</td><td>550,500</td></tr>
<tr><td></td><td>Silt</td><td>642,250</td></tr>
<tr><td></td><td>Clay</td><td>458,750</td></tr>
<tr><td>The approach Channel</td><td>Gravel</td><td>165,000</td><td rowspan="3">HU080 for material dredged by TSHD;

Equally into HU081 and HU082 for material dredged by BHD or CSD</td><td rowspan="4">1,650,000</td></tr>
<tr><td></td><td>Sand</td><td>495,000</td></tr>
<tr><td></td><td>Silt</td><td>577,500</td></tr>
<tr><td></td><td>Clay</td><td>412,500</td></tr>
<tr><td>The turning area</td><td>Gravel</td><td>25,000</td><td rowspan="3">HU080 for material dredged by TSHD;

Equally into HU081 and HU082 for material dredged by BHD or CSD</td><td rowspan="4">250,000</td></tr>
<tr><td></td><td>Sand</td><td>75,000</td></tr>
<tr><td></td><td>Silt</td><td>87,500</td></tr>
<tr><td></td><td>Clay</td><td>62,500</td></tr>
<tr><td>The pumping station outfall</td><td>Sand</td><td>500</td><td rowspan="2">HU080</td><td rowspan="2"></td></tr>
<tr><td></td><td>Silt</td><td>7,500</td></tr>
<tr><td>The Cherry Cobb Sands breach</td><td>Sand</td><td>2,000</td><td rowspan="2">If the dredged material is suitable, the area within the proposed managed realignment site</td><td rowspan="2">10,000</td></tr>
<tr><td></td><td>Silt</td><td>8,000</td></tr>
</table>
</td></tr>
<tr><td>Part 2 – 12 (1) (a)
Maintenance dredging</td><td>the berthing pocket to a depth of -11 metres Chart Datum;</td><td>the berthing pocket and inset berth to a depth of -11 metres Chart Datum;</td></tr>
<tr><td>Part 2 – 12 (3)
Maintenance dredging</td><td>N/A – new insert</td><td>The undertaker is permitted to carry out plough dredging at deposit sites HU081 and HU082 to even out deposited material above a level of -5.3 metres Chart Datum.</td></tr>
</table>

<table>
<tr><th>DML Provision</th><th>Original Text</th><th>Amended / Proposed Text</th></tr>
<tr><td>Part 2 – 12 (4)
Maintenance dredging</td><td>
<table>
<tr><th>Location</th><th>Material</th><th>Maximum tonnage per year</th><th>Deposit location</th><th>Total licensed tonnage</th></tr>
<tr><td>The berthing pocket</td><td>Sand</td><td>150,000</td><td>HU080</td><td>3,225,000</td></tr>
<tr><td></td><td>Silt</td><td>925,000</td><td></td><td></td></tr>
<tr><td>The approach channel</td><td>Sand</td><td>10,000</td><td>HU080</td><td>150,000</td></tr>
<tr><td></td><td>Silt</td><td>40,000</td><td></td><td></td></tr>
<tr><td>The turning area</td><td>Sand</td><td>10,000</td><td>HU080</td><td>150,000</td></tr>
<tr><td></td><td>Silt</td><td>40,000</td><td></td><td></td></tr>
<tr><td>The E.ON outfall</td><td>Sand</td><td>500</td><td>None</td><td>7,500</td></tr>
<tr><td></td><td>Silt</td><td>2,000</td><td></td><td></td></tr>
<tr><td>The Centrica outfall</td><td>Sand</td><td>500</td><td>None</td><td>7,500</td></tr>
<tr><td></td><td>Silt</td><td>2,000</td><td></td><td></td></tr>
<tr><td>The pumping station outfall</td><td>Sand</td><td>50</td><td>HU080</td><td>300</td></tr>
<tr><td></td><td>Silt</td><td>50</td><td></td><td></td></tr>
</table>
</td><td>
<table>
<tr><th>Location</th><th>Material</th><th>Maximum tonnage per year</th><th>Deposit location</th><th>Total licensed tonnage</th></tr>
<tr><td>The berthing pocket</td><td>Sand</td><td>80,000</td><td>HU080</td><td>3,000,000</td></tr>
<tr><td></td><td>Silt</td><td>920,000</td><td></td><td></td></tr>
<tr><td>The approach channel</td><td>Sand</td><td>100,000</td><td>HU080</td><td>375,000</td></tr>
<tr><td></td><td>Silt</td><td>25,000</td><td></td><td></td></tr>
<tr><td>The turning area</td><td>Sand</td><td>100,000</td><td>HU080</td><td>375,000</td></tr>
<tr><td></td><td>Silt</td><td>25,000</td><td></td><td></td></tr>
<tr><td>The Uniper outfall</td><td>Sand</td><td>500</td><td>None</td><td>7,500</td></tr>
<tr><td></td><td>Silt</td><td>2,000</td><td></td><td></td></tr>
<tr><td>The CGEN outfall</td><td>Sand</td><td>500</td><td>None</td><td>7,500</td></tr>
<tr><td></td><td>Silt</td><td>2,000</td><td></td><td></td></tr>
<tr><td>The pumping station outfall</td><td>Sand</td><td>50</td><td>HU080</td><td>300</td></tr>
<tr><td></td><td>Silt</td><td>50</td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>Part 4 – 14 (3) (a)
Maintenance dredging</td><td>the construction and capital dredge activities are carried out within the first 9 years; and</td><td>the construction and capital dredge activities are carried out within the first 10 years; and</td></tr>
<tr><td>Part 4 – 40
Percussive Piling conditions
(note: additional to that contained in MC2 submission)</td><td>No percussive piling is to take place between 7 April and 1 June inclusive in any calendar year.</td><td>No percussive piling is to take place in the marine environment between 7 April and 1 June inclusive in any calendar year.</td></tr>
<tr><td>Part 4 – 41 (1)
Percussive Piling conditions
(note: additional to that contained in MC2 submission)</td><td>Percussive piling is to be restricted at other times as follows:</td><td>Percussive piling in the marine environment is to be restricted at other times as follows:</td></tr>
<tr><td>Part 4 – 43
Percussive Piling conditions</td><td>The maximum diameter of marine piles is to be 2.1 metres unless otherwise agreed in writing with the MMO, following consultation with the harbour master, Natural England and the Environment Agency.</td><td>The maximum diameter of marine piles is to be 2.54 metres unless otherwise agreed in writing with the MMO, following consultation with the harbour master, Natural England and the Environment Agency.</td></tr>
<tr><td>Part 4 – 46 (a)
General dredging and disposal conditions</td><td>as a result of the capital dredging activities referred to in paragraph 11:
(i) no inerodible material and no more than 2,218,000 tonnes of erodible material site is disposed of to site HU080; and
(ii) no erodible material and no more than 1,000,000 tonnes of inerodible material is disposed of to site HU082; and</td><td>as a result of the capital dredging activities referred to in paragraph 11 no more than 4,358,000 tonnes of material overall is deposited into sites HU080, HU081 and HU082 of which:
(i) no inerodible material and no more than 2,218,000 tonnes of erodible material is disposed of to site HU080; and
(ii) no erodible material and no more than 1,254,000 tonnes of inerodible material is disposed of to site HU082; and
(iii) no erodible material and no more than 1,254,000 tonnes of inerodible material is disposed of to site HU081; and;</td></tr>
</table>

DML Provision	Original Text	Amended / Proposed Text
Part 4 – 46 (b) General dredging and disposal conditions	as a result of the maintenance dredging activities referred to in paragraph 12 no inerodible material and no more than 1,180, 100 tonnes of erodible material per year is disposed to site HU080.	as a result of the maintenance dredging activities referred to in paragraph 12 no inerodible material and no more than 1,500,000 tonnes of erodible material per year is disposed to site HU080.
Part 4 – 48 General dredging and disposal conditions	(1) The licence holder must ensure that dredged material is passed through grid screens no larger than 30 centimetres to minimise the amount of man-made materials disposed of at sea. (2) Any man-made material must be separated from the dredged material and disposed of to land.	The undertaker shall take all reasonable measures to ensure no man made material is disposed of to sea.
Part 4 – 50 Capital dredging and disposal conditions	The licence holder must ensure that during the course of disposal, non-erodible material is placed in the depressions of HU082, and that the site is filled to a gradient in keeping with the surrounding bathymetry and ensure that no depths within the disposal site are reduced to less than 5.3 metres below admiralty Chart Datum at its shallowest point.	The undertaker must ensure that during the course of disposal, non-erodible material is placed in the depressions of HU082 or in HU081, and that the sites are filled to a gradient in keeping with the surrounding bathymetry and ensure that no depths within the disposal site are reduced to less than 5.3 metres below admiralty Chart Datum at its shallowest point.
Part 4 – 51 Capital dredging and disposal conditions	The licence holder must undertake regular bathymetric surveys to ensure that the disposal of dredged material at site HU082 has been undertaken in line with the requirements of this licence.	The undertaker must undertake regular bathymetric surveys to ensure that the disposal of dredged material at site HU082 and site HU081 has been undertaken in line with the requirements of this licence.
Part 4 – 52 Capital dredging and disposal conditions	(1) The licence holder must ensure that no gravel is disposed of to HU080 until sampling of the existing seabed has been undertaken and an assessment made which demonstrates that disposal of gravel to the site is acceptable. (2) The assessment must be submitted to and agreed by the MMO, prior to disposal activity being undertaken. (3) If following the assessment gravel is found not to be suitable to disposal to site HU080 the gravel material must be reused or disposed of elsewhere.	N/A – To be deleted as MMO has accepted that gravel can be disposed on to HU080
Part 4 – 58 Capital dredging and disposal conditions	The berthing pocket must be maintained to no deeper than -11.0m CD to ensure that no gravel infill material migrates from the berthing pocket or is dredged and disposed of to unsuitable disposal grounds.	The berthing pocket and inset berth must be maintained to no deeper than -11.0m CD to ensure that no gravel infill material migrates from the berthing pocket and inset berth or is dredged and disposed of to unsuitable disposal grounds.

In addition to the above, the term 'licence holder' is used on 59 occasions within the current DML. It is understood that the MMO has moved away from the use of this term within such DML's and that

this should be replaced in all instances with the term 'the undertaker'.

A detailed list of drawings to be retained, substituted or withdrawn from the DCO is provided within the submitted UES (and also within the Explanatory Memorandum enclosed with this letter) and is not therefore repeated within this submission.

4.0 SUPPORTING STATEMENT

Able UK wish to bring forward a number of minor amendments to the AMEP scheme to allow the development to be implemented in full. These minor amendments are as detailed below.

4.1 Changes to the NSIP: Work No.1 – the Quay

Work No. 1 occupies land owned by the Crown Estate specifically parcel No.'s 08001 and 09001 on the Land Plans. At the time of the application, the land needed for the development of Work No. 1 was leased to Associated British Ports, but since the development was consented in 2014, the lease for the relevant parcel of land has been acquired by the Applicant but surrendered back to The Crown Estate. Pursuant to the start of the works, Able Humber Ports Limited (AHPL, the Company named in the DCO) now has an option to lease the land needed to construct the Quay.

The approved development is detailed on the drawings listed in the DCO at Schedule 11, paragraph 6 (refer to Technical Appendix UES1-1 for a copy of the DCO). The following changes are proposed to Work No.1:

- The specialist berth at the southern end of the quay is to be reclaimed as the vessel that was to use the facility (refer to Figure 5.18 of the original ES) has not been constructed and is not likely to be built;

- At the northern end of the quay, the quay line is to be set back 61m over a length of 288 m to create a barge berth and allow the potential for end load in of cargo from Ro-Ro vessels;

- Alternative details are proposed for the piled relieving slab to the rear of the quay which is shown on the approved drawing AMEP_P1D_D_003. Options are sought to locate this slab at the ground surface, or it could be omitted altogether subject to detailed design, refer to drawing AME-036-00003 at Appendix UES4-1 which illustrates the alternatives being sought; and,

- Alternative details are proposed for anchoring the quay wall. The option is sought to use more conventional steel anchor piles and tie bars in-lieu of flap anchors to tie back the quay piles, but the option to use flap anchors will remain, refer to drawing AME-036-00003 at Appendix UES4-1.

The net effect of changes (a) and (b) above is that marginally less land would be reclaimed from the estuary, refer to Figure 1. Nevertheless, no changes are proposed to the compensation proposals taken into account in the Secretary of State's Habitats Regulations Assessment for the consented development. The change in habitat loss is summarised in Table 2 below, and the amendment results in a net reduction in the footprint of the quay from 45ha to 43.6ha. The changes are further detailed on drawings AME-036-00001 - 00002 at Appendix UES4-1.

Figure 1: Consented Quay Alignment and Proposed Changes

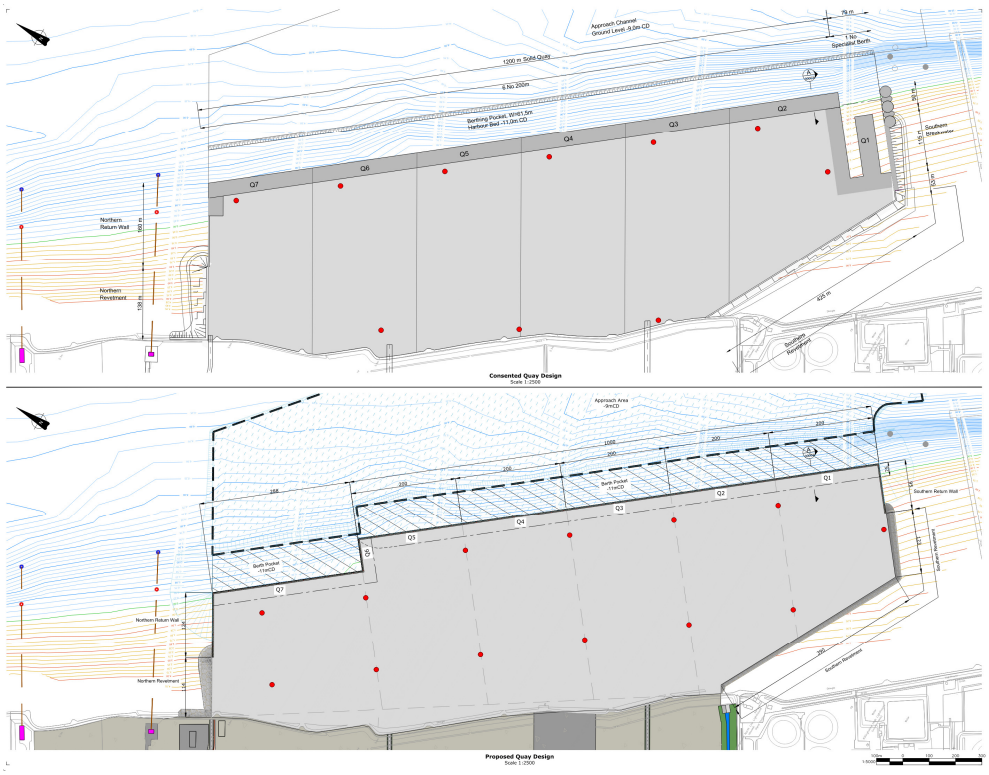


Table 2: Comparison of Habitat Losses

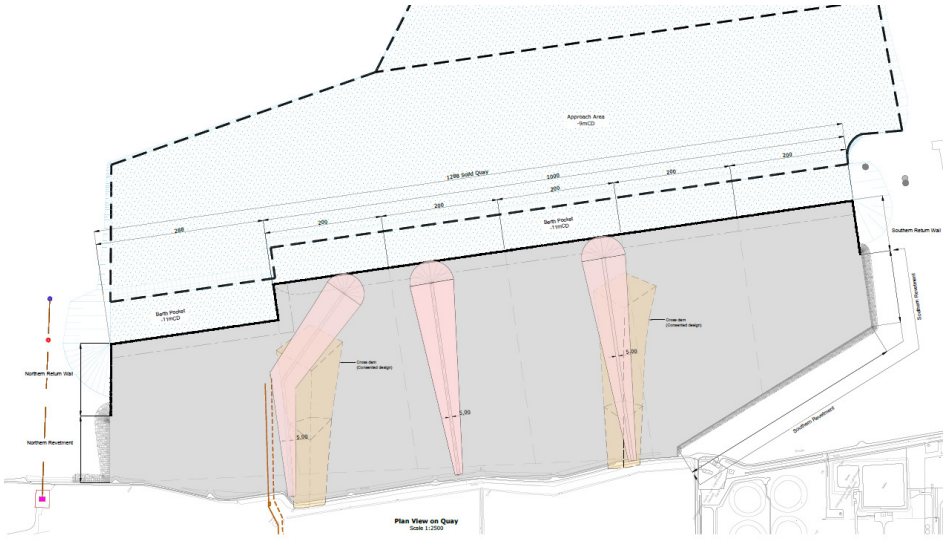
Habitat Type	Habitat Loss Arising from Consented Scheme Agreed with NE in 2012[1] (ha)	Habitat Loss with Material Change (ha) (Technical Appendix UES11-2)
1130 Sub-tidal	13.5	10.4
1140 Mudflat	43.1	39
1310/1330 Saltmarsh	2	8.1
[1]Refer to SoCG, Table 3.2 and paragraphs 3.5.1 -3.5.2		

4.2 Changes to the NSIP: Work No.1 – the Reclamation

Certain details of the reclamation are prescribed in Schedule 8, paragraph 4 of the DCO (Technical Appendix UES1-1). Specifically, paragraph 4(f) states that the estuary, '*may be reclaimed using marine dredged sands and gravels by constructing two granular dams that extend from the existing flood defence wall to the area reclaimed..., so that the dams divide the remaining reclaim area into three approximately equal cells*' (underline added).

Anglian Water has two pipelines which discharge within the footprint of the reclamation area between the existing flood defence wall and the new Quay wall refer to Figure 2. In order to facilitate the diversion of these outfalls, and to facilitate sectional completion of the Quay, it is necessary to introduce a third cross dam within the reclamation area. An amendment is sought to permit this change.

Figure 2: Revised Indicative Cross Dam Positions in light red Shading (original dams in orange shading, Anglian Water outfalls as red lines)



4.3 Changes to Associated Development – Capital Dredging

The proposed capital and maintenance dredging operations are explained in paragraphs 4.4.15 onwards of the original ES. Dredging operations are controlled by conditions set out in Schedule 8 (Variation 2) of the DCO (Technical Appendix UES1-2), and limits on dredging volumes are set out in paragraph 11 thereof. Dredging volumes are proposed to be amended to the extent necessary to dredge the berthing pockets for the amended quay line and in line with the current bathymetry.

The new volumes to be dredged are detailed in the Dredging Strategy included in Technical Appendix UES4-2.

The permitted deposit locations for dredge arisings are prescribed in the Schedule 8 paragraph 11(2) of the DCO (Technical Appendix UES1-1). It is proposed to amend the deposit site for 1,100,000 tonnes of clay that is to be dredged to form the berthing pocket from its consented location on the *'terrestrial area landward of the existing Killingholme Marshes flood defence wall'*, to deposit sites HU081 and HU082. Both of these sites are licensed deposit sites within the Humber estuary and are identified on drawing AME-036-10014 within Appendix UES4-1.

The reason for this change is that these dredge arisings, comprising Till, had been intended to be used to raise levels on the AMEP site. However, ground raising over most of the site was actually undertaken in 2014/15 pursuant to planning permissions PA/2013/0519 and PA/2014/0512 obtained from North Lincolnshire Council under the Town and Country Planning Act. As it is intended to develop the remainder of the site concurrently with the quay, this opportunity for beneficial use as fill to the

terrestrial areas of the AMEP site itself, is potentially lost and an alternative use or a disposal site is required. If, at the relevant time any material can be used within the AMEP site or elsewhere, such as within the reclamation site itself, then permission to deposit within the estuary would not prevent such an alternative for beneficial use being implemented in any event.

An estimate of marine construction vessel movements is set out in Chapter 14, paragraph 14.6.27 of the original ES. The original estimate remains valid as, upon review, it has included for all dredged material to be deposited within the estuary, notwithstanding that 1.1M tonnes was to be deposited on land.

4.4 Changes to Public Rights of Way

These changes relate to the terrestrial environment and have no impact upon the marine environment. As such, we have not provided further information regarding the proposed changes to the Public Rights of Way within this letter. However, should you wish to view further information on changes to the Public Rights of Way, this is readily available within the submitted UES.

4.5 Changes to the Construction Methodology

4.5.1 The Quay

In order to facilitate early handover of an operational section of quay, the works are now proposed to commence at the southern end of the quay and progress northwards. On this basis, the construction sequence shown on the DCO approved drawings AMEP_P1D_D_101 to 103 is proposed to be amended, and thereby superseded, by the alternative sequence shown on application drawings AME-036-10009 to 10011 which are included in Appendix UES4-1.

The alternative options for anchoring of the quay wall and for the piled relieving slab, or for omitting the piled relieving slab altogether, will not give rise to any materially different construction operations to those described in paragraphs 4.4.4 *et seq* of the original ES and assessed in subsequent Chapters contained therein. Notwithstanding this, these amendments to the construction methodology / phasing have been considered within this UES where appropriate.

4.6 Operational Details

4.6.1 Vessels

As the specialist berth is to be omitted, the specialist vessel will no longer be required to berth at the facility. The new barge berth at the northern end will enable Ro-Ro vessels to berth and unload directly.

The spread of operational vessels set out in Chapter 14, Table 14.12 of the original ES will change as a consequence and the revised estimate of vessel movements associated with the operation of the AMEP Quay is shown in Table 3 below.

Table 3: AMEP Operational Phase Vessel Movements

Vessel Type	DCO – Original ES		Proposed – UES		Comparison / Change	
	Annual Number of Trips	Annual Number of Movements	Annual Number of Trips	Annual Number of Movements	Annual Number of Trips	Annual Number of Movements
Foundation Transfer Vessels	12	24	0	0	-12	-24
Installation Vessel	100	200	100	200	No change	No change
1,500 Tonne Support Vessel	100	200	100	200	No change	No change
6,000 – 10,000 Tonne Cargo Ship	50	100	50	100	No change	No change
TOTAL	**262**	**524**	**250**	**500**	**-12**	**-24**

The overall change in annual number of trips and movements represent a very minor change from the original ES given the context of the existing number of shipping movements within the Humber Estuary, which is in the order of 25,000-30,000 per annum.

4.6.2 The Harbour Limits

The limits of the harbour are delineated by a boundary line defined by coordinates listed in Schedule 10 of the DCO (Technical Appendix UES1-1). The change in the quay alignment necessitates a consequential change to the limits of the harbour and the proposed change is shown on drawing AME-036-00006, included in Appendix UES4-1.

4.7 Consideration of Proposed Material Amendment (Material Change 2) on DML

With the exception of the changes to the approved diversion of footpath FP50, the proposed amendments all relate to elements of the development within the marine environment. Furthermore, all of the proposed amendments are associated with elements either located within the estuary or on the south bank of the estuary. None of the amendments interrelate to or impact upon the works proposed on the north bank of the estuary (i.e. the Cherry Cobb Sands ecological mitigation area).

On this basis, it is necessary to seek a number of variations to the content of the DML as detailed within Table 1 above and within the Explanatory Memorandum prepared by BDB Pitmans.

As outlined above, the proposed material amendment (Material Change 2) application has been subject to an UES which assess the proposed changes to the consented DCO in the context of the marine environment. Table 4 below provides a summary of the key findings within the UES with respect to the marine environment and how these are of relevance to the DML Variation. Further detail

on these matters is provided within the various technical assessments and individual chapters of the UES itself.

Table 4: Updated Environmental Statement – Relevance to DML Variation

UES Chapter	Topic / Title	Relevance to Consideration of DML Variation
1-6	Introduction; Environmental Assessment Process; Changes to Policy and Context; Description of Changes to Development; Scoping and Consultation; and Description of Committed Developments	These provide a factual account of the purpose of the UES, the EIA process, any changes in policy since the original ES, a description of the proposed changes to the development as proposed by the Material Change 2 application, any scoping and consultation undertaken in advance of the Material Change 2 application being submitted (including a Preliminary Environmental Information Report and consultation with key stakeholders/statutory consultees), and committed developments in the study area for the UES which need to be considered in determining potential cumulative impacts. These chapters provide an overview of the proposed material amendment (Material Change 2) application which is of relevance to the DML variation.
7	Geology, Hydrogeology and Ground Conditions	Additional sediment sampling and testing has been undertaken which identifies elevated trace metal and hydrocarbon concentrations beyond those identified within the original ES. Notwithstanding, these levels remain within the acceptable limits to allow the disposal of dredging material at identified locations within the Humber as proposed within the original ES. On this basis, the proposed material to be deposited within the marine environment is still entirely suitable and supports the DML variation.
8	Hydrodynamic and Sedimentary Regime	The chapter concluded that water levels, bed shear stresses and waves are similar for the AMEP Amended Quay layout and the consented. There are small differences in the peak flow patterns on the ebb tide; a localised region of flow acceleration is predicted off the downstream end of the quay. This initial change may diminish with time but should be noted. For the proposed AMEP Amended Quay layout, mud transport modelling using present-day bathymetry predicts a reduction in maintenance dredging requirements (compared with the updated baseline) at adjacent berths except for a potential increase at South Killingholme Oil Jetty (SKOJ) (35,000 to 88,000 m^3 /year) and a potential increase (3,000 to 7,000m^3 per year) at Immingham Gas Terminal (IGT). From the sand transport modelling some potential increases of sand deposition compared with baseline are predicted for Humber International Terminal (50,000 to 102,000 m^3), C.Ro Port (13,000 to 18,000 m^3), Immingham Bulk Terminal (8,000 to 13,000 m^3), Immingham Outer Harbour (2,000 to 3,000 m^3) with a reduction of 100,000 to 204,000 m^3 predicted at SKOJ, and between 18,000 m^3 increase or 29,000m^3 reduction likely at IGT. The significance of these potential effects on future maintenance dredging at these berths should be assessed alongside evidence of the composition of the material that is presently dredged from the berths. It is understood that the bulk of the material from the berths is muddy. If the berths are not presently subject to significant sandy infill, which is understood to be the case, then the changes due to AMEP in terms of sandy sedimentation in the berths are not predicted to arise. The change to maintenance dredging requirements at the proposed AMEP Amended Quay layout when compared to the consented scheme is predicted to be an increase of up to 41,000 m^3 /year muddy sediments and a decrease of

UES Chapter	Topic / Title	Relevance to Consideration of DML Variation
		34,000 m^3 /year for sandy sediments into the AMEP Berth Pockets. Significant localised sand deposition onto the dredged slopes of the proposed turning area / approach channel is predicted. To the northwest of AMEP, bed level rising is likely to be at a slightly lower rate with the proposed AMEP Amended Quay layout. To the southeast there is likely to be no significant change from that predicted, other than to note that significant accretion has taken place since the original assessment (as a result of HIT) which leads to a reduced accretionary effect attributable to AMEP. On this basis, the proposed material amendment (Material Change 2) application is considered entirely appropriate and supports the DML variation.
9	Water and Sediment Quality	There is a potential for a change in the effect of the scheme during construction associated primarily with dredging and deposition of estuarine sediment. Detailed analyses and assessment provided within Chapter 9 of the UES has however confirmed that these impacts will remain small and are not significant. The proposed material amendment would also involve a variation to the final quay profile extending out into the estuary. While associated impacts of this on flow patterns and sediment deposition are considered in Chapter 8 of the UES, there is also a potential for changes in mixing and circulation to impact water quality. Detailed analyses and assessment provided within Chapter 9 of the UES has however confirmed that these impacts will remain small and are not significant. On this basis, the proposed material amendment (Material Change 2) application is considered entirely appropriate and supports the DML variation.
10	Aquatic Ecology	When considering the proposed material amendment, the following issues of significance were identified: • Saltmarsh Communities; • Intertidal and Subtidal Invertebrate Communities; • Fish Communities; • Marine Mammals; and • Based on the updated characterisation of the above appropriate baseline conditions, changes to expected potential impacts arising from the material amendment, mitigation measures and residual impacts if and when they occur. The potential pathways for environmental effects from the proposed material amendment arise from: • Construction of the quay entailing: Loss of habitat (intertidal and subtidal) and benthic communities from the reclamation of ground required for the quay; underwater noise and vibration from piling; indirect changes to habitats from project-induced changes in hydrodynamic and morphodynamic regimes; and changes to aquatic environment in adjacent water bodies. • Dredging of the quay, berth pocket and approaches entailing: Habitat change from substrate removal; habitat and benthic communities disturbance from the sediment plume; indirect changes to habitats from project-induced changes in hydrodynamic and morphodynamic regimes;

UES Chapter	Topic / Title	Relevance to Consideration of DML Variation
		and disturbance to fish and fish eggs/larvae from habitat loss and disturbance. • Dredge Disposal entailing: Loss of subtidal habitat and benthic communities from dredge spoil disposal; habitat and benthic communities disturbance from the sediment plume; indirect changes to habitats from project-induced changes in hydrodynamic and morphodynamic regimes; and disturbance to fish and fish eggs/larvae from habitat loss and disturbance. The actual likelihood of any significant effects to occur to the aquatic ecology of the area from the material amendment have been discounted, with it being concluded that the effects as identified in the original ES remain valid. Only very small scale localised alterations to the aquatic ecology of the area are expected. These alterations are not measurable against the background natural variability of the estuarine system. The baseline conditions have been reviewed and updated since 2012 to reflect the current baseline. No significant changes have been identified compared to those described in the DCO (2014) and the Examining Authority's Report (2013). Based on the above assessment of potential changes to the aquatic ecology of the area against conditions identified in the original ES baseline, and from the assessment of the material amendment, no significant effects have been identified other than those assessed in the original ES from the DCO. Mitigation measures provided in Chapter 10 Aquatic Ecology of the original ES are considered to remain valid, with no significant residual impacts to the aquatic ecology of the Humber Estuary expected following their discharge. On this basis, the proposed material amendment (Material Change 2) application is considered entirely appropriate and supports the DML variation.
11	Ecology and Nature Conservation	From the assessment of potential changes to the terrestrial ecology and nature conservation of the area against conditions identified in the original ES baseline, and from the assessment of the material amendment, no significant effects have been identified other than those assessed in the original ES. Mitigation measures provided in the original ES and secured in the DCO and associated DML (principally by the requirement to obtain approvals for a series of Environmental Management and Monitoring Plans) are considered to remain valid. Overall, there are no changes to the residual effects identified within the original ES and the approved compensatory habitat will remain suitable to offset effects that cannot be mitigated. On this basis, the proposed material amendment (Material Change 2) application is considered entirely appropriate and supports the DML variation.
12	Commercial Fisheries	When considering the proposed material amendment, the following issues of significance were identified: • alteration to the fish and shellfish assemblage; • alteration to potential commercial resource exploitation; • restriction to access of fish and shellfish resources for commercial and recreational fisheries. Changes to dredge disposal leading to:

UES Chapter	Topic / Title	Relevance to Consideration of DML Variation
		• alteration to the fish and shellfish assemblage; • alteration to potential commercial resource exploitation. The baseline conditions have been reviewed and updated since 2012 to reflect the current baseline although the importance of the area around the vicinity of the AMEP development is not considered to be high for commercial and recreational fishing activity. These data, and potential impact pathways from the material amendment, have been assessed against those described in the original ES, these largely relating to indirect effects through potential impacts to the fish and shellfish communities of the area. No significant changes have been identified outwith those described in the original ES and the Examining Authority's Recommendation Report (2013). Based on the above assessment of potential changes to the commercial and recreational fisheries of the area against conditions described in the original ES baseline, and from the assessment of the material amendment and pathways of potential impact, no significant effects have been identified other than those assessed in the original ES. Mitigation measures provided in the original ES are considered to remain valid, with no significant residual impacts to the commercial and recreational fisheries of the Humber Estuary in the vicinity of the AMEP development expected following their discharge. On this basis, the proposed material amendment (Material Change 2) application is considered entirely appropriate and supports the DML variation.
13	Drainage and Flood Risk	Whilst not of relevance to the DML variation, the chapter principally considers the associated flood risk and drainage requirements within the terrestrial environment. However, with regards to drainage, storm water runoff from the site will largely be discharged to the Humber Estuary. Particularly during construction there is however a potential for pollution to occur to the adjacent surface water channels and networks. This will be controlled and managed through the implementation of good construction practices. In both cases the proposed material amendment will make no difference to the potential effects identified within the original ES (not significant) and no additional mitigation will be required. On this basis, the proposed material amendment (Material Change 2) application is considered entirely appropriate and supports the DML variation.
14	Navigation	The proposed activities associated with the Project have been assessed and it has been concluded that the Project should have a minimal effect on the existing risk profile which should be managed and contained assuming compliance with embedded mitigation and regulations governing: movements, pilotage, towage, VTS and procedures. A general decrease in risk is noted across all hazard categories when compared to the assessment undertaken in 2011 in support of the original DCO application. Factors influencing this decrease in risk profile include: • An overall decline in Humber vessel transits past the Project (>50%

UES Chapter	Topic / Title	Relevance to Consideration of DML Variation
		reduction in passing transits from AIS); • Improvement of the Humber-wide SMS and implementation of embedded mitigations over time; • The embedding of many originally proposed additional mitigation measures into the project design; • The review and associated reduction in construction phase vessel movements associated with dredging activities identified within scoping; • The simplification of the quay design via the removal of the specialist berth; and • The reduction of cumulative projects considered within the 2011 NRA that have either been completed or were not taken forward. All residual effects for the amended project were assessed as Moderate or Low and therefore 'not significant'. This is considered acceptable in terms of the EIA regulations. On this basis, the proposed material amendment (Material Change 2) application is considered entirely appropriate and supports the DML variation.
15	Traffic and Transport	There are no considerations of relevance to the marine environment or the proposed amendments to the DML within this Chapter of the UES.
16	Noise and Vibration	This chapter of the UES considers the alteration to the piling arrangements as proposed within the material amendment (Material Change 2) application. The chapter concludes that the proposed material amendment, and changes in policy, guidance and baseline conditions that have occurred since the original DCO application, will not alter the findings presented within the original ES. On this basis, it is not necessary to undertake further technical assessments in support of the proposed material amendment. It is therefore concluded that the findings of the original ES remain valid and that the proposed material amendment is entirely appropriate in the context of the extant DCO. On this basis, the proposed material amendment (Material Change 2) application is considered entirely appropriate and supports the DML variation.
17	Air Quality	The Air Quality Chapter of the original ES which supported the DCO Application, included detailed qualitative and quantitative air quality assessments to assess the construction and operational phases of the AMEP. The assessment considered several pollutants and several emissions sources, across a range of human and ecological receptors existing within the study area. Chapter 17 of the UES has considered the predicted effects of the original ES, and the current and future baseline, in the context of the material amendment and whether the material amendment and current baseline will materially alter the conclusions of the original Air Quality Chapter to the ES. This includes a notional 100 per cent increase in emission from all non-road sources (i.e. vehicle / boat movements within the marine environment). It has been concluded that the findings of the original ES, which predicted all effects as 'not significant', remain valid. Furthermore, the assessment of even a notional 100 per cent increase in emissions from all non-road sources still concludes a 'not significant' effect at all relevant receptors. The material

UES Chapter	Topic / Title	Relevance to Consideration of DML Variation
		amendment is therefore not considered to result in any new/different effects or effects of a greater magnitude than were previously assessed. On this basis, the proposed material amendment (Material Change 2) application is considered entirely appropriate and supports the DML variation.
18	Marine Archaeology	The construction phase impacts altered by the change in quay design and dredging from the original ES are associated with the amended dredging operations in the Berthing Pocket. The overall footprint of the quay is largely unchanged and as there is no alteration to the depths of the dredging in the in the Berthing Pocket, Approach Channel and Turning Area these changes do not induce additional effects on the marine Historic Environment to those assessed in the original ES. The impact of the material change on the historic environment are negligible. The risks to the marine Historic Environment can be adequately mitigated through the mitigation measures set out in the 2012 WSI (Wessex Archaeology 2012a). The proposed material amendments will make no difference to the potential effects and no additional mitigation measures will be required to those set out in the 2012 WSI (Wessex Archaeology 2012a). On this basis, the proposed material amendment (Material Change 2) application is considered entirely appropriate and supports the DML variation.
19	Light	There are no considerations of relevance to the marine environment or the proposed amendments to the DML within this Chapter of the UES.
20	Landscape and Visual	There are no considerations of relevance to the marine environment or the proposed amendments to the DML within this Chapter of the UES.
21	Socio-Economic	There are no considerations of relevance to the marine environment or the proposed amendments to the DML within this Chapter of the UES.
22	Aviation	There are no considerations of relevance to the marine environment or the proposed amendments to the DML within this Chapter of the UES.
23	Waste	The consideration of clay arisings and the reasons for the chosen options for disposal are contained within other Chapters of the UES (principally Chapter 4: Description of Changes to Development, and Chapter 8: Hydrodynamics and Sedimentary Regime). On this basis, there are no considerations of relevance to the marine environment or the proposed amendments to the DML within this Chapter of the UES.
24	Health	There are no considerations of relevance to the marine environment or the proposed amendments to the DML within this Chapter of the UES.
25	Other Environmental Issues	There are no considerations of relevance to the marine environment or the proposed amendments to the DML within this Chapter of the UES.
26	Cumulative and In-Combination Effects	For in-combination effects there is a nil change scenario for both sensitive receptors and significant effects, there is no alteration to the consideration of in-combination effects beyond those contained within the original ES. The consideration of cumulative effects remains consistent with those

UES Chapter	Topic / Title	Relevance to Consideration of DML Variation
		contained within the original ES and the risk of likely significant effects from cumulative effects remains consistent with that found to be acceptable in the making of the DCO. The proposed material amendment will not raise any additional or alternate Transboundary Effects beyond those considered within the original Transboundary Consultation Process. As such, no further consultation need be undertaken as a result of the proposed material amendment. On this basis, the proposed material amendment (Material Change 2) application is considered entirely appropriate and supports the DML variation.
27	Summary of Mitigation and Monitoring	With regard to Commercial and Recreational Navigation, it is noted that many of the possible additional risk controls proposed within the 2011 NRA have now been embedded into the project design or HES procedures and, as such, the proposed possible additional mitigation measures show a reduced effectiveness on the majority of hazards. A number of alternate or additional risk control measures have been identified, informed by stakeholder consultation, aimed at further reducing the residual risk during the construction and operation phases of the Project. These include additional surveys, up-to-date weather forecasting, availability of towage, restriction of simultaneous movements, and management of pilot allocation. Further information regarding these potential alternate or additional mitigation measures is contained within Chapter 27 of the UES (Commercial and Recreational Navigation). With regard to Aviation, further mitigation will be required, over and above that committed to as part of the DCO application, in relation to the potential for 200 m maximum height quay-side cranes. This proposed mitigation is linked to the latest specific guidance on Aviation Safeguarding and best practice for tall structures, including lighting and hazard notification. Full details of the proposed mitigation are set out in Chapter 22 of this UES. Subject to the implementation of these mitigation measures, and incorporation of their requirements within the DML (where appropriate), the proposed material amendment (Material Change 2) application is considered entirely appropriate and supports the DML variation.
28	Conclusion	The proposed material amendment has been assessed for additional environment effects beyond those contained within the original ES for the DCO. This has been undertaken through the preparation of the UES and the associated technical assessments contained or referenced herein. In accordance with the EIA Regulations, consideration has been given to assessing additional potential effects during both the construction and operational phases of the development, whilst effects have been analysed in terms of residual and cumulative; temporary and permanent (short and long term); and beneficial, negligible and adverse. It is acknowledged that the proposed development, as assessed within the original ES, will result in a number of adverse effects, some of which are considered 'significant' from an impact perspective. However, through the undertaking of the UES, it has been assessed that there will be no additional, or change to, the significant effects identified within the original ES. On this basis, the conclusion is reached that the proposed material amendment

UES Chapter	Topic / Title	Relevance to Consideration of DML Variation
		(Material Change 2) application is appropriate in the context of the DCO and associated DML. Furthermore, there are adequate mitigation measures available to ensure that the proposed development could proceed, as amended, without giving rise to unacceptable environmental effects, including within the marine environment, even in combination with the other committed developments identified. Subject to the implementation of these mitigation measures, and incorporation of their requirements within the DML (where appropriate), the proposed material amendment (Material Change 2) application is considered entirely appropriate and supports the DML variation. On this basis, there should be no foreseeable reason why the proposed material amendment (Material Change 2) would be considered inappropriate or unacceptable from an environmental impact perspective. The findings of the UES thereby supports the DML variation as proposed herein.

With regard to the findings of the UES, whilst the proposed material amendment (Material Change 2) alters the character of the effects upon the marine environment, they do not result in any alterations to the level of effect or their significance in comparison to the findings of the original Environmental Statement for the DCO. Notwithstanding, a number of new or alternate mitigation measures are recommended, where appropriate, which would be brought forward through any DCO (Amendment) Order which would be made and have been considered within the DML variation proposed herein.

4.8 Additional Information

The technical assessments and reports necessary to support the DML variation are as those prepared and submitted in support of the material amendment (Material Change 2) application. No variation to those reports/assessments are necessary to support this DML variation.

As outlined above, a full copy of the UES and its associated technical appendices is available to view via the PINS website: https://infrastructure.planninginspectorate.gov.uk/projects/yorkshire-and-the-humber/able-marine-energy-park-material-change-2/. The chapters of the UES of relevance to the DML variation is as identified within Table 4 above, whilst the technical appendices of relevance to this DML variation are identified below:

- Appendix Ref UES1-2 – Variation 2 of the Deemed Marine Licence;
- Appendix Ref UES3-1 – East Onshore and Est Offshore Marine Plan Compliance Table;
- Appendix Ref UES4-1 – Scheme Change Drawings;
- Appendix Ref UES4-2 – Dredging Strategy;
- Appendix Ref UES4-3 – Works Plan No. 7;
- Appendix Ref UES4-4 – Quay Alternatives;
- Appendix Ref UES8-1 – Sediment Plume Dispersion from Dredging;
- Appendix Ref UES8-2 – Inerodible Clay;

- Appendix Ref UES9-4 – Estuary Sediment Quality Data;
- Appendix Ref UES9-5 – Thermal Plume Modelling;
- Appendix Ref UES10-1 – North Killingholme Marshes Saltmarsh Survey 2020;
- Appendix Ref UES10-2 – AMEP Disposal Sites – Subtidal Benthic Survey 2015;
- Appendix Ref UES10-3 – Marine Surveys at North Killingholme and Cherry Cobb Sands (Autumn 2015);
- Appendix Ref UES10-4 – Marine Surveys at North Killingholme and Cherry Cobb Sands (Spring 2016);
- Appendix Ref UES10-5 – Marine Surveys at North Killingholme and Cherry Cobb Sands (Spring 2013);
- Appendix Ref UES10-6 – Marine Surveys at North Killingholme and Cherry Cobb Sands (Autumn 2013);
- Appendix Ref UES10-7 – European Eel Status Assessment at Killingholme Marshes and Halton Marshes;
- Appendix Ref UES10-8 – MMO Letter to DS 18-05-2018 re Changes to Pile Diameter and Existing Mitigation Suitability;
- Appendix Ref UES10-9 – Action Levels Result Analysis;
- Appendix Ref UES10-10 – Sediment Contaminant Context Information;
- Appendix Ref UES11-2 – Change in Habitat Losses within the Designated Site;
- Appendix Ref UES11-3 – Analysis of ABP Ornithological Monitoring Data for the Killingholme Marshes Foreshore, 2018-19 and 2019-20;
- Appendix Ref UES14-1 – Navigation Risk Assessment;
- Appendix Ref UES18-1 – Written Scheme of Investigation;
- Appendix Ref UES18-2 – Site Location and Marine Heritage Receptors;
- Appendix Ref UES18-3 – AMEP Geoarchaeology Report (76490); and
- Appendix Ref UES18-4 – AMEP Geoarchaeology Report (76491.01).

In addition to the above EIA related information, a Habitats Regulations Assessment (HRA) and Water Framework Directive (WFD) Assessment have also been submitted in support of the material amendment (Material Change 2) application made to PINS. Please note that the HRA is formed of three parts within the electronic index uploaded to the PINS website.

All of the supporting information has been previously submitted to the MMO as part of the material amendment (Material Change 2) application submission to PINS. None of this information has been updated from that previously submitted.

5.0 CLOSURE

We trust that the above and enclosed provides sufficient information to allow the DML Variation to be duly considered and determined by the MMO. However, should you have any queries or require any

additional information, please do not hesitate to contact either me or Richard Cram (Able UK Ltd) via the following contact details:

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Yours sincerely
SLR Consulting Limited

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Technical Director

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	R Cram	Able UK Ltd
	A Walker	BDB Pitmans
	J Purkis	BDB Pitmans

Enc.	Annex 1	DML Variation No. 2 (2021)
	Annex 2	Explanatory Memorandum (BDB Pitmans)