

**Rampion 2 Wind Farm  
Category 8: Examination  
Documents  
Applicant's Response to  
Prescribed Consultees' Written  
Representations**

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Rev A**

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## Document revisions

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# Executive Summary

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At Deadline 1 of the Examination for Rampion 2 Offshore Wind Farm Project, Interested Parties were invited to submit Written Representations and Post-hearing submissions following Issue Specific Hearing 1 (held 07 to 08 February 2024) into the examination. A total of six Written Representations were received from Prescribed Consultees.

Rampion Extension Development Limited (the 'Applicant') has taken the opportunity to review each of the Written Representations and the Post-hearing submission received from Prescribed Consultees, this document provides the Applicant's responses and has been submitted for Examination Deadline 2.

# 1. Introduction

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## 1.1 Project Overview

- 1.1.1 Rampion Extension Development Limited (hereafter referred to as 'RED') (the 'Applicant') is developing the Rampion 2 Offshore Wind Farm Project ('Rampion 2') located adjacent to the existing Rampion Offshore Wind Farm Project ('Rampion 1') in the English Channel.
- 1.1.2 Rampion 2 will be located between 13km and 26km from the Sussex Coast in the English Channel and the offshore array area will occupy an area of approximately 160km<sup>2</sup>. A detailed description of the Proposed Development is set out in **Chapter 4: The Proposed Development, Volume 2** of the Environmental Statement (ES) [APP-045], submitted with the Development Consent Order (DCO) Application.

## 1.2 Purpose of this document

- 1.2.1 Interested Parties were invited to submit Local Impact Reports, Written Representations, and Post-hearing submissions at Deadline 1 (28 February 2024) following Issue Specific Hearing 1 (held 07 to 08 February 2024) to provide further information and to expand on views provided in Relevant Representations previously submitted in accordance with the Examination timetable in the Rule 8 letter [PD-007]. Please see below for a summary of the submissions received at Deadline 2, as categorised by the Planning Inspectorate:
- 6 submissions from Local Planning Authorities;
  - 5 submissions from parish and towns councils and Members of Parliament;
  - 6 representations from prescribed consultees;
  - 28 representations from and on behalf of Affected Parties;
  - 44 representations from members of the public or businesses; and
  - 8 representations from non-prescribed organisations.
- 1.2.2 The Applicant has taken the opportunity to review each of the Local Impact Reports, Written Representations, and Post-hearing submissions received. This document provides the Applicant's responses to Prescribed Consultees and has been submitted for Examination Deadline 2.

## 1.3 Structure of the Applicant's Responses

- 1.3.1 For ease of referencing and to facilitate future cross-referencing, the Applicant has included references for the Applicant's responses to the Local Impact Reports, Written Representations, and Post-hearing submissions received from other Interested Parties, as follows:
- Local Authorities (including both host and neighbouring authorities):

- ▶ Arun District Council (**Applicant's Responses to Arun District Council Deadline 1 Submissions (Document Reference: 8.44)**);
- ▶ Brighton and Hove City Council (**Applicant's Responses to Brighton and Hove City Council Deadline 1 Submissions (Document Reference: 8.48)**);
- ▶ Horsham District Council (**Applicant's Responses to Horsham District Council Deadline 1 Submissions (Document Reference: 8.45)**);
- ▶ Mid Sussex District Council (**Applicant's Responses to Arun District Council Deadline 1 Submissions (Document Reference: 8.46)**);
- ▶ South Downs National Park Authority (**Applicant's Responses to South Downs National Park Authority Deadline 1 Submissions (Document Reference: 8.47)**); and
- ▶ West Sussex County Council (**Applicant's Responses to West Sussex County Council Deadline 1 Submissions (Document Reference: 8.43)**).
- Parish Councils and Members of Parliament (**Applicant's Responses to Parish Councils and MP's Written Representations (Document Reference: 8.37)**);
- Prescribed Consultees (this document: as set out in Schedule 1 of the Infrastructure Planning (Application: Prescribed Forms and Procedures) Regulations 2010, noting that Parish Councils are also Prescribed Consultees) (**Applicant's Responses to Prescribed Consultee's Written Representations (Document Reference: 8.49)**);
- Affected Parties (Category 1, 2 and 3 Land Interests as identified in the **Book of Reference [PEPD-014]**) (**Applicant's Responses to Affected Parties' Written Representations (Document Reference: 8.51)**);
- Members of the Public and Businesses (**Applicant's Responses to Members of the Public and Businesses' Written Representations (Document Reference: 8.52)**);
- Non-Prescribed Consultees (**Applicant's Responses to Non-Prescribed Consultee's Written Representations (Document Reference: 8.53)**).

1.3.2 Each section below includes responses to the submissions received from Prescribed Consultees. Each response is identified in the relevant table:

- Historic England: **Table 2-1**;
- Marine Management Organisation: **Table 2-2**;
- National Highways: **Table 2-3**;
- Natural England: **Table 2-4**; and
- Southern Gas Networks Plc: **Table 2-5**.
- Maritime and Coastguard Agency: **Table 2-6**.

## 2. Applicant's Response to Prescribed Consultees

**Table 2-1: Applicant's Response to Historic England's Written Representation [REP1-055]**

Ref	Written Representation Comment	Applicant's Response
0.1	<p>Summary</p> <p>Historic England is the Government's statutory adviser on the historic environment. It is our duty under the National Heritage Act 1983 to secure the preservation and enhancement of the historic environment. This extends to monuments in, on, or under the seabed within the seaward limits of the UK Territorial Sea adjacent to England. Our objective is to ensure that the historic environment generally, and marine and designated heritage assets especially, are fully considered in the determination of this DCO.</p>	Noted, the Applicant has no further comments on this matter at this time.
0.2	<p>We have provided substantive pre-application advice about the scope of environmental assessment and the PEIR. We have also submitted a Relevant Representation (November 2023). The applicant has provided an Environmental Statement with supporting appendices and other documentation with the application. We have considered the information provided in support of the DCO proposal and provide more detailed comments here, expanding on the advice provided in our Relevant Representation.</p>	Noted, the Applicant has no further comments on this matter at this time.
0.3	<p>Historic England do not object in principle to the Proposed Development. However, we have concerns that harm to the historic environment may result from its construction, operations and maintenance, and decommissioning.</p>	The Applicant welcomes Historic England's support on the subject matter.
<p><b>Reference</b> 0.4</p>	<p>Our concerns and requirements can be summarised as follows:</p> <ul style="list-style-type: none"> <li>i) Insufficient evaluation has been done in advance of the application for onshore, intertidal and offshore areas. It would therefore be important to secure these works post consent, but pre-construction should consent be granted;</li> <li>ii) The onshore route selection process was determined without due regard to the potential significant effects on heritage; in the case of chosen route LACR01d, this has a greater impact on Archaeological Notification Areas than the original PEIR and SIR routes. The applicant should therefore demonstrate how they can practicably avoid harm to the historic environment, and clearly and convincingly demonstrate provision for retention of significant archaeological remains in situ where possible;</li> <li>iii) There is inaccurate assessment of magnitude of impact and significance of effect. We expect the ES to demonstrate an accurate assessment of magnitude, effects, and levels of harm;</li> <li>iv) The embedded environmental measures do not include convincing and practicable provision to avoid the risk of harm to potentially nationally important archaeological remains. Avoiding harm to nationally important heritage assets should be a primary objective;</li> <li>v) No marine geotechnical data was acquired to inform production of the Environmental Statement and therefore corroboration is not possible with geophysical data for this area known to be of prehistoric archaeological interest. We also do not agree with the assessment provided regarding the historic character of the proposed marine development area;</li> <li>vi) The application includes an Outline Marine Written Scheme of Investigation (WSI) as a mitigation action which should inform archaeological assessment of further survey data to be acquired (should consent be obtained) post-consent. However, we are not satisfied by the</li> </ul>	<p>The Applicant appreciates the summary of concerns and requirements. Responses are provided on a point-by-point basis below, with reference to more detailed responses where appropriate.</p> <ul style="list-style-type: none"> <li>i) The <b>Outline Onshore Written Scheme of Investigation (WSI) [APP-231]</b> sets out the methodological approach for archaeological investigations which ensures further investigation will be undertaken prior to construction. The <b>Outline Onshore Written Scheme of Investigation [APP-231]</b> also sets out the measures that will be taken in response to the disturbance of archaeological remains resulting from work at onshore construction areas and which cannot be avoided through appropriate design measures. Further consultation is currently being undertaken with the West Sussex County Council Archaeologist and Historic England on the <b>Outline Onshore Written Scheme of Investigation [APP-231]</b> and a revised version will be submitted at Examination Deadline 3. Implementation of the WSI will be secured by Requirement 19 of the <b>Draft Development Consent Order [PEPD-009]</b> (updated at Deadline 2 submission). See Applicant's responses to Historic England's comments on the <b>Outline Onshore Written Scheme of Investigation [APP-231]</b> in <b>references 10.1 to 10.11</b>.</li> <li>ii) As described in the response to <b>reference 6.12</b> the Applicant notes that Archaeological Notification Areas (ANA) cover an extensive area of the South Downs and there was no viable connection option which would have avoided ANAs within the South Downs National Park (SDNP). The PEIR route crossed various ANAs with a total length of 4.6km based on the indicative centreline of the cable, whilst the final route for which consent is sought</li> </ul>



Ref	Written Representation Comment	Applicant's Response
	<p>standard of the Outline Marine WSI presented and it is our advice that it should not be accepted as a certified document;</p> <p>vii) The draft DCO includes two (draft) Deemed Marine Licences which include conditions for WSIs. However, the wording requires amendment to ensure implementation in the crucial post-consent and pre-construction phase to adequately inform the planning and engineering design, and delivery of the proposed project;</p> <p>viii) The Development Consent Order should contain requirements to ensure that appropriate safeguards are in place regarding the historic environment, either known or presently unknown as might be encountered in the delivery of this proposed project;</p> <p>ix) The ExA should require the applicant to address how they would avoid harm to the historic environment, and clearly and convincingly demonstrate practical provision for retention of archaeological remains in situ; to enable the ExA to weigh residual harm to the historic environment against the benefits of the proposals, as set out in relevant policy;</p> <p>x) The ExA should require the applicant to seek to enhance or better reveal the significance of identified heritage assets.</p>	<p>covers a total of approximately 3.2km of land within ANAs, representing an overall reduction. Commitments C-79 and C-225 in the <a href="#">Commitments Register [REP1-015]</a> provide for mitigation through design and archaeological recording. Archaeological interest retained in an asset which is actively conserved is more valuable and actively sought through detailed design, which will be informed by evaluation.</p> <p>As described in the response to <b>reference 6.9</b> within longer alternative cable route (LACR)-01d the Applicant would use the flexibility being sought to adjust the circa 40m onshore construction corridor within the approximately 100m wide proposed DCO Order Limits following the completion of further archaeological evaluation works to seek to avoid archaeological remains of high significance.</p> <p>iii) Within <a href="#">Chapter 25: Historic environment, Volume 2</a> of the Environmental Statement (ES) <a href="#">[PEPD-020]</a> the Applicant has followed the EIA Methodology which is consistent with the methodology that was set out within the Scoping Report and is also consistent with the approach which has been used in previous environmental assessments for other recent DCO projects. In all cases the rationale for conclusions on magnitude of impact and significance of effect are explained and justified. See the Applicant's response in <b>References 6.6-6.8</b>.</p> <p>iv) As described in the response to <b>Reference 6.9</b>, the embedded environmental measures for the Proposed Development were established and adapted through the pre-DCO Application consultation and engagement process. Following a meeting on 27 October 2023 with the West Sussex County Council (WSSCC) Archaeologist, commitment C-225 has been updated by the Applicant within the Commitments Register <a href="#">[REP1-015APP-254]</a> (updated at the Deadline 1 submission) and this will be secured within the <a href="#">Outline Onshore Written Scheme of Investigation [APP-231]</a>, which would itself be secured by Requirement 19 of the <a href="#">Draft Development Consent Order [PEPD-009]</a> (updated at Deadline 2 submission). Further consultation is currently being undertaken with the West Sussex County Council Archaeologist and Historic England on the <a href="#">Outline Onshore Written Scheme of Investigation [APP-231]</a> and a revised version will be submitted at Examination Deadline 3. For the marine environment, the embedded environmental measures for the Proposed Development were established and adapted through the pre-DCO Application consultation and engagement process. Further updates in response to Historic England's feedback are captured in the Applicant's response in <b>Reference 5.11</b>. The updates will be included in the <a href="#">Outline Marine Written Schemes of Investigation [APP-235]</a> with a revised version submitted at Examination Deadline 3.</p> <p>v) Please see the Applicants response regarding the Historic Seascape Character (HSC) of the proposed marine development area in <b>References 7.12- 7.19</b>.</p> <p>vi) The <a href="#">Outline Marine Written Schemes of Investigation [APP-235]</a> sets out the methodological approach for archaeological investigations (with the specific details and parameters stated in specific Method Statements which will be agreed with Historic England prior to any works) this ensures that further investigation will be undertaken prior to construction. A revised version will be submitted to the Examination Deadline (secured by Condition 11(2) of the dML, Schedules 11 &amp; 12 of the <a href="#">Draft Development Consent Order</a></p>



Ref	Written Representation Comment	Applicant's Response
		<p><b>[PEPD-009]</b> (updated at Deadline 2 submission). The Applicant's response to detailed comments on the WSI are outlined in <b>11.1 -11.28</b>.</p> <p>vii) Please see the Applicants response regarding the <b>Draft Development Consent Order [PEPD-009]</b> wording of the proposed marine development area in <b>References 12.1- 12.10</b>.</p> <p>viii) This is addressed by the <b>Outline Onshore Written Scheme of Investigation [APP-231]</b> (secured by Requirement 19 of the <b>Draft Development Consent Order (DCO) [PEPD-009]</b>) and the <b>Outline Marine Written Schemes of Investigation [APP-235]</b> (secured by Condition 11(2) of the dML, Schedules 11 &amp; 12 of the <b>Draft Development Consent Order [PEPD-009]</b> (updated at Deadline 2 submission)) with revised versions submitted at Examination Deadline 3.</p> <p>ix) Please see the Applicants response to point iv) above.</p> <p>x) With regard to the onshore historic environment, the installation of an underground cable does not obviously open opportunities for the enhancement of heritage assets. However, the delivery of archaeological works set out in the <b>Outline Onshore Written Scheme of Investigation [APP-231]</b> and in the <b>Outline Marine Written Schemes of Investigation [APP-235]</b> will produce archaeological information which will help to 'better reveal' the archaeological resource in this area.</p>
0.5	We are engaging with the applicant and their heritage consultants regarding the proposal, to see how these matters will be dealt with, and will provide updates as appropriate to the ExA during the course of the examination.	Noted, the Applicant has no further comments on this matter at this time.
0.6	The local authority heritage advisors for West Sussex County Council and the South Downs National Park Authority are the Planning Inspectorate's primary advisors on onshore non-designated heritage assets. However, due to the potential for non-designated heritage assets of archaeological interest to be present which may be demonstrably of equivalent significance to Scheduled Monuments, we will provide comment as appropriate on the issue. Regarding the marine area, as could be subject to this development, Historic England is the primary advisor for any aspect of the historic environment as defined by the Marine and Coastal Access Act 2009, the UK Marine Policy Statement and published English marine plans.	Noted, the Applicant has no further comments on this matter at this time.
<b>1. Introduction</b>		
1.1	1.1 This Written Representation sets out the views of Historic England on the proposed Development Consent Order (DCO) application made by Rampion Extension Development (RED) for the proposed Rampion 2 Offshore Wind Farm. We understand from the application documents that the array area for Rampion 2 would be located adjacent to the existing Rampion offshore wind farm (Rampion 1) in the English Channel and located between 13km and 26km off the Sussex Coast with an array area of 160km <sup>2</sup>	The Applicant can confirm that the details of the Proposed Development provided by Historic England are correct.
1.2	1.2 The application explains that the size and capacity of Wind Turbine Generators (WTGs) for the Proposed Development will be determined during the final project design stage i.e.	The Applicant can confirm that the details of the Proposed Development provided by Historic England are correct.

Ref	Written Representation Comment	Applicant's Response
	<p>post consent, should permission be obtained and that this Environmental Statement (ES) assess a maximum design scenario for the WTGs as a “worst case” scenario. The ES describes two options:</p> <ul style="list-style-type: none"> <li>• 90 “smaller WTG type” (285m blade tip height); and</li> <li>• 65 “larger WTG type” (325m blade tip height).</li> </ul>	
1.3	1.3 We note that Rampion 1 WTGs have a blade tip height of 140m	The Applicant can confirm that the details of the Rampion 1 project provided by Historic England are correct.
1.4	1.4 Electricity cables will connect the WTGs to up to three offshore substations, with interconnectors between the substations and up to export four cables to transfer the High Voltage Alternating Current (HVAC) electricity to a proposed landfall location at Climping (Arun District, West Sussex).	The Applicant can confirm that the details of the Proposed Development provided by Historic England are correct.
1.5	1.5 The submitted application includes an Environmental Statement (ES), dated August 2023, produced to satisfy the requirements of Environmental Impact Assessment (EIA) requirements, under the terms of European Union Directive 2011/92/EU (as amended by Directive 2014/52/EU) on the assessment of the effects of certain public and private projects on the environment (EIA Directive). The EIA Directive is transposed into English law for Nationally Significant Infrastructure Projects (NSIPs) by The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017	The Applicant can confirm that the details of the Proposed Development provided by Historic England are correct.
1.6	1.6 The Historic Buildings and Monuments Commission for England (HBMCE), known as Historic England, is the Government’s adviser on all aspects of the historic environment in England including historic buildings and areas, archaeology and historic landscape; and a duty to promote public understanding and enjoyment. Historic England is an executive Non-Departmental Public body sponsored by the Department for Culture, Media and Sport (DCMS) and we answer to Parliament through the Secretary of State DCMS. Our remit in conservation matters intersects with the policy responsibilities of a number of other government departments particularly those with responsibilities for land use planning matters. The National Heritage Act (2002) gave Historic England responsibility for maritime archaeology in the English area of the UK Territorial Sea (i.e. English Inshore Marine Planning Area). We also provide our advice in reference to the provisions for marine planning and licensing as defined by the Marine and Coastal Access Act 2009.	Noted, the Applicant has no further comments on this matter at this time.
1.7	1.7 In our Section 56 Relevant Representation (dated 6th November 2023) we noted that this development has the potential to impact upon the historic environment (onshore and offshore), and that this impact could be significant in relation to a number of heritage receptors and in relation to EIA policy.	The Applicant has provided a response to the concerns raised in Historic England’s Relevant Representations, please see <a href="#">Applicant's Response to Relevant Representations [REP1-017]</a> submitted at Deadline 1.
<b>2 Comments on Environmental Statement: Volume 2, Chapter 4 - The Proposed Development (Document Reference: 6.2.4) PINS Reference: APP-045</b>		
2.1	2.1 We note the detail provided regarding the use of a design envelope approach (known as Rochdale Envelope) that should identify key design assumptions, so that the environmental assessment retains flexibility to accommodate further refinement (should the proposed project proceed). Furthermore, we note the explanation that as part of the Rampion 2 design process, a number of embedded environmental measures have been adopted to reduce the potential for environmental impacts and effects with a commitment to implementing these measures in the design of Rampion 2, which should have an operational lifetime of 30 years.	The Applicant can confirm that the details of the Proposed Development provided by Historic England are correct.

Ref	Written Representation Comment	Applicant's Response
	<p>It is of interest to note that a minimum turbine spacing at 950m represents the minimum spacing for the Smaller WTG Type and a minimum of 1,130m for larger WTGs (Table 4-2), as this means potential for greater impact on the seabed. In reference to WTG installation, we understand that the vessel likely to be used is a jack-up vessel (JUV) with up to six legs, each taking up an area of 250m<sup>2</sup>.</p>	
2.2	<p>2.2 Paragraph 4.3.16 describes the WTG foundation types that could be used, subject to completion of geotechnical investigations, identification of environmental sensitivities and final WTG design selected. However, it is important to note that more than one type of foundation design could be used which are presently selected, as the type of foundation will have a bearing on impacts:</p> <ul style="list-style-type: none"> <li>• monopiles;</li> <li>• multi-leg foundations with pin piles; and</li> <li>• multi-leg foundations with suction buckets.</li> </ul>	<p>The Applicant can confirm that the details of the Proposed Development provided by Historic England are correct.</p>
2.3	<p>2.3 Paragraph 4.3.18 highlights that final development planning and design will be informed by geophysical and geotechnical surveys conducted before installation. The results of this survey work should inform cable route selection and micro-siting of WTGs in reference to identified debris, boulders, archaeological features, Unexploded Ordnance (UXO) and sediment depth. Paragraph 4.3.26 (and Table 4- 5) describe and quantify the use of pre-lay grapnel runs and clearance areas required, which will necessitate the application and adhering to any archaeological reporting protocol developed and agreed for the proposed development.</p>	<p>The Applicant can confirm that the details of the Proposed Development provided by Historic England are correct.</p>
2.4	<p>2.4 Paragraph 4.3.34 explains that the dimensions of monopiles used will depend on the size of the WTG selected, as well as other factors inclusive of ground conditions, although the estimated maximum monopile diameter should be 13.5m with a maximum embedment depth of 60m (i.e. for the larger WTG type). However, if multi-leg foundations with pin piles are selected the maximum diameter should be 4.5m (Table 4-7) and if multi-leg foundations with suction buckets are deployed, the maximum diameter is stated as 15m with 25m seabed penetration. The proposed three offshore substations are described as likely to require either monopile (13.5m maximum diameter) or multi-leg foundations with pin piles (4.5m maximum diameter).</p>	<p>The Applicant can confirm that the details of the Proposed Development provided by Historic England are correct.</p>
2.5	<p>2.5 We note that array cabling between WTGs and offshore substations and interconnector cabling between offshore substations should be buried to 1m. The four electricity export cables are described as requiring burial of 1-1.5m. Paragraph 4.3.53 acknowledges that "...exact routing of the export cables within the offshore cable corridor will be determined during the detailed design of the Proposed Development..." we appreciate that attention given to consideration of seabed conditions and "environmental sensitivities", which we consider to be inclusive of known and presently unknown elements of the historic environment, as might be revealed by pre-commencement surveys. It is therefore relevant that the attention given to optimising pre-commencement surveys prior to selection of installation technique (e.g. ploughing, jetting, trenching, or a combination of these techniques) best supports archaeological analysis and interpretation to actively inform cable route selection. Determining the proximity of cable installation to features of known or possible archaeological interest is particularly relevant considering the statement in paragraph 4.3.66 that "...approximately 20% of the array cable may require protection</p>	<p>Noted, the Applicant has no further comments on this matter at this time.</p>

Ref	Written Representation Comment	Applicant's Response
	measures". Section 4.4 explains that at landfall, between Middleton-on-Sea and Littlehampton (Climping), the export cables are to be Horizontally Directionally Drilled (HDD) from offshore to onshore i.e. under the foreshore (as illustrated in Graphic 4-17 and described in paragraph 4.4.10).	
2.6	2.6 The overall operation and maintenance strategy, in paragraph 4.8.10, explains that cable surveys and foundation inspections will initially be undertaken approximately every two years. However, if the infrastructure is considered stable then the survey interval may increase. At decommissioning (Section 4.9), we note that all Rampion 2 infrastructure above the seabed, but inclusive of cabling, will be completely removed. Foundations within the seabed such as piles will not be removed due to the depth of embedment. If suction buckets are used, removal might be attempted.	The Applicant can confirm that the details of the Proposed Development provided by Historic England are correct.
<b>3. Comments on Environmental Statement: Volume 2, Chapter 5 - Approach to the EIA (Document Reference: 6.2.5) PINs Reference: APP-046</b>		
3.1	3.1 We appreciate that this Nationally Significant Infrastructure Project (NSIP) is subject to an EIA exercise, produced in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017, as necessary to support determination of the Development Consent Order (DCO) application. In particular, the ES should explain the predicted likely significant effects (positive and negative) and the scope for avoiding, preventing, reducing, and if possible, offsetting them. We appreciate that this assessment will seek to identify likely significant effects associated with the proposed project during the construction, operation and maintenance, and decommissioning phases. We also note the attention given to the use of a Commitments Register which is to identify environmental measures that should be incorporated into the design and referred to as "embedded environmental measures" or "primary mitigation" such as avoidance strategies.	Noted, the Applicant welcomes Historic England's support on the subject matter.
3.2	3.2 Table 5-3 (EPP Meetings held to date), the following errors are identified: <ul style="list-style-type: none"> <li>• Evidence Plan Process: Seascope (SLVIA) and Marine Archaeology Expert Topic Group Meeting held on 16/06/2022 was omitted;</li> <li>• Additional ETG meeting for onshore historic environment and LVIA held on 10/11/2022 – We have no record of attending this meeting;</li> <li>• Additional ETG meeting for onshore LVIA and Historic Environment on 01/03/2023 was cancelled; and</li> <li>• Additional ETG meeting for onshore LVIA and Historic Environment on 14/06/2023 was attended by Historic England</li> </ul>	<p>The Applicant welcomes these points from Historic England. A full list of the Evidence Plan Process Meetings and the minutes for the meetings specified can be found in the <a href="#">Evidence Plan (Part 1 of 11) [APP-243]</a>.</p> <ul style="list-style-type: none"> <li>• Seascope (SLVIA) and Marine Archaeology Expert Topic Group Meeting held on 16 June 2022, page 649, <a href="#">Evidence Plan (Part 1 of 11) [APP-243]</a>;</li> <li>• Additional ETG meeting for onshore historic environment and LVIA held on 10 November 2022, page 621, <a href="#">Evidence Plan (Part 1 of 11) [APP-243]</a>;</li> <li>• Additional ETG meeting for onshore LVIA and Historic Environment on 01 March 2023, page 558, <a href="#">Evidence Plan (Part 1 of 11) [APP-243]</a>; and</li> <li>• Additional ETG meeting for onshore LVIA and Historic Environment on 14 June 2023, page 738, <a href="#">Evidence Plan (Part 1 of 11) [APP-243]</a>.</li> </ul>
<b>4. Comments on Environmental Statement: Volume 2, Chapter 15 - Seascope, landscape, and visual impact assessment (Document Reference: 6.2.15) PINs Reference: APP-056</b>		
4.1	4.1 Paragraph 15.9.1 we note that the construction of the offshore elements of Rampion 2 have the potential to result in significant effects on the perceived seascope character of Marine Character Areas (MCAs): MCA05, MCA06, MCA07 and MCA08. In particular that MCA08 (South Downs Maritime) is described as "Sensitivity to Change: High".	The Applicant can confirm that the details provided by Historic England are correct.



Ref	Written Representation Comment	Applicant's Response
<b>5. Comments on Environmental Statement: Volume 2, Chapter 16 – Marine Archaeology (Document Reference: 6.1.14) PINs Reference: APP-057</b>		
5.1	5.1 It is important to note that referral to EN-3 should be to the final version published in November 2023. For example, EN-3 paragraph 2.8.315 sets out that sufficient and adequate mitigation is applicable as much to known wreck (of historic environment interest) as for discoveries that may occur when high resolution surveys are commissioned, should consent be obtained.	Section 104 of the 2008 Planning Act outlines that the DCO Application must be decided in accordance with the relevant National Policy Statements (NPSs) (in this case: NPS EN-1 (Department of Energy and Climate Change (DECC), 2011a), NPS EN-3 (DECC, 2011b) and NPS EN-5 (DECC, 2011c). NPS EN-1 (Department for Energy Security and Net Zero (DESNZ), 2023a), NPS EN-3 (DESNZ, 2023b) and NPS EN-5 (DESNZ, 2023c), which came into force in 2024, will be referred to as relevant considerations in the decision-making process unless (inter alia) the adverse impacts of a proposal would outweigh its benefits, however NPSs EN-1 and EN-3 (2011) which were extant at the time of submission of the Development Consent Order (DCO) Application and against which it will be tested. The variance in the NPS 2011 and 2023 versions of the EN-1 and EN-3 are detailed in a specific project document ( <a href="#">Applicant's National Policy Statement Tracker</a> (document reference 8.38).
5.2	5.2 EN-3 Paragraph 5.9.13 (published November 2023) encourages the applicant to "...prepare proposals which can make a positive contribution to the historic environment..." however, the response offered by the Applicant is solely limited to delivery of "embedded mitigation measures" and that if conducted could make a contribution. The Applicant is therefore not demonstrating a proactive attitude in delivering wider understanding about our shared historic environment, as is likely to be encountered in the proposed development area.	National Policy Statements (NPSs) EN-1 and EN-3 (2011) which were extant at the time of submission of the Development Consent Order (DCO) Application and against which it will be tested. The <a href="#">Chapter 16: Marine archaeology, Volume 2</a> of the Environmental Statement (ES) [APP-057] relevance to assessment in relation to NPS EN-3 Paragraph 5.9.13 Tables 16-2 and 16-3 outlines that positive contributions to knowledge and enhancement of understanding of the historic environment can be realised through data gathering, interpretation and publication all of which are secured through the written schemes of investigations secured through the <a href="#">Draft Development Consent Order [PEPD-009]</a> (requirement 19 onshore and condition 11(2) of the deemed marine licences. The works will contribute to current research frameworks in the region and will be further detailed in forthcoming method statements. No changes will be made to the text in <a href="#">Chapter 16: Marine archaeology, Volume 2</a> of the ES [APP-057].
5.3	5.3 EN-3 Paragraph 5.9.16 (published November 2023) explains that "...retaining the heritage asset, and therefore the ability to record evidence of the asset should not be a factor in deciding whether such loss should be permitted..." However, the Applicant in response only acknowledges action that could be taken to avoid all known marine heritage receptors and does not adequately address the need for archaeological investigations to be completed ahead of development commencing. Investigations are required to ascertain the presence of presently unknown receptors, so that in-situ protection measures are applied accordingly. Therefore, attention is now required regarding the revised text within paragraphs 5.9.19 and 5.9.20 within EN-1 published November 2023. The statement made by the Applicant about reliance on a protocol for discoveries does not provide mitigation, as reflected in the text of published EN-1 regarding prevention of loss occurring. It is crucial that the measures are in place prior to "project works" commencing (as described by the Applicant.	The EN-1 and EN-3 (2011) which were extant at the time of submission of the Development Consent Order (DCO) Application and against which it will be tested. The <a href="#">Chapter 16: Marine archaeology, Volume 2</a> of the Environmental Statement (ES) [APP-057] outlines that the commitment to avoid all known marine heritage receptors and to further investigate the area of impacts ensuring that unknown receptors are located, and impact mitigated will ensure preservation <i>in situ</i> . Where items might be removed from the seabed, conservation strategies will be clearly outlined in the relevant method statements produced ahead of any such archaeological works. Embedded environmental measures C-58 and C-59 clearly outline the how the Applicant has and continues to undertake archaeological investigations during construction. The Written Schemes of Investigation which detail these mitigations are secured through condition 11(2) of each of Schedules 11 (generation assets) and 12 (transmission assets) of the <a href="#">Draft Development Consent Order [PEPD-009]</a> .  Table 16-3 within <a href="#">Chapter 16: Marine archaeology, Volume 2</a> of the ES [APP-057] is being reviewed, taking into account Historic England's comments.
5.4	5.4 Paragraph 5.9.21 (EN-1 published November 2023) is focussed on undiscovered heritage assets as might be discovered and the requirement for appropriate procedures for identification and treatment "discovered during construction" therefore a WSI for "construction" phase is required. Furthermore, it seems that the proposed mitigation is not	The EN-1 and EN-3 (2011) which were extant at the time of submission of the Development Consent Order (DCO) Application and against which it will be tested. Relevance to assessment in relation to EN-3 Paragraph 5.9.19 within the <a href="#">Chapter 16: Marine archaeology, Volume 2</a> of the Environmental Statement (ES) [APP-057] states that all

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	<p>directly aligned with the NPSs (published November 2023). For example, the use of a protocol reporting system only facilitates communication – the damage/destruction will have already occurred and therefore not mitigated.</p>	<p>embedded mitigation measures apply. The Applicant acknowledges that damage/destruction to heritage assets is a possibility. However, the Protocol For Archaeological Discoveries (PAD) does not replace the process of archaeological assessment and evaluation (Embedded environmental measures C-59 and C-60, secured through the marine written scheme of investigations and condition 11(2) of each of schedules 11 and 12 of the <a href="#">Draft Development Consent Order [PEPD-009]</a>), but rather acts as a safety net in the event of unexpected discoveries during the course of works. No changes will be made to the text in <a href="#">Chapter 16: Marine archaeology, Volume 2</a> of the ES <a href="#">[APP-057]</a>.</p>
5.5	<p>5.5 Paragraph 16.6.13-14 explains that corroboration between UK Hydrographic Office (UKHO) and the National Record of the Historic Environment (NRHE) records and geophysical survey data indicate the existence of 28 known wreck sites. However, it is important to highlight that there are an additional 28 recorded vessel losses within the study area which are not associated with an identified shipwreck. Plus, there are “seabed features” which potentially could be correlated with recorded losses identified as anomalies during the archaeological assessment of geophysical data. It is also entirely possible that these anomalies represent previously unknown wrecking events, and which could be of significant archaeological interest (as acknowledged in paragraph 16.6.16). There are also 17 reported losses of aircraft within the study area with all but one crash location occurring during the Second World War. We appreciated the attention given to 20 records classed as fishermen’s fasteners recorded by the NRHE (paragraph 16.6.18) and that action has been taken to cross reference to anomalies identified from geophysical survey.</p>	<p>The Applicant welcomes Historic England’s support on the subject matter.</p>
5.6	<p>5.6 Paragraph 16.6.20 briefly describes the geophysical data commissioned for this proposed project, which is described as “good” quality and therefore considered suitable for archaeological interpretation. The detail of Table 16-13 is useful in that 30 anomalies of “high” archaeological potential are identified as well as other anomalies considered to be “medium” or “low” potential. However, it is important to make clear that the inclusion of records in paragraph 16.6.22 for known losses, such as Gerlen sunk on 19th July 1972 or Ny Eeasteyr, sunk on 8th December 1980 are not of historic environment interest and should not be included here. It is also noted that information is included here, such as for MA005, MA0021 and MA0025 which describes what could be a ship’s hull, but for which no corresponding UKHO record references are provided. Furthermore, paragraph 16.6.24 seems to suggest that material already identified as boulders or modern debris are included as “low” potential anomalies; such detail should not be included here.</p>	<p>Paragraph 16.6.22 within the <a href="#">Chapter 16: Marine archaeology, Volume 2</a> of the Environmental Statement (ES) <a href="#">[APP-057]</a> is being reviewed, taking into account Historic England’s comments.</p> <p>Paragraph 16.6.24 describes the low potential archaeological anomalies as possible modern fishing debris or boulders, however as this assessment has not been confirmed by ground truthing they are kept as features of archaeological potential to be avoided until such time that their archaeological potential can be ruled out through further investigation.</p>
5.7	<p>5.7 Paragraph 16.6.27 requires close attention to ensure alignment with national policy. The action to prepare a survey specific method statement should not be prepared “Prior to any works”, but there should be a clear commitment and obligation that any such Method Statement is prepared to inform the planning and delivery of a geotechnical survey campaign, as should be conducted “prior to any works”. We will therefore provide further comments as to the suitability of the quoted embedded environmental measures, such as C-59, which we understand is reflected through draft DCO deemed Marine Licence conditions.</p>	<p>Paragraph 16.6.27 within the <a href="#">Chapter 16: Marine archaeology, Volume 2</a> of the Environmental Statement (ES) <a href="#">[APP-057]</a> is being reviewed, taking into account Historic England’s comments.</p> <p>Please note that condition 11(3) of the <a href="#">Draft Development Consent Order [PEPD-009]</a> confirms that pre-commencement archaeological investigations and pre-commencement material operations which involve intrusive activities must only take place in accordance with a specific written scheme of investigation (which must accord with the details set out in the outline marine written scheme of investigation) which has been submitted to and approved by the MMO.</p>



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5.8	<p>5.8 We note that paragraph 16.6.36 explains how a prehistoric channel system (Ref: MA3001) of possible archaeological interest identified through the studies conducted for the Rampion 1 development, extends into the Rampion 2 survey area. However, Table 16-14 is described as a “preliminary deposit model” but doesn’t appear to include detail as alluded to in paragraph 16.6.41 regarding peat exposures, which could be of significant geo-archaeological interest.</p>	<p>Table 16-14 within the <a href="#">Chapter 16: Marine archaeology, Volume 2</a> of the Environmental Statement (ES) [APP-057] is being reviewed, taking into account Historic England’s comments.</p>
5.9	<p>5.9 “Historic Seascape Characterisation” (paragraphs 16.6.43 to 16.6.53), although reference is made to Chapter 15 (Seascape and Landscape) the consideration of “current seascape” requires attention. It is our advice that MCAs should also take account of Seascape Character Assessment (as used in English marine planning), which incorporates cultural characteristics (as defined by the Marine and Coastal Access Act 2009); this is relevant when considering the capacity of seascapes to accommodate change. It is therefore the case that the statement in paragraph 16.6.47 is not directly demonstrated by the detail presented. For example, in ES Chapter 15, MCA08 (South Downs Maritime) is described in reference to Sensitivity to Change as “High”. Furthermore, it appears that the focus for describing historic character seems to be primarily based on public perception (paragraph 16.6.50). However, the use of Historic Seascape Characterisation (HSC) within this chapter should also consider perceptions of change in identified characteristics in reference to what could be introduced by the proposed RED development project.]</p>	<p>Paragraphs 16.6.43 to 16.6.53 detailing the Historic Seascape Characterisation (HSC) within the <a href="#">Chapter 16: Marine archaeology, Volume 2</a> of the Environmental Statement (ES) [APP-057] is being reviewed, taking into account Historic England’s comments. All assessment of the current seascape should be accessed through <a href="#">Chapter 15: Seascape, landscape and visual impact assessment, Volume 2</a> of the ES [APP-056].</p>
5.10	<p>5.10 We note that the worst-case scenario presented in Table 16-15 is for 65 “larger type WTGs” differs to the assumption made in the Outline WSI (Doc Ref: 7.1.3, Application Ref: APP-235) which is 90 “smaller type WTGs”.</p>	<p>The assessment has used the 65 larger type WTGs as the worst-case scenario, as the seabed disturbance for this would be greater for this scenario than the 90 smaller type WTG. The description of the Proposed Development provided in Section 3 is taken from <a href="#">Chapter 4: The Proposed Development, Volume 2</a> of the ES [APP-045]. The worst-case scenarios for each assessment is explained in detail in <a href="#">Pre-Exam Procedural Deadline Submission - 8.23 - Examining Authority requested additional information - Revision A [PEPD-041]</a>.</p>
5.11	<p>5.11 Table 16-16 Embedded environmental measures – we offer the following comments:</p> <ul style="list-style-type: none"> <li>• C-57 – the stage of application of the Marine Written Schemes of Investigation (WSI) to be developed in accordance with the Outline WSI must be clearly explained, as well as the methodological approaches to be used for any monitoring and assessment work (vis. EN-1 published November 2023, paragraph 5.9.18);</li> <li>• C-58 – any offshore geophysical surveys including Unexploded Ordnance (UXO) surveys undertaken during the life of the project should be subject to archaeological review in accordance with an agreed WSI delivered by the Consent Holder’s retained professional archaeological advice service;</li> <li>• C-59 – Offshore geotechnical surveys prior to construction should be undertaken following early discussions with Historic England utilising an Outline WSI which will support production of a geoarchaeological deposit model following available guidance;</li> <li>• C-60 – Clarification is required whereby any intrusive activities undertaken during the life of the project will be routed and micro-sited to avoid not only heritage receptors identified pre-construction, but in accordance with archaeological assessment procedures set out in a “Marine WSI”, should the project encounter presently unknown heritage receptors (vis. risks associated with the maximum design scenario), as confirmed in EN-3 (published November 2023), paragraph 2.8.165.</li> </ul>	<p>Updates to the Embedded environmental measures in line with Historic England feedback received at Scoping and PEIR were presented to Historic England at ETG meetings on the 22 March 2022 and 16 June 2022 respectively. Suggestions for further updates in line with Historic England comments are in bold below:</p> <p><i>“C-57: Marine Written Schemes of Investigation (WSI) will be developed in accordance with the Outline Marine Written Schemes of Investigation (WSI) (Application Document Reference 7.13). The Marine WSI will <b>outline-detail</b> environmental measures including the archaeological exclusion zones (AEZ), the implementation of a Protocol for Archaeological Discoveries in accordance with ‘Protocol for Archaeological Discoveries: Offshore Renewables Projects’ (The Crown Estate, 2014) <b>and methodologies</b> for future monitoring, <b>survey</b> and assessment requirements.</i></p> <p><i>C-60: All intrusive activities undertaken during the life of the project will be routed and micro-sited to avoid any identified marine heritage receptors <b>pre-construction</b>, with Archaeological Exclusion Zones (AEZs) (buffers) as detailed in the Outline Marine Written Schemes of Investigation (WSI) (Application Document Reference 7.13) unless other mitigation is agreed with Historic England as per the Marine WSI. Micrositing and AEZs will</i></p>

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	<ul style="list-style-type: none"> <li>• C-277 – any post construction monitoring plan, as well as identifying anomalies, areas or sites of archaeological interest and significance, should outline how post-construction monitoring campaigns will be conducted in accordance with a stage-specific WSI to determine direct or indirect impacts to marine heritage receptors.</li> </ul>	<p><i>further be applied to not yet undiscovered marine archaeology receptors should they be located.</i></p> <p><i>C-277: A post-construction monitoring plan as per Marine Written Schemes of Archaeological Investigation (WSI) will be produced. The post-construction monitoring plan will recommend areas or sites of <b>high archaeological interest or significance for monitoring</b> and outline how post-construction monitoring campaigns will collect, assess and report on changes <b>or impacts</b> to marine heritage receptors that may have occurred during the construction phase.</i></p> <p>C-58 and C-59 together with the WSI are considered to capture the detail required for the successful implementation of the mitigation without further changes at this stage.”</p>
5.12	<p>5.12 Paragraph 16.1.3 details that 30 “high potential” and 22 “medium potential” anomalies have been assigned Archaeological Exclusion Zones (AEZs) and that of the combined total of proposed AEZs, 28 locations are identified known wrecks and obstructions. These wrecks and obstructions have been assigned 100m AEZs and for records for which there is no corroboration with geophysical survey data, “precautionary” 50m radius AEZs are proposed. We are prepared to accept this preliminary approach subject to subsequent higher resolution investigation.</p>	<p>Noted, the Applicant has no further comments on this matter at this time.</p>
5.13	<p>5.13 Paragraph 16.8.4 provides helpful acknowledgement that consideration of “likely significant effects” in EIA terms used in this application is about the impact on the significance of heritage assets inclusive of cumulative, transboundary, inter-related and residual effects. We add that Table 16-17 (Criteria for establishing the level of receptor sensitivity) implies that only in situ archaeological finds are of very high/high sensitivity. An exemption should be made for Palaeolithic finds which are rarely in situ but almost always of very high/high sensitivity.</p>	<p>Table 16-17 within the <a href="#">Chapter 16: Marine archaeology, Volume 2</a> of the Environmental Statement [APP-057] is being reviewed, taking account of Historic England’s comments.</p>
5.14	<p>5.14 Table 16-18 (Criteria for magnitude of impact) – it would be helpful if the Applicant could demonstrate how a “major” magnitude of impact using criteria “beneficial” will be achieved through delivery of embedded mitigation measures (e.g. Table 16-16), as explained within EN-1 (November 2023), paragraph 5.9.13.</p>	<p>Table 16-18 within the <a href="#">Chapter 16: Marine archaeology, Volume 2</a> of the Environmental Statement [APP-057] is being reviewed, taking account of Historic England’s comments.</p>
5.15	<p>5.15 Section 16.9 (Assessment of Effects: construction phase) – in reference to removal of sediment containing undisturbed archaeological contexts, we agree with the possible impacts (negative i.e. exposure and positive i.e. burial), but the assumption made in paragraph 16.9.4 that after application of embedded environmental measures the magnitude of impact is considered “negligible” is entirely predicated on effective implementation. It is relevant to highlight EN-1 (published November 2023), paragraph 5.9.16.</p>	<p>Noted, the Applicant has no further comments on this matter at this time.</p>
5.16	<p>5.16 Tables 16-20 to 16-24 – we do not agree with the identification that 30 “High” potential anomalies should be afforded receptor sensitivity (value) of “Medium”; as this determination does not seem to be aligned with consideration afforded to heritage assets as set out in EN-1 (published November 2023), paragraph 5.9.6 and EN-3 (published November 2023), paragraph 2.8.315.</p>	<p>Tables 16-20 to 16-24 within <a href="#">Chapter 16: Marine archaeology, Volume 2</a> of the Environmental Statement [APP-057] are being reviewed, taking account of Historic England’s comments.</p>

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5.17	5.17 Paragraph 16.9.54 – we do not agree with the approach adopted by the Applicant for historic characterisation, which we do not see as aligned with available guidance. For example, paragraph 16.9.56 describes the attention given to public perception of seascape, which together with the conclusions offered in Table 16-25 (Changes to HSC) doesn't appear to correlate with the assessment approach detailed in Chapter 15 for MCAs (e.g. MCA08). Furthermore, as there is no published methodological approach to determine sensitivity in relation to HSC, we cannot concur with the appropriateness or accuracy of the determination of significance of residual effect in paragraphs 16.9.62 and 19.9.63.	Section 16.9 and Table 16-25 detailing the Historic Seascape Characterisation (HSC) within the <b>Chapter 16: Marine archaeology, Volume 2</b> of the Environmental Statement <b>[APP-057]</b> are being reviewed, taking account of Historic England's comments.
5.18	5.18 Section 16.10 (Assessment of effects: Operation and Maintenance phase) – regarding the assumptions made about the magnitude of impact of maintenance activities relating to Rampion 2 on marine heritage receptors after the embedded environmental measures (Table 16-16), its consideration as “negligible” is again predicated on effective and enforceable implementation of mitigation conditions.	Noted, the Applicant has no further comments on this matter at this time.
5.19	5.19 Tables 16-26 to 16-29 – we do not agree with the identification that 30 “High” potential anomalies should be afforded receptor sensitivity (value) of “Medium”; this determination does not appear to be aligned with consideration afforded to heritage assets as set out in EN-1 (published November 2023), paragraph 5.9.6 and EN-3 (published November 2023), paragraph 2.8.315.	Tables 16-26 to 16-29 within the <b>Chapter 16: Marine archaeology, Volume 2</b> of the Environmental Statement <b>[APP-057]</b> are being reviewed, taking account of Historic England's comments.
5.20	5.20 Changes to HSC as a result of operation and maintenance vessel activities and the presence of the completed wind farm – we do not concur with the conclusions drawn which use HSC to contextualise a regional approach (paragraph 16.10.44) with the statement made in paragraph 16.10.48 that HSC equates to a marine heritage receptor for which an impact can be determined.	The <b>Chapter 16: Marine archaeology, Volume 2</b> of the Environmental Statement <b>[APP-057]</b> are being reviewed, taking account of Historic England's comments.
5.21	5.21 Table 16-30 (Marine heritage receptor changes to the Historic Seascape Characterisation (HSC) (Operation and Maintenance) – consideration of changes in perception appear to be duplicated from consideration of HSC during construction. It also seems that detail could have been added about decommissioning given estimated length of operational of Rampion 2 e.g. 30 years, by which time there is likely to be character association with renewable energy therefore decommissioning and removal could equate to major change.	Table 16-30 within the <b>Chapter 16: Marine archaeology, Volume 2</b> of the Environmental Statement <b>[APP-057]</b> is being reviewed, taking account of Historic England's comments.
5.22	5.22 Section 16.12 Assessment of cumulative effects – the text states that the following projects: IFA2; Cross Channel Fibre; and Portsmouth-Ryde BT that the environmental assessments produced for these projects were not available or did not contain marine archaeology impact assessment. However, we provided advice for all three of these development projects, summarised here: <ul style="list-style-type: none"> <li>• IFA2 produced a combined marine archaeological desk-based assessment and review of marine survey data (document dated May 2016);</li> <li>• CrossChannel Fibre Limited Report Identifying Additional Studies included archaeology (document dated March 2020);</li> <li>• BT Isle of Wight Cable Project MOP &amp; Environmental Assessment included archaeology (document dated May 2014).</li> </ul>	Section 16.12 within the <b>Chapter 16: Marine archaeology, Volume 2</b> of the Environmental Statement <b>[APP-057]</b> is being reviewed, taking account of Historic England's comments. The Applicant kindly requests copies of the documents mentioned, if available.
5.23	5.23 Table 16-35 – We appreciate that “...archaeological input is of paramount importance throughout the life of the project.” Furthermore, the assumption that “cumulative significance	Table 16-35 within the <b>Chapter 16: Marine archaeology, Volume 2</b> of the Environmental Statement <b>[APP-057]</b> is being reviewed, taking account of Historic England's comments.



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	of effect during the construction phase is not significant, in EIA terms" is predicated on effective implementation and enforcement of consent requirements. It must also be made clear that in instances where archaeological materials are disturbed, damaged and/or destroyed by the development project cannot be subject to "mitigation".	
5.24	5.24 Paragraph 16.12.14 – although there might not be any "...spatial overlap with aggregate production areas and the Rampion 2 Assessment Boundary" no consideration is given to the impact to the target resource (palaeo-channels) through dredging or restricted access and disturbance from construction of an offshore wind farm. Therefore, the statement made in paragraph 16.12.17 cannot be substantiated.	Paragraph 16.12.14 and 16.12.17 within the <a href="#">Chapter 16: Marine archaeology, Volume 2</a> of the Environmental Statement (ES) [APP-057] are being reviewed, taking account of Historic England's comments.
5.25	5.25 Paragraph 16.12.19 – the text states that "No direct cumulative impacts on marine heritage receptors within the Rampion 2 Assessment Boundary are expected; the two wind farms (Rampion 1 and Rampion 2) are in close proximity but do not have spatially overlapping Assessment Boundaries". However, this does not appear to take into account the possible impact to prehistoric landscape features that cross the two development areas.	Paragraph 16.12.19 within the <a href="#">Chapter 16: Marine archaeology, Volume 2</a> of the Environmental Statement (ES) [APP-057] is being reviewed, taking account of Historic England's comments.
5.26	5.26 Table 16-37 – Embedded mitigation and avoidance of significant impact is only possible if materials are first discovered and left undisturbed in-situ. Therefore, to substantiate what mitigation might be able to deliver, this table necessitates effective implementation of all archaeological led assessments conducted and completed to inform development planning in advance of any commencement of construction related activities	Noted, the Applicant has no further comments on this matter at this time.
<b>6. Comments on Environmental Statement: Volume 2, Chapter 25 - Historic Environment (Document Reference: 6.2.25) PINs Reference: APP-066</b>		
6.1	6.1 Page 5, Baseline Environment: This section notes that "within the proposed DCO Order Limits there are no designated heritage assets", however document 6.4.25.1 (ES Volume 4, Appendix 25.1: Gazetteer of onshore heritage assets, Table 1-1) notes that scheduled monument 1005828 (medieval earthworks E and SE of St Mary's church) is in the DCO Order limit, as is Sullington Conservation Area.	The text referred to on page 5 is an error and the correction will be provided in the Errata (to be submitted at Deadline 3). Section 25.6 Baseline conditions in <a href="#">Chapter 25: Historic environment, Volume 2</a> of the Environmental Statement (ES) [PEPD-020], correctly identifies that the proposed DCO Order Limits intersects with scheduled monument 1005828 (medieval earthworks E and SE of St Mary's church) and Sullington Conservation Area. This correct baseline information was used to inform the assessment of effects in <a href="#">Chapter 25: Historic environment, Volume 2</a> of the ES [PEPD-020]. No change is required to the assessment.
6.2	6.2 There are also other scheduled monuments identified in Table 1-1 with a distance of 0km from the DCO Order limit (i.e. directly abutting it); Muntham Court Romano British Site (1005850), Group of four bowl barrows at the Chantry Post (1015713), and also Lyminster and Washington Conservation Areas. The scheduled prehistoric flint mine and part of a round barrow cemetery at Blackpatch (monument 1015880) is also only 5m from the DCO Order limit.	The Applicant notes Historic England's comment and has no further comment at this time.
6.3	6.3 Given the high potential for further archaeological remains in close proximity to these scheduled monuments, which might therefore fall within the DCO Order Limits, it would be helpful to acknowledge this. This ES section should be updated to reflect the above information.	Where Archaeological Notification Areas (areas defined by West Sussex County Council which have a high potential for archaeological remains to be present, which includes areas associated with scheduled monuments) intersect with the proposed DCO Order Limits and study area, these have been identified in Tables 2-5 and 2-6 in <a href="#">Appendix 25.1: Gazetteer of onshore heritage assets, Volume 4</a> of the ES [APP-199]. These provide part of an evidence base (with all other appendices [APP-200, 201, 202, 211 – 214 and PEPD-031, PEPD-113 – 119], which have informed the assessment of potential and significance of archaeological remains in <a href="#">Appendix 25.2: Onshore historic environment desk study</a>

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6.4	<p>6.4 Page 6, Likely Significant Effects: This section notes significant residual effects have been identified during the construction phase in relation to nationally important archaeological heritage assets:</p> <ul style="list-style-type: none"> <li>• Neolithic flint mining, mortuary and settlement remains (including those related to the prehistoric flint mine at Harrow Hill);</li> <li>• Bronze Age and early medieval archaeological remains where these may be of national importance, within Zone 2 (South Downs);</li> <li>• Undated possible enclosures or settlement indicated by geophysical survey (38 1-3, Appendix 25.4: onshore geophysical survey report, ES Volume 4).</li> </ul>	<p><b>Part 1 of 2, Volume 4</b> of the ES <b>[APP-200]</b>, as summarised in Tables 25-19, 25-20 and 25-21. The potential for further archaeological remains associated with scheduled monuments is fully recognised in <b>Chapter 25: Historic environment, Volume 2</b> of the ES <b>[PEPD-020]</b>, as summarised in Table 25-30.</p> <p><b>Appendix 25.1: Gazetteer of onshore heritage assets, Volume 4</b> of the Environmental Statement (ES) <b>[APP-199]</b> provides a list of heritage assets and records as identified in the relevant sources of data detailed in Section 25.5 of <b>Chapter 25: Historic environment, Volume 2</b> of the ES <b>[PEPD-020]</b>. These include known heritage assets recorded spatially within the proposed DCO Order Limits and study areas. For example, Table 1-1 and Table 1-2 of <b>Appendix 25.1: Gazetteer of onshore heritage assets, Volume 4</b> of the ES <b>[APP-199]</b> lists the designated heritage assets as identified in the National Heritage List for England, supplemented by West Sussex Historic Environment Record.</p>
6.5	<p>6.5 Significant residual effects are also identified on listed building Oakendene Manor (NHLE 1027074) during the operation of Rampion 2, arising due to changes to its setting. We defer here, however, to the relevant Local Authority heritage advisors, as they are the Planning Inspectorate's primary advisors on Listed buildings, conservation areas, and onshore non-designated archaeological assets.</p>	<p>The Applicant notes Historic England's comment and has no further comment at this time.</p> <p>With regard to Oakendene Manor, Horsham District Council has stated in their Relevant Representation <b>[RR-148]</b> that: "HDC confirms that, having reviewed the location of designated above-ground heritage assets within the vicinity of the development and evaluated the contribution that their settings make to the significance of the asset, the impact of the development, including the substation, on these would be less than substantial at the lower end of the scale of that category in all cases of the historic environment and individual heritage assets."</p>
6.6	<p>6.6 We have particular concern that consistently throughout the ES, Historic Environment Chapter 25, where levels of magnitude and effects are assessed, that the conclusions of "not significant", or "less than substantial harm" are drawn, despite the medium to high heritage significance of some assets, and adverse effects from construction (for example see 29.5.27, 25.9.140-2, and 25.9.152).</p>	<p>The narrative supporting the assessment of effects on heritage assets is provided in <b>Chapter 25: Historic environment, Volume 2</b> of the Environmental Statement (ES) <b>[PEPD-020]</b> and supporting appendices in <b>Volume 4</b> of the ES <b>[APP-200, 201, 211, 212, 214, PEDP-032]</b>.</p> <p>Historic England should note that the test of "substantial harm" in National Policy Statement (NPS) EN-1 (Department of Energy and Climate Change (DECC), 2011) refers only to designated assets or equivalent (i.e. of high heritage significance) and refers to the degree of harm only. The presence of assets of high heritage significance does not necessarily lead to a finding of substantial harm, as this would only apply where a change will demonstrably lead to "substantial" harm to the heritage significance of an asset.</p>
6.7	<p>6.7 There seems to be an assumption that if highly significant archaeological deposits are recorded following a methodology outlined in an approved WSI, that this reduces the level of</p>	<p>The Applicant notes National Policy Statement (NPS) EN-1 (DECC, 2011) paragraph 5.9.6 <i>Non-designated heritage assets of archaeological interest that are demonstrably of</i></p>

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	<p>harm (and thereby downgrades the significance of an effect). This is clearly not the case (as demonstrated by para 5.9.6 of Policy EN-1, see section 14 below), as intrusive excavation and recording means harm to the archaeological resource. Preservation by record does not reduce the harm and is not justification for harm; harm of highly significant heritage assets should be a last resort.</p>	<p><i>equivalent significance to Scheduled Monuments should be considered subject to the policies for designated heritage assets<sup>231</sup>. The absence of designation for such heritage assets does not indicate lower significance.</i></p> <p>It is not clear how Historic England believe that this policy provision relates to the point that it is seeking to make in this instance.</p> <p>The baseline and assessment in <a href="#">Chapter 25: Historic environment, Volume 2</a> of the Environmental Statement (ES) [PEPD-020] identifies the potential for archaeological remains of which may be of high heritage significance. These heritage assets are assessed in accordance with NPS EN-1.</p> <p>The assessment methodology followed in the <a href="#">Chapter 25: Historic environment, Volume 2</a> of the ES [PEPD-020] is consistent with the methodology that was set out within the Scoping Report. It is also consistent with the approach which has been used in previous environmental assessments for other recent DCO projects such as Sizewell C nuclear new build and Yorkshire Green grid connection. In the case of Sizewell C, where a decision was made and consent was granted, the approach was accepted by the Examining Authority. <a href="#">Chapter 25: Historic environment, Volume 2</a> of the ES [PEPD-020] provides an assessment of effects on a 'worst-case' basis based on the description and parameters of the Proposed Development, as set out in <a href="#">Chapter 4: The Proposed Development, Volume 2</a> of the ES [APP-045], and therefore in the absence of engineering responses to be implemented through Commitment C-225 in <a href="#">Commitments Register [REP1-015]</a>. It is acknowledged that an agreed scheme of archaeological investigation, recording and dissemination, following any mitigation by detailed design (such as narrowing of the construction corridor, refinement of the onshore cable route within Order Limits), would still result in loss or truncation of archaeological remains but the archaeological interest would be preserved by record before the loss occurs. Archaeological interest retained in an asset which is actively conserved is more valuable and actively sought through detailed design, which will be informed by evaluation. Mitigation through recording would serve as partial mitigation. The assessment of residual effects in <a href="#">Chapter 25: Historic environment, Volume 2</a> of the ES [PEPD-020] takes this mitigation into account in determining the magnitude of change.</p>
6.8	<p>6.8 We expect the ES to demonstrate an accurate assessment of magnitude, effects, and levels of harm. Avoiding harm to nationally important heritage assets should be the primary objective, however we are not clear in relation to most of the designated archaeological assets affected, how this would be achieved. We also articulate this point in our comments below, section 6.16.4 and 6.17.</p>	<p>See the Applicant's response in <a href="#">reference 6.7</a>.</p> <p>The design of the Proposed Development has been an iterative process that has avoided direct effects on designated heritage assets and other known heritage assets of high significance, and to limit the potential for indirect effects, wherever possible. Relevant embedded environmental measures (Table 25-23) are presented in Section 25.7 of <a href="#">Chapter 25: Historic environment, Volume 2</a> of the Environmental Statement (ES) [PEPD-020]. Specifically, commitments C-225 and C-79 in the <a href="#">Commitments Register [REP1-015]</a> provide for mitigation through design and archaeological recording and are secured through Schedule 1, Part 3, Requirement 19 of <a href="#">Draft Development Consent Order [PEPD-009]</a>.</p> <p>Whilst the Proposed Development intersects with two designated heritage assets (as referred to in <a href="#">Reference 6.1</a>), there will be no direct effects to these heritage assets (see <a href="#">Chapter 25: Historic environment, Volume 2</a> of the ES [PEPD-020]). Where temporary</p>



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6.9	<p>6.9 Page 92, in reference to LACR-01d – we are pleased to see the commitment that a site-specific WSI will be required for archaeological evaluation works (which will be agreed in advance with relevant stakeholders). We noted previously that if extensive evaluation work was not possible ahead of submission, it must be set out within the ES how the project would mitigate for retention of in situ unexpected archaeological remains of national significance. If the archaeological evaluation work is undertaken sufficiently, the risk of unexpected finds should be reduced. It is not made clear, however, how preservation in situ could be achieved, given a potential lack of alternative routes at this stage in the project.</p>	<p>effects are identified arising through change to setting during the construction phase, these will be temporary and not significant (see paragraphs 25.9.522 to 25.9.527 and 25.9.239 to 25.9.241).</p> <p>Where significant effects are identified in the assessment in <b>Chapter 25: Historic environment, Volume 2</b> of the ES [PEPD-020], these are currently based on a worst-case scenario which identifies a theoretical potential for archaeological remains of high heritage significance, which has not yet been confirmed through the available evidence.</p> <p>Flexibility is sought to enable the construction of works anywhere within the area identified for those works on the <b>Onshore Works Plans [PEPD-005]</b>, within which area there will be a circa 40m construction corridor and 20m permanent easement corridor (save for in certain circumstances such as where HDD techniques are employed). The final routing is not fixed and will be dependent upon matters such as pre-construction surveys, including archaeological investigations, giving the opportunity to avoid any assets thus identified.</p> <p>See Applicant's response to <b>Reference 6.8</b>.</p> <p>The embedded environmental measures for the Proposed Development were established and adapted through the pre-DCO Application consultation and engagement process. Within longer alternative cable route (LACR)-01d this would mean using the flexibility being sought to adjust the circa 40m onshore construction corridor within the approximately 100m wide proposed DCO Order Limits following the completion of further archaeological evaluation works. There would also be provision for reducing the onshore construction corridor to circa 20m in places if required. Commitment C-225 has been updated by the Applicant within the <b>Commitments Register [REP1-015]</b> to the following:</p> <p><i>C-225: "Where previously unknown archaeological remains of high heritage significance are identified through surveys along the cable route, and where these locations have not been possible to avoid during earlier design stage, consideration will be made for engineering solutions (e.g. narrowing of the construction corridor, <b>divert cable route within DCO Order Limits, re-siting stockpiles</b>) to <b>avoid impacts in the first instance</b>. Where impacts are not avoidable, <b>these will be minimised where possible through design solutions and an appropriate programme of mitigation will be undertaken to ensure preservation by record</b>. Such measures will be reviewed in consultation with relevant stakeholders (WSSCC Archaeologist and Historic England). An onshore outline WSI provides detail of appropriate methodologies to be implemented during the evaluation and mitigation stages of the archaeological works."</i></p> <p>Commitment C-225 will be secured within the <b>Outline Onshore Written Scheme of Investigation [APP-231]</b>, which would itself be secured by Requirement 19 of the <b>Draft Development Consent Order [PEPD-009]</b>. Further consultation is currently being undertaken with the West Sussex County Council Archaeologist and Historic England on the <b>Outline Onshore Written Scheme of Investigation [APP-231]</b> and a revised version will be submitted at Examination Deadline 3.</p>

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6.10	6.10 Pg.111-2, Table 25-14 notes that site surveys were undertaken. We are not clear where the results from the walkover surveys are, and whether they were used in these interpretations. This should be amended to make it clear.	The results of walkover surveys have been incorporated into baseline description. Please see paragraph 3.4.2 of <a href="#">Appendix 25.2: Onshore historic environment desk study, Volume 4</a> of the Environmental Statement [ <b>APP-200</b> ].
6.11	6.11 Pg.118, Table 25-15 notes that the flint mine on Harrow Hill is 630m from DCO limit. This is correct in relation to the boundary of the scheduled area, however we advise that the limits of the flint mine as an archaeological landscape cannot be so easily defined. The archaeological activity here is an extensive landscape that goes beyond the scheduled boundary, and harm to the wider site could have permanent effects at a landscape scale.	<p>The Applicant notes that the content of Table 25-15 is agreed as a factual statement.</p> <p>The potential for the presence of further archaeological remains related to Neolithic flint extraction is discussed in <a href="#">Appendix 25.2: Onshore historic environment desk study (Parts 1 and 2 of 2), Volume 4</a> of the ES [<b>APP-200 – APP-201</b>], see the summary in Table 5.2. The potential for effects on these is assessed within <a href="#">Chapter 25: Historic environment, Volume 2</a> of the ES [<b>PEPD-020</b>] paragraphs 25.9.148-152.</p>
6.12	6.12 It is disappointing that impacts on Archaeological Notification Areas (ANA) have not been avoided, especially that encompassing Harrow Hill. The ES fails to understand the known and potential prehistoric, Romano-British and Anglo-Saxon remains as a spatio-temporal landscape rather than individual, spatially-defined sites. The ES does not explain how the project would mitigate for retention in situ of unexpected archaeological remains of national significance. Extensive fieldwork will be required within ANAs and we remind the applicant that the majority of the area crossed by LACR-01d should be considered in an equivalent way to a scheduled site.	<p>The Applicant notes that Archaeological Notification Areas (ANA) cover an extensive area of the South Downs. <a href="#">Chapter 3: Alternatives, Volume 2</a> of the Environmental Statement (ES) [<b>APP-044</b>] describes the multi-disciplinary design process including environment, engineering, landowner, and cost considerations which has been followed. It identifies that there was no viable connection option which would have avoided ANAs within the South Downs National Park (SDNP). Whilst historic environment considerations were given due weight in this process, alongside other environmental considerations, it would not have been possible to identify a route which avoided ANAs. The Applicant has sought to avoid, reduce, or minimise effects on archaeology through the design process and also by identifying and securing embedded environmental measures.</p> <p><a href="#">Chapter 25: Historic environment, Volume 2</a> of the ES [<b>PEPD-020</b>] does acknowledge that there is a potential for further archaeological remains of high heritage significance. These are considered at a landscape scale and the potential for effects on these is included within the ES.</p> <p>See Applicant's response in <a href="#">reference 6.9</a> with regard to the proposed measures to seek the retention of archaeological remains of high heritage significance.</p>
6.13	6.13 The ES needs to demonstrate that detailed consideration has been given as to how to avoid and minimise harm in these areas.	See Applicant's response in <a href="#">Reference 6.9</a> with regard to the proposed measures to seek the retention of archaeological remains of high heritage significance.
6.14	6.14 Pg.138, 25.6.40 – consideration is not given to information missed by geophysics. Geophysics is one form of baseline evidence gathering, but it has limitations on what	Please see paragraph 25.5.8 of <a href="#">Chapter 25: Historic environment, Volume 2</a> of the Environmental Statement (ES) [ <b>PEPD-020</b> ] which states that " <i>Limitation regarding the</i>

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	<p>archaeological data can be identified and is most appropriately applied as part of suite of investigation techniques. The ES needs to detail how the geophysical survey undertaken, so far, will be supported by other techniques of investigation.</p>	<p><i>suitability and effectiveness of geophysical survey in the detection of archaeological remains is described in <a href="#">Appendix 25.4: Onshore geophysical survey report, Volume 4 of the ES (Document Reference: 6.4.25.4)</a>". Specifically, paragraph 7.1.2 notes that "The success of a geophysical survey in identifying archaeological remains can be heavily influenced by several factors, including geology, seasonality, field conditions and the properties of the features being detected. Therefore, the geophysical interpretation may only reveal certain archaeological features and not produce a complete plan of all the archaeological remains within a survey area". Whilst taking this into account, the survey was successful in identifying archaeological remains and paragraph 6.1.1 confirms that "The geophysical survey has produced good quality magnetic gradiometer results which have successfully helped to clarify whether archaeological or uncertain remains are present across the proposed DCO Order limited and the wider Survey Extent. There is a high confidence level that the methodology and survey strategy chosen were appropriate to assess the archaeological potential across most of the Survey Extent". The quality, success and the limitations of the geophysical were fully recognised in the completion of the assessment within <a href="#">Chapter 25: Historic environment, Volume 2</a> of the ES [PEPD-020].</i></p> <p>The <a href="#">Outline Onshore Written Scheme of Investigation [APP-231]</a> sets out the methodological approach for archaeological investigations which ensures further investigation will be undertaken prior to construction. The <a href="#">Outline Onshore Written Scheme of Investigation [APP-231]</a> also sets out the measures that will be taken in response to the disturbance of archaeological remains resulting from work at onshore construction areas and which cannot be avoided through appropriate design measures. Further consultation is currently being undertaken with the West Sussex County Council Archaeologist and Historic England on the <a href="#">Outline Onshore Written Scheme of Investigation [APP-231]</a> and a revised version will be submitted at Examination Deadline 3. Implementation of the WSI will be secured by Requirement 19 of the <a href="#">Draft Development Consent Order [PEPD-009]</a> (updated at Deadline 2 submission).</p>
6.15	<p>6.15 Pg.139, Table 25-19, in reference to Arun floodplain and coastal plain; the potential in relation to Palaeoenvironmental deposits is noted as "low to very high". This wide range emphasises the need for investigative data to fully understand the archaeological potential of this area</p>	<p>The <a href="#">Outline Onshore Written Scheme of Investigation (WSI) [APP-231]</a> sets out the methodological approach for archaeological investigations which ensures further investigation will be undertaken prior to construction. The <a href="#">Outline Onshore Written Scheme of Investigation [APP-231]</a> also sets out the measures that will be taken in response to the disturbance of archaeological remains resulting from work at onshore construction areas and which cannot be avoided through appropriate design measures. Further consultation is currently being undertaken with the West Sussex County Council Archaeologist and Historic England on the <a href="#">Outline Onshore Written Scheme of Investigation [APP-231]</a> and a revised version will be submitted at Examination Deadline 3. Implementation of the WSI will be secured by Requirement 19 of the <a href="#">Draft Development Consent Order [PEPD-009]</a> (updated at Deadline 2 submission).</p>
6.16	<p>6.16 Pg 140, Table 25-19, in reference to Intertidal zone KM 00: Buried/submerged prehistoric landscapes are identified as of "regional importance". We disagree with this assessment. The discovery of significant remains (such as a prehistoric monument; another henge), could be of international significance. In the context of rising sea levels and intensified storms, the discovery of buried landscapes will become less likely, making the heritage significance medium to high.</p>	<p>The rationale for the identification of a potential 'regional importance' for buried/submerged prehistoric landscapes is described in Table 5.1 of <a href="#">Appendix 25.2: Onshore historic environment desk study (Part 1 of 2), Volume 4</a> of the Environmental Statement [APP-200] and is necessarily based on a judgement of what may be reasonably foreseeable based on available information. The discovery of a henge monument within the confines of the proposed DCO Order Limits would be highly exceptional.</p>



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6.17	6.17 Pages 140 to 188, Table 25-19,20 and 21, All zones – with reference to “geophysical anomalies of unclear origins” for all three zones, we disagree with the levels of heritage significance proposed, and this highlights the need for ground-truthing of geophysics results.	Any change in likelihood of chance discoveries in the future due to climate change would not alter the heritage significance of any remains that may be present.  The rationale for the levels of heritage significance is explained in the relevant sections of <b>Chapter 25: Historic environment, Volume 2</b> of the Environmental Statement (ES) [PEPD-020], based on the information presented in <b>Appendix 25.4: Onshore geophysical survey report (Part 1 of 8), Volume 4</b> of the ES [PEPD-031] and with reference to other relevant data presented in <b>Appendix 25.2 Onshore historic environment desk study, Volume 4</b> of the ES [APP-200 – APP-201] (e.g. HER data, LiDAR, historic maps and aerial photographs) and with reference to Table 25-24.  It is not clear whether Historic England disagrees with the conclusions in any specific instance or the rationale which Historic England has followed in this.
6.18	6.18 We do not think it is possible to decide the heritage significance of areas is very low to medium given it is not clear what the anomalies are, and that the available baseline evidence for certain periods (for example medieval in zone 1 and neolithic in zone 2), suggests there is a high potential. This indicates that a different approach to understanding these anomalies is required, particularly where they may be associated with known ‘receptors’ (heritage assets).	The conclusions on the levels of heritage significance are necessarily based on the available information and the applicant is satisfied that the level of information is sufficiently robust to draw the conclusions which have been reached. Where this has included a range of the possible levels of significance, this has been stated.  The <b>Outline Onshore Written Scheme of Investigation (WSI) [APP-231]</b> sets out the methodological approach for archaeological investigations which ensures further investigation will be undertaken prior to construction and implementation of the WSI will be secured by Requirement 19 of the <b>Draft Development Consent Order [PEPD-009]</b> (updated at Deadline 2 submission).  Historic England may wish to note the distinction between ‘potential’ and ‘heritage significance’ which is explained in the footnotes to Table 25-19. ‘Potential’ describes the degree to which remains are predicted to be present and the heritage significance is a judgement on the importance of such remains, with reference to Table 25-24.
6.19	6.19 Pg.158, Table 25-20 – we do not agree with an outcome of low to medium heritage significance for General Chalk Upland Neolithic. Considering the route is going through an ANA, Harrow Hill, and is within such close proximity to scheduled monuments that form part of a wider archaeological landscape, we would expect a high level of heritage significance to be ascribed here.	As described in Table 25-20 of <b>Chapter 25: Historic environment, Volume 2</b> of the Environmental Statement (ES) [PEPD-020], this entry refers to the potential for the presence of Neolithic Flint Artefacts, which may be isolated finds and would not be of high heritage significance. Table 25-20 does also include an entry at page 170 for potential for ‘Neolithic flint mines and mortuary remains’, which are described as of high heritage significance.
6.20	6.20 Pages 161-5, KM09 to KM13 – with regard to possible extraction pits between TC-10 and TC-12c; it is possible these could relate to the scheduled Neolithic flint mine. If so, we advise this would raise their level of significance. We recommend more detailed review of these features.	These features (LDr_024-025, LDr_027, LDr_087, LDr_090-091, LDr_093) are located approximately 1.5-3km from the scheduled flint mine site. In light of the stated reference to ‘Old Chalk Pits’ on 19 <sup>th</sup> century ordnance survey (OS) maps which coincide with the location of some of these, the interpretation in the Environmental Statement that these are more recent features is much more likely.  The <b>Outline Onshore Written Scheme of Investigation (WSI) [APP-231]</b> sets out the methodological approach for archaeological investigations which ensures further investigation will be undertaken prior to construction and implementation of the WSI will be secured by Requirement 19 of the <b>Draft Development Consent Order [PEPD-009]</b> (updated at Deadline 2 submission).

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6.21	6.21 Page 176, vicinity of KM13.5 and km14.5 – with regard to the undated possible pits, nearby, if related to designated heritage assets nearby, this could raise the level of significance. We recommend more detailed review of these features.	<p>This potential is noted within Table 25-20 of <b>Chapter 25: Historic environment, Volume 2</b> of the Environmental Statement (ES) <b>[PEPD-020]</b>. It is also noted that these are dispersed anomalies and so are distinct from the dense grouping of pits and shafts that is characteristic of the scheduled flint mine sites.</p> <p>The <b>Outline Onshore Written Scheme of Investigation (WSI) [APP-231]</b> sets out the methodological approach for archaeological investigations which ensures further investigation will be undertaken prior to construction and implementation of the WSI will be secured by Requirement 19 of the <b>Draft Development Consent Order [PEPD-009]</b> (updated at Deadline 2 submission).</p>
6.22	6.22 Pages 177-9, vicinity of KM16 to 17 TC-15b – circular mound features have been identified at Sullington Hill; if related to designated assets nearby, this would raise their level of significance. We recommend more detailed review of these features.	<p>The rationale for the conclusion of low to medium heritage significance is fully explained in Table 25-20 of <b>Chapter 25: Historic environment, Volume 2</b> of the Environmental Statement (ES) <b>[PEPD-020]</b>. It is not clear which designated assets Historic England may consider that these may be associated with or what the rationale to raise their level of significance would be.</p>
6.23	6.23 Page 214-5, Table 25-23, C-6 – the Archaeological Notification Areas (ANA) should be included here.	See Applicant's response in <b>Reference 6.12</b> .

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6.24	<p>6.24 Table 25-23, in reference to Relevant historic environment embedded environmental measures:</p> <ul style="list-style-type: none"> <li>• Page 216, C-11 – we note that soil may be required for retaining archaeological remains in situ;</li> <li>• Page 216, C-12 – suggested addition; “a professional archaeologist may be required to oversee soil stripping”;</li> <li>• Page 224-5, C-103 – suggested additions; “such as impacts to buried deposits of archaeological interest”, the geochemistry and hydrology affecting preservation conditions “and changes to setting”; and</li> <li>• Page 230, C-225 – we welcome this approach, but we are not yet convinced that sufficient archaeological evaluation has been undertaken to be able to avoid such remains, nor by the practicality of a response by changing the proposed route. If newly identified archaeological deposits were of high heritage significance they would require an equivalent approach to that of designated heritage assets (scheduled monuments). We note that preservation by record means destruction of the archaeological resource and is not therefore a direct alternative to preservation in situ. This is particularly pertinent for heritage assets of national importance.</li> </ul>	<p>Page 216, Commitment C-11 – The Applicant notes Historic England’s comment and has no further comment at this time.</p> <p>Page 216, Commitment C-12 – The <b>Outline Onshore Written Scheme of Investigation (WSI) [APP-231]</b> sets out the methodological approach for archaeological investigations which ensures further investigation will be undertaken prior to construction and implementation of the WSI will be secured by Requirement 19 of the <b>Draft Development Consent Order [PEPD-009]</b> (updated at Deadline 2 submission).</p> <p>Page 224-5, Commitment C-103 – the requested change to this commitment is not clear and the applicant would welcome further discussion with Historic England on this matter.</p> <p>Page 230, Commitment C-225 – Commitment C-225 and commitment C-79 in the <b>Commitments Register [REP1-015]</b> (updated at the Deadline 1 submission) provide for mitigation through design and archaeological recording. These will be secured through the <b>Outline Onshore Written Scheme of Investigation [APP-231]</b>, which also sets out the methodological approach for archaeological investigations which ensures further investigation will be undertaken prior to construction. The <b>Outline Onshore Written Scheme of Investigation [APP-231]</b> is secured by Requirement 19 of the <b>Draft Development Consent Order [PEPD-009]</b>. Commitments C-225 has been updated to the following:</p> <p><i>C-225: “Where previously unknown archaeological remains of high heritage significance are identified through surveys along the cable route, and where these locations have not been possible to avoid during earlier design stage, consideration will be made for engineering solutions (e.g. narrowing of the construction corridor, divert cable route within DCO Order Limits, re-siting stockpiles) to avoid impacts in the first instance. Where impacts are not avoidable, these will be minimised where possible through design solutions and an appropriate programme of mitigation will be undertaken to ensure preservation by record. Such measures will be reviewed in consultation with relevant stakeholders (WSSCC Archaeologist and Historic England). An onshore outline WSI provides detail of appropriate methodologies to be implemented during the evaluation and mitigation stages of the archaeological works.”</i></p> <p>Further consultation is currently being undertaken with the West Sussex County Council Archaeologist and Historic England on the <b>Outline Onshore Written Scheme of Investigation [APP-231]</b> and a revised version will be submitted at Examination Deadline 3.</p>
6.25	<p>6.25 Page 401 Table 25-30 – It is our advice that the summary table of residual effects for the construction phase is misguided and misleading. Embedded environmental measures, such as recording archaeology before any loss, would not reduce harm leading to effects being classified as Not Significant.</p>	<p>See the Applicant’s response in <b>Reference 6.7</b>.</p>
6.26	<p>6.26 Whilst investigating archaeology at risk of loss or disturbance is essential, and will reduce the loss of knowledge and understanding, it cannot reduce the actual harm (and thereby downgrade the significance of an effect). Harm can be caused directly through excavations or indirectly through increased pressure caused by overlying temporary and</p>	<p>See the Applicant’s response in <b>Reference 6.7</b>.</p>



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	permanent loads, and/or geochemical and hydrological changes to the archaeological matrix. These matters are not adequately translated in the table.	
6.27	6.27 Page 233, in reference to Assessment of Effect, direct effects: effects from construction compounds, the 40m wide corridor, and HGV traffic are not considered here, and should be included.	<p>Please see paragraph 25.4.3 of <b>Chapter 25: Historic environment, Volume 2</b> of the Environmental Statement <b>[PEPD-020]</b> which states that “For direct effects, the spatial scope of the assessment is defined by the extent of works that could give rise to direct, physical disturbance of archaeological remains; for the purposes of this assessment, that is defined by the extent of the proposed DCO Order Limits”.</p> <p>This confirms that the assessment of direct effects considers all elements of the Proposed Development within the extent of the proposed DCO Order Limits.</p>
<b>7 Comments on Volume 4, Appendix 16.1: Marine Archaeological Technical Report (Document Reference: 6.4.16.1) PINs Reference: APP-162</b>		
7.1	7.1 Section 2.4 (Geophysical data collection and methodology) – the methodology for geophysics should include line spacings and depth of survey, as described in the Geophysical Survey Report (ES Volume 4, Appendix 9.4, Doc Ref: 6.4.9.4, PINs Ref: APP-144), such that isopach charts are produced to show sediment thickness of the upper, loose and any mobile material. Plus, any other significant reflector levels which might impact on the engineering design to 50m below seabed for the proposed array areas and to 10m below seabed for the export cable corridor.	Section 2.4 within <b>Appendix 16.1: Marine Archaeological Technical Report, Volume 4</b> of the Environmental Statement <b>[APP-162]</b> is being reviewed, taking into account Historic England's comments.
7.2	7.2 We are aware that the surveys used techniques inclusive of Multi Beam Echo Sounder (MBES) and Side Scan Sonar (SSS) within the proposed array areas for the offshore part of the export cable corridor. In addition, Sub Bottom Profiler (SBP) and Magnetometer (Mag) data for the offshore part of export cable corridor with a line spacing of 60m, and 4 out of every 5 main lines in array areas, with a line spacing of 77m. The geophysical survey report (as referenced above) also states that Ultra-High Resolution Seismic (UHRS), SBP and Mag data was acquired for the (proposed) array areas at a line spacing of 385m with cross lines spacing of 1,336m which we understand could equate to possible WGT locations.	Noted, the Applicant has no further comments on this matter at this time.
7.3	7.3 Section 2.5 (Methodology geophysical data interpretation) – We note that archaeological assessment of geophysical data was conducted by a qualified and experienced marine archaeologist and that marine geophysics guidance published in 20131 was used. However, it is important to note the attention given to line spacings for surveying archaeological remains which are recommended at 30-50m for large (spatial) areas. This guidance should be followed in further surveys and therefore should be clearly referenced in the Outline WSI submitted as part of this DCO application.	Line spacings at future geophysical surveys will be outlined in specific method statements as stated in the <b>Outline Marine Written Schemes of Investigation [APP-235]</b> .
7.4	7.4 Section 2.6 (Environmental measures methodology) – We noted the following statement “These will evolve over the development process as the EIA progresses and in response to consultation”. However, it seems apparent that there is not a full appreciation that an ES has now been produced and that any progress will be related to work stemming from consent requirements, should permission be obtained, and delivered through the WSI mechanism.	Section 2.6 within <b>Appendix 16.1: Marine Archaeological Technical Report, Volume 4</b> of the Environmental Statement <b>[APP-162]</b> is being reviewed, taking into account Historic England's comments.
7.5	7.5 Paragraph 3.2.2 includes Historic Seascape Character as a “marine archaeological resource”; this is not a resource per se, but an exercise conducted by the Applicant to determine the capacity of perceptions of historic character to accommodate change as proposed by the development.	Noted, the Applicant has no further comments on this matter at this time.

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7.6	7.6 We noted the attention given to attributing “significance” to all the desk-based wreck records (e.g. UKHO “Live” records) considered spatially relevant to this proposed development. However, the consideration of “group value” could have contributed to a sense of setting (re HSC) and therefore what change could be introduced by the proposed development. For example, the three wrecks which are described as having “some significance as part of a wider narrative of a particular enemy attack” on 26th July 1940 (wrecks of SS London Trader, SS Broadhurst and SS Lulonga). Furthermore, we appreciate the attention given to unidentified UKHO record records which correspond with geophysical anomalies identified as having the potential to be significant. For example, UKHO Record 19988 (Mulberry harbour bridge unit) of “high overall archaeological significance”.	Noted, the Applicant has no further comments on this matter at this time.
7.7	7.7 It is not justified why records such as MFV Jenny (sunk 1979); MV Gerlen (sunk 1972) or NY-Eeasteyr (sunk 1980) are included in this chapter. Furthermore, UKHO 82762 is included as medium significance although could it be a modern vessel.	<p>The relevant paragraphs under section 3.3 in <a href="#">Appendix 16.1: Marine Archaeological Technical Report, Volume 4</a> of the Environmental Statement [APP-162] are being reviewed, taking into account Historic England’s comments.</p> <p>These records were included as part of the baseline assessment as although they do not have archaeological significance now, they may in the future.</p>
7.8	7.8 The desk-based sources of information and corroboration with geophysical survey results clearly show the concentration of First World War wreck records associated with German U-boat attacks between November 1916 and August 1918 that resulted in the loss of 12 vessels. Overall, therefore it is apparent that this informs and contributes to the historic seascape of this location.	Noted, the Applicant has no further comments on this matter at this time.
7.9	7.9 The attempt to identify “significance” unfortunately moves matters away from considering if the available information indicates the presence of a heritage asset. For example, HMS Minion (lost while under tow in 1921) is described as having a good level archaeological potential, but overall “medium” archaeological significance, therefore should be considered as a (non-designated) heritage asset. Furthermore, for UKHO 20020 (tank landing craft), the text states that because the identity and age of this wreck are unknown, it is unclear what archaeological significance it may have. However, this conclusion doesn’t seem to draw sufficiently on details already known, whereby if more is learnt that it could be considered of medium to high significant. The conclusion that the identity and age affect the “significance” is not accepted given that available evidence allows for this site to be considered as a heritage asset, as defined by national policy.	<p><a href="#">Appendix 16.1: Marine Archaeological Technical Report, Volume 4</a> of the Environmental Statement [APP-162] is being reviewed, taking into account Historic England’s comments.</p>
7.10	7.10 Paragraph 3.3.137 – There are 20 records classed as “fishermen’s fasteners” recorded by the NRHE which the text acknowledges could indicate the presence of material of archaeological interest. The investigation of these records should be clearly identified as key locations for subsequent investigation for which the WSI should describe the techniques and methodologies for inspection.	Noted, the Applicant has no further comments on this matter at this time.
7.11	7.11 Figure 7.3 – was produced at a scale that made its use difficult and inconvenient. For example, no attempt was made to make known wreck sites identifiable with only “MA” codes for geophysical anomalies. This same point is applicable to ES Volume 3, Chapter 16: Marine archaeology – Figures (PINs Ref: APP-096).	<p>Figure 7.3 within <a href="#">Appendix 16.1: Marine Archaeological Technical Report, Volume 4</a> of the Environmental Statement [APP-162] is being reviewed, taking into account Historic England’s comments.</p>

Ref	Written Representation Comment	Applicant's Response
7.12	7.12 Section 3.5 Historic Seascape Characterisation, paragraph 3.5.1 – while appreciate that Historic Seascape Characterisation (HSC) should be used as a means to contextual historic environment information for the proposed development area, it is also the case that a perception of seascape character cannot be destroyed or damaged, but nor can there be “impacts” as there is no available methodology to equate sensitivity to historical character and associated perception.	Section 3.5 within <a href="#">Appendix 16.1: Marine Archaeological Technical Report, Volume 4</a> of the Environmental Statement [APP-162] is being reviewed, taking into account Historic England's comments.
7.13	7.13 Paragraph 3.5.3 – we do not agree that “The historic character of a seascape can be defined by its dynamic nature and ability to accommodate change. Perceptions of the seascape are also dynamic and subjective to the public and time.” The implication in this assumption is that dynamic change constantly occurs therefore character constantly changes, therefore there can be no historic character at risk of change. It is also the case that a primary principle for HSC methodology is objectivity and is not specifically tied to the assumed perspectives of the public. The approach advocated here unhelpfully conflates HSC with SLVIA. Furthermore, the losses associated with First World War U boat attacks cannot be considered “dynamic”	Paragraph 3.5.3 detailing the Historic Seascape Characterisation (HSC) within <a href="#">Appendix 16.1: Marine Archaeological Technical Report, Volume 4</a> of the Environmental Statement [APP-162] is being reviewed, taking into account Historic England's comments.
7.14	7.14 Paragraph 3.5.5 – it is important to add that the HSC methodological approach was developed prior to construction of Rampion 1 Offshore Wind Farm, which was commissioned April 2018. Also, the correct reference is National Historic Seascape Characterisation Consolidation database which provides a geo-spatial database with accompanying guidance.	Paragraph 3.5.5 within <a href="#">Appendix 16.1: Marine Archaeological Technical Report, Volume 4</a> of the Environmental Statement [APP-162] is being reviewed, taking into account Historic England's comments.
7.15	7.15 Paragraph 3.5.26 – the text provided doesn't appear to consider change due to physical presence of Rampion 1 and 2 and there are assumptions made e.g. regarding navigation that may or not contribute to safer navigation such as marine traffic forced elsewhere and at risk from other hazards.	Paragraph 3.5.26 within <a href="#">Appendix 16.1: Marine Archaeological Technical Report, Volume 4</a> of the Environmental Statement [APP-162] is being reviewed, taking into account Historic England's comments.
7.16	7.16 Paragraph 3.5.41 – we do not agree with the process of selecting a broad character type to determine change given that all the broad character types contribute to perception of character against which there should be consideration of change as introduced by the proposed Rampion 2 project. We therefore cannot see how conclusions of no change, natural or positive (e.g. “military” as described in paragraphs 3.5.68 to 3.5.72) can be drawn.	Paragraph 3.5.41 within <a href="#">Appendix 16.1: Marine Archaeological Technical Report, Volume 4</a> of the Environmental Statement [APP-162] is being reviewed, taking into account Historic England's comments.
7.17	7.17 Paragraph 3.5.52 – the conclusion that historical seascape perception of fishing as a deeply ingrained and traditional economic role for many coastal communities is assessed not to change does not appear to be substantiated by the information provided.	Paragraph 3.5.52 within <a href="#">Appendix 16.1: Marine Archaeological Technical Report, Volume 4</a> of the Environmental Statement [APP-162] is being reviewed, taking into account Historic England's comments.
7.18	7.18 Paragraph 3.5.56 – it is unfortunate that no consideration was given to the change introduced by new industry and associated servicing requirements that is likely to be more than “neutral” in terms of perception of how ports and docks are utilised and redeveloped. Furthermore, there is no logical demonstration of why “coastal infrastructure”, “communications”, “settlement” or “woodland” were included.	Paragraph 3.5.56 within <a href="#">Appendix 16.1: Marine Archaeological Technical Report, Volume 4</a> of the Environmental Statement [APP-162] is being reviewed, taking into account Historic England's comments.
7.19	7.19 Paragraph 3.5.58 – the argument made regarding public awareness of historic and recreational dive areas following the identification of wreck locations during “archaeological surveys” is not correct. Archaeological surveys have yet to be conducted although there is the future potential for “greater understanding, respect and enjoyment of the seascape”. Therefore, any conclusion regarding “positive” outcome is directly related to how the	This comment appears to relate to Paragraph 3.5.82 rather than Paragraph 3.5.58. Paragraph 3.5.82 within the <a href="#">Appendix 16.1: Marine Archaeological Technical Report, Volume 4</a> of the Environmental Statement [APP-162] is being reviewed, taking into account Historic England's comments.



Ref	Written Representation Comment	Applicant's Response
	development space is managed and public access facilitated together with proactive investment in public information.	
7.20	7.20 Paragraph 3.5.85 – it is not possible to conclude that Rampion 2, through an increase in research and awareness following archaeological surveys, will produce an “impact” that can be considered to be “positive”. The loss of resource and access to in-situ palaeo-environmental evidence will be permanently due to sub-seabed infrastructure that will not be removed, as acknowledged in paragraph 4.3.1 and the acknowledgement of the existence of “complex prehistoric landscapes” and how there will be “direct impact to deposits” (paragraph 5.5.2).	Paragraph 3.5.85 within <a href="#">Appendix 16.1: Marine Archaeological Technical Report, Volume 4</a> of the Environmental Statement [APP-162] is being reviewed, taking into account Historic England’s comments.
7.21	7.21 Paragraph 3.5.88 – the impact of the development on peat is described as positive “thanks to an increase and awareness following archaeological surveys”. Whilst “the perception of peat” is unlikely to be impacted by Rampion 2, the preserved organic and minerogenic remains that make up the peat will suffer detrimental impacts. Even after samples of peat have been analysed and palaeo-environmental evidence interpreted, the disturbance or destruction of peat and the release of carbon dioxide cannot be seen as a positive.	Paragraph 3.5.88 within <a href="#">Appendix 16.1: Marine Archaeological Technical Report, Volume 4</a> of the Environmental Statement [APP-162] is being reviewed, taking into account Historic England’s comments.
7.22	7.22 Paragraphs 3.5.96 & 3.5.97 – the claim that no change is determined is not substantiated by the conclusion drawn in Chapter 15 which through the use of “marine character types” has utilised historic character information. Furthermore, the statement that “no significant change in the multiple characters and dimensions of the marine environment as a result of Rampion 2 in isolation or cumulatively with neighbouring developments is identified” cannot be understood or accepted on the basis of the information presented.	Paragraph 3.5.96 & 3.5.97 detailing the Historic Seascape Characterisation (HSC) within <a href="#">Appendix 16.1: Marine Archaeological Technical Report, Volume 4</a> of the Environmental Statement [APP-162] is being reviewed, taking into account Historic England’s comments.
7.23	7.23 Section 4 Geophysical assessments – Paragraph 4.1.2 – it is correct that all anomalies will be considered throughout the project and Table 4-1 (Summary of archaeological anomalies) and Annex E and F provide important information to inform this project should it progress e.g. the identification of thirty anomalies assessed as “high archaeological potential”.	Noted, the Applicant has no further comments on this matter at this time.
7.24	7.24 Paragraphs 4.3.18 and 4.3.29 – highlight the importance of including survey results from Rampion 1 to inform the assessment for Rampion 2, especially the depth of deposits of geoarchaeological interest and correlation with proposed engineering designs for the proposed Rampion 2 development (vis. ES Chapter 1 and WTG foundation designs) or even surface exposed peat deposits as alluded to in paragraph 4.3.19 and Table 4-2.	Noted, the Applicant has no further comments on this matter at this time.
7.25	7.25 Paragraph 4.3.53 – we agree with the focus on sampling peat and understanding its association with the broader onshore and offshore palaeo-landscapes. However, it is clear that the extent of peat across the offshore area is still poorly understood and needs further investigations through geotechnical and geoarchaeological sampling to support the ambition of producing an “outline deposit model” (as mentioned in 4.3.56) using a staged geoarchaeological assessment process as should be explained within an Outline Marine Written Schemes of Investigation	Noted, the Applicant has no further comments on this matter at this time.
7.26	7.26 Section 5 Mitigation – Paragraph 5.2.2 – on the basis of the information presented we are prepared to accept the proposed use of Archaeological Exclusion Zones (e.g. 100m or 50m radius) in reference to “known marine heritage receptors”. However, it is not understood	Section 5 Mitigation – Paragraph 5.2.2 within <a href="#">Appendix 16.1: Marine Archaeological Technical Report, Volume 4</a> of the Environmental Statement [APP-162] is being reviewed, taking into account Historic England’s comments.

Ref	Written Representation Comment	Applicant's Response
7.27	<p>why no attempt was made to qualify the existence of heritage assets as clearly defined “receptors”, as set out in National Policy Statements, UK Marine Policy Statement and published South Marine Plans. It is important to add that the suitability of 50m AEZ is predicated on the acquisition of high-resolution survey data to fully comprehend the nature of identified wreck complexes (i.e. debris fields), so that spatial extent of AEZ polygons can be employed effectively, as presently illustrated in Figure 7.7.</p>	<p>Sub-section 5.3, Sub-section 5.4 and Sub-section 5.6 within <a href="#">Appendix 16.1: Marine Archaeological Technical Report, Volume 4</a> of the Environmental Statement [APP-162] are being reviewed, taking into account Historic England’s comments.</p>
<p><b>8 Comments on Environmental Statement: Volume 4, Appendix 25.3 - Onshore Geoarchaeological and Palaeoenvironmental Assessment (report 6.4.25.3) - PINs Reference: APP-202</b></p>		
8.1	<p>8.1 We think the desk-based geoarchaeological and palaeoenvironmental assessment report is a good overview of the geology and sedimentology, dividing the onshore study area into three useful landscape zones. It also provides a good summary of the potential for archaeological and palaeoenvironmental remains, both from the types of sediments generally and more specifically from West Sussex. The latter area appears to have far less potential than the rest of the SE of England, but the authors do stress throughout the report that this is most probably a reflection of fewer interventions and lack of research in West Sussex, and we think this raises problems with regard to the interpretation of that data.</p>	<p>Noted, the Applicant has no further comments on this matter at this time.</p>
8.2	<p>8.2 The assessment provides a useful broad-scale vision of the potential for palaeoenvironments. However, since very few boreholes exist along the designated site route, the precise location, depth and thickness of sediments/soils remain unknown as does the level of impact potentially caused by all aspects of proposed works.</p>	<p>The <a href="#">Outline Onshore Written Scheme of Investigation (WSI) [APP-231]</a> provides for geotechnical investigations and geoarchaeological investigations. The scope of these works will be detailed in a site-specific WSI as secured through Requirement 19 of the <a href="#">Draft Development Consent Order [PEPD-009]</a> updated at Deadline 2.</p>
8.3	<p>8.3 Similarly, the potential impacts from HDD cables on submerged prehistoric landscapes in the intertidal zone remains unknown. A more precise understanding of geomorphological layers will also help to establish the potential for archaeological remains from later periods, their state of preservation as well as potential direct and indirect levels of harm. Further evaluations should include boreholes and/or geoarchaeological test pits monitored and described by a geoarchaeologist.</p>	<p>See Applicant’s response in <a href="#">reference 8.2</a>. Any results of further surveys will be reviewed against anticipated construction impacts the deep trenchless crossing (e.g. horizontal directional drilling (HDD)) cables at landfall. The maximum assessment assumptions are provided in <a href="#">Chapter 4: The Proposed Development, Volume 2</a> of the Environmental Statement (ES) [APP-045] and Table 25-22 of <a href="#">Chapter 25: Historic environment, Volume 2</a> of the ES [PEPD-020]. At landfall, the horizontal directional drilling (HDD) maximum burial depth is approximately 20m and minimum burial depth is 5m.</p>

Ref	Written Representation Comment	Applicant's Response
8.4	8.4 Evaluation for Pleistocene and Early Holocene remains (i.e. Palaeolithic and Mesolithic) is inadequate. Such remains rarely consist of earthworks likely to be visible in geophysical, land surface and aerial surveys. Additionally, they are usually deeply buried both onshore and offshore. Relying on the (lack of) HER of finds to predict the potential for such remains is problematic as they are, by default, rare but significant for understanding the early human occupation of Britain.	See Applicant's response in <b>references 8.2 and 8.3</b> .
8.5	8.5 Unlike for archaeological periods with higher populations densities and settled communities, absence of evidence cannot be equated to evidence of absence for the Palaeolithic and Mesolithic. The potential for remains from these periods is drawn from the presence of attractive palaeoenvironments, such as raised beaches, buried soils, peat, and palaeochannels and their alluvial plains. These natural deposits have archaeological as well as palaeoenvironmental potential. Application of a suite of survey and investigative techniques is therefore required.	See Applicant's response in <b>references 8.2 and 8.3</b> . <a href="#">Appendix 25.3 Onshore desk-based geoarchaeological and palaeoenvironmental assessment report, Volume 4</a> of the Environmental Statement [APP-202] considers a range of data to assess the geoarchaeological and palaeoenvironmental potential and heritage significance within onshore part of the proposed DCO Order Limits, which includes the relevant information/data on palaeoenvironments.
8.6	8.6 Page 35, Table 5.1: We are concerned that Table 5.1, which will most likely be used as a summary of the report, is purely based on current findings in West Sussex (hence the surprisingly low potentials).	See Applicant's response in <b>references 8.2, 8.3 and 8.5</b> .
8.7	8.7 The use of 'post-Palaeolithic' is also confusing terminology and could lead to the conclusion that the Neolithic to post-medieval periods are rare in the area. That column refers to sections in Chapter 4 describing 'post-Palaeolithic potential' through geoarchaeological remains, but geoarchaeology is only a method to understand anthropogenic landscapes and behaviour through geology and geomorphology. The terminology is confusing and we are unclear what is meant by Holocene geoarchaeological remains.	<i>Holocene geoarchaeological remains</i> refers to geoarchaeological remains of the Holocene epoch (see Section 1.2 of <a href="#">Appendix 25.3 Onshore desk-based geoarchaeological and palaeoenvironmental assessment report, Volume 4</a> of the Environmental Statement [APP-202]).
8.8	8.8 The column on palaeoenvironmental potential in Table 5.1 is more reliable as this potential is dependent upon natural conditions and therefore more predictable from geomorphology. However, it is important to note (as referred to in Chapter 5), that soil conditions can vary at a local scale, so that preservation conditions must be assessed at a site by site basis. It would be helpful if this column is updated to reflect this.	See Applicant's response in <b>references 8.2</b> .
8.9	8.9 In summary, whilst the main text of the report offers a valuable baseline of geological and geomorphological history of West Sussex, Table 5.1 could easily be misinterpreted. The report highlights the current paucity of geoarchaeological research in the area and provides examples of nationally and internationally significant archaeology discovered on Palaeolithic landscapes in southern England, known to also exist in the study area. This supports the indication that the area may have higher potential than initial analysis of the baseline data indicates and emphasises the need for further data to inform the baseline and responses to it.	See Applicant's response in <b>references 8.2, 8.3 and 8.5</b> .
<b>9 Comments on Environmental Statement: Volume 4, Appendix 25.4 - Onshore Geophysical Survey Report - PINs Reference: APP-203</b>		
9.1	9.1 The report is a good initial evaluation to inform the need for further investigations in particular areas (by more geophysics or other evaluation techniques). However, we are concerned that the main ES chapter has taken results at face value without considering the caveats in the approach and the levels of confidence in the results. We highlight here, issues with confidence levels noted in the report:	Magnetometry geophysical survey has continued following Development Consent Order (DCO) Application submission (August 2023) with survey results up to December 2023 provided in the updated <a href="#">Appendix 25.4: Onshore geophysical survey report, Volume 4</a> of the Environmental Statement (ES) [PEPD-031] submitted at Pre-Examination Procedural Deadline A. <a href="#">Appendix 25.4: Onshore geophysical survey report, Volume 4</a> of the ES



Ref	Written Representation Comment	Applicant's Response
	<ul style="list-style-type: none"> <li>• Page 5, Only “where ground conditions were suitable, and land access was possible”. This means that there could be a significant number of areas left without this level of baseline data, on which to base design and mitigation;</li> <li>• A total of 23 of the survey areas contained either green waste or military artefacts possibly affecting magnetometer readings (obscuring signals from archaeological remains). This means baseline data in these areas could be affected, as could its subsequent interpretation;</li> <li>• Page 35, Modern utilities and boundary fencing obscuring signals from archaeological remains; “it must be stressed that this is not a utility survey, and some utilities may not have been detected by the gradiometer survey, for example plastic pipes and small telecommunication cables”. This again means baseline data could be affected, as could its subsequent interpretation; and</li> <li>• Pg.21, 3.1.5 in relation to Table 5.2 – “the effectiveness of the technique is lessened in areas with complex geology, particularly where igneous and metamorphic bedrock is present or thick layers of alluvium or till. All magnetic geophysical surveys must therefore take the effects of background geological and geomorphological conditions into account”. It is noted that the applicant describes that geology has been taken into account, but it’s unclear how potential effects have been considered in the detailed results. There seems to be no mention of hidden/missing signals due to deep alluvial sequences, waterlogged layers, etc.</li> </ul>	<p><b>[PEPD-031]</b>) includes 88% of land within the proposed DCO Order Limits considered suitable for survey (424 hectares (ha) in total). Areas noted as unsuitable for survey comprise areas that cannot be surveyed due to permanent adverse ground conditions; e.g., the presence of trees and/or infrastructure. Provision for use of other geophysical survey techniques, where appropriate, will be made in an update to the <a href="#">Outline Onshore Written Scheme of Investigation (WSI) [APP-231]</a>. Consultation is ongoing with the West Sussex County Council Archaeologist and Historic England on the update to the <a href="#">Outline Onshore Written Scheme of Investigation [APP-231]</a> and this will be submitted at Examination Deadline 3.</p> <p>The limitations of the geophysical survey are acknowledged in Section 25.5 of <a href="#">Chapter 25: Historic environment, Volume 2</a> of the ES <b>[PEPD-020]</b>. Whilst there are some data limitations relating to historic environment these do not affect the robustness of the assessment of this ES. When geotechnical and geoarchaeological investigation data for the proposed DCO Order Limits becomes available, this will support the interpretation of geophysical data, together with trial trenching, as provided for in the <a href="#">Appendix 25.4: Onshore geophysical survey report, Volume 4</a> of the Environmental Statement (ES) <b>[PEPD-031]</b>.</p> <p>The Applicant notes that the assessment of archaeological potential takes into consideration not only the geophysical survey results but also the comprehensive baseline data summarised <a href="#">Chapter 25: Historic environment, Volume 2</a> of the Environmental Statement <b>[PEPD-020]</b>.</p>
9.2	<p>9.2 We highlight here, issues with confidence levels NOT noted in the main report:</p> <ul style="list-style-type: none"> <li>• Effects of weather prior to and during fieldwork – magnetometry doesn’t work very well in very wet and/or dry soil conditions;</li> <li>• The depth of signals recorded by gradiometers can be quite short – this information is not available in the documentation provided by the applicant;</li> <li>• The distance between measurements is not given. This will have affected the detail and precision of results; and</li> <li>• The distance between traverses is not given. This will have affected spatial resolution.</li> </ul>	<p>The limitations of the geophysical survey are acknowledged in Section 25.5 of <a href="#">Chapter 25: Historic environment, Volume 2</a> of the Environmental Statement (ES) <b>[PEPD-020]</b>. Whilst there are some data limitations relating to historic environment these do not affect the robustness of the assessment of this ES. The prevailing ground conditions at the time of survey were taken into consideration when undertaking interpretation of the survey data. Survey and data methodology is provided in Section 3.2 of <a href="#">Appendix 25.4: Onshore geophysical survey report, Volume 4</a> of the ES <b>[PEPD-031]</b>, the Applicant invites Historic England to specify which measurements they require which are not already provided.</p>
9.3	<p>9.3 This information should be integrated more explicitly into the interpretation of results, so that the baseline and responses to it are accurately assessed.</p>	<p>See Applicant’s response in <b>reference 9.2</b>.</p>
<p><b>10 Comments on Environmental Statement: Doc Ref: 7.9 - Outline Onshore Written Scheme of Investigation - PINs Reference: APP-231</b></p>		
10.1	<p>10.1 The outline onshore WSI is comprehensive and reassuring. It is detailed and comprehensive. The latter is confirmed in point 1.3.6:</p> <ul style="list-style-type: none"> <li>• “The ACoW will ensure, on behalf of RED, that this Outline Onshore WSI (and subsequent SSWSIs) are implemented, will review any archaeological method statements, sampling/finds policies and reporting, and will lead consultation with Archaeological Curators, as advised by RED”</li> </ul>	<p>The Applicant welcomes Historic England’s response which acknowledges the <a href="#">Outline Onshore Written Scheme of Investigation [APP-231]</a> is detailed and comprehensive.</p>
10.2	<p>10.2 It is important that archaeological investigations can occur post-consent, as per point 1.2.5:</p>	<p>Noted, the Applicant has no further comments at this time.</p>

Ref	Written Representation Comment	Applicant's Response
10.3	<p>• “Detailed measures will be defined on the basis of evaluation survey information including any geophysical survey and evaluation trial trenching completed. Where required, for example where it has not been practicable to complete surveys in advance of the DCO Application, additional SSWSIs will be provided setting out proposals for evaluation survey. SSWSIs will also be produced for mitigation which may be required following completion of evaluation surveys. Development of appropriate mitigation strategies will be undertaken, as appropriate, with input from experienced specialists (e.g., geoarchaeologist and environmental archaeologist).”</p> <p>10.3 All the suggested works are to be “proportionate and targeted” reflecting the significance of the archaeology. Whilst we agree with this approach, it all hinges on a fair and appropriate allocation of significance and sensitivity which the ES has failed to do, especially for remains from the Pleistocene and Early Holocene Epochs. The ES baseline assessment therefore needs updating to accurately demonstrate significance levels.</p>	<p>The Applicant discussed in <b>reference 10.3</b> with Historic England at a meeting on 08 March 2023. The Science Advisor at Historic England indicated that this comment was made to raise awareness to the Applicant of the potential presence of early prehistoric remains of heritage significance that may be higher than what was assessed in <b>Chapter 25: Historic environment, Volume 2</b> of the Environmental Statement (ES) <b>[PEPD-020]</b>.</p> <p>The assessment of significance is based on available evidence for predicted remains, with information on the Pleistocene and Early Holocene Epochs supported by <b>Appendix 25.3 Onshore desk-based geoarchaeological and palaeoenvironmental assessment report, Volume 4</b> of the ES <b>[APP-202]</b>. This Appendix was prepared and reviewed by experienced Geoarchaeological and Quaternary specialists. Additional information will be gained from evaluation investigations, undertaken in line with the <b>Outline Onshore Written Scheme of Investigation (WSI) [APP-231]</b> and subsequent site-specific WSIs. The results of these evaluation investigations will advance the information available on the presence and significance (considering their nature, condition and extent) of the remains and the need for further investigations and scope of mitigation in the form of avoidance through design measure or preservation by record. Following the Applicant's response, as above, no changes will be made to the ES assessment in response to Historic England's comment. As acknowledged in the <b>Outline Onshore Written Scheme of Investigation [APP-231]</b>, input will be sought from Historic England where necessary on the production of the site-specific WSIs.</p>
10.4	<p>10.4 We welcome the addition of the site-wide, broad-scale Onshore Written Scheme of Investigation (WSI) and the acknowledgement that site-specific WSIs will be required. The surveys undertaken have provided useful information on the potential for archaeological remains along the route (though see separate comments on reports). However, the gathered information on known and potential archaeological remains has not been sufficiently used in designing mitigation strategies to avoid the loss of/harm to remains.</p>	<p>The <b>Outline Onshore Written Scheme of Investigation (WSI) [APP-231]</b> provides the overarching approach to further evaluation and subsequent mitigation, which is to be updated in line with feedback from stakeholders. Indicative areas for fieldwalking, test pitting and trial trenching have been provided based on available baseline information, the exact scope of which are to be discussed and agreed with West Sussex County Council Archaeologist, with input from Historic England. The site-specific WSIs will set the detail of those out the requirements for further investigation where this has not been completed pre-DCO award, as well as for mitigation measures to secure archaeological recording and reporting. The mitigation strategies will be informed by the results of the evaluation investigations.</p>
10.5	<p>10.5 We realise that the geophysical survey is not yet complete (though the additional information submitted January 2024 has been helpful in adding to the baseline data), but we foresee that further evaluations, such as boreholes and trial-trenching, will be required in areas of archaeological sensitivity. We recommend closer collaboration with Local Authority Archaeologists to determine which sections require further evaluations.</p>	<p>See the Applicant's response in <b>reference 10.4</b>. Engagement with the West Sussex County Council Archaeologist on the <b>Outline Onshore Written Scheme of Investigation [APP-231]</b> is ongoing to agree measures set out in this document, which sets out the requirement for local planning authority approval of site-specific WSI's (secured through Requirement 19 of the <b>Draft Development Consent Order [PEPD-009]</b> provided at Deadline 2 submission) which will detail the scope of different phases of evaluation.</p>

Ref	Written Representation Comment	Applicant's Response
10.6	<p>10.6 We recommend the following amendments are made to the OOWSI to achieve more favourable outcomes for the historic environment:</p> <ul style="list-style-type: none"> <li>• Section 1.3.8 - "with advice sought from Historic England (South West Regional Advisor and Science Advisor)": It should be the South East Regional Advisor;</li> <li>• Section 4.5.21 – add that geotechnical cores should be whole/intact for geoarchaeological investigations;</li> <li>• Section 4.6.20 – change to: "50-100% depending on the site type and archaeological or historical period. Neolithic and Bronze Age sites often have a paucity of cultural remains; discreet features should be 100% sampled to maximise the potential for recovery";</li> <li>• Section 4.6.33 - add: "Samples from homogenous fills will be taken from different locations within a fill (scatter sample), in line with technical guidance including Historic England guidance (2011: Fig.5)";</li> <li>• Section 4.6.42 - add: "...(with the exception of organic remains and ceramics encrusted with organic residues)"; and</li> <li>• Section 4.6.45, in reference to Scientific Dating: scientific dating should be a key consideration during the project design and not just during the post-excavation assessment, in line with Historic England Radiocarbon Dating guidelines (2022).</li> </ul>	<p>The <b>Outline Onshore Written Scheme of Investigation (WSI) [APP-231]</b> will be updated at Deadline 3 to align with Historic England's suggested amendments. Regarding the comment on Section 4.6.45, reference to this Historic England guidance will be included with the updated report but no other changes are required to the text which covers the requirement for a strategy for the selection of samples for scientific dating in the site-specific WSIs.</p>
10.7	<p>10.7 Although most of the investigative approaches described apply to sites of all archaeological periods, Palaeolithic and Mesolithic sites may also require specific approaches. It is therefore recommended that Curating the Palaeolithic and guidance on managing lithic scatters are also referenced.</p>	<p>The Applicant will include reference to those recommended documents within the updated <b>Outline Onshore Written Scheme of Investigation [APP-231]</b> to be submitted at Deadline 3.</p>
10.8	<p>10.8 We note that some of the ClfA Standards and Guidance have been updated and should be reflected in the reports.</p>	<p>The Applicant will review and update the Chartered Institute for Archaeologists references, where necessary, in the <b>Outline Onshore Written Scheme of Investigation [APP-231]</b> to be submitted at Deadline 3.</p>
10.9	<p>10.9 Please note that not all references are up to date in the Sussex Archaeological Standards (2019); Historic England's Science Advisor for the South East is [REDACTED]</p>	<p>The Applicant notes that not all references are up to date in the Sussex Archaeological Standards (2019) and also notes the details of Historic England's Science Advisor.</p>
10.10	<p>10.10 Annex E, point 1, please add: "The standards set out in Appendices 1, 2 and Annex A above will all be complied with, as a minimum."</p>	<p>Annex E is part of the Sussex Archaeological Standards (2019) and cannot be edited by the Applicant.</p>
10.11	<p>10.11 We also note the scale of this project requires the collection of a significant quantity and variety of historic environment and archaeological data in a wide range of formats including digital and physical artefact resource. We recommend it should be a requirement of the DCO, should it be granted, that a project plan be approved by the LPA for a secure project archive and outreach programme, which should then be implemented to the satisfaction of the relevant authorities.</p>	<p>Embedded environmental measure C-261 in the <b>Commitments Register [REP1-015]</b> (updated at the Deadline 1 submission) provides for an appropriate and proportional programme of public outreach to be developed and implemented by the Applicant. Commitment C-79 provides for appropriate curation/deposition of the site archive and is secured through Requirement 19 of the <b>Draft Development Consent Order [PEPD-009]</b>.</p> <p>The requirement for a proportionate programme of public outreach is secured in Section 7 of the <b>Outline Onshore Written Scheme Investigation [APP-231]</b>, which identifies possible methods of providing public outreach. Securing and treatment of a project archive is also provided for in the <b>Outline Onshore Written Scheme of Investigation [APP-231]</b>.</p>
<p><b>11 Comments on Outline Marine Written Schemes of Investigation Date: August 2023; Revision A; Document Ref: 7.9 (Document Reference 6.3.14.2) PINs Reference: APP-235</b></p>		
11.1	<p>11.1 Executive summary – document does not reference a protocol system for reporting discoveries of possible archaeological interest (as mentioned in paragraph 1.1.7). Section</p>	<p>The relevant paragraphs of the <b>Outline Marine Written Schemes of Investigation [APP-235]</b> are being reviewed, taking into account Historic England's comments.</p>



Ref	Written Representation Comment	Applicant's Response
	1.2 (introduction) – it is important to see highlighted pre-construction activities comprising: • survey and site investigations; and • seabed preparation.	
11.2	11.2 Paragraph 2.4.1 – reference should clearly be made to Historic England as a single entity to avoid any unnecessary confusion.	Paragraph 2.4.1 within the <a href="#">Outline Marine Written Schemes of Investigation [APP-235]</a> is being reviewed, taking into account Historic England's comments.
11.3	11.3 Section 3 (Proposed Development Details) – the possible development details quoted do not match the two development specifications set out in Chapter 4 (Proposed Development) or Chapter 16 (Table 16-15) which are up to 90 smaller WTG types or 65 larger WTG types. We make this point as it is not explicitly made clear if only the 90 smaller WTG design is being described as the “worst case” scenario (vis. ES Chapter 2, paragraph 4.1.7). We make this point in reference to the risk to either the known or presently unknown historic environment, as might be impacted (directly or indirectly) by installation craft and WTG foundations designs such as suction buckets, as these will have the most direct impact upon submerged archaeology.	The assessment has used the 65 larger type wind turbine generators (WTGs) as the worst-case scenario, as the seabed disturbance for this would be greater for this scenario than the 90 smaller type WTG. The description of the Proposed Development provided in Section 3 is taken from <a href="#">Chapter 4: The Proposed Development, Volume 2</a> of the ES <a href="#">[APP-045]</a> . The worst-case scenarios for each assessment is explained in detail in <a href="#">Pre-Exam Procedural Deadline Submission - 8.23 – Examining Authority requested additional information - Revision A [PEPD-041]</a> .
11.4	11.4 Paragraph 3.1.4 – it is not clear why details are provided about the possible cable route landward of MLWS.	The description of the Proposed Development provided in Section 3 is taken from <a href="#">Chapter 4: The Proposed Development, Volume 2</a> of the Environmental Statement <a href="#">[APP-045]</a> and is provided for context in all of the standalone documents submitted with the Application.
11.5	11.5 Section 5 (Summary of archaeology and cultural heritage baseline) – the detail provided here duplicates information effectively provided elsewhere in the ES (e.g. Table 5-1). The only WSI relevant information is that provided in sub-sections 5.5 (geophysical assessment) and 5.6 (sedimentary horizons).	Section 5 within the <a href="#">Outline Marine Written Schemes of Investigation [APP-235]</a> is being reviewed, taking into account Historic England's comments.
11.6	11.6 Section 5.7 (Historic Seascape Characterisation) is to be removed as it is not relevant to the primary purpose of a WSI. It is the purpose of WSI to set out a clear methodological approach to how post-consent/pre-construction survey campaigns are designed, planned and delivered to incorporate archaeological objectives and thereby directly inform subsequent engineering design.	Section 5.7 within the <a href="#">Outline Marine Written Schemes of Investigation [APP-235]</a> is being reviewed, taking into account Historic England's comments.
11.7	11.7 Section 5.8 (Research Frameworks) – the North Sea Prehistory Research and Management Framework is not included, which is also spatially relevant to the Eastern English Channel.	Section 5.8 within the <a href="#">Outline Marine Written Schemes of Investigation [APP-235]</a> is being reviewed, taking into account Historic England's comments.
11.8	11.8 Section 5.9 (Relevant legal protection) – neglects to include the Merchant Shipping Act 1995 and the duty to report legally defined wreck material.	Section 5.9 within the <a href="#">Outline Marine Written Schemes of Investigation [APP-235]</a> is being reviewed, taking into account Historic England's comments.
11.9	11.9 Section 6 (Embedded Enviro Measures) – Paragraph 6.1.3 states that the Outline Marine WSI was developed in consultation with the Regulator (MMO) and Archaeological Curators to form a framework that presents mitigation strategies. However, it is also apparent that detailed advice that we provided during pre-application (our letter dated 8th April 2022) on the (draft) outline WSI, such as removal of HSC content, has not been acted on.	See Applicant's response to <a href="#">5.11</a> .
11.10	11.10 Paragraph 6.1.5 – we must also draw your attention to the statement that “Any intrusive activities associated with pre-construction works will be planned to avoid any identified marine heritage receptors and AEZs as detailed in the embedded environmental	Paragraph 6.1.5 within the <a href="#">Outline Marine Written Schemes of Investigation [APP-235]</a> is being reviewed, taking into account Historic England's comments.



Ref	Written Representation Comment	Applicant's Response
11.11	<p>measures (C-60..." However, a crucial factor is that while the conducting of "intrusive activities" should not impact known heritage assets, it must also be acknowledged that it is the purpose of the WSI to inform the planning of those "intrusive activities" to capture historic environment information through prior geophysical, geotechnical or visual inspection programmes vis. embedded mitigation measure C-59 (table 6-1).</p>	<p>Table 6-1 within the <a href="#">Outline Marine Written Schemes of Investigation [APP-235]</a> is being reviewed, taking into account Historic England's comments.</p>
11.12	<p>11.12 Section 6.2 (Embedded environmental measures for known wrecks and obstructions) – the text does not mention the application of 100m AEZ which must be explained, as they are included in Table 6-2. We add also that while an attempt has been made to determine "archaeological significance" using guideline published by DCMS in 2013, we consider a more effective strategy would have been to determine whether or not sites encountered could be identified as heritage assets (as described within EN-1, published November 2023, as defined in paragraph 5.9.3). The identification of a heritage asset marks the first stage in subsequent assessment by Historic England as to whether national importance is identifiable. This point is applicable to this project given the possibility of sites that could subsequently merit attention for designation within the English Inshore marine planning area.</p>	<p>Section 6.2 within the <a href="#">Outline Marine Written Schemes of Investigation [APP-235]</a> is being reviewed, taking into account Historic England's comments.</p>
11.13	<p>11.13 Sections 6.3 (Embedded environmental measures for unlocated marine heritage receptors) and 6.4 (Embedded environmental measures for geophysical anomalies of archaeological potential) – the text here explains what each (embedded mitigation) measure is supposed to do without providing any information about the surveying methodology necessary to delivery that measure.</p>	<p>Sections 6.3 and 6.4 within the <a href="#">Outline Marine Written Schemes of Investigation [APP-235]</a> is being reviewed, taking into account Historic England's comments.</p>
11.14	<p>11.14 Paragraph 6.4.5 – the text states that "Further investigation of these sites will occur during future surveys works, where possible." This statement is unacceptable in reference to National Policy Statements EN-1 and EN-3 (published November 2023) and the attention directed at the historic environment.</p>	<p>Paragraph 6.4.5 within the <a href="#">Outline Marine Written Schemes of Investigation [APP-235]</a> is being reviewed, taking into account Historic England's comments.</p>
11.15	<p>11.15 Section 6.5 (Embedded environmental measures for deposits of geoarchaeological potential) – paragraphs 6.5.1 and 6.5.2 – whilst we agree with the principle of 6.5.2, we disagree that palaeo-landscapes are currently mapped and understood to a level which enable precise descriptions of impact. The Marine Archaeology Technical Report describes the main channels as no deeper than 25m, but the surface levels of palaeo-channels and the extent of channel sediments is not clearly understood. Impacts caused by pre- and post-construction, construction and decommissioning activities are not described.</p>	<p>Section 6.5 within the <a href="#">Outline Marine Written Schemes of Investigation [APP-235]</a> is being reviewed, taking into account Historic England's comments.</p>
11.16	<p>11.16 Paragraph 6.5.4 – we note that this (draft) outline WSI "...outlines preliminary positions for archaeology specific cores..." it is inadequate that this WSI makes no attempt to describe appropriate geoarchaeological sampling strategies. In consideration that this document has failed to set out this basic information, it becomes incumbent on any WSI subsequently produced (should consent be obtained), to correctly direct the detail to survey specific method statements for geotechnical and geoarchaeological campaigns. For example, what type of samples do the sample locations indicate on Fig.1-6? We add that,</p>	<p>Specific archaeological sample locations will be recommended in addition to the geotechnical samples collected for the overarching geotechnical campaign. These will be outlined in specific method statements as stated in the <a href="#">Outline Marine Written Schemes of Investigation [APP-235]</a>. No changes have been made to the document as further details on geotechnical campaigns are not yet known.</p>

Ref	Written Representation Comment	Applicant's Response
	from the information provided, we expect identified areas with geoarchaeological potential to be extensively sampled and that approach described in detail.	
11.17	11.17 Paragraph 6.7.8 – The following should have been added to the last sentence: "...as per embedded environmental measure C-57 and the PAD."	Paragraph 6.7.8 within the <a href="#">Outline Marine Written Schemes of Investigation [APP-235]</a> is being reviewed, taking into account Historic England's comments.
11.18	11.18 Section 6.8 (Further archaeological works) – the statement made in paragraph 6.8.2 is unachievable, as this purported Outline Marine WSI fails to include any survey methodological approaches, which should then be targeted and elaborated in a draft method statement subject to consultation with Historic England.	<p>Specific survey details will be outlined in specific method statements as stated in the <a href="#">Outline Marine Written Schemes of Investigation [APP-235]</a>. No changes have been made to the document as further details on pre-construction surveys are not yet known.</p> <p>As per Crown Estate's <i>Archaeological Written Schemes of Investigation for Offshore Wind Farm Projects</i> (The Crown Estate, 2021) "The WSI produced to inform the defined construction period of the consented project will include all information and data derived from the archaeological surveys conducted, in accordance with agreed Method Statements, for phases of activities occurring post-consent and pre-commencement"</p>
11.19	11.19 Paragraph 6.8.3 – states that "A pre-commencement survey Draft Marine WSI" is to follow, which does question the purpose of this document, other than to duplicate information provided elsewhere in the DCO application. Paragraph 6.8.4 appears to further confirm this matter as does Table 6-4.	<p>As per The Crown Estate's <i>Archaeological Written Schemes of Investigation for Offshore Wind Farm Projects</i> (The Crown Estate, 2021).</p> <p>"A Draft WSI should then be prepared, in accordance with the Outline WSI but building on it, containing, for instance, additional details on project design, activities and their methodologies, appropriate data review"</p>
11.20	11.20 Paragraph 6.8.7 – no further HSC assessments is necessary for any element of subsequent archaeological assessments, as might be conducted for this proposed development.	Paragraph 6.8.7 within the <a href="#">Outline Marine Written Schemes of Investigation [APP-235]</a> is being reviewed, taking into account Historic England's comments.
11.21	11.21 Section 7.2 (Retained Archaeologist/Archaeological contractors) – it is noticeable that the text repeatedly states an advisory role to RED. However, any such service should have the skills and competency to not just "advise", but to stipulate the precise requirements to delivery prescribed mitigation measures.	Section 7.2 within the <a href="#">Outline Marine Written Schemes of Investigation [APP-235]</a> is being reviewed, taking into account Historic England's comments.
11.22	11.22 Section 7.3 (Archaeological curators) – in consideration of the attention given to subsequent WSIs to be produced (should this project progress), the curatorial body is also to be consulted on any such draft WSIs from which method statements should be produced. It is also apparent that some of the ClfA Standards and Guidance referenced should be updated to latest versions.	Section 7.3 within the <a href="#">Outline Marine Written Schemes of Investigation [APP-235]</a> is being reviewed, taking into account Historic England's comments.
11.23	11.23 Paragraph 8.1 – the following should have been included Curating the Palaeolithic (published by Historic England, 2023). Furthermore, it is inadequate that no attention is given to either the type of geophysical survey platforms to be deployed post-consent to assist project delivery planning or geotechnical survey methodologies (e.g. borehole, vibrocore optimisation or even grab sampling in consideration of surface exposed peat).	Paragraph 8.1 within the <a href="#">Outline Marine Written Schemes of Investigation [APP-235]</a> is being reviewed, taking into account Historic England's comments.
11.24	11.24 Section 8.8 (Ordnance) – the statement made in paragraph 8.8.6 that if there is no UXO contractor on-board, that an archaeologist if present is to "...follow procedures set out in the Archaeological Watching Brief method statement" must be checked to ensure compliance with all prescribed procedures set by UK Health and Safety Executive.	Section 8.8 within the <a href="#">Outline Marine Written Schemes of Investigation [APP-235]</a> is being reviewed, taking into account Historic England's comments.

Ref	Written Representation Comment	Applicant's Response
11.25	11.25 Section 9 (Arrangements for review of the WSI) – this Outline Marine WSI has not presented any mitigation measures based on the archaeological assessments undertaken in preparation of the Rampion 2 ES. Furthermore, no methodological frameworks for the archaeological analysis and interpretation of survey data throughout the lifetime of the project have been set out in this WSI. We also do not agree with the approach set out in paragraph 9.1.4 regarding a preparation of a subsequent “Draft Marine WSI” in consideration of the failure of this document to offer any methodological approach as explained herein.	Section 9 within the <a href="#">Outline Marine Written Schemes of Investigation [APP-235]</a> is being reviewed, taking into account Historic England’s comments.
11.26	11.26 Paragraph 9.1.5 we do not agree with this approach. It is our advice that the planning of pre-commencement surveys are to be informed by a Marine WSI approved by the MMO in consultation with Historic England, so that the surveys conducted are informed by archaeological objectives; this is the most efficient way to inform the planning of the distribution of turbines (including quantity and spacing), offshore substation locations, and offshore export cable routes. It is possible that new heritage assets will be discovered for which subsequent targeted archaeological investigation could be required to inform the placement of adequate AEZs. It is also possible that our understanding of sites or anomalies could change requiring an adaptive approach to mitigation design and delivery.	<p>As per Crown Estate’s <i>Archaeological Written Schemes of Investigation for Offshore Wind Farm Projects</i> (The Crown Estate, 2021).  <i>“A Draft WSI should then be prepared, in accordance with the Outline WSI but building on it, containing, for instance, additional details on project design, activities and their methodologies, appropriate data review”</i></p> <p>Specific survey details will be outlined in specific method statements as stated in the <a href="#">Outline Marine Written Schemes of Investigation (WSI) [APP-235]</a>. Details will also be included in the Draft Marine WSI. Minor changes have been made to the document to clarify this. An updated version will be submitted in due course.</p>
11.27	11.27 In summary, it is apparent that no geoarchaeological assessment has been conducted and the geophysical methodology is not sufficiently detailed. We still do not understand the landscape features in enough detail to know what the level of impact will be from this proposed development. Furthermore, none of the information submitted discuss potential impacts throughout the project and its defined stages. During pre-application and in response to the Preliminary Environmental Information Report, we have explained the importance of scale when analysing and interpreting places/landscapes as opposed to individual finds such as wrecks and aircrafts. It is therefore essential that a thorough and extensive geoarchaeological approach is set out in a WSI, as it is clear that the palaeo-landscape that is known to exist across the proposed development area, which potentially could be associated with some of the first hominin presence in the British Isles, is irreversibly and pervasively damaged.	<p>Specific archaeological sample locations will be recommended in addition to the geotechnical samples collected for the overarching geotechnical campaign. These will be outlined in specific method statements as stated in the <a href="#">Outline Marine Written Schemes of Investigation [APP-235]</a>.</p> <p>Further and as outlined in <a href="#">Outline Marine Written Schemes of Investigation [APP-235]</a> Section 6.5 the assessment has provided information on the location of palaeolandscapes within the marine archaeology study area and it is recognised that all phases of the development may cause direct impact to deposits which have the potential to be of geoarchaeological interest. The impacts are not mitigated by avoidance but offset, by the collection and assessment of the deposits, as detailed in <a href="#">Outline Marine Written Schemes of Investigation [APP-235]</a>. Future geoarchaeological assessments will be undertaken using a staged geoarchaeological approach to assessment and analysis of the collected geotechnical data resulting in project reports and a deposit mode. The assessments will be used to contribute to seabed mapping and modelling of submerged prehistoric landscapes, resulting in a greater understanding of the prehistoric past and the use and habitation of submerged former terrestrial landscapes.</p>
11.28	11.28 It is apparent that we must, again, explain the importance of generating information that will enable dating of the deposits preserved within the palaeo-channels in order to determine their archaeological and palaeo-environmental potential and significance and test the geophysical results. In our advice in July 2022 to the Applicant, we stated that any preliminary geotechnical survey campaign undertaken to inform engineering questions should also be informed by geo-archaeological objectives to ensure maximum value was obtained from time and effort. We are not aware that any such coordination occurred. However, the principle is still applicable that to obtain geoarchaeological understanding, cores will be required in different locations (as alluded to in paragraph 6.5.3 and Figure 1-6) to those located for geotechnical engineering purposes. Therefore, not only do we need early engagement and liaison with the teams planning the geotechnical surveys, and access	Noted, the Applicant has no further comments on this matter at this time.



Ref	Written Representation Comment	Applicant's Response
	<p>to the intact cores they recover, but we are likely to need additional cores, recovered specifically for geoarchaeological purposes. Furthermore, liaison between the offshore and onshore archaeological/geoarchaeological contractors should be coordinated to provide more robust results. It is also important that data from Rampion 1 and other relevant projects are integrated into the landscape study. The Applicant needs to acknowledge that additional fieldwork (i.e. further dedicated cores) in areas that will be impacted by foundations and seabed cable trenches could be required.</p>	
<b>12 Development Consent Order, Date: August 2023; Revision A; Document Ref: 3.1, PINs Reference: APP-019</b>		
12.1	<p>12.1 All advice is offered here without prejudice to any decision as might be made whether or not to grant consent for this proposed development.</p>	<p>The basis on which Historic England's advice is offered is noted.</p>
12.2	<p>12.2 Schedule 11 Deemed marine licence under the 2009 Act – Generation Assets Part 1 (Licensed Marine activities) requires amendment: 1(4)(g) the address of Historic England is incorrect for this project and is to be amended to: Historic England, 4th Floor, Cannon Bridge House, 25 Dowgate Hill, London EC4R 2YA</p>	<p>This was amended in the <a href="#">Draft Development Consent Order [PEPD-009]</a> updated at Deadline 2.</p>
12.3	<p>12.3 Part 2 (Conditions): Pre-construction plans and documentation; It is essential that post-consent and pre-construction archaeological evaluation informs delivery plans to avoid in-situ archaeological sites, as could be revealed through assessments conducted and completed post-consent and pre-construction. We would therefore expect a condition to be applied to that effect on the DML.</p>	<p>Condition 11(2) of each of the deemed marine licences secures that the authorised scheme must not commence without prior approval of a written scheme of investigation. Further, condition 11(3) requires that pre-construction archaeological investigations and pre-commencement material operations which involve intrusive activities must only take place in accordance with a specific written scheme of investigation.</p> <p>Condition 12(5) secures that the authorised scheme must be carried out in accordance with the approved plans, protocols, statements, schemes and details approved under condition 11, unless otherwise agreed in writing by the Marine Management Organisation (MMO).</p>
12.4	<p>12.4 Condition 11(2) to be revised to: An archaeological written scheme of investigation in relation to the offshore Order limits seaward of MHWS, in accordance with an outline marine written scheme of investigation produced in consultation with the statutory historic body at least 12 weeks prior to the commencement of any survey work unless otherwise agreed by the MMO; to include—</p> <ul style="list-style-type: none"> <li>(a) details of responsibilities of the undertaker, archaeological consultant and contractor;</li> <li>(b) a methodology for further site investigation including any specifications for geophysical, geotechnical and diver or remotely operated vehicle investigations;</li> <li>(c) archaeological analysis of high-resolution survey data, and timetable for reporting, which is to be submitted to the MMO within four months of any survey being completed;</li> <li>(d) delivery of any mitigation including, where necessary, identification and modification of archaeological exclusion zones;</li> <li>(e) monitoring of archaeological exclusion zones during and post construction;</li> <li>(f) a requirement for the undertaker to ensure that a copy of any agreed archaeological report is deposited with the Archaeological Data Service, by submitting an OASIS (Online Access to the Index of archaeological investigations investigations) form with a digital copy of the report within six months of completion of construction of the authorised scheme, and to notify the MMO and Historic England that the OASIS form has been submitted to the Archaeological Data Service within two weeks of submission;</li> </ul>	<p>This condition been updated in the <a href="#">Draft Development Consent Order [PEPD-009]</a> updated at Deadline 2.</p>



Ref	Written Representation Comment	Applicant's Response
12.5	<p>(g) a reporting and recording protocol, including reporting of any wreck or wreck material during construction, operation and decommissioning of the authorised scheme; and</p> <p>(h) a timetable for all further site investigations, which must allow sufficient opportunity to establish a full understanding of the historic environment within the Order limits and the approval of any necessary mitigation required as a result of the further site investigations prior to commencement of licensed activities;</p> <p>12.5 11(3) Pre-commencement surveys and archaeological investigations and pre-commencement material operations which involve intrusive seabed works must only take place in accordance with a specific outline written scheme of investigation (which must accord with the details set out in the outline marine written scheme of investigation) which has been submitted to and approved by the MMO.</p>	This condition been updated in the <a href="#">Draft Development Consent Order [PEPD-009]</a> updated at Deadline 2.
12.6	<p>12.6 Schedule 12 Deemed marine licence under the 2009 Act – Transmission Assets Part 1 (Licensed Marine activities) requires amendment: 1(4)(h) the address of Historic England is incorrect for this project and is to be amended to: Historic England, 4th Floor, Cannon Bridge House, 25 Dowgate Hill, London EC4R 2YA</p>	This has been amended in the <a href="#">Draft Development Consent Order [PEPD-009]</a> updated at Deadline 2.
12.7	<p>12.7 Part 2 (Conditions): Pre-construction plans and documentation; It is essential that post-consent and pre-construction archaeological evaluation informs delivery plans to avoid in-situ archaeological sites, as could be revealed through assessments conducted and completed post-consent and pre-construction.</p>	Please see above response to <b>Reference 12.4</b> .
12.8	<p>12.8 11(2) to be revised to: an archaeological written scheme of investigation in relation to the offshore Order limits seaward of MHWS, in accordance with an outline marine written scheme of investigation produced in consultation with the statutory historic body at least 12 weeks prior to the commencement of any survey work unless otherwise agreed by the MMO; to include—</p> <p>(a) details of responsibilities of the undertaker, archaeological consultant and contractor;</p> <p>(b) a methodology for further site investigation including any specifications for geophysical, geotechnical and diver or remotely operated vehicle investigations;</p> <p>(c) archaeological analysis of high-resolution survey data, and timetable for reporting, which is to be submitted to the MMO and any relevant local planning authority within four months of any survey being completed; (d) delivery of any mitigation including, where necessary, identification and modification of archaeological exclusion zones;</p> <p>(e) monitoring of archaeological exclusion zones during and post construction;</p> <p>(f) a requirement for the undertaker to ensure that a copy of any agreed archaeological report is deposited with the Archaeological Data Service, by submitting an OASIS (Online Access to the Index of archaeological investigations investigations) form with a digital copy of the report within six months of completion of construction of the authorised scheme, and to notify the MMO and Historic England that the OASIS form has been submitted to the Archaeological Data Service within two weeks of submission;</p> <p>(g) a reporting and recording protocol, including reporting of any wreck or wreck material during construction, operation and decommissioning of the authorised scheme; and</p> <p>(h) a timetable for all further site investigations, which must allow sufficient opportunity to establish a full understanding of the historic environment within the Order limits and the approval of any necessary mitigation required as a result of the further site investigations prior to commencement of licensed activities;</p>	Please see above response to <b>Reference 12.4</b> .

Ref	Written Representation Comment	Applicant's Response
12.9	12.9 11(3) Pre-commencement surveys and archaeological investigations and precommencement material operations which involve intrusive seabed works must only take place in accordance with a specific outline written scheme of investigation (which must accord with the details set out in the outline marine written scheme of investigation) which has been submitted to and approved by the MMO and relevant local planning authority.	Please see above response to <b>Reference 12.4</b> .
12.10	12.10 Schedule 16 Documents to be Certified: We do not agree with the inclusion of "Outline marine written scheme of investigation" which is incorrectly referenced as Doc Ref: 7.13 dated July 2023.	The Applicant will continue to engage with Historic England to resolve any outstanding concerns in respect of the <b>Outline Marine Written Schemes of Investigation [APP-235]</b> and will update the reference to this document on its front cover on the next iteration of the document
<b>13 Commitments Register; Date: August 2023; Revision A; Doc Ref: 7.22 PINs Reference: APP-254</b>		
13.1	13.1 While we note that the Commitments Register highlights securing mechanism within the Development Consent Order it is apparent that the Commitments Register is not provided for within the DCO. We must therefore defer to the Examination Authority as to its inclusion as an enforceable requirement, should consent be obtained, or request the Commitments Register to be part of the requirements.	The <b>Commitments Register [REP1-015]</b> has been created, maintained and provided as a convenient compendium of project commitments, but it is not intended as a secured document. As noted, each of the commitments is itself secured through the <b>Draft Development Consent Order [PEPD-009]</b> (updated at Deadline 2) or other certified document.
<b>14 Policy of relevance to the proposals</b>		
14.1	14.1 The National Policy Statements are of relevance to the proposals: Overarching National Policy Statement for Energy (EN-1) (Department of Energy and Climate Change (DECC), 2011a, updated March 2023); National Policy Statement for Renewable Energy (EN-3) (DECC, 2011b); and National Policy Statement for Electricity Networks (EN-5) (DECC, 2011c).	Section 104 of the Planning Act 2008 outlines that the DCO Application must be decided in accordance with the relevant National Policy Statement (NPS) (in this case: NPS EN-1 (Department of Energy and Climate Change (DECC), 2011a), NPS EN-3 (DECC, 2011b) and NPS EN-5 (DECC, 2011c) with NPS EN-1 (Department for Energy and Net Zero (DESNZ), 2023a), NPS EN-3 (DESNZ, 2023b) and NPS EN-5 (DESNZ, 2023c), that came into force in 2024, relevant considerations in the decision-making process) unless (inter alia) the adverse impacts of a proposal would outweigh its benefits.
14.2	14.2 Each of these statements includes policies specifically related to the avoidance of harm to heritage assets and guidance for the Examining Authority on determining applications which would cause harm to the significance of heritage assets.	Noted, the Applicant has no further comments on this matter at this time.
14.3	<p>14.3 We advise that the application in its current form does not meet the requirement of these policy documents in relation to heritage, and we refer here in particular to EN-1 (published November 2023) and the following paragraphs:</p> <ul style="list-style-type: none"> <li>• 5.9.6 Non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to Scheduled Monuments should be considered subject to the policies for designated heritage assets. The absence of designation for such heritage assets does not indicate lower significance.</li> <li>• 5.9.11 Where a site on which development is proposed includes, or the available evidence suggests it has the potential to include, heritage assets with an archaeological interest, the applicant should carry out appropriate desk-based assessment and, where such desk-based research is insufficient to properly assess the interest, a field evaluation.</li> <li>• 5.9.14 Careful consideration in preparing the scheme will be required on whether the impacts on the historic environment will be direct or indirect, temporary, or permanent.</li> <li>• 5.9.15 Applicants should look for opportunities for new development within Conservation Areas and World Heritage Sites, and within the setting of heritage assets, to enhance or better reveal their significance. Proposals that preserve those elements of the setting that</li> </ul>	<p>Regarding 5.9.6 of National Policy Statement (NPS) EN-1 (published November 2023), <b>Chapter 25: Historic environment, Volume 2</b> of the Environmental Statement (ES) <b>[PEPD-020]</b> identifies "non-designated assets of demonstrably schedulable quality" as a receptor type of high heritage significance (sensitivity) in <i>Table 25-24 Establishing the heritage significance (or sensitivity) of receptors for onshore historic environment</i>. Receptors of this type are identified within the baseline and assessed in <b>Chapter 25: Historic environment, Volume 2</b> of the ES <b>[PEPD-020]</b>.</p> <p>Regarding 5.9.11 and 5.9.22 of EN-1 (published November 2023), the Applicant has provided robust and comprehensive baseline information to support the assessment of significance and residual effect presented in <b>Chapter 25: Historic environment, Volume 2</b> of the ES <b>[PEPD-020]</b>.</p> <p>Regarding 5.9.14 and 5.9.15 of EN-1 (published November 2023), see Applicant's response in <b>reference 6.8</b>.</p>

Ref	Written Representation Comment	Applicant's Response
	<p>make a positive contribution to the asset (or which better reveal its significance) should be treated favourably.</p> <ul style="list-style-type: none"> <li>• 5.9.16 A documentary record of our past is not as valuable as retaining the heritage asset, and therefore the ability to record evidence of the asset should not be a factor in deciding whether such loss should be permitted, and whether or not consent should be given.</li> <li>• 5.9.22 In considering the impact of a proposed development on any heritage assets, the Secretary of State should consider the particular nature of the significance of the heritage assets and the value that they hold for this and future generations. This understanding should be used to avoid or minimise conflict between their conservation and any aspect of the proposal.</li> <li>• 5.9.25 When considering the impact of a proposed development on the significance of a designated heritage asset, the Secretary of State should give great weight to the asset's conservation. The more important the asset, the greater the weight should be. This is irrespective of whether any potential harm amounts to substantial harm, total loss, or less than substantial harm to its significance.</li> <li>• 5.9.26 The Secretary of State should give considerable importance and weight to the desirability of preserving all heritage assets. Any harm or loss of significance of a designated heritage asset (from its alteration or destruction, or from development within its setting) should require clear and convincing justification.</li> </ul>	<p>Regarding 5.9.16, 5.9.25 and 5.9.26 of EN-1 (published November 2023), see Applicant's response in <b>references 0.4</b> and <b>6.8</b>. Additionally, the <b>Planning Statement [APP-036]</b> outlines the position with regards the planning balance with regard to the benefits of the Proposed Development and the harm to heritage assets that is identified in <b>Chapter 25: Historic environment, Volume 2</b> of the ES [PEPD-020], which does not factor in the ability to record evidence.</p>
<b>15 Historic England Written Representation: Conclusions</b>		
15.1	15.1 Historic England do not object in principle to the Proposed Development.	The Applicant welcomes the assertion that Historic England does not object in principle to the Proposed Development.
15.2	15.2 We consider, however, that there is the potential for a high level of harm to non-designated archaeological heritage assets, some of which may be of national significance. This pertains to both the onshore and marine receptors, but particularly concerns the area within Zone 2: South Downs, which has a concentration of nationally important heritage assets and high archaeological potential.	Noted, the Applicant has no further comments on this matter at this time.
15.3	<p>15.2 Our concerns and requirements can be summarised as follows:</p> <ol style="list-style-type: none"> <li>Insufficient evaluation has been done in advance of the application for onshore, intertidal and offshore areas. It would therefore be important to secure these works post-consent, but pre-construction should consent be granted;</li> <li>The onshore route selection process was determined without due regard to the potential significant effects on heritage; in the case of chosen route LACR01d, this has a greater impact on Archaeological Notification Areas than the original PEIR and SIR routes. The applicant should therefore demonstrate how they can practicably avoid harm to the historic environment, and clearly and convincingly demonstrate provision for retention of significant archaeological remains in situ where possible;</li> <li>There is inaccurate assessment of magnitude of impact and significance of effect. We expect the ES to demonstrate an accurate assessment of magnitude, effects, and levels of harm;</li> <li>The embedded environmental measures do not include convincing and practicable provision to avoid the risk of harm to potentially nationally important archaeological remains. Avoiding harm to nationally important heritage assets should be a primary objective;</li> </ol>	<p>The Applicant appreciates the summary of concerns and requirements and confirms that further archaeological works are secured through the <b>Draft Development Consent Order [PEPD-009]</b> (updated at Deadline 2). The Applicant response to each of the concerns and requirements is detailed above.</p>

Ref	Written Representation Comment	Applicant's Response
	<p>v) No marine geotechnical data was acquired to inform production of the Environmental Statement and therefore corroboration is not possible with geophysical data for this area known to be of prehistoric archaeological interest. We also do not agree with the assessment provided regarding the historic character of the proposed marine development area;</p> <p>vi) The application includes an Outline Marine Written Scheme of Investigation (WSI) as a mitigation action which should inform archaeological assessment of further survey data to be acquired (should consent be obtained) post-consent. However, we are not satisfied by the standard of the Outline Marine WSI presented and it is our advice that it should not be accepted as a certified document;</p> <p>vii) The draft DCO includes two (draft) Deemed Marine Licences which include conditions for WSIs. However, the wording requires amendment to ensure implementation in the crucial post-consent and pre-construction phase to adequately inform the planning and engineering design, and delivery of the proposed project.</p> <p>viii) The Development Consent Order should contain requirements to ensure that appropriate safeguards are in place regarding the historic environment.</p>	
15.4	15.3 The Outline WSI's for onshore and offshore will be key documents to ensure adequate provision for historic environment protection, mitigation and enhancement post DCO, should consent be forthcoming.	Noted, the Applicant has no further comments on this matter at this time.
15.5	15.4 We are not satisfied by the standard of the Outline Marine WSI presented and it is our advice that it should not be accepted as a certified document.	See Applicant's response in <b>References 11.1- 11.28.</b>
15.6	15.5 The Outline Onshore WSI is detailed and comprehensive, and we welcome the acknowledgement that site-specific WSIs will also be required. However, the baseline information regarding archaeological remains has not been sufficiently used in designing mitigation strategies to avoid the loss of/harm to remains (see points iii and iv above).	See Applicant's response to <b>10.4.</b>
15.7	15.6 The results of archaeological work undertaken in accordance with the onshore and marine WSIs should inform amendments to the design to avoid or mitigate harm to heritage assets. Harm to nationally important heritage assets should be avoided, if possible.	Noted, the Applicant has no further comments on this matter at this time.
15.8	15.7 In relation to the Historic Environment matters, and in coming to a decision on the application, the ExA should require the applicant to address how they would avoid harm to the historic environment, and clearly and convincingly demonstrate practical provision for retention of archaeological remains in situ. Only then would the ExA be able to weigh any residual harm to the historic environment against the benefits of the proposals, as set out in policy.	See Applicant's response in <b>References 0.4, 6.9, 5.11 and 6.24.</b>
15.8	15.8 The ExA should also require the applicant to seek to enhance or better reveal the significance of identified heritage assets. Provision of an appropriately accessible archive may form part of this commitment.	See Applicant's response in <b>Reference 10.11.</b>
15.9	15.9 If consent is granted, provision should be made in the Schedule of Requirements to secure avoidance and/or mitigation of harm by requiring the approval of Relevant Authorities.	Requirement 19 of the <b>Draft Development Consent Order [PEPD-009]</b> (updated at Deadline 2) provides for the <b>Outline Onshore Written Scheme of Investigation (WSI) [APP-231]</b> , and subsequent site-specific WSIs, which require approval from the Local Planning Authority archaeologist.





Table 2-2: Applicant's Response to Marine Management Organisation's Written Representation [REP1-056]

Ref	Written Representation Comment	Applicant's Response
<b>1. Comments on Relevant Representation from other Interested Parties</b>		
<b>Environment Agency (EA) (RR-116)</b>		
1.1.1	1.1.1 The MMO notes that the Environment Agency ("EA") are satisfied with the Applicants Water Framework Directive ("WFD"). The MMO defers to the EA on these matters entirely but welcomes this confirmation.	Noted, the Applicant has no further comments on this matter at this time.
1.1.2	1.1.2 The EA have raised concerns regarding the release of Bentonite during drilling processes. An expert topic group meeting was held with the Sussex Kelp Recovery Project, and the MMO will keep a watching eye on the outcomes of this throughout examination.	The Applicant is engaging with Sussex Kelp Recovery Project (SKRP) and SKRP is aware that the Rampion 2 DCO Application has been published on the Planning Inspectorate's website. Whilst the Applicant has not engaged with SKRP on direct impacts on the kelp beds, <b>Chapter 9: Benthic, subtidal and intertidal ecology, Volume 2</b> of the Environmental Statement (ES) [APP-050] has assessed all algal features, including kelp, and no significant effects are predicted to occur. Additionally, Section 2.7 of <b>Appendix 6.3: Coastal processes technical report: Impact assessment, Volume 4</b> of the ES [APP-131] has assessed drilling fluid release during HDD at the landfall and no significant effects are predicted to occur. It is therefore considered by the Applicant to be unlikely that construction works, including the potential release of bentonite during drilling activities at landfall, would result in the deterioration of relevant biological quality elements under the Water Framework Directive (WFD (England and Wales) Regulations 2017, although it is also noted that the Sussex coastal water body is not assessed / classified for macroalgae.
1.1.3	1.1.3 The MMO notes the previous discussions between the EA and the Applicant regarding the rapidly changing coastal morphology at the Horizontal Directional Dredging (HDD) Landfall Site at Climping.	Noted, the Applicant has no further comments on this matter at this time.
1.1.4	1.1.4 The MMO notes that during pre-application, the EA states the preferred method for crossing a Main River is HDD as this method presents the least risk in terms of flood risks and risks to river ecology. However, the Applicant has stated that all "main rivers" and watercourses considered to provide good habitat for fish are proposed to be crossed by "trenchless crossing", and the EA have requested justification for this, and further clarity on ambiguous statements such as "where this represents the best environment solution, is financially & technically feasible". The EA has also recommended that the use of existing access points or using temporary bridges as alternatives to trenching and have encouraged the applicant to avoid the use of temporary culvert crossings.	<p>Commitment C-5 in the <b>Commitments Register [REP1-015]</b> states that: "Main Rivers, watercourses, railways and roads that form part of the Strategic Highways Network will be crossed by HDD or other trenchless technology, in accordance with Appendix A Crossing Schedule of the Outline of Construction Practice."</p> <p>For clarity, the Applicant confirms that all Main Rivers will be crossed by trenchless crossing technology as reflected in <b>Figures 26.2a-t of Chapter 26: Water environment – Figures (Part 1 of 2), Volume 3</b> of the Environmental Statement (ES) [APP-117] as per Appendix A: Crossing schedule and paragraph 5.10.13 of the <b>Outline Code of Construction Practice [PEPD-033]</b>. This is secured via Requirement 22 of the <b>Draft Development Consent Order [PEPD-009]</b>.</p> <p>Also, as outlined in Table 26.7 of <b>Chapter 26: Water environment, Volume 2</b> of the ES [APP-067], a collaborative approach was carried out between the water environment and terrestrial ecology aspects in the design of the Proposed Development to identify sensitive watercourses which required trenchless crossings. A fisheries habitat survey report recorded the key findings in <b>Appendix 22.6: Fisheries habitat survey report, Volume 4</b> of the ES [APP-184]. All watercourse crossings which were identified as having 'good' potential fisheries habitat have trenchless crossings proposed (RVX-01, RVX-02, STRX-18). One crossing which was identified as offering 'moderate – good' coarse fishery habitat near Buncton adjacent to Water Lane (STRX-05) was updated to a trenchless crossing to minimise effects from channel disturbance at that location. Several others were described as having 'moderate' potential fisheries habitat (STRX-14, STRX-15, STRX-16), and a range of mitigation measures (such as erosion control, channel profile management, soil storage, bank reinstatement,</p>

Ref	Written Representation Comment	Applicant's Response
		<p>works timing and duration, pump screening, fish rescue etc) have been embedded to minimise potential effects at those locations, as set out in the <b>Chapter 22: Terrestrial ecology and nature conservation, Volume 2</b> of the ES [APP-063]. The crossings which were identified as having 'poor' potential fisheries habitat are predominantly open cut trenched crossings, owing to their low overall sensitivity.</p> <p>Feedback from the Environment Agency regarding temporary culvert crossings was taken into account in paragraphs 5.10.13 – 5.10.14 of the <b>Outline Code of Construction Practice [PEPD-033]</b>.</p> <p>In the context of this Proposed Development, temporary crossings relate to the proposed temporary haul roads only as the onshore cable will be installed below the bed of watercourses.</p> <p>All trenchless cable watercourse crossings would have no need for associated temporary haul road crossings as they would be accessed via adjacent fields / accesses.</p> <p>An embedded environmental measure (C-229) outlined in the <b>Commitments Register [REP1-015]</b> secured through the <b>Outline Code of Construction Practice [APP-224]</b> and Requirement 22 of the <b>Draft Development Consent Order [PEPD-009]</b>. This will ensure that where the onshore cable route is open cut trenched, sensitive watercourse locations will be crossed by open span haul road bridges (e.g. DTX-1de-14 and STRX-1de-03 as outlined in paragraph 5.10.14 of the <b>Outline Code of Construction Practice [APP-224]</b> which states that "Clear span bridges will also be used for those watercourses too wide or deep to be crossed using culverts" and that "watercourse crossings will be designed to minimise morphological and conveyance effects and sized to maintain existing flow conveyance". <b>Appendix 4.1: Crossing schedule, Volume 4</b> of the ES [APP-122] provides information on proposed cable crossing methodologies and of those listed, only open cut trenched crossings of Ordinary Watercourses will require temporary haul road crossings.</p>
1.1.5	1.1.5 The MMO notes that EA is satisfied with the hydrogeological risk assessment, however further clarification is required regarding the preclusion of drilling fluids containing hazardous or environmental harmful substances.	<p>The <b>Commitments Register [REP1-015]</b> and <b>Appendix 26.4: Hydrogeological Risk Assessment, Volume 4</b> of the Environmental Statement (ES) [APP-218] identify commitment C-137 which outlines that "there will be no storage of hazardous materials including chemicals, oils and fuels within any SPZ". This is secured through the <b>Outline Code of Construction Practice [APP-224]</b> and Requirement 22 of the <b>Draft Development Consent Order [PEPD-009]</b>.</p> <p>Further assurances regarding use of drilling fluids are provided within the embedded environmental measures outlined in <b>paragraph 5.2.16 of Appendix 26.4: Hydrogeological Risk Assessment, Volume 4</b> of the ES [APP-218], which states that "Environmentally hazardous drilling fluids, or those containing groundwater hazardous substances, will not be used during trenchless crossings (including HDD)" (C-245) as secured through the <b>Outline Code of Construction Practice [APP-224]</b> and Requirement 22 of the <b>Draft Development Consent Order [PEPD-009]</b>. The locations of the indicative trenchless crossing (including HDD) compounds and their Limits of Deviation are shown on <b>Figures 26.6a-n in Chapter 26: Water environment – Figures (Part 2 of 2), Volume 3</b> of the ES [APP-118].</p>
1.1.6	1.1.6 The MMO acknowledges the EAs comments regarding the presence of historical landfills and understands that preferential pathways for contaminants must not be part of this scheme. The MMO also notes that any waste material removed from landfills cannot be re-deposited and must be appropriately disposed of as waste material.	<p>The Applicant welcomed the Environment Agency's comment that whilst works must not compromise any containment features, the age of the historical landfills means containment features are unlikely to be present. The <b>Outline Code of Construction Practice [PEPD-033]</b> outlines the Applicant's commitment that the historical landfills (as one of the locations identified in <b>Appendix 24.1: Phase 1 geo-environmental desk study, Volume 4</b> of the Environmental Statement (ES) [APP-198]) will be subject to further contamination assessment, post-DCO award, and that appropriate remediation will be</p>

Ref	Written Representation Comment	Applicant's Response
		<p>implemented where required in line with the Environment Agency's guidance on land contamination and risk management (LCRM). This is secured through Requirement 25 of <a href="#">Draft Development Consent Order [PEPD-009]</a> (updated at Deadline 2).</p> <p>Section 4.12 of the <a href="#">Outline Code of Construction Practice [PEPD-033]</a> provides the Applicant's commitments to the management of excavated soils in line with the Contaminated Land: Applications in Real Environments (CL:AIRE) (2011) Definition of Waste Code of Practice and Waste Regulations (DoWCoP). This includes development of a Materials Management Plan (MMP) declared by a Qualified Person and for material that is not suitable for reuse to be managed as waste material in accordance with the Waste Regulations (2011) and removed offsite for treatment / disposal under Duty of Care (commitment C-31 and C-69). Stage specific CoCPs will detail these measures and be secured via Requirement 22 of the <a href="#">Draft Development Consent Order [PEPD-009]</a>.</p>
1.1.7	1.1.7 The MMO notes that if contamination (including any contamination not previously identified) is found to be present during development, the EA would expect appropriate remedial works be undertaken to address any residual risks.	<p>The <a href="#">Outline Code of Construction Practice [PEPD-003]</a> provides the Applicant's commitment that an unexpected contamination protocol will be developed and in place prior to construction to ensure appropriate management of unexpected contamination in line with the Environment Agency's land contamination and risk management (LCRM) guidance as detailed in commitment C-72 in the <a href="#">Commitments Register [REP1-015]</a>, Stage specific CoCPs are required pursuant to Requirement 22 of the <a href="#">Draft Development Consent Order [PEPD-009]</a>. The Applicant also notes Requirement 25(3) of the <a href="#">Draft Development Consent Order [PEPD-009]</a> which addresses previously unidentified contamination and the requirements to notify the relevant authority and identify how the contamination will be dealt with.</p>
<b>Historic England (HE) (RR-146)</b>		
1.1.8	1.1.8 The MMO notes that HE does not object, in principle to the Proposed Development.	The acknowledgement that Historic England does not object to the principle of the Proposed Development is welcomed by the Applicant.
1.1.9	1.1.9 The MMO supports HE's request that the Written Scheme of Investigation ("WSI") provides for geoarchaeological analysis of geotechnical survey materials	<p>During the Evidence Plan Process, discussions included the geophysical surveys, the use of historic datasets, and the Applicant advised that geotechnical survey work would not be carried out during the pre-DCO Application stage. However, all available information will be used to ensure that the Final offshore Written Scheme of Investigation (WSI) and embedded environmental measures state that archaeological input must be sought ahead of geotechnical campaigns (in accordance with commitment C-59 (Offshore geotechnical surveys prior to construction will be undertaken)) secured in Condition 11(2) of the draft Marine Licence (dML) (Schedules 11 and 12 of the <a href="#">Draft Development Consent Order [PEPD-009]</a>).</p>
1.1.10	1.1.10 The MMO notes that inaccurate assessments of magnitude of impact and significance of effect Embedded environmental measures ("EEM"), would not reduce harm or magnitude of impact. Therefore, HE has stated that the downgraded assessment of the impact being classified as 'Not Significant' is misguided and misleading.	<p>The assessment methodology followed in the <a href="#">Chapter 25: Historic environment, Volume 2</a> of the Environmental Statement (ES) <a href="#">[PEPD-020]</a> is consistent with the methodology that was set out within the Scoping Report. It is also consistent with the approach which has been used in previous environmental assessments for other recent DCO applications such as Sizewell C nuclear new build and Yorkshire Green grid connection. In the case of Sizewell C, where a decision was made and consent was granted, the approach was accepted by the Examining Authority. <a href="#">Chapter 25: Historic environment, Volume 2</a> of the ES <a href="#">[PEPD-020]</a> provides an assessment of effects on a 'worst-case' basis based on the description and parameters of the Proposed Development, as set out in <a href="#">Chapter 4: The Proposed Development, Volume 2</a> of the ES <a href="#">[APP-045]</a>, and therefore in the absence of engineering responses to be implemented through Commitment C-225 in <a href="#">Commitments Register [REP1-015]</a>. It is acknowledged that an agreed scheme of archaeological investigation, recording and</p>



Ref	Written Representation Comment	Applicant's Response
		<p>dissemination, following any mitigation by detailed design (such as narrowing of the construction corridor, refinement of the onshore cable route within Order Limits), would still result in loss or truncation of archaeological remains but the archaeological interest would be preserved by record before the loss occurs. Archaeological interest retained in an asset which is actively conserved is more valuable and actively sought through detailed design, which will be informed by evaluation. Mitigation through recording would serve as partial mitigation. The assessment of residual effects in <b>Chapter 25: Historic environment, Volume 2</b> of the ES [PEPD-020] takes this mitigation into account in determining the magnitude of change.</p> <p>The <b>Outline Onshore Written Scheme of Investigation (WSI) [APP-231]</b> provides the overarching approach to further evaluation and subsequent mitigation, which is to be updated in line with feedback from stakeholders. The <b>Outline Onshore Written Scheme of Investigation [APP-231]</b> (secured by Requirement 19 of the <b>Draft Development Consent Order [PEPD-009]</b>) provides for the production of site-specific WSIs which will set out the requirements for further investigation where this has not been completed pre-DCO award, as well as for mitigation measures to secure archaeological recording and reporting.</p> <p>Heritage assets in the marine zone as defined in Table 16-8 (<b>Chapter 16: Marine archaeology, Volume 2</b> of the ES [APP-057]) and the archaeological potential within the marine archaeology study area have been considered and assessed in <b>Appendix 16.1: Marine archaeological technical report, Volume 4</b> of the ES [APP-162]. The <b>Outline Marine WSI [APP-235]</b> which is secured through the <b>Draft Development Consent Order [PEPD-009]</b> include the commitment to avoid all known marine heritage receptors and to further investigate areas of potential impacts ensuring that unknown receptors are located, and impact mitigated which will ensure preservation <i>in situ</i>. Where items might be removed from the seabed, conservation strategies will be clearly outlined in the relevant method statements produced and submitted to Historic England ahead of any such archaeological works.</p>
1.1.11	<p>1.1.11 The MMO notes that HE considers there is a potential for high level of harm to non-designated archaeological heritage assets, some of which may be of national significance. Concerns pertain to both onshore and marine receptors, but particularly focus on Zone 2: South Downs. HE concerns are that</p> <ul style="list-style-type: none"> <li>i) insufficient evaluation has been done in advance of the application for onshore, intertidal and offshore areas,</li> <li>ii) the onshore route selection process was determined without due regard to the potential significant effects on heritage, and</li> <li>iii) the embedded environmental measures do not include convincing and practicable provision to avoid the risk of harm to potentially nationally important archaeological remains.</li> </ul> <p>HE states that the DCO should contain requirements to ensure appropriate safeguards in place regarding the historic environment.</p>	<p>The Applicant refers the MMO to its response to Historic England's Relevant Representation in the <b>Applicant's Responses to Relevant Representations [REP1-017]</b> submitted at Deadline 1, where the Applicant has set out clarification on baseline data gathering, site selection process, consideration of alternatives, and mitigation measures for both onshore and offshore aspects of the Proposed Development, as well as specifically referencing the precautionary approach adopted in identifying potential significant harm to heritage assets with archaeological interest.</p> <p>The Applicant highlights the updated <b>Commitments Register [REP1-015]</b> and the updated version of <b>Chapter 25: Historic environment, Volume 2</b> of the Environmental Statement (ES) [PEPD-020], submitted at Pre-Examination Procedural Deadline A, which includes an updated assessment reflecting additional geophysical survey undertaken. The updated commitment (C-255) will be secured by the <b>Outline Onshore Written Scheme of Investigation (WSI) [APP-231]</b>, an updated version of which will be submitted at Examination Deadline 3. The Applicant would also refer to the archaeological assessment of geophysical and geotechnical surveys which have and will continue to be conducted throughout the lifetime of the Proposed Development as detailed in the <b>Outline Marine Written Schemes of Investigation [APP-235]</b>, which is secured through Requirement 19 and Condition 11 (2) Schedule 11 and 12 of the <b>Draft Development Consent Order [PEPD-009]</b>.</p>
<b>Natural England (NE) (RR-265)</b>		

Ref	Written Representation Comment	Applicant's Response
1.1.12	<p>1.1.12 The MMO is aware that there remain unresolved issues that centre around Sites of Special Scientific Interest (SSSI). We note the this includes the following sites:</p> <ul style="list-style-type: none"> <li>• Climping Beach SSSI</li> <li>• Flamborough Head SSSI</li> <li>• Farne Islands SSSI</li> <li>• Amberley Wild Brooks SSSI</li> <li>• Pulborough Brooks SSSI</li> <li>• Waltham Brooks SSSI</li> </ul>	<p>This matter is addressed in the Applicant's response to references J3, J6, J13, J49, J50 and J126 in Table 4-15, and in reference F41 of Table 4-11 of the <a href="#">Applicant's Responses to Relevant Representations [REP1-017]</a>.</p>
1.1.13	<p>1.1.13 The MMO defers to NE on all matters related to SSSI but will maintain a watching brief for any potential mitigation or DML conditions for those areas below MHWS.</p>	<p>Noted, the Applicant has no further comments on this matter at this time.</p>
1.1.14	<p>1.1.14 The MMO notes that NE have concerns regarding the likelihood of there being significant risk of hindering the achievements of the conservation objectives of the following Marine Conservation Zones (MCZs):</p> <ul style="list-style-type: none"> <li>• Kingmere MCZ</li> <li>• Beachy Head West MCZ</li> <li>• Selsey Bill and the Hounds MCZ</li> <li>• Bembridge MCZ</li> <li>• Beachy Head East MCZ</li> <li>• Offshore Overfalls MCZ</li> </ul>	<p>The Applicant has responded to these points in the Applicant's response to Natural England Relevant Representations (<a href="#">Applicant's Responses to Relevant Representations [REP1-017]</a>) and is continuing discussions with Natural England to reach agreement on the proposed mitigation for the Marine Conservation Zones as noted in the Applicant's response to Natural England's Deadline 1 submission (<a href="#">Table 2-4</a>).</p>
1.1.15	<p>1.1.15 The MMO notes that, as the competent authority (Conservation of Habitats and Species Regulations 2017), NE is not satisfied that it can be excluded beyond reasonable scientific doubt that the project would have an adverse effect alone or in combination on the integrity of the:</p> <ul style="list-style-type: none"> <li>• Flamborough and Filey Coast SPA</li> <li>• Farne Islands SPA</li> <li>• Arun Valley SPA</li> <li>• Arun Valley Ramsar</li> <li>• Arun Valley SAC</li> <li>• River Itchen SAC</li> <li>• Solent and Dorset Coast SPA</li> </ul>	<p>The Applicant has submitted a <a href="#">Habitats Regulations Assessment (Without Prejudice) Derogation Case [APP-039]</a> for the kittiwake feature of the Flamborough and Filey Coast Special Protection Area (SPA) in the event that an AEoI cannot be ruled out and is continuing discussions with Natural England on the compensation measures associated with such, as set out in the Kittiwake Implementation and Monitoring Plan (KIMP). The Applicant submitted an update to the KIMP in the <a href="#">Deadline 1 Submission – 8.25.7 Applicant's Post Hearing Submission – Issue Specific Hearing 1, Appendix 7 - Further information for Action Point 33 – Kittiwake Implementation and Monitoring Plan [REP1-026]</a> at Deadline 1.</p> <p>The Applicant has submitted an <a href="#">In Combination Assessment Update for Guillemot and Razorbill [REP1-027]</a>, which is relevant to both the Flamborough and Filey Coast SPA and the Farne Islands SPA and awaits further discussions with Natural England.</p> <p>The Applicant notes that Natural England identified in its Relevant Representation <a href="#">[RR-265]</a> that subject to clarification/agreement on the way in which Atlantic salmon were considered as a receptor to noise effects, it was likely to agree with the conclusion of no AEoI in relation to the River Itchen SAC.</p>

Ref	Written Representation Comment	Applicant's Response
		<p>The Applicant refers the MMO to its response to Natural England in the <a href="#">Applicant's Responses to Relevant Representations [REP1-017]</a> submitted at Deadline 1.</p> <p>The Applicant has provided responses with regards potential effects on functionally linked land and water neutrality on the Arun Valley SAC, SPA and Ramsar in the <a href="#">Applicant's Responses to Relevant Representations [REP1-017]</a> submitted at Deadline 1 (specifically in response to Natural England's Relevant Representation Appendix J).</p>
1.1.16	1.1.16 The MMO defers to NE on all matters related to HRA. The MMO will maintain a watching brief on these matters and will ensure we are included/are provided updates on any discussions in relation to the HRA. The MMO highlights that any mitigation secured through the HRA will need to be included within the conditions on the deemed marine licence.	Noted, the Applicant has no further comments on this matter at this time. Consideration will be given to updating draft Schedule 17 <a href="#">[PEPD-017]</a> , provided on a without prejudice basis, in due course with any associated changes required to the deemed marine licences.
1.1.17	1.1.17 The MMO notes NE's decision to use the 'Red Amber Green' ('RAG') system to denote the level of risk associated with a topic related to this development. The MMO welcomes NE's use of this system and considers it a clear and concise way to present the severity of an outstanding concern.	Noted, the Applicant has no further comments on this matter at this time.
1.1.18 & 1.1.19	<p><b>1.1.18 Summary of NE Key Environmental concerns</b></p> <p>1.1.19 The MMO notes that NE does not agree with the Applicants position with regards to offshore ornithology; specifically relating to Kittiwake, Guillemot, and razorbill within Flamborough and Filey Coast SPA and Guillemot within the Farne Islands SPA. The MMO also notes that NE disagree with the Applicant's assessment of the cumulative impacts on great black-backed gull. The MMO defers to NE for matters relating to ornithology</p>	The Applicant has submitted an <a href="#">In Combination Assessment Update for Guillemot and Razorbill [REP1-027]</a> and awaits further discussions with Natural England. The Applicant has also submitted its <a href="#">Great black-backed gull assessment sensitivity report [REP1-038]</a> , which provides consideration of the potential usage and behaviour of great black-backed gull within the area to aid in the identification of any potential mitigation measures and clarification on collision risk modelling assumption ranges to inform the overall risk potential to this species.
1.1.20	1.1.20 The MMO acknowledges NE concern over the lack of clarity over piling 'worst case scenario', and agrees that it is, currently, not possible to confidently assess whether this has been robustly assessed by the applicant. Additionally, the MMO notes concerns relating to the Vessel Management Plan (VMP) and marine mammals. The MMO also has concerns relating to underwater noise and will keep a watching brief on this topic.	The Applicant has submitted <a href="#">Deadline 1 Submission – 8.25.1 Applicant's Post Hearing Submission – Issue Specific Hearing 1 Appendix 9 – Further Information for Action Points 38 and 39 – Underwater Noise [REP1-020]</a> and <a href="#">Deadline 1 Submission – 8.25.10 Applicant's Post Hearing Submission – Issue Specific Hearing 1 Appendix 10 – Further Information for Action Point 42 – Proximity to Marine Wildlife. [REP1-028]</a> . The Applicant considers these documents provide appropriate information to address the issues raised by Natural England.
1.1.21	1.1.21 The MMO welcomes comments raised by NE relating to coastal processes and welcomes the request for further information to assess the potential risks to designated MCZ features. The MMO especially welcomes comments regarding the need for lessons learnt from Rampion 1 (post-construction monitoring) to be included in Rampion 2 impacts assessments.	<p>Whilst seabed disturbance and associated changes in suspended sediment concentrations ("SSC") and deposition of sediment will occur, the Kingmere MCZ is not identified as a receptor (or containing receptors) that is/ are directly or indirectly sensitive to the occurrence of such changes (similar to fluctuating everyday natural processes). As such, the nature and magnitude of the effect is described as a pathway (in paragraph 6.9.21 onwards, <a href="#">Chapter 6: Coastal processes, Volume 2</a> of the Environmental Statement (ES) <a href="#">[APP-047]</a>). Impacts and impact assessment on other MCZ features (e.g. benthic ecology features) are signposted in the same assessment, paragraph 6.9.32, <a href="#">Chapter 6: Coastal processes, Volume 2</a> of the ES <a href="#">[APP-047]</a>.</p> <p>The Applicant notes that Rampion 1 and the Proposed Development are two distinct projects and entities. However, there is ongoing dialogue between the two projects/entities and information generated by Rampion 1 has been and is being taken into account by The Applicant. Regarding Rampion 1 post-construction monitoring data specifically, it is the Applicant's understanding that the reports for the first two years of monitoring have been submitted to the respective discharging authorities in August 2023 and that these have not yet been approved. Therefore, the evidence within</p>



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		<p>such reports is still confidential and not yet in the public domain and as such, should not form the basis for this representation. Additionally, the reports have not yet been signed off by the discharging authorities and are therefore subject to change. The evidence from the Rampion 1 post-construction reports is not yet available for the Proposed Development to include in the ES, due to the reasons mentioned above.</p>
1.1.22	<p>1.1.22 The MMO strongly agrees with NE stance relating to the applicant's conclusion of "no significant risk of hindering the achievement of the conservation objectives in relation to the Black seabream features of Kingmere MCZ due to Temporary Threshold Shift (TTS) and behavioural impacts due to underwater noise generated from piling". The MMO agrees that piling activities from 1 March – 31 July inclusive, has the potential to hinder the conservation objectives of Kingmere MCZ in relation to black seabream, and the MMO supports the need for a full seasonal restriction.</p>	<p>The Applicant acknowledges the MMO's concerns regarding the potential for impacts on nesting black bream from underwater noise.</p> <p>Following a detailed assessment undertaken on a precautionary basis, as detailed in <a href="#">Chapter 8: Fish and shellfish ecology, Volume 2</a> of the Environmental Statement (ES) [APP-049], the Applicant considers that a full piling restriction from 1 March to 31 July is disproportionate to the risk of an impact arising that could result in significant population level effects on nesting black bream.</p> <p>Whilst, in 2021, the black seabream spawning/nesting period was extended to include the month of July, spawning/nesting activity during this month is considerably reduced and therefore with much less impact on the population breeding success is anticipated than the preceding months, as set out in <a href="#">Chapter 8: Fish and shellfish ecology, Volume 2</a> of the ES [APP-049], with 5% of nests attended by males by 10 July and 0% by 30 July in a 2020 survey. This compared with 89.4% nests attended by males in June of the same year. Noting that some nesting is still potentially occurring in July, the <a href="#">In Principle Sensitive Features Mitigation Plan [REP1-012]</a>, the provision of which is secured in Condition 11(1)(k) of the draft Marine Licences (dMLs) (Schedules 11 and 12 of the <a href="#">Draft Development Consent Order [PEPD-009]</a>) sets out multiple mitigation measures during the month of July; these include (in the event that piling is undertaken in July in the western part of the array) the combination of a low noise hammer technology and bubble curtains, and a sequencing approach to piling starting in locations furthest from the Marine Conservation Zone (MCZ).</p> <p>Through the application of a variety of mitigation measures in July, the Applicant is confident that piling operations will not hinder the Kingmere MCZ conservation objectives.</p> <p>The Applicant reiterates that a full piling exclusion from March-July inclusive would have significant issues for the practical development of the Proposed Development.</p>
1.1.23	<p>1.1.23 The MMO notes NE disagreement with the applicant's conclusion of 'no significant risk of hindering' Short snouted seahorse within Beachy Head West MCZ and Beach Head East MCZ. The MMO supports NE's request for further evidence to support the proposed mitigation and agrees that the current uncertainties surrounding underwater noise modelling question the effectiveness of the current mitigation measures.</p>	<p>This issue is addressed in <a href="#">Deadline 1 Submission – 8.25.1 Applicant's Post Hearing Submission – Issue Specific Hearing 1 Appendix 9 – Further Information for Action Points 38 and 39 – Underwater Noise [REP1-020]</a>.</p>
1.1.24	<p>1.1.24 The MMO agrees that there is currently insufficient evidence to understand if the mitigation measures to protect Annex 1 habitats and Habitats of Principal Importance (<i>Sabellaria spinulosa</i>, chalk, peat and clay, and stoney/bedrock reefs) will be effective. The MMO supports the suggestion for the applicant to gather geotechnical information to inform a Cable Burial Risk Assessment (CBRA), and the MMO hopes to see this submitted into examination.</p>	<p>The assessment of permanent habitat loss is presented in Section 9 of <a href="#">Chapter 9: Benthic, subtidal and intertidal ecology, Volume 2</a> of the Environmental Statement (ES) [APP-050], with the sensitivity of chalk afforded a 'high' sensitivity category within the assessment as a result of its protected status.</p> <p>Recognising that due to the widespread nature of chalk in the region, often as underlying geology beneath surficial sediment cover, not all chalk can be avoided, the Applicant has provided its approach</p>



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		<p>to minimising permanent loss of chalk within the updated <b>In Principle Sensitive Features Mitigation Plan [REP1-012]</b>, which includes the use of specialist equipment to minimise impact footprints in such areas where full avoidance is not possible. The Applicant confirms that trench cutting on the seafloor using a mechanical cutter would be able to deposit the majority of the cuttings back into the trench, however this process will obviously be influenced by the characteristics of the chalk rock itself. The development of the mitigation, which will be provided in the final Sensitive Features Mitigation Plan, forms an important component of the approach to ensuring the 'minor' magnitude impact assigned to chalk receptors, as well as Habitats of principle Importance, is appropriate. The final Mitigation Plan will be submitted to and approved in writing by the MMO, as secured in condition 11(1)(k) of the dMLs (Schedules 11 and 12 of the <b>Draft Development Consent Order [PEPD-009]</b>), alongside the Cable Specification and Installation Plan, Condition 11(1)(n) of the dMLs (Schedules 11 and 12 of the <b>Draft Development Consent Order [PEPD-009]</b>), both of which will draw upon the cable burial risk assessment (secured in Condition 11(1)(n) of the dMLs (Schedules 11 and 12 of the <b>Draft Development Consent Order [PEPD-009]</b>).</p>
1.1.25	<p>1.1.25 The MMO acknowledges that NE believe that Rampion 1 led to significant permanent loss of irreplaceable marine chalk potentially as a result of floatation pits and the cable installation in the nearshore. The MMO acknowledges the scarcity and importance of marine chalk in this area and supports the call for a clear appraisal of all options for nearshore cable installation and their impacts to be submitted into the examination.</p>	<p>The use of floatation pits has been discounted for the Proposed Development. An appraisal of alternative options is presented in <b>Deadline 1 Submission – 8.25.13 Applicant's Post Hearing Submission – Issue Specific Hearing 1 Appendix 13 – Further Information for Action Point 45 and 46 – Physical Processes and Benthic [REP1-030]</b>.</p>
1.1.26	<p>1.1.26 The MMO acknowledges concerns raised by NE regarding seascape, landscape, and visual impacts. The MMO defers fully to NE and the LPA on this topic but will keep a watching brief throughout examination and hope to see concerns resolved.</p>	<p>This is noted, the Applicant has no further comments on this matter at this time.</p>
1.1.27	<p>1.1.27 The MMO agrees that evidence should be provided across 'Other Plans (marine)' which demonstrates lessons learned from Rampion 1 monitoring.</p>	<p>The Applicant notes that Rampion 1 and the Proposed Development are two distinct projects and entities. However, there is ongoing dialogue between the two projects/entities and information generated by Rampion 1 has been and is being taken into account by The Applicant. Regarding Rampion 1 post-construction monitoring data specifically, it is the Applicant's understanding that the reports for the first two years of monitoring have been submitted to the respective discharging authorities in August 2023 and that these have not yet been approved. Therefore, the evidence within such reports is still confidential and not yet in the public domain and as such, should not form the basis for this representation. Additionally, the reports have not yet been signed off by the discharging authorities and are therefore subject to change. The evidence from the Rampion 1 post-construction reports is not yet available for the Proposed Development to include in the Environmental Statement (ES), due to the reasons mentioned above.</p>
<p><b>Sussex Wildlife Trust (SWT) (RR- 381)</b></p>		
1.1.28	<p>1.1.28 The MMO notes that SWT have not been able to ascertain the environmental impacts of the project due to the high level of uncertainty regarding the proposed development. The MMO will review the Applicant's response in relation to this and may provide further comments at Deadline 2.</p>	<p><b>Chapter 5: Approach to the EIA, Volume 2</b> of the Environmental Statement (ES) <b>[APP-046]</b> states that where the design is still evolving, a precautionary approach has been applied to ensure a maximum design scenario which represents the worst-case scenario for each aspect is assessed in the ES. This approach has been adopted in line with the Planning Inspectorate Advice Note Nine: Rochdale Envelope (Planning Inspectorate, 2018), and is further described in <b>Chapter 4: The Proposed Development, Volume 2</b> of the ES <b>[APP-045]</b> in paragraphs 4.1.4 to 4.1.6. The use of the Rochdale Envelope approach is recognised in paragraph 4.2.8 of NPS EN-1 (2011) and is also</p>

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1.1.29	<p>1.1.29 The MMO notes that SWT are discouraged by the frequent use of caveats in The Commitment Register; 'where possible' or 'where practical'. This reduces confidence that commitments will be adhered to, and SWT are seeking clarity on how these commitments will be monitored and enforced during construction. The MMO will review the Applicant's response in relation to this and may provide further comments at Deadline 2.</p>	<p>reflected in the newly designated NPS (Department of Energy Security and Net Zero 2023a; 2023b and 2023c).</p> <p>There have been opportunities for the development of environmental measures which have been adopted to reduce the potential for environmental impacts and effects. These were included directly into the design of Rampion 2 as embedded environmental measures and are detailed in the <a href="#">Commitments Register [REP1-015]</a>. The Commitments Register was initially presented in the Scoping Report and subsequently updated throughout the Statutory Consultation exercises and in the Environmental Statement to reflect design evolution and consultation feedback.</p> <p>The <a href="#">Commitments Register [REP1-015]</a> includes a column for the securing mechanism for each embedded environmental measure and its related commitment reference. This cross-refers to the mechanism, for example a requirement in the <a href="#">Draft Development Consent Order [PEPD-009]</a> Schedule 1 Part 3. Where there is an accompanying document such as an outline plan submitted with the DCO Application with which works must be undertaken in accordance with, this is also referred to under the 'Relevant Application Documents' column.</p> <p>The statements referenced in this relevant representation are commonly used and accepted throughout the industry and in other DCO applications.</p> <p>The Applicant has identified the appropriate embedded environmental measures to avoid, reduce or minimise effects based on best practice and industry experience. There is the need for some flexibility where a measure may not be applicable in a specific scenario during construction or require slight adjustment, in such instances this would be confirmed in the stage specific documents secured in the <a href="#">Draft Development Consent Order [PEPD-009]</a> such as the detailed Code of Construction Practice (CoCP), which is secured in Requirement 22 of the <a href="#">Draft Development Consent Order [PEPD-009]</a>. The Applicant would need to confirm that no new or materially different environmental effects would arise in this instance.</p> <p>Note that for added clarity on the corresponding securing mechanisms, the <a href="#">Commitments Register [REP1-015]</a> provided at application submission has been updated at Deadline 1 to include further detail e.g. the full reference to DCO requirements and addition of the location of further information within the Application documents.</p>
1.1.30	<p>1.1.30 The MMO notes that SWT believe that the proposal should commit to the type of foundations being used for WTG due to the high level of variation of impacts on the seabed between proposed types. The MMO will review the Applicant's response in relation to this and may provide further comments at Deadline 2.</p>	<p>The type of wind turbine generator foundation to be installed will be determined from the results of geotechnical investigations, existing environmental sensitivities and the final wind turbine generator selection. It is anticipated that more than one type of foundation may be used across the Proposed Development. The maximum design scenario which has been assessed in <a href="#">Chapter 9: Benthic, subtidal and intertidal ecology, Volume 2</a> of the Environmental Statement (ES) <a href="#">[APP-050]</a> has been based on a worst-case scenario of foundation types and no significant effects are predicted to occur.</p>
1.1.31	<p>1.1.31 The MMO notes that SWT would like to see a commitment to micro-siting all elements of construction to minimise impacts to irreplaceable habitats, but especially with regard to HDD exit pits at landfall locations. The MMO will review the Applicant's response in relation to this and may provide further comments at Deadline 2.</p>	<p>The Applicant has committed to undertaking targeted pre-construction surveys of priority habitats as referenced in the <a href="#">Offshore In Principle Monitoring Plan [APP-240]</a>. The Applicant will ensure the extent of these features are mapped as part of these surveys. Proposals for micro-siting around priority habitats are presented within the <a href="#">In Principle Sensitive Features Mitigation Plan [REP1-012]</a>. The final Sensitive Features Mitigation Plan is to be submitted to and approved in writing by the Marine Management Organisation, as secured in Condition 11(1)(k) of the draft Marine Licence (dML) (Schedules 11 and 12 of the <a href="#">Draft Development Consent Order [PEPD-009]</a>). Micro-siting required</p>

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1.1.32	1.1.32 The MMO notes that SWT would like to see commitment to noise abatement technology. The MMO would welcome the commitment to noise abatement and will review the Applicant's response in relation to this and may provide further comments at Deadline 2.	<p>for anthropological constraints, marine heritage receptors, environmental constraints including wind loading standards and projected changes in climate conditions during the operational life of the Proposed Development and marine designated areas or difficult ground conditions and choice of foundation types for all wind turbine generators will also be included in the design plan, secured in Condition 11(1)(a) of the draft Marine Licence (dML) (Schedules 11 and 12 of the <a href="#">Draft Development Consent Order [PEPD-009]</a>).</p> <p>The Applicant confirms that the inclusion of <a href="#">Draft Piling Marine Mammal Mitigation Protocol [APP-236]</a>, which is secured via Condition 11(1)(l) of the dMLs (Schedules 11 and 12 of the <a href="#">Draft Development Consent Order [PEPD-009]</a> and noted in <a href="#">Table 8-13 of Chapter 8: Fish and shellfish ecology, Volume 2</a> of the ES <a href="#">[APP-049]</a> is an embedded environmental measure related to the use of soft start procedures for piling to deter mobile marine life, therefore reducing the noise exposure to fish and shellfish receptors. With regards to mitigating against the potential for impacts to sensitive stationary receptors such as black seabream and seahorse, further mitigation measures have been proposed. These are detailed in <a href="#">In Principle Sensitive Features Mitigation Plan [REP1-012]</a>, and include noise abatement measures, and the development of a spatial and temporal zoning plan for piling. This is secured in Condition 11(1)(k) of the dMLs (Schedules 11 and 12 of the <a href="#">Draft Development Consent Order [PEPD-009]</a>).</p> <p>C-265 commits the Applicant to using: <i>“At least one offshore piling noise mitigation technology will be utilised to deliver underwater noise attenuation in order to reduce predicted impacts to sensitive receptors at relevant Marine Conservation Zone (MCZ) sites and reduce the risk of significant residual effects on the designated features of these sites.”</i> As secured by the <a href="#">In Principle Sensitive Features Mitigation Plan [REP1-012]</a> (Condition 11(1)(k) of the draft Marine Licence (dML) (Schedules 11 and 12 of the <a href="#">Draft Development Consent Order [PEPD-009]</a>).</p>
1.1.33	1.1.33 The MMO notes that SWT do not feel able to assess or comment on specific ecological impacts due to the lack of specific detail within the application (e.g., ground conditions not assessed yet).	<p>The Applicant refers the MMO to its response to <a href="#">Reference 1.1.28</a> above in relation to the way in which the assessment has considered uncertainties, and the way in which this provides for a full assessment of the Proposed Development to be completed, recognising that the final design is completed post-consent. The final design will be informed by a range of additional data, which importantly will inform aspects such as micro-siting of infrastructure, as well as specific mitigation measures that will be employed where necessary to ensure environmental effects are no greater than those set out within the ES. These additional data, notably including geotechnical and geophysical surveys, will inform ground conditions, with the approaches and commitments set out in the <a href="#">Offshore In Principle Monitoring Plan [APP-240]</a>, the delivery of which is secured in Condition 11(1)(j) of the dMLs (Schedules 11 and 12 of the <a href="#">Draft Development Consent Order [PEPD-009]</a>). Proposals for micrositing around priority habitats, which importantly will be based on the results of the pre-construction surveys, are presented within the <a href="#">In Principle Sensitive Features Mitigation Plan [APP-239]</a> secured in Condition 11(1)(k) of the dMLs (Schedules 11 and 12 of the <a href="#">Draft Development Consent Order [PEPD-009]</a>).</p>
1.1.34	1.1.34 The MMO notes that SWT have concerns over the 'Future Baselines' section within the ES (Chapter 2, Volume 9) and questions whether there are lessons to be learnt from Rampion 1 post-consent surveys. The MMO welcomes this statement and agrees strongly that the post-consent monitoring from Rampion should be referred to in order to strengthen the methodologies of Rampion 1 post-consent monitoring surveys.	<p>The purpose of the 'Future Baselines' section 9.6.36-38 in <a href="#">Chapter 9: Benthic, subtidal and intertidal ecology, Volume 2</a> of the Environmental Statement (ES) <a href="#">[APP-050]</a>, is to describe potential changes or factors affecting the baseline looking forwards in time, without the Proposed Development. As stated in <a href="#">paragraph 9.6.38 of Chapter 9: Benthic, subtidal and intertidal ecology, Volume 2</a> of the ES <a href="#">[APP-050]</a>, <i>“Any changes that may occur during the construction, operation and decommissioning of the Proposed Development should be considered in the context of both greater variability and sustained trends occurring on national and international scales in the marine</i></p>



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		<p><i>environment, and the changes that will be expected to occur naturally in the absence of the Proposed Development.”</i></p> <p>Table 9-16 in <b>Chapter 9: Benthic, subtidal and intertidal ecology, Volume 2</b> of the ES [APP-050], lists the embedded environmental measures that the Applicant is committed to adopting in order to reduce the potential for effects on benthic subtidal and intertidal ecology.</p> <p>The Applicant notes that Rampion 1 and the Proposed Development are two distinct projects and entities. However, there is ongoing dialogue between the two projects/entities and information generated by Rampion 1 has been and is being taken into account by The Applicant. Regarding Rampion 1 post-construction monitoring data specifically, it is the Applicant's understanding that the reports for the first two years of monitoring have been submitted to the respective discharging authorities in August 2023 and that these have not yet been approved. Therefore, the evidence within such reports is still confidential and not yet in the public domain and as such, should not form the basis for this representation. Additionally, the reports have not yet been signed off by the discharging authorities and are therefore subject to change. The evidence from the Rampion 1 post-construction reports is not yet available for the Proposed Development to include in the ES, due to the reasons mentioned above.</p>
1.1.35	1.1.35 The MMO notes that the SWT feel that criteria for determining the suitability of HDD is unclear, e.g., 'where this represents the best environment solution and is financially and technically feasible'. The MMO welcomes this comment and agrees that further information is required from the applicant to inform interested parties of the determining factors.	Commitment C-5 ( <b>Commitments Register [REP1-015]</b> ) (provided at Deadline 1 submission) has been updated at the Deadline 1 submission to clarify that Horizontal Directional Drill (HDD) or other trenchless technology will be deployed in accordance with Appendix A: Crossing Schedule of the <b>Outline Code of Construction Practice [PEPD-033]</b> secured via Required 22 within the <b>Draft Development Consent Order [PEPD-009]</b> . The Applicant will not switch to open-cut trenching at these locations. The appropriate realistic Worst-Case Scenario has been assessed in the ES. Note, that in the unlikely event that another trenchless technology is deployed at a specific crossing, this would require demonstration that there are no materially new or materially different environmental effects. Any change will need to be approved by the relevant planning authority through amendment to the stage specific Code of Construction Practice and Crossing Schedule.
1.1.36	1.1.36 The MMO notes that the SWT queries whether the 'realistic worst-case scenario' within the ES allows for changes to construction methods. The MMO will review the Applicant's response in relation to this and may provide further comments at Deadline 2.	Please see above response.
1.1.38	1.1.38 The MMO notes that the SWT have concerns regarding Climping beach, which is highly mobile and experiences heavy erosion. SWT are concerned that significant changes may occur by 2026, and query whether this has been considered when assessing construction methods and to ensure minimal ecological impacts at this protected site. The MMO will review the Applicant's response in relation to this and may provide further comments at Deadline 2.	Ecological impacts at Climping Beach Site of Special Scientific Interest (SSSI) are avoided through the use of horizontal directional drill (HDD) secured via descriptions of Work No.6 and Work No. 7 in the <b>Draft Development Consent Order [PEPD-009]</b> . This means that there will not be any surface construction works within the SSSI and only pedestrian access will be required to monitor the path of the drill head, see paragraphs 5.6.8 to 5.6.15 of the <b>Outline Code of Construction Practice [PEPD-033]</b> , that is secured via Requirement 22 of the <b>Draft Development Consent Order [PEPD-009]</b> . The draft DCO also includes Requirement 23 (b) to restrict access to the Climping Beach SSSI. The onshore works begin at the closest potential landfall location around 170m north of the SSSI, thereby allowing adequate room to control for indirect effects (e.g. dust deposition, light spill from temporary lighting etc.). This has been considered within the assessment in <b>Chapter 22: Terrestrial ecology and nature conservation, Volume 2</b> of the Environmental Statement (ES) [APP-063].



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1.1.39	1.1.39 The MMO notes that the SWT welcomes the Applicant's commitment to deliver at least 10% Biodiversity Net Gain ("BNG") and acknowledges the lack of detail as to how this is achieved. The MMO defers to NE on this matter.	<p>Furthermore <b>Chapter 6: Coastal processes, Volume 2</b> of the ES [APP-047] concludes that construction and operation and maintenance activities will not significantly impact coastal morphology and offshore sediment transport and therefore the development will not increase the risk of coastal erosion. Following Issue Specific Hearing 1 (ISH1), the Applicant has provided further information in request to Action Point 7 to provide more detail on HDD at Climping Beach, see Appendix 11 – Further information for Action Point 7, <b>Applicant's Response to Action Points Arising from Issue Specific Hearing 1 [REP1-018]</b>.</p> <p>On the basis of the assessment undertaken within <b>Chapter 6: Coastal processes, Volume 2</b> of the ES [APP-047] and commitment C-247 (<b>Commitments Register [REP1-015]</b>) which secures via Requirement 26 of the <b>Draft Development Consent Order [PEPD-009]</b>, the coastal vulnerability of the Proposed Development is considered to be low, for which further mitigation will be identified and implemented post-granting of DCO consent as necessary.</p> <p>Requirement 14 of the <b>Draft Development Consent Order [PEPD-009]</b> secures the delivery of Biodiversity Net Gain (BNG) and <b>Appendix 22.15: Biodiversity Net Gain Information, Volume 4</b> of the Environmental Statement [APP-193] describes the mechanism by which it will be delivered including information on the timing of delivery (including front loading), the process for identifying biodiversity units (i.e. a hierarchy of criteria to identify the most suitable units available) and how these would be secured and managed (effectively as units purchased from strategic projects or via habitat banks (including potentially on land owned by affected parties). Without a detailed design and the opportunity to then fully quantify the losses, identify where these occur (including in which district), and identify what opportunities for provision are available at the time, it is not possible to provide information on location, type etc. at present. This information would be provided and agreed as per Requirement 14 of the <b>Draft Development Consent Order [PEPD-009]</b>. It is noted that a similar approach was accepted by the Secretary of State in the recently granted (14 March 2024) Development Consent Order for Yorkshire Green.</p>
1.1.40	1.1.40 The MMO notes that the SWT require clarity on the type and total area of habitat to be permanently lost, and any subsequent mitigation and compensation for. The MMO acknowledges that SWT wish to see on-site habitat restoration delivering enhancements wherever possible.	<p><b>Chapter 22: Terrestrial ecology and nature conservation, Volume 2</b> of the Environmental Statement (ES) [APP-063] identifies the location of permanent loss of hedgerow and woodland (noting that reinstatement in these areas will be of mixed scrub). The only other habitats where permanent loss will be evident is in modified grassland and arable field. Habitat reinstatement and indicative habitat creation within the Proposed DCO Order Limits is described in the <b>Outline Landscape and Ecology Management Plan [APP-232]</b>. A detailed Landscape Ecology and Management Plan will be produced through Requirements 12 and 13 of the <b>Draft Development Consent Order [PEPD-009]</b>. The short fall of habitat units identified in <b>Appendix 22.15: Biodiversity Net Gain Information, Volume 4</b> of the ES [APP-193].</p> <p>Requirement 14 of the <b>Draft Development Consent Order [PEPD-009]</b> secures the delivery of Biodiversity Net Gain (BNG) and <b>Appendix 22.15: Biodiversity Net Gain Information, Volume 4</b> of the ES [APP-193] describes the mechanism by which it will be delivered including information on the timing of delivery (including front loading), the process for identifying biodiversity units (i.e. a hierarchy of criteria to identify the most suitable units available) and how these would be secured and managed (effectively as units purchased from strategic projects or via habitat banks (including potentially on land owned by affected parties). Without a detailed design and the opportunity to then fully quantify the losses, identify where these occur (including in which district) and identify what opportunities for provision are available at the time it is not possible to provide information on location, type etc. at</p>

Ref	Written Representation Comment	Applicant's Response
<p>present. This information would be provided and agreed as per Requirement 14 of the <b>Draft Development Consent Order [PEPD-009]</b>.</p>		
<p><b>Sussex Inshore Fisheries and Conservation Authority (IFCA) (RR-381)</b></p>		
1.1.41	<p>1.1.41 IFCA has a high level of uncertainty regarding the proposed development due to the consistent use of the 'Rochdale Envelope', which makes it challenging to pass comment on mitigation measures and techniques. The MMO understands the flexibility needed by the Applicant and would welcome any further refinement during examination.</p>	<p><b>Chapter 5: Approach to the EIA, Volume 2</b> of the Environmental Statement (ES) <b>[APP-046]</b> states that where the design is still evolving, a precautionary approach has been applied to ensure a maximum design scenario which represents the worst-case scenario for each aspect is assessed in the ES. This approach has been adopted in line with the Planning Inspectorate Advice Note Nine: Rochdale Envelope (Planning Inspectorate, 2018), and is further described in <b>Chapter 4: The Proposed Development, Volume 2</b> of the ES <b>[APP-045]</b> in paragraphs 4.1.4 to 4.1.6. The use of the Rochdale Envelope approach is recognised in paragraph 4.2.8 of NPS EN-1 (2011) and is also reflected in the newly designated National Policy Statements (Department of Energy Security and Net Zero 2023a; 2023b and 2023c).</p>
1.1.42	<p>1.1.42 The MMO notes that IFCA is concerned about the lack of up to date-site based survey data, and the age of the baseline data used. The MMO will review the Applicant's response in relation to this and may provide further comments at Deadline 2.</p>	<p>The Applicant is confident that data available at the time of writing, inclusive of historic desk studies, survey data drawn from the aggregates industry surveys and site-specific geophysical survey data was used to inform the baseline characterisation to inform the assessment undertaken in <b>Chapter 8: Fish and shellfish ecology, Volume 2</b> of the Environmental Statement (ES) <b>[APP-049]</b>.</p> <p>During the Benthic Ecology and Fish Ecology Expert Topic Meeting (ETG) Meeting on 24 March 2021, Sussex Inshore Fisheries and Conservation Authority (IFCA) stressed that site-specific fish and shellfish surveys were considered more appropriate than solely relying on desk-based studies to inform the baseline, but ultimately deferred to their statutory authority colleagues on this matter (Marine Management Organisation (MMO) and Centre for Environment, Fisheries and Aquaculture Science (Cefas)). Agreement of no additional fish and shellfish surveys required for the Proposed Development was confirmed with these bodies. As part of the Evidence Plan Process (EPP), it was agreed with the fish and shellfish ETG that adequate information had been provided for the baseline characterisation, and with the exception of black seabream, further fish and shellfish surveys were not considered necessary for the assessment, as set out in the <b>Evidence Plan [APP-243]</b>. Site specific geophysical surveys were conducted across the entire proposed DCO Order Limits, which allows the consideration of likely distribution of black seabream nests, and nesting habitat potential outside the Kingmere Marine Conservation Zone (MCZ) based on seabed characteristics (Section 8.6, paragraph 8.6.82 to 8.6.84 of <b>Chapter 8: Fish and shellfish ecology, Volume 2</b> of the ES <b>[APP-049]</b>). The site-specific surveys complement long term black seabream nest distribution data collected within the export cable corridor, Kingmere Marine Conservation Zone (MCZ) and the nearfield Zone of Influence (ZOI) to inform licensing decisions for the aggregate industry, black seabream catch and release data, and regional geological data, the composite of which is described in this chapter and completes a comprehensive baseline characterisation fit for the purposes of environmental impact assessment (EIA).</p>
1.1.43	<p>1.1.43 IFCA has serious concerns regarding the likelihood of significant impacts to Black Bream during the construction, operation, and maintenance of Rampion 2. IFCA acknowledge that the proposed mitigation from sedimentation and noise generation has alleviated some of these concerns however, preconstruction site-specific surveys are needed to inform micro-siting of all elements of construction to minimise the environmental impact. The MMO will review the Applicant's response in relation to this and may provide further comments at Deadline 2.</p>	<p>This is noted by the Applicant.</p>

Ref	Written Representation Comment	Applicant's Response
1.1.44	<p>1.1.44 The MMO notes that IFCA has concerns about the impact of underwater noise in relation to disturbance of black seabream and would like to see a commitment to noise abatement technology during the nesting season. The threshold for disturbance of breeding black seabream is unknown, therefore we suggest a baseline of background noise occurring during a successful nesting season is used to inform a suitable target for noise abatement mitigation to achieve. The MMO would welcome the commitment to noise abatement and will review the Applicant's response in relation to this and may provide further comments at Deadline 2.</p>	<p>The Applicant has set out its commitments to the use of noise abatement mitigation during the black seabream spawning period, within the <a href="#">In Principle Sensitive Features Mitigation Plan [REP1-012]</a>, which is secured via Condition 11(1)(k) of the draft Marine Licences (dMLs) (Schedules 11 and 12 of the <a href="#">Draft Development Consent Order [PEPD-009]</a>.</p> <p>The noise abatement mitigation commitments are:</p> <ul style="list-style-type: none"> <li>• C-265 At least one offshore piling noise mitigation technology will be utilised to deliver underwater noise attenuation to reduce predicted impacts to sensitive receptors at relevant Marine Conservation Zone (MCZ) sites and reduce the risk of significant residual effects on the designated features of these sites.</li> <li>• C-280 Commitment that no piling will occur in the piling exclusion zones during the seabream breeding period (March-July) which will be defined by the modelling in the Final Sensitive Features Mitigation Plan.</li> <li>• C-281 Commitment to no piling within the western part of the Rampion 2 offshore array closest to the Kingmere MCZ during the majority of the black seabream breeding period (March-June); and sequenced piling in the western part of the Offshore Array Area during July in accordance with the zoning plan to be set out in the Final Sensitive Features Mitigation Plan, to reduce the risk of significant effects from installation works on breeding black seabream within or outside of the Kingmere MCZ.</li> <li>• C-282 Commitment to commence piling at locations furthest from the Kingmere. MCZ during the black seabream breeding period (March-July), to reduce the risk of significant effects from installation works on breeding black seabream within or outside of the Kingmere MCZ.</li> </ul> <p>The proposed noise threshold will be informed by the site-specific ambient noise surveys in order to ensure a relevant threshold for the area. <a href="#">Appendix 8.4: Black Seabream Underwater Noise Technical Note and Survey Results - Revision A, Volume 4</a> of the Environmental Statement (ES) <a href="#">[PEPD-023]</a> has been submitted to the Examination at the Pre-Exam Procedural Deadline A on 16 January 2024 and subsequently published on the PINS website.</p>
1.1.45	<p>1.1.45 The MMO notes that IFCA has serious concerns regarding Under Water Noise (UWN) and Herring. The MMO acknowledges that IFCA are recommending a seasonal piling restriction to limit disturbance to spawning populations during the spawning season (November-January) or methods such as bubble curtains. The MMO will review the Applicant's response in relation to this and may provide further comments at Deadline 2.</p>	<p>This is noted by the Applicant.</p>
<p><b>Trinity House (TH) (RR – 081)</b></p>		
1.1.46	<p>1.1.46 The MMO notes that all correspondence, should it be necessary, between Trinity House and any other Interested Parties should be directed to its Legal Advisor, Russell Dunham. The MMO welcomes this point and will ensure that any correspondence is directed through this channel.</p>	<p>Noted, the Applicant has no further comments on this matter at this time.</p>
<p><b>Maritime and Coastguard Agency (MCA) (RR – 221)</b></p>		



Ref	Written Representation Comment	Applicant's Response
1.1.47	1.1.47 The MMO welcomes the MCA's confirmation that the MCA will be responding on matters of navigational safety and maritime emergency response. The MMO notes that the MCA have concerns about vessel routing, and the MMO hopes to see these concerns addressed throughout examination.	The Applicant is continuing to work with the MCA to address their concerns and has responded to the MCA's Written Representation in Table 2-8 of <a href="#">Applicant's Responses to Non-Prescribed Consultee's Written Representations (Document Reference: 8.53)</a> , submitted at Deadline 2.
<b>2. Cumulative impacts assessment</b>		
2.1.1	<b>2.1 Major comments</b> 2.1.1 Documents reviewed: <ul style="list-style-type: none"> <li>• Volume 2, Chapter 30: Inter-related effects, Document Reference: 6.2.30,</li> <li>• Volume 4, Appendix 5.3: Cumulative effects assessment detailed onshore search and screening criteria, Document Reference: 6.4.5.3,</li> <li>• Volume 4, Appendix 5.4: Cumulative effects assessment shortlisted developments, Document Reference: 6.4.5.4,</li> </ul>	Noted, the Applicant has no further comments on this matter at this time.
2.1.2	2.1.2 As mentioned in point 4.6.4 of our Relevant Representation, the MMO has further reviewed the cumulative impacts assessments provided by the Applicant and has the following additional comments as below:	Noted, the Applicant has no further comments on this matter at this time.
2.1.3	2.1.3 The MMO considers the sources used to inform the cumulative effects assessment (CEA) short list are appropriate, however the MMO is not in full agreement with the approach that the Applicant has used.	These comments are welcomed by the Applicant, individual comments are addressed below in <b>References 2.1.4 – 2.1.12.</b>
2.1.4	2.1.4 The Applicant states in the document listed in point 3.1, that “once the CEA long list was collated, all projects, plans, and activities have been individually screened based on the data available, and the potential for interactions on a conceptual, physical, and temporal basis with each technical aspect of the ES”. Initially this seems appropriate, however the MMO notes that a quantitative spatial and temporal zone of influence for screening developments in or out of the CEA has not been defined. This has resulted in the ‘short-list’ of offshore developments identified for inclusion in the CEA (Table 2-1 of the document listed in point 5iii) including developments which are in excess of 200 km away from the Rampion 2 development. The MMO does not believe this is appropriate as it is unlikely that a development such as the Awel y Mor OWF (which is included as screened into the CEA under Table 2-1 and located in the Irish Sea more than 350km away from Rampion 2) will have a conceivable pathway through which cumulative impacts to fisheries receptors may arise.	<p>A short list of ‘other developments’ that may interact with the Zones of Influence (ZOIs) of all Environmental Statement (ES) assessments during the construction, operation or decommissioning of the Proposed Development is presented in <a href="#">Appendix 5.4: Cumulative effects assessment shortlisted developments, Volume 4</a> of the Environmental Statement (ES) [APP-128] and on <a href="#">Figure 5.4.1, Volume 3</a> of the ES [APP-078]. This list has been generated by applying criteria set out in <a href="#">Chapter 5: Approach to the EIA, Volume 2</a> of the ES [APP-046] and has been collated up to the finalisation of the ES through desk study, consultation and engagement. Each ES chapter contains a shortlist specific to that assessment, using a ZOI relevant to the receptors and pathways considered.</p> <p>For example, for marine mammals this was accomplished by screening out already operational projects that had been identified in the long list, and thus the short-list consists of all offshore projects within the marine mammal MUs that are expected to be constructed during the time period considered in the CEA. Table 5-8 in <a href="#">Chapter 5: Approach to the EIA, Volume 2</a> of the ES [APP-046] sets out the aspect specific screening distances used to refine the screened long list into aspect specific short lists (along with justifications for the distances used). Additional details can be found in Section 11.12 of <a href="#">Chapter 11: Marine mammals, Volume 2</a> of the ES [REP1-004].</p> <p>For fish and shellfish receptors, the ZOIs applied to ensure direct and indirect cumulative effects were appropriately identified and assessed, included a 16km ZOI (for potential cumulative sedimentary impacts) and 100km ZOI (for potential cumulative underwater noise impacts). All ‘other developments’ falling outside the fish and shellfish ecology ZOI were excluded from the CEA. The assessment of the potential for cumulative effects on fish and shellfish receptors is provided Section 8.12 of <a href="#">Chapter 8: Fish and shellfish ecology, Volume 2</a> of the ES [APP-049]. The Applicant agrees with the MMO that the Awel y Mor OWF, located over 350 km from the Proposed Development has no conceivable pathway through which cumulative impacts to fisheries receptors may arise and further confirms that</p>



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		<p>this project has not been included in the fish and shellfish ecology cumulative assessment. The Awel y Mor OWF has been included in the cumulative effects assessment for marine mammals, as noted above, and offshore ornithology, for the purposes of EIA and HRA.</p>
2.1.5	<p>2.1.5 The map in Annex 1 (Figure 5.4.1 from our RR) provides a UK-scale map of projects on the Applicant's 'short-list'. This figure has a smaller map inset which depicts the developments surrounding Rampion 2 at a more appropriate geographic scale. However, there is no discussion on this inset map, which provides a truer short-list of developments with potential for cumulative interactions, within the document. The Applicant should present the developments highlighted in the inset map of Figure 5.4.1 under a separate table as a more meaningful 'short-list' of developments relevant for inclusion in the CEA, based on an appropriate zone of influence around the Rampion 2 array</p>	<p>The assessment of the potential for cumulative effects on fish and shellfish receptors is provided Section 8.12 of <b>Chapter 8: Fish and shellfish ecology, Volume 2</b> of the Environmental Statement (ES) [APP-049]. The Zones of Influence (ZOIs) applied to ensure direct and indirect cumulative effects were appropriately identified and assessed, included a 16km ZOI (for potential cumulative sedimentary impacts) and 100km ZOI (for potential cumulative underwater noise impacts). All 'other developments' falling outside the fish and shellfish ecology ZOI were excluded from the CEA. Developments screened into the fish and shellfish ecology CEA are listed in Table 8.27 of <b>Chapter 8: Fish and shellfish ecology, Volume 2</b> of the ES [APP-049] and are presented in <b>Figure 8.25 of Chapter 8: Fish and shellfish ecology – Figures, Volume 3</b> of the ES [APP-081]. The Applicant would note that Figure 5.4.1 provides a map of all potential cumulative projects considered for screening across all topics, and not solely fish and shellfish ecology; projects considered for fish and shellfish ecology cumulative assessment were taken from the relevant ZOIs as noted above.</p>
2.1.6	<p>2.1.6 There is little to no discussion in the documents provided on which developments within the zone of influence have impacts that could potentially cause cumulative interactions which would impact fish ecology receptors. This must be made clear within either the inter-related effects chapter, or within accompanying documentation which examines cumulative effects on receptor groups (including fish ecology receptors). At present, the MMO cannot confidently say which developments the Applicant has identified as having potential for cumulative effects on fish ecology receptors, or whether these effects have been appropriately assessed.</p>	<p>A cumulative effects assessment (CEA) examines the combined impacts of Rampion 2 in combination with other developments on the same single receptor or resource and the contribution of Rampion 2 to those impacts. The overall method followed in identifying and assessing potential cumulative effects in relation to the offshore environment is set out in <b>Chapter 5: Approach to the EIA, Volume 2</b> of the Environmental Statement (ES) [APP-046].</p> <p>The offshore screening approach is based on the Planning Inspectorate's Advice Note Nine (Planning Inspectorate, 2018) and Advice Note Seventeen (Planning Inspectorate, 2019), with relevant components of the RenewableUK (RenewableUK and NERC, 2013) accepted guidance, which includes aspects specific to the marine elements of an offshore wind farm, addressing the need to consider mobile wide-ranging species (foraging species, migratory routes etc).</p> <p>Paragraph 5(2)(e) of the EIA Regulations 2017 requires that the EIA consider the interaction of environmental effects associated with the Proposed Development. The inter-related effects assessment considers likely significant effects from multiple impacts and activities from the construction, operation and maintenance, and decommissioning of Rampion 2 on the same receptor, or group of receptors. The inter-related effects assessment does not include effects on receptors as a result of Rampion 2 and other developments, which is assessed within the CEA.</p> <p>A cumulative effects assessment in line with the above is included in paragraphs 8.12.3 to 8.12.38 in <b>Chapter 8: Fish and shellfish ecology, Volume 2</b> of the ES [APP-049]. Developments screened into the fish and shellfish ecology CEA are listed in Table 8.27 of <b>Chapter 8: Fish and shellfish ecology, Volume 2</b> of the ES [APP-049] and are presented in Figure 8.25 of <b>Chapter 8: Fish and shellfish ecology - Figures, Volume 3</b> of the ES [APP-081].</p> <p>The inter-related effects assessment considers likely significant effects from multiple impacts and activities from the construction, operation and maintenance, and decommissioning phases of Rampion 2 on the same receptor, or group of receptors. Inter-related effects could potentially arise in one of two ways. The first type of inter-related effect is a project-lifetime effect, where multiple phases of the Proposed Development interact to create a potentially more significant effect on a receptor than in one</p>

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2.1.7	<p>2.1.7 The Applicant's approach to the cumulative and inter-related impacts and effects assessment is outlined in Section 30.4 of the document listed in point 2.1.1 (Volume 2, Chapter 30: Inter-related effects, Document Reference: 6.2.30) and considers effects which may accumulate across project phases (project lifetime), as well as effects which may accumulate to create a greater effect on a particular receptor (receptor-led).</p>	<p>phase alone. The second type of inter-related effect is receptor-led effects. Receptor-led effects are where effects from different environmental aspects combine spatially and temporally on a receptor. The inter-related effects assessment has been undertaken in compliance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (the 'EIA Regulations 2017') and specific guidance produced by the Planning Inspectorate (<b>Chapter 30: Inter-related effects assessment, Volume 2</b> of the ES [APP-071]).</p> <p>The Applicant notes this comment and refers the MMO to its response to <b>reference 2.1.6</b> above with respect to the distinction between cumulative assessment and inter-related effects assessment.</p>
2.1.8	<p>2.1.8 The MMO notes (from Table 30-5) that the Applicant considers that receptor led inter-related effects for commercial fisheries receptors have been adequately considered in the respective Environmental Impact Assessment (EIA) chapter and are therefore not considered further in the inter-related effects chapter. The Applicant has outlined that the inter-related effect from the combination of the reduction in access to fishing grounds and the subsequent increased pressure on adjacent grounds has been discussed at length within the Fish and Shellfish Ecology chapter and the Shipping and Navigation chapter. The MMO believes this is acceptable and defer to the commercial fishing representatives to provide further comments.</p>	<p>These comments are welcomed by the Applicant.</p>
2.1.9	<p>2.1.9 The Applicant has not indicated in Table 30-5 whether receptor-led inter-related effects for fish ecology receptors have been considered further. The Applicant seems to indicate that receptor-led inter-related effects are only considered where receptors occur within the study areas of multiple 'environmental aspects. However, there is no list or definition indicating what environmental aspects (whether they be effects from the different phases of Rampion 2, or effects arising from other nearby developments) are of relevance to fish ecology receptors and therefore it is impossible to determine whether receptor-led effects for fish ecology receptors have been assessed in appropriate detail. It would be helpful if the Applicant could clarify this element of their approach.</p>	<p>The Applicant confirms that the cumulative effects arising from other nearby developments and Rampion 2 are assessed within Section 8.12 of <b>Chapter 8: Fish and shellfish ecology, Volume 2</b> of the Environmental Statement (ES) [APP-049]. Developments screened into the fish and shellfish ecology cumulative effects assessment (CEA) are listed in Table 8.27 of <b>Volume 2 Chapter 8 Fish and shellfish ecology, Volume 2</b> of the ES [APP-049] and are presented in Figure 8.25 of <b>Chapter 8: Fish and shellfish ecology – Figures, Volume 3</b> of the ES [REP1-007].</p> <p>The inter-related effects assessment considers the Proposed Development alone as noted in the Applicant's response to 2.1.6 above. As detailed in Table 30-8 of <b>Chapter 30: Inter-related effects, Volume 2</b> of the ES [APP-071], no significant inter-related effects were concluded on fish and shellfish receptors inclusive of nesting black sea bream. This conclusion is drawn from the assessment of potential impacts on fish and shellfish receptors undertaken in <b>Chapter 8: Fish and shellfish ecology, Volume 2</b> of the ES [APP-049], whereby no residual effects (following the implementation of embedded mitigations proposed) are concluded to occur over the sequential phases of the Proposed Development.</p> <p>As stated in Section 8.14 of <b>Chapter 8: Fish and shellfish ecology, Volume 2</b> of the ES [APP-049], receptor-led inter-related effects are considered within the chapter, for potential interactions between fish and shellfish ecology, and the following environmental aspects: <b>Chapter 6: Coastal processes, Volume 2</b> of the ES [APP-047] and <b>Chapter 9: Benthic, subtidal and intertidal ecology, Volume 2</b> of the ES [APP-050]. As no residual effects (following the implementation of embedded mitigations proposed) are concluded on these environmental aspects, no significant receptor led inter-related effects are predicted to occur. Relevant mitigation measures are set out in the <b>In Principle Sensitive</b></p>

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2.1.10	<p>2.1.10 The MMO expected to see a discussion on black seabream within this section given that there have been major concerns throughout the Evidence Plan Process regarding the likelihood of significant impacts to black seabream during the construction, operation, and maintenance of Rampion 2. As part of the Environmental Statement (ES) for Rampion 2, the Applicant characterised the presence and density of nest sites in the vicinity of the array and export cable corridor (ECC), which showed that black seabream nests occurred in the proximity of the Rampion 2 array and ECC in each year of data presented. Table 30-8 presents the project-lifetime inter-related effects assessment for fish ecology receptors. In relation to impacts from “direct disturbance resulting from marine works with the export cable and array area”, the Applicant has provided a very high-level summary and concluded that “in general, mobile fish species are expected to be able to avoid temporary disturbance. The most vulnerable species are likely to be shellfish which are much less mobile than fish”. In relation to impacts from “temporary localised increases in SSC and smothering”, the Applicant concludes that “there is no potential for project-lifetime inter-related effects as the residual effects identified do not occur over sequential project phases”. The MMO does not agree with either of these conclusions and would have expected a discussion of the potential for maintenance works within the export cable corridor throughout each phase of the project to cause sedimentation of black seabream nests.</p>	<p><b>Features Mitigation Plan [REP1-012]</b>, which is secured via Condition 11(1)(k) of the dMLs (Schedules 11 and 12 of the <b>Draft Development Consent Order [PEPD-009]</b>.</p> <p>The Applicant directs the MMO to its response to comment 2.1.9 above and also refers the MMO to the assessment of all phases of the Proposed Development, including maintenance works in the export cable corridor, presented in <b>Chapter 8: Fish and shellfish ecology, Volume 2</b> of the ES [APP-049], the detail of which the inter-related effects assessment draws upon and summarises.</p>
2.1.11	<p>2.1.11 The Applicant should have noted in their inter-related effects assessment that any activities which lead to increased suspended sediment concentrations and deposition of sediment across areas where black seabream nest, have the potential to create a layer of sediment over nesting sites during the project's lifetime which may reduce the suitability of the nesting sites for black seabream nesting, affect their ability to nest and spawn, and thereby affect the reproductive success of the species. The MMO requests that a short discussion and assessment of this under the relevant headings of Table 30-8 is included.</p>	<p>The potential impacts of suspended sediment concentrations and deposition of sediment across areas where black seabream nest have been assessed in paragraphs 8.9.397 and 8.9.413 in <b>Chapter 8: Fish and shellfish ecology, Volume 2</b> of the Environmental Statement (ES) [APP-049].</p> <p>As detailed in Table 30-8 of <b>Chapter 30: Inter-related effects, Volume 2</b> of the ES [APP-071], no significant inter-related effects were concluded on fish and shellfish receptors inclusive of nesting black sea bream. This conclusion is drawn from the assessment of potential impacts on fish and shellfish receptors undertaken in <b>Chapter 8: Fish and shellfish ecology, Volume 2</b> of the ES [APP-049], whereby no residual effects (following the implementation of embedded mitigations proposed) are concluded to occur over the sequential phases of the project.</p> <p>As stated in Section 8.14 of <b>Chapter 8: Fish and shellfish ecology, Volume 2</b> of the ES [APP-049], receptor-led inter-related effects are considered within the chapter, for potential interactions between fish and shellfish ecology, and the following environmental aspects: <b>Chapter 6: Coastal processes, Volume 2</b> of the ES [APP-047] and <b>Chapter 9: Benthic, subtidal and intertidal ecology, Volume 2</b> of the ES [APP-050]. The Applicant would highlight that the coastal processes assessment has identified that no long-term residual effects (following the implementation of embedded mitigations proposed) that could give rise to further compounded impacts from sediment deposition year-on-year or across the phases of the Proposed Development and, therefore, no significant receptor led inter-related effects. Relevant mitigation measures are set out in the <b>In Principle Sensitive Features Mitigation Plan [REP1-012]</b>, which is secured via Condition 11(1)(k) of the dMLs (Schedules 11 and 12 of the <b>Draft Development Consent Order [PEPD-009]</b>).</p>



Ref	Written Representation Comment	Applicant's Response
2.1.12	2.1.12 In relation to impacts arising from Unexploded Ordnance (UXO) clearance, the Applicant concludes that “this effect will only arise during the construction phase and as such there will be no inter-related effects across the project-lifetime”. This statement is not wholly accurate as there is the possibility for UXOs to be revealed by shifting sediments during the operation of the OWF, or during maintenance works, and therefore potential for this impact to occur at multiple project stages. However, the MMO appreciates, that inter-related effects between project phases are not likely due to the temporary nature of UXO detonation, and that impacts arising from any post-construction UXO-detonation will be assessed under a separate marine licence application	Noted, the Applicant has no further comments on this matter at this time.
2.2.1	<p><b>2.2 General Comments</b></p> <p>2.2.1 The writing style and wording used in the report is convoluted and unnecessarily complicated, which makes interpreting the technical aspects of the report difficult. Sentences are long-winded and reflexive which means it takes additional time to decipher what is being said by the Applicant and creates unnecessary uncertainty when reviewing the accuracy of the assessment. The MMO recommends moving forwards that the applicants use simpler language.</p>	Noted, the Applicant has no further comments on this matter at this time.
2.3.1	<p><b>2.3 Summary</b></p> <p>2.3.1 In line with the MMO's advice on the ES Chapter 5, a number of clarifications and additional information are required to fully iron out impacts with respect to black seabream. The Applicant has not discussed black seabream in their inter-related effects assessment, and the MMO believes the document listed in point 3.1 should be updated to consider the comments.</p>	<p>The Applicant confirms that a comprehensive assessment on the potential for impacts on black sea bream has been undertaken in <b>Chapter 8: Fish and shellfish ecology, Volume 2</b> of the Environmental Statement (ES) <b>[APP-049]</b>.</p> <p>As detailed in Table 30-8 of <b>Chapter 30: Inter-related effects, Volume 2</b> of the ES <b>[APP-071]</b>, no significant inter-related effects were concluded on fish and shellfish receptors inclusive of nesting black sea bream. This conclusion is drawn from the assessment of potential impacts on fish and shellfish receptors (including black seabream) undertaken in <b>Chapter 8: Fish and shellfish ecology, Volume 2</b> of the ES <b>[APP-049]</b>, whereby no residual effects (following the implementation of embedded mitigations proposed) are concluded to occur over the sequential phases of the project.</p> <p>As stated in Section 8.14 of <b>Chapter 8: Fish and shellfish ecology, Volume 2</b> of the ES <b>[APP-049]</b>, receptor-led inter-related effects are considered within the chapter, for potential interactions between fish and shellfish ecology, and the following environmental aspects: <b>Chapter 6: Coastal processes, Volume 2</b> of the ES <b>[APP-047]</b> and <b>Chapter 9: Benthic, subtidal and intertidal ecology, Volume 2</b> of the ES <b>[APP-050]</b>. As no residual effects (following the implementation of embedded mitigations proposed) are concluded on these environmental aspects, no significant receptor led inter-related effects are concluded.</p>
<b>3. Comments on Pre-Exam Procedural Deadline Submissions</b>		
3.1.1	<p><b>3.1 Black Seabream Underwater Noise Technical Note and Survey Results (PEPD – 023)</b></p> <p>3.1.1 The MMO acknowledges the submission of Appendix 8.4: Black Seabream Underwater Noise Technical Note and Survey Results – Revision A and is currently reviewing the report. Detailed comments will be provided at Deadline 2.</p>	Noted, the Applicant has no further comments on this matter at this time.
3.2.1	<p><b>3.2 Comments on Offshore Works Plans (PEPD – 004)</b></p> <p>3.2.1 The MMO acknowledges the annotations added in Revision B and has no further comments to make at this time.</p>	Noted, the Applicant has no further comments on this matter at this time.



Ref	Written Representation Comment	Applicant's Response
<b>4. Comments on the DCO/DML</b>		
<b>4.1.1</b>	<b>4.1 General DCO Comments</b> 4.1.1 The MMO notes that the Applicant is planning on providing a detailed response to our comments at Deadline 1 and the MMO will review these and provide comments where required. The MMO has provided comments on PEPD-009/PEPD-010 below noting these may change with further information.	Noted, the Applicant has no further comments on this matter at this time.
<b>4.1.2</b>	4.1.2 The MMO still seeks clarity on whether the investigation of and the detonation of UXO's are included in the licenced activities, and this does not appear to have been addressed in the amended DCO.	The activities to which the deemed marine licences apply do not include investigation and detonation of unexploded ordnance (UXO). However, as the clearance of UXO may be required as part of the project the potential impacts have been assessed as part of the Environmental Impact Assessment. Further, these deemed marine licences will remain in force until the authorised project is decommissioned. The approval of the <a href="#">Draft Unexploded Ordnance Clearance Marine Mammal Mitigation Protocol [APP-237]</a> now provides confidence that mitigation can and will be secured if UXO are required to be detonated. This is consistent with other DCOs for offshore wind farms where separate licences for UXO detonation may be sought.
<b>4.2.1</b>	<b>4.2 Interpretation</b> 4.2.1 The MMO welcomes the amendment to Article 2, where 'Natural England' has been corrected to 'statutory nature conservation body'.	These comments are welcomed by the Applicant.
<b>4.3.1</b>	<b>4.3 Benefits of the Order</b> 4.3.1 The MMO notes that Article 5 has not been updated and our position in RR-219, 3.3.3 – 3.3.9 has not changed.	<p>The concern raised by the MMO appears to be in respect of the scope for a development consent order to include provision for the transfer of a marine licence at all.</p> <p>The ability for an undertaker to transfer a marine licence has been included in numerous DCOs for offshore wind farms dating back to 2015 when this power was included in The Dogger Bank Creyke Beck Offshore Wind Farm Order 2015. Whilst the drafting of the relevant provisions has evolved since that time, the principle of the ability to transfer a marine licence has remained, and features in the recently granted orders for East Anglia One North, East Anglia Two and Hornsea Four offshore wind farms.</p> <p>The wording of Article 5 in the <a href="#">Draft Development Consent Order [PEPD-009]</a>, including for circumstances in which the Secretary of State's consent is required for a transfer of powers under the Order and for their consultation with the MMO, follows the approach adopted in the recently made Orders including in respect of disapplication of sections 72(7) and (8) of the Marine and Coastal Access Act 2009.</p>
<b>4.4.1</b>	<b>4.4 Public Rights of Navigation</b> 4.4.1 The MMO notes that there are still no powers for the MMO to comment or refuse on this.	<p>This article is included because the wind farm is partially located in territorial waters where there is a right of public navigation.</p> <p>The article confirms the suspension of public rights of navigation where permanent infrastructure is located. This infrastructure will be located in accordance with the detailed design plan to be submitted and approved by the MMO under condition 11(1)(a) of the deemed marine licences, as required by condition 12. The suspension of rights of navigation will therefore only take effect once the infrastructure is being installed in accordance with details which the MMO has approved.</p>
<b>4.5.1</b>	<b>4.5 Schedule 1 Part 3: Requirements</b>	These comments are welcomed by the Applicant.

Ref	Written Representation Comment	Applicant's Response
	4.5.1 The MMO welcomes the update to the Detailed Offshore Design Parameter	
4.5.2	4.5.2 5(4) MMO seeks clarity on what situations would require agreement for further cable crossings. If cable crossings are identified would the associated cable protection be within the maximum permitted area and volume?	<p>The Applicant notes that potential cable crossings relate to a single interconnector project, which is yet to be determined. The need for additional crossings would only arise if additional cable projects were brought forward; given no such projects are known, no additional crossings above the four sought within the DCO are reasonably foreseeable. The Applicant therefore confirms that it is not intended that any additional cable crossings will be required.</p> <p>Any associated cable protection would require to be within the cable protection parameters. Should any additional cable protection be required this would be subject to separate approval.</p>
4.5.3	4.5.3 10(1) The MMO acknowledges the amendment of this requirement to consult the MMO insofar as it relates to Work No.6 in the Intertidal area. The MMO requires further discussion with the LPA and the Applicant to ensure that the overlapping area is consented. The MMO will provide an update in due course.	These comments are welcomed by the Applicant.
4.5.4	4.5.4 (22,2) The MMO acknowledges the amendment of this requirement to consult the MMO insofar as it relates to Work No.6 in the intertidal area. The MMO requires further discussion with the LPA and the Applicant to ensure that the overlapping area is consented. The MMO will provide an update in due course.	These comments are welcomed by the Applicant.
4.6.1	<p><b>4.6 Part 1 Schedule 11 &amp; 12 draft DMLs</b></p> <p>4.6.1 The MMO welcomes the updates made to this section</p>	These comments are welcomed by the Applicant.
4.6.2	4.6.2 The MMO notes that the comments for (7), (8) & (9) have not been actioned. Provision (7) in relation to Section 72 needs to be removed.	<p>The concern raised by the MMO appears to be in respect of the scope for a development consent order to include provision for the transfer of a marine licence at all. Please see response to <b>Reference 4.3</b> above.</p> <p>The wording of Article 5 in the <b>Draft Development Consent Order [PEPD-009]</b>, including for circumstances in which the Secretary of State's consent is required for a transfer of powers under the Order and for their consultation with the MMO, follows the approach adopted in the recently made Orders including in respect of disapplication of sections 72(7) and (8) of the Marine and Coastal Access Act 2009.</p>
4.6.3	4.6.3 The MMO requests that the following is added to (8): " <i>Subsequent to the first approval of those plans, protocols or statements provided it has been demonstrated to the satisfaction of the MMO that the subject matter of the relevant amendments do not give rise to any materially new or materially different environmental effects to those assessed in the environmental information.</i> "	The Applicant does not consider it necessary to include this wording as this is covered by <b>paragraph 9</b> .
4.6.4	4.6.4 The MMO acknowledges the amendments made to paragraph (9), but still requests that the wording be changed to the below: " <i>...satisfaction of the MMO that the subject matter of the relevant amendments do not give rise to any materially new or materially different environmental effects to those assessed in the environmental information.</i> "	The change to environmental information is inappropriate as the Environmental Statement is the document to be certified.
4.7.1	<p><b>4.7 Part 2 Schedule 11 &amp; 12 draft DMLs</b></p> <p><b>General Comments</b></p>	These comments are noted by the Applicant.

Ref	Written Representation Comment	Applicant's Response
	4.7.1 The MMO welcomes the updates to this section and notes that several of the requested changes to text within the DMLs have not been made. The MMO will review the Applicant's comments to be submitted at Deadline 1 and provide a response in due course.	
4.7.2	4.7.2 The MMO notes that the determination dates within both schedules have remained unchanged. The MMO's position on this has not changed, and the MMO has already begun the discussion with the Applicant to determine alternative timelines.	<p>As the project comprises a nationally significant infrastructure project it is necessary for there to be a degree of certainty as to the programme for its delivery, particularly given the need for the project to contribute to the UK Government achieving its net zero target.</p> <p>Recently made DCOs for offshore wind farms include a mix of periods for determination of either four or six months. Four months is considered an appropriate period for the approval of submitted details. However, the Applicant is continuing to engage with the MMO, and Natural England as statutory nature conservation body, to identify any approvals which require a longer determination period.</p>
4.7.3	4.7.3 The Applicant has provided the name for the laboratory undertaking analysis for trace heavy metals and Polycyclic Aromatic Hydrocarbons (PAHs). The MMO will provide comments on disposal areas following consultation with our technical advisors at Centre for Environment, Fisheries and Aquaculture Science (Cefas).	These comments are welcomed by the Applicant.
4.7.4	<b>Condition 2</b> 4.7.4 Condition 2 (6) The MMO acknowledges the amendment from 15 years 10 years.	Noted, the Applicant has no further comments on this matter at this time.
4.7.5	<b>Condition 3</b> 4.7.5 The MMO requests that Condition 3(1) be amended to refer to the outline operation and maintenance plan "in accordance with the outline" to ensure all parties and consultees are clear what activities will take place within the Operation and Maintenance phase and ensure all required sections within the plan have been highlighted this stage.	It is agreed that the <a href="#">Outline Offshore Operations and Maintenance Plan (OOMP) [APP-238]</a> should be referenced in the <a href="#">Draft Development Consent Order [PEPD-009]</a> and included in Schedule 16. This has been addressed at the revision to the <a href="#">Draft Development Consent Order [PEPD-009]</a> submitted at Deadline 2. The Outline OOMP will be updated at Deadline 3 to clarify the condition of the deemed Marine Licences pursuant to which the final document is to be submitted.
4.7.6	4.7.6 The MMO acknowledges the amendment to Condition 3(5), but requests that that the wording be changed to the below: " satisfaction of the MMO that the subject matter of the relevant amendments do not give rise to any materially new or materially different environmental effects to those assessed in the environmental information."	The paragraph refers to works which may be undertaken in maintenance of the authorised scheme and provides that no works whose effects are not assessed in the environmental statement may be carried out unless approved by the MMO. Sub-paragraph (5) provides that approval may be given only where it has been demonstrated that the works for which approval is sought are unlikely to give rise to any new or materially different effects from those assessed in the environmental statement. This wording is considered more directly related to the purpose for which any approval might be sought under condition 3 than amending to refer to the 'subject matter of relevant amendments'.
4.7.7	<b>Condition 4</b> 4.7.7 The MMO welcomes the amendment to Condition 4(1).	These comments are welcomed by the Applicant.
4.7.8	<b>Condition 5</b> 4.7.8 The MMO welcomes the amendment to Condition 5	These comments are welcomed by the Applicant.
4.7.9	<b>Condition 6</b> 4.7.9 The MMO welcomes the clarification of Condition 6(1)	These comments are welcomed by the Applicant.

Ref	Written Representation Comment	Applicant's Response
4.7.10	4.7.10 The MMO notes that Condition 6(3) has not been amended to remove reference to 11(1)(o), but acknowledges the changes made to 6(1). The MMO requests further discussion on this	The Applicant welcomes further discussion with the MMO in relation to the wording of condition 6(3)
4.7.11	<b>Condition 9</b> 4.7.11 The MMO will provide an update on the relevant changes required for this condition in due course.	Noted, the Applicant has no further comments on this matter at this time.
4.7.12	4.7.12 The MMO acknowledges the amendment made to Condition 9(8) but still requests that the wording of Condition 9(8) is further amended to the following: <i>(1) The undertaker must report all dropped objects to the MMO using the dropped object procedure form as soon as reasonably practicable and in any event within 24 hours of becoming aware of an incident.</i> <i>(2) On receipt of the dropped Object Procedure Form, the MMO may require, acting reasonably, the undertaker to carry out relevant surveys. The undertaker must carry out surveys in accordance with the MMO's reasonable requirements and must report the results of such surveys to the MMO.</i> <i>(3) On receipt of such survey results, the MMO may, acting reasonably, require the undertaker to remove specific obstructions from the seabed. The undertaker must carry out removals of specific obstructions from the seabed in accordance with the MMO's reasonable requirements and at its own expense."</i>	This condition has been amended to remove reference to notice having to be given within five days; notice must therefore be given as soon as reasonably practicable following the undertaker becoming aware of an incident in all instances; this is consistent with the condition imposed on the grant of the Hornsea Four Offshore Wind Farm Order, 2023. The wording of the condition in the <b>Draft Development Consent Order [PEPD-009]</b> is otherwise consistent with the provision included in previously made DCOs for offshore wind farms including Hornsea Four, and East Anglia One North and Two.
4.7.13	<b>Condition 10</b> 4.7.13 MMO still requests that Condition 10 is removed as it duplicates s.86 of MCAA and causes confusion.	The condition imposes a requirement to report any deposits made in an emergency within 48 hours which can be enforced alongside section 86. Similar provision is included in numerous Orders for offshore wind farms including East Anglia One North and Two, and Hornsea Four. It is not considered appropriate for the Order, which will be a statutory instrument, to state that this is in addition to the terms of section 86 of the Marine and Coastal Access Act 2009.
4.7.14	<b>Condition 14</b> 4.7.14 The MMO is discussing the wording of Condition 14 with the MCA and will confirm the most recent agreed wording.	Noted, the Applicant has no further comments on this matter at this time.
4.7.15	<b>Condition 15</b> 4.7.15 The MMO acknowledges the amendments to Condition 15 and will provide confirmation of the changes at Deadline 2.	Noted, the Applicant has no further comments on this matter at this time.
4.7.16	<b>Condition 17</b> 4.7.16 The MMO requests the following information is included within Condition 17: <i>"(2) Subject to receipt from the undertaker of specific proposals pursuant to this condition the construction monitoring plan must include, in outline— (b) where piled foundations are to be employed, unless otherwise agreed by the MMO in writing, details of proposed monitoring of the noise generated by the installation of the first six piled foundations of each piled foundation type to be constructed collectively under this licence and the licence granted under Schedule 12 of the Order. (3) The results of the initial noise measurements monitored in accordance with sub-paragraph 17(2)(b) must be provided in writing to the MMO within six weeks of the installation (unless otherwise agreed in writing) of the first six piled foundations of each piled foundation type. The assessment of this report by the MMO will determine whether any further noise monitoring is required. If, in the opinion of the MMO in consultation</i>	It is proposed that monitoring should be undertaken in respect of the first four piles as provided in the <b>Offshore In Principle Monitoring Plan [APP-240]</b> submitted as part of the application documents, and with which the construction phase monitoring plan is to accord (pursuant to conditions 11(1)(j) and 17 of Schedules 11 and 12 of the <b>Draft Development Consent Order [PEPD-009]</b> . No further monitoring is considered necessary based on the assessment of predicted effects.



Ref	Written Representation Comment	Applicant's Response
	<p><i>with the statutory nature conservation body, the assessment shows impacts significantly in excess to those assessed in the environmental statement and there has been a failure of the mitigations set out in the marine mammal mitigation protocol, all piling activity must cease until an update to the marine mammal mitigation protocol and 19 further monitoring requirements have been agreed. (4) The undertaker must carry out the surveys specified within the construction monitoring plan or plans in accordance with that plan or plans, including any further noise monitoring required in writing by the MMO under condition 17(3), unless otherwise agreed in writing.”</i></p>	
4.7.17	<p><b>Condition 19 and 20</b> 4.7.17 The MMO acknowledges the amendments to Condition 19 and 20 and will provide confirmation of the changes at Deadline 2</p>	Noted, the Applicant has no further comments on this matter at this time.
4.7.18	<p><b>Condition 21</b> 4.7.18 The MMO requests that Condition 21 is amended to include the following (below): <i>“In the event that driven, or part-driven pile foundations are proposed to be used, the hammer energy used to drive or part-drive monopile foundations must not exceed 4,400kJ and the hammer energy used to drive or part-drive pin pile foundations must not exceed 2,500kJ.”</i></p>	Condition 11(1)(c) of Schedules 11 and 12 has been amended in the <b>Draft Development Consent Order [PEPD-009]</b> to secure that all piling methods are specified and submitted for approval as part of the construction method statement. As the contents of this document must accord with the construction methods assessed in the Environmental Statement, which include piling, the submission and approval of this document will confirm the maximum hammer energies and ensure they do not exceed those assessed in the ES. Condition 12 requires that the authorised scheme is constructed in accordance with the approved documents. An additional condition to secure this limit is therefore unnecessary.
4.7.19	<p><b>Condition 22</b> 4.7.19 The MMO acknowledges the amendments to Condition 22 and will provide confirmation of the changes at Deadline 2.</p>	Noted, the Applicant has no further comments on this matter at this time.
4.7.20	<p><b>Condition 23</b> 4.7.20 The MMO still seeks clarity on the inclusion of Condition 23 and will provide confirmation of the changes at Deadline 2.</p>	Noted, the Applicant has no further comments on this matter at this time.
4.7.21	<p><b>Condition 24</b> 4.7.21 The MMO acknowledges the amendments to Conditions 24 and will provide confirmation of the changes at Deadline 2.</p>	Noted, the Applicant has no further comments on this matter at this time.
4.7.22	<p><b>Additional Conditions</b> 4.7.22 The MMO thanks the Applicant for adding Condition 25. Reporting of Impact Pile Driving, into Schedule 11 and 12. However, the MMO notes that the other requested Conditions ((26) Maintenance Reporting and (27) Stages of Construction) have not been added as conditions, and there is no stand-alone condition for seasonal restrictions (still included within Condition (11)).</p>	<p>The Applicant has responded to the MMOs requests for additional conditions in its response at Deadline 1 but for completeness:</p> <ul style="list-style-type: none"> <li>• Additional condition 26 is not considered necessary as any necessary maintenance reporting can be secured through the Operational Maintenance Plan, itself secured through condition 3 of the deemed Marine Licences at Schedules 11 and 12 of the <b>Draft Development Consent Order [PEPD-009]</b> (updated at Deadline 2) and compliance with the condition can be enforced by the MMO ;</li> <li>• Additional condition 27 is not required as a construction programme is already secured through condition 11(1)(b) of each of the deemed Marine Licences at Schedules 11 and 12 of the <b>Draft Development Consent Order [PEPD-009]</b> (updated at Deadline 2) and compliance with the condition can be enforced by the MMO; and</li> <li>• Seasonal restrictions are secured through the Sensitive Features Mitigation Plan which is secured through condition 11(1)(k) of each of the deemed Marine Licences at Schedules 11 and 12 of the</li> </ul>

Ref	Written Representation Comment	Applicant's Response
		<p><a href="#">Draft Development Consent Order [PEPD-009]</a> (updated at Deadline 2) and compliance with the condition can be enforced by the MMO.</p>
4.8.1	<p><b>4.8 Schedule 16</b> 4.8.1 The MMO still recommends this schedule be split into 3 parts:</p> <ul style="list-style-type: none"> <li>• Part 1 documents forming the environmental statement to be certified.</li> <li>• Part 2 examination documents forming part of the environmental Statement to be certified.</li> <li>• Part 3 other documents to be certified.</li> </ul>	<p>This is not considered necessary at the present time due to the number of documents listed in schedule 16. However, should the number of documents increase consideration will be given to splitting them for clarity.</p>
<b>5. Comments from ISH1</b>		
5.1.1	<p>5.1.1 The MMO notes that in ISH1 the Applicants will provide written clarification on the Maximum Design Scenario (MDS) for piling and looks forward to seeing this</p>	<p>This is addressed in <a href="#">Deadline 1 Submission – 8.25.1 Applicant's Post Hearing Submission – Issue Specific Hearing 1 Appendix 9 – Further information for Action Points 38 and 39 – Underwater Noise [REP1-020]</a>.</p>
5.1.2	<p>5.1.2 The MMO notes that in ISH1 the potential for July to be included within the piling restriction was discussed, but concluded with the applicant stating that they did not view July to be as crucial as March – June. The MMO notes that the Applicant acknowledged that the exclusion of July is not a precautionary method, and goes against strong recommendations by NE.</p>	<p>Noted, the Applicant has no further comments on this matter at this time.</p>
5.1.3	<p>5.1.3 The MMO notes that the Applicant explained the impacts of extending seasonal restrictions for an additional month. Whilst the MMO acknowledges the impact of restricting construction work, the MMO still supports the inclusion of July within seasonal restrictions for Blackbream.</p>	<p>As detailed in the <a href="#">In Principle Sensitive Features Mitigation Plan [REP1-012]</a>, the Applicant has committed to the implementation of various noise abatement measures, inclusive of a piling restriction from March through to June (in the Western area), the implementation of a piling sequencing plan in July, and the use of at least one offshore piling noise mitigation technology throughout the piling campaign and further noise mitigation measures if piling is undertaken between March and July. Figure 6 1 and Figure 6 2 illustrate unmitigated recoverable injury impact ranges (203dB SELcum), and the further reduced impact ranges from the proposed mitigation, relative to the Kingmere MCZ of which black seabream are a feature. To ensure a precautionary approach, the minimum noise abatement offered by the proposed mitigation has been modelled and presented (-6dB reduction, low noise hammer). As evident in Figure 6 1 and Figure 6 2, with the implementation of the minimal proposed mitigation throughout the piling campaign, there is no interaction of the recoverable injury impact contours with the MCZ. The Applicant is therefore confident that with the proposed mitigation measures there no hindrance of the conservation objectives of the Kingmere MCZs due to recoverable injury from underwater noise immissions on black seabream.</p>
5.1.4	<p>5.1.4 The MMO notes that the Applicant will provide further details on additional Herring heatmaps, and the MMO looks forward to seeing new heat maps using the recommended MarineSpace (2013a and 2013b) methods.</p>	<p>The Applicant has submitted <a href="#">Deadline 1 Submission – 8.25.1 Applicant's Post Hearing Submission – Issue Specific Hearing 1 Appendix 9 – Further information for Action Points 38 and 39 – Underwater Noise [REP1-020]</a>. (Submitted at Deadline 1).</p>
5.1.5	<p>5.1.5 The MMO notes that the Applicant has determined the impact to Short Snouted Seahorses to be negligible, due to the small population of seahorses in the affected area. The MMO defers to NE as the statutory nature conservation body but questions the validity of the Applicants assessment. The MMO will maintain a watching brief on this matter.</p>	<p>Noted, the Applicant has no further comments on this matter at this time.</p>

Ref	Written Representation Comment	Applicant's Response
5.1.6	5.1.6 The MMO has reviewed EV3-020 'Action Points Arising from Issue Specific Hearing 1' and will review the documents/updates to be submitted by the Applicant.	Noted, the Applicant has no further comments on this matter at this time.
5.1.7	5.1.7 The MMO will keep a watching brief on responses from the Applicant relating to concerns raised in Agenda Item 13.	<p>The Applicant cannot commit to the removal of cable protection in this Application, as this will be subject to a separate licence application to enable decommissioning when it is due to take place.</p> <p>The Applicant would like to keep open the materials used for cable protection works to enable the most appropriate design solution for the situation which evolves after the initial cable burial methods detailed in the Application have been applied.</p> <p>If either rock bags or concrete mattresses are determined as the preferred material for cable protection, the Applicant will seek to find products in the market which do not involve the use of plastics, though this is subject to such products being available in the supply chain and these products being suitable for the application of long-term cable protection.</p> <p>For further details please refer to <a href="#">Deadline 1 Submission – 8.25.13 Applicant's Post Hearing Submission – Issue Specific Hearing 1 Appendix 13 – Further Information for Action Point 45 and 46 – Physical Processes and Benthic [REP1-030]</a>.</p>
5.1.8	5.1.8 The MMO has reviewed 'The Examining Authority's Written Question arising out of Issue Specific Hearing 1 on Environmental Matters', specifically Question 12. It appears that the Applicant is highly confident that none of the Rampion 2 phases will result in any significant impact to benthic habitats, with the maximum assessed impact being 'minor adverse' (table 9 –28). The MMO questions this and recommends a more conservative assessment is produced, especially considering the impacts raised by members of the fishing community regarding Rampion 1 (RR – 219, page 6). Sussex Kelp Beds hugely benefit local stakeholders, and the rewilding project frequently receives media attention at high levels, and the importance of bringing back this declining habitat should be considered in this assessment. However, the MMO defers to NE as the statutory nature conservation body on this matter. If the MMO has more comments to raise regarding this matter they will be included in our next response.	<p>The proposed export cable corridor will pass through a 304 km<sup>2</sup> area of seabed which is protected from trawling by the Sussex Nearshore Trawling Byelaw. This area is also a site for kelp restoration and protection, led by the Sussex Kelp Restoration Project (SKRP). SKRP focuses on the restoration of four historically common kelp species of Sussex: oarweed <i>Laminaria digitata</i>, tangle <i>Laminaria hyperborea</i>, sugar kelp <i>Saccharina latissima</i> and furbelows <i>Saccorhiza polyschides</i>. Aside from the direct impact of the export cable corridor, kelp forests are affected by various factors, including changes in turbidity and seabed sediments.</p> <p>All information relating to potential impacts on benthic ecology can be found in Table 9-16 in <a href="#">Chapter 9: Benthic, subtidal and intertidal ecology, Volume 2</a> of the Environmental Statement (ES) [APP-050]. Relevant benthic subtidal and intertidal ecology embedded environmental measures details specific measures that will be taken to reduce the environmental impacts (C-271 (routeing design to maximise the potential for successful burial) and C-272 (use of specialised cable installation techniques and technology), both of which are set out within the <a href="#">In Principle Sensitive Features Mitigation Plan [REP1-012]</a>, which is secured via Condition 11(1)(k) of the dMLs (Schedules 11 and 12 of the <a href="#">Draft Development Consent Order [PEPD-009]</a>; and C-279 (provision of a foundation installation methodology, secured in Condition 11(1)(c)(i) of the dMLs (Schedules 11 and 12 of the <a href="#">Draft Development Consent Order [PEPD-009]</a>). The magnitude of habitat disturbance relating to construction activities on benthic subtidal receptors (including kelp beds) is considered to be minor, indicating that the potential is for localised disturbance and/or loss of habitat that does not threaten the long-term viability of the resource.</p> <p>In relation to the sensitivity of kelp, it is noted that there will be direct habitat disturbance from construction. <i>L. digitatum</i>, <i>L. hyperborea</i>, <i>S. latissimi</i> and <i>S. polyschides</i> are all permanently attached to the substratum so would be removed upon substratum loss. They cannot re-attach once removed and would be swept away. Experimental clearance experiments showed that <i>L. digitatum</i> was re-established within 18-20 months (Bartsch <i>et al</i>, 2008), <i>L. hyperborea</i> returned to near control levels of biomass within three years (Bartsch <i>et al</i>, 2008), <i>S. latissima</i> (studied as <i>Laminaria saccharina</i>) was abundant six months after the substratum was cleared (Kain and Jones, 1975), and <i>S. polyschides</i> colonised cleared areas of substratum within 26 weeks (Kain and Jones, 1975). Therefore, recovery of</p>

Ref	Written Representation Comment	Applicant's Response
		<p>these species should be rapid and the significance result presented in <b>Chapter 9: Benthic, subtidal and intertidal ecology, Volume 2</b> of the ES <b>[APP-050]</b> is considered to be appropriate.</p> <p>An increase in SSC can increase turbidity of the water and reduce available light for photosynthesis. Lyngby and Mortensen (1996) found that an increase in the level of SSC may reduce growth of <i>Laminaria</i> plants. Smothering of mature plants by a 5 cm layer of sediment is unlikely to have an impact on photosynthesis as only the holdfast of the plant is likely to be covered. Germlings, spores and gametophytes are more intolerant of smothering. However, recoverability should be high as <i>L. digitata</i> can rapidly recolonise suitable substrate. An increase in the level of SSC was found to reduce growth rates in <i>S. latissimi</i> by 20%. A deposition of a 1-2 mm thick layer of fine-grained material on the plants caused direct physical damage and rotting and 25% of the plants died after four weeks (Lyngby and Mortensen, 1996). On return to normal conditions, recoverability should be high as <i>S. latissimi</i> has been observed to rapidly cleared areas (Kain and Jones, 1975). <i>S. polyschides</i> is abundant in areas of high siltation so may tolerate increases in SSC (Santos, 1993). As the impact is temporary in nature and the recoverability is recorded as high as detailed in the literature, the significance result presented in <b>Chapter 9: Benthic, subtidal and intertidal ecology, Volume 2</b> of the ES <b>[APP-050]</b> is considered to be appropriate.</p>



**Table 2-3: Applicant's Response to National Highway's post-hearing submissions [REP1-058]**

Ref	Post-hearing submission comment	Applicant's Response
1	This letter responds to the Examining Authority (ExA) Rule 8 letter dated 7 February 2024 and Deadline 1 required actions as set out on the PINS Rampion 2 webpage.	The Applicant welcomes National Highways commitment to working with all parties to resolve concerns raised. The Applicant considers that all outstanding matters can be resolved with National Highways before the end of the Examination and will continue to work with National Highways to resolve the outstanding areas of concern.
2	National Highways is the government owned company which operates, maintains and improves the Strategic Road Network (SRN) as the strategic highway company appointed under the provisions of the Infrastructure Act (2015) and in accordance with the Licence <sup>1</sup> issued by the Secretary of State for Transport.	The Applicant is in consultation with National Highways and has provided further technical specifications for review. A Designer's Geotechnical Advisor has been appointed by the Applicant and accepted as qualified by National Highways. The Applicant has also prepared a Design Manual for Roads and Bridges (DMRB) compliant access design for Access A-21/A-22 and has shared this with National Highways on the 29 February 2024 for review. It is the intention that this design will be subject to an independent Road Safety Audit so that an agreement in principle can be reached on the proposals prior to the end of the Examination.
3	National Highways is a statutory consultee to the planning process. It has a specific obligation to deliver economic growth through the provision of a safe and reliable SRN, in line with the provisions set out in DfT Circular 01/2022: The strategic road network and the delivery of sustainable development <sup>2</sup> .	
4	The Circular sets out how National Highways will work with developers to ensure that specific tests are met when promoting a scheme. This includes ensuring the transport impact is understood, any mitigation (or other infrastructure) is designed in accordance with the relevant standards and that environmental impacts are appraised and mitigated accordingly.	The Applicant is in negotiation with National Highways in respect of protective provisions for inclusion in the Development Consent Order (DCO) and anticipates that these will be concluded within the timeframe of Examination.
5	National Highways met regularly with the Applicant's transport consultants during the pre-application period and these meetings are continuing during the examination period. As the Panel are aware from National Highway's Relevant Representations and PADS and participation at the Preliminary Meeting and Issue Specific Hearing (Environmental Matters), National Highways has identified the high-level impacts of the proposed development on the SRN generally and the location of some of the more detailed impacts. However, further details on various matters are still required from the Applicant in order for the Applicant to demonstrate compliance with national policy, particularly that set out in DfT Circular C1/2022.	
6	<p>Appendices;</p> <ul style="list-style-type: none"> <li>• Appendix 1 provides National Highways responses with regards the Deadline 1 requirements</li> <li>• Appendix 2 provides a copy of National Highways Standard Protective Provisions</li> <li>• Appendix 3 provides National Highways comments on the draft DCO, made at the ISH on 8 February along with additional comments to assist the ExA.</li> </ul>	
7	In conclusion, given the outstanding issues summarised above, National Highways is not yet satisfied that the Applicant's proposals appropriately address National Highways' concerns and requirements to ensure the safety, reliability and operational efficiency of the SRN is safeguarded as required by national planning and transport policy. However, National Highways remain keen to resolve the concerns raised and commit to working with all parties to do so.	

<sup>1</sup> [Highways England: licence \(publishing.service.gov.uk\)](https://publishing.service.gov.uk)

<sup>2</sup> [Strategic road network and the delivery of sustainable development - GOV.UK \(www.gov.uk\)](https://www.gov.uk)

Ref	Post-hearing submission comment	Applicant's Response
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**Appendix 1: National Highways response to the EXA Deadline 1 required actions**

1.1 The ExAs Deadline 1 actions are set out at <https://national-infrastructure-consenting.planninginspectorate.gov.uk/projects/EN010117/examination-timetable>

EXA Required Action	National Highways Response	Applicant's Response
Comments on any updates to application documents submitted by the Applicant before or at the PM	<p>National Highways Relevant Representations and PADS dated 3 November 2023 set out National Highways comments on Rampion 2 submissions up to that date.</p> <p>National Highways note the various submissions made since that date and have no comments at this time but would ask the ExA to note that various of the documents, for example,</p> <ul style="list-style-type: none"> <li>• Land Plans Onshore (Sub 2.1.2 Rev B 18/1/24)</li> <li>• Onshore Works Plans (Sub 2.2.2 Rev B 18/1/24)</li> <li>• Draft Development Consent Order (Sub 3.1 Rev B (Tracked) 18/1/24)</li> <li>• Schedule of Changes for the Draft Development Consent Order (Sub 3.3 Rev A 18/1/24)</li> <li>• Statement of Reasons Appendix 1: List of Land Parcels, Proposed Acquisitions and Works for which the land is required (Sub 4.1.1 Rev B 18/1/24)</li> <li>• Book of Reference (Sub 4.3 Rev B 18/1/24)</li> <li>• Outline Code of Construction Practice (Sub 7.2 Rev B 18/1/24)</li> <li>• Outline Construction Traffic Management Plan (Sub 7.6 Rev B 18/1/24)</li> </ul> <p>all contain details or proposals that will need to be reviewed by National Highways in the light of the further submissions to be made by the Applicant in response to National Highways concerns and requirements. Therefore, National Highways would request to be heard as considered appropriate and necessary by the ExA with regards any of the submissions set out above or subsequently identified as relevant to safeguarding the safety, reliability and/or operation of the Strategic Road Network during the course of the Examination.</p>	The Applicant has no further comments on this matter at this time.
Written Representations (WRs) including summaries if exceeding 1500 words	N/A	The Applicant has no further comments on this matter at this time.
Local Impact Reports	N/A	The Applicant has no further comments on this matter at this time.
Comments on the Applicant's draft Statement of Commonality of	The Statement of Commonality – dated 18/1/24 includes National Highways as an SoCG party for transport/ alternatives and the DCO. National Highways is placed in the category of All	The Applicant has no further comments on this matter at this time.

Ref	Post-hearing submission comment	Applicant's Response
	<p>Statements of Common Ground matters under discussion and have no comment on or objection to the SoC.</p> <p>A draft SoCG was supplied to National Highways on 16/1/24 and National Highways responded on 23/1/24. Given the various responses due from Applicant in the near future, National Highways is are content to agree a revised SoCG to reflect progress in due course.</p>	
	<p>Responses to ExA's request for statement on the new National Policy Statement for Energy N/A</p>	The Applicant has no further comments on this matter at this time.
	<p>Notification by Statutory Parties of their wish to be considered as an IP by the ExA As per our PINS registration ID: 20045175, National Highways is registered as an Interested Party</p>	The Applicant has no further comments on this matter at this time.
	<p>Requests from Affected Persons to be heard at any subsequent Compulsory Acquisition Hearing(CAH). Requests by Affected Persons (defined in section 59(4) of the Planning Act 2008) to be heard at a CAH To safeguard National Highways position, National Highways request to be heard with regards any outstanding matters relating to any rights or acquisitions sought by the Applicant 2 in connection with National Highways land or assets.</p>	The Applicant has no further comments on this matter at this time.
	<p>Requests from Interested Parties to be heard at any subsequent Open Floor Hearing (OFH) National Highways participated in the ISH (Environmental Matters) hearing and to safeguard National Highways position would request to be heard, if necessary and appropriate, with regards any matters impacting the Strategic Road Network covered by any future OFH or ISH</p>	The Applicant has no further comments on this matter at this time.
	<p>Post-hearing submissions including written submissions of oral cases See Appendix 3 with regards National Highways comments on the Draft DCO covering our ISH submissions etc.</p>	The Applicant has no further comments on this matter at this time.
	<p>Notification of wish to have future correspondence received electronically National Highways is content to receive correspondence electronically. It should be sent to <a href="mailto:planningse@nationalhighways.co.uk">planningse@nationalhighways.co.uk</a></p>	The Applicant has no further comments on this matter at this time.

Ref	Post-hearing submission comment	Applicant's Response
	<p>Any further information requested by the ExA under Rule 17 of The Infrastructure Planning (Examination Procedure) Rules 2010</p>	<p>The Applicant has no further comments on this matter at this time.</p>
	<p>Comments on any further information/submissions accepted by the ExA</p>	<p>The Applicant has no further comments on this matter at this time.</p>
	<p>Summaries of all RRs exceeding 1500 words (if not provided at the Pre-Examination)</p>	<p>The Applicant has no further comments on this matter at this time.</p>
	<p>Responses to RRs (if not provided at the Pre-Examination Procedural Deadline)</p>	<p>The Applicant has no further comments on this matter at this time.</p>

**Appendix 2: Required Protective Provisions**



**Ref Post-hearing submission comment**

1-2

**NATIONAL HIGHWAYS STANDARD PROTECTIVE PROVISIONS**

PART [ ]

FOR THE PROTECTION OF NATIONAL HIGHWAYS LIMITED

**Application etc.,**

1. —(1) The provisions of this Part of this Schedule apply for the protection of National Highways and have effect unless otherwise agreed in writing between the undertaker and National Highways.

(2) Except where expressly amended by the Order the operation of the powers and duties of National Highways or the Secretary of State under the 1980 Act, the 1984 Act, the 1991 Act, the Transport Act 2000, or Town and Country Planning (General Permitted Development) (England) Order 2015 which shall continue to apply in respect of the exercise of all National Highways' statutory functions.

**Interpretation**

2.—(1) Where the terms defined in article 2 (*interpretation*) of this Order are inconsistent with subparagraph (2) the latter prevail.

(2) In this Part of this Schedule—

“as built information” means one electronic copy of the following information—

- (a) as constructed drawings in both PDF and AutoCAD DWG formats for anything designed by the undertaker; in compliance with Interim Advice Note 184 or any successor document;
- (b) list of suppliers and materials used, as well as any relevant test results and CCTV surveys (if required to comply with DMRB standards);
- (c) product data sheets and technical specifications for all materials used;
- (d) as constructed information for any utilities discovered or moved during the works;
- (e) method statements for the works carried out;
- (f) in relation to road lighting, signs, and traffic signals any information required by Series 1300 and 1400 of the Specification for Highway Works or any replacement or modification of it;
- (g) organisation and methods manuals for all products used;
- (h) as constructed programme;
- (i) test results and records as required by the detailed design information and during construction phase of the project;
- (j) a stage 3 road safety audit subject to any exceptions to the road safety audit standard as agreed by the undertaker and National Highways;
- (k) the health and safety file; and
- (l) such other information as is required by National Highways to be used to update all relevant databases and to ensure compliance with National Highway's *Asset Data Management Manual* as is in operation at the relevant time.

“the bond sum” means the sum equal to 200% of the cost of the carrying out the specified works (to include all costs plus any commuted sum) or such other sum agreed between the undertaker and National Highways;

“the cash surety” means the sum agreed between the undertaker and National Highways;

“commuted sum” means such sum calculated as provided for in paragraph 16 of this Part of this Schedule to be used to fund the future cost of maintaining the specified works;

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**Applicant's Response**

These proposed protective provisions have been provided to the Applicant and are informing discussion between the parties. The protective provisions included in the **Draft Development Consent Order [PEPD-009]** as amended at Deadline 2 do not reflect the standard wording provided by National Highways, which is not project specific, pending settlement of the terms of any side agreement required between the Applicant and National Highways.

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“condition survey” means a survey of the condition of National Highways structures and assets within the Order limits that may be affected by the specified works;

“contractor” means any contractor or subcontractor appointed by the undertaker to carry out the specified works;

“defects period” means the period from the date of the provisional certificate to the date of the final certificate which shall be no less than 12 months from the date of the provisional certificate;

“detailed design information” means such of the following drawings specifications and calculations as are relevant to the development—

- (a) site clearance details;
- (b) boundary, environmental and mitigation fencing;
- (c) road restraints systems and supporting road restraint risk appraisal process assessment;
- (d) drainage and ducting as required by DMRB CD 535 Drainage asset data and risk management and DMRB CS551 Drainage surveys – standards for Highways
- (e) earthworks including supporting geotechnical assessments required by DMRB CD622 Managing geotechnical risk and any required strengthened earthworks appraisal form certification;
- (f) pavement, pavement foundations, kerbs, footways and paved areas;
- (g) traffic signs and road markings;
- (h) traffic signal equipment and associated signal phasing and timing detail;
- (i) road lighting (including columns and brackets);
- (j) regime of California Bearing Ratio testing;
- (k) electrical work for road lighting, traffic signs and signals;
- (l) motorway communications as required by DMRB;
- (m) highway structures and any required structural approval in principle;
- (n) landscaping;
- (o) proposed departures from DMRB standards;
- (p) walking, cycling and horse riding assessment and review report;
- (q) stage 1 and stage 2 road safety audits and exceptions agreed;
- (r) utilities diversions;
- (s) topographical survey;
- (t) maintenance and repair strategy in accordance with DMRB GD304 Designing health and safety into maintenance or any replacement or modification of it;
- (u) health and safety information including any asbestos survey required by GG105 or any successor document; and
- (v) other such information that may be required by National Highways to be used to inform the detailed design of the specified works;

“DBFO contract” means the contract between National Highways and the highway operations and maintenance contractor for the maintenance and operation of parts of the strategic road network which are within the Order Limits or any successor or replacement contract that may be current at the relevant time;

“DMRB” means the Design Manual for Roads and Bridges or any replacement or modification of it;

“final certificate” means the certificate relating to those aspects of the specified works that have resulted in any alteration to the strategic road network to be issued by National Highways pursuant to paragraph 14;

“the health and safety file” means the file or other permanent record containing the relevant health and safety information for the authorised development required by the Construction



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Design and Management Regulations 2015 (or such updated or revised regulations as may come into force from time to time);

"highway operations and maintenance contractor" means the contractor appointed by National Highways under the DBFO contract;

"nominated persons" means the undertaker's representatives or the contractor's representatives on site during the carrying out of the specified works as notified to National Highways from time to time;

"programme of works" means a document setting out the sequence and timetabling of the specified works;

"provisional certificate" means the certificate of provisional completion relating to those aspects of the specified works that have resulted in any alteration to the strategic road network to be issued by National Highways in accordance with paragraph 7 when it considers the specified works are substantially complete and may be opened for traffic;

"road safety audit" means an audit carried out in accordance with the road safety audit standard;

"road safety audit standard" means DMRB Standard HD GG119 or any replacement or modification of it;

"road space booking" means road space bookings in accordance with National Highways' Asset Management Operational Requirements (AMOR) including Network Occupancy Management System (NOMS) used to manage road space bookings and network occupancy;

"Specification for Highways Works" means the specification for highways works forming part of the manual of contract documents for highway works published by National Highways and setting out the requirements and approvals procedures for work, goods or materials used in the construction, improvement or maintenance of the strategic road network;

"specified works" means so much of any work, including highway works and signalisation, authorised by this Order including any maintenance of that work, as is undertaken on, in, under or over the strategic road network for which National Highways is the highway authority;

"strategic road network" means any part of the road network including trunk roads, special roads or streets for which National Highways is the highway authority including drainage infrastructure, street furniture, verges and vegetation and all other land, apparatus and rights located in, on, over or under the highway;

"utilities" means any pipes wires cables or equipment belonging to any person or body having power or consent to undertake street works under the New Roads and Street Works Act 1991; and

"winter maintenance" means maintenance of the road surface to deal with snow and ice.

#### General

3. In respect of any part of the strategic road network that is managed under a DBFO contract both National Highways and the highway operations and maintenance contractor shall have the benefit of this Part of Schedule [ ] but for the purposes of any approvals required under this Part of Schedule [ ] the undertaker shall liaise directly with National Highways.

4. Notwithstanding the limits of deviation permitted pursuant to article [ ] of this Order, no works in carrying out, maintaining or diverting the authorised development may be carried out under the strategic road network at a distance within 4 metres of the lowest point of the ground.

5. References to any standards, manuals, contracts, regulations and directives including to specific standards forming part of the DMRB are, for the purposes of this Part of this Schedule, to be construed as a reference to the same as amended, substituted or replaced, and with such modifications as are required in those circumstances.

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**Works outside the Order limits**

6.—If the undertaker proposes to carry out works to the strategic road network that are outside of the Order Limits in connection with the authorised development, the undertaker must enter into an agreement with National Highways in respect of the carrying out of those works prior to the commencement of those works.

**Prior approvals and security**

## 7.—(1) The specified works must not commence until—

- (a) a stage 1 and stage 2 road safety audit has been carried out and all recommendations raised by them or any exceptions are approved by National Highways;
  - (b) the programme of works has been approved by National Highways;
  - (c) the detailed design of the specified works comprising of the following details, insofar as considered relevant by National Highways, has been submitted to and approved by National Highways—
    - (i) the detailed design information, incorporating all recommendations and any exceptions approved by National Highways under sub-paragraph (a)
    - (ii) details of the proposed road space bookings;
    - (iii) the identity and suitability of the contractor and nominated persons;
    - (iv) a process for stakeholder liaison, with key stakeholders to be identified and agreed between National Highways and the undertaker;
    - (v) information demonstrating that the walking, cycling and horse riding assessment and review process undertaken by the undertaker in relation to the specified works has been adhered to in accordance with DMRB GG142 – Designing for walking, cycling and horse riding; and
  - (d) a scheme of traffic management has been submitted by the undertaker and approved by National Highways such scheme to be capable of amendment by agreement between the undertaker and National Highways from time to time;
  - (e) stakeholder liaison has taken place in accordance with the process for such liaison agreed between the undertaker and National Highways under sub-paragraph (c)(v) above;
  - (f) National Highways has approved the audit brief and CVs for all road safety audits and exceptions to items raised in accordance with the road safety audit standard;
  - (g) the undertaker has agreed the estimate of the commuted sum with National Highways;
  - (h) the scope of all maintenance operations (routine inspections, incident management, reactive and third party damage) to be carried out by the undertaker during the construction of the specified works (which must include winter maintenance) has been agreed in writing by National Highways;
  - (i) the undertaker has procured to National Highways collateral warranties in a form approved by National Highways from the contractor and designer of the specified works in favour of National Highways to include covenants requiring the contractor and designer to exercise all reasonable skill care and diligence in designing and constructing the specified works, including in the selection of materials, goods, equipment and plant; and
  - (j) a condition survey and regime of monitoring of any National Highways assets or structures that National Highways considers will be affected by the specified works, has been agreed in writing by National Highways.
- (2) The undertaker must not exercise—
- (a) article [ ] (*maintenance of authorized development*);
  - (b) article [ ] (*street works*);
  - (c) article [ ] (*permanent stopping up of streets, rights of way and rights of access*);



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7 (cont) - 8	<p>(d) article [ ] (<i>temporary stopping up of streets, rights of way and rights of access</i>);</p> <p>(e) article [ ] (<i>traffic regulation</i>);</p> <p>(f) article [ ] (<i>discharge of water</i>);</p> <p>(g) article [ ] (<i>protective works to buildings</i>);</p> <p>(h) article [ ] (<i>authority to survey and investigate the land</i>);</p> <p>(i) article [ ] (<i>compulsory acquisition of land</i>);</p> <p>(j) article [ ] (<i>compulsory acquisition of rights</i>);</p> <p>(k) article [ ] (<i>temporary use of land for carrying out the authorized development</i>);</p> <p>(l) article [ ] (<i>temporary use of land for maintaining the authorized development</i>); or</p> <p>(m) article [ ] (<i>felling or lopping trees</i>) of this Order,</p> <p>over any part of the strategic road network without the consent of National Highways, and National Highways may in connection with any such exercise require the undertaker to provide details of any proposed road space bookings and/or submit a scheme of traffic management for National Highways' approval.</p> <p>(3) National Highways must prior to the commencement of the specified works or the exercise of any power referenced in sub-paragraph (2) inform the undertaker of the identity of the person who will act as a point of contact on behalf of National Highways for consideration of the information required under sub-paragraph (1) or (2).</p> <p>(4) Any approval of National Highways required under this paragraph-</p> <p>(a) must not be unreasonably withheld;</p> <p>(b) must be given in writing;</p> <p>(c) shall be deemed to have been refused if neither given nor refused within 2 months of the receipt of the information for approval or, where further particulars are requested by National Highways within 2 months of receipt of the information to which the request for further particulars relates; and</p> <p>(d) may be subject to any conditions as National Highways considers necessary.</p> <p>(5) Any change to the identity of the contractor and/or designer of the specified works will be notified to National Highways immediately and details of their suitability to deliver the specified works will be provided on request along with collateral warranties in a form agreed by National Highways.</p> <p>(6) Any change to the detailed design of the specified works must be approved by National Highways in accordance with paragraph 7(1) of this Part.</p> <p><b>Construction of the specified works</b></p> <p>8.—(1) The undertaker must give National Highways 28 days' notice in writing of the date on which the specified works will start unless otherwise agreed by National Highways.</p> <p>(2) The undertaker must comply with National Highways' road space booking procedures prior to and during the carrying out the specified works and no specified works for which a road space booking is required shall commence without a road space booking having first been secured from National Highways.</p> <p>(3) The specified works must be carried out by the undertaker to the satisfaction of National Highways in accordance with—</p> <p>(a) the relevant detailed design information and programme of works approved pursuant to paragraph 7(1) above or as subsequently varied by agreement between the undertaker and National Highways;</p> <p>(b) the DMRB, the Manual of Contract Documents for Highway Works, including the Specification for Highway Works, together with all other relevant standards as required by National Highways to include, inter alia; all relevant interim advice notes, the Traffic Signs Manual and the Traffic Signs Regulations and General Directions 2016 save to the extent</p>	
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that exceptions from those standards apply which have been approved by National Highways; and

- (c) all aspects of the Construction (Design and Management) Regulations 2015 or any statutory amendment or variation of the same and in particular the undertaker, as client, must ensure that all client duties (as defined in the said regulations) are undertaken to the satisfaction of National Highways.

(4) The undertaker must ensure that (where possible) without entering the highway the highway is kept free from mud, soil and litter as a result of carrying out a Specified Work.

(5) The undertaker must permit and must require the contractor to permit at all reasonable times persons authorised by National Highways (whose identity must have been previously notified to the undertaker by National Highways) to gain access to the specified works for the purposes of inspection and supervision of the specified works.

(6) If any part of the specified works is constructed-

- (a) other than in accordance with the requirements of this Part of this Schedule; or  
(b) in a way that causes damage to the highway, highway structure or asset or any other land of National Highways,

National Highways may by notice in writing require the undertaker, at the undertaker's own expense, to comply promptly with the requirements of this Part of this Schedule or remedy any damage notified to the undertaker under this Part of this Schedule, to the satisfaction of National Highways.

(7) If during the carrying out of the authorised development the undertaker or its appointed contractors or agents causes damage to the strategic road network then National Highways may by notice in writing require the undertaker, at its own expense, to remedy the damage.

(8) If within 28 days on which a notice under sub-paragraph (6) or sub-paragraph (7) is served on the undertaker (or in the event of there being, in the opinion of National Highways, a danger to road users, within such lesser period as National Highways may stipulate), the undertaker has failed to take the steps required by that notice, National Highways may carry out the steps required of the undertaker and may recover any expenditure incurred by National Highways in so doing, such sum to be payable within 30 days of demand.

(9) Nothing in this Part of this Schedule prevents National Highways from carrying out any work or taking any such action as it reasonably believes to be necessary as a result of or in connection with the carrying out or maintenance of the authorised development without prior notice to the undertaker in the event of an emergency or to prevent the occurrence of danger to the public and National Highways may recover any expenditure it reasonably incurs in so doing.

(10) In constructing the specified works, the undertaker must at its own expense divert or protect all utilities and all agreed alterations and reinstatement of highway over existing utilities must be constructed to the satisfaction of National Highways.

(11) During the construction of the specified works the undertaker must carry out all maintenance (including winter maintenance) in accordance with the scope of maintenance operations agreed by National Highways pursuant to paragraph 7(1)(h) and the undertaker must carry out such maintenance at its own cost.

(12) The undertaker must notify National Highways if it fails to complete the specified works in accordance with the agreed programme pursuant to paragraph 7(1)(b) of this Part or suspends the carrying out of any specified work beyond a reasonable period of time and National Highways reserves the right to withdraw any road space booking granted to the undertaker to ensure compliance with its network occupancy requirements.

#### Payments

9.—(1) The undertaker must pay to National Highways a sum equal to the whole of any costs and expenses which National Highways incurs (including costs and expenses for using internal or external staff and costs relating to any work which becomes abortive) in relation to the specified



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works and in relation to any approvals sought under this Order, or otherwise incurred under this Part, including—

- (a) the checking and approval of the information required under paragraph 7(1);
- (b) the supervision of the specified works;
- (c) the checking and approval of the information required to determine approvals under this Order;
- (d) all costs in relation to the transfer of any land required for the specified works; and
- (e) all legal and administrative costs and disbursements incurred by National Highways in connection with the Order and sub-paragraphs (a)-(d); and
- (f) any value added tax which is payable by National Highways in respect of such costs and expenses and for which it cannot obtain reinstatement from HM Revenue and Customs,

together comprising "the NH costs".

(2) The undertaker must pay to National Highways upon demand and prior to such costs being incurred the total costs that National Highways believe will be properly and necessarily incurred by National Highways in undertaking any statutory procedure or preparing and bringing into force any traffic regulation order or orders necessary to carry out or for effectively implementing the authorised development.

(3) National Highways must provide the undertaker with a schedule showing its estimate of the NH costs prior to the commencement of the specified works and the undertaker must pay to National Highways the estimate of the NH costs prior to commencing the specified works and in any event prior to National Highways incurring any cost.

(4) If at any time after the payment referred to in sub-paragraph (3) has become payable, National Highways reasonably believes that the NH costs will exceed the estimated NH costs it may give notice to the undertaker of the amount that it believes the NH costs will exceed the estimate of the NH costs (the excess) and the undertaker must pay to National Highways within 28 days of the date of the notice a sum equal to the excess.

(5) National Highways must give the undertaker a final account of the NH costs referred to in sub-paragraph (1) above within 91 days of the issue of the provisional certificate issued pursuant to paragraph 10(4).

(6) Within 28 days of the issue of the final account:

- (a) if the final account shows a further sum as due to National Highways the undertaker must pay to National Highways the sum shown due to it;
- (b) if the account shows that the payment or payments previously made by the undertaker have exceeded the costs incurred by National Highways, National Highways must refund the difference to the undertaker.

(7) If any payment due under any of the provisions of this Part of this Schedule is not made on or before the date on which it falls due the party from whom it was due must at the same time as making the payment pay to the other party interest at 3% above the Bank of England base lending rate from time to time being in force for the period starting on the date upon which the payment fell due and ending with the date of payment of the sum on which interest is payable together with that interest.

**Provisional Certificate**

10.—(1) Following any closure or partial closure of any of the strategic road network for the purposes of carrying out the specified works, National Highways will carry out a site inspection to satisfy itself that the strategic road network is, in its opinion, safe for traffic and the undertaker must comply with any requirements of National Highways prior to reopening the strategic road network.

(2) As soon as the undertaker considers that the provisional certificate may be properly issued it must apply to National Highways for the provisional certificate.

(3) Following an application for a provisional certificate, National Highways must as soon as reasonably practicable:

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- (a) inspect the specified works; and
- (b) provide the undertaker with a written list of works that are required for the provisional certificate to be issued or confirmation that no further works are required for this purpose.
- (4) When—
- (a) a stage 3 road safety audit for the specified works has been carried out and all recommendations raised including remedial works have (subject to any exceptions agreed) been approved by National Highways;
- (b) the specified works incorporating the approved remedial works under sub-paragraph (4)(a) and any further works notified to the undertaker pursuant to sub-paragraph 10(3)(b) have been completed to the satisfaction of National Highways;
- (c) the as built information has been provided to National Highways; and
- (d) the undertaker has paid the commuted sum to National Highways,
- National Highways must issue the provisional certificate.
- (5) On the issue of the provisional certificate the bond sum shall be reduced to 20% of the total bond sum save insofar as any claim or claims have been made against the bond before that date in which case National Highways will retain a sufficient sum to ensure it does not have to meet any costs for or arising from the specified works.
- (6) The undertaker must submit a stage 4 road safety audits as required by and in line with the timescales stipulated in the road safety audit standard. The undertaker must comply with the findings of the stage 4 road safety audit and must pay all costs of and incidental to such and provide updated as-built information to National Highways.

#### Opening

11. The undertaker must notify National Highways not less than 56 days in advance of the intended date of opening to the public of the strategic road network and the undertaker must notify National Highways of the actual date the strategic road network will be opened to the public within 14 days of that date.

#### Final condition survey

12.—(1) The undertaker must, as soon as reasonably practicable after making its application for a provisional certificate pursuant to paragraph 10(2), arrange for the highways structures and assets that were the subject of the condition survey to be re-surveyed and must submit the re-survey to National Highways for its approval. The re-survey will include a renewed geotechnical assessment required by DMRB CD622 if the specified works include any works beneath the strategic road network.

(2) If the re-surveys carried out pursuant to paragraph 12(1) indicates that any damage has been caused to a structure or asset, the undertaker must submit a scheme for remedial works in writing to National Highways for its approval in writing and the undertaker must carry out the remedial works at its own cost and in accordance with the scheme submitted.

(3) If the undertaker fails to carry out the remedial work in accordance with the approved scheme, National Highways may carry out the steps required of the undertaker and may recover any expenditure it reasonably incurs in so doing.

(4) National Highways may, at its discretion, at the same time as giving its approval to the re-surveys pursuant to paragraph 12(1) give notice in writing that National Highways will remedy any damage identified in the re-surveys and National Highways may recover any expenditure it reasonably incurs in so doing.

(5) The undertaker must make available to National Highways upon request copies of any survey or inspection reports produced pursuant to any inspection or survey of any specified work following its completion that the undertaker may from time to time carry out.



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**Defects Period**

13. —(1) The undertaker must at its own expense remedy any defects in the strategic road network as are reasonably required by National Highways to be remedied during the defects period. All identified defects must be remedied in accordance with the following timescales—

- (a) in respect of matters of urgency, within 24 hours of receiving notification for the same (urgency to be determined at the absolute discretion of National Highways);
- (b) in respect of matters which National Highways considers to be serious defects or faults, within 14 days of receiving notification of the same; and
- (c) in respect of all other defects notified to the undertaker, within 4 weeks of receiving notification of the same.

(2) Following the expiry of the defects period National Highways has responsibility for routine maintenance of the strategic road network save for any soft landscaping works which must be established and which must thereafter be maintained for a period of 3 years by and at the expense of the undertaker.

**Final Certificate**

14. —(1) The undertaker must apply to National Highways for the final certificate no sooner than 12 months from the date of the provisional certificate.

(2) Following receipt of the application for the final certificate, National Highways must as soon as reasonably practicable:

- (a) inspect the strategic road network; and
  - (b) provide the undertaker with a written list of any further works required to remedy or make good any defect or damage in the strategic road network or confirmation that no such works are required for this purpose.
- (3) The undertaker must carry out such works notified to it pursuant to sub-paragraph 14(2).
- (4) When National Highways is satisfied that:
- (a) any defects or damage arising from defects during the defects period and any defects notified to the undertaker pursuant to sub-paragraph 14(2) and any remedial works required as a result of the stage 4 road safety audit have been made good to the satisfaction of National Highways; and
  - (b) the NH costs have been paid to National Highways in full;

National Highways must issue the final certificate after which the bond shall be released in full.

(5) The undertaker must pay to National Highways within 28 days of demand the costs reasonably incurred by National Highways in identifying the defects and supervising and inspecting the undertaker's work to remedy the defects that it is required to remedy pursuant to these provisions.

**Security**

15.—(1) The specified works must not commence until—

- (a) the undertaker procures that the specified works are secured by a bond from a bondsman first approved by National Highways in the agreed form between the undertaker and National Highways to indemnify National Highways against all losses, damages, costs or expenses arising from any breach of any one or more of the obligations of the undertaker in respect of the exercise of the powers under this Order and the specified works under the provisions of this Part of this Schedule provided that the maximum liability of the bond must not exceed the bond sum; and
- (b) the undertaker has provided the cash surety which may be utilised by National Highways in the event of the undertaker failing to meet its obligations to make payments under paragraph 9 or to carry out works the need for which arises from a breach of one or more of the obligations of the undertaker under the provisions of this Part of this Schedule.

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**Commuted sums**

16.—(1) National Highways must provide to the undertaker an estimate of the commuted sum, calculated in accordance with FS Guidance S278 Commuted Lump Sum Calculation Method dated 18 January 2010 or any successor guidance, prior to the commencement of the specified works.

(2) The undertaker must pay to National Highways the commuted sum prior to the issue of the provisional certificate.

**Insurance**

17. Prior to the commencement of the specified works the undertaker must effect public liability insurance with an insurer in the minimum sum of £10,000,000.00 (ten million pounds) in respect of any one claim against any legal liability for damage loss or injury to any property or any person as a direct result of the execution of specified works or use of the strategic road network by the undertaker.

**Indemnity**

18.—(1) The undertaker fully indemnifies National Highways from and against all costs, claims, expenses, damages, losses and liabilities suffered by National Highways arising from the construction, maintenance or use of the specified works or exercise of or failure to exercise any power under this Order within 14 days of demand save for any loss arising out of or in consequence of any negligent act or default of National Highways.

**Maintenance of the specified works**

19.—(1) The undertaker must, prior to the commencement of any works of maintenance to the specified works, give National Highways 28 days' notice in writing of the date on which those works will start unless otherwise agreed by National Highways, acting reasonably.

(2) If, for the purposes of maintaining the specified works, the undertaker needs to occupy any road space, the undertaker must comply with National Highways' road space booking requirements and no maintenance of the specified works for which a road space booking is required shall commence without a road space booking having first been secured.

(3) The undertaker must comply with any requirements that National Highways may notify to the undertaker, such requirements to be notified to the undertaker not less than 7 days' in advance of the planned commencement date of the maintenance works.

(4) The provisions of paragraph 11 shall apply to the opening of any part of the strategic road network following occupation of any road space under this paragraph.

**Land**

20.—(1) Following the issue of the final certificate pursuant to paragraph 14(4) National Highways may serve notice on the undertaker that it wishes to take a freehold transfer of land within the extent of strategic road network boundary which is not in the ownership of National Highways but has been acquired by the undertaker for the purposes of carrying out the specified works.

(2) If the undertaker receives notice under sub-paragraph (1) then the undertaker must effect a freehold transfer of the land which is the subject of the notice and complete such transfer as soon as reasonably practicable at no cost to National Highways.

(3) The undertaker must not under the powers of this Order:

- (a) acquire or use land forming part of;
- (b) acquire new or existing rights over; or
- (c) seek to impose or extinguish any restrictive covenants over;

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## Applicant's Response

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any of the strategic road network, or extinguish any existing rights of National Highways in respect of any third party property, except with the consent of National Highways by written request to [legalserviceteam@nationalhighways.co.uk](mailto:legalserviceteam@nationalhighways.co.uk)

(4) Where any land or interest is proposed to be acquired for the benefit of National Highways, the undertaker must, unless otherwise agreed by National Highways, exercise article [ ] (*compulsory acquisition of land*) and article [ ] (*compulsory acquisition of rights and imposition of restrictive covenants*) as applied by articles [ ] (*application of the 1981 Act*) and article [ ] (*modification of the 2017 Regulations*) of this Order to directly vest in National Highways any such land or interest.

#### Expert Determination

21.—(1) Article [ ] (*arbitration*) of the Order does not apply to this Part of this Schedule.

(2) Any difference under this Part of this Schedule may be referred to and settled by a single independent and suitable person who holds appropriate professional qualifications and is a member of a professional body relevant to the matter in dispute acting as an expert, such person to be agreed by the differing parties or, in the absence of agreement, identified by the President of the Institution of Civil Engineers.

(3) On notification by either party of a dispute, the parties must jointly instruct an expert within 14 days of notification of the dispute.

(4) All parties involved in settling any difference must use best endeavours to do so within 21 days from the date that an expert is appointed.

(5) The expert must—

- (a) invite the parties to make submission to the expert in writing and copied to the other party to be received by the expert within 7 days of the expert's appointment;
- (b) permit a party to comment on the submissions made by the other party within 7 days of receipt of the submission;
- (c) issue a decision within 7 days of receipt of the submissions under sub-paragraph (b); and
- (d) give reasons for the decision.

(6) Any determination by the expert is final and binding, except in the case of manifest error in which case the difference that has been subject to expert determination may be referred to and settled by arbitration under article [ ] (*arbitration*).

(7) The fees of the expert are payable by the parties in such proportions as the expert may determine or, in the absence of such determination, equally.



Ref	Post-hearing submission comment	Applicant's Response
<b>Appendix 3 Summary of comments made by National Highways at ISH1 and further relevant matters regarding the draft Development Consent Order</b>		
1	<p>1. National Highways now require standard Protective Provisions to sit on the face of the DCO and which are attached at Appendix 2. The standard Protective Provisions were sent to the Applicant on 3 August 2023 and National Highways has since received draft Project Specific Protective Provisions from the Applicant which will be subject to negotiation and if agreed appended to a Side Agreement. The Applicant has informed National Highways they do not object to National Highways Standard Protective Provisions on the face of the DCO and are prepared to negotiate Project Specific Protective Provisions to be appended to a side agreement.</p>	<p>The Applicant is negotiating protective provisions with National Highways and are confident that appropriate protections can be accommodated.</p>
2	<p>2. National Highways notes from the Book of Reference that the Applicant is seeking permanent acquisition of rights over plots 7/3, 7/5, 7/6 7/12 and 7/13. National Highways is not prepared to agree to permanent acquisition of rights over National Highways land.</p>	<p>The Applicant is seeking to acquire Rights by the Creation of New Rights or the Imposition of Restrictive Covenants over: -</p> <ul style="list-style-type: none"> <li>• plot 7/3 - unregistered land being hardstanding, part adopted highway and verge (Construction and Operational Access Rights);</li> <li>• plot 7/5 - registered land being adopted highway and verge (Cable Rights/Restrictive Covenant);</li> <li>• plot 7/6 - unregistered land being adopted highway (Cable Rights/Restrictive Covenant);</li> <li>• plot 7/12 - unregistered land being adopted highway footway, accessway, verge and trees (Cable Rights/Restrictive Covenant); and</li> <li>• plot 7/13 - registered land being adopted highway, grassed area, wooded area and verge (Cable Rights/Restrictive Covenant).</li> </ul> <p>The Rights and Restrictive Covenants sought over these plots are required for the routeing of the cable under the A27 and rights over a construction and operational access from the A27 south to the proposed DCO Order Limits (west of Hammerpot).</p> <p>The Applicant is seeking Powers of Temporary Possession over: -</p> <ul style="list-style-type: none"> <li>• plot 7/7 – registered land being adopted highway and verge (Temporary Construction Access);</li> <li>• plot 7/8 – unregistered land being adopted highway and verge and footway (Temporary Construction Access);</li> <li>• plot 7/9 – registered land being adopted accessway off Arundel Road, grassed area and verge (Temporary Construction Access);</li> <li>• plot 7/14 – unregistered land being adopted highway (Temporary Construction Access);</li> <li>• plot 7/15 – registered land being adopted highway, footway, grassed area, wooded area, access path and verge (Temporary Construction Access);</li> <li>• plot 7/16 – unregistered land being adopted highway, verge, access (Temporary Construction Access);</li> <li>• track, wooded area, grassed area and drain;</li> <li>• plot 7/17 – registered land being adopted highway and verge, access track, wooded area, grassed area and drain (Temporary Construction Access);</li> <li>• plot 7/18 – registered land being wooded area and drain (Temporary Construction Access); and</li> </ul>

Ref	Post-hearing submission comment	Applicant's Response
3	<p>3. Referring to Document PEPD-010 draft Development Consent Order January 2024 (revision B) National Highways need to be defined in the Development Consent Order ('DCO');</p> <p>a. Interpretation (Part 1, article 2) There is no definition of National Highways as the strategic highway authority (Network Rail are defined on page 7). Wording to be inserted in the DCO; "National Highways" means National Highways Limited (company number 09346363, whose registered office is at Bridge House, 1 Walnut Tree Close Guildford, Surrey, GU1 4LZ) the Strategic Highway Authority.</p> <p>b. The DCO needs to refer to the correct highway authority throughout the DCO.</p> <p>c. The A27 which is part of the strategic road network is not listed as a street in Part 3 of the DCO. The northern boundary of the A27 is the southern boundary of the South Downs National Park and it is not clear whether some of the verges of the A27 in the vicinity of are located within the boundary of the South Downs National Park. Article 15 of the DCO only refers to highway access to or from the strategic road network outside the confines of the South Downs National Park.</p> <p>d. Schedule 1 Part 1 of the DCO refers to 'works' but no detail is given in the DCO on the governance including decision making of the project.</p> <p>e. Article 5(5) National Highways as the strategic highway authority must be consulted if the Applicant is seeking to affect, change or alter any part of the strategic road network.</p> <p>f. There is no definition of 'complete' or 'completion' in the DCO which will lead to uncertainty with regards to delivery of obligations set out in the DCO.</p>	<ul style="list-style-type: none"> <li>• plot 7/19 – registered land being adopted highway verge and scrubland (Temporary Construction Access).</li> </ul> <p>The Temporary Possession Powers sought over these plots are required to enable the Applicant to carry out Work No. 13.</p> <p>All of the above land parcels comprise adopted highway, being the A27, save in the case of Plot 7/18, being approximately 21 square metres of land outside the adopted highway designation.</p> <p>The Applicant has been seeking to engage in discussions with National Highways and are looking to progress negotiations to take forward discussions associated with the necessary agreements relating to the land rights required.</p> <p>(a) The <b>Draft Development Consent Order [PEPD-009]</b> (updated at Deadline 2 submission) includes a definition of highway authority as having the same meaning as in the Highways Act 1980. This definition therefore encompasses both the local highway authority and the strategic highway authority. It is not considered appropriate to include a definition of National Highways as a private company in this context, where its functions under the terms of the Order is as strategic highway authority. By way of analogy, the Applicant has removed the definition of Natural England from the <b>Draft Development Consent Order [PEPD-009]</b> and replaced it with a definition of statutory nature conservation body.</p> <p>(b) The <b>Draft Development Consent Order [PEPD-009]</b> refers to the highway authority where required and in accordance with the definition of highway authority encompasses both the local and strategic highway authorities as relevant for the highway concerned to account for the interface between the Proposed Development and parts of both the local and strategic highway network.</p> <p>(c) It is not clear where it is proposed that the A27 should be referred to in Part 3 of the <b>Draft Development Consent Order [PEPD-009]</b>.</p> <p>(d) It is not clear what governance is anticipated to be included in Schedule 1 Part 1 of the <b>Draft Development Consent Order [PEPD-009]</b>. Article 3 of the <b>Draft Development Consent Order [PEPD-009]</b> confirms that development consent is granted for the authorised development consent is granted for the ancillary works, subject to the provisions of the Order and the requirements. 'Authorised development' is defined by reference to the development described in Part of Schedule 1, and 'ancillary works' are those works described in Part 2 of Schedule 1. Requirements are defined by reference to Part 3 of Schedule 1</p> <p>(e) Article 5(5) deals with transfer of benefit of the provisions of the deemed marine licences. It is not concerned with changes or alterations to any part of the strategic road network. It is not clear what amendment is sought to this Article. Should there be any transfer of benefit of the terms of the Order under article 5, paragraph 5(3) ensures that any reference to the undertaker includes reference to the transferee or lessee, who must then comply with the terms of the Order.</p> <p>(f) It is not clear which provisions of the <b>Draft Development Consent Order [PEPD-009]</b> the representation refers to as requiring reference to completion; further clarification from National Highways would be welcomed to enable the Applicant to consider the request further.</p>

**Table 2-4: Applicant's Response to Natural England's Written Representation [REP1-059]**

Ref	Response to Deadline 1 Comment	Applicant's Response
0.1	<p>Natural England observes that the traffic light system proposed by the Applicant in the Statement of Commonality for SoCG is complex and unclear. Whilst we are not commenting on the rating given to specific thematic areas at this stage, we advise that because no issues with Natural England are coloured red or orange, this does not accurately represent the levels of risk and disagreement that still exist regarding key receptors, such as (but not limited to) impacts on seascape, landscape and visual impacts and the Kingmere Marine Conservation Zone. As Natural England has made clear with our own risk rating system within our Relevant Representations, there are a number of red and amber issues where significant disagreement exists. The Statement of Commonality for SoCG does not reflect this.</p>	<p>The Applicant's <b>Statement of Commonality for the Statements of Common Ground [PEPD-039]</b> was submitted at Pre-Exam Procedural Deadline (16 January 2024).</p> <p>Using the methodology set out at Section 1.2 of <b>Statement of Commonality for the Statements of Common Ground [PEPD-039]</b> of the document, categorising an issue as 'red' or 'orange' would have meant that a final position had been reached. The Applicant was not of the view that at Pre-Exam Procedural Deadline (prior to the Pre-Examination Meeting) they had reached a 'final' position in relation to any of the matters raised by Natural England in their submissions to the examination. This is why these categorisations were not used.</p>
0.2	<p>We note that all issues have been categorised as Amber, which is defined as 'the issue is capable of resolution. The Applicant will look to progress this issue with relevant Interested Parties with a view to agreeing a resolution'. We note that this document and the topics included do not fully reflect the advice in our Principal Areas of Disagreement Statements 3 (PADS) or Relevant Representations for some issues. For example, there are some topics where we have advised that unless fundamental changes are made, or mitigation commitments are made, it is highly unlikely that certain issues can be resolved. We recommend this document is updated by the Applicant to more accurately reflect our comments to date. We consider that separate subsections for onshore and offshore ecology, grouped by thematic area, as well as landscape and seascape, would provide more clarity.</p>	<p>Notwithstanding this, the Applicant acknowledges Natural England's advice here, in particular the confirmation that there are a number of issues '<i>where significant disagreement exists</i>' and Natural England's advice is that unless fundamental changes are made, or mitigation commitments are made, it is highly unlikely that certain issues can be resolved.</p> <p>At Deadline 2 the Applicant has updated the <b>Statement of Commonality for the Statements of Common Ground</b> to reflect the various Comments on the Applicant's Statement of Commonality for Statements of Common Ground published at Deadline 1 (including the comments of Natural England).</p>
0.3	<p>We note that the Applicant has provided a table relating to minor typographical errors and corrections in the DCO submission, which they suggest will require correction in the relevant document at some stage of the examination process. Whilst the Applicant has submitted some updated documents (as listed in Appendix 2) with tracked changes to show these errata, we understand that the Applicant will submit the rest of the updated documents at some point in the examination process. Natural England is not able to comment on whether these changes address any of our Relevant/Written Representation comments until we have had sight of the full set of updated documents with the tracked changes to review.</p>	<p>Noted, the Applicant has no further comments on this matter at this time.</p>
0.4	<p>Section 245 (Protected Landscapes) of the Levelling Up and Regeneration Act 2023 places a duty on relevant authorities in exercising or performing any functions in relation to, or so as to affect, land in a National Park, the Broads or an Area of Outstanding Natural Beauty (AONB) ("National Landscape") in England, to seek to further the statutory purposes of the area. The duty applies to local planning authorities and other decision makers in making planning decisions on development and infrastructure proposals, as well as to other public bodies and statutory undertakers. It is anticipated that the government will provide guidance on how the duty should be applied in due course. In the meantime, and without prejudicing that guidance, Natural England advises that:</p> <ul style="list-style-type: none"> <li>The duty to 'seek to further' is an active duty, not a passive one. Any relevant authority must take all reasonable steps to explore how the statutory purposes of</li> </ul>	<p>Noted, the Applicant has no further comments on this matter at this time.</p>



Ref	Response to Deadline 1 Comment	Applicant's Response
	<p>the protected landscape (A National Park, the Broads, or an AONB) can be furthered;</p> <ul style="list-style-type: none"> <li>The new duty underlines the importance of avoiding harm to the statutory purposes of protected landscapes but also to seek to further the conservation and enhancement of a protected landscape. That goes beyond mitigation and like for like measures and replacement. A relevant authority must be able to demonstrate with reasoned evidence what measures can be taken to further the statutory purpose.</li> <li>The proposed measures to further the statutory purposes of a protected landscape, should explore what is possible in addition to avoiding and mitigating the effects of the development, and should be appropriate, proportionate to the type and scale of the development and its implications for the area and effectively secured. Natural England's view is that the proposed measures should align with and help to deliver the aims and objectives of the designated landscape's statutory management plan. The relevant protected landscape team/body should be consulted.</li> </ul>	
<b>Natural England's Comments on the Rampion 2 Offshore In-Principle Monitoring Plan (IPMP) [APP-240]</b>		
3	<p>3. Natural England advises that this is a live document which is updated throughout examination and post consent to reflect the outcome of discussions and/or monitoring. Therefore, because project design parameters and mitigation commitments are likely to be modified through the examination and pre-construction, we advise against the inclusion of Section 1 on the project description, as this could lead to issues around version control and inconsistencies developing between documents.</p>	<p>This is noted, the Applicant will ensure that Section 1 remains up-to-date in further revisions of the <b>Offshore In Principle Monitoring Plan (IPMP) [APP-240]</b>.</p>
4-8	<p>4. In recognition of the emphasis being placed by projects currently in the post consent phase on the IPMP when setting the monitoring requirements and parameters; Natural England highlights the importance of this outline document setting monitoring requirements. Natural England emphasises the requirement is to agree the scope of the IPMP and hypotheses which will be tested by the monitoring as part of the consenting phase and not be prescriptive on the type of monitoring and associated methodologies.</p> <p>5. Overall, Natural England feels that much more detail is required than is provided in the IPMP in its current form. For example;</p> <ol style="list-style-type: none"> <li>What are the hypotheses the monitoring will be testing?</li> <li>How will the monitoring be designed to ensure that the desired outcomes can be achieved i.e. is the proposed monitoring fit for purpose?</li> <li>What are the indicative timings of the surveys?</li> <li>Can lessons be learnt from previous thematic surveys and how will modifications to survey design be incorporated between survey campaigns?</li> </ol>	<p>The Applicant is open to discussions and is considering additional monitoring which could be beneficial (subject to aspects such as proportionality, the costs which would be incurred, and the logistical implications for the project). The Applicant would be interested in discussing this matter further with Natural England.</p> <p>The Applicant notes that monitoring proposals have been based on the identification of significant effects within the EIA. Where relevant, the Applicant will consider whether, in light of Natural England's comments, any additional detail is required within the current <b>Offshore In Principle Monitoring Plan [APP-240]</b>.</p>

Ref	Response to Deadline 1 Comment	Applicant's Response
v.	What does 'success' look like to demonstrate that no further monitoring is required?	
vi.	What happens if the results do not support the null hypothesis? Is further monitoring required (with/without modifications)? If impacts are greater than predicted, do actions need to be undertaken to address these impacts? How will further monitoring and actions be secured, is a change to the wording of the deemed Marine Licence (dML) required? And if so, how will success of any action/s be monitored and what will be the success criteria before monitoring can cease?	
	<p>To answer the above, Natural England considers the IPMP should focus on what the uncertainties and evidence gaps of the EIA and/or HRA are, rather than repeating the outcomes of the EIA only (Section 3). We consider that establishing and agreeing the uncertainties and evidence gaps of the EIA and/or the HRA is necessary to inform what monitoring should be undertaken.</p>	
	<p>6. As per the Applicant's 'Guiding Principles' (Section 2) Natural England advises an approach mechanism in which the Applicant presents a clearly defined hypothesis or null hypothesis of no impact would be beneficial. Monitoring thereafter would aim to test this. We advise a review period during which Statutory Nature Conservation Bodies (SNCBs) and regulatory bodies such as the Marine Management Organisation (MMO) are consulted by the Applicant to assess the results of the first period of monitoring. For example, one mechanism that could be introduced for particular receptors would be a live document which is reflective of what the monitoring is observing, including consideration of species/habitat recovery.</p>	
	<p>7. We advise that monitoring should be effective in providing sufficient evidence preconstruction to inform the deployment of mitigation measures, and similarly 3 demonstrate the efficacy of mitigation measures during construction and post-construction. This is important to demonstrate compliance with the measures identified in assessments and/or stipulated in the DCO/dML to mitigate significant impacts. It is also important to provide evidence to assess the significance of adverse effects, evaluate the success of mitigation measures and to help inform whether further remedial measures are required.</p>	
	<p>8. In relation to remedial measures, Natural England wishes to highlight the importance of ensuring that all relevant monitoring proposals for Rampion 2 (and/or associated DCO/dML conditions) consider the aim of securing a mechanism for adaptive monitoring when unforeseen impacts are detected. Thus, ensuring remedial measures (i.e., adaptive management) are triggered should the results of monitoring demonstrate impacts that are significantly greater than predicted and/or incorrect assumptions were made following review of the conclusions of the environmental statement and supporting documents. Currently the Offshore IPMP [APP-240] has omitted this key consideration. We advise that the potential for certain monitoring to trigger the development of countermeasures (with associated monitoring of those measures) should be clearly stated in relevant tables of the IPMP and incorporated into the DCO conditions where relevant.</p>	

Ref	Response to Deadline 1 Comment	Applicant's Response
9	<p>9. It is unclear to Natural England if this also encompasses monitoring surveys to inform final project design including those required to inform mitigation measures such as avoidance of certain sensitive receptors particularly environmental ones. If so, it would be useful if the Applicant could specify the purpose of each aspect of the engineering and design related monitoring in full. We highlight that geotechnical investigations will be critical to inform the cable burial risk assessment and in relation to reducing down the direct or indirect impacts to environmental receptors. We request that further details are provided to answer the questions posed in our overarching comments.</p>	<p>The Applicant notes the comment from Natural England but would highlight that the proposed monitoring to inform mitigation measures, notably including in respect of the avoidance of sensitive receptors as part of the final design of the Proposed Development is clearly identified within the <b>Offshore In Principle Monitoring Plan [APP-240]</b>, which includes the stated purpose of the monitoring, albeit at a summary level. The Applicant acknowledges the importance of surveys to inform the cable burial risk assessment and notes that this will inform the Cable Specification and Installation Plan, Condition 11(1)(n) of the dMLs (Schedules 11 and 12 of the <b>Draft Development Consent Order [PEPD-009]</b>). The Applicant reiterates that it will seek further discussion with Natural England to identify the need for additional detail within the current in-principle plan, but notes that detailed monitoring plans will be developed once the design of the Proposed Development has been finalised and therefore the specific focus of the monitoring can be agreed, based on the risk of significant effects arising from the refined project, rather than at this design-envelope stage. The provision for submission of detailed monitoring plans, which will require agreement in writing from the MMO, is secured in:</p> <ul style="list-style-type: none"> <li>• Condition 11(1)(j) of the dMLs (Schedules 11 and 12 of the <b>Draft Development Consent Order [PEPD-009]</b> for the <b>Offshore In Principle Monitoring Plan [APP-240]</b>;</li> <li>• Condition 16 of the dMLs (Schedules 11 and 12 of the <b>Draft Development Consent Order [PEPD-009]</b> Condition 11(1)(j) of the dMLs (Schedules 11 and 12 of the <b>Draft Development Consent Order [PEPD-009]</b>);</li> <li>• Condition 17 of the dMLs (Schedules 11 and 12 of the <b>Draft Development Consent Order [PEPD-009]</b>);</li> <li>• Condition 18 of the dMLs (Schedules 11 and 12 of the <b>Draft Development Consent Order [PEPD-009]</b>); and</li> <li>• Condition 20 of the dMLs (Schedules 11 and 12 of the <b>Draft Development Consent Order [PEPD-009]</b>).</li> </ul>
10-11	<p>10. Table 4.1 and the proceeding text lists out some proposed environmental measures (but is not an exhaustive list) in the form of plans, but it does not set out what monitoring will inform each of the plans and/or determine the success criteria of implementing the plans.</p> <p>11. Natural England highlights the risks and issues we have raised in our Relevant/Written Representation [RR-265] in relation to potential disruption of coastal processes, and coastal/seabed morphology, as well as the potential impacts this may have on designated site features. Therefore, as with other thematic areas we advise that further consideration is given to monitoring requirements, and the timing and duration of monitoring campaigns in order to better understand if there are any lasting impacts and/or recovery.</p>	<p>The Applicant notes that monitoring proposals have been based on the identification of significant effects within the Environmental Impact Assessment (EIA). Where relevant, the Applicant will consider whether, in light of Natural England's comments, any additional detail is required within the current <b>Offshore In Principle Monitoring Plan [APP-240]</b>.</p> <p>An assessment of the potential for seabed change as a result of scour around foundations and cable protection is provided in Section 6 of <b>Appendix 6.3: Coastal processes technical report: Impact assessment, Volume 4</b> of the Environmental Statement (ES) <b>[APP-131]</b>; and summarised in paragraphs 6.10.38 onwards in the ES (<b>Chapter 6: Coastal processes, Volume 2</b> of the ES <b>[APP-047]</b>). The maximum likely extent of scour is assessed for the Proposed Development is in the order of 1-10 m around most foundation types and around cable protection, up to 30 m for the largest individual foundation types. These dimensions are consistent with the available evidence from other built wind farms in similar environmental settings and are based on stochastic relationships based on a much wider range of observations, laboratory testing and theoretical analyses.</p> <p>The most likely layout of foundations and routing of cables means that the predicted dimensions of scour are very unlikely (i.e. not at all expected) to extend beyond the Proposed DCO Order Limits or, therefore, into any areas of Designated seabed. No Coastal Processes receptors were identified that are directly sensitive to the development of scour. The conclusions of the assessment of scour are used by other topics to inform their assessments in relation to other receptors.</p>



Ref	Response to Deadline 1 Comment	Applicant's Response
<p><b>Offshore and intertidal ornithology</b></p>		
12	<p>12. We note that the IPMP as submitted does not include any ornithological monitoring, based on the EIA concluding no significant effects on ornithological receptors and the Report to Inform Appropriate Assessment concluding no Adverse Effect on Integrity (AEol). Natural England notes that the Applicant has presented a without prejudice derogation case in relation to options for compensating for potential AEol on kittiwake for Flamborough and Filey Coast Special Protection Area (FFC SPA). Additionally, as stated in our relevant representations Natural England is not currently able to provide advice on the potential for AEol on the guillemot and razorbill features of FFC SPA and on the guillemot feature of the Farne Islands SPA without a full in-combination assessment being provided. Natural England advises that the monitoring of any compensation measures that are required would need to be included within the Implementation and Monitoring Plans for the compensatory measures. Currently only an outline Kittiwake Implementation and Monitoring Plan is included, but similar documentation may be needed for further species depending on the results of the full in combination assessments requested. The monitoring requirements that will be required within this plan are dependent on which final species require compensation, and the final compensation measures selected. We advise this plan will need to be updated as further information is known.</p>	<p>The occurrence of scour is considered to be a common potential feature of any above-seabed infrastructure in the marine environment and the maximum likely dimensions of scour for a specific design are relatively reliably predictable. Scour protection is an effective mitigation against scour, but which can lead to other potential impacts (separately considered). Monitoring for scour around unprotected infrastructure is often undertaken as part of routine maintenance, but such surveys are not normally or routinely made publicly available. The Applicant is open to discussions about sharing of routinely collected data to add to the (already large) evidence base.</p> <p>The Applicant acknowledges Natural England's request and has undertaken an updated in-combination assessment for the requested sites and features this was submitted in <a href="#">Deadline 1 Submission 8.25.8 Applicant's Post Hearing Submission – Issue Specific Hearing 1 – Appendix 8: Further information for Action Point 34 - In Combination Assessment Update for Guillemot and Razorbill [REP1-027]</a>.</p> <p>The Applicant submitted an updated Kittiwake Implementation and Monitoring Plan in <a href="#">Deadline 1 Submission 8.25.7 Applicant's Post Hearing Submission – Issue Specific Hearing 1 – Appendix 7 - Further information for Action Point 33 – Kittiwake Implementation and Monitoring Plan [REP1-026]</a> at Deadline 1. Section 7 of this document outlines the proposed monitoring and adaptive management measures, if it is determined by the Secretary of State that an Adverse Effect on Integrity (AEol) cannot be ruled out and compensation is required.</p>
<p><b>Benthic subtidal and intertidal Ecology</b></p>		
13	<p>13. Natural England welcomes the monitoring of Priority Habitats under NERC 2006, but note that this is currently limited to chalk, stony reef and potential <i>Sabellaria spinulosa</i> reef. We advise consideration is given to monitoring requirements in relation to all the Priority/Annex I habitats raised within our Relevant/Written Representation [RR-265].</p> <p>We wish to highlight the potential risk raised within our Representations [RR-265] to Marine Conservation Zone (MCZ) features from secondary impacts, which may also require monitoring. As with other thematic areas we advise that further consideration is given to monitoring requirements, and the timing and duration of monitoring campaigns in order to better understand if there are any lasting impacts and/or recovery. We advise that the duration of the monitoring should not be limited to one survey at this point and advise that if no stony reef and/or <i>Sabellaria spinulosa</i> reef is identified in the pre-construction surveys this does not diminish the need for post construction surveys in relation to other Priority or Annex I Habitats such as chalk or peat and clay exposures. Natural England advises that where mitigation measures have been proposed, monitoring should ensure the effectiveness of those measures</p>	<p>The Applicant has committed to undertaking targeted pre-construction surveys of priority habitats as referenced in the <a href="#">Offshore In Principle Monitoring Plan [APP-240]</a> and secured in Condition 16(2)(b) of the dMLs (Schedules 11 and 12 of the <a href="#">Draft Development Consent Order [PEPD-009]</a>). The Applicant would highlight that the wording of this DCO condition has been updated to include peat and clay in the pre-construction survey, as follows:</p> <p>(b) a survey to determine the location, extent and composition of chalk habitats, stony reef and potential <i>Sabellaria spinulosa</i> reef features, potential nesting sites for black seabream, and peat and clay exposures as set out within the outline in-principle monitoring plan.</p> <p>Subsequent, post-construction, monitoring is set out within the <a href="#">Offshore In Principle Monitoring Plan [APP-240]</a> and will be informed by the findings of the pre-construction survey in relation to the occurrence and locations of sensitive habitat features noted above. The Applicant confirms that, as relevant, peat and clay exposures will be added to the specified habitat features in an updated Plan, to be submitted at Deadline 3. The Applicant notes that chalk habitat is already included in the current proposal for post construction surveys.</p>

Ref	Response to Deadline 1 Comment	Applicant's Response
	<p>particularly in relation to Priority/Annex I habitats and habitats suitable for black seabream nesting. If it is found that measures have been insufficient, then further measures and/or remediation may be required.</p>	<p>The <b>Offshore In Principle Monitoring Plan [APP-240]</b> presents details of the monitoring proposals. The Applicant notes that monitoring proposals have been based on the identification of significant effects within the EIA. Where relevant, the Applicant will consider whether, in light of Natural England's comments, any additional detail is required within the current <b>Offshore In Principle Monitoring Plan [APP-240]</b>.</p> <p>The Applicant would also refer Natural England to its response to the Natural England Relevant Representation with respect to secondary (indirect) impacts to features of MCZs; specifically, response to F36 (see <b>Applicant's Response to Relevant Representations [REP1-017]</b>).</p>
	<p><b>Fish and Shellfish Ecology</b></p>	
14	<p>14. Natural England notes that currently the only monitoring proposed relates to underwater noise. It is proposed that the generic construction noise monitoring will be adopted which includes measuring noise generated by the installation of the first four piled foundations of each piled foundation type to be installed. However, we query what hypothesis this monitoring will test (and how) in regard to fish and shellfish ecology and avoidance of impacts?</p>	<p>The Applicant confirms the only underwater noise monitoring in the <b>Offshore in Principle Monitoring Plan [APP-240]</b> is the industry standard monitoring of the first 4 piles and notes that this is not considered post-consent monitoring by Natural England. The monitoring of the pile installations will provide empirical data on noise levels during installation to provide for comparison with, and confirmation of, modelled values set out in the ES.</p> <p>The monitoring proposals within the <b>Offshore In Principle Monitoring Plan [APP-240]</b> have been based on the identification of significant effects within the EIA, and the outcomes of the HRA. Where relevant, the Applicant will consider whether, in light of Natural England's detailed advice, any additional detail is required within the current in-principle Plan.</p> <p>Survey programmes and methodologies for the purposes of monitoring shall be submitted to the MMO for written approval at least four months prior to the commencement of any survey works. These will be implemented as approved. Information will also be gathered and processed in accordance with UK Noise Registry requirements, if appropriate at the time of construction. Noise monitoring data will be recorded, and results will be included in final report submitted to MMO.</p>
15	<p>15. Natural England considers that piling activities from 1st March to 31st July inclusive have the potential to hinder the conservation objectives of Kingmere MCZ in relation to black seabream. As the Applicant has not included the seasonal restriction in its entirety in the Rampion 2 application, we advised in our Relevant/Written Representations [RR-265] that they begin development of a Measures of Equivalent Environmental Benefit (MEEB) proposal, in the event of the Stage 2 Assessment reaching a negative conclusion. Either way the IPMP will need to have commitments and hypotheses in relation to residual noise impacts on black seabream, as well as an outline noise management plan to avoid further real time impacts from continued piling if the monitoring shows this and/or monitoring of success of mitigation measures and MEEB.</p> <p>Please note that the above is different to monitoring of recovery. In addition to underwater noise monitoring, we advise post-construction monitoring that tests whether areas identified as being potentially suitable for black seabream nesting are still suitable for nesting post-construction is presented. This is important to demonstrate that mitigation measures have achieved the levels of mitigation suggested within the application and to evidence recovery post-construction.</p>	<p>Whilst the Applicant considers the assessment presented within the <b>Draft Marine Conservation Zone assessment [APP-040]</b> is robust and identified no effects that would hinder the conservation objectives of the designated sites, the Applicant discussed the possibility of a Measures of Equivalent Environmental Benefit (MEEB) proposal with Natural England in a meeting on 8 March 2024. The Applicant is exploring whether this would be a feasible option for the Proposed Development. As part of this process, and should MEEB be identified as necessary, then the Applicant would identify any relevant associated monitoring proposals at that time.</p>

Ref	Response to Deadline 1 Comment	Applicant's Response
<b>Marine Mammals</b>		
16	16. Currently the only post-consent monitoring that has been proposed is the industry standard monitoring of underwater noise from the first 4 piles. Whilst the Applicant refers to the Marine Mammal Mitigation Plan (MMMP) there is no consideration of monitoring the effectiveness of the mitigation measures in reducing the impacts to acceptable levels.	The Applicant confirms the only underwater noise monitoring in the <b>Offshore in Principle Monitoring Plan [APP-240]</b> is the industry standard monitoring of the first 4 piles. The outputs of the noise monitoring will be used to validate the impact ranges presented in the post-consent MMMP. The specific mitigation measure (or suite of measures) that will be implemented during the construction of the Proposed Development will be determined in consultation with Natural England, following confirmation of final hammer energies and foundation types, collection of additional survey data (noise or geophysical data) and/ or acquisition of noise monitoring data, and/ or information on maturation of emerging technologies. This additional data and information will allow the noise modelling to be updated to feed into discussions on the appropriate mitigation measure(s) and the Final Piling MMMP.
<b>Advice relating to post-consent monitoring (PCM)</b>		
17	The process and structure of the planning system, including post-consent monitoring, is currently under review by Government, Defra, Natural England and other bodies (see Section 3.1). Options for how PCM can be improved to increase our understanding of the marine environment, the effects of offshore wind development and provide information-rich data over relevant spatial and temporal scales are being considered, such as the promotion of strategic or collaborative monitoring (see Section 4.4). The following section provides Natural England's advice and recommendations for the production and delivery of receptor-specific monitoring plans at the post-consent phase.	Noted, the Applicant has no further comments on this matter at this time.
18	<b>Early and continued engagement with SNCBs</b> – engagement with the relevant SNCB(s) is recommended at the earliest possible opportunity to agree the focus of monitoring plans and to allow for continual engagement as plans evolve.	Noted, the Applicant has no further comments on this matter at this time.
19	<b>Clear aims, objectives and hypotheses</b> – post-consent monitoring plans should be targeted and have clear aims and hypotheses (Chambers et al. 2012; MMO, 2014; Lindeboom et al. 2015). Monitoring should be proportionate to the level of risk to biological receptors and should not be delivered for the sake of monitoring, but instead focus on sensitive receptors and be driven by a clear understanding of what the monitoring is seeking to address (MMO, 2014). This helps to collect data that is information rich, as well as data rich (Wilding et al. 2017). Early engagement with NE or relevant SNCB is recommended to help agree monitoring plans.	Noted, the Applicant has no further comments on this matter at this time.
20	<b>Detection of unforeseen impacts</b> – post-consent monitoring should be targeted, with clear monitoring aims and objectives. Whilst PCM plans should not be designed to detect unforeseen impacts, the analysis of the results of PCM may identify unforeseen impacts which arise during offshore wind farm development across relevant spatial and temporal scales (MMO, 2014). If detected, unforeseen effects can be investigated through adaptive monitoring (see Section 4.3). Participation in collaborative or strategic-level monitoring projects may be also appropriate for identifying long term and lasting effects to marine receptors as a result of offshore wind development.	Noted, the Applicant has no further comments on this matter at this time.



Ref	Response to Deadline 1 Comment	Applicant's Response
21	<p><b>Statistical power</b> – the ability of a survey to collect a sufficiently large amount of data to make robust statistical inferences about changes is known as its power (Maclean et al. 2006). Where possible, power analyses should be undertaken before monitoring commences to inform the design of PCM to ensure sufficient statistical power in subsequent analyses to detect meaningful changes (Bennet et al. 2016). Projects should also aim to reduce dependence within or between sampling units and plan the statistical tests and/or modelling approach so that the nature and quantity of data collected is suited to conduct the required tests/modelling (Bennet et al. 2016; NobleJames et al. 2018). Early engagement with Natural England is recommended when considering the statistical power of analyses and how this is used to inform survey design, or if power analyses indicate that the expected statistical power may not be sufficient to draw meaningful conclusions.</p>	Noted, the Applicant has no further comments on this matter at this time.
22	<p><b>Uncertainty and significance</b> – as set out within MMO (2014), uncertainty and significance are two important considerations when designing and implementing PCM plans. Uncertainty reflects the extent of error or assumptions that were made when predicting impacts. There is a greater need to monitor topics if there is higher uncertainty regarding the effects of an impact or resulting recovery of receptors. The significance of an impact is another important consideration for PCM and helps to inform whether further management or remedial measures are required (MMO, 2014).</p>	Noted, the Applicant has no further comments on this matter at this time.
23	<p><b>Sufficient duration</b> – PCM should be of a suitable duration to capture lags in impacts to receptors being detected as some impacts may only be detectable after a duration of time, depending on the receptor and the monitoring objectives. In addition, PCM may be required to monitor the recovery of receptors after an impact has occurred (e.g., impacts from construction) or a compensation measure has been put in place. Monitoring plans should be designed to incorporate long term or lasting impacts to validate predictions made within the ES and to improve our understanding of long-term effects and recovery of marine receptors. Monitoring plans should also have a clearly defined criteria for when and how decisions will be made on the conclusion of monitoring during the post-consent phase, for example when monitoring will be deemed to have met the objectives of the monitoring programme. Refer to the adaptive management approach principle below (Section 4.3).</p>	Noted, the Applicant has no further comments on this matter at this time.
24	<p><b>Strategy for consequence</b> – a key role of post-consent monitoring is to validate the predictions of the ES, HRA, EIA or MCZ Assessment (Section 4). Monitoring plans should therefore have a clear strategy for subsequent remedial action if the monitoring shows that the original conclusions are incorrect, such as the significance of an impact upon a receptor or the timeframe for its recovery (MMO, 2014). Thresholds can be used to set acceptable levels of change for some environmental indicators, which if exceeded, can trigger additional monitoring or the implementation of mitigation or management measures to avoid adverse effects (Bennet et al. 2016; Wilding et al. 2017).</p>	Noted, the Applicant has no further comments on this matter at this time.
25	<p><b>Sharing of data</b> – in order to maximise the usefulness of post-consent monitoring, data and reports should be made publicly available and provided to the relevant data repositories, such as the Marine Data Exchange (MDE) and the Marine</p>	The Applicant can confirm that post-consent monitoring, data and reports will be made publicly available and provided to the relevant data repositories, this will be added as a commitment to the <a href="#">Offshore In Principle Monitoring Plan [APP-240]</a> in due course.

Ref	Response to Deadline 1 Comment	Applicant's Response
	<p>Environmental Data and Information Network (MEDIN). All reports should be supported by the source/raw data and provide a description of the collection methodology and protocols followed (MMO, 2014). Metadata and environmental metadata should also be made publicly available (Chambers et al. 2012). Natural England advise that PCM data should be shared within the relevant data repositories as a matter of best practice. This could be secured as a licence condition for projects.</p>	
26	<p><b>Maximise use of baseline characterisation data and existing data</b> – where possible, data collected at the pre-application phase should be used to supplement post-consent monitoring data. The results of baseline characterisation surveys may also be useful to inform the design of post-consent monitoring plans (e.g., the key areas or receptors for monitoring to focus upon). There may also be suitable existing datasets which can be used to provide context or supplement site-specific monitoring data. However, the validity and suitability of existing datasets must be carefully considered if used beyond providing a historical context for subsequent monitoring data (Noble-James et al. 2018). Parker et al. (2022a) provides advice and principles for the use of existing data to inform baseline characterisation surveys.</p>	<p>Noted, the Applicant has no further comments on this matter at this time.</p>
27	<p><b>Comparable and standardised data</b> – data should be collected and presented in a consistent format which, where possible, enables effective comparisons with other datasets and other monitoring programmes. Consistent data standards may also allow for backwards/forwards compatibility of monitoring methods over time. Data collection should follow the MEDIN data standards and guidelines as a matter of best practice. A consistent naming convention should also be followed. Species should be recorded using the World Register of Marine Species (WoRMS) list of accepted scientific names and biotopes should be recorded using the EUNIS classification system (EEA, 2019). A consistent and comparable approach also enables effective cumulative and incombination assessments and improves the functionality of data repositories.</p>	<p>Noted, the Applicant has no further comments on this matter at this time.</p>
28	<p><b>Follow industry standards, methodologies and protocols</b> – monitoring programmes should follow the current industry standards, methodologies and protocols as a matter of best practice. This may apply to data collection, handling or analysis (Chambers et al. 2012). Receptor-specific advice is provided within the relevant sections below. Whilst this document will be periodically updated to reflect evolving best practice for industry standards and survey methodologies, Natural England would welcome the opportunity to discuss proposals to use the latest industry monitoring methods, standards or protocols.</p>	<p>Noted, the Applicant has no further comments on this matter at this time.</p>
29	<p><b>Novel and emerging monitoring methods</b> – Natural England acknowledges the role of offshore wind farm developers in exploring and testing new monitoring methods. Natural England supports innovation and welcomes the exploration of novel and emerging monitoring methods, such as environmental DNA (eDNA), or passive monitoring methods. Although there can be challenges presented by the relative novelty of some techniques in early stages, collaborative working can unlock many wider benefits if planned carefully. Early engagement with Natural England is recommended if novel approaches are proposed.</p>	<p>Noted, the Applicant has no further comments on this matter at this time.</p>

Ref	Response to Deadline 1 Comment	Applicant's Response
30	<p><b>Strategic / joined up approach</b> – a strategic, collaborative or joined up approach can deliver monitoring programmes of a greater scale and scope, thereby providing a 11 greater understanding of ecological impacts, sensitivity or recovery (see Section 4.4). Natural England strongly supports strategic or collaborative monitoring proposals and can provide bespoke advice on a case-by-case basis.</p>	Noted, the Applicant has no further comments on this matter at this time.
<p><b>Appendix A1: Natural England's Comment on Schedule of Changes for the Draft Development Consent Order – Revision A [PEPD-011], Draft Development Consent Order – Revision B [PEPD-009/PEPD-010] and Alternative Schedule 17 – Revision A [PEPD-017].</b></p>		
A1	<p><b>5. Schedules 11 and 12 Part 2 condition 2 (6)</b></p> <p>Natural England notes an update has been made (as per our advice) and that cable protection will only be deployable under this DCO for 10 years from commencement. We would however, advise a slight update to state offshore commencement, noting there are different definitions for both on and offshore commencement and that onshore works often commence a year or more ahead of offshore. We advise more precise wording would remove any ambiguity.</p> <p><b>We advise that more precise wording is added in relation to offshore commencement.</b></p>	<p>The Applicant considers the further change unnecessary as the condition refers to commencement of the authorised scheme, which term is defined in the deemed marine licence by reference to Works No 1 and 2 in Schedule 11 and Work Nos. 3 to 6 in Schedule 12</p>
A2	<p><b>6. Schedules 11 and 12 Part 2 Condition 11 (1) (a)</b></p> <p>Natural England notes the updated wording and considers that it partially addresses our concerns. We advise that the Applicant considers amending the requirement to state that they will microsite around features of ecological or conservation importance.</p> <p><b>We advise a further consideration is given to this amendment.</b></p>	<p>The Applicant will prepare its design plan required under condition 11(1)(a) to take account of micro-siting requirements as informed by the pre-construction surveys. The plan will require to be approved by the MMO. Consequently, it is not considered any further amendment is required to this condition, which is consistent with the wording used in several recently made DCOs for offshore wind farms in this respect</p>
A3	<p><b>7 Schedules 11 and 12 Part 2 – Condition 11 1 (c)</b></p> <p>As per our comments on Condition 11 (1) (a) above.</p> <p><b>As above.</b></p>	<p>The construction method statement will also be required to take account of micro-siting requirements and by subject to approval hence no further amendment is considered necessary</p>
<p><b>Document Reviewed – Alternative Schedule 17</b></p>		
A4	<p>9. Natural England notes that discussions regarding the compensation requirements for Kittiwake are ongoing. Therefore, our position on the compensation schedule may change subject to discussions and agreements made in relation to what is required. We reserve the right to raise issues later in the examination process with regard to the drafting, as this issue progresses. Natural England have provided some general advice below on the proposed schedule considering the general need to secure and enforce compensation requirements.</p> <p><b>We have provided some general guidance in our comments below, which we advise is considered at this stage.</b></p>	<p>This is noted by the Applicant. The Applicant has undertaken an updated in-combination assessment for the requested sites and features this was submitted in <a href="#">Deadline 1 Submission 8.25.8 Applicant's Post Hearing Submission – Issue Specific Hearing 1 Appendix 8 – Further Information for Action Point 34 - In Combination Assessment Update for Guillemot and Razorbill [REP1-027]</a>.</p> <p>The Applicant submitted an updated Kittiwake Implementation and Monitoring Plan in <a href="#">Deadline 1 Submission 8.25.7 Applicant's Post Hearing Submission – Issue Specific Hearing 1 Appendix 7 – Further information for Action Point 33 – Kittiwake Implementation and Monitoring Plan [REP1-026]</a> at Deadline 1.</p>



Ref	Response to Deadline 1 Comment	Applicant's Response
A5	<p>10. Natural England notes that the proposed provisions differ to the majority of previous projects that have required compensation, as they remove the requirement for a steering group to be involved in the drafting of the implementation and monitoring plan. Whilst we recognise that the collaborative nature of the Applicant's proposed compensatory measures may mean an alternative approach is necessary, Natural England may have further comments on this as discussions on compensation progress.</p> <p>At this stage, we wish to note that previous Steering Group conditions did provide for some important aspects that should still be captured through condition, even if no Steering Group is required. If no Steering Group is provided, then these aspects could be conditioned separately as to be submitted to the SoS and approved in consultation with the relevant SNCB. These aspects include; a timetable for preparation and delivery of the Kittiwake Implementation and Monitoring Plan (KIMP), a schedule of meetings and an agreed dispute resolution procedure. The schedule of preparation and delivery is important as it provides a chance to address any unrealistic timing requirements early on in the process (please also note Point 11 and the issues with timing requirements). While the dispute resolution procedure allows any disputes between parties to be resolved quickly to avoid potential delays.</p> <p><b>We advise that amendments to schedule 17 are considered, subject to ongoing discussion regarding compensation requirements.</b></p>	<p>Natural England's comments are noted. The Applicant welcomes further comment on the approach adopted to the without prejudice kittiwake compensation provisions. Consideration will be given to amendment to the Without Prejudice Schedule 17 and a revised document will be submitted in due course</p>
A6	<p><b>11. Condition 4</b></p> <p>The condition as drafted does not provide a timing requirement beyond it being prior to operation of the offshore wind farm. We note that similar compensation schedules on Hornsea Project 3, Norfolk Boreas, Norfolk Vanguard, East Anglia One North and East Anglia Two all had timing requirements that the compensation be delivered four full breeding seasons prior to operation. We advise that such timing requirements should be added to ensure the compensation measures are fully functional and compensating prior to the impact occurring.</p> <p><b>We advise that condition 4 is amended to ensure compensation is delivered four full breeding seasons prior to operation of the offshore wind farm.</b></p>	<p>Natural England's comments are noted and consideration will be given to amendment to the Without Prejudice Schedule 17, noting that should a collaborative approach be adopted that onshore mitigation is already in place. A revised document will be submitted in due course.</p>
A7	<p>12. Natural England notes that there are no provisions for the end of the lifetime of the projects and the compensatory measures. Please see the example below, which includes wording taken from the recent Dudgeon and Sheringham Extension NSIP draft DCO which appropriately covers the requirement to gain approval for decommissioning of the compensatory measures:</p> <p><i>'The artificial nest site improvement measures must not be decommissioned without written approval of the Secretary of State in consultation with the relevant statutory nature conservation body.'</i></p> <p><b>We advise a condition on this is added.</b></p>	<p>Natural England's comments are noted. Consideration will be given to amendment to the Without Prejudice Schedule 17, and a revised document will be submitted in due course.</p>
A8	<p>13. Natural England notes that there is no requirement to notify the SoS that the installation of compensatory measures has been completed. This links to evidencing</p>	<p>Natural England's comments are noted. Consideration will be given to amendment to the Without Prejudice Schedule 17, and a revised document will be submitted in due course.</p>

Ref	Response to Deadline 1 Comment	Applicant's Response
	<p>the requirement for the measures to be in place four full breeding seasons in advance and provides a clear starting point for the timing requirements. Again, we have provided wording taken from the Dudgeon and Sheringham Extension Offshore Wind Farm NSIP draft DCO for consideration:</p> <p>‘The undertaker shall notify the Secretary of State of completion of implementation of the artificial nest site improvements measures set out in the Kittiwake Compensation Implementation and Monitoring Plan.’</p> <p><b>We advise a condition on this is added.</b></p>	
<b>Appendix E1: Natural England's Comments on Appendix 8.4: Black Seabream Underwater Noise Technical Note and Survey Results – Revision A [PEPD-023]</b>		
<b>2. Main Comments</b>		
<b>E1</b>	<p>Natural England have focussed our commentary on the Sound Pressure Level route mean squared (SPLRMS) values. The Peak sound pressure level (SPLpeak) values presented are of interest, but these represent transient/short-lived noises (measuring absolute maximum exposure at any one time), and therefore are not representative of the continuous noise generated from pile driving.</p>	<p>Noted, the Applicant has no further comments on this matter at this time.</p>
<b>E2</b>	<p>To date the Project has proposed a behavioural threshold of 141 dB single strike Sound Exposure Level (SELSS), which equates to 148 dB SPLRMS. A lower 135 dB SELSS has also been suggested (which equates to 142 dB SPLRMS). For ease of reference, from this point onwards NE will refer to these thresholds as 148 dB SPLRMS and 142 dB SPLRMS respectively.</p> <p>To avoid confusion, Natural England advises that the Project provide a translation table between SELSS/SPLpeak and SPLRMS/SELCUM (cumulative Sound Exposure Level) as the noise modelling in the Environmental Statement is presented as SELCUM. It should also include details on all proposed thresholds, such as temporary threshold shift (TTS), injury and mortality. We advise it would also be useful for baseline SELCUM to be calculated for comparison against the predictions included in the Environmental Statement (ES).</p>	<p>The Applicant notes this request for a conversion (translation) table, but this is not practically possible. While the SPL<sub>RMS</sub> of a pile strike has found to be approximately 7 dB greater than an equivalent SPL<sub>SS</sub>, this is only offered as a rough estimate to aid understanding, can only be approximate and will vary depending on many factors such as distance. The Applicant does not consider that it should be ‘formalised’ in this way. This variation will be even greater between SEL<sub>SS</sub> and SPL<sub>peak</sub>. The cumulative SEL is dependent on the number of strikes and time, whereas SPL<sub>rms</sub> is not and there can be no simple conversion factor.</p>
<b>E3</b>	<p>Natural England advises that both of the proposed noise thresholds for behavioural responses in black seabream (148 and 142 dB SPLRMS) are significantly above the observed baseline conditions (see extracted Table 6.1 below). If 148 and 142dB SPLRMS were to be plotted against the data in the figures, they would rarely intersect with the dB SPLRMS values, and would occupy the upper half of SPLpeak. We note that Table 6.1 is useful in presenting the 90<sup>th</sup> (the level is exceeded 90% of the time), 50<sup>th</sup> (the level is exceeded 50% of the time) and 1<sup>st</sup> percentiles (the level is exceeded 1% of the time). These percentiles are helpful in understanding how much of the time the background noise was at certain levels. The report states that ‘134.3 dB SPLRMS is regularly exceeded under baseline conditions’, however this statement does not consider that this is only for around 1% of the time, that these are short term events (on average lasting just over 14minutes per day), and that it could only be once per day. Furthermore, this figure is still 7.7 dB</p>	<p>The Applicant recognises that predictions of piling noise are, and would be expected to be, above the observed baseline conditions for most of the time, as is clear from the results. The results do show that this noise level is exceeded on site, and therefore could be described as normal, even if it not ‘frequent’, the Applicant acknowledges that ‘frequent’ and ‘regular’ do not have a quantitative definition, although the meaning is generally understood.</p> <p>To clarify, the purpose of this analysis is to demonstrate that noise levels typically present on site are close to the 141 dB SEL<sub>SS</sub> or 148 dB SPLRMS proposed threshold, and therefore it provides the context that this threshold should not be considered extreme or unacceptable at Kingmere. Noise levels are frequently in excess of 134.3 dB SPLRMS as noted, and they exceed 140 dB SPLRMS on multiple occasions, over the survey period, as can be seen in <a href="#">Section 5, Figure 5-1, Appendix 8.4: Black Seabream Underwater Noise Technical Note and Survey Results, Volume 4 – Revision A [PEPD-023]</a>. The Applicant also refers Natural England to its response to comment E4 below.</p>

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quieter than the lower behavioural response threshold proposed.

Table 6-1 Statistical summary of noise levels across the survey period, 2023

	SPL <sub>RMS</sub> (dB re 1 µPa)				Notes
	Mar (15 days)	Apr-Jun (55 days)	Jul-Aug (39 days)	Mar-Augt (109 days)	
SPL <sub>RMS,90</sub>	110.9	108.2	108.3	108.4	Background noise
SPL <sub>RMS,50</sub>	116.9	111.5	112.4	112.1	50 <sup>th</sup> %ile, average noise
SPL <sub>RMS,01</sub>	136.7	132.3	134.3	134.3	Short-term events, ~14 mins/day

**E4** Taking into consideration all the data presented in the report, we advise it is evident that background noise levels rarely reach the thresholds proposed (148 & 142 dB SPLRMS), and when they occasionally do it is only for short periods of time. We advise that piling would represent a notable increase from baseline conditions during the bream breeding season (March-July), and therefore the data presented does not support the Applicant's assertion that there will be no impact on breeding black seabream under prolonged exposure to 148 & 142 dB SPLRMS conditions.

The Applicant would like to reiterate that the introduction of piling noise threshold at 141 dB SEL (approximately 148 dB SPLRMS) would not be expected to be below the underlying underwater noise baseline (although noting that this is based on the nearest point in the Kingmere MCZ and would be lower in the rest of the MCZ). The baseline measurements demonstrate that the introduction of noise at 141 dB SELss (~148 dB SPLRMS) would not be a substantial deviation from the noise levels that already do occur at times and should therefore not be considered extreme or unacceptable.

**E5 1 General Comment**

We advise that to fully understand the baseline underwater noise data presented, a plot should be provided that is similar to Figure 6.1 that includes the entire dataset (2023 and 2022) for all months, displaying both SPLRMS values, SPLpeak values, and lines indicating the 148 & 142 dB SPLRMS thresholds in relation to the data. We advise that this dataset needs to be considered in context of the impact assessment and related back to the predictions in the ES, including the noise contours.

**We advise this further information is provided in an updated report to clarify the findings with respect to the Applicant's proposed noise thresholds.**

The Applicant notes that the data in Figure 6-1, [Appendix 8.4: Black Seabream Underwater Noise Technical Note and Survey Results, Volume 4 – Revision A \[PEPD-023\]](#) is intended to show a like-for-like comparison between the period sampled in July 2022 and 2023, and that the results are sufficiently similar to demonstrate corroboration over these two years. The full dataset for 2023 can be seen in Figure 5-1, [Appendix 8.4: Black Seabream Underwater Noise Technical Note and Survey Results, Volume 4 – Revision A \[PEPD-023\]](#) and as it demonstrated to be very similar, the addition of the 2022 data to Figure 5-1, [Appendix 8.4: Black Seabream Underwater Noise Technical Note and Survey Results, Volume 4 – Revision A \[PEPD-023\]](#) would not add any notable advancement to the results.

**E6 2. Section 1, Page 2, Para 2**

It should be noted that detailed comments on underwater noise were provided in our relevant/written representation on Fish and Shellfish Ecology. We advise that these comments are included in the key milestones and the documents list.

**We advise the key milestones and documents list is updated.**

The purpose of [Appendix 8.4: Black Seabream Underwater Noise Technical Note and Survey Results, Volume 4 – Revision A \[PEPD-023\]](#) is to provide details of the underwater noise monitoring sample taken during the black seabream nesting period of March to July 2023, as such, the Applicant does not intend to update this document. If the Applicant replicates the key milestones and documents list in future submissions, any additional relevant correspondence with Natural England, will be included.

**E7 3. Section 4, Page 6, Section 4.1**

We note that the spatial distribution of underwater sound pressure is depth dependent. We advise that information on the water depth at the hydrophone location and justification for its position in the water column is provided.

We advise this information is provided in an updated report.

The Applicant can confirm that the depth of water was approximately 15 m at the measurement location in Kingmere and the hydrophone was 1.2 m to 1.5 m above the seabed. This depth was required as there were restrictions due to clearance from vessels and the potential for entanglement in fishing gear, as required by the MMO, MCA and Trinity House.

**E8 4. Section 4, Page 6, Section 4.1**

We note that a single hydrophone has been used in the study, in only one location, resulting in no replicate data being available to corroborate the findings. The National Physical Laboratory Good Practice Guide for Underwater Noise Measurement

The Applicant would like to reiterate that the purpose of this survey was to corroborate the shorter-term data from the same location in the previous year, which it did. The location represented the closest point to the Offshore Array Area, which is the reason for its selection. A second hydrophone at a different depth at the measurement location was not possible due to restrictions by the MMO.



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	<p>(National Measurement Office et al. 2014) lists the advantages of using more than 1 hydrophone per measurement location. We advise that justification is provided in relation to the use of a single hydrophone, and only one location, or that the report is updated to indicate that the methodology used has some limitations.</p> <p><b>We advise that it would be helpful if this information was provided in an updated report.</b></p>	
E9	<p><b>5. Section 4, Page 9, Section 4.3</b> Natural England advise that the results from the beginning of the survey period cannot be relied upon to be fully representative, particularly in March (16 days) and April (4 days) when the number of days monitoring was significantly reduced. There was also no data collected between the 21 June and 7 July. Although the data collected over 15 days in August falls outside the breeding period for black seabream, Natural England welcome its inclusion for additional context.</p> <p><b>We advise that this limitation is clearly highlighted within the discussion text in an updated report and that where the data is limited this should not be fully relied upon to be representative.</b></p>	<p>The Applicant acknowledges that during some periods, it was not possible to acquire a full dataset and this is recognised in Section 4.3 of <a href="#">Appendix 8.4: Black Seabream Underwater Noise Technical Note and Survey Results – Revision A [PEPD-023]</a>. However, we would direct the reader to Section 5, Figure 5-1, <a href="#">Appendix 8.4: Black Seabream Underwater Noise Technical Note and Survey Results, Volume 4 – Revision A [PEPD-023]</a>, which shows a chart of the complete dataset measured. It can be seen that although the March data is marginally louder, the data on the whole is reasonably consistent throughout the sampled period and there is no reason to expect anything significantly different in the missing periods.</p>
E10	<p><b>6. Section 6, Page 12 Table 6.1</b> We note that the number of days stated in Table 6.1 is not consistent with the number of days stated in Table 5.1.</p> <p><b>We advise that the report is updated to state a consistent number of days.</b></p>	<p>The Applicant is grateful for Natural England identifying this apparent discrepancy: variance is due to differences in the method of counting, e.g. a 24-hr measurement may be from midday on the 1st to midday on the 2nd of a month, which is over two days, but may be only 24 hrs, i.e. one day. This does not influence the result in any way.</p>
E11	<p><b>7. Section 6, Page 12 (Section 6.2), Page 14 (Section 6.3)</b> Natural England have previously provided detailed comments on the unsuitability of Radford et al. (2016) and Kastelein et al. (2017) (as well as Collett et al. (2012)) in our relevant representations. Natural England does not support the use of 141dB re 1uPa SELSS (taken from Kastelein et al. (2017)), as a threshold for behavioural disturbance in black seabream and we do not agree that this threshold is precautionary. We highlight that Natural England has consistently advised against this approach throughout the evidence plan process and then our relevant representations.</p> <p><b>We advise that this is Natural England's longstanding position on this point.</b></p>	<p>The Applicant notes that Natural England does not support the use of the 141dB threshold to inform the zoning approach to mitigation as detailed in the <a href="#">In Principle Sensitive Features Mitigation Plan [REP1-012]</a>. The Applicant considers the disturbance threshold of 141dB SELss (Sound Exposure Level, single-strike) as suitably precautionary, as it is based on a short-lived startle response observed in sea bass. As informed by Popper et al., (2014), behavioural disturbances are considered to be long term changes in behaviour and distribution, and should not include effects on single animals, or small changes in behaviour such as startle responses or minor movements. The use of the disturbance threshold of 141dB SELss is therefore considered to be suitably precautionary. Further to this, the approach used by the Applicant to define a suitable threshold for disturbance from underwater noise aligns with that used in other OWF applications and assessments (e.g. Hornsea Four Offshore Wind Farm Application (Ørsted, 2021) Hornsea Project Three Offshore Wind Farm Application (Ørsted, 2018), Sheringham and Dudgeon Extension Offshore Wind Farm Projects Application (Equinor, 2022) Awel y Môr Offshore Wind Farm Application (RWE, 2023)) and therefore complies with current practice when approaching issues such as scientific data gaps and uncertainties, in order for consenting decisions to be made.</p>
E12	<p><b>8. Section 6, Page 12, Section 6.2</b> We note that section 6.2 states: <i>“All reactions to noise stimulus noted in these publications, at all reported noise levels, are relatively minor and short-term. Although sound exposure tests have not been undertaken to identify the reaction of nesting seabream, where this level was only found to lead to an initial and short-lived reaction, it would reasonably be</i></p>	<p>The Applicant highlights that various measures of precaution have been applied when informing appropriate mitigation for black seabream. Firstly, as detailed in the <a href="#">In Principle Sensitive Features Mitigation Plan [REP1-012]</a>, a precautionary disturbance threshold has been applied (141dB SELss), based on the startle response of sea bass. As informed by Popper et al., (2014), behavioural disturbances are considered to be long term changes in behaviour and distribution, and should not</p>

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	<p><i>expected to be somewhat less than sufficient for fish to abandon their nests when they would be highly motivated to remain for this activity. Additionally, habituation to noise could be expected: Radford et al. (2016) demonstrated a reduction in reaction to piling noise with time at higher levels (146.7 dB SPLRMS) than are proposed for the noise limit at Rampion 2."</i></p> <p>Natural England have previously provided detailed comments on the unsuitability of Radford et al.(2016) in our relevant representations, which noted that: <i>"Breeding black seabream exhibit breeding behaviours that if subject to a behavioural response could even in the short-term lead to effects on breeding success that could be significant. We strongly disagree that these effects can be considered to have no wider effect on the MCZ feature, considering the impacts of potentially failed breeding at Kingmere across the local population (given site fidelity) and in the light of the conservation objectives of the MCZ. We therefore advise that the application of the concept of acclimatisation to noise is inappropriate in this instance. This is because even if acclimatisation were to occur, the time frames over which it may occur would mean that it is likely this effect would have already had a significant impact on the breeding success of bream before this point, and that it is feasible breeding attempts could have failed for that year."</i></p> <p><b>We advise that this is Natural England's long-standing position on this point and that unless further evidence is brought forward, reference to habitation is removed from the assessment in any updated report.</b></p>	<p>include effects on single animals, or small changes in behaviour such as startle responses or minor movements. Therefore, the use of the 141dB SELss disturbance threshold is inherently precautionary. Furthermore, as detailed in the <b>Chapter 8: Fish and shellfish ecology, Volume 2</b> of the Environmental Statement <b>[APP-049]</b>, evidence has shown the potential for receptors to habituate to repeated sound exposure (Anderson et al., 2011; Neo et al., 2018). Therefore, taking into account the precautionary disturbance threshold, and the implementation of proposed mitigation measures (including noise abatement measures, seasonal restrictions and zoning), the Applicant is confident that there will be no wider effects on sensitive features of the Marine Conservation Zones.</p>
E13	<p><b>9. Section 6, Page 13, Para 6.2.3</b></p> <p>We note that the statistical average of the background noise levels over the period was recorded at around 108.4 dB SPL<sub>RMS</sub>, 90 (90 %ile). Higher levels of 134.3 dB SPL<sub>RMS</sub>, were only exceeded 1% of the time (i.e., on average just over 14 minutes a day). We advise that the Applicant's proposed threshold of 141dB re 1uPa SEL<sub>SS</sub> (approximately equivalent to 148 dB SPL<sub>RMS</sub>) is significantly above background noise levels, and the elevated level of noise would be a significant increase from average baseline conditions during the bream breeding season. In turn, this has the potential to elicit a behavioural response that could significantly impair their ability to undertake normal breeding behaviours during breeding season. Male black seabream exhibit guarding behaviours which are critical for protecting the eggs from predation and keeping it free from sedimentation before they hatch, if these behaviours are interrupted then this has the potential to impact on the viability of the nest and the success of the breeding attempt. Further to this, noise disturbance also has the potential to affect the physical condition and health of the bream, at a stage where their guarding behaviours already mean they are expending more energy, reducing their feeding opportunities, and increasing their predation risk.</p> <p>Natural England advise that the further information provided in this report further supports Natural England's position that this is not a suitable threshold in relation to black seabream behavioural disturbance and would not prevent the proposal from potentially hindering the conservation objectives of Kingmere MCZ</p>	<p>The Applicant reiterates, as in previous responses, that the target threshold for piling noise (141 dB SEL<sub>SS</sub> or approximately 148 dB SPL<sub>RMS</sub>) is not expected to be below the underlying underwater baseline noise level. The underwater noise measured during the baseline survey get close to this threshold, and so the increases that could occur during piling should not be considered extreme in the context of the existing environment.</p> <p>The Applicant would like to highlight two points:</p> <ul style="list-style-type: none"> <li>• 141 dB SEL<sub>SS</sub> is the noise level predicted at the maximum blow energy and therefore the noise level would be lower than this for most of the time.</li> <li>• 141 dB SEL<sub>SS</sub> is predicted at the closest point in the Kingmere MCZ and therefore the noise level would be lower than this for the rest of the Kingmere MCZ.</li> </ul> <p>The above are also based on worst case predictions. The original research (Kastelein et al. 2017) showed a short-lived reaction to 50% of the tested fish at 141 dB SEL<sub>SS</sub>, and found no consistent sustained reaction, even at higher noise levels than this. The smaller the difference between introduced noise and the existing noise, the less likely an animal will be disturbed. As the presence of the noise at the threshold level will be limited in time and location, then for most time and place within the Kingmere MCZ, the noise will not be far in excess of noise that is already present at this site.</p>

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<p><b>Natural England's advice remains that a full seasonal restriction (1 March – 31 July) is required to avoid hindering the conservation objectives of the MCZ.</b></p>		
E14	<p><b>10. Section 6, Page 13, Para 6.2.3</b> We advise that whilst the maximum hammer energy applied for remains 4400 kJ, it should be assumed that this will be required as a worst-case scenario at all locations. Therefore, any comments regarding this potentially not being required at some locations should be disregarded unless the maximum energy applied for is reduced.</p> <p><b>We advise that the worst-case scenario of a hammer energy of 4400KJ being required at all locations has to be what is assessed, unless the Applicant reduces the maximum hammer energy applied for.</b></p>	<p>The Applicant confirms that for the purpose of the underwater noise modelling, the following worst-case hammer energies have been used, as informed by the worst-case ground locations identified in characterisations surveys:</p> <ul style="list-style-type: none"> <li>• Monopile foundations – 4,400kJ hammer energy; and</li> <li>• Multileg foundations – 2,500kJ hammer energy.</li> </ul> <p>These hammer energies have been used to inform the assessments of underwater noise on marine mammals and fish and shellfish receptors (as detailed in <a href="#">Chapter 8 Fish and shellfish ecology, Volume 2</a> of the Environmental Statement (ES) [APP-049] and <a href="#">Chapter 11: Marine mammals, Volume 2</a> of the ES [REP1-004]). To contextualise the statement within <a href="#">Appendix 8.4: Black Seabream Underwater Noise Technical Note and Survey Results, Volume 4</a> of the ES [PEPD-023], the worst-case hammer energies are informed by the worst-case ground conditions identified in initial geophysical surveys. Due to the natural variation in ground conditions across the site, the maximum hammer energies used to install each individual turbine at the required penetration depth will vary. Therefore, as stated in <a href="#">Appendix 8.4: Black Seabream Underwater Noise Technical Note and Survey Results, Volume 4</a> of the ES [PEPD-023], it is likely that many of the Rampion 2 foundations will not require the maximum assessed hammer energy to be employed, and if reached it is likely to be for a short period when compared to the complete piling operation required to install any given monopile, as was the case for Rampion 1.</p>
E15	<p><b>11. Section 6, Page 13, Para 6.2.3</b> It is stated that <i>'Rampion 1 piling did not use any noise abatement systems and the estimated noise at the Kingmere site was 147.0 to 156 dB SELss, based on extrapolations of the measurements from the noise monitoring undertaken at the time. (The noise levels were not measured at this location during WTG foundation construction). There was no apparent impact on breeding success for seabream following the installation of Rampion 1 (with piling taking place within the extended spawning period for black seabream (Mar-Jul)); an increase in population was identified year on year before and after the installation'</i>.</p> <p>We advise that no evidence is provided to support the claims made here. We therefore advise in the absence of evidence in the form of noise level measurements for Rampion 1, and specific population level monitoring of black bream (which the spatially limited aggregates monitoring and the Rampion 1 fish monitoring do not provide), this point has no scientific basis.</p> <p>We note the reference to piling during Rampion 1. Natural England advises that any assessment should recognise the worst-case scenario predicted for Rampion 2, and unless the worst-case scenario values are reduced to the figure provided for Rampion 1, we advise this information does not alter our previous advice. We advised that a piling ban was in place for Rampion 1 for a substantial part of the black seabream breeding season from 15 April and 30 June for monopile foundations and a partial ban for jacket/ multi-leg piles. It should be noted that the sensitive season for black seabream nesting in the conservation advice for Kingmere MCZ was updated in March 2021 from April to June, to March to July.</p>	<p>The Applicant is exploring whether additional evidence from Rampion 1 is available to support the assertions made in <a href="#">Appendix 8.4: Black Seabream Underwater Noise Technical Note and Survey Results, Volume 4</a> of the Environmental Statement (ES) [PEPD-023].</p> <p>The Applicant notes the comments from Natural England regarding differences in piling parameters between Rampion 1 and the Proposed Development, however the comparison between predicted noise immission levels at the Kingmere MCZ with those from Rampion 1 based on extrapolations of the measurements from the underwater noise monitoring undertaken at the time is relevant in terms of equivalency of impact risk on the black seabream feature at the designated site as it is the level of noise received at this location that is the relevant point rather than the source level at the piling location.</p> <p>To clarify, the nearest locations at which noise monitoring was undertaken at Rampion 1 were approximately 6 to 10 km from the Kingmere MCZ. Noise levels were measured at 4 km and 10 km from these locations. Based on these data, the noise levels estimated to have occurred at the edge of the Kingmere site during piling at Rampion 1 were 142 to 153 dB SELss. (The estimates of 147 to 156 dB SELss were based on an exercise to predict piling noise as if it took place at the closest point on the Proposed Development to the MCZ, 4 km, which will now not occur in the sensitive period).</p> <p>Rampion 1 was not subject to piling restrictions in the month of July and therefore the construction of Rampion 1 continued through that month. For the Proposed Development, the zoning, notably restricting any piling during the March to June period to the eastern part of the array area (which is at greater distance from the Kingmere MCZ than Rampion 1) and applying noise abatement measures is predicted to result in noise immission levels of no greater than 141 dB SELss at the MCZ. Zoning and noise abatement mitigation measures are also in place for any piling undertaken in the western part of the array area of the Proposed Development during July, ensuring noise levels will also not exceed 141 dB SELss</p>



Ref	Response to Deadline 1 Comment	Applicant's Response
	<p>When making any comparison between Rampion 1 and Rampion 2, it is key to recognise that there are a number of key differences that include (but are not limited to): the project location in relation to the Kingmere MCZ (with more of the Rampion 2 array area being closer), the difference in project installation parameters (such as pile size and hammer energy), and environmental parameters (such as ground conditions), which could differ as the Project is yet to collect full geotechnical information. Additionally, the Rampion 2 Application includes simultaneous piling, which we understand was not permitted under the Rampion 1 DCO, unless further noise measurement and contours were provided.</p> <p><b>We advise that unless robust scientific evidence can be provided to support this point it should be removed from consideration.</b></p> <p><b>We advise that there is insufficient evidence provided to support assertions made in relation to Rampion 1. We advise that unless further evidence can be provided these assertions are removed from an updated report. We advise differences in the situation between Rampion 1 and Rampion 2 limit any meaningful comparison and that this should also be clearly recognised in an updated report.</b></p>	<p>during this month. This noise level will be lower than the level estimated to have occurred during construction at Rampion 1</p> <p>It is entirely reasonable, therefore, to identify that comparable (or lower) levels of piling-generated noise will reach the Kingmere MCZ as a result of the construction of the Proposed Development to those arising from the construction of Rampion 1. Whilst informed by a small number of fish monitoring surveys, the post-construction monitoring for Rampion 1 did not identify any adverse population effects on black seabream following construction, with the surveys showing an increase between pre- and post-construction surveys, as reported in <a href="#">Chapter 8: Fish and shellfish ecology, Volume 2</a> of the ES [APP-049]. The Applicant highlights that this rationale was the intended assertion made within <a href="#">Appendix 8.4: Black Seabream Underwater Noise Technical Note and Survey Results, Volume 4</a> of the ES [PEPD-023].</p> <p>The Applicant would also note that the commentary on the likelihood of the highest hammer energies being required for only some (if any) of the construction process provides what it considers to be relevant context for the assessments, based on experience of developing offshore wind farms, importantly including Rampion 1. Even so, the Applicant would reiterate that the assessments presented within the ES have been based on the worst-case assumptions, and assessment on this basis also supports the precautionary nature of the assessment undertaken by the Applicant.</p> <p>The Applicant would note that in terms of black seabream as a feature of the Kingmere MCZ, the inclusion of simultaneous piling for the Proposed Development has no material bearing on the comparison given that the entirety of the Kingmere MCZ will be afforded the same level of noise mitigation protection regardless of whether piling is undertaken at one or two locations at the same time. The relevant control mechanism for avoiding effects on the population at Kingmere is based on the avoidance of noise at levels above 141 dB SELss under any construction scenario during July.</p>

**Table 2-5: Applicant's Response to Southern Gas Networks Plc's Written Representation {REP1-154}**

Ref	Comment	Applicant's Response
1.1	<p>As the Examining Authority is aware, we are instructed by Southern Gas Networks Plc (SGN) in relation to the above Order as detailed in the relevant representation made by SGN on 3 October 2023.</p> <p>For the purposes of efficiency, this email is being provided in default of a full written representation from SGN. For the benefit of the Examining Authority, SGN can confirm that they are actively engaging with the undertaker in relation to the protective provisions and a confidential side agreement. SGN will continue to proactively negotiate with the undertaker with the view to secure the early removal of SGN's objection.</p> <p>Further updates will be provided to the Examining Authority in a timely manner.</p>	<p>The Applicant is in discussions with Southern Gas Networks Plc (SGN) to agree suitable Protective Provisions to maintain SGN's rights of access to inspect, repair and renew its infrastructure. There are several areas that require the provision and review of technical information which both parties are engaged with and anticipate to be resolved before the end of the Examination period.</p>

**Table 2-6: Applicant's Response to Maritime and Coastguard Agency's Relevant Representation [RR-221]**

Ref	Relevant representation comment	Applicant's response
1.1	<p>1. Navigable Sea Room The changes to the Red Line Boundary (RLB) as presented in Figure 6.1 of the NRA have led to an overall increase in the navigable sea room available in the vicinity of The Dover Strait TSS to the south, Inshore Traffic Zone (ITZ) to the east and the approaches to the Solent to the west. In addition, as noted in paragraph 371 of the NRA and although not formally designated as a navigation corridor, the introduction of a structures exclusion zone (NRA Figure 17.1) compliant with MGN 654 to the west of Rampion 1 is welcomed by the MCA.</p> <p>Guidance from MGN 654 has been used to show the minimum width required for the 3.6NM long corridor and 1.3NM as a worst-case scenario is compliant. The inclusion of this structures exclusion zone and the reduction in the western boundary in proximity to Owers Bank and in particular the Owers south cardinal mark, has been welcomed by key stakeholders. MCA is content with these changes and agrees with the assessment and conclusion that it will not pose an unacceptable navigational risk.</p>	Noted. no further action required.
1.2	<p>2. Shipping and Navigation Mitigation Measures In response to MCA queries at the PEIR stage we are content that adequate focus has now been given to increased vessel grounding risks as addressed in chapter 13, sections 13.9- 13.11 and section 19.1.4 of the NRA. Consideration has also been given to the effects of reduction of depth in relation to Chart Datum of any scour protection and cable installation and associated works, with a Cable Specification and Installation Plan (CSIP) and Cable Burial Risk Assessment (CBRA) as embedded mitigations C-41 and C-45 respectively.</p> <p>Additionally, it should be noted that the requirement for an Emergency Response Cooperation Plan (ERCoP), as referenced in Table 13-14 of the ES Chapter 13 Shipping and Navigation, will be secured in the DCO/DML under the condition for complying with MGN 654. There will not be a specific condition for the completion of an ERCoP</p> <p>The list of mitigation measures in Table 24-1 of the NRA and Table 13-14 of the Shipping and navigation ES Chapter is relevant and appropriate and will serve to reduce identified risks to ALARP.</p>	<p>The Requirement for an Emergency Response Cooperation Plan (ERCoP) has now been removed from the <a href="#">draft Development Consent Order [PEPD-009]</a>.</p> <p>Condition 2(7) of the <a href="#">draft Development Consent Order [PEPD-009]</a> secures the installation method for installing the cables, and a cable specification and installation plan is secured by condition 11(1)(n) of each of Schedules 11 (generation assets) and 12 (transmission assets) of the <a href="#">draft development consent order [PEPD-009]</a> as updated at Deadline 2.</p> <p>Compliance with MGN 654 is secured through condition 14 of each of Schedules 11 (generation assets) and 12 (transmission assets) of the <a href="#">draft development consent order [PEPD-009]</a> as updated at Deadline 2</p>
1.3	<p>3. Layout Design The turbine layout design must be compliant with MGN 654 and it will require MCA and Trinity House approval prior to construction to minimise the risks to surface vessels, including rescue boats, and search and rescue aircraft operating within the site. MCA will seek to ensure all structures are aligned in straight rows and columns with a minimum of two lines of orientation. Mitigation C-86 in table 13-14 of Chapter 13 and Table 24-1 of the NRA, confirms the intention to continue discussions with the MCA and Trinity House. Further advice will be provided once the layout discussions have started.</p>	Noted. The Applicant looks forward to further discussions with the MCA post-consent on layout as soon as a detailed layout is available.
1.4	<p>4. Marking and Lighting. MCA will seek to ensure the turbine numbering system follows a 'spreadsheet' principle and is consistent with other windfarms in the UK. All lighting and marking arrangements will need to be agreed with MCA and Trinity House. The MCA requires all aviation lighting to be visible 360° and compatible with night vision imaging systems, as detailed in CAP 764 and MGN 654 Annex 5.</p>	Noted, The Applicant confirms that it will agree ID marking systems as well as lighting and marking plans with the Maritime and Coastguard Agency, Civil Aviation Authority and Trinity House post-consent as soon as a final layout is agreed.



Ref	Relevant representation comment	Applicant's response
1.5	<p>5. Emergency Response and Search and Rescue.</p> <p>There is an expectation that the presence of wind farms will increase the likelihood of the requirement for emergency response, not just from navigational incidents but from other incidents such as medical evacuation or pollution. A SAR checklist based on the requirements in MGN 654 Annex 5 will need to be completed in agreement with MCA before construction starts. This will include the requirement for an approved Emergency Response Co-operation Plan (ERCoP).</p> <p>During SAR discussions, particular consideration will need to be given to the implications of the site size and location. Attention should be paid to the level of radar surveillance, AIS and shore-based VHF radio coverage and give due consideration for appropriate mitigation such as radar, AIS receivers and in-field, Marine Band VHF radio communications aerial(s) (VHF voice with Digital Selective Calling (DSC)) that can cover the entire wind farm sites and their surrounding areas. It will be expected that RED will provide this AIS and VHF capability to the MCA with direct access to HM Coastguard systems.</p> <p>Chapter 9 of the NRA regarding lessons learned within the offshore industry references SAR helicopter trials at the North Hoyle offshore wind farm in 2005. This is now a dated document and while references may still be made, there may be more benefit in referring to documents written by the MCA in 2019, titled: "MCA report following aviation trials and exercises in relation to offshore windfarms" and "MCA report following aviation trials at Hornsea Project 1 windfarm".</p> <p>A minor note in way of clarification is that the UK is now divided into six districts and 18 areas. Paragraph 143 of the NRA refers to these areas as 'geographical regions'. Full list of the areas is available at <a href="https://www.gov.uk/government/publications/coastguard-rescueservice-areas-and-stations">https://www.gov.uk/government/publications/coastguard-rescueservice-areas-and-stations</a>.</p> <p>Section 9.6.2 of the NRA references incidents in European offshore wind farms which although not in the UK, does show that vessels are interacting with windfarms/turbines. We would recommend that an allision/collision per windfarm would be a more accurate representation rather than per turbine, as presented in paragraph 155, since it is the presence of the windfarm which the NRA is addressing.</p>	<p>As discussed in a meeting with the MCA on the 18<sup>th</sup> March, the Applicant will discuss requirements of the Search and Rescue (SAR) checklist with the MCA post-consent, to confirm what mitigations they are able to provide.</p> <p>The Navigational Risk Assessment (NRA) related comments were also discussed in the meeting on 18<sup>th</sup> March and it was agreed that the comments will be addressed in the next iteration of the Statement of Common Ground (SoCG).</p>
1.6	<p>6. Construction scenarios.</p> <p>We would expect to see some form of linear progression of the construction programme avoiding disparate construction sites across the development area, and the consent needs to include the requirement for an agreed construction plan to be in place ahead of any works commencing.</p>	<p>This was discussed with the MCA in a meeting on 18<sup>th</sup> March and it was agreed that the comments will be addressed in the next iteration of the SoCG.</p>
1.7	<p>7. Cable Routes.</p> <p>Export cable routes, cable burial protection index and cable protection are issues that are yet to be fully developed but the commitment to Cable Specification and Installation Plan (CSIP) and Cable Burial Risk Assessment (CBRA) as embedded mitigations C-41 and C-45 respectively are welcomed. As a reminder however due cognisance needs to address cable burial and protection, particularly close to shore where impacts on navigable water depth may become significant. Any consented cable protection works must ensure existing and future safe navigation is not compromised. It is noted in Table 4-14 in Volume 2 Chapter 4, that the export cables will be High Voltage Alternate Current (HVAC) which is expected to have no impact on electro-magnetic fields and ships' magnetic compasses.</p>	<p>Noted. Cable burial and protection will be undertaken in line with the requirements of MGN 654 (Maritime and Coastguard Agency, 2021). Should changes to water depth exceed 5% then the Applicant will discuss this with the MCA and Trinity House to confirm As Low As Reasonably Possible (ALARP) status and any additional mitigations. A cable specification and installation plan is secured through condition 11(1)(n) of the deemed marine licence in each of Schedules 11 (generation assets) and 12 (transmission assets) of the <a href="#">draft development consent order [PEPD-009]</a> as updated as Deadline 2.</p>

Ref	Relevant representation comment	Applicant's response
1.8	<p>8. Safety Zones.</p> <p>The requirement and use of safety zones as detailed in the application as embedded mitigation C-56 in table 13-14 of chapter 13 is noted, and MCA will comment on the safety zone application once submitted, as a statutory consultee. Safety zones during the construction, maintenance and decommissioning phases are supported. A detailed justification would be required for a 50m operational safety zone, with significant evidence from the construction phase in addition to the baseline NRA required supporting the case. Safety zones triggered by a Service Operation Vessel connecting to a wind turbine will not be supported.</p>	<p>A safety zone application will be undertaken post consent in which the Applicant will discuss with the Department for Energy Security and Net Zero (DESNZ) and the MCA what safety zones are required to mitigate risks to mariners.</p>
1.9	<p>Draft Development Consent Order (DCO) (APP-019)</p> <p>We would like to comment on the draft conditions in the Deemed Marine Licences as follows:</p> <p>Schedule 11:</p> <ul style="list-style-type: none"> <li>• 5(12) move to Schedule 12 and amend to: <ul style="list-style-type: none"> <li>o In case of buried cables becoming exposed on or above the seabed, the undertaker must within three days following identification of a cable exposure, notify mariners, regional fisheries contacts and the Kingfisher Information Service of Seafish of the location and extent of exposure. Copies of all notices must be provided to the MMO, MCA, Trinity House, and the UKHO within 5 days.</li> </ul> </li> <li>• 9 (8) Amend to: <ul style="list-style-type: none"> <li>o All dropped objects must be reported to the MMO, UKHO and HMCG using the Dropped Object Procedure Form as soon as reasonably practicable and no later than 6 hours of the undertaker becoming aware of an incident. Immediate notification should be made to HM Coastguard via telephone where there is a perceived danger or hazard to navigation. On receipt of the Dropped Object Procedure Form, the MMO may require relevant surveys to be carried out by the undertaker (such as side scan sonar) if reasonable to do so and the MMO may require obstructions to be removed from the seabed at the undertaker's expense if reasonable to do so.</li> </ul> </li> <li>• 13(1) the condition implies there must be a safety zones application. This is not a mandatory requirement and suggest it can be removed.</li> <li>• 14 remove reference to ERCoP. Amend to: <ul style="list-style-type: none"> <li>o No part of the authorised project may commence until the MMO, in consultation with the MCA, has confirmed in writing that the undertaker has taken into account and, so far as is applicable to that stage of the project, adequately addressed all MCA recommendations as appropriate to the authorised project contained within MGN654 "Offshore Renewable Energy Installations (OREIs) – Guidance on UK Navigational Practice, Safety and Emergency Response Issues" and its annexes.</li> </ul> </li> <li>• 16(2)(a) amend to: <ul style="list-style-type: none"> <li>o A swath bathymetric survey to IHO Order 1a of the area within the Offshore Order Limits extending to an appropriate buffer around the site, must be undertaken. This should fulfil the requirements of MGN654 and its supporting 'Hydrographic Guidelines for Offshore Renewable Energy Developers', which includes the requirement for the full density data and reports to be delivered to the MCA and the UKHO for the update of nautical charts and publications. This must be submitted as soon as possible, and no later than [three months] prior to construction. The Order Limit shapefiles must be submitted to MCA. The Report of Survey must also be sent to the MMO.</li> </ul> </li> <li>• 24 amend to:</li> </ul>	<p>This was discussed with the MCA in a meeting on 18<sup>th</sup> March.</p> <p>Condition 5(12) deals with exposure of buried cables so is equally applicable to schedules 11 (in respect of inter array cables) and 12 (in respect of interconnector and export cables). Amendments have been made to the condition in each schedule, however this does not include a requirement to notify of the extent of the exposure as this may not be known at the time of the requirement to notify.</p> <p>It is not considered reasonable or proportionate to require any dropped object to be reported within 6 hours or sooner as sought. The condition has been left as requiring notification as soon as reasonably practicable. This is consistent with the approach adopted in the Hornsea 4 Offshore Wind Farm Order 2023. We also note that the Orders for the East Anglia One North and Two Offshore Wind Farms made in 2022 required notification within five days.</p> <p>This is noted but the condition has been retained at present, noting it applies 'insofar as is relevant' for the part of the authorised scheme.</p> <p>This amendment has already been made in the <a href="#">draft Development Consent Order [PEPD-009]</a>.</p> <p>This amendment has been made in the <a href="#">draft Development Consent Order [PEPD-009]</a> updated at Deadline 2 save that the timing for submission of the data is to be in accordance with timings agreed pursuant to the condition.</p>

Ref	Relevant representation comment	Applicant's response
1.10	<p>o The undertaker must submit a close out report to the MMO, MCA, UKHO and the relevant statutory nature conservation body within three months of the date of completion of construction. The close out report must confirm the date of completion of construction and must include the following details:</p> <ul style="list-style-type: none"> <li>- the final number of installed wind turbine generators;</li> <li>- as built plans; and</li> <li>- latitude and longitude coordinates of the centre point of the location for each wind turbine generator and offshore platform, substation, booster station and meteorological mast; provided as Geographical Information System data referenced to WGS84 datum.</li> </ul> <p>Schedule 12:</p> <ul style="list-style-type: none"> <li>• 5(8) add MCA for receiving notices.</li> <li>• 5(9) add MCA for receiving notifications.</li> <li>• 5(11) replace with wording from Schedule 11 Condition 5(12).</li> <li>• 9(8) amend to:</li> </ul> <p>o All dropped objects must be reported to the MMO, UKHO and HMCG using the Dropped Object Procedure Form as soon as reasonably practicable and no later than 6 hours of the undertaker becoming aware of an incident. Immediate notification should be made to HM Coastguard via telephone where there is a perceived danger or hazard to navigation. On receipt of the Dropped Object Procedure Form, the MMO may require relevant surveys to be carried out by the undertaker (such as side scan sonar) if reasonable to do so and the MMO/NRW/MS/DAERA may require obstructions to be removed from the seabed at the undertaker's expense if reasonable to do so.</p> <ul style="list-style-type: none"> <li>• 13 remove condition. Safety zones do not apply to cables.</li> <li>• 14 remove reference to ERCoP. Amend to:</li> </ul> <p>o No part of the authorised project may commence until the MMO, in consultation with the MCA, has confirmed in writing that the undertaker has taken into account and, so far as is applicable to that stage of the project, adequately addressed all MCA recommendations as appropriate to the authorised project contained within MGN654 "Offshore Renewable Energy Installations (OREIs) – Guidance on UK Navigational Practice, Safety and Emergency Response Issues" and its annexes.</p> <ul style="list-style-type: none"> <li>• 16(2)(a) amend to:</li> </ul> <p>o A swath bathymetric survey to IHO Order 1a of the cable routes within the Offshore Order Limits extending to an appropriate buffer around the site, must be undertaken. This should fulfil the requirements of MGN654 and its supporting 'Hydrographic Guidelines for Offshore Renewable Energy Developers', which includes the requirement for the full density data and reports to be delivered to the MCA and the UKHO for the update of nautical charts and publications. This must be submitted as soon as possible, and no later than [three months] prior to construction. The Order Limit shapefiles must be submitted to MCA. The Report of Survey must also be sent to the MMO.</p> <ul style="list-style-type: none"> <li>• 18 add the following post-construction hydrographic survey requirement:</li> </ul> <p>o The undertaker must conduct a swath bathymetric survey to IHO Order 1a of the installed export cable route and provide the data and survey report(s) to the MCA and UKHO. The MMO should be notified once this has been done, with a copy of the Report of Survey also sent to the MMO. This should fulfil the requirements of MGN654 and its supporting 'Hydrographic Guidelines for Offshore</p>	<p>Condition 24 requires submission of these details but those details pertaining to generation assets are listed in Schedule 11 of the <a href="#">draft Development Consent Order [PEPD-009]</a> whereas for the transmission assets details are in Schedule 12. Additionally, information is secured in respect of those parameters of the authorised schemes as constructed which are relevant to seascape landscape and visual impacts.</p> <p>These changes have been made in the <a href="#">draft Development Consent Order [PEPD-009]</a> save that it is unclear why 5(11) is to be replaced by condition 5(12) from Schedule 11. Both conditions 5(11) and 5(12) are included in each schedule on the basis that each licence covers structures and cables.</p> <p>Please see above response at 1.9 in relation to the timing for reporting a dropped object</p> <p>Schedule 12 also includes substations as part of the transmission assets hence condition 13 has been retained in the <a href="#">draft Development Consent Order [PEPD-009]</a>.</p> <p>Condition 14 has been amended in the <a href="#">draft Development Consent Order [PEPD-009]</a>.</p> <p>Condition 16(2) has been amended in the <a href="#">draft Development Consent Order [PEPD-009]</a> save that the timing for submission of data is to be in accordance with a timetable agreed pursuant to the condition</p> <p>A requirement for a swath bathymetric survey to the requested standard has been included in condition 18.</p> <p>Condition 24 has been included but also includes reference to the offshore substations which are considered as transmission assets.</p>



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Ref	Relevant representation comment	Applicant's response
	<p>Renewable Energy Developers', which includes the requirement for the full density data and reports to be delivered to the MCA and the UKHO for the update of nautical charts and publications.</p> <ul style="list-style-type: none"><li>• 24 amend to:<ul style="list-style-type: none"><li>o The undertaker must submit a close out report to the MMO, MCA, UKHO and the relevant statutory nature conservation body within three months of the date of completion of construction. The close out report must confirm the date of completion of construction and must include the following details:<ul style="list-style-type: none"><li>- latitude and longitude coordinates of the inter array and export cable routes; provided as Geographical Information System data referenced to WGS84 datum.</li></ul></li></ul></li></ul>	

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