



The Sizewell C Project

9.97 Responses to the ExA's Third Written Questions (ExQ3) Volume 1 - SZC Co. Responses

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1 INTRODUCTION

1.1.1 This report provides SZC Co.'s response to the Examining Authority's Third Written Questions (ExQ3s) issued on 9th September 2021 [PD-043 to PD-049].

1.1.2 A total of 139 written questions were issued on 9th September 2021 in six parts [PD-044 to PD-049], as set out below.

- Part 1:
 - 2 general and cross-topic questions;
 - 2 questions on Agriculture and Soils;
 - 6 questions on Air Quality;
 - 4 questions on Alternatives;
 - 1 question on Amenity and Recreation;
- Part 2:
 - 12 questions on Biodiversity and Ecology, Terrestrial and Marine;
 - 8 questions on Habitats Regulation Assessment;
- Part 3:
 - 5 questions on Climate Change;
 - 5 questions on Compulsory Acquisition;
 - 3 questions on Cumulative and Transboundary;
 - 15 questions on Coastal Geomorphology;
 - 1 question on Community Issues;
- Part 4:
 - 7 questions on Draft Development Consent Order (DCO);
 - 6 questions on Health and Wellbeing;

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- 4 questions on Historic Environment;
- 8 questions on Landscape Impact, Visual Effects and Design;
- Part 5:
 - 24 questions on Noise and Vibration;
 - 3 questions on Policy and Need.
- Part 6:
 - 5 questions on Radiological Consideration;
 - 17 questions on Transport;
 - 1 question on Waste (Conventional) and Material Resources.

1.1.3 Appendices are provided in Volume 2 of this document.

1.1.4 Whilst some of the above written questions were not directly addressed to the Applicant, a response has been provided where SZC Co. has considered it may be appropriate and helpful to do so.

1.1.5 This report follows the same question referencing format, as provided by the Examining Authority.

1.1.6 This report contains Examination Library References in square brackets (e.g. [APP-001]).

Navigation guide to the Examining Authority's Third Written Questions:

ExQ3 Part 1 Link to Part 1	ExQ3 Part 2 Link to Part 2	ExQ3 Part 3 Link to Part 3	ExQ3 Part 4 Link to Part 4	ExQ3 Part 5 Link to Part 5	ExQ3 Part 6 Link to Part 6
<ul style="list-style-type: none"> • General and Cross topic Questions • Agriculture and soils • Air Quality • Alternatives • Amenity and recreation 	<ul style="list-style-type: none"> • Biodiversity and ecology • Habitats Regulations Assessment 	<ul style="list-style-type: none"> • Climate change and resilience • Coastal Geomorphology • Compulsory Acquisition • Community issues • Cumulative impact 	<ul style="list-style-type: none"> • Draft Development Consent Order (DCO) • Flood risk, ground water, surface water • Health and wellbeing • Historic environment (terrestrial and marine) • Landscape impact, visual effects and design 	<ul style="list-style-type: none"> • Noise and Vibration • Policy and need 	<ul style="list-style-type: none"> • Radiological considerations • Section 106 • Socio-economic • Traffic and Transport • Waste (conventional) and material resource

Application by NNB Generation Company (SZC) Limited for an Order Granting Development Consent for The Sizewell C Project

The Examining Authority's third written questions and requests for information (ExQ3)

Issued on 09 September 2021

Responses are due by Deadline 8: 24 September 2021

PART 1 OF 6

G.3 [General and Cross-topic Questions](#)

Ag.3 [Agriculture and soils](#)

AQ.3 [Air Quality](#)

AI.3 [Alternatives](#)

AR.3 [Amenity and recreation](#)



ExQ3	Question to:	Question:
G.3	General and Cross-topic Questions	
	The Applicant	<p>Policy approach:</p> <p>The draft Overarching National Policy Statement for Energy (EN-1) was published on 6 September 2021. In addition, the associated 'Planning for New Energy Infrastructure Draft National Policy Statements for energy infrastructure' consultation document was published which includes comments in relation to EN-6. Please provide an update in the light of these recent publications setting out any perceived implications for the application of policy to the Sizewell C Project and the need for new electricity generating infrastructure of the type of proposed.</p>
	SZC Co. Response at Deadline 8	<p>The Government's energy policy is set out in the Energy White Paper, 2020, which explains the Government's intention to review the National Policy Statements during 2021. The publication of the consultation and the associated draft policy documents, therefore, was anticipated and the consultation document explains that the purpose of consulting is to ensure that the National Policy Statements '<i>reflect the Government's energy policy</i>'. The publications, therefore, do not signal any change in policy from that which has so far been considered and discussed in the examination.</p> <p>The consultation document explains at the bottom of page 11 that while the review is undertaken, the current suite of NPS and the Written Ministerial Statement of 7 December 2017 remain relevant Government policy and continue to provide a proper basis on which applications can be prepared, the Planning Inspectorate can examine, and the Secretary of State can make decisions on, applications for development consent. That is consistent with what is said in the Energy White Paper and reflects a continuity of policy approach to the determination of applications such as this.</p> <p>The consultation document explains that NPS EN-6 is not proposed to be amended as part of this review '<i>as there are no changes material to the limited circumstances in which it will have effect</i>' (Consultation document page 11). No amendments are being made to EN-6 and it is not part of this consultation (page 11).</p>



ExQ3	Question to:	Question:
		<p>A new NPS for nuclear electricity generation deployable after 2025 will be developed but until it is '<i>EN-6 will continue to have the role set out in the 2017 Written Ministerial Statement</i>' (page 11).</p> <p>The consultation includes a draft revised version of the Overarching National Policy Statement for Energy (EN-1) but both the consultation and the draft NPS are clear that, even once it has been designated, the new NPS will only have effect for applications accepted after its designation (Consultation document page 12 and draft EN-1 para 1.6.2), i.e. not for this application. The approach to the transition period is consistent with what is said in the Energy White Paper about the ongoing appropriateness of the existing suite of energy NPS for decision-making, and reflects the considerable degree of continuity in policy that is apparent in the suite of draft NPS.</p> <p>As paragraph 1.6.3 of draft EN-1 states, any emerging draft NPS is potentially capable of being important and relevant in the decision-making process but the draft NPS does not and is not intended to replace existing NPS EN-1 for the purposes of decision making or as the primary basis for policy for applications which have already been accepted for examination.</p> <p>In so far as the draft EN-1 is important and relevant, it is clearly material that the policy for nuclear development remains that set out in the existing NPS EN-1 and in NPS EN-6, in the terms explained in the Written Ministerial Statement of 7 December 2017 (draft NPS EN-1 paragraph 1.6.2).</p> <p>For example, the Consultation document confirms (at page 8) that '<i>the need for the energy infrastructure set out in the Energy NPS remains</i>' (except in the case of coal fired generation). That need, of course, includes the urgent need for new large-scale nuclear generation. Similarly, draft NPS EN-1 confirms that the Government intends to place no limit on the amount of any energy electricity infrastructure that can be consented in accordance with the energy NPSs (paragraph 3.3.62).</p>



ExQ3	Question to:	Question:
		<p>Draft NPS EN-1 contains a refresh of the need for new electricity infrastructure projects but its analysis is based on the same analysis which underpins the Energy White Paper and its conclusions are unsurprisingly the same. These include confirmation that the country needs a diverse energy mix (paragraph 3.3.8), that there continues to be a need for large-scale energy infrastructure (3.3.13) and that all technologies referenced within the draft (including large scale new nuclear) are '<i>urgently needed</i>' to meet the Government's energy objectives (paragraphs 3.3.40, 3.3.43 and 3.3.44).</p> <p>Paragraph 3.3.61 confirms that there is:</p> <p style="text-align: center;"><i>"...an urgent need for new (and particularly low carbon) electricity NSIPs to be brought forward as soon as possible, given the crucial role of electricity as the UK de-carbonises its economy."</i></p> <p>The analysis of the level and urgency of need in section 3 is then reflected in the presumption in favour of granting consent to applications for energy NSIPs within the scope of the new EN-1 (paragraph 4.1.2). That includes large-scale new nuclear generation (paragraph 3.3.44).</p> <p>The draft NPS reports that it has been the subject of an Appraisal of Sustainability, which considered alternatives to its proposed policy approach. On page 12 it explains that the alternatives included an alternative without nuclear (Alternative A3) and paragraph 1.7.9 explains that Alternative A3 '<i>which is the same as EN-1 but without Nuclear</i>' would be:</p> <ul style="list-style-type: none"> • adverse for the achievement of Net Zero due to greater on-going emissions from unabated gas; • adverse on Security of Supply as reliant on a small group of electricity generating technologies; and



ExQ3	Question to:	Question:
		<ul style="list-style-type: none"> adverse for the Natural Environment as emphasis on renewables and natural gas with CCS would require large areas of land and sea to meet the same energy output as EN-1. <p>Based on the above, these recent publications do not affect the application of policy to the Sizewell C project or the need for new electricity generating infrastructure of the type of proposed.</p> <p>The draft NPS EN-1 does contain some update of the Assessment Principles set out in the existing NPS. SZC Co. has reviewed these and does not consider that they would represent a significant shift in overall approach from that currently set out. However, SZC Co. will set this out more fully in its update of the Planning Statement to be submitted before the close of the examination.</p>
G.3.1	The Applicant, ESC, SCC	<p>Policy approach:</p> <p>Please confirm your view as to the correct policy approach in this case to development within the AONB in the light of relevant NPS, NPPF and Local Plan policies relating to major development in such locations?</p>
	SZC Co. Response at Deadline 8	<p>The Planning Statement [APP-590] sets out the legislative and policy context including the role of NPSs (see paragraphs 3.2.1 – 3.2.6), the NPPF (see paragraph 3.4.3) and local plan policies (see paragraph 3.4.4). In summary, as most recently submitted at ISH9 [REP7-102] the NPSs are intended to set development control tests to be used in decision making for NSIPs. They are prepared, assessed and consulted upon for that purpose. The NPPF does not contain policies for NSIPs (that is confirmed at paragraph 5 of the NPPF). It must follow that local plans do not do that either and it is notable that the local plan Inspector recommended modifications to the local plan to make it clear that the local plan is not setting policy tests for NSIPs (Planning Statement Update, Annex B [REP2-043]). NPS EN-1 provides policy relating to development proposed within nationally designated landscapes (including AONB) at paragraphs 5.9.9 – 5.9.11. SZC Co. (at paragraph 1.2.5 of REP5-110 and Appendix A of REP7-072) has previously drawn attention to the important and deliberate differences between the wording of this and the equivalent NPPF</p>



ExQ3	Question to:	Question:
		<p>policy (paragraph 177). Policy SCLP10.4 of the local plan provides policy for the consideration of applications for planning permission for major developments in the AONB with reference to the considerations set out in the NPPF. That policy does not apply to NSIPs, and was neither formulated nor assessed for its soundness on the basis that it would set the test for determining the acceptability of such developments.</p> <p>For the reasons set out in response to the Examining Authority's Third Written Questions (ExQ3) G.3.0 that position has not changed. The new draft NPS EN-1 is only draft and cannot yet have effect but, even if it did (and even if it was to apply to this DCO application, which it states it would not), it contains precisely the same wording for decision making on energy NSIPs within nationally designated landscapes, as the current EN-1. It also helps to explain why that is the case. In particular:</p> <ul style="list-style-type: none"> - electricity demand is expected to double and the country may need a fourfold increase in low carbon generation to achieve the Government's objectives, including its commitment to net zero (paragraph 3.3.5); - to meet that need, it will be necessary to develop large scale energy infrastructure (paragraph 3.3.13); - the need is urgent, including the need for large scale nuclear generation (paragraph 3.3.44); and - due to the nature and size of potential schemes (as well as likely locations in areas such as coastal areas), opportunities for landscape mitigation will be limited and short medium and long term significant adverse effects on landscape, townscape and seascapes are likely to remain (paragraph 1.7.40). <p>The terms of the policy test set out in NPS EN-1 and confirmed in its emerging replacement, therefore, have been framed against this very particular and nationally important background and in the knowledge that one of the limited number of potentially suitable sites for large scale new nuclear generation is at Sizewell in an AONB. This is a purposeful and deliberate policy formulation, which has recently been revisited and</p>

ExQ3	Question to:	Question:
		confirmed. It is not the intention of government policy that any different test should apply.
Ag.3	Agriculture and soils	
Ag.3.0	The Applicant	<p>Permanent and Temporary Loss of Agricultural Land</p> <p>The content of Appendix E 'ALC Land Take Summary Table' [REP6-24] is noted. However, the response by Natural England to FWQ Ag.2.2 at Deadline 7 contends that data inconsistencies remain within Table 17.6 of [APP-277]. Please provide a response.</p>
	SZC Co. Response at Deadline 8	<p>The response from Natural England to the Examining Authority's Second Written Questions (ExQ2) Ag 2.2 at Deadline 7 [REP7-056] contends that data inconsistencies remain in Table 17.6 of [APP-277]. This is set out in paragraph 1.4 of the Natural England Response.</p> <p>Paragraph 1.4 refers to Table 17.6 of [APP-277] and compares this to the figures presented in Table 3.10 of [APP-577]. Table 3.10 of [APP-577] relates to land areas within each agricultural landholding. The areas presented for agricultural landholdings include woodland, access tracks, farmyards and farm buildings, and so an individual holding may cover a larger area than the areas mapped and reported by land grade. The term 'non-agricultural' in the figures presented for land grade under the Agricultural Land Classification (ALC) system in Table 17.6 of [APP-277] has been used to report all 'other' uses as defined in the ALC Guidelines (MAFF, 1988) but Table 17.6 does report the land areas by ALC grade consistently.</p>
Ag.3.1	The Applicant	<p>Outline Soil Management Plan (oSMP)</p> <p>The response by Natural England to FWQ Ag.2.2 at Deadline 7 details several required amendments to the oSMP. Please consider each amendment and confirm whether changes to the oSMP are required. Where not considered necessary, please provide a detailed justification.</p>

ExQ3	Question to:	Question:
	SZC Co. Response at Deadline 8	<p>The response by Natural England to ExQ2 Ag 2.2 at Deadline 7 to the revised outline Soil Management Plan (oSMP) [REP3-018] has been reviewed, and responses are provided below for each paragraph where a query has been raised or an amendment proposed. It should be noted that the oSMP is secured through the CoCP.</p> <p>Para. 1.3: the summary tables of land take by project element and by land grade have now been submitted within Appendix E of SZC Co.'s Comments at Deadline 6 on Submission from Earlier Submissions and Subsequent Written Submissions to ISH1-ISH6 - Appendices [REP6-024].</p> <p>Para 1.4: The response to this is as set out in the response to ExQ3 Ag 3.0 above.</p> <p>Para 1.5: The design of the two village bypass and the Sizewell link road have been rationalised throughout the design iterations. The design modifications undertaken following the submission of the Application in relation to requested amendments from landowners and ongoing highway design, primarily focused on drainage and visibility, following the results of surveys and input from Suffolk County Council.</p> <p>Paras 1.8 & 1.9: These paragraphs refer to the ALC methodology and the commitment to undertake detailed ALC surveys in those areas where the historical surveys were undertaken at a semi-detailed level (in these areas it was agreed with Natural England that, based on ground-truthing undertaken, the available data was suitable to inform the assessment), in those areas where the surveys were oldest (in these areas detailed ALC surveys were undertaken in 2016) and in those areas which were not surveyed due to Order Limit changes after the detailed surveys had been completed.</p> <p>The survey data presented in Revision 2 of the oSMP were not updated on the basis that it has not been possible to correctly assign the two laboratory analysed samples (for soil texture) presented in Volume 9, Chapter 10, Appendix 10A of the ES (Green Rail Route: Agricultural Land Classification) [APP-564] categorically to the sample point. This</p>

ExQ3	Question to:	Question:
		<p>was set out in the response to ExQ2 Ag 2.1 (which notes that the assessment outcome would not be affected by this error), and this area will be re-surveyed in autumn 2021 and the new data will supersede the currently presented data and will be used to inform the detail of the Soil Management Plan.</p> <p>As requested in paragraph 1.9 this new survey information will include ALC maps and sample point maps, soil profile pit descriptions, laboratory particle size analysis data and will include laboratory data on soil chemistry (focused on pH and plant available nutrients) and will be collated to inform the development of the detailed Soil Management Plan. A clear explanation will be included in relation to how the new data supersedes some of the existing data and how the final data set has been developed.</p> <p>Para 1.10: A Soil Management Plan will be detailed and finalised prior to soil stripping operations commencing, as set out within the CoCP Part B. Revision 2.0 [REP3-018] includes a commitment to return land to the pre-construction ALC grade where land was being returned to agriculture (paragraphs 1.1.2 and 1.2.6 and paragraph 1.2.6 (commitment to set out the target specification for the restored soils)), and this will be based on the pre-construction ALC grade and associated soil information. Not all land will be returned to agriculture and so a commitment is given in paragraph 7.1.1 that the primary objective of soil restoration is to provide soil profiles suitable for the proposed reinstated land use. This will require the setting of target specifications for each proposed land use, taking account of the <i>in situ</i> soil properties; this is committed, in paragraph 7.1.1, to be defined in the final SMP when the detailed plans for land restoration, landscape planting etc. will be known.</p> <p>Paragraph 1.10 requests further justification on how soils on land undergoing cut and fill earthworks or temporary roadways involving compacting basal layers and the application of tarmac, paving etc, will be restored back to their original quality post development. This will be detailed in the final SMP and associated SRPs when the final layout of proposed works is fully known. The approach to these works is set out in Appendix F of the oSMP [REP3-018] and further detail will be added in the final SMP.</p>

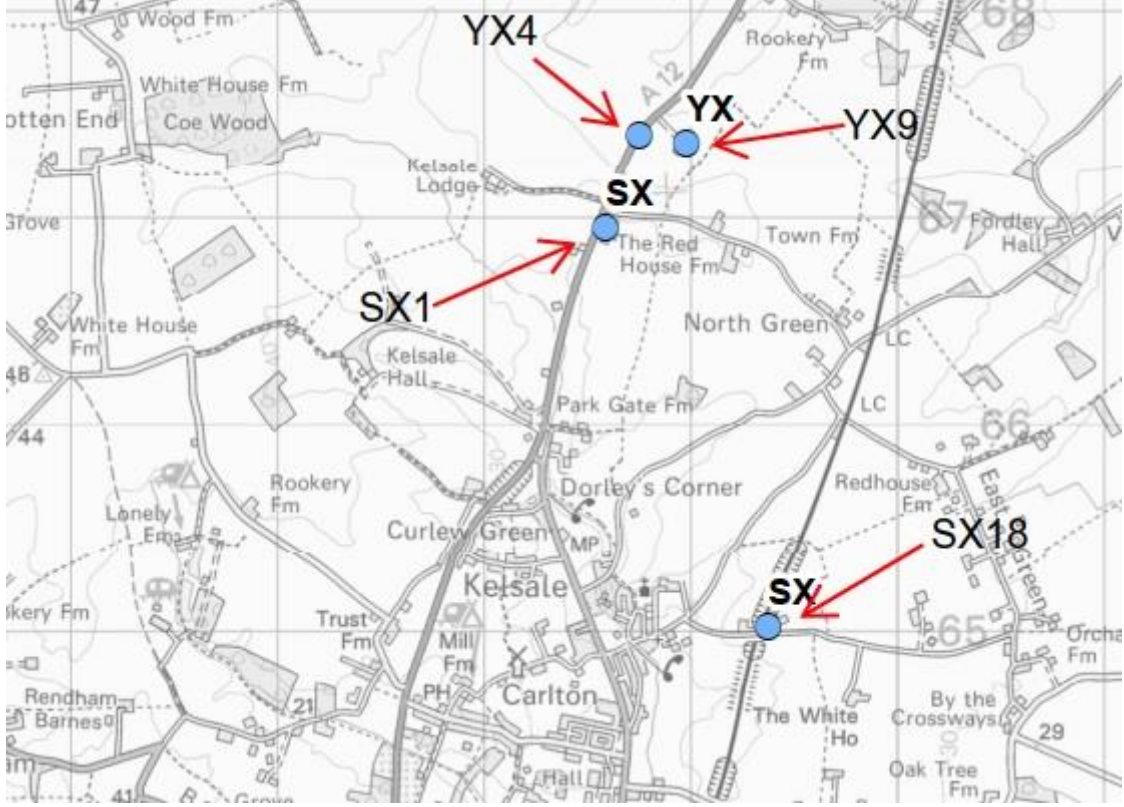


ExQ3	Question to:	Question:
		<p>Paras 1.12, 1.20 & 1.28: It is noted that the proposed content of the SRPs is deemed appropriate by Natural England. It is requested that a monitoring and aftercare plan be detailed to confirm the target ALC grade to be achieved to ensure no loss of BMV land [as a result of poor restoration]. Section 8 of the oSMP [REP3-018] provides a framework for the required monitoring, and whilst the section heading is just 'Monitoring' it also includes a requirement for works to be detailed should the soils be found to be non-compliant in any respect; the term aftercare will be added to a revised version of the oSMP. The request for a 5 year monitoring and aftercare period is noted and it is confirmed that the proposed aftercare period will be detailed in the final SMP that is submitted for approval pursuant to the CoCP Part B.</p> <p>Para 1.13: The statement is agreed with, and this specific potential impact will be added to a revised oSMP.</p> <p>Para. 1.14: it is noted that soils should ideally be handled when in a dry and friable condition. A methodology is provided in Appendix C to test for whether soils are in a plastic or non-plastic state. As the detailed programme is not yet defined there is the potential that some soils may need to be handled when plastic, either due to seasonality or due their inherent nature. The reconditioning step has been included to ensure that, should soils be handled when plastic there is a defined methodology for reconditioning these prior to re-use. Appendix 7 does, however, require soils to be handled when in a non-plastic state during the soil placement step; this has been deliberately stated as at placement there is then no opportunity to recondition and as such the soils need to be in a suitable condition that they can be restored effectively.</p> <p>Para. 1.15: The requirement to use every effort to avoid handling soils when they in a plastic state is noted. A statement to this effect will be added to a revised oSMP.</p> <p>Para. 1.16 & 1.18: Sections 6.2 and 6.3 of the oSMP [REP3-018] specifically refer to restoration to agriculture deliberately, to ensure that where this is required topsoil and</p>

ExQ3	Question to:	Question:
		<p>subsoil are stripped and stockpiled separately so the full soil profile, in the correct sequence, can be restored. Paragraph 6.3.3 of Section 6.3 then refers to areas being restored to habitat creation areas as defined in the Landscape and Ecological Management Plan (LEMP) where the soil characteristics will need to be defined based on the proposed habitat types. In these areas there may be a need to, for example, reduce the fertility of the soil materials and mixing topsoil and subsoil may be a means to achieve this without losing any soil resource and minimising the amount of topsoil or subsoil needing to be removed from site. Paragraph 6.3.3 states that details of what soil materials will be mixed/stockpiled together will be detailed in the final SMP and this will include the rationale for taking the approach, making it clear that this must not result in a loss of soil resources.</p> <p>Para. 1.17 & 1.22: This is noted and will be included in the final SMP. The responsibility for clearly identifying topsoil and subsoil resources is set out in Section 2.3 under the responsibilities of the Contractor's Soil Scientist. A revised oSMP will include a note to ensure this is explicitly stated.</p> <p>Para. 1.19: Maps will be provided to illustrate the areas intended for restoration. This requirement is included in paragraph 1.2.6 as part of the content of the Soil Resource Plans (SRPs).</p> <p>Para. 1.21: Appendix B covers the use of both excavators and bulldozers for stripping soils and refers to the MAFF (2000) guidance sheets for further details. The required contents of the SRPs (paragraph 1.2.6) includes reference to any changes to the methods proposed, including the machinery used; this text will be clarified in a revised oSMP to require a statement of the machinery to be used. Appendix D (Soil Stockpiling Method) refers to the loose tipping methods.</p> <p>Para. 1.24: The requirement to use a low ground pressure bulldozer for ripping the subsoil when it is in a non-plastic state is noted. The specific plant to be used for this operation will be determined by the contractor who will need to select plant which enables</p>

ExQ3	Question to:	Question:
		<p>the restoration of the full soil profile with the required structural characteristics; a note will be added to a revised oSMP to include reference to the use of low ground pressure plant. Appendix F Soil Placement includes a requirement for ripping and also includes the requirement for the soil during placement operations to be in a non-plastic state.</p> <p>Para. 1.25: An aftercare and monitoring section has not been included in the proposed contents list for the SRPs as this will be detailed in the final SMP and will form an overarching plan covering all areas. The SRPs will include a target specification for the restored land (as set out in paragraph 1.26), which for areas returned to agriculture will be informed by the pre-construction soil conditions and land grade.</p> <p>Para. 1.26: Section 8.2 of the oSMP [REP3-018] requires the acceptability of the replacement soil profiles to be checked. This will only be possible through a soil survey; the specific requirement to undertake this check through a soil survey will be added to an updated version of the oSMP.</p> <p>Para. 1.29: Appendix H requires information to be recorded regarding soil movements (i.e. what material is in each stockpile). Paragraph 6.7.1 includes the requirement for stockpiles to be clearly marked on the ground. Section 8.2 will be updated to refer specifically to checks being required of the correct labelling etc.</p> <p>Para. 1.30: The word 'Contractors' will be added to the responsible person column in the table in Appendix I in an updated oSMP.</p> <p>Para. 1.31: Section 4 states that the SRPs will base soil stripping, storage and restoration plans on volume calculations using the baseline data. Reference to the relevant British Standards has been included in Section 1.2 should any import of materials be required. A clarification will be added to a revised OSMP that the criteria for any imported soil materials will be specified in the details SMP/SRPs.</p>

ExQ3	Question to:	Question:
AQ.3	Air Quality	
AQ.3.0	The Applicant	Clarification Following the submission responding to actions at ISH4 Socio economic and community issues Para 1.3.12 refers to a number of receptors, and says the results are presented in [AS-127]. Please advise which plans show the locations of each of the receptors identified. SX18 does not appear to be present, but please advise for each.
	SZC Co. Response at Deadline 8	The locations of receptors SX1, SX18, YX4 and YX9 have been indicated on this mark-up based on Figure 12B.4 [APP-213]; the numbers on the original figure were inadvertently omitted.

ExQ3	Question to:	Question:
		
AQ.3.1	The Applicant, ESC	<p>Monitoring and Reporting of Results</p> <p>Concern was expressed throughout the ISH on Air Quality on future monitoring of air quality in respect of PM10, PM2.5, and NOx.</p> <ul style="list-style-type: none"> (i) Has a monitoring and reporting regime now been agreed? (ii) Please confirm where this is secured within the DCO documentation. (iii) Please advise how, the public will be kept apprised of the findings of the ongoing monitoring.

ExQ3	Question to:	Question:
	SZC Co. Response at Deadline 8	<p>(i) The scope and extent of deposited dust monitoring, and real-time NO_x, PM₁₀ and PM_{2.5} monitoring is to be agreed with the Councils through the main development site Dust Monitoring and Management Plan (DMMP), to demonstrate compliance with annual average national Air Quality Strategy objectives and standards using accredited and calibrated techniques and reference methods; additionally, real-time PM₁₀ monitoring will be used to provide real-time feedback to the contractors on the effectiveness of dust control measures. This position has been agreed between the Applicant and the Councils.</p> <p>(ii) The CoCP Part B and C (Doc Ref. 8.11(E)) includes the commitment to the DMMP which is secured by Requirement 2 of the DCO.</p> <p>(iii) SZC Co. will gather PM_{2.5} and PM₁₀ monitoring data with the results shared with the Councils through the Environment Review Group for publication as they consider appropriate. This is set out and secured through the DMMP.</p>
AQ.3.2	Applicant, ESC, EA	<p>Medium Combustion Plant Directive and Non Mobile Machinery - Clarification</p> <p>There are a series of generators that would be used through construction and operation which are covered by different regimes of control.</p> <p>(i) Can each party confirm the position in respect of how the different elements are controlled so that there is a clear understanding of who controls what (EA – Medium combustion Plant?) (ESC- Non Mobile Machinery up to 560Kw) and if agreed how the in combination effects of the different plant is controlled to an appropriate level.</p> <p>(ii) If it is not agreed, please explain what the differences are.</p> <p>(iii) Will plant above 560Kw be covered by controls under the Medium Combustion Plant Directive? Or through an EA permit?</p> <p>(iv) Please clarify what is the EA permitting threshold.</p>
	SZC Co. Response at Deadline 8	<p>The plant defined as Non-Road Mobile Machinery (NRMM) within the kW thresholds of 37kW-560kW can include a range of plant from hand-held cutting tools to small excavators; these are subject to the emissions controls as described within the revised CoCP submitted at Deadline 7 [REP7-037]. The stationary generators and other non-mobile power plant (temporary diesel generators) (as defined under the Environmental Permitting Regulations) are subject to emission controls regulated by the Environment</p>

ExQ3	Question to:	Question:
		Agency, depending on the size of plant. Stationary generators (such as construction phase generators, campus energy plant, operation phase emergency diesel generators) that in isolation or aggregated are >50MW will require an Environmental Permit under the EP Regulations. Other temporary diesel generators will require an Environmental Permit under the Medium Combustion Plant Directive with no minimum threshold for plant size where these are in place for more than 6 months, also regulated by the Environment Agency; where temporary diesel generators are in use for less than 6 months these would not be covered by the MCPD. SZC Co. has set out commitments to minimise the use of temporary diesel generators through use of the construction electrical supply in the CoCP (Doc Ref. 8.11(E), Part B, Table 4.1).
AQ.3.3	Applicant, ESC,	<p>Ozone</p> <p>In the event that the latest change request were to be accepted would this have any implications for ozone?</p> <p>At the ISH8 on Air Quality, it was indicated that raised ozone levels in the vicinity of the site were largely related to activities from elsewhere although this is not agreed by all parties. Are their implications for raised ozone downwind of the application site irrespective of the change request?</p>
	SZC Co. Response at Deadline 8	The change request would not have any implications for ozone levels in the vicinity of the site, because the change is not material to the overall air pollutant loading from the assessed activities, and ozone creation takes place over several days. Therefore, the aged plume will be of the order of 100km from the site and not local.
AQ.3.4	PHE, ESC	<p>Ozone</p> <p>Concerns continue to be expressed by Interested Parties (Frances Crowe D7) REP7-187 as to the likely adverse health effects as a consequence of a combination of increased ozone and increased particulate matter and NOx linked to the construction of and transport for the proposed development.</p> <p>Can ESC and PHE confirm their position in respect of any effects of ozone either in itself or in combination with other pollutants and any risks to human health that may arise.</p>



ExQ3	Question to:	Question:
	SZC Co. Response at Deadline 8	No response from SZC Co. is required.
AQ.3.5		<p>Monitoring of PM_{2.5}</p> <p>It would appear higher levels of PM_{2.5} are linked to poorer health outcomes for residents/people subject to exposure at higher levels and that this increase in risk, increases over time.</p> <p>(i) Is this considered to be a reasonable assumption?</p> <p>(ii) If so would it not be appropriate to monitor levels of PM_{2.5} now to understand the baseline position in advance of the commencement of work in the event the DCO were to be granted, and to have a requirement/obligation to monitor future levels both on the main freight routes but also at and around the main construction site?</p> <p>(iii) If this were not undertaken can the SoS be assured that the test to protect human health during construction and subsequent operation are being met?</p>
	SZC Co. Response at Deadline 8	<p>(i) The risk to human health from exposure to PM_{2.5} is known to increase with the duration of exposure and this has been recognised by the UK in setting long term air quality objective values for PM_{2.5}, for the protection of human health.</p> <p>(ii) SZC Co. has demonstrated that PM_{2.5} resulting from the Project would not contribute to any exceedance of the national Air Quality Strategy levels and it is agreed by SZC Co. and the Councils that there is no project need for PM_{2.5} monitoring. However, to provide additional reassurance to members of the public on this point, SZC Co. has agreed to include the gathering of PM_{2.5} concentration data prior to and during construction works, as secured through the DMMP and in turn by the CoCP, and the DCO. The scope and detailed monitor locations for the monitoring is to be agreed with the Councils through the DMMP, and monitoring would include a period of baseline data gathering prior to commencement of construction as well as monitoring during the Project construction phase. This proposed approach and indicative PM_{2.5} monitoring locations are agreed with the Councils.</p> <p>(iii) The tests to protect human health during construction and subsequent operation are considered to be met as demonstrated by the predictive modelling work undertaken to support the DCO application but this will be further demonstrated by the above</p>

ExQ3	Question to:	Question:
		commitments and by the large margin that the assessment, presented in the ES, has demonstrated the air quality objective value for PM _{2.5} would continue to be achieved by.
AI.4	Alternatives	
AI.3.0	The Applicant	<p>General assessment principles:</p> <p>Please provide an update in relation to the Applicant's consideration of alternatives in the light of the judgment in <i>R (Save Stonehenge World Heritage Site Limited) v Secretary of State (Holgate J, 30 July 2021)</i> with particular regard to the absence of any consideration of alternatives for the main site platform and decisions relating to the reactor design.</p>
	SZC Co. Response at Deadline 8	<p>SZC Co. has considered the judgment in the Save Stonehenge case, and it does not have any implications for the approach to be taken to the issue of alternatives in relation to the proposed development of Sizewell C.</p> <p>The Save Stonehenge case involved the application of existing well-established principles of common law regarding the relevance of alternatives to the particular facts of that case. Those principles were described by Holgate J as being "<i>well-established</i>" in paragraph 268 of the Judgment and are summarised at paragraphs 269 to 276. The case does not change the law as to the principles that apply in determining whether alternative sites or options may permissibly be taken into account or whether, going further, they are an '<i>obviously material conclusion</i>' which must be taken into account. The written and oral submissions that have been made on behalf of SZC Co. in this examination in respect of alternatives are consistent with those principles and reflect their application to the particular facts of this case.</p> <p>NPS EN-1 acknowledges that the relevance or otherwise to the decision-making process of the existence (or alleged existence) of alternatives to the proposed development is in the first instance a matter of law, detailed guidance on which falls outside the scope of the NPS (paragraph 4.4.1). It then goes on to explain in paragraph 4.4.3 that where there <i>is</i> a legal or policy requirement to consider alternatives the decision-maker should be guided by the principles listed in that paragraph '<i>when deciding what weight should be given to alternatives</i>'. Those principles are specific to NPS EN-1, and are not reproduced in the</p>

ExQ3	Question to:	Question:
		<p>National Policy Statement for National Networks ("NPSNN") which had effect in decision-making in respect of the application for development consent at Stonehenge. The NPSNN has its own very different guidance on options appraisal at paragraph 4.27, which is specific to the types of infrastructure that it covers and was important to the outcome of that case for the reasons summarised below.</p> <p>Unlike the suite of Energy NPS as they apply to new nuclear power stations, the NPSNN is not site-specific and its contents have not been informed by an assessment of alternatives to the sites listed in EN-6.</p> <p>The findings of the Court on ground 5(iii) (alternatives) in the Save Stonehenge case are necessarily highly fact-specific, and the '<i>relevant circumstances of the present case</i>' were described by Holgate J as '<i>wholly exceptional</i>'. It was the cumulative effect of a long list of case-specific circumstances that led the Court to the conclusion that '<i>the relative merits of the alternative tunnel options compared to the western cutting and portals were an obviously material consideration which the SST was required to address</i>' (paragraph 277).</p> <p>It should be noted that alternative options for improving the A303 to address the harmful impact on the integrity of the Outstanding Universal Value of the Stonehenge World Heritage Site had begun to be considered as early as the 1990s (paragraph 10). The World Heritage Committee itself had specifically asked the United Kingdom to consider a longer tunnel as an alternative to the preferred scheme in 2017 so that the western portal would be outside the World Heritage Site, and had re-iterated that request in 2019 (paragraph 13). The longer-tunnel option was considered in the examination (paragraph 15).</p> <p>Nine reasons for the Court's conclusion on this Ground were set out in paragraphs 278 to 279 of the Judgment. It is very clear from a reading of those paragraphs, together with the relevant factual background as summarised at paragraphs 5 to 20 and 243 to 267, that the reasons given are specific to the unique combination of legal, policy and factual circumstances of that case. That is unsurprising given that the relevance or otherwise of alternatives, whether they are obligatory material considerations or not, and the weight to</p>

ExQ3	Question to:	Question:
		<p>be given to them if material, will always depend on the concatenation of circumstances in any individual case. The circumstances of the Save Stonehenge case are plainly not comparable to those which arise in this application. For example:</p> <ul style="list-style-type: none"> • The case involved a proposed development which was found to cause material harm to a World Heritage Site, with specific legal and policy consequences which were critical to the conclusion that exceptional circumstances existed requiring consideration of alternative tunnel options (see e.g. paragraphs 278 to 282). • Both the Panel and the Secretary of State had misdirected themselves in relation to the policy in paragraph 4.27 of the NPSNN, and specifically as to the implications of the fact that the Applicant had carried out the “<i>options appraisal</i>” as part of the investment decision making process required by paragraph 4.27 of the NPSNN (see paragraphs 285 and 288). • In that case it had not been suggested that the extended tunnel options did not need to be considered because they were too vague or inchoate (paragraph 289). By contrast, SZC Co. has made clear its view that the putative ‘alternatives’ for the main site platform and reactor design referred to by Interested Parties in this case are vague and inchoate. No Interested Party has set out to demonstrate in any detail what development such an alternative would require, whether it would be practically achievable on this site, how its various environmental impacts would compare to those of the proposed development, or that there is a realistic prospect of such an alternative delivering the same infrastructure capacity (including energy security and climate change benefits) in the same timescale as the proposed development (see NPS EN-1 paragraph 4.4.3). <p>SZC Co.’s submissions on the relevance of potential alternatives and (if relevant) the weight that should be attached to any such alternatives are therefore unaffected by the <i>Stonehenge</i> judgment.</p>



ExQ3	Question to:	Question:
Al.3.1	The Applicant	<p>General assessment principles:</p> <p>The Deadline 5 submission of Bill Parker [REP5-191], states that a core issue is that the space between the sea to the east and the SSSI Sizewell Marshes to the west is too narrow to accommodate this specific nuclear power station design. He questions why: <i>"only one inappropriate design of nuclear station has been presented"</i>. Please explain why other alternatives to the nuclear power station design and dimensions sought have not been considered and assessed?</p>
	SZC Co. Response at Deadline 8	<p>SZC Co. refers the ExA to Section 1.16 of Written Submissions Responding to Actions Arising from ISH5: Landscape and Visual Impact and Design [REP5-117], where a response to suggestions that the potential for use of alternative reactor designs should be considered as an important and relevant consideration has been provided.</p> <p>The EPR is an evolutionary design that has been demonstrated, through extensive studies, to be a design that meets, and generally exceeds by some margin, all UK regulatory requirements. While other reactor designs have undergone the Generic Design Assessment (GDA), the EPR is the only design to have completed the GDA process and to have gained permission to allow construction to start (at Hinkley Point C). This construction project at Hinkley Point C has resulted in extensive design development and learning, in addition to that coming from international EPR projects, that will bring significant safety benefits in building the EPR design at Sizewell C. Given this additional safety benefit, and the fact the EPR design is sufficiently mature to easily adopt at Sizewell C, the Sizewell C project has not considered alternative reactor technologies for the site. Further, it is worth noting that the other viable large scale nuclear reactor designs that could be considered would be unlikely to provide significantly greater safety benefits than the EPR, although there would be significantly longer project gestation times and First of a Kind (FOAK) project risks. These latter points mean the project would take far longer to deliver the key benefits to the UK of power supply security and meeting climate change obligations.</p> <p>While it is true that the Sizewell C site is considerably smaller than the Hinkley Point C site, this has not resulted in any layout compromises that affect nuclear safety. The</p>

ExQ3	Question to:	Question:
		<p>layout, orientation and building spacing of the Nuclear Island and Conventional Island buildings has been maintained as the same as at Hinkley Point C. This means that all the hazards associated with the size and layout of the site are unchanged relative to Hinkley Point C. Although some safety related support buildings have been moved relative to their locations on the Hinkley Point C, their new positions at Sizewell C will not result in any detriment in relation to nuclear safety. It should also be noted that, since the design of safety significant systems remains the same as at Hinkley Point C, the fault studies also remain unchanged at Sizewell C.</p> <p>SZC Co. considers that the space between the sea to the east and the SSSI Sizewell Marshes to the west is not too narrow to accommodate this specific nuclear power station design.</p> <p>SZC Co. does not seek to repeat its case for the sensitive design of the power station here, but it does wish to point to the following feedback from the Design Council: <i>"Extensive steps are being taken by the project team to carefully integrate the Sizewell C site into its historic, coastal setting. Overall, we think the proposal is being approached with great care and attention across architecture, engineering, landscape design and ecology."</i> (Main Development Site Design and Access Statement Part 3 [REP5-075], electronic page 70).</p>
Al.3.2	The Applicant	<p>General assessment principles:</p> <p>The Deadline 5 submission of Professor Blowers [REP5-189], in relation to the potential suitability of the site puts forward three qualifications to the Applicant's assumption that the site is not an issue since Sizewell is one of those sites listed in the NPS. In addition, his Deadline 7 submission states that the recent report of the IPCC has a direct bearing on the development of a nuclear power station such as Sizewell C on a coastal location and is relevant to the policy on strategic siting assessment. Please respond and comment on the need to assess the suitability of the site as a whole in the light of the NPS designation and in the light of the recent report of the IPCC.</p>



ExQ3	Question to:	Question:
	SZC Co. Response at Deadline 8	<p>SZC Co. is cognisant of the recent IPCC Report and its findings.</p> <p>The IPCC report relates to global and very large regional scales, where it indicates a likely sea level rise of between 0.28m and 1.01m by 2100, and between 0.37m and 1.88m by 2150. The report states "low confidence" in anything higher and only under a scenario involving "very high greenhouse gas emissions".</p> <p>For the purposes of this application, it is appropriate to base assessments on data that is recognised as relevant good practice by the regulators and best responds to the localised context. Responding to the local context is important because, for example, sea level rise is projected to be lower in the north of Scotland compared to the south of England due to geological processes altering the tilt of the UK. The IPCC report is therefore insufficiently tailored to the local environment to underpin the modelling in this application, and not supported for use by the regulators.</p> <p>The best local and regional information for considering climate change impacts is UKCP18, which regulators such as the Environment Agency and the Office for Nuclear Regulation endorse as Relevant Good Practice.</p> <p>SZC Co. has used UKCP18 data accordingly and specifically the most conservative scenario within it (RCP8.5) as input data to underpin the protection of the power station. In addition, the Hard Coastal Defence Feature design is engineered in line with the principle of managed adaptation. As the ExA will be aware, the application allows for the HCDF design to be adapted if sea level rise is greater than that which has been projected under the UKCP18 RCP8.5 scenario.</p> <p>On Page 6 of Professor Blowers' D7 response [REP7-169], Professor Blowers states '<i>the impacts of CC [climate change] on SLR [sea level rise], storm surges and coastal processes could render the Sizewell site unviable and threaten the decommissioning process and the security of interim stores</i>'. This is clearly a judgement and no evidence</p>



ExQ3	Question to:	Question:
		<p>has been presented by Professor Blowers to demonstrate that this would be the case. The IPCC report does not constitute an evidence base that outweighs that supported by the EA and ONR for the reasons set out above.</p> <p>Also on Page 6 [REP7-169], Professor Blowers suggests that it is not preferable for SZC Co. to rely on the ONR for matters relating to the site licence process. The ExA will be aware that SZC Co.'s approach is in accordance with NPS EN-6, which states at paragraph 2.7.3 that the Planning Inspectorate '<i>should not duplicate the consideration of matters that are within the remit of the Nuclear Regulators</i>'. Paragraph 2.7.4 confirms that this includes the site licensing process.</p>
AI.3.3	The Applicant	<p>General assessment principles:</p> <p>The draft Overarching National Policy Statement for Energy (EN-1) was published on 6 September 2021. This includes reference at Section 1.7 to the Appraisal of Sustainability and Habitats Regulation Assessment and explains the assessment of alternatives to EN-1 and to the consideration of alternatives in Section 4.2. Please comment on any implications arising from that assessment for the inclusion of Nuclear generation within EN-1, and for the consideration of alternatives to the proposed development generally.</p>
	SZC Co. Response at Deadline 8	<p>SZC Co.'s response to ExQ3. G.3.0 provides relevant context for this question. The draft EN-1 is only draft but it notably reinforces the urgency of the need for large scale energy infrastructure including the need for large scale nuclear generation (paragraph 3.3.44).</p> <p>The Appraisal of Sustainability (AoS) provides an assessment of the draft EN-1 against fourteen objectives. The findings are presented at section 5 of the AoS and in a matrix at Table 10.1. A summary of these findings is presented at section 10.1 and the key points are set out at Paragraph 1.7.4 of the draft EN-1. These key findings include:</p> <ul style="list-style-type: none"> • that the NPS will be transformational in enabling the transition to a low carbon economy; • the energy NPS will still generate residual carbon emissions;

ExQ3	Question to:	Question:
		<ul style="list-style-type: none"> • the energy NPS are likely to contribute positively to the UK energy market improving security of supply and through increased economic opportunities for local communities have positive effects for health and well-being; • opportunities for landscape mitigation, due to the nature, location and size of schemes will be limited and significant adverse effects are likely; • there is potential that construction and operation activities will have significant negative effects on biodiversity; • there may be cumulative negative effects on various environmental topics and projects will be subject to project level assessment. <p>These conclusions are reached following an assessment of alternatives to the draft EN-1 as required by the SEA Regulations. Four potential strategic alternatives were tested against the AoS objectives (which are grouped under six headings for this purpose). The four alternative scenarios are identified in the table on page 12 of the draft EN-1. They are:</p> <p>"A1. As EN-1 without Nuclear and Unabated Natural Gas", "A2. As EN-1 without Unabated Natural Gas", "A3. As EN-1 without nuclear", "A4. As EN-1 but with an even stricter protection of the marine environment".</p> <p>The AoS presents the findings of the appraisal of alternatives at section 5.19 and provides a summary at Table 5-18 before setting out the key differences between the alternatives. These are summarised at paragraphs 1.7.6 – 1.7.10 of the draft EN-1. The AoS concludes, as set out at paragraph 1.7.11 of the draft EN-1 that <i>'none of these alternatives are as good as, or better than, the proposals set out in EN-1 and therefore the government's preferred option is to take forward the proposals set out herein'</i>.</p> <p>The policy option presented in EN-1, which reiterates the continued support for new large scale nuclear generation, is concluded to represent the best policy approach.</p> <p>One of the alternatives considered through the AoS (A3) was the same as EN-1 but specifically excluding nuclear. As summarised at p125 of the AoS (and shown at Table 5-</p>



ExQ3	Question to:	Question:
		<p>18) the alternative without nuclear was found to deliver no benefits compared to the proposed draft EN-1 when assessed against the AoS objectives. There would be some neutral effects but the majority of the effects of excluding nuclear were found to be negative. Paragraph 1.7.9 of draft EN-1 provides a brief summary but in more detail at page 125 of the AoS it is reported that EN-1 without nuclear would:</p> <ul style="list-style-type: none"> • <i>have adverse effects on the achievement of Net Zero due to greater ongoing emissions from unabated gas;</i> • <i>have adverse effects on Security of Supply as reliant on a smaller range of electricity generating technologies;</i> • <i>be neutral in terms of Health and Well-being and the Economy by providing for a range of low energy sources to meet future energy needs, as well as economic stimulus and improved employment opportunities though there may also be economic and community costs at the local scale;</i> • <i>have adverse effects for the Built Environment due to additional land take by wind and solar Renewables and location near to coasts, estuaries or rivers by Natural Gas with or without CCS, affecting flood risk; and</i> • <i>have adverse effects for the Natural Environment as emphasis on Renewables and Natural Gas with CCS would require larger areas to meet the same energy output as EN-1.</i> <p>The AoS reinforces the continued strong support for new nuclear as part of the UK's future energy mix.</p> <p>The section of the draft NPS setting out its policy approach to 'Alternatives' (from paragraph 4.2.11) remains largely unchanged from section 4.4 of the current EN-1. The changes are limited to:</p> <ul style="list-style-type: none"> - confirming that the ES is obliged to include information about <u>reasonable</u> (rather than main) alternatives (para 4.2.12); - advising that only alternatives that can meet the objectives of the proposed development need be considered (para 4.2.13);



ExQ3	Question to:	Question:
		<p>- deletion of the first part of bullet 3 of paragraph 4.4.3 (relating to renewables legislation).</p> <p>The work undertaken for the AOS, therefore, serves to validate the up to date requirement for new nuclear and the absence of a valid alternative policy approach.</p>
AR.3 Amenity and recreation		
AR.3.0	The Applicant, SCC, Local Access Forum	<p>Suffolk Coastal Path</p> <p>It is expected that equestrians will have to dismount to ensure safe crossing underneath the permanent BLF, via the use of mounting blocks.</p> <p>(i) Do SCC regard this as a suitable solution for equestrians?</p> <p>(ii) How has the safety of elderly and disabled riders using such a facility been assessed?</p> <p>(iii) Are there details setting out the dimensions, type of block and suitability of surface both of the block and surrounding ground set out anywhere? If not how are these details to be agreed?</p> <p>(iv) What provision would there be for maintenance going forwards.</p>
	SZC Co. Response at Deadline 8	<p>(i) No response required from SZC Co.</p> <p>SZC Co. would, however, like to make one point for clarification. Riders will be able to ride along the coast and pass the permanent BLF when the deck is in place, without dismounting by following the Coast Path which will pass across the access road to the BLF, and not under the deck. The Rights of Way and Access Strategy submitted at Deadline 8 (Doc Ref. 6.3 15 (D)) has been revised to make this clearer.</p> <p>(ii) As noted above, riders will not need to dismount if they follow the Coast Path across the access road to the BLF. During delivery of AILs riders will be able to either wait for a short period until the delivery has been made, or use the alternative route on the beach and under the BLF deck where they would need to dismount.</p>

ExQ3: 09 September 2021

Responses due by Deadline 8: 24 September 2021



The Planning Inspectorate
Yr Arolygiaeth Gynllunio

ExQ3	Question to:	Question:
		(iii) The specification of the mounting blocks will be agreed with the Highways Authority through the Public Rights of Way Implementation Plan. (iv) Any maintenance measures would be captured in the Public Rights of Way Implementation Plan should this be considered necessary by Suffolk County Council.

ExQ3: 09 September 2021

Responses due by Deadline 8: 24 September 2021

Application by NNB Generation Company (SZC) Limited for an Order Granting Development Consent for The Sizewell C Project

The Examining Authority's third written questions and requests for information (ExQ3)

Issued on 09 September 2021

Responses are due by Deadline 8: 24 September 2021

PART 2 OF 6

Bio.3 [Biodiversity and ecology, terrestrial and marine](#)

HRA.3 [Habitats Regulations Assessment](#)



ExQ3	Question to:	Question:
Bio.3	Biodiversity and ecology, terrestrial and marine	
Part 1 - General		
Bio.3.0	The Applicant, ESC, SCC, Suffolk Wildlife Trust	Protected species licensing, non-licensable method statements and the CoCP (Associated development, terrestrial ecology, section 6 epage 178 and following) - Code of Construction Practice. Doc 8.11 revision 5 submitted at Deadline 7-. Are ESC, SCC and SWT content with the amended CoCP and various non-licensable method statements? If not, what do they require? Do Natural England have any views in relation to these. .
	SZC Co. Response at Deadline 8	It should be noted that the CoCP, the Reptile Mitigation Strategy and the various non-licensable method statements (Doc Ref. 8.11(E)) have all been re-submitted at Deadline 8. They have been updated for technical matters as required and to address the ExA's requirement to use imperative language. All draft licenses that are likely to be required have been submitted to Natural England and also submitted to the examination.
Bio.3.1	Natural England, MMO	A number of questions were raised seeking information and input from Natural England and MMO during ISH10. Those at agenda item 5 were published by the ExA on 31 August 2021 following ISH10 and a note of the times at which other questions relevant to them were raised was sent to them later. For ease of reference, the ExA sets out those points below. Please will Natural England and the MMO respond at Deadline 8. In the event that their D7 responses or submissions in lieu of attendance have covered these points to their satisfaction, please will they state where, with EL references, paragraph and electronic page numbers.
	SZC Co. Response at Deadline 8	No response from SZC Co. is required.
Bio.3.2	Natural England MMO	Agenda item 3.a Sabellaria spinulosa, in general and progress with a Sabellaria mitigation and monitoring plan which is awaited from the Applicant - see also Natural England's position set out in their post-ISH7 submission [REP5-160] (page 21 of 21) what DML conditions are proposed for mitigation and comments on likelihood of presence and need for compensation (see also MMO's REP6-039] paras 1.3.6.6 and 1.3.7.9).



ExQ3	Question to:	Question:
		<p>Q(a) Where is the mitigation and monitoring plan, is Natural England content with it, likewise MMO</p> <p>Q(b) Natural England say three locations for intakes; Are there not two intakes of which the northernmost avoids SS as it is not on reef. Southernmost has to be on reef, does it not? What is the third? Was it a candidate rejected? (The Applicant clarified there are two heads per intake and three potential locations.)</p> <p>Q(c) Will there be a condition in the DML requiring mitigation of any effects on SS? And also will an in principle monitoring and mitigation plan be submitted to the examination as suggested by MMO at para 1.3.6.6? When?</p>
	SZC Co. Response at Deadline 8	No response from SZC Co. is required.
Bio.3.3	Natural England MMO	<p>Agenda item 3.b</p> <p>To understand which issues considered at the Hinkley Point C water discharge permit acoustic fish deterrent appeal and in dispute are common to the Sizewell DCO application; and who was involved? (Please will the MMO and Natural England take into account the Applicant's response at ISH10 and its post-ISH10 submissions in replying.</p>
	SZC Co. Response at Deadline 8	No response from SZC Co. is required.
Bio.3.4	Natural England	<p>Agenda item 4.a</p> <p>Fen meadow proposals, including Pakenham – to understand in particular Natural England's position on need, quantum and the likelihood of success</p> <p>ExA As Natural England are not able to be here today, the ExA is going to put this question to the Applicant to ask for their understanding of Natural England's position and their reply, and also so that Natural England can speak for themselves in writing at Deadline 7. The ExA has their note in lieu of attendance.</p> <p>The policy in EN1 para 5.3.11 is not normally to grant where there is a likely adverse effect on an SSSI, and that where after mitigation there is an AE on a site's notified special interest features an exception can be made where benefits outweigh impacts on the site as a SSSI and on the national network of SSSIs. You are taking 0.4 something ha of fen meadow, call it 0.5 ha. (a) That, it seems to me, is the Natural England position on need. Q (b) Please will you explain to me fairly, putting it in the best light, how Natural</p>



ExQ3	Question to:	Question:
		<p>England justify the total land take at Halesworth, Benhall and Pakenham put together. Q (c) What made the Applicant think at the time of the Application in May 2020 that Halesworth and Benhall alone would be sufficient? And Q(d) why at Deadline 5, 23 July, would Natural England describe the possibility of success thus: "To summarise, our advice is that creating compensatory habitat of the same quality to that which will be destroyed will be extremely difficult, if not impossible". It was said by Mr Lewis for the Applicant at CAH1 Part 1 that this was a hangover from an earlier stage in the Examination. Is that it right. It was their clearly stated view at D5, 23 July.</p> <p>Q(e) Will the Applicant explain to its position but only in so far as it needs to add to anything it said at CAH1 Part 1. The ExA notes that the AoS of EN6, at para 5.13 says: There is potential for habitat creation within the wider area in order to replace lost 'wet meadows' habitats of the Sizewell Marshes SSSI but it may not be possible to fully compensate for losses to this habitat ... develop and ecological mitigation and management plan to minimise the impacts". Does the Applicant draw an comfort from this or rely it? There is a question there also for Natural England – does this para allow for some failure of fen meadow recreation, and how in the light of it is the fen meadow at Pakenham justified?</p> <p>Q(f) Is the money for the Fen Meadow Contingency Fund yet agreed?</p>
	SZC Co. Response at Deadline 8	<p>No response from SZC Co. is required.</p> <p>SZC Co.'s position on these matters was dealt with during ISH 10 [REP7-069] and where required in subsequent submissions at Deadline 7 (Appendix F to the Written Submissions Arising from CAH1 Part 1 [REP7-064]).</p>
Bio.3.5	Natural England	<p>Agenda item 4.e</p> <p>District licensing – changes and effects</p> <p>Q(a) The ExA's understanding is that it is only for newts and has no separate statutory basis. But in the absence of Natural England, please can ESC tell us if we are right or not and explain what difference it makes? (See also Natural England Blog post of 11 Dec 2020.)</p>
	SZC Co. Response at Deadline 8	No response from SZC Co. is required.
Bio.3.6	Natural England	Agenda item 4.g



ExQ3	Question to:	Question:
		<p>Biodiversity net gain – the effect of the new metric and assessment of SSSIs</p> <p>Q(a) To the Applicant – (i) what are you intending to do in relation to Metric 3.0? (ii) If you are putting something in, when will we get it? (iii) The ExA notes that at the Natural England website it is stated that “Users of the previous Biodiversity Metric 2.0 should continue to use that metric (unless requested to do otherwise by their client or consenting body) for the duration of the project it is being used for as they may find that the biodiversity unit values metric 2.0 generates will differ from those generated by Biodiversity Metric 3.0”. Does the Applicant wish to say in relation to that? Please will Natural England comment.</p>
	SZC Co. Response at Deadline 8	No response from SZC Co. is required. However, SZC Co. reiterates the position set out in response to the ExA at ExQ2 Bio.2.31 [REP7-051] .
Please answer the following questions in the event that the change request for the desalination plant is accepted		
Bio.3.7	Natural England, MMO	The ExA understands that Natural England and the MMO did not respond to the consultation. Please will they both set out their responses to the proposed changes?
	SZC Co. Response at Deadline 8	No response from SZC Co. is required.
Bio.3.8	Applicant	The Applicant explains that the intake screen and pipework would require periodic shock chlorination, which would be flow controlled and angled inwards to prevent chlorine emissions to the environment. Why does the outfall pipe not also need chlorination or treatment?
	SZC Co. Response at Deadline 8	Chlorination is a treatment used to control biofouling. Biofouling is the growth of marine organisms on or inside the water systems. At the desalination intake marine water, inclusive of entrained larvae or marine organisms, will be drawn in through the intake. While the intake structure itself will be protected against clogging of the Passive Wedge-Wire Cylinder screen by means of a compressed air cleaning system, entrained marine organisms that enter the intake tunnel have the potential to settle in the interior of the tunnel potentially leading to biofouling. Chlorination at the intake head prevents settlement and grown within the intake tunnel. The discharge is composed of the water which has already been treated and been through the Sea Water Reverse Osmosis (SWRO) membranes. No viable marine organisms would be present after this process and therefore the discharged water does not pose a biofouling risk. At the outfall diffusers the

ExQ3	Question to:	Question:
		water velocity will be sufficiently great to prevent ingress of marine organisms into the discharge pipework. Therefore, chlorination of the outfall diffusers and outfall pipe is not required
Bio.3.9	Applicant	Fourth ES addendum Bk 6 6.18 Vol 1. At para 3.9.13 it is said that environmental design and mitigation measures have been secured by Reqt 8. Is that a reference to the Construction Method Statement and if so to which parts and paragraphs? If not, please state how Reqt 8 does in fact secure this as the only other documents referred to in Reqt 8 are parameters plans.
	SZC Co. Response at Deadline 8	This is covered within the Change Request (Deadline 7) version of the Construction Method Statement (paragraphs 3.1.10 to 3.1.40) [REP7-281]. Requirement 8 now secures compliance with the CMS.
Bio.3.10	Applicant	Same document. At para 3.9.142 effects on commercial fishing are considered. It is stated that "A review of the commercial fishing off Sizewell and the wider area is provided in Volume 2, Appendix 22F of the ES [APP-323]. Shore-based observations suggest that most fishing near the proposed BLF is carried out by potting and trawling vessels". Should the reference to the BLF be to the salination plant intake and outfall headworks?
	SZC Co. Response at Deadline 8	The ES [AS-035] and Appendix 22F of the ES [APP-323] describe commercial fishing in the wider Sizewell area and Greater Sizewell Bay area in particular. These observations are applicable to the proposed desalination infrastructure which are within the study area of the original review [APP-323]. The ExA is correct to interpret para 3.9.142 to mean that shore-based observations suggest that most fishing near the proposed desalination marine headworks is carried out by potting and trawling vessels, as this statement applies to the general Sizewell Bay area.
Bio.3.11	Applicant	Same document. Does para 3.9.157 relate to and therefore be headed Benthic-pelagic and pelagic larvae sensitivity? It is currently simply "sensitivity".
	SZC Co. Response at Deadline 8	Correct. Paragraph 3.9.157 describes the sensitivity of benthic ecology receptors to entrainment. It should be headed ' <i>Benthic invertebrate sensitivity</i> '.
HRA.3 Habitats Regulations Assessment		
HRA.3.0	The Applicant	Marine Water Quality



ExQ3	Question to:	Question:
		NE has identified concerns regarding water quality impacts to numerous European sites, resulting from bentonite breakout [RR-0878][REP2-153]. At Deadline 3, the Applicant [REP3-042] committed to updating the CoCP to include information to address this point, but this was not addressed in the CoCP submitted at Deadline 7 (Revision 5). Can the Applicant update the CoCP to address this matter?
	SZC Co. Response at Deadline 8	<p>The Tunnel Boring Machines (TBM) tunnelling strategy on Sizewell C for the installation of the Intakes and Outfall tunnels differs from typical sea outfall construction using Horizontal Directional Drilling (HDD) or Micro Tunnel Boring Machine (MTBM) techniques where the drilling tool or MTBM terminates at seabed level without shaft structure. On Sizewell C, the tunnels will be what are called '<i>blind tunnels</i>'. The TBM will be launched from an onshore launch shaft then will proceed under seabed until the intersection with the 1st offshore shaft. The TBM will go through the 1st offshore shaft then will resume in the ground until the last offshore shaft. The TBM will bore through the last shaft and continue to bore in the ground till the TBM tail skin structure exits from the shaft plus an additional margin of 1 to 2 meters. The TBM will then be abandoned and sealed in the ground. Some of the components can be dismantled and recovered and oils are removed before tail skin, TBM Shield & Cutterhead are sealed permanently in the ground and concreted in.</p> <p>The tunnels alignments on Sizewell have been carefully planned and designed to stay out of the blow out zone with a given safety factor. By doing so, the risk of having bentonite slurry and air blowing out of the ground and appearing at seabed level is unlikely. The blow out zone is clearly shown and labelled on the tunnel alignments as exclusion zone.</p> <p>The TBM mining process is based on a careful and precise monitoring of the bentonite slurry pressure. This is performed using a set of pressure sensors positioned in the TBM working and excavation chambers for example, with adequate redundancy. This set-up allows for a perfect balancing with the existing water and ground pressures.</p> <p>For reference, the supply team has recently completed the Hong Kong Tuen Mun – Chek Lap Kok Link using similar design and installation techniques which consisted of 5 km long twin tunnels with a tunnel ID of 12.2 m. Approximately 4 km of the twin tunnel alignment were sub-sea drives with seabed up to 25 m below sea level. The tunnel axis was between 40 and 50 m below sea level during these marine drives (up to 5 bar of pressure). This project which won several international tunnelling awards and experienced no bentonite</p>



ExQ3	Question to:	Question:
		<p>slurry leaks / breakouts at seabed level at any point during the 7 year Project (2013-2020).</p> <p>The construction method for the tunnels is explained in the Construction Method Statement, which is secured by requirement 8. This will ensure that the measures set out above are secured throughout the construction process.</p>
HRA.3.1	Applicant	<p>Impacts to breeding birds (including marsh harriers)</p> <p>The Applicant has explained [Doc. 9.71, HRA.2.8] that the works to create the new wetland habitats in the proposed marsh harrier compensatory habitat area on the EDF Energy Estate ('the MHCHA') would not be undertaken in February-October, to avoid impacts on breeding birds (including marsh harriers) and that this would be secured in a future update to the CoCP.</p> <p>This is not reflected in the CoCP submitted at Deadline 7 (Revision 5). Can the Applicant update the CoCP to address this matter, or otherwise explain how this commitment is secured in the dDCO?</p>
	SZC Co. Response at Deadline 8	<p>The CoCP submitted at Deadline 8 (Doc Ref 8.11(E)) includes this commitment as follows:</p> <p><i>'The excavation works to create the wetlands (as defined in the 'On-site Marsh Harrier Compensatory Habitat Strategy' (Doc Ref. 9.16(A)) secured pursuant to Requirement 14A) must be commenced in the first winter of construction on the main development site and in accordance with the marsh harrier implementation plan approved pursuant to Requirement 14A. Excavation works must be undertaken between October and February, unless otherwise agreed with the Ecology Working Group. Any remaining excavation would be completed in the following winter.</i></p> <p><i>This definition is to ensure that there are no noise impacts to breeding bitterns (which commence breeding in February) and breeding marsh harriers at Minsmere, during the summer, from the excavation of the wetlands.</i></p> <p><i>For the avoidance of doubt, wetland planting and other habitat works, other than excavation, are excluded from this seasonal constraint.'</i></p> <p>Note that the Wet Woodland Strategy (Doc Ref. 9.8(A)), which is secured by requirement, already states:</p>



ExQ3	Question to:	Question:
		<p>5.1.12: <i>'The flood mitigation area and wetland habitats will be constructed during winter in the first two years of the construction phase to ensure that there is no ongoing construction disturbance to foraging marsh harriers during the summer.'</i></p> <p>Note that this response also addresses HRA.3.2 below.</p>
HRA.3.2	Applicant	<p>Marsh harrier compensatory habitat area on the EDF Energy Estate ('the MHCHA')</p> <p>The Applicant has stated that the new wetland habitats proposed as part of the MHCHA would be created in the first winter of the construction phase following the grant of any DCO (currently estimated to be winter 2022-2023) [REP2-088, NV1] [REP6-002] [Doc. 9.71, HRA.2.8].</p> <p>The Applicant has confirmed this is an "absolute commitment" in [Doc. 9.85] submitted at Deadline 7. How is this specific commitment secured in the dDCO (or other legal mechanism)?</p>
	SZC Co. Response at Deadline 8	This is covered in full under a joint response provided to HRA.3.1 above.
HRA.3.3	Applicant	<p>Land at Westleton</p> <p>a) The Applicant does not appear to have proposed specific monitoring measures relevant to marsh harrier on the land at Westleton, although the Marsh Harrier Compensatory Habitat Report for the Westleton land [REP3-053] confirms that <i>"...the status of the habitats will be monitored by the SZC Co. land management team seasonally to ensure appropriate management is undertaken"</i>. Could the Applicant confirm whether it intends to undertake monitoring at Westleton and if so, provide any further details and confirm how this is secured?</p> <p>b) Regarding provision 12.1 of the Deed of Obligation ('Habitats Bond') (Rev 7) submitted at Deadline 7, are the Local Authority bound to delivery of the Marsh Harrier Compensatory Habitat Report in line with Requirement 14C of the dDCO in the situation of a "Default Event"?</p>
	SZC Co. Response at Deadline 8	<p>(a) The Applicant can confirm that if the site at Westleton is included by the Secretary of State in the order, monitoring of that site will be undertaken, including monitoring of the use of the site by marsh harriers, monitoring of the prey species</p>



ExQ3	Question to:	Question:
		<p>and monitoring of the establishment of the vegetation. This is secured by defining the monitoring of the Westleton site in the updated TEMMP submitted at Deadline 8, specifically via Table 2.1 'Monitoring measures relating to relevant qualifying interest features of the Minsmere habitat sites' and Table 3.3 'Monitoring for Marsh Harrier habitat establishment.'</p> <p>(b) The Applicant is agreeing with the Councils the drafting of a positive obligation in the Deed of Obligation to carry out and complete the relevant Habitat Works in the event of a Default Event.</p>
HRA.3.4	Applicant	<p>Minsmere Monitoring and Mitigation Plan (MMP) [REP5-105]</p> <p>The Applicant has confirmed at Deadline 7 [Doc 9.73] that measures proposed by NE in [REP6-042] to mitigate impacts from construction workers are acceptable and can be reflected in the MMP. Can the Applicant update the MMP accordingly?</p>
	SZC Co. Response at Deadline 8	<p>NE stated, at paragraph 6.4 of [REP6-042]:</p> <p><i>"Mitigation measures to educate workers on sensitive features of protected sites such as breeding birds and vegetated shingle are currently proposed via printed literature in the form of leaflets or similar. This form of information may be easily discarded by workers. We advise in addition to printed literature this information is delivered orally within worker inductions or as a toolbox talk to ensure these vulnerable features are properly highlighted to workers. Further guidance and best practice can be found within the Working with wildlife: guidance for the construction industry (C691)."</i></p> <p>Delivery of this information orally within worker inductions or toolbox talks has been included in the updated Monitoring and Mitigation Plan for Minsmere – Walberswick and Sandlings (North) submitted at Deadline 8 (Doc. Ref. 8.17(G)) at Table 5.1.</p> <p>NE stated, at paragraph 6.6 of [REP6-042]:</p> <p><i>"We welcome the two-pronged approach to monitoring that have been outlined in this document which we believe has the potential to be highly effective. However, as much of this mitigation is contingent on the wardening resource, we question whether the provision of two wardens over 10+ sites tasked with monitoring visitor attendance, educating visitors, monitoring field signs of recreational disturbance, in addition to their other day to duties have the capacity to provide fulfil the above roles adequately. We</i></p>



ExQ3	Question to:	Question:
		<p><i>suggest that the wardening resource is carefully considered and the capacity assessed in more detail potentially providing an additional warden from the outset."</i></p> <p>At Deadline 7 ([REP7-060] paragraph 2.1.18) SZC Co. responded saying that two wardens would be provided as part of the Initial Mitigation Measures at the commencement of construction consistent with the Monitoring and Mitigation Plan for Minsmere – Walberswick and Sandlings (North) submitted at Deadline 5 [REP5-105v].</p> <p>SZC Co. has now committed to providing four wardens as part of the Initial Mitigation Measures at the commencement of construction, and this has been updated in the Monitoring and Mitigation Plan for Minsmere – Walberswick and Sandlings (North) submitted at Deadline 8 (Annex U of the DoO, Doc. Ref. 8.17(G)).</p>
HRA.3.5	Applicant	<p>Additional mitigation for recreational pressure</p> <p>Can the Applicant provide an update with regards the discussions on the further access improvements in the local area, as referenced in Doc 9.73, Appendix A - Response to NE, RSPB/SWT responses to Deadline 6?</p>
	SZC Co. Response at Deadline 8	<p>Proposals for further access improvements within the Estate, close to the construction workers accommodation campus, caravan site at the LEEIE and Leiston which, combined with existing recreational access and already committed improvements, will provide excellent alternative green space for construction workers and potential displaced people, are submitted at Deadline 8 (Doc. Ref. 9.111) and proposed to be secured in the Deed of Obligation.</p>
HRA.3.6	Natural England	<p>Re. Question CG.2.6 of ExQ2 [PD-034]</p> <p>In NE's response to Question CG.2.6 of ExQ2 at Deadline 7, NE requested "...that the ExA defer our input to Part 3 of Examiner's questions, when we will aim to provide a response by Deadline 8". Can NE please provide its response to Question CG.2.6 of ExQ2 [PD-034].</p>
	SZC Co. Response at Deadline 8	<p>No response from SZC Co. is required.</p>
HRA.3.7	Natural England	<p>Southern North Sea (SNS) SAC (Marine mammals) (Physical interaction with project infrastructure – collision)</p> <p>NE's RR [RR-0878] highlighted the risk of collision to mobile species including from marine vessel activity, capital dredging, piling and drilling works. Subsequently, NE [REP2-153]</p>

ExQ3: 09 September 2021

Responses due by Deadline 8: 24 September 2021



The Planning Inspectorate
Yr Arolygiaeth Gynllunio

ExQ3	Question to:	Question:
		confirmed it had no further concerns regarding physical interaction between project infrastructure and marine mammals. Can NE please confirm what information resolved their concerns?
	SZC Co. Response at Deadline 8	No response from SZC Co. is required.

Application by NNB Generation Company (SZC) Limited for an Order Granting Development Consent for The Sizewell C Project

The Examining Authority's third written questions and requests for information (ExQ3)

Issued on 09 September 2021

Responses are due by Deadline 8: 24 September 2021

PART 3 OF 6

CC.3 [Climate change and resilience](#)

CA.3 [Compulsory acquisition](#)

Cu.3 [Cumulative impact](#)

Cg.3 [Coastal Geomorphology](#)

CI.3 [Community Issues](#)

ExQ3	Question to:	Question:
CC.3	Climate change and resilience	
CC.3.0	The Applicant	<p>General climate change and policy issues:</p> <p>The draft Overarching National Policy Statement for Energy (EN-1) was published on 6 September 2021. Part 2 of the NPS covers the government's energy and climate change strategy and Section 4.9 considers climate change adaptation. Please comment on any implications for the Project arising from Part 2 and/or in relation to resilience of the proposed development to the possible impacts of climate change and the proposed climate change adaptation measures.</p>
	SZC Co. Response at Deadline 8	<p>Helpfully, the draft revision to the NPS notes that low carbon energy development is itself an adaptive measure to address climate change.</p> <p>The policy principles set out in the draft revised EN-1, at paragraph 4.1.5, note that the NPS takes account of the NPPF and Planning Practice Guidance, and specifically in paragraph 4.9.7 that a proposed development needs to take into account the latest UK Climate Projections and associated research and expert guidance. Section 5.6 (Coastal Change) and Section 5.8 (Flood Risk) of the draft revised EN-1 summarises the policy in relation to these two topics.</p> <p>The requirement to assess the impact of the most current UK Climate Projections in the context of the potential effect on flood risk management infrastructure, drainage and flood risk remains unchanged from that set out in the current NPS. SZC Co. has demonstrated accordance with this requirement within the Main Development Site Flood Risk Assessment (FRA) [APP-093] and subsequent Main Development Site Flood Risk Assessment (MDS FRA) Addendum (Doc Ref. 5.2(A)Ad) [AS-157].</p> <p>SZC Co. believes that the proposed development remains in accordance with the draft revised EN-1, and that the Project has demonstrated its resilience taking account of the Environment Agency's Climate Change Allowances for Flood Risk Assessments, as well as the guidance specifically relevant to this project provided in the <i>Use of UK Climate Projections 2018 (UKCP18) by GB Nuclear Industry</i> report and ONR / Environment Agency Joint Advice, Principles for Flood and Coastal Erosion Risk Management (ONR, Environment Agency and Natural Resources Wales, July 2017).</p>
CC.3.1	The Applicant	<p>General climate change and policy issues:</p>

ExQ3	Question to:	Question:
		The Deadline 5 submission of Professor Blowers [REP5-189], in considering the overall resilience of the sea defensive systems during the operational phase, states that there seems to be a reliance on levels of sea level rise and coastal impacts that reflect a maximum scenario of 4°C. In addition, his Deadline 7 submission, highlights the question of the resilience of the nuclear island to the most severe impacts and the prospect of a low probability/high consequence risk associated with Climate Change events. (i) Please explain further the consideration that has been given to any potential risk of severe impacts associated with Climate Change that might occur in the long-term towards the end of the century and into the next. (ii) Please also comment on the Climate Change implications for the safe decommissioning of the site and radioactive waste management.
	SZC Co. Response at Deadline 8	<p>(i) The ExA will be aware that SZC Co's. approach is in accordance with NPS EN-6, which states at paragraph 2.7.3 that the Planning Inspectorate "should not duplicate the consideration of matters that are within the remit of the Nuclear Regulators." Paragraph 2.7.4 confirms that this includes the site licensing process.</p> <p>For the assessment of flood risk to the development, climate change allowances were adopted in line with the Environment Agency and ONR Position Statement on the use of UKCP18 projections (revision 1 published in November 2020). The assessment considers climate change through the scenario RCP8.5 at the 95%ile up to 2140. It should be noted that RCP8.5 is the most conservative scenario (it projects the highest level of climate change) within UKCP18. The assessment of the risk from overtopping of the defence showed that the proposed design of the HCDF would limit overtopping to a tolerable rate (as presented in Table 4.1 of the MDS FRA Addendum [AS-157] (epage 55)), and as such would protect the site up to and throughout the decommissioning phase. Furthermore, the credible maximum climate change scenario was considered in the flood risk assessment, it also resulted in a tolerable rate of overtopping of the HCDF up to the end of the operational phase (2090). Table 4.2 of the MDS FRA Addendum [AS-157] (epage 56), presents the potential flood depths on the platform in the credible maximum climate change scenario beyond the operational phase. It shows the flood depth in such a scenario is likely to be above the door threshold height of +0.2m above the platform (all finished floor levels on the Main Platform are set above the finished ground level, which is secured by the relevant drawings for approval). However, at this point in time the activities on the site would be limited, as the site would no longer be operational, and</p>

ExQ3	Question to:	Question:
		<p>therefore the flood risk to people would be managed and mitigated with appropriate risk management plans. Furthermore, it is noted that inundation to the platform would be during the peak of the surge event only, for a period of approximately 3 hours, and therefore the risk would also be time limited.</p> <p>(ii) As stated in point (i), the flood risk up to 2140 would be managed with appropriate mitigation measures and actions, as set out in Appendix F of MDS FRA Addendum, i.e. the MDS Flood Risk Emergency Plan [AS-170] (epage 43), including in relation to decommissioning of the site and radioactive waste management.</p> <p>The Applicant's approach to the assessment of coastal flooding is validated by the Environment Agency, by reference to the Statement of Common Ground which will be submitted at Deadline 10.</p> <p>SZC Co. also refers the ExA to the Applicant's response to ExQ3 AI.3.2, which also addresses Prof. Blowers' Deadline 7 submission [REP7-169].</p>
CC.3.2	The Applicant	<p>General climate change and policy issues:</p> <p>The Deadline 5 submission of Bill Parker [REP5-191], states that the Applicant has not clarified how the coastline will develop in the long-term and the expected consequences for SZC and the adjacent coastline. Please provide further details to explain how the resilience of the Project would be maintained, taking account of climate change, in response to shoreline evolution and change scenarios over the anticipated site life, including the prospect of the creation of a headland on which the development would sit.</p>
	SZC Co. Response at Deadline 8	<p>It is not possible to clarify long-term coastal change beyond 3-5 decades after development so the Expert Geomorphological Assessment (EGA) of future scenarios only projects as far as 2087 (see Section 7 of Volume 2, Appendix 20A [APP-312]). After this point, the direction and scale of environmental changes become increasingly uncertain (as per the EGA [APP-312]) regarding whether natural coastal change would expose the HCDF in the station's lifetime). However, in the broadest sense there are only two outcome 'types' – either no shoreline retreat at Sizewell (in which case no new marine impacts could develop and the SCDF would not need to be maintained) or recession of adjacent shoreline(s).</p> <p>The latter (recession) is expected and hence the SCDF has been designed and its viability tested and proven across the station life. BEEMS Technical Reports TR544 and TR545 [REP7-101 & REP7-045] clearly demonstrate that persistence and maintenance (see also</p>

ExQ3	Question to:	Question:
		<p>the Coastal Processes Monitoring and Mitigation Plan (CPMMP) [REP5-059] of the SCDF is viable through to the end of the Decommissioning Phase (2140), even for the adaptive design at 2140 which, to be implemented would require the RCP8.5 climate change scenario to be realised. With the SCDF in place and providing mitigation for exposure of the HCDF formation of a headland is not predicted.</p> <p>Based on the above scenario, the resilience of the site to coastal erosion would be maintained by appropriate actions set out in the CPMMP. As such, it is concluded that the level of flood risk to the site throughout its life time would be in accordance with the risk identified and summarised in the MDS FRA [AS-018] and subsequent MDS FRA Addendum [AS-157] and managed through appropriate mitigation measures and actions as set out in Appendix F of the MDS FRA Addendum, i.e. MDS Flood Risk Emergency Plan [AS-170] (epage 43).</p>
CC.3.3	The Applicant	<p>Greenhouse gas emissions:</p> <p>TASC in response to ExQ CC.2.5, state that there has been very little narrowing of the disagreement between the parties in relation to the adequacy of the Applicant's evidence on the carbon impacts of the construction, decommissioning and storage phases of the proposal and the detail necessary to justify the Applicant's figures has not been provided. Please explain and justify the absence of the details sought and why those aspects of the project which will generate a carbon footprint cannot be itemised and ascribed a figure based on known or estimated units and metrics with a view to enabling a more transparent picture of the carbon debt that SZC represents to be ascertained.</p>
	SZC Co. Response at Deadline 8	<p>Please see SZC Co.'s Deadline 8 response to ExQ2 CC.2.5 (Doc Ref. 9.96). The response is repeated below:</p> <p>The Life Cycle Assessment (LCA) performed for Sizewell C by Ricardo AEA used a proprietary database (Ecoinvent¹) which has an established reputation as a leading source of life cycle impacts. It is often used for LCA studies. Ecoinvent is a proprietary database, Ricardo AEA has paid for a licence to use the database and publish analysis which makes</p>

¹ <https://www.ecoinvent.org/home.html>

ExQ3	Question to:	Question:
		<p>use of the data. However, as the data is the property of Ecoinvent, Ricardo (and other users of the database) cannot publish the Ecoinvent data in the public domain.</p> <p>The study was conducted under publicly available Product Category Rules (PCRs) which define rules, requirements and guidelines for developing Environmental Product Declarations (EPDs)² in order to ensure the approach taken to calculation was transparent and to the extent possible met standards required to obtain an EPD – an internationally recognised standard for assessing lifecycle impacts.</p> <p>Third-party verification of the analysis was performed by WSP UK Ltd, who scrutinised the analysis including the data used, calculation approach and consistency with the PCR requirements. WSP's final review statement (which is included in the LCA report) states: <i>The carbon LCA report: Ref: ED 13018102 has been independently reviewed by WSP and deemed to be fully conformant with the requirement of ISO 14040:2006 and ISO 14044:2006 and partially conformant with the PCR - Electricity, Steam and Hot Water Generation and Distribution PCR2007:08, version 4. The LCA model, its underlying data, data assumptions, impact assessment method, results and interpretations were fully disclosed by Ricardo for verification and are adequately elucidated in the LCA report to enable transparent communication with the public.</i></p> <p>In summary, therefore, the further details sought by TASC cannot and do not need to be provided. The approach adopted is robust and accords with best practice and guidance, and offers appropriate transparency.</p>
CC.3.4	The Applicant	<p>Greenhouse gas emissions:</p> <p>Stop Sizewell C's Deadline 7 submission queries the Applicant's estimation of the carbon footprint of the build and how, after increasing almost 10% from 5.7Mt to 6.2Mt CO₂(e) this would seem to have fallen some 40% to around 3.8Mt. (i) Please provide a full and detailed explanation of the change in the anticipated carbon footprint. (ii) In the event that Change Request No 19 is accepted into the Examination, please set out any change in carbon footprint as a result of the proposed water desalination plant.</p>

² <https://test1.environdec.com/PCR/What-are-product-category-rules/>

ExQ3	Question to:	Question:
	SZC Co. Response at Deadline 8	<p>(i) A detailed explanation of the factors that have contributed to the change in the estimated carbon emissions was provided in the response to ExQ2 CC.2.6 at Deadline 7 [REP7-056] (e-page 113).</p> <p>(ii) SZC Co. will provide an update on the carbon footprint calculation for the proposed desalination plant by Deadline 10.</p>
CA.4 Compulsory acquisition		
CA.3.0	The Applicant	<p>Whether adequate funding is likely to be available:</p> <p>The Applicant's Deadline 7 Written Submissions Responding to Actions Arising from Compulsory Acquisition Hearing 1 Part 1, at Section 1.10 deal with the provision of updates to the cost estimate for the Project. Whilst the ExA does not seek the provision of commercially sensitive information, it does seek to be updated in relation to any changes to the overall figure that has been provided as part of the application. (i) Please clarify the position, especially as it was indicated at the CAH Part 1 that there would be updates before the end of the planning process. (ii) If such an update is available before the end of the Examination, then please confirm that it will be submitted. (iii) Since the Applicant has indicated that this is an ongoing process please indicate whether the Applicant is at this stage aware of any information or reason to believe that the overall figure will change?</p>
	SZC Co. Response at Deadline 8	<p>(i) The cost estimate will be updated after the examination has closed and prior to the Secretary of State making the decision with respect to the Sizewell C application, which is expected in April 2022.</p> <p>(ii) An update to the cost estimate will not be completed during the examination.</p> <p>(iii) As described in the response to ExQ1 CA.1.28, the cost estimate between now and Financial Close will vary, though this variation is expected to be limited in the context of the project's overall cost estimate. The factors giving rise to these variations are understood and inevitable for a large infrastructure project at this stage in its development and include (but are not limited to): ongoing negotiations with the supply chain; development of engineering scope and site studies; and confirmation of the construction schedule.</p> <p>These variations in the cost estimate are also not expected to affect the project's ability to secure sufficient finance to meet the project's total capital expenditure. This is because under the RAB funding model being developed with the Government, increases in the cost</p>

ExQ3	Question to:	Question:
		estimate between now and Financial Close will result in an increase to the project's future revenue stream. In turn this revenue provides the basis for the finance required to meet the project's total construction cost (including risk and contingency) at Financial Close.
CA.3.1	The Applicant	<p>Whether adequate funding is likely to be available:</p> <p>The Applicant's Deadline 7 Written Submissions Responding to Actions Arising from Compulsory Acquisition Hearing 1 Part 1, at Section 1.11 sets out the new Draft DCO Article 87 intended to provide security for Compulsory Acquisition costs. Please provide relevant extracts of the articles from all the other DCOs on which it is stated the drafting is based.</p>
	SZC Co. Response at Deadline 8	<p>Swansea Bay Tidal Generation Station Order 2015, article 7:</p> <p>7.— Guarantees in respect of payment of compensation, etc.</p> <p>(1) The authorised development must not be commenced, and the undertaker must not exercise the powers in articles 24 to 37, until—</p> <p>(a) subject to paragraph (3), security of £10.5 million has been provided in respect of the liabilities of the undertaker to pay compensation under this Order; and</p> <p>(b) the City and County of Swansea Council has approved the security in writing.</p> <p>(2) The security referred to in paragraph (1) may include, without limitation, any 1 or more of the following—</p> <p>(a) the deposit of a cash sum;</p> <p>(b) a payment into court;</p> <p>(c) an escrow account;</p> <p>(d) a bond provided by a financial institution;</p> <p>(e) an insurance policy;</p> <p>(f) a guarantee by a person of sufficient financial standing (other than the undertaker).</p> <p>(3) The City and County of Swansea Council may agree to the substitution of a different sum to that of £10.5 million referred to in paragraph (1), having regard to the liabilities of the undertaker to pay compensation under this Order existing at the time of the approval referred to in that paragraph.</p>

ExQ3	Question to:	Question:
		<p>(4) The authorised development must not be commenced until—</p> <p>(a) the undertaker has provided to the City and County of Swansea Council written evidence (which may comprise a written certificate given by a professional firm) of—</p> <p>(i) the construction contracts in respect of Works No. 1a, 1b and 2a and a contract for the procurement of hydroturbines for installation in Work No. 2a; and</p> <p>(ii) financial provision to secure the delivery of the works and procurement referred to in paragraph (i); and</p> <p>(b) the City and County of Swansea Council has given written confirmation that it is satisfied that such financial provision is sufficient.</p> <p>(5) The undertaker must pay to the City and County of Swansea Council the reasonable and proper costs, charges and expenses that the City and County of Swansea Council may reasonably incur in obtaining legal or financial advice in respect of giving the confirmation of satisfaction referred to in paragraph (4)(b).</p> <p>(6) The City and County of Swansea Council is to have no liability to pay compensation in respect of the compulsory acquisition of land or otherwise under this Order.</p> <p>Rookery South (Resource Recovery Facility) Order 2013, article 8:</p> <p>8.— Guarantees in respect of payment of compensation</p> <p>(1) The authorised development must not be commenced and the undertaker must not begin to exercise the powers of articles 17 to 27 of this Order unless either a guarantee in respect of the liabilities of the undertaker to pay compensation under this Order or an alternative form of security for that purpose is in place which has been approved by the relevant planning authorities.</p> <p>(2) A guarantee given in respect of any liability of the undertaker to pay compensation under this Order is to be treated as enforceable against the guarantor by any person to whom such compensation is payable.</p> <p>Able Marine Energy Park DCO 2014, article 14:</p>

ExQ3	Question to:	Question:
		<p>14.— Guarantees in respect of payment</p> <p>(1) The authorised development must not be commenced and the undertaker must not begin to exercise the powers conferred by Part 5 (powers of acquisition) unless either guarantees or alternative forms of security for that purpose in respect of—</p> <p>(a) the liabilities of the undertaker to pay compensation under this Order; and</p> <p>(b) the liabilities of the undertaker to construct and maintain the compensatory environmental habitat referred to at paragraph 4(a) of Schedule 1 (authorised development) and any additional compensatory habitat identified in the compensation environmental management and monitoring plan,</p> <p>are in place which have been approved by the relevant planning authority.</p> <p>(2) A guarantee given in respect of any liability of the undertaker to pay compensation under this Order is to be treated as enforceable against the guarantor by any person to whom such compensation is payable.</p> <p>Thorpe Marsh Gas Pipeline Order 2016, article 35:</p> <p>35.— Guarantees in respect of payment of compensation</p> <p>(1) The undertaker must not begin to exercise the powers of compulsory acquisition set out in articles 20 to 32 in relation to any land unless it has first put in place either—</p> <p>(a) a guarantee in respect of the liabilities of the undertaker to pay compensation under this Order in respect of the exercise of the relevant power in relation to that land; or</p> <p>(b) an alternative form of security for that purpose which has been approved by the Secretary of State.</p> <p>(2) A guarantee or alternative form of security given in respect of any liability of the undertaker to pay compensation under this Order is to be treated as enforceable against the guarantor by any person to whom such compensation is payable and must be in such a form as to be capable of enforcement by such a person.</p> <p>(3) The guarantee or alternative form of security must be in place for a maximum of 15 years from the date that the relevant power of this Order is exercised.</p>
CA.3.2	The Applicant	Whether adequate funding is likely to be available:

ExQ3	Question to:	Question:
		The Applicant's response to ExQ CA.2.8 (iv) <i>"Please respond to the queries raised by the Stop Sizewell C DL3 comments [REP3-133] in relation to whether the predicted cost and/or contingencies include the potential for multiple adaptive approaches to the sea defences and price rises in construction materials?"</i> , simply states that <i>"(iv) SZC Co.'s cost estimates are being regularly updated"</i> . Please provide a full and detailed response to the question asked.
	SZC Co. Response at Deadline 8	<p>The contingency for the project will be determined with reference to a comprehensive portfolio of construction uncertainties in line with industry best practice. The portfolio of risks includes the potential for required changes to the design of buildings during the construction phase (including the sea wall) and changes in the cost of materials. The contingency allowance at the point of financial close will reflect up to date information at that point.</p> <p>The current cost estimate reflects the current design of the sea wall. Any potential adaptations to the sea wall design due to changes in forecast future climate conditions are not expected within the construction period (if at all) because of the conservative assumptions about future climate conditions that underpin the current design. Adaptions are therefore not specifically included in the construction phase contingency estimate. It should be noted that under the RAB model – there is pre-defined consumer funding for cost increases above the contingency estimate (for any reason), which means there will be sufficient finance to meet unanticipated cost increases above the contingency amount.</p> <p>If work is required for adaptations to the sea wall, it is therefore assumed that this will occur after the project has begun operating. At this point the project will have multiple potential sources of funds available to meet these costs (as well as any other maintenance / operating phase capital expenditure) including positive cash flow, reserve accounts, access to capital markets.</p>
CA.3.3	The Applicant	<p>Whether adequate funding is likely to be available:</p> <p>The Applicant's response to ExQ CA.2.6 (iii) <i>"The Applicant relies upon its DL2 submission in relation to the DL3 response by Stop Sizewell C [REP3-133] and does not seek to rebut or clarify the quoted comment made by EDF CEO Simone Rossi to Reuters' Global Energy Transition conference. Does that comment to the effect that there is no Plan B in the event the government did not advance with the legislation for the RAB model represent the Applicant's position?"</i>, states that <i>".... As the choice of funding model is a question for</i></p>

ExQ3	Question to:	Question:
		<i>Government, SZC Co. considers that the existence of a Plan B funding model is also a question for Government. However, SZC Co notes its confidence that the RAB model discussions will be successful and observes that a number of funding models have historically been applied (internationally and in the UK) to successfully bring forward other new nuclear projects". Please clarify whether that means that the answer to the question posed is "yes". If not, what are the Applicant's Plan B funding models for the scheme and are there any timing implications associated with those alternative models?</i>
	SZC Co. Response at Deadline 8	<p>It would be unduly simplistic to treat the Applicant's position on this issue as being encapsulated in the brief comment to which reference has been made. The Applicant's position in relation to the potential for 'Plan B' funding models and any timing implications is as summarised below.</p> <p>SZC Co. considers that the funding model for any new nuclear project is highly likely to be provided through a form of public support provided by and ultimately approved by the Government (for example the RAB model or the CfD model applied at Hinkley Point C). The response to ExQ2 CA2.6. was intended to explain that any potential funding model for new nuclear (including any 'Plan B') will ultimately be a matter for the Government to determine as a matter of national policy, and not something that SZC Co. can itself determine in isolation. Hence reference to "the Applicant's Plan B funding models" (emphasis added) is not an appropriate way to describe the way that any alternative funding model would be developed and adopted.</p> <p>SZC Co.'s current discussions with the Government are focused on the RAB model and do not currently include considerations of any alternative 'Plan B' funding models. That reflects the positive nature and progress of the discussions relating to the RAB model, and thus the absence of any need to invest time in the development and assessment of an alternative. However, if that were to become necessary, it is SZC Co's expectation that the Government would explore other funding models.</p> <p>That expectation is informed by, and is consistent with, the Government's position set out in the Energy White Paper at page 49: <i>"Last year, we consulted on a Regulated Asset Base (RAB) model for private investment in new nuclear generation. Today we are publishing a summary of the responses which have indicated that a RAB model remains credible for funding large-scale nuclear projects. The government will continue to explore this,</i></p>

ExQ3	Question to:	Question:
		<p><i>alongside a range of financing options, with the developer of the next large-scale project in the pipeline and other relevant stakeholders, including other nuclear developers."</i></p> <p>In the unlikely event that the Government decided not to proceed with the RAB model for Sizewell C, the Government may decide, therefore, that it wanted to consider bringing Sizewell C forward with an alternative funding model (though this is of course a question for the Government). If this were to occur, SZC Co. would work with the Government to develop any potential new funding model. The timing implications of such a scenario would depend on many factors, including in particular those relating to the Government's own decision-making and providing an estimate at this stage would be speculative and not an appropriate task for SZC Co.</p>
CA.3.4	The Applicant, SCC	<p>Protective Provisions:</p> <p>The Applicant's Deadline 7 Written Submissions Responding to Actions Arising from Compulsory Acquisition Hearing 1 Part 1, Section 1.13 considers Part 1 claims under the Land Compensation Act 1973 and at Section 1.15 considers the need for protective provisions for SCC. It concludes that there is no need for further protections. (i) Please indicate whether that this is now an agreed position, including in relation to any drafting changes to Article 21 (ii) Does SCC have any outstanding concerns in relation to the Land Compensation Act 1973 or Protective Provisions sought to safeguard its interests?</p>
	SZC Co. Response at Deadline 8	<p>SZC Co. understands that SCC is close to being comfortable that article 21 safeguards its concerns sufficiently. It is understood that SCC accepts that any Part 1 claims would (by virtue of the provisions of the Planning Act 2008) be payable directly by SZC Co rather than by the local highway authority. SZC Co. understands that SCC's only remaining concern is to agree a suitable level of highway design and supervision fees under Schedule 16 (para 14) of the Deed of Obligation. Negotiations in this regard are ongoing. But once settled it is understood that SCC intends to drop its request for protective provisions.</p>
Cu.3	Cumulative impact	
Cu.3.0	The Applicant, EA	<p>Cumulative impacts of coastal processes:</p> <p>The EA's post hearing submission of oral case at ISH6 [REP5-149] states that with regard to the BLF, HCDF and SCDF it cannot scrutinise cumulative impacts at this stage because of outstanding modelling – adapted HCDF design and morphodynamics of SCDF beyond 2099 – required to inform their position. The same applies to in-combination impacts with</p>

ExQ3	Question to:	Question:
		other projects such as EA1 and 2. (i) In the light of information provided by the Applicant at DL7 can a response on cumulative impacts now be provided? (ii) If not, what further information is required? (iii) The Applicant is requested to summarise and update its position in relation to cumulative impacts in the light of the latest information that has been submitted.
	SZC Co. Response at Deadline 8	<p>(iii) The updated modelling of the SCDF (which itself is mitigation) included in BEEMS Technical Reports TR544 and TR545 [REP7-101 and REP7-045] has not caused SZC Co to revise its position in relation to cumulative impacts and so the assessment of cumulative impacts provided in the First ES Addendum, Volume 1, Chapter 10 [AS-189] remain SZC Co's position.</p> <p>SZC Co's position remains that, having assessed the likely significance of cumulative effects, these are assessed as minor (Not Significant) but in recognition of uncertainty with regard to longshore bar dynamics, provision for monitoring of these features (and mitigation if required) is made within the CPMMP [REP5-059].</p>
Cu.3.1	The Applicant	<p>Cumulative impacts with other plans or projects:</p> <p>The EA1N and EA2 response to ExQ Cu.2.2 indicates that the parties are progressing Protective Provisions and the associated confidential side agreement to protect EA1N and EA2's interests. (i) Please indicate whether it is still anticipated that those agreed Protective Provisions will be submitted by Deadline 8 and that they will secure the mechanism for the consideration of the interface between the projects at an early stage? (ii) Please confirm that the communications protocol to be agreed between the three parties will be recorded in the SZC TRG? (iii)</p>
	SZC Co. Response at Deadline 8	<p>(i) The proposed draft Protective Provisions are under discussion along with the necessary Side Agreement. It is anticipated that EA1N and EA2 will submit draft Protective Provisions at Deadline 8. The agreement between the parties will clearly set out the communication interface and also specific transport protocols including the management of AiLs.</p> <p>(ii) The primary communications interface will be directly between SZC Co., EA1N and EA2. The TRG will be made aware of all of the transport commitments that SZC Co. has, including the necessary liaison with other projects.</p>
Cu.3.2	The Applicant	Cumulative impacts – Suffolk Coast and Heaths AONB

ExQ3	Question to:	Question:
		In [REP5-176] Suffolk County Council state that they consider there is a need to take a holistic approach in respect of looking at all the effects on the AONB when assessing the extent to which the proposals will undermine its statutory purpose. Please can the Applicant signpost to where such information is located within the application documentation? If such work hasn't been undertaken, please can the Applicant confirm why it is has not considered this to be necessary and if this approach is supported by any guidance or precedent?
	SZC Co. Response at Deadline 8	<p>Tables 13.14 and 13.17 in Volume 2, Chapter 13 of the ES [APP-216] present an assessment of the susceptibility of each of the natural beauty and special qualities indicators of the SCHAONB, a description of the nature of effects and a judgement of the scale and extent of the effects arising during construction and operation. This assessment represents a holistic approach to looking at all the effects on the AONB.</p> <p>Where relevant and appropriate the consideration of effects on natural beauty and special qualities indicators refers to the findings presented in other technical ES chapters, to inform a holistic assessment.</p> <p>Natural Beauty Indicators</p> <ul style="list-style-type: none"> • Under the Factor 'Relative Tranquillity' reference is made to the Amenity and Recreation Assessment (Volume 2 Chapter 15 of the ES [APP-267]). • Under the Factor 'Natural heritage features' reference is made to the Terrestrial Ecology and Ornithology Assessment (Volume 2 Chapter 14 of the ES [APP-224]). • Under the Factor 'Cultural heritage' reference is made to the Terrestrial Historic Environment Assessment (Volume 2 Chapter 16 of the ES [APP-272]). <p>Special Qualities Indicators</p> <ul style="list-style-type: none"> • Under the Factor 'Health and Well-being' reference is made to the Amenity and Recreation Assessment (Volume 2 Chapter 15 of the ES [APP-267]). • Under the factor 'Economy' reference is made to the Soils and Agriculture Assessment (Volume 2 Chapter 17 of the ES [APP-277]), Amenity and Recreation Assessment (Volume 2 Chapter 15 of the ES [APP-267]) and Socio-economics Assessment (Volume 2 Chapter 9 of the ES [APP-195 and APP-196]).

ExQ3	Question to:	Question:
		Judgements of the overall effects on the SCHAONB arising from construction are presented in paragraphs 13.6.145 – 13.6.150. Judgements of the overall effects on the SCHAONB arising from operation are presented in paragraphs 13.6.316 – 13.6.321.
CG.3 Coastal Geomorphology		
CG.3.0	The Applicant	<p>Impacts on coastal processes:</p> <p>The Minsmere Sluice Operation and Impacts Review, at paragraph 1.5.26, [Appendix M to REP6-024], sets out the reasons why the Applicant does not consider that the potential accretion on the Minsmere frontage arising from the deposition of SCDF sediments would not extend to the sluice and hence would not affect the sluice's ability to discharge. Paragraph 1.5.27, refers to the provision of further information and detail on the modelling and assessment of coastal processes and sediment transport in the application documents. However, please provide a summary of the evidence (with specific document and paragraph references) to support and explain further the assertions made in paragraph 1.5.6 (a) to (c) of the Review.</p>
	SZC Co. Response at Deadline 8	<p>The following answer is based on the assumption that the ExA is referring to paragraph 1.5.26 and not 1.5.6.</p> <p>The evidence for each point (a) to (c) of the Minsmere Sluice Operation and Impacts Review paragraph 1.5.26 [Appendix M, REP6-024] is contained in Section 2.3.4.2 of Volume 2, Appendix 20A of the ES [APP-312].</p> <p>Paragraph 1.5.26 (a) reads: "SCDF beach shingle (proposed mitigation) would, in net terms, drift slowly to the south, not to the north. Some shingle may accumulate immediately to the north of Sizewell C, but not as far as the sluice (longshore transport calculations and tracer studies indicate that detectable volumes of SCDF shingle are not likely to be encountered more than a few hundred metres north of Sizewell C). Therefore, there would be no impact at the Minsmere Sluice outfall.":</p>

ExQ3	Question to:	Question:
		<p>1. The existing coastal processes and the relatively small volumes of sediment added by the SCDF do not support transport to, nor cause deposition at, the sluice that could interfere with its operation. The evidence for this derives from:</p> <ul style="list-style-type: none"> the literature on longshore transport (all studies indicate net southward transport – that is away from the sluice, not toward it; Volume 2, Appendix 20A of the ES [APP-312]) and SZC Co's shingle transport study synthesised in Section 2.3.4.2 of Volume 2, Appendix 20A of the ES [APP-312], which showed: <ul style="list-style-type: none"> Beach shingle in the sub-bay between Minsmere Sluice and Thorpeness is transported by waves only (and no other driver) that the waves move shingle slowly south away from the sluice and with a point of divergence between Sizewell C and the sluice –meaning that the potential for net northward transport falls to almost zero before the sluice. <p>2. Furthermore,</p> <ul style="list-style-type: none"> The sediment available for transport during storms is effectively the same with and without the SCDF as waves can only mobilise sediment from the exposed beach face. This means that during SE storms the same amount of sediment would move toward the sluice regardless of the presence of the SCDF. The pebbly component of beach/SCDF shingle (and the SCDF) cannot easily disrupt the outfall pipe as beach pebbles are largely confined above low-tide, whereas the outfall head is around 30 m seaward of low-tide; The sandy component of beach/SCDF shingle is highly mobile and when mobilised from the SCDF during storms would be dispersed widely and depositing as a very thin layer with no measurable effect at the sluice (due to the very wide area of which sands would be deposited); The SCDF does not affect the waves nor their ability to transport sediment, thus the sediment transport rate at the sluice will remain unchanged from the present and there would be no detectable impact. <p>Paragraph 1.5.26 (b) reads: "Any SCDF sediments that are transported north of Sizewell C would most likely be deposited and retained in areas where the shoreline has already receded to a more westerly position than the SCDF (tens to a few hundred metres north of</p>



ExQ3	Question to:	Question:
		<p><i>Sizewell C). This would tend to trap shingle and prevent further northward transport for as long as the more westerly shoreline position persisted."</i></p> <ol style="list-style-type: none"> 1. Paragraph 1.5.26 (b) refers to the likely future case of natural erosion north of Sizewell C shifting the shorelines to a more landward or westerly position than the maintained SCDF shoreline. 2. The backdrop is that any sediment transported to the north will be returned to the south, under the net southerly transport. 3. Natural shoreline recession is higher just north of Sizewell C than it is toward the sluice. If shoreline recession continued, it would lead to a gradual clockwise rotation of the shore toward a more ESE facing aspect and a reduction in the angle between waves and the shoreline and, therefore, a reduction in the potential for northward transport (during SE storms). 4. At its juncture with Sizewell C the shoreline would curve seaward to join the SCDF's more ENE facing frontage, which itself would be prone to erosion during SE storms (as shown in TR545 [REP7-045]). Eroded northbound sediments would deposit when they reach the ESE shoreline (< 100 m), hence a localised sediment trap. 5. It is important to note that the pressures of sea level rise would lead to a gradual erosion pressure which would be superimposed on all areas. <p>For the reasons given in the previous paragraphs, there is no evidence to suggest that the natural function of the sediment transport around the sluice outfall could be affected by Sizewell C, because it does not affect the wave and tidal flows that determine the quantity of sediment which reaches this location.</p> <p>Paragraph 1.5.26 (c) reads: <i>"The sluice's outfall pipe will continue to disrupt natural shingle transport for as long as it is present, which can be seen as an alternating accumulation of sediment on either side of the sluice determined by storm direction. Sizewell C's activities will have no bearing on that process."</i></p> <ol style="list-style-type: none"> 1. As explained in Section 2.1 and the photographs shown in Figure 2 of BEEMS Technical Report TR544 [REP7-101], the sluice's outfall pipe cuts directly through the beach and runs to about 30 m seaward of the shoreline. As a result, it is a

ExQ3	Question to:	Question:
		<p>barrier to longshore sediment transport and acts like a groyne, causing a build-up on the updrift side and erosion downdrift (which reverses with storm direction). Although some beach shingle can pass over the outfall pipe (above the high tide mark) and subtidal sands pass around its 30 m protrusion into the sea, subaerial beach sediment will continue to be locally trapped until the barrier – the outfall pipe – is removed or naturally decays.</p> <p>Furthermore, at the Issue Specific Hearing 11, Mr Gary Watson for the Environment Agency agreed that Sizewell C's activities, and specifically the SCDF, would not affect the sluice's ability to discharge. East Suffolk Council deferred to the Environment Agency's opinion on the matter.</p>
CG.3.1	The Applicant	<p>Impacts on coastal processes:</p> <p>The Environment Agency (EA) [REP5-149] – indicates that it would welcome a provision in the draft DCO for the removal of the HCDF after decommissioning. The Applicant's position is that it is inappropriate to make provision at this point is noted. Nevertheless, please indicate if it is known at this stage whether there are likely to be any technical reasons to prevent the HCDF removal after decommissioning?</p>
	SZC Co. Response at Deadline 8	<p>SZC Co does not consider there to be any technical reason which would prevent removal of the HCDF after decommissioning; however, as previously submitted, such decision will be subject to assessment at the time (to be set out in a monitoring and mitigation cessation report in accordance with the CPMMP [REP5-059]). The CPMMP also records the default position to be removal of the HCDF, but confirms that such decision must be subject to, and only confirmed after, assessment at that later point in time."</p>
CG.3.2	ESC, EA	<p>Impacts on coastal processes:</p> <p>The Applicant accepts [REP5-118] that recent modelling shows during and beyond decommissioning the SCDF maintained coast could become a foreland and even though it is releasing sediment, the SCDF may begin to disrupt longshore sediment transport. It states that this matter is in hand as it has the right monitoring to detect whether there has been a blockage and three mitigation methods for beach maintenance are planned to correct that. A section in the CPMMP [REP5-059] has been added to more explicitly reflect this point. Please confirm that it is agreed that the CPMMP revision achieves that objective</p>

ExQ3	Question to:	Question:
		and that the monitoring, mitigation methods and triggers set out in section 7 are satisfactory and agreed?
	SZC Co. Response at Deadline 8	No response required by SZC Co.
CG.3.3	The Applicant	<p>Impacts on coastal processes:</p> <p>Natural England (NE) in its comments on revision 4 draft DCO/DML – 4 (2) a (v [REP5-159] highlights that the use of temporary rock construction or jack barge is not assessed in the marine ecology chapter. Please indicate (with specific references) where this been assessed in the ES?</p>
	SZC Co. Response at Deadline 8	<p>In preliminary consultation with stakeholders, the use of a temporary rock armour platform was proposed as one potential means to construct the subtidal elements of the Beach Landing Facility (BLF). However, this option was subsequently discontinued and not incorporated within the DCO application in May 2020 and so it does not feature in the Environmental Statement.</p> <p>Jack-up barges would be required for the installation of mooring dolphins associated with the BLF ([AS-181] see Table 2.37). The impacts of the jack-up activities at the terminus of the BLF are anticipated to occur within the footprint of dredge activities. Dredging activities associated with the BLF are outlined in Table 2.42 of [AS-181]. The use of jack-up barges to construct the BLF was not assessed in the Marine Ecology Chapter but was assessed in the Coastal Geomorphology and Hydrodynamics Chapter of the ES [APP-312] in relation to scour at section 20.8.9 which states that <i>"The impacts of a jack-up barge would be equivalent to that of the BLF structure (presence of piles), albeit for a substantially shorter duration, and so would not be significant. The jack-up barge would have minor hydrodynamic effects around the legs and would not be present for long enough to allow equilibrated scour pits to develop. It would have a negligible effect (not significant) on the outer longshore bar near the mooring dolphin locations."</i></p> <p>At the MBIF, a jack-up barge will be used for the installation (and removal) of the mooring dolphins as these are too far from the BLF decks to use a cantilever installation method ([AS-181] see Table 2.38). Section 2.2.82 of [AS-181] specifies that <i>"with the exception of the mooring dolphins, which would be installed using a jack-up barge, the temporary BLF [MBIF] would be predominantly constructed without placing construction vehicles into</i></p>

ExQ3	Question to:	Question:
		<p><i>the sea.</i>" No dredging on the seabed is required for the MBIF. As such, the impacts of jack-up barges on benthic receptors represent an additional impact. The direct impacts of spud placement and scour on marine ecology benthic receptors would be akin to those assessed for the case where jack-up barges would be required for operational maintenance at the Unit 2 cooling water intakes and cooling water outfalls (located in soft sediment) (assessed in the benthic ecology section of the Marine Ecology and Fisheries ES [APP-317] see paragraph 22.7.458).</p> <p>The presence of the jack-up barge and anchor chains would result in localised surface and sub-surface abrasion in the soft sediment environment near the mooring dolphins of the MBIF. The predicted depression and scour pit resulting from the jack-up spuds as well as infilling rates has been modelled (Appendix 20A [APP-312], see paragraphs 4.2.1.3 and 4.3.1.2). Results showed that scour is likely to occur over a very small area, and in the worst-case scenario, infilling rates are such that changes to the seabed would be short term (<50 days) (Appendix 20A [APP-312], see paragraphs 4.2.1.3 and 4.3.1.2). The impact magnitude is therefore very low.</p> <p>The presence of the jack-up barge at the MBIF location would affect benthic invertebrates in soft sediments as these would be expected to have no resistance abrasion from the spud legs and anchor points. However, a very small proportion of benthic habitat would be affected. The rapid infilling rates would mean habitat changes would be short-term, and recolonization could occur. Soft sediment benthic receptors are hence not sensitive to the pressure. Effects are predicted to be negligible, as per the assessment for the maintenance of the CWS outfall and northern intake ([APP-317] see paragraph 22.7.458).</p>
CG.3.4	The Applicant	<p>Impacts on coastal processes:</p> <p>The Deadline 6 submission of Nick Scarr [REP6-068], states that: "<i>the safety of Sizewell C cannot be entrusted to an 'adaptive plan', if indispensable geomorphological receptors are not within the control of human agency</i>". He has also provided a summary of his papers REP2-393, REP5-253 and Deadline 7 in relation to the Sizewell Dunwich banks. Please explain: (i) How it would be possible to maintain the integrity of a depleting or restructuring offshore geomorphology including the Dunwich Bank. If that is not possible, nor intended, please set out any implications arising from that prospect and where this</p>

ExQ3	Question to:	Question:
		has been assessed? (ii) Is it agreed that the Dunwich Bank represents a key driver to Sizewell shoreline security and that the safety of Sizewell C relies unreasonably upon the continued stability and integrity of an unpredictable offshore geomorphology? (iii) How would an adaptive plan respond to the changes or loss of such features in the future? (iv) Please explain further why it is not considered necessary to model any changes or degradation of the Sizewell-Dunwich banks in the main Flood Risk and Shoreline change assessments? (v) Is it agreed that if the Dunwich bank is lost the shoreline may return to a period of acute erosion resulting in flooding of the Minsmere levels and Sizewell marsh with consequential flooding to the landward side of the platform?
	SZC Co. Response at Deadline 8	<p>i. There is no identified pathway for SZC to impact the Dunwich Bank [APP-311], so no assessment is deemed necessary. Changes to the geomorphology of the banks is most likely at Dunwich Bank, which is historically variable and not afforded the stable tidal and sediment circulation patterns that give rise to the stability observed at Sizewell Bank. A significant reduction in Dunwich Bank could re-initiate the former severe phase of cliff erosion near Dunwich (which has largely been stable since 1925) and increase the supply of sediment to the southern Sizewell Bay, which historically resulted in shoreline accretion – such an event would reduce the maintenance requirements of the SCDF owing to increased natural sediment supply. The negative implications of natural changes in the offshore banks have been considered in BEEMS Technical Report TR544 [REP7-101] through the application of several layers of conservative calculations into the modelling and viability of the SCDF to account for uncertainty – this includes the modelling approach in BEEMS Technical Report TR545 [REP7-045] that excludes the bank, which is equivalent to a no-bank scenario. As the modelling without the bank demonstrates SCDF viability, offshore changes only influence (increase or decrease) the maintenance requirement for the SCDF, but do not affect viability.</p> <p>ii. No. As discussed in point (i) above, the safety of Sizewell C does not rely on the stability of offshore geomorphology. SZC Co. tested the extreme conditions using a range of bank configurations (bank in situ, bank eroded and bank fully removed) to determine which was the worst in terms of the flood risk to the Project, i.e. which would result in the greatest risk of overtopping. This is discussed in Section 5.3 of Appendix A of the Coastal Modelling Report (Appendix 1 of the MDS FRA [APP-094] (epage 67)), where the assessment concluded that the Baseline scenario, i.e. with</p>

ExQ3	Question to:	Question:
		<p>the Sizewell - Dunwich bank in situ, resulted in more conservative (i.e. worst case) nearshore wave conditions than with its removal and subsequently the assessment assumed a greater risk of overtopping. As such, the worst case scenario was adopted in the MDS FRA and the results presented in Table 4.1 of the MDS FRA Addendum [AS-157] (epage 55) show that for the basis of design event (1 in 10,000-year) with climate change allowances, the HCDF would protect the site keeping the overtopping rates within a tolerable level.</p> <p>iii. SZC Co. acknowledges that natural events may precipitate changes in the SCDF maintenance regime, increasing it or decreasing it. However, as this is trigger based, it will already be specified in the CPMMP and so isn't part of Adaptive Environmental Assessment and Management. The CPMMP will undergo regular review through the life of SZC and any changes to monitoring extent or mitigation that are necessary can be made if approved by ESC and the MMO.</p> <p>iv. To clarify, changes or degradation in the Sizewell – Dunwich Banks have been considered within both the FRA and coastal geomorphology assessments.</p> <p>The FRA considered different bank scenarios to determine the worst-case bank scenario for the FRA (discussed in Appendix 1 of the MDS FRA [APP-094] (epage 67)) that would result in the greatest overtopping risk to the site, and as a result adopted a conservative approach. The Environment Agency confirmed in ISH11 (transcript for ISH11 Session 2 epage 3) that they were content with how it was modelled and how it was represented within the flood risk assessment.</p> <p>For coastal geomorphology the modelling to test the viability of the SCDF excluded the influence of the Bank, increasing the conservative nature of the assessment. The Environment Agency agreed that this approach was suitable at Issue Specific Hearing 6 [REP5-148].</p> <p>v. SZC Co. does not agree that if the Dunwich bank is lost and the shoreline returns to a period of acute erosion that it would result in flooding of the Minsmere levels and Sizewell marsh with consequential flooding to the landward side of the platform. If Dunwich Bank were lost or substantially reduced (in extent or elevation) there is a greater potential for erosion of the shoreline around Dunwich and, importantly, the</p>

ExQ3	Question to:	Question:
		<p>Minsmere – Dunwich Cliffs, resulting in a local increase in the supply of sand and pebbles (i.e., beach shingle) from the cliffs. This sediment would move south and could reduce erosion rates. Reduced erosion rates could tend to increase resistance to flooding over the Minsmere and Sizewell frontages.</p> <p>Indeed, severe erosion in the 1800s was associated with shoreline accretion south of the Minsmere Levels, including Sizewell.</p>
CG.3.5	The Applicant, ESC	<p>Impacts on coastal processes:</p> <p>ESC in its written summary of oral case at ISH6 [REP5-144] sets out under item 2(b) a list of information and details that it states are required. In addition, ESC in its 'Comments on Temporary and Permanent Coastal Defence Feature Plans [REP5-015]' [REP6-032] seeks further information, profile drawings and sections in relation to the temporary and permanent coastal defence features. ESC in its written summary of oral case at ISH6 [REP5-144] sets out under item 2(b) a list of information and details that it states are required. It is noted that the Applicant has provided some further information and plans at Deadline 7. (i) Please specify what, if any additional information sought by ESC remains outstanding and when this information will be provided. (ii) If it is not intended to provide all the information sought, please explain why?</p>
	SZC Co. Response at Deadline 8	<p>[REP5-144] item 2b requests the following items, listed alongside the locations where the Applicant considers the information has been provided. The Applicant considers that all the information sought has been provided, or will have been provided at Deadline 8.</p> <ul style="list-style-type: none"> - evidence that the Hard Coastal Defence Feature (HCDF) is located as landward as possible; this is described in Section 3.9 of [REP2-116], an update of which will be provided at Deadline 8 (Doc. Ref. 9.13(A)). The Deadline 8 update will explain how a further 5m of landward movement of the main run of HCDF, and of 15m at the BLF/ Northern Mound area have been achieved. The HCDF alignment with these reductions, placing the HCDF toe at Eastings 647615, is shown in [REP5-015]. - evidence that the HCDF foundation is resilient to coastal change over the life of the Project; Resilience of the HCDF to coastal change is assured by the provision and through-life maintenance of the Soft Coastal Defence Feature (SCDF), described in Section 3.7 of [REP2-116] and also in [REP7-101] which has been updated to 2140 timeframe.



ExQ3	Question to:	Question:
		<p>Viability of maintenance is also addressed in [REP7-101]. An update of [REP2-116] will be provided at Deadline 8 to reference [REP7-101].</p> <ul style="list-style-type: none"> - evidence that the profile and makeup of the Soft Coastal Defence Feature (SCDF) will not obstruct native sediment transport along the frontage; refer to [REP7-101] "Preliminary Design and Maintenance Requirements for the Sizewell C Coastal Defence Feature - Revision 3.0." - evidence that maintenance of the SCDF is viable over the lifetime; Maintenance of the SCDF during the required lifetime is described in Section 3.7.d of [REP2-116] and [REP7-101]. Conventional maintenance activities of recharge with imported material are proposed, and are considered feasible and viable: refer to [REP5-059], Coastal Processes Monitoring and Mitigation Plan. - an assessment of the impact of an Adapted HCDF (that advances circa 17m seaward) will not impede sediment transport; [REP7-101] now includes the adaptive design. We note that most of the 17m advance is buried by the SCDF and will therefore not impede sediment transport under most conditions. - further detail on the proposed profile of the HCDF and SCDF at most vulnerable: The Applicant has provided details of the HCDF and SCDF at typical locations in [REP2-116], an update of which will be provided at Deadline 8, with updates and additional details at the Northern Mound in [REP5-015]. Further details will be developed at the detailed design stage. - evidence that the May 2020 DCO / ES conclusions regarding HCDF impact and methods of mitigation [APP-311, APP-312] have not changed in light of the seaward advance of the HCDF since then (currently 8m over the central majority and further at the overlap with the Sizewell B defence, albeit ESC understands that this position may change with the submission of further detail from the Applicant); [REP7-101] now includes the 5m setback, the pared back alignment at the BLF and the SZB overlap alignment. No change to impact and mitigation are foreseen as a result. - clarification of the forecast date (2140) when the HCDF is no longer needed to protect the nuclear site. This date is the date by which all nuclear materials and safety functions will have been removed from the SZC site, following decommissioning of the SZC Plant and removal of spent fuel from the site.

ExQ3	Question to:	Question:
CG.3.6	ESC	<p>Impacts on coastal processes:</p> <p>ESC in its 'Comments on the CPMMP Revision 2 [REP5-059]', [REP6-032] indicates that it is still considering whether provision relating to the removal of the HCDF after decommissioning should be included in a Draft DCO Requirement as well as the CPMMP. Has ESC reached a conclusion on this and, if so, what does it seek and why?</p>
	SZC Co. Response at Deadline 8	Please refer to the response provided at ExQ3 CG.3.1.
CG.3.7	The Applicant	<p>Impacts on coastal processes:</p> <p>ESC in its 'Comments on the CPMMP Revision 2 [REP5-059]', [REP6-032] proposes various amendments to the CPMMP. Does the Applicant agree the proposed CPMMP amendments by ESC and, if not please explain why?</p>
	SZC Co. Response at Deadline 8	<p>It should be noted that the CPMMP [REP5-059] is draft and that its final form will need to be approved by ESC pursuant to Requirement 7A, following consultation with stakeholders.</p> <p>Numerous proposed amendments relate to syntax or paragraph construction for consideration to increase clarity and SZC Co. will examine these points for consideration in Revision 4 of the draft CPMMP (Deadline 10).</p> <p>With respect to the request for consultation with the MTF on proposed updates to the adaptive CPMMP, SZC Co is in agreement that this should be written into the next version of the CPMMP as requested, and this commitment was given in ISH11.</p> <ol style="list-style-type: none"> 1. ESC requested revision of the statement made on p27 to the effect that "<i>there is no pathway to impact on the crag</i>" to state instead that no impact is expected and monitoring is required to confirm this hypothesis. <p>SZC Co. does not consider this proposed revision is appropriate, as no pathway to impact has been identified; that is, it is not appropriate to monitor receptors that have no pathway to impact. Such data would have no value in the CPMMP. To date SZC Co. has not been able to identify an activity or pathway, and neither has the MTF nor its constituent members (including ESC).</p>

ExQ3	Question to:	Question:
		<p>2. ESC suggests that annual monitoring of the Sizewell-Dunwich Bank should be required to confirm that bank change remains slow. SZC Co. observes that there are no significant impacts to the bank and therefore there is no requirement to monitor it from an impact perspective. Impacts are predicted to occur in the nearshore zone, which is well-monitored by regular field surveys (2 - 4 per year) and continuous high-frequency remote sensing techniques.</p> <p>SZC Co considers that 5-yearly surveys of the sand bank (double the rate currently conducted by Sizewell B) as proposed on p27 is an appropriate frequency and note the agreement of the EA on this matter in their responses to ExQ2 submitted at D7 [REP7-129]. Further rationale for the 5-yearly surveys includes:</p> <ul style="list-style-type: none"> • The significant amount of evidence already gathered already shows only small bank changes over sub-decadal time periods, which is to be expected as the bank mass is very large (6.5 million cubic metres). • The CPMMP takes an adaptive approach to monitoring and has the facility to undertake <i>ad hoc</i> surveys built-in should reason arise for conducting an interim survey. <p>3. ESC raises several points relating to the definition of secondary mitigation triggers for the SCDF including:</p> <ul style="list-style-type: none"> • p51 – timing of the mitigation triggers in an annexe; • p51 – the details of a ‘wait & see’ approach and the time taken to gauge the level of ‘success’ of secondary mitigation undertaken; • plus p53-54 references to shoreline alignment and crest height triggers. <p>SZC Co has stated that trigger definition is likely to form part of the evolving content within an adaptive CPMMP and proposes that future versions of the CPMMP may develop details in an annexe to the report (e.g., triggers should be reviewed at each Substantive Ten-yearly Review). Due to the requirement for more detailed design work, such triggers are likely to undergo further refinement and consultation with the MTF prior to construction and will require agreement with the discharging authorities.</p>

ExQ3	Question to:	Question:
		<p>4. ESC also suggests that mention of beach recycling at Lowestoft (on p57) should be removed, as these works are at a different site and have been discontinued.</p> <p>SZC Co. recognises these differences but notes that ESC comments do not affect the basic accuracy of the statement, which simply makes the single point that the method is not unprecedented (and indeed recycling activity has been recently observed there). This applies also to ESC concerns over comparisons with other UK sites used to illustrate the general principles. SZC Co. introduces these examples not to suggest that Sizewell will operate in exactly the same way, but to show that the methods proposed are viable geomorphic impact mitigation techniques in use at various coastal locations around the UK and in particular those in the same regional setting. As such it is considered appropriate to illustrate by way of examples.</p> <p>The CPMMP will be refined prior to its submission for approval and indeed throughout the station's life. Remaining minor points can be resolved in continued consultation with the Marine Technical Forum.</p>
CG.3.8	The Applicant	<p>Impacts on coastal processes:</p> <p>ESC in its 'Comments on the CPMMP Revision 2 [REP5-059]', [REP6-032] point 21, states that if the Applicant is adhering to the principle that monitoring extents are always defined to be substantially larger than the predicted effect e.g. scour monitor extents around structures are set to 7-11 times the scale of the predicted scour footprint, then the Thorpeness and Minsmere frontages would also be monitored. Is that agreed and, if so, please confirm the 7-11 times the scale of the footprint of the feature will be used throughout?</p>
	SZC Co. Response at Deadline 8	<p>The applicant maintains the view that there is no identified pathway for the development to impact the Thorpeness or Minsmere frontages.</p> <p>The use of a fixed factor for defining monitoring extents is not agreed, is considered inappropriate and SZC Co is not aware of its application elsewhere. Monitoring extents necessarily vary for each location and activity or marine component, taking into account the detailed knowledge base at individual sites. Sizewell, is a well-studied location and therefore it is inappropriate to use a fixed multiplication factor that disregards location,</p>



ExQ3	Question to:	Question:
		<p>coastal processes, uncertainty, existing understanding of the site and Value, as proposed in East Suffolk Council's Deadline 6 submission [REP6-032; Ref Pg 21, 1.4.1].</p> <p>The monitoring area is also a function of impact extent, and it is standard practice in setting survey areas to elucidate the full extent of the impact before determining the relevant spatial scale of survey effort. At Sizewell, there has been significant monitoring effort over many years, employing a range of different novel and traditional techniques to determine the full scale of potential effects. The example of scour cited by ESC [REP6-032; Ref Pg 21, 1.4.1] is only an example – for the reasons stated it is inappropriate to use a fixed factor relating impact extent to monitoring extent. SZC Co is unaware of ESC, or other marine regulators, using, or requiring the use of, a fixed factor to define monitoring extents across multiple separate contexts. As the CPMMP is adaptive – were impacts to approach or exceed the monitoring extents, they would be expanded as necessary.</p>
CG.3.9	The Applicant	<p>Impacts on coastal processes:</p> <p>The MMO in its comments on ISH6 agenda item 4 (f) for the permanent BLF, during the construction phase, the impacts of any dredging and the barge berthing platform recommends that the outcome of the initial capital dredge is monitored. It advises that additional surveys should be undertaken to monitor this after the initial capital dredge. It also expresses the view that as there is uncertainty in the response of the outer longshore bar to the continued maintenance dredging related to the permanent BLF, there should be annual surveys for the duration of the construction phase to monitor the outer longshore bar and these additional surveys should be outlined in the CPMMP. Please can the Applicant confirm that this is agreed and that the CPMMP will be revised to reflect this?</p>
	SZC Co. Response at Deadline 8	<p>SZC Co. agrees to monitoring the nearshore zone including the longshore bars on an annual basis during the construction phase. This commitment will be updated in the draft CPMMP revision for Deadline 10.</p>
CG.3.10	The Applicant	<p>Impacts on coastal processes:</p> <p>The Deadline 5 submission of Bill Parker [REP5-191], states that the Applicant has yet to define its methodology for 'ground improvement' that will be a critical element in determining the resilience of the development in the long-term. Please indicate whether this methodology and details of ground improvement works been determined. If so, when</p>

ExQ3	Question to:	Question:
		will this information be submitted to the Examination? If not, how can a determination of future resilience be made in the absence of that information?
	SZC Co. Response at Deadline 8	Ground Improvement is included beneath that part of the HCDF which sits over extensive peat/ alluvium deposits. A number of Ground Improvement methods are under consideration, and the HCDF may include more than one method. The method(s) proposed for ground improvement beneath the HCDF will depend on multiple factors, principally the actual quality of the ground in each area (determined through sample testing and site trials), the degree of modification to ground properties required to support the design (including resilience) and the cost and schedule impacts of each solution. In addition to the Applicant's view of the most appropriate technical solution, any proposed method(s) will require the agreement of the Regulator (ONR). Details of the proposed Ground Improvement will be prepared during the detailed design stages pursuant to Requirement 12B.
CG.3.11	The Applicant	<p>Impacts on coastal processes:</p> <p>The Deadline 5 submission of Bill Parker [REP5-191], seeks details as to how the HCDF would be integrated with the SSSI crossing, the BLF and jetty. The Applicant has submitted drawings at Deadline 7 relating to the permanent and temporary BLFs and SSSI crossing. Please explain in detail including by reference to any submitted plans how that would be achieved?</p>
	SZC Co. Response at Deadline 8	<p>The integration between Permanent HCDF, SSSI crossing, Permanent and Temporary BLF is illustrated on drawing SZC-SZ0100-XX-000-DRW-100261, included in [REP5-015]. The integration between these features remains as shown in this plan submitted at Deadline 5.</p> <p>Further details of the Permanent and Temporary BLF have been provided on drawings SZC-EW0610-XX-000-DRW-100265SZC-SZ0100-XX-000-DRW-100202 and ...100203 at Deadline 7 in [REP7-004] and SZC-EW0610-XX-000-DRW-100265 in [REP5-015].</p> <p>Further details of the SSSI crossing have been provided on drawings SZC-SZ0100-XX-000-DRW-100205, ...100207, ...100209 and ...100210 at Deadline 7 in [REP7-005].</p>

ExQ3	Question to:	Question:
		The HCDF will run South to North along the foreshore, and will turn inland between the position of the Temporary and Permanent BLFs. This section of HCDF running inland will be formed by the reconstructed Northern Mound and will tie in with the higher ground adjacent to the SSSI Crossing, set back from the coastline. The extent of the HCDF revetment is shown in plan in [REP5-015] , in plan on drawing 100261 and in sections A-A, B-B, and C-C on drawing 100265. The Permanent BLF will land to the seaward side of the HCDF, and the BLF approach road will climb from the BLF to the higher ground at the SSSI Crossing along the outer face of the HCDF. The Temporary BLF will not interface with the permanent HCDF, as the Temporary BLF will have been removed prior to the construction of the HCDF.
CG.3.12	The Applicant	<p>Impacts on coastal processes:</p> <p>The Deadline 5 submission of Bill Parker [REP5-191], states that there needs to be a recognition that Sizewell Bay is a complex and dynamic environment. (i) Please explain how the assessment of long-term impacts have taken account of integrated system elements of the design and the potential for “emergent behaviour” from the natural environment? (ii) Should an independent expert assessment of the system elements operating in combination be carried out? (iii) If not, why is this not considered to be necessary?</p>
	SZC Co. Response at Deadline 8	<p>SZC Co continues to recognise the complexity of marine geomorphology and the Sizewell Bay environment.</p> <p>(i) Considered from a systems perspective, the coastal geomorphic impacts of SZC occur in the same spatial area and affect the same environmental variables in any given future scenario i.e., wave and tidal flows in the nearshore, and longshore sediment transport. The assessments undertaken already have established the scale, extent and significance of the impacts using standard EIA approaches and the effect significance was classified as minor or negligible.</p> <p>For the impacts originating at Sizewell C to influence the regional geomorphic system, local effects would need to radiate outwards from the point of impact. Some impacts reach an equilibrium and do not spread further (for example scour, where the hydrodynamics and sediment transport are only altered over a fixed local distance).</p>

ExQ3	Question to:	Question:
		<p>The proposed SCDF monitoring and mitigation is designed to avoid HCDF exposure and minimise any adverse impacts by avoiding disruptions to longshore sediment transport. As the activities do not remove sediment from the system and do not impose barriers, the impacts will be small and certainly much smaller than those experienced during the construction and operation of Sizewell B. As the impacts will be localised, have been minimised and confined (through design) and will be monitored and mitigated (if needed), they would not spread to a larger sub-regional or regional scale and hence emergent behaviour at a systems level is not expected or predicted.</p> <p>(ii), (iii) An additional independent systems assessment is not necessary, as this has already been undertaken in the Expert Geomorphological Assessment, where a systems-based understanding of the drivers of change was used and applied. However, the MTF (EA, MMO, ESC and NE) serves to provide independent scrutiny of the assessments, monitoring and mitigation during pre-application, the examination and post examination (as secured in the Deed of Obligation; Doc. Ref. 8.17(G)). 'Emergent dynamics' were identified in the context of a shoreline displaying change behaviours which show no clear correlation with simplistic 'linear' representations of the hydrodynamic forcing. This complexity is recognised throughout Section 2 of Volume 2, Appendix 20A of the ES [APP-312], but particularly Section 2.4 in discussing future change (based on the more detailed BEEMS Technical Report TR403, which is an exhaustive report of the systems-level understanding applied by the EGA).</p>
CG.3.13	The Applicant	<p>Impacts on coastal processes:</p> <p>The Deadline 7 submission of Nick Scarr highlights the fact that the adjoining Sizewell B has a 10m AOD sea defence crest height and the new proposed sea defence for Sizewell C (14.6-16.4m AOD) does not appear to cover the frontage of Sizewell B. Whilst paragraph 3.2.21 in the Applicant's 'Sustainability Statement [APP-617]' is noted, please explain the apparent discrepancy and how any potential risk posed by the Sizewell B defences to either site in the long-term would be overcome and secured by the draft DCO?</p>



ExQ3	Question to:	Question:
	SZC Co. Response at Deadline 8	<p>Sizewell B and Sizewell C Sea Defences are conceived to protect their respective stations against wave run-up and excessive overtopping throughout the life of their respective stations.</p> <p>The key objectives of Sizewell C Sea Defences are to protect Sizewell C without placing any reliance on the presence or condition of the Sizewell B Sea Defences, and not to prejudice the continuing operation of the Sizewell B Sea Defences. The continuing protection of the Sizewell B site will be delivered by the Sizewell B Sea Defences, including any potential future modifications or extensions which may be required to maintain the safe operation and decommissioning of Sizewell B.</p> <p>The Sizewell C Sea Defences have therefore been designed to be independent of the Sizewell B Sea Defences, including features such as the overlapping configuration extending part-way along the Sizewell B frontage, independent foundations and the roundhead termination of the Sizewell C HCDF. The Sizewell C Sea Defences are required to protect the Sizewell C site for a longer period than the Sizewell B Sea Defences are required to protect the Sizewell B site. The Sizewell C Sea Defences therefore provide a higher crest level, to address the higher potential for climate change effects such as sea level rise to occur during the life of the Sizewell C Sea Defences. It should also be noted that the functional crest level of the Sizewell C HCDF is 12.6m (increased from the 10.2mOD stated in paragraph 3.2.20 of [APP-617]) with landscaping material undulating between 12.6m and 14.6m OD, and the potential for a future increase to 16.4m in the Adaptive Design.</p> <p>Whilst the crest levels of Sizewell B and Sizewell C Sea Defences are different, the Applicant does not see this as a discrepancy, but rather reflecting their different and independent functions.</p> <p>The design parameters of the Sizewell C defences are secured by Requirement 12B of the draft DCO, which provides that the marine infrastructure works must not commence until the details of the layout, scale and external appearance of such works have been</p>

ExQ3	Question to:	Question:
		submitted to and approved by ESC, in consultation with the MMO and the Environment Agency, and that such work must be carried out in accordance with the approved details.
CG.3.14	The Applicant, ESC, EA	Impacts on coastal processes: In the event that Change Request 19 is accepted by the ExA, please explain how the primary mitigation proposed to minimise impacts on coastal geomorphology and hydrodynamics from the proposed temporary desalination plant would be secured by the draft DCO? Is it agreed that Requirement 8 would be sufficient to serve that purpose and are any further drafting changes or additional Requirements or safeguards sought?
	SZC Co. Response at Deadline 8	Change Request 19 has been accepted. Draft DCO Requirement 8 would also include the desalination plant, however, the main safeguarding mechanism is the CPMMP which must be adhered to during construction and operation. Any potential impacts on coastal geomorphology receptors from the desalination plant would automatically be picked up by the CPMMP [REP5-059]. An updated draft of the CPMMP is to be submitted at Deadline 10 in any case to address comments from IPs since Revision 2 was submitted, and the update will include amendments to specify the desalination plant in the plan where necessary (for example, scour monitoring at the intake and outfall locations). Mitigation within the CPMMP would be equally applicable for any identified impacts from the desalination plant so no additional mitigation is envisaged.
CI.3 Community Issues		
CI.3.0	The Applicant	Accommodation provision It is understood from the D7 submissions that there is now agreement as to financial provisions in the event that either the accommodation campus or the caravan park at the LEEIE are not delivered in time. (i) Are ESC now confident this would avoid adverse effects in the event that there was a shortage of accommodation and this shortage coincided with large numbers of workers at the site. (ii) Will the agreed financial remedy ensure that additional bed spaces are in place in advance of when they were required, or at least in a timely manner?

ExQ3	Question to:	Question:
		<p>(iii) In light of the recognised adverse effects of not having sufficient accommodation in a timely manner adversely affecting the more vulnerable groups in society. What reassurances can the ExA have that their interests would be properly safeguarded?</p> <p>(iv) If there remains disagreement or the ExA consider that this financial remedy were not sufficiently robust, do ESC have a preferred mechanism for delivery of the accommodation and a suggested wording for a requirement or other from of mechanism for securing provision of the accommodation.</p>
	SZC Co. Response at Deadline 8	<p>Part (i), (ii) and (iv)</p> <p>To aid ExA, SZC Co has collated a document for submission at Deadline 8 at Appendix 2 to SZC Co's Response to Request for Additional Information a Deadline 8 (Doc Ref. 9.109) in order to respond to the issues raised in parts (i), (ii) and (iv) in the above question together with additional requests for information on similar issues.</p> <p>That document sets out, inter alia, the justification that, should the Project Accommodation be delayed, the Housing Fund and the Housing Contingency Fund have the ability to mitigate for additional short-term demand on the housing market arising from the delay of Project Accommodation.</p> <p>SZC Co and ESC agree that the Housing Fund and Housing Contingency Funds are capable of doing this, and welcome the opportunity to set out in full the context to the assessment of demand and impacts and development of mitigation.</p> <p>However - it is important to consider not just the ability of contingency funding to respond to potential additional demand should Project Accommodation be delayed, but also to consider that the likelihood of the additional effects arising is very small due to inherent conservatism in the assessment and the approach to non-contingent mitigation (which already is comprehensive).</p> <p>On that basis, the following key points should be taken into account, and are explained more fully throughout Appendix 2 to SZC Co's Response to Request for Additional Information a Deadline 8 (Doc Ref. 9.109):</p> <ol style="list-style-type: none"> 1) The approach to the assessment of effects on the housing market is highly conservative based on assumptions of available supply of accommodation, location of uptake, sectors used and number of NHB workers – this means that the 'assessment case' represents a worst case scenario, and as this impact is fully



ExQ3	Question to:	Question:
		<p>mitigated by the Housing Fund (3), it is likely that there is a very precautionary level of mitigation secured in the Deed of Obligation.</p> <p>2) Related to this, the assessment in Volume 2, Chapter 9 of the ES [APP-195] and the Accommodation Strategy [APP-613] on which the approach to mitigation via the Housing Fund is based, assumes a later delivery of Project Accommodation than set out in the Implementation Plan – so delay in Project Accommodation does not represent a deviation from the scale of impact assessed in the ES. Delay to Project Accommodation may give rise to additional demand for accommodation, however it will not necessarily lead to additional effects, especially once committed (non-contingent) mitigation is taken into account.</p> <p>3) The assumptions for delivery of bed spaces through the Housing Fund is both precautionary (in that it mitigates for at least 100% of identified demand in the private rented sector), conservative (in terms of the estimated number of bedspaces it could produce) and flexible with the ability for front-loading – this means that the peak effects will be mitigated as a minimum, and that the provision of bedspaces can be expanded and front-loaded to deal with any delay in Project Accommodation, meaning that any delay in Project Accommodation that results in the release of contingency funding plays into a very benign environment.</p> <p>4) Late delivery of Project Accommodation is highly unlikely - the Project is committed to providing it (and it is very much in its interests to) – this means that the non-delivery of accommodation is not a likely eventuality, and as set out in (3), delay can be mitigated.</p> <p>5) The Housing Fund is both responsive and pro-active, and can deliver additional accommodation quickly through strong and forward looking governance, monitoring and planning.</p> <p>6) The role of unconventional supply is likely to be important. Volume 2, Chapter 9 of the ES [APP-195] and the Accommodation Strategy [APP-613] take no account of so-called “latent” accommodation. This is likely to be popular with both landlords and workers. Evidence from both Sizewell B and Hinkley Point C show that significant numbers of workers rented spare rooms in people’s houses with around 20% choosing this option. Landlords benefit from a tax break and the rents they charge tend to relate to the workers’ allowances rather than the prevailing private sector rents.</p>

ExQ3	Question to:	Question:
		<p>Minor grants to bring forward this type of accommodation have been very popular at HPC and delivered 1,500 bedspaces in the first 3 years.</p> <p>The Draft Deed of Obligation (Schedule 3) now includes a long-stop linking the completion of the LEEIE Caravan Site and each Phase of the Accommodation Campus to reporting of NHB workforce numbers, with any default on that position resulting in release of Housing Contingency Funds. The longstop date for Phase 1 of the Accommodation Campus (when the workforce is expected to be 3,000) is Q1 of Year 4, so is aligned with the assessment in Volume 2, Chapter 9 (Socio-economics) of the ES [APP-195] and the Accommodation Strategy [APP-613].</p> <p>Part (iii) – Vulnerable People</p> <p>As set out in Appendix 2 to SZC Co’s Response to Request for Additional Information a Deadline 8 (Doc Ref. 9.109), delivery of the Project Accommodation after the dates set out in the Implementation Plan would not lead to adverse effects.</p> <p>SZC Co’s whole approach to accommodation has been based deliberately on conservative assumptions so as to avoid adverse effects on existing community, including more vulnerable groups in society.</p> <p>As demonstrated in Appendix 2 to SZC Co’s Response to Request for Additional Information a Deadline 8 (Doc Ref. 9.109), the contingency funded bedspaces are deliverable, in the unlikely situation that the Project Accommodation is delayed, and the Housing Fund would deliver these in such a way that allows proactive and responsive approaches as need, with decisions being at the discretion of ESC as experts in statutory housing provision and knowledgeable of particular vulnerabilities.</p> <p>It is noted, however, that late delivery of the campus compared to the Implementation Plan would not automatically give rise to additional impacts requiring immediate mitigation, and there are safeguards in terms of monitoring, governance and delivery of the Housing Fund to pre-empt the need to rely on the effectiveness of contingency payments.</p> <p>Again, it should be noted that the assessment already considers the effects and mitigation for a worse scenario than the Project is committed to mitigate. In effect, delay to delivery of the Project Accommodation would result in a deviation from the Implementation Plan, but not a change in the impacts assessed by the ES.</p>

ExQ3	Question to:	Question:
		<p>SZC Co has set out in response to ExQ2 CI.2.3 [REP7-056] how the Housing Fund and complementary measures will avoid significant effects on vulnerable people, and this applies equally to the bedspaces brought forward by the contingency payments.</p> <p>A non-contingent element of the Housing and Homelessness Service Resilience element of the Housing Fund will be provided to ESC on or before the first anniversary of the Commencement Date – agreed to be £500,000 to support the precautionary and proactive delivery of measures to support the East Suffolk Council’s statutory housing advice and homelessness prevention service including staff resourcing, training and projects, landlord engagement and support, management of HMOs and temporary/emergency accommodation.</p> <p>This is precautionary – SZC Co. does not expect adverse effects (none have been experienced at HPC in terms of demand on services or housing market stress, or what might be considered an indirect effect of housing need), but they will be closely monitored and additional funding released if there are any indicators of housing market stress, regardless of the delivery of the Project Accommodation. This is summarised in Joint Local Impact Report- Appendix 2.1 Study on the impacts of the early-stage construction of the Hinkley Point C Nuclear Power Stage: Monitoring and Auditing Study Final Report [REP1-089] and Chapter 31 of SZC Co’s Response to the Councils’ Local Impact Report [REP3-044].</p> <p>This element of the fund will be considered for release on an annual basis on receipt of evidence of information provided by East Suffolk Council that the Accommodation Working Group agrees shows housing market stress relative to pre-Commencement levels which may reasonably be related to the effects of the NHB Workforce (and any HB Workers moving their permanent address explicitly to work on the Project).</p> <p>The Housing Fund is also developed with vulnerable people in-mind, and is adaptable, proactive and reactive to reduce the risks of housing need and homelessness for those particularly vulnerable to change. The AWG can target monitoring of housing market stress on key vulnerable groups.</p> <p>The contingency element would work in the same way as the non-contingent element in that regard.</p>



ExQ3	Question to:	Question:
		<p>Additionally, funding can move between pots in order to provide additional flexibility - If agreed by the Accommodation Working Group – funds can be moved between different elements of the Housing Fund based on monitoring of the effectiveness of measures.</p> <p>It should also be noted that the Housing Fund and Accommodation Working Group will work with other, complementary mitigation measures to ensure safety of potentially vulnerable residents – for example via the Community Safety Resilience Measures and Local Community Safety Measures in the Public Services Resilience Fund (Schedule 5 of the Draft Deed of Obligation (Doc Ref. 8.17(G)) which include funding for the SAFE accommodation scheme for victims of domestic abuse, and the Domestic Abuse Outreach Service.</p>

Application by NNB Generation Company (SZC) Limited for an Order Granting Development Consent for The Sizewell C Project

The Examining Authority's third written questions and requests for information (ExQ3)

Issued on 09 September 2021

Responses are due by Deadline 8: 24 September 2021

PART 4 OF 6

- DCO.3** [Draft Development Consent Order \(DCO\)](#)
- FR.3** [Flood risk, ground water, surface water](#)
- HW.3** [Health and wellbeing](#)
- HE.3** [Historic environment \(terrestrial and marine\)](#)
- LI.3** [Landscape impact, visual effects and design](#)



ExQ3	Question to:	Question:
DCO.3	Draft Development Consent Order (DCO)	
DCO.3.0	The Applicant	In the redrafting of the CoCP for D7, has the substance of any of the commitments been changed? To take an example, in Part C, section 8 (Historic Environment) the whole of section 8.2 has been deleted and a new para 8.1.4 inserted. It seems to the ExA that the effect of 8.2 is now contained in para 8.1.4. Is this the intention and effect?
	SZC Co. Response at Deadline 8	Table 8.1 and Section 8.2 of the CoCP [REP7-037] summarised the measures set out in the Overarching WSI (Doc Ref. 6.14 2.11.A(B)), which are secured by Requirement 3, and measures secured by the Deemed Marine Licence Conditions (Schedule 20 of the dDCO (Doc Ref. 3.1(I))). The Deadline 7 CoCP therefore was updated to remove this duplication and instead include a cross reference to the relevant control document. In terms of the historic environment, the substance of the commitments set out in the Overarching WSI, secured by requirement 3, or the DML Conditions set out in Schedule 20, have not changed. In respect of the historic environment, the CoCP therefore only includes a cross reference to the relevant commitments and their associated securing mechanism. Some additional wording has been added to the CoCP at Deadline 8 (Doc Ref. 8.11(E)) to make reference to the peat and marine mitigation measures that are also secured by requirement 3 and Schedule 20 respectively.
DCO.3.1	Applicant	<p>(a) At para 1(4) of Sch 2 (reqts) of the dDCO Revision 8 the Applicant has deleted the word "substantively" from "substantively consistent" and also deleted the words "and in a manner that does not give rise to any materially new or materially different environmental effects to those assessed in the environmental information". Please will the Applicant explain the reason for the latter deletion. Is it inevitable that works to be carried out in general accordance with details etc will, if they are simply consistent with those details etc not give rise to materially new / different effects?</p> <p>(b) However, the ExA is finding it more difficult to understand the Applicant's reluctance to abandon the use of "in general accordance" and to replace it with the straightforward "in accordance". Please will the Applicant reconsider.</p>
	SZC Co. Response at Deadline 8	The DCO Requirements have been revised to ensure that where works are to be carried out pursuant to submitted details only 'in accordance' is now used. 'General accordance' is only used where there is a subsequent approval by a relevant body, such as ESC or



ExQ3	Question to:	Question:
		SCC. The inclusion of 'general accordance' in these instances is considered beneficial to ESC and SCC as it allows acceptable discretion on the part of the decision maker. Limiting such instances to 'in accordance' might limit the ability of final details to be improved from those initially drafted.
DCO.3.2	Applicant	The intake heads for the two cooling water intake tunnels are not described in Sch 1 so as to link them to the relevant tunnel (at least not without checking the plans of the works). This is important for the DML Condition 45. Could it be made clear in Sch 1 that Work 2B is for Work 2A and Work 2D is for Work 2C (which the ExA surmises is the case)?
	SZC Co. Response at Deadline 8	Schedule 1 of the draft DCO (Doc Ref. 3.1(I)) has been updated to reflect this clarification.
DCO.3.3	MMO and Applicant	Please see MMO's REP6-039, paras 1.1.7 -22 (a) Please will the Applicant explain why it must have Sch 23 for DML conditions refusals / deemed refusals? Why is this case different from Hornsea 3 and Norfolk Vanguard? (b) MMO – are the considerations which apply to wind farms really the same for a single phase, time critical project with little flexibility over siting?
	SZC Co. Response at Deadline 8	SZC Co. understands the MMO's position to be that the marine elements of the SZC project are not exceptional and no different to other NSIP marine licences. SZC Co. does not disagree with that insofar as it goes, however, that does not in itself mean that there is no justification for applying an appeal procedure to the discharge of marine licence conditions as we have suggested via the drafting we have proposed in Schedule 20A of the draft DCO (note Schedule 23 is not relevant – it applies to appeals of requirements only). The whole project relies on a very well-defined programme and construction schedule. Whilst a delay to an offshore element of the SZC project in isolation is not necessarily more significant than for any other large offshore project, the potential knock-on delays to other elements of the SZC project would be very significant. For example, the whole transport strategy is based on the availability of the BLF and MBIF so delays to the discharge of conditions relating to those works would have significant impacts on the overall construction programme. Similarly, offshore works rely entirely on dredging and disposal works and delays to those works can also have significant impacts on programme as well as logistical issues with leasing vessels. Aside from potential delays to the



ExQ3	Question to:	Question:
		<p>construction and delivery of an operational Sizewell C, the costs associated with such delays could be very significant given the need to pre-book very large vessels of limited availability or progress other inter-related elements on the MDS (10s to 100s millions of pounds).</p> <p>Government policy also identifies the need for new low carbon energy capacity as urgent; its delivery should not be delayed for want of an effective consenting process. Schedule 20A is considered to be necessary and proportionate to the scale of the Project and we do not consider the absence of such a provision from offshore wind projects to justify its disapplication in the context of this Project. The SZC Co. team are not expert on the nature and complexity involved in discharging deemed marine licence conditions relating to offshore wind and how this compares with the types of condition to be discharged on the Sizewell C project. It is therefore difficult for us to give a comparison between the two types of project. Rather, our view is that each project should be considered on its own merits, and we would ask the ExA and the Secretary of State to weigh the real risk of delay and impediment to the Sizewell C Project in circumstances where the MMO delays or refuses to discharge a condition, against the provision of a perfectly equitable appeal mechanism which might be used in those rare but important circumstances.</p>
DCO.3.4	Applicant	Please will the Applicant supply a track changes version of the Sched of Other Consents, Doc 5.11 Ch Revision 2.0.
	SZC Co. Response at Deadline 8	<p>A tracked changes version of the Schedule of Other Consents, Licences and Agreements (Revision 3.0) is submitted at Deadline 8 (Doc Ref. 5.11(B)). For completeness, this shows changes made to the report since the May 2020 version (Revision 1.0) [APP-153].</p> <p>As set out in response to ExQ2 CA.2.23 [REP7-056], an updated Schedule of Other Consents, Licences and Agreements will be submitted at Deadline 10 to reflect progress on consents, permits and licences for the Sizewell C Project since the Deadline 3 version (Revision 2.0) [REP3-011]. The response to ExQ2 CA.2.23 sets out updates to be made to the report at the time of the Deadline 7 submission.</p>
Please answer the following questions in the event the change request for the desalination plant is accepted		



ExQ3	Question to:	Question:
DCO.3.5	MMO, Natural England, Environment Agency	Are the MMO, Natural England and Environment Agency satisfied that the co-ordinates for the location of the works and their construction are given correctly in the ninth revision of the dDCO?
	SZC Co. Response at Deadline 8	No response from SZC Co is required
DCO.3.6	Applicant	Please will the Applicant supply a track changes version of the Sched of Other Consents, Doc 5.11 Ch Revision 3.0.
	SZC Co. Response at Deadline 8	A tracked changes version of the Schedule of Other Consents, Licences and Agreements (Revision 3.0) is submitted at Deadline 8 (Doc Ref. 5.11(B)). For completeness, this shows changes made to the Schedule since the May 2020 version (Revision 1.0) [APP-153], including changes made to reflect the desalination plant, as accepted.
FR.3 Flood risk, ground water, surface water		
No questions provided.		
HW.3 Health and wellbeing		
HW.3.0	The Applicant, ESC, SCC, CCG	Health Impact Assessment Should a Health Impact Assessment have been carried out to fully understand the implications of impacts on human health of the proposed development both during construction and subsequent operation? Can the Exa be assured that all potential health impacts have been properly understood, assessed and mitigated where appropriate
	SZC Co. Response at Deadline 8	As set out in SZC Co.'s response to HW.1.21 [REP2-100], "A <i>Health Impact Assessment has been carried out and this is set out in Volume 2, Chapter 28 (Health and Wellbeing) of the ES</i> [APP-346]. As set out in section 28.2, the transposition of the amended EU EIA Directive into UK legislation resulted in the voluntary process of Health Impact Assessment (HIA) being integrated within the EIA assessment process in 2017. The scope, focus, process, approach and methods remain the same regardless of whether the assessment sits in a stand-alone HIA or is integrated into the ES. The core difference is that the health and wellbeing assessment must now meet the requirements of the EIA



ExQ3	Question to:	Question:
		<p><i>Regulations, and the dedicated health and wellbeing chapter within the ES [APP-346] affords greater weight within the planning and decision-making process than its voluntary counterpart."</i></p> <p>This approach is best practice, whereby it is unnecessary to provide two separate documents which would provide the same information (i.e. a health and wellbeing ES chapter and a standalone HIA) – one with significance criteria applied and one without. The authors of the health and wellbeing chapter have a substantial amount of experience undertaking standalone HIA (prior to the transposition of the amended EU EIA Directive into UK legislation in 2017) and assessing health within EIA for some of the most complex major infrastructure projects across a range of sectors within the UK, Ireland and Australia. Furthermore, both are technical advisors to the World Health Organisation on assessing the health impacts of waste management in the context of circular economy and have been heavily involved in the integration of HIA within EIA through their involvement with the IEMA "Health in EIA Working Group". Therefore, it is their expert opinion that all potential health impacts have been properly understood, assessed and impacts mitigated where appropriate.</p>
HW.3.1	Applicant, NE, RSPB/SWT, ESC, SCC, AONB Partnership, National Trust	<p>Displacement of Visitors</p> <p>Doc 9.94 submitted at D7 is a helpful summary of the different positions in respect of the potential for the displacement of visitors during the construction period.</p> <p>NE are continuing to recommend that SANG would be necessary and appropriate and this appears to be endorsed by RSPB/SWT.</p> <p>(i) In light of the continuing difference of view, please advise how you consider the effects on recreational amenity and whether the difference in figures which appears to remain, would lead to a different conclusion of effects on amenity and recreation issues.</p> <p>(ii) What do you consider would be necessary to overcome the possible adverse effects (if there are any) and how could this mitigation be secured?</p>
	SZC Co. Response at Deadline 8	<p>Visitor displacement does not mean an impact on physical activity and recreation sufficient to impact upon physical or mental health. It is temporary reduced amenity value and or use of alternative amenities and facilities. No health impact is identified, and no mitigation is required.</p>



ExQ3	Question to:	Question:
		<p>SZC Co. also considers that the assessments undertaken to consider the effect of potential displacement on European sites can help to inform this assessment.</p> <p>SZC Co. is very grateful to the Examining Authority for posing this question. Whilst there has been substantial debate about the numeric calculation, it is SZC Co.'s position that the dispute regarding the numbers does not affect the principal conclusions from the sHRA and that concerns raised by stakeholders will be mitigated by the measures set out in the application. This has implications for recreation and amenity as well as ecology.</p> <p>SZC Co. observes from the appendices to [REP7-087] that stakeholders tend to prefer the higher estimates of visitor displacement because they are higher and, therefore, presumably more precautionary. However, there is limited engagement with the reasons which SZC Co. has put forward to explain why either set of figures is considered to be highly precautionary. With respect to the stakeholders, there has been little engagement with the Applicant's case that any approach which allocates all displacement and construction worker visits exclusively to designated European sites even when the named locations were to nearby coastal settlements or other locations near but outside European sites (or where no location was given), and when significant percentages of people surveyed at two locations within European sites (Dunwich Heath and Aldringham Walks) said that they would displace from these areas (and which was not factored into the calculations) must be at least very precautionary.</p> <p>Notwithstanding the scale of that precaution, the calculated increase in visitor numbers on European sites is relatively small – please see Appendix A of [REP7-087], except in the case of Minsmere and Sandlings North where the sHRA suggests that it would be precautionary to introduce monitoring and management measures.</p> <p>Those measures are set out in the draft Monitoring and Management Plans (MMPs) which have been updated for Deadline 8 (included in the Deed of Obligation; Doc. Ref. 8.17(G)) to reflect the comments received from stakeholders. The MMPs have been well received and SZC Co. was grateful to Natural England for its recognition at Deadline 6 that the</p>



ExQ3	Question to:	Question:
		<p>proposed approach "<i>has the potential to be highly effective</i>" (Written Representations (WR's) - Comments on Terrestrial Ecology Documents [REP6-042] paragraph 6.6).</p> <p>The proposals of course not only add wardens, monitoring and management which either enhance existing provision or introduce wardening where there currently is none, they also put in place a reactive monitoring and management approach. In practice, the applicants expect the net effect to be greater protection of the designated sites than currently exists.</p> <p>SZC. Co has reacted positively to all suggestions for enhancements to these measures, which complement the additional measures to which SZC Co. has also committed including:</p> <ul style="list-style-type: none"> - payment into ESC's RAMS (Recreational Disturbance Avoidance Mitigation Strategy) (Draft Deed of Obligation Schedule 11); - commitments to a gym and trim trail facilities around the accommodation campus; - the provision of active sports provision for construction workers at the Alde Valley Academy in Leiston; - the prior provision and subsequent enhancement of alternative open access recreational space at Aldhurst Farm; - an investment of £2.5 million in the enhancement of public rights of way within the PRow Fund in the vicinity of Sizewell C which would add a step change in the quality of routes available for a recreation, amenity and exercise. <p>As set out in paragraphs 3.3.4 and 3.4.5 of SZC Co.'s response to the Natural England, the RSPB and the Suffolk Wildlife Trust at Deadline 7 [REP7-060], the scale of provision at Aldhurst Farm exceeds that which would be required using Natural England's SANG Guidance. It is important to note that, in addition to this exceeding the area that would be required for the peak 3,000 construction workers calculated using Natural England's area standard for residents in new residential development, the construction workers will not have dogs unlike residents of residential development, and they would undertake much</p>



ExQ3	Question to:	Question:
		<p>less frequent walks at sites like Aldhurst Farm than residents with dogs. Construction workers are also not permanent residents – they are present for the temporary construction period and, during that period might be expected to return home when not working.</p> <p>Against this background, it is not clear to the applicant what additional provisions may be either necessary or appropriate.</p> <p>Natural England's response contained within [REP7-087] is helpful in recognising a number of these matters and advising:</p> <p><i>"1.4.13 We consider that the size and design of the alternative green space is open for debate in terms of SANGs guidelines, but that it would need to be specifically designed to mitigate impacts from workers, targeted at the types of recreation they are likely to undertake."</i></p> <p>SZC Co. believes that the facilities proposed are designed to meet the recreational requirements of construction workers. Attached at Appendix 4A is a note prepared on this subject which draws on the assessment of the recreational requirements of construction workers carried out in the Environmental Statement (at Appendix 9E to Volume 2, Chapter 9 of the ES [APP-196]), together with available published data which identifies that surveys have established that recreational visits by construction workers are more likely to be focussed on open spaces in a town or city or a seaside resort than sensitive natural environments. In combination with the gym, trim trail, sports pitches, bike and footpaths provided and improved, together with the alternative open space provision at Aldhurst Farm, SZC Co. considers it has provided generous provision for the requirements of construction workers and that no further mitigation is necessary.</p>
HW.3.2	Applicant, CCG	<p>Health and Wellbeing Working Group</p> <p>Has there now been resolution in respect of the governance, scope and funding for the Health and Wellbeing Working Group?</p>

ExQ3	Question to:	Question:
	SZC Co. Response at Deadline 8	<p>SZC Co. and the CCG have shared further drafting changes on the governance and scope of Schedule 6 since Deadline 7 and this is now agreed; the updated position is set out in the draft Deed of Obligation (Doc Ref. 8.17(G)).</p> <p>The Residual Healthcare Contribution is agreed, as is funding for a full-time health and wellbeing officer for the first 7 years of the project, reducing to 0.5 of a role thereafter. Since Deadline 7, the CCG has requested funding for a GP to attend the health and wellbeing group and this has also been agreed.</p> <p>The only matter not agreed is whether SZC Co. should provide a dentistry contribution. SZC Co. does not consider this is needed for the reasons set out in HW.3.3 below.</p>
HW.3.3	Applicant, CCG	<p>First Written Questions -</p> <p>Please provide an update in respect of the review of the approach identified in FWQ HW.1.0</p> <p>(i) Has the data now been shared, and reviewed?</p> <p>(ii) What is the outcome and is there now an agreed position?</p>
	SZC Co. Response at Deadline 8	<p>Some data relating to health care costs has been shared by the CCG and this has informed the calculation of the residual healthcare contribution which is now agreed.</p> <p>The only outstanding matter relates to a dentistry contribution that was requested by the CCG on 1-9-21 - SZC Co. has set out to the CCG why it does not consider this is required and is awaiting a further response on this matter.</p> <p>In brief, SZC Co. has explained that this is because the Project is not predicting an impact on NHS dentistry. Most non-home-based workers would retain their dentist at their permanent home address and will only access dental care in Suffolk should they need urgent treatment (and not be able to wait until they return home). Given the lack of any NHS dentistry spaces in Suffolk, workers would need to pay privately for this service so the CCG would not incur additional costs.</p> <p>Non-home-based workers who move permanently to the area with their families (dependants) would typically take owner-occupied or private rented accommodation so would take the place of other residents moving out, and not comprise net additional population. Furthermore, the health and wellbeing assessment in Volume 2, Chapter 28 of the ES [APP-346] has taken a conservative approach, assuming some net additionality,</p>



ExQ3	Question to:	Question:
		<p>and this has formed the basis for the voluntary residual healthcare contribution. An equivalent contribution is not proposed for dentistry as the lack of local NHS dentistry capacity means that the chances of non-home-based workers or their families being able to access local NHS dental services is almost zero, noting that many members of the existing local community are already having to pay privately or - if they cannot afford to pay privately - are not able to access dental services.</p> <p>This is a problem in Leiston where two dental surgeries have closed recently due to an inability to recruit dentists (BUPA in March 2020 and MyDentist in April 2021) and Suffolk-wide where there is no spare NHS dental capacity currently (see for example Why you probably can't find a local NHS dentist - A system in crisis? - Healthwatch Suffolk). This is also catalogued in the GP Patient Survey Dental Statistics, where in the last 2 years, the success rate for those trying to get a dentist appointment in NHS Ipswich and East Suffolk was 73% Statistics » GP Patient Survey Dental Statistics; January to March 2021, England.</p> <p>SZC Co. has explained to the CCG that it cannot provide a Deed of Obligation contribution for a service that it is not impacting and its non-home-based workforce and their families will not be able to access.</p> <p>The CCG has set out that new dental capacity is being tendered for in Leiston with the aim to open this in July 2022. SZC Co. considers that it is not credible that sufficient new capacity will come forward even to provide for the needs of the many members of the local community waiting for an NHS dentist. Furthermore, it would not be appropriate to provide any contribution that would incentivise the CCG / local NHS dentists to take on Sizewell C non-home-based workers and families over and above members of the local community due to a Deed of Obligation payment.</p>
HW.3.4	Applicant, CCG	<p>First Written Questions - severance</p> <p>Please provide an update following the response to HW1.2 and the respective positions with regard to understanding severance and the affect on local communities.</p>
	SZC Co. Response at Deadline 8	<p>The significant effects identified in Volume 2, Chapter 10 of the ES [APP-198] are either mitigated (as set out in that chapter) or are not considered relevant to equality. This applies across pedestrian severance, pedestrian delay, amenity, and fear and intimidation – including in the early years, peak construction, reinstatement, and during operation</p>



ExQ3	Question to:	Question:
		<p>In terms of developing that mitigation, detailed design measures will be included in the proposed mitigation that will ensure that disproportionate and differential effects on those people with protected characteristics that may lead to difficulty in mobility are considered – for example, the maximum gradient of the Coast Path would be set to ensure wheelchair users can access with no disproportionate effect.</p> <p>Two key principles of both the construction and operational phases defined in the Rights of Way and Access Strategy (paragraph 1.1.6) [REP7-023] are:</p> <ul style="list-style-type: none"> • <i>"to comply with the legal requirements of the Equality Act 2010 and the Countryside and Rights of Way Act 2000 in terms of temporary access infrastructure and management, by ensuring that there are no physical barriers to access without lawful authority and that reasonable adjustments are made to facilitate participation by all; and</i> • <i>to ensure that all new linear surfaces are easy to use;"</i> <p>Changes to existing PRoW and permissive footpaths, and creation of new PRoW and permissive footpaths, for the main development site and associated development sites, will be designed in detail post-DCO consent.</p> <p>Paragraph 1.1.2 of the Rights of Way and Access Strategy [REP7-023] states that Public Rights of Way Implementation Plans will be prepared for each development site and submitted to the highway authority for agreement under Requirement 6A of the Draft DCO.</p> <p>The Public Rights of Way Implementation Plans will be agreed by the Rights of Way Working Group.</p> <p>One of the key considerations of this process will be to ensure that works to existing and new rights of way are designed to cater for people who may experience effects disproportionately as a result of their protected characteristics, in accordance with the Equality Act 2010.</p>
HW.3.5	Applicant, CCG	<p>Care Homes</p> <p>The CCG indicated concerns with regard to the potential impact upon care homes and their residents and staff.</p> <p>Please provide an update on whether this concern has now been overcome</p>
	SZC Co. Response at Deadline 8	SZC Co. has not identified a likely significant effect on care home residents and staff.



ExQ3	Question to:	Question:
		<p>However, a number of resilience measures have been agreed during the course of the examination which will support care home residents and staff.</p> <p>In terms of staff in the care sector, SZC Co. recognises that there is potential for some workers in the care sector to seek employment on the Sizewell C Project. This is a positive benefit for the workers, and a normal part of labour market churn that all employers are subject to. There has been high turnover of staff and difficulty in retention in social care irrespective of the labour market for the last 10 years. Retention is always an issue, irrespective of the state of the labour market – at peak of boom and in recession.</p> <p>Nonetheless, given the importance of the sector, SZC Co. has committed to providing funding of £100,000 for resilience measures to support resilience in workforce planning within Suffolk County Council's Adult Social Care and Children's Services including support for recruitment, training and retention of staff (similar to initiatives under NALEP's Sector Skills Plan and developing through EU funding) as set out through the Public Services Resilience Fund at Schedule 5 of the Draft Deed of Obligation [REP7-040].</p> <p>This would be similar to funding previously utilised by the sector via the LEP's The Sector Skills Plan for Health and Social Care (2016) that sets out the key challenges and strategic priorities for the sector, focusing on entrance and retention to the health and social care sector with a particular focus on adult social care, and identifying a set of measures that could be implemented.</p> <p>This may help to improve Suffolk County Councils capacity to retain staff in this sector, plan for recruitment and training and provide resilience.</p> <p>In addition, as set out in Schedule 5 of the Draft Deed of Obligation [REP7-040] SZC Co has agreed to fund 'Social Care Resilience Measures (Adult Community Services)' (Schedule 5, draft Deed of Obligation (Doc Ref. 8.17(G)) which comprises initiatives to support the resilience and service provision of Suffolk County Council's Adult Community Services, including support for the commissioning and delivery of Home Care services to residents including to people who may experience differential or disproportionate effects as a result of their Protected Characteristics.</p> <p>SZC Co has also agreed to provide contingency funding for "Housing and Homelessness Services Resilience Measures" (Schedule 3, draft Deed of Obligation (Doc Ref. 8.17(G)) which includes provision for the Accommodation Working Group to agree a payment by</p>



ExQ3	Question to:	Question:
		<p>SZC Co. to Suffolk County Council should information provided by Suffolk County Council demonstrate closure of Council-provided residential care homes directly as a result of the Sizewell C Project.</p> <p>More generally, measures to support local healthcare capacity (Schedule 6) and the East of England Ambulance Group (Schedule 4), as well as transport measures (Schedule 16) such as widened footways and increased numbers of informal crossing points should also benefit this age demographic. Full detail will be provided in the updated Equality Statement to be submitted before the end of the Examination.</p>
HE.3 Historic environment (terrestrial and marine)		
HE.3.0	Applicant	<p>Enhancement to Proposed Mitigation Schemes</p> <p>Noting the response made by East Suffolk Council in respect of FWQ HE.2.10 at Deadline 7, it is understood that the initial meeting held with IPs was a scoping meeting. Please confirm whether any further meetings are proposed to discuss additional mitigation? If additional mitigation is proposed, please confirm when/if details will be submitted?</p>
	SZC Co. Response at Deadline 8	<p>SZC Co notes that the Landscape and Ecology Management Plans for Sizewell Link Road [REP5-076] and the Two Village Bypass [REP5-077] contain proposals for agreeing and monitoring the effect of landscape mitigation that conforms to the principles and outline scope set out above and further engagement will be carried out through the detail design process. For properties where there are currently ongoing discussions in relation to further enhancement proposals, such as Farnham Hall, details of those enhancement proposals are provided in the Written Submissions Responding to Actions from ISH13 and will be discussed further with ESC as part of the detailed design process.</p>
HE.3.1	Applicant	<p>Barrow Cemetery Group (FMF)</p> <p>In respect of the response provided by Historic England to FWQ HE.2.10 at Deadline 7, please provide further detail regarding any proposed enhanced mitigation and what the outcome of the mitigation is likely to be? In addition, please confirm the proposed mechanism for securing the mitigation?</p>
	SZC Co. Response at Deadline 8	<p>SZC Co. has discussed this matter further with Historic England and the approach set out in SZC Co.'s response to EXQ HE.2.10 at Deadline 7 [REP7-053] has been agreed. To ensure this is secured, additional wording - agreed with Historic England - has been added</p>



ExQ3	Question to:	Question:
		to the outreach section of the Overarching Archaeological Written Scheme of Investigation (Doc Ref. 6.14 2.11.A(B)). This reads: <i>"The freight management facility site-specific WSI will set out specific proposals for further engagement focused on the Seven Hills barrow cemetery (which includes SM 1011339, SM 1011340, SM 1011341, 1011342, SM 1011343, SM 1011344). This will include proposals for academic and popular publication of the results of the freight management facility excavations in the context of the wider group of barrows in addition to other forms of engagement as noted above. The site-specific WSI must, after consultation with Historic England, be submitted to and approved by SCC pursuant to Requirement 3."</i>
HE.3.2	National Trust	First Written questions – Temporary and Permanent Beach Landing Facilities In response to second written questions HE.1.19 and HE.1.20 at Deadline 7, the Applicant stated the National Trust has: (i) overstated the nature and effects of the enhancement of the permanent beach landing facility; and (ii) overstated the potential visibility of the temporary beach landing facility and associated infrastructure. Please provide a response to the above.
	SZC Co. Response at Deadline 8	No response is required from SZC Co.
HE.3.3	English Heritage	Sustainable Conservation and Management Strategy Please provide a copy of the Sustainable Management Strategy as detailed in introductory paragraph 1.5 of Response to The Examining Authority's second written questions and requests for information (ExQ2) on behalf of The England Heritage Trust submitted at Deadline 7.
	SZC Co. Response at Deadline 8	No response is required from SZC Co.
LI.3	Landscape impact, visual effects and design	
LI.3.0	Applicant, ESC	Design and Access Statement – Detailed Built Development Principles In response to FWQ LI.2.22 the National Trust has request involvement in the following:



ExQ3	Question to:	Question:
		<p>(i) discussions in relation to the colour palette for the cladding of the turbine halls – Principle 56 of Table 5.3 [REP5-070]; and</p> <p>(ii) notification and consultation of the Reserved Matters applications in relation to Principles 57 and 80 of Table 5.3 [REP5-070].</p> <p>Please respond to the request made by the National Trust and where relevant, amend relevant documentation.</p>
	SZC Co. Response at Deadline 8	<p>(i) In the updated revision (Rev 02) of the Design and Access Statement [REP5-070] submitted at Deadline 5, the revised wording to Design Principle 56 confirmed that SZC Co will need to obtain approval from ESC for the colour palette and panel profile. By virtue of the pre application by SZC Co. and consultation following submission to ESC, SZC Co. would expect the AONB Partnership and the National Trust to be consulted.</p> <p>(ii) Both Design Principle 57 and 80 as included in the updated revision (rev 02) of the Design and Access Statement [REP5-070], refer to reserved matters applications requiring to be submitted for approval. dDCO Requirement 12, states that these reserved matters applications need to be submitted and approved by ESC, following consultation with the National Trust and the AONB.</p>
LI.3.1	ESC, SCC, AONB Partnership, National Trust, Natural England	<p>Design and Access Statement – Detailed Built Development Principles</p> <p>In response to FWQ LI.2.13 and LI.2.14 the Applicant has detailed amendments to Principles 56 and 57. Please review and provide a response to the appropriateness of the additional text.</p>
	SZC Co. Response at Deadline 8	No response from SZC Co. is required.
LI.3.2	ESC, SCC, AONB Partnership, National Trust, Natural England	<p>Estate Wide Management Plan for the EDF Energy Estate</p> <p>At Deadline 7 the Applicant submitted an Estate Wide Management Plan for the EDF Energy Estate (Doc 9.88). Please review and comment on the content and likely effectiveness of the plan. Are you content with the wording of Requirement 5C within the draft DCO (Doc 3.1 Revision 8.0)?</p>
	SZC Co. Response at Deadline 8	No response from SZC Co. is required.



ExQ3	Question to:	Question:
LI.3.3	ESC, SCC, AONB Partnership, Natural England	Associated Development Design Principles Please comment on the amendments made to the Associated Development Design Principles (Doc 8.3, Revision 3.0) submitted at Deadline 7, in respect of planting and hedgerows.
	SZC Co. Response at Deadline 8	No response from SZC Co. is required.
LI.3.4	Applicant	SSSI Crossing The content of Principle 79 of the Detailed Built Development Principles [REP5-070] is noted. However please further expand on how the colour selection of the hard elements of the SSSI crossing, visible from public viewpoints, has taken into consideration the advice contained in 'Guidance on the Selection and use of Colour in Development' published by the Suffolk Coast and Heaths AONB?
	SZC Co. Response at Deadline 8	<p>Detailed Landscape Design Principle 79 [REP5-070] records that: <i>"For hard elements of the SSSI Crossing that are visible from public viewpoints and where a colour coating can reasonably be applied, the choice of colour will have regard to the 'Guidance on the Selection and use of Colour in Development' published by the Suffolk Coast and Heaths AONB' where doing so would not give rise to operational, safety or ecological harm. This includes polartactic invertebrates. Elements of the SSSI Crossing that are reasonably required to have a concrete finish are excluded from this design principle".</i></p> <p>The Suffolk Coast & Heaths AONB 'Guidance on the selection and use of colour in development' document (2019) [REP1-081] identifies simplified landscape character types and provides guidance on the selection and use of colour for building development within the AONB. Each landscape character type has a distinct colour palette, an understanding of which can assist in making appropriate choices for development.</p> <p>As recorded in the Design and Access Statement [REP5-070] drawing on the guidance and site visits, three landscape character types have been identified in the immediate context of the operational platform: Sand dunes and shingle ridges (located along the coastline),</p>



ExQ3	Question to:	Question:
		<p>saltmarsh and intertidal flats; coastal levels (located in lower lying areas inland of the coast) and estate sandlands, woods and heath.</p> <p>The SSSI crossing is located within the estate sandlands, woods and heath simplified landscape character type and crosses over the saltmarsh and intertidal flats; coastal levels simplified landscape character type.</p> <p>The objective would be to create a unified scheme that supports the integration the SSSI crossing structure into its landscape context. SZC Co. would refer to the 'developed palette' and 'colourways' of the estate sandlands, woods and heath simplified landscape character type to inform colour selection. In addition to the suggested colours, consideration would be given to concrete colour and colour of the visible sheet pile wall in colour selection.</p> <p>The guidance records that visual confusion can be caused if multiple colours are selected. It is anticipated that a maximum of two colours would be selected to give the SSSI crossing a unified appearance. Factors that will influence final colour selection will include operational and performance requirements, notably given the location of the SSSI crossing on the coast and the availability of colours and finishes to meet the required specification.</p> <p>The choice of colour would be submitted to and approved by East Suffolk Council, following consultation with the Environment Agency and Natural England, as part of the external appearance of the SSSI Crossing pursuant to Requirement 12C.</p>
LI.3.5	Applicant	<p>Main Development Site – Potter's Farm and Eastridge Farm</p> <p>Noting the proximity of Potter's Farm and Eastbridge Farm to the proposed borrow pits, stockpiles and accommodation campus, please confirm any difference in significance of effects in respect of lighting through the different seasons.</p>
	SZC Co. Response at Deadline 8	<p>As recorded in Table 1.6 in the Lighting Management Plan (Volume 2, Appendix 2B of the ES [REP7-019]) task lighting will be required in the area of the accommodation campus. In the area of the borrow pits and stockpiles, task lighting will be required exceptionally</p>

ExQ3	Question to:	Question:
		<p>when there is a requirement to carry out maintenance in hours of darkness. There will typically be no ambient lighting in these areas.</p> <p>From Potter's Farm and Eastbridge Farm, landform and multiple 'layers' of vegetation (principally hedgerows) would screen/filter views to low level activity and sources of artificial lighting (although views would be possible to illuminated taller elements such as cranes and to sky glow above the construction site).</p> <p>The maximum screening/filtering of views afforded by intervening vegetation would be during the late spring, summer and early autumn when deciduous trees and hedgerows are at or near full leaf. Whilst some screening/filtering of views would remain (especially where several lines or areas of vegetation lie between the viewer and the source of lighting) the significance of visual effects at night from artificial lighting would be greatest during winter months when deciduous trees and shrubs (including hedgerows) are out of leaf.</p> <p>The lighting management plan describes the measures that would mitigate the impact of artificial lighting on the surrounding environment during the construction phase as far as reasonably practicable.</p> <p>Lighting mitigation measures are set out in Section 1.3 of the Lighting Management Plan and their implementation is secured under Requirement 9.</p>
LI.3.6	ESC, Applicant	<p>Requirement 14 - Advanced Planting</p> <p>ESC – Following the Compulsory Acquisition Hearing on 17 August 2021, Requirement 14 – Main development site: Landscape works (Doc 3.1 Revision 8.0) has been amended to include wording in relation to an advanced landscape scheme. Please review and provided comment.</p> <p>Applicant – It is noted that detail of the advanced landscaping scheme is to be submitted to and approved by ESC. It would however be helpful to be provided with high level information including, but not limited to, proposed location of planting, timing of planting</p>



ExQ3	Question to:	Question:
		and scale. In addition, please advise why advanced planting is only proposed at Work 1A? Please consider the extension of advanced planting both within the main development site and the associated development sites.
	SZC Co. Response at Deadline 8	<p>SZC Co. is committed to establishing new planting at the earliest practicable opportunity in accordance with the project design principles contained within Chapter 5 of the Design and Access Statement [REP5-070]. A Planting Phasing Strategy (Appendix D of Comments at Deadline 7 on Submissions from Earlier Deadlines and Subsequent Written Submissions to ISH1-ISH6 – Appendix D, Electronic Page 84 [REP7-060]) for the Main Development Site was submitted at Deadline 7. The document provides information on the indicative location and timing of planting in relation to the five phases of construction identified in the Construction Method Statement (Doc Ref. 6.3 3D9D). The strategy includes an additional 'Advanced Planting Phase' prior to the start of construction activity to show areas of planting to be implemented in advance of, or as part of, enabling works to provide initial screening and integration of built features. Some of this planting has already been completed with further planting planned for the 2021/2022 tree planting season.</p> <p>With regard to the associated development sites, as both designs for the associated developments and their landscape schemes continue to evolve, consideration will be given to areas where advance planting could be achieved without being affected by construction works as part of the detailed design stage. Areas where planting would provide particular benefit to local residents and other sensitive receptors will be prioritised for consideration.</p>
LI.3.7	Applicant	<p>Change 19 – Temporary Desalination Plant</p> <p>In the event that Change 19 is accepted, please confirm any lighting requirements. Please provide a response in respect of both possible locations of the desalination plant and associated infrastructure.</p>
	SZC Co. Response at Deadline 8	<p>Lighting in relation to the Temporary Desalination Plant would be controlled by Section 1.3 of the Lighting Management Plan [REP7-019], which is secured under Requirement 9. The Temporary Desalination Plant will initially be located in Zone A prior to relocating to Zone B of the site as defined in Table 1.6 of the Lighting Management Plan. The</p>



ExQ3	Question to:	Question:
		Temporary Desalination plant will require ambient lighting in line with other construction processes and activities, to permit safe access to and around the plant, and for security purposes. Task-specific lighting is expected to be required for intermittent activities during operation. This will be maintained in line with the Lighting Management Plan. It should be noted that the containerised nature of much of the treatment plant will permit task-lighting to plant items to be provided inside containers, which will shield light spill to the external environment.

ExQ3: 09 September 2021
Responses due by Deadline 8: 24 September 2021

Application by NNB Generation Company (SZC) Limited for an Order Granting Development Consent for The Sizewell C Project

The Examining Authority's third written questions and requests for information (ExQ3)

Issued on 09 September 2021

Responses are due by Deadline 8: 24 September 2021

PART 5 OF 6

NV.3 [Noise and Vibration](#)

P.3 [Policy and need](#)



ExQ3	Question to:	Question:
NV.3	Noise and Vibration	
NV.3.0	The Applicant	<p>Noise thresholds at the Main Development Site</p> <p>In light of the proximity of the borrow pits and the stockpiles/spoil heaps near to Eastbridge and Potters Farm and the similarity of the works and machinery that are likely to be used to those on a waste or minerals site. Why would the controls linked to BS 5228 suggested by the Council not be more appropriate than those currently proposed?</p>
	SZC Co. Response at Deadline 8	<p>SZC Co. takes it that the part of BS5228 that is referred to in the question is Annex E.5, which relates to long-term, large-scale earth moving projects.</p> <p>Noise from the borrow pits is not assessed in isolation, and it will not occur in isolation. There will be periods where activities at the borrow pits are the most prominent part of the works, particularly for receptors in close proximity to them, but equally there will be periods where other parts of the main development site are more prominent, even for receptors close to the borrow pits.</p> <p>There is no simple method of disaggregating noise from the borrow pits from the rest of the main development site, other than measuring in close proximity to the works and calculating the noise level at a more distant location. This one of the reasons that SZC Co. does not consider this approach to be practicable for a site as complex as the main development site, with the array of sources that will be present.</p> <p>SZC Co.'s position was set out at Deadline 7 in paragraphs 1.6.21 to 1.6.40 of Written Submissions Responding to Actions Arising from Issue Specific Hearing 8: Air Quality, Noise and Vibration (25 August 2021) [REP7-071, electronic page 10]. In summary:</p> <ul style="list-style-type: none"> The main development site is not an earth-moving project nor akin to one, but a complex mix of earth-moving plant, construction plant, rail movements, unloading activities, and static plant.



ExQ3	Question to:	Question:
		<ul style="list-style-type: none"> • It is not possible to disaggregate noise from a complex mix of sources to apply the appropriate criteria for each activity, and SZC Co.'s approach reconciles this complexity. • Taken as a whole, the selective use of the minerals guidance is not an appropriate way to control noise from the main development site, and the approach preferred by ESC would extend the duration of the works and be incompatible with the construction programme. • SZC Co.'s proposed approach is robust and stringent; it is based on and goes beyond applicable guidance, and it is supported by the approach adopted by the Secretary of State at Hinkley Point C (indeed it also represents a tightening of that approach). <p>This summary of SZC Co.'s position, together with the fuller explanation in paragraphs 1.6.21 to 1.6.40 of Written Submissions Responding to Actions Arising from Issue Specific Hearing 8: Air Quality, Noise and Vibration (25 August 2021) [REP7-071, electronic page 10] applies to Eastbridge and Potter's Farm in the question, as well as more broadly.</p> <p>Following further discussions with ESC, an additional, lower threshold has been included for the evening period in an update to the draft main development site Noise Monitoring and Management Plan (Appendix B of Part B of the Code of Construction Practice (Doc Ref 8.11(E)) committing SZC Co. to submit a Bespoke Mitigation Plan for any construction works on the main development site that are likely to generate noise levels above 50dB $L_{Aeq,4hrs}$.</p> <p>This evening threshold is additional to the daytime and night-time noise thresholds previously set out, and exceeding any of the thresholds will trigger the need to develop a Bespoke Mitigation Plan and engage formally with ESC to agree an approach to the works.</p> <p>There is a temporal overlap between the 16 hour daytime period between 07:00 and 23:00 hours and the new additional 4 hour evening period between 19:00 and 23:00 hours. As is stated in the updated draft main development site Noise Monitoring and</p>



ExQ3	Question to:	Question:
		Management Plan (Appendix B of Part B of the Code of Construction Practice (Doc Ref 8.11(E))), there is no material effect of this overlap in the context of noise predictions in advance of the works, as the calculations will simply consider both periods. Exceedance of either will trigger the need for a Bespoke Mitigation Plan.
NV.3.1	ESC	<p>Noise Thresholds at the Main Development Site</p> <p>In light of the ongoing concern identified at ISH8 and in earlier representations, should the Applicant not agree to a change to the noise threshold for evening working;</p> <p>(i) what control would do the Council wish to see in place? And</p> <p>(ii) how would this be secured?</p> <p>In the event this were to be a revised or additional requirement please provide a draft of the wording the Council would wish to see included.</p>
	SZC Co. Response at Deadline 8	<p>Although not a question for SZC Co., it is considered helpful to reiterate the point made in response to ExQ3 NV.3.0 and highlight that the update to the draft main development site Noise Monitoring and Management Plan (Appendix B of Part B of the Code of Construction Practice (Doc Ref 8.11(E))) being submitted at Deadline 8 includes an additional evening threshold that will trigger the need to formally engage with ESC and agree a Bespoke Mitigation Plan. The additional evening threshold is set at a level of 50dB $L_{Aeq,4hrs}$, lower than the 55dB $L_{Aeq,16hrs}$ value already included in the Noise Monitoring and Management Plan (Appendix B of Part B of the Code of Construction Practice (Doc Ref 8.11(E))) for the daytime period, reflecting the potential for the evening period to be more sensitive than the daytime period.</p> <p>As also noted in response to ExQ3 NV.3.0, the temporal overlap between the 16 hour daytime period (07:00 and 23:00 hours) and the new additional 4 hour evening period (19:00 and 23:00 hours) has no material effect in the context of noise predictions in advance of the works; the calculations will simply consider both periods, and predicted exceedance of either will trigger the need for a Bespoke Mitigation Plan.</p>
NV.3.2	Applicant, ESC	Borrowpits and Stockpiles at the Main Development Site



ExQ3	Question to:	Question:
		<p>(i) The response in [REP6-025] is noted however, there is nothing currently in place which would prevent 24 hour working at the borrowpits or stockpiles. While para 4.3.8 indicates this is not the intention, should this not be prevented by prescribing a restriction of working hours in these locations?</p> <p>(ii) Are the Council satisfied that controls are currently in place would provide adequate living conditions for nearby receptors?</p> <p>(iii) If the Council continue to have concerns would a revised or additional requirement be appropriate? please provide a draft of the wording the Council would wish to see included should this be the case.</p>
	SZC Co. Response at Deadline 8	<p>(i) As stated at paragraph 4.3.8 of SZC Co.'s Comments at Deadline 6 on Submission from Earlier Submissions and Subsequent Written Submissions to ISH1-ISH6 [REP6-025, electronic page 32] SZC Co. does not intend to operate the northern borrow pit during the night. SZC Co. will therefore accept a discrete restriction to this area limited to earthworks operations, and this restriction is now included in paragraph 1.3.1 of the Code of Construction Practice (Doc Ref 8.11(E)), secured by Requirement 2 of the dDCO (Doc Ref 3.1(I)). It should be noted that other low-level activities may occur in this area such as security inspections and patrols of the site perimeter.</p> <p>(ii) No response from SZC Co. is required.</p> <p>(iii) No response from SZC Co. is required.</p>
NV.3.3	Applicant, ESC (iv) only	<p>Residential Gardens</p> <p>The Noise Mitigation Scheme and draft Rail Noise Mitigation Scheme are both aimed at reducing noise impacts within properties that would be subject to adverse noise.</p> <p>(i) Please advise if there has been an assessment of effects on residential gardens,</p> <p>(ii) Please advise what would be in place which may protect the enjoyment of people's gardens and the enjoyment of outside space associated with the home.</p> <p>(iii) What standard is sought to be achieved in protecting residential gardens? If this varies relative to the source of noise please explain any distinction that exists.</p> <p>(iv) Are there any concerns the Council has in this regard either with the assessment undertaken, or the mitigation offered?</p>



ExQ3	Question to:	Question:
	SZC Co. Response at Deadline 8	<p>(i) The protection of gardens is largely related to construction noise and road traffic noise, as these are the sources that may be present during the daytime when gardens are likely to be in use.</p> <p>Railway noise is not relevant as SZC Co's trains will run for the most part at night. Notwithstanding this, the elements of the Rail Noise Mitigation Strategy (Doc Ref 6.14 9.3.E(A)), now renamed the Rail Noise Mitigation Plan) that relate to physical measures will bring about a reduction in railway noise and vibration during both the daytime and night-time, within properties and in external areas.</p> <p>As SZC Co. stated at ISH12, the assessment of construction noise is either based on the criteria set out in BS5228-1: 2009+A1: 2014¹ (AD sites) or follows the principles set out in the standard (main development site). The approach in BS5228-1: 2009+A1: 2014 is to consider noise-sensitive premises, and it is clear from the definition in Section 3 of the standard, titled 'Terms and Definitions', that gardens are included within the scope of noise-sensitive receptors:</p> <p>"3.9 noise-sensitive premises (NSPs) <i>any occupied premises outside a site used as a dwelling (including gardens), place of worship, educational establishment, hospital or similar institution, or any other property likely to be adversely affected by an increase in noise level."</i></p> <p>BS5228-1: 2009+A1: 2014 therefore already includes consideration of gardens when setting criteria, and those criteria are applied at the dwelling, cognisant of the fact that the dwelling may have gardens around it. SZC Co. considers that the assessment considers gardens in exactly the way envisaged in BS5228-1: 2009+A1: 2014.</p> <p>For road traffic noise, the approach set in DMRB LA111 is applied, and that method does not require consideration of road traffic noise in gardens. Notwithstanding this, in most instances the predicted noise levels with the new roads in place are expected to be below the 55dB upper guideline value in BS8233: 2014, which is the only British Standard that provides a guideline value for gardens, albeit in the context of new residential</p>

¹ British Standard BS5228-1: 2009+A1: 2014 Code of Practice for noise and vibration control at open construction sites – Noise



ExQ3	Question to:	Question:
		<p>development proposed close to existing noise sources, rather than assessing a change in the existing noise climate.</p> <p>For context, British Standard 8233: 2014² recommends a 'desirable' guideline value for gardens of 50dB L_{Aeq,T} and an upper guideline value of 55dB L_{Aeq,T}, both in the context of residential development proposed close to existing noise. The standard also states that higher noise levels are acceptable where development is desirable, providing that the noise levels are as low as practicable.</p> <p>(ii) The Code of Construction Practice (Doc Ref 8.11(E)) provides the mechanism to apply appropriate mitigation for construction works, which will protect both external and internal environments alike.</p> <p>The Noise Monitoring and Management Plans provide a means for ESC to control construction work, to ensure mitigation is appropriate, and if necessary, to seek targeted mitigation for locations they consider sensitive. For the main development site, that provision for ESC to influence construction works occurs at a noise level of 55dB L_{Aeq,16hrs}, i.e. at the equivalent level to the upper guideline value set out in BS8233: 2014 for gardens. The draft main development site Noise Monitoring and Management Plan (Appendix B of Part B of the Code of Construction Practice (Doc Ref 8.11(E))) to be submitted at Deadline 8 includes an additional evening threshold that will require the agreement of ESC to the proposed construction works at an additional evening threshold set at a level of 50dB L_{Aeq,4hrs}.</p> <p>The Noise Monitoring and Management Plans for the Associated Development sites will include a similar approach; a draft of the Noise Monitoring and Management Plan (Appendix A of Part C of the Code of Construction Practice (Doc Ref 8.11(E))) for the northern park and ride site is submitted at Deadline 8 and the Noise Monitoring and</p>

² See section 7.7.3.2 of British Standard 8233: 2014 Guidance on sound insulation and noise reduction for buildings (2014)



ExQ3	Question to:	Question:
		<p>management Plans for the associated development sites must be in general accordance with that draft.</p> <p>SZC Co. considers that this approach provides certainty that the works will be managed and mitigated to an appropriate level, in partnership with ESC.</p> <p>(iii) There is no standard relating to the protection of gardens from changes in the existing noise climate. The criteria that are routinely applied to gardens are generally applied in the context of new residential development, and are found in BS8233: 2014³. The criteria are also found in the WHO's 'Guidelines for Community Noise'⁴, although these guideline values are largely superseded by the 2018 Environmental Noise Guidelines⁵.</p> <p>The guidelines in BS8233: 2014 are:</p> <ul style="list-style-type: none"> • 50dB $L_{Aeq,T}$, which is a 'desirable' target in BS8233: 2014 (and the level not to be exceeded to avoid 'moderate' annoyance in the 1999 WHO guidance. It is stated as a 16hr value in the WHO guidance). • 55dB $L_{Aeq,T}$, which is an 'upper limit' in BS8233: 2014 (and the level not to be exceeded to avoid 'serious' annoyance in the 1999 WHO guidance. It is also stated as a 16hr value in the WHO guidance). <p>BS8233: 2014 suggests that development in higher noise areas that is regarded as desirable should not be prohibited if gardens exceed 55dB, but the lowest practicable levels should be achieved.</p> <p>SZC Co. notes that the 16hr time base for these values is not equivalent to that set out in the Annex E.5 long-term earth moving criteria, which uses a 1hr time period, and equivalence should not be assumed.</p>

³ British Standard 8233: 2014 Guidance on sound insulation and noise reduction for buildings (2014)

⁴ World Health Organisation Guidelines for Community Noise (1999)

⁵ World Health Organisation Environmental Noise Guidelines for the European Region (2018). The equivalent guidance in the 2018 ENG is 54dB L_{DEN} for railway noise and 53dB L_{DEN} for road traffic noise.



ExQ3	Question to:	Question:
		<p>As noted in part (i) of this question, the standard for construction noise sets criteria cognisant of the fact that the dwelling may have gardens around it, and DMRB does not require separate consideration of gardens.</p> <p>On the above basis, the change in noise from construction and operational activities has been assessed for representative receptors, including gardens. The methodology applied is in keeping with the regulatory assessment process, the procedures and mitigation to manage noise at source and reduce exposure is appropriate, and the residual impact is not sufficient to quantify any manifest health outcome or deter the use and enjoyment of gardens. In any event, and as noted in part (ii) of this question, the Code of Construction Practice (Doc Ref 8.11(E)) provides the mechanism to apply appropriate mitigation for construction works, which will protect both external and internal environments alike.</p> <p>(iv) No response from SZC Co. is required.</p>
NV.3.4	Applicant	<p>Noise Mitigation Scheme</p> <p>Are you able to advise of the number of properties that are anticipated that would require noise insulation to avoid SOAEL?</p> <p>In considering this question it is understood that more detailed noise assessments are expected to be carried out, nevertheless an estimate for each element of the numbers of properties affected by the development would be helpful in understanding the degree of effect that is anticipated.</p> <p>It is also understood that these figures will vary for construction and operation, please provide a breakdown on that basis, site by site, or by activity (e.g. Green Rail Route. East Suffolk Main Line, Saxmundham to Leiston branch line, SLR, TVB etc.)</p>
	SZC Co. Response at Deadline 8	<p>A breakdown of the current property numbers is set out here, broken down for each element of the project.</p> <p>It is important to understand that these figures are based on very worst-case outcomes, where no mitigation for construction noise is assumed. As described in the submitted assessments, it is expected that the mitigation delivered through the Code of Construction Practice (Doc Ref 8.11(E)) will be sufficient to avoid SOAEL in almost all</p>



ExQ3	Question to:	Question:																								
		<p>instances. That mitigation is secured through Requirement 2 of the DCO, such that there can be confidence that these figures will not be realised.</p> <p>However, since the exact quantum of noise reduction delivered through the Code of Construction Practice (Doc Ref 8.11(E)) is not known in detail at this time, no reductions are applied to the calculated construction noise levels.</p> <p>It is also assumed for these purposes that construction work continues unabated on Saturday afternoons on the Associated Development sites. As stated in SZC Co.'s response to ExQ2 NV.2.1 [REP7-054, electronic page 4] and was confirmed by SZC Co. at ISH12, it is expected that Saturday afternoons will largely be limited to maintenance activities, with some earthworks possible in dry weather to seek to accelerate the delivery of the associated development sites. This step alone is likely to be sufficient to avoid exceeding SOAEL at the associated development sites during their construction.</p> <p>The numbers set out here are also the number of properties, not the number of receptors or receptor groups. The exercise of resolving the number of receptors into property numbers has been undertaken to produce these figures.</p> <p>Table 1: Maximum number of properties likely to be above SOAEL (before mitigation through the CoCP and before application of the Noise Mitigation Scheme)</p> <table> <tr> <th>Element of SZC project</th><th>Total number of properties</th><th>Of which are listed properties</th></tr> <tr> <td>Main Development Site</td><td>44⁽¹⁾</td><td>1</td></tr> <tr> <td>Two Village Bypass</td><td>28</td><td>3</td></tr> <tr> <td>Sizewell Link Road</td><td>40</td><td>5</td></tr> <tr> <td>Yoxford Roundabout</td><td>30</td><td>6</td></tr> <tr> <td>Green Rail Route</td><td>18</td><td>0</td></tr> <tr> <td>Saxmundham to Leiston Branch Line</td><td>3</td><td>0</td></tr> <tr> <td>Freight Management Facility</td><td>0</td><td>0</td></tr> </table>	Element of SZC project	Total number of properties	Of which are listed properties	Main Development Site	44 ⁽¹⁾	1	Two Village Bypass	28	3	Sizewell Link Road	40	5	Yoxford Roundabout	30	6	Green Rail Route	18	0	Saxmundham to Leiston Branch Line	3	0	Freight Management Facility	0	0
Element of SZC project	Total number of properties	Of which are listed properties																								
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ExQ3	Question to:	Question:												
		<table> <tr> <td>Northern Park and Ride</td><td>10</td><td>1</td></tr> <tr> <td>Southern Park and Ride</td><td>0</td><td>0</td></tr> <tr> <td>East Suffolk Line</td><td>5-10⁽²⁾</td><td>-(4)</td></tr> <tr> <td>B1122/Lovers Lane</td><td>12⁽³⁾</td><td>-(4)</td></tr> </table> <p>Notes:</p> <p>(1) – The reduced eligibility thresholds for the main development site agreed at ISH12 will increase the number of properties that are likely to be eligible for insulation to 129, but the additional 85 properties are not expected to be above SOAEL.</p> <p>(2) – For the East Suffolk line, the stated total is the number of properties likely to be above SOAEL, i.e. above 77dB (free-field) L_{AFmax}. There will be an additional 100 to 110 no. properties that are likely to have noise levels above 70dB (free-field) L_{AFmax} and are likely to be eligible for insulation under the revised Noise Mitigation Scheme, but are below SOAEL.</p> <p>(3) – In addition to the stated properties, insulation will be offered to an additional 71 no. properties on the B1122, although they are unlikely to be above SOAEL. This is secured in Schedule 12 of the Deed of Obligation (Doc Ref 8.17(G)), where the properties are listed as 'the B1122 properties'.</p> <p>(4) – The number of listed buildings within the 11 no. stated B1122 properties and 5-10 no. properties adjacent to the East Suffolk line have not been calculated.</p> <p>All of the figures set out in Table 1 are subject to revision and review under the refreshed assessments that forms Stage 1 of the Noise Mitigation Scheme (Annex W of the Deed of Obligation (Doc Ref 8.17(G))).</p>	Northern Park and Ride	10	1	Southern Park and Ride	0	0	East Suffolk Line	5-10 ⁽²⁾	-(4)	B1122/Lovers Lane	12 ⁽³⁾	-(4)
Northern Park and Ride	10	1												
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B1122/Lovers Lane	12 ⁽³⁾	-(4)												
NV.3.5	Applicant, ESC	<p>Appropriate Control Mechanism</p> <p>During ISH8 on Air Quality and Noise there was debate around whether effective controls would be in place via the Applicant's preferred route as opposed to the established legislative route already in place through S60 and S61 of the Control of Pollution Act.</p>												



ExQ3	Question to:	Question:
		<p>(i) Has agreement now been reached as to the appropriateness of the Applicant's route?</p> <p>(ii) In the event it is not agreed, what would the Council wish to see in place either through a requirement or other form of control?</p>
	SZC Co. Response at Deadline 8	<p>(i) SZC Co.'s proposed control mechanism through the Code of Construction Practice (Doc Ref 8.11(E), Noise Monitoring and Management Plans and Bespoke Mitigation Plans has been agreed in principle.</p> <p>As is stated in paragraph 4.4.4 of the draft main development site Noise Monitoring and Management Plan (Appendix B of Part B of the Code of Construction Practice (Doc Ref 8.11(E)) the proposed process does not affect ESC's powers under section 60 of the Control of Pollution Act 1974. SZC Co. understands that ESC may seek to use their powers under the Control of Pollution Act 1974 as an alternative means of enforcing any breaches of agreed Bespoke Mitigation Plans.</p> <p>(ii) No response is required from SZC Co.</p>
NV.3.6	Applicant, ESC, SCC	<p>Additional receptor at FMF</p> <p>D7 Appendix 11B response to LPA Second Request for Information has undertaken further noise assessment for the FMF set out under heading of Operation at para 2.3.</p> <p>There has been a suggestion there is a residential caravan adjacent the FMF in earlier representations [AS-321].</p> <p>(i) Has the assessment assessed the affects at this location?</p> <p>(ii) Are the Council's able to confirm the status of this caravan and it's precise location?</p>
	SZC Co. Response at Deadline 8	<p>(i) The assessment presented in SZC Co.'s second set of responses to requests for information from ESC at RFI34 [REP-093, electronic page 13] was focussed on the two receptors highlighted by ESC, which are located at the western end of Felixstowe Road. The potential receptor at the southern end of Levington Lane that is identified by Mr Webb in his earlier written representation [AS-321] was not considered as part of that assessment, as it was not requested by ESC as part of their specific question about road traffic noise effects on the houses identified on Felixstowe Road.</p>



ExQ3	Question to:	Question:
		<p>SZC Co. understands from ESC that the caravan does not have planning permission and the Council is taking steps to remove it. It is understood that it is not regarded as a sensitive receptor.</p> <p>(ii) No response is required from SZC Co.</p>
NV.3.7	Applicant, ESC	<p>DCO Requirement No. 25</p> <p>As currently drafted DCO Requirement No.25 relates to works no. 4 only.</p> <p>(i) Are there appropriate mechanisms in place to ensure that operational and constructional controls for the rest of the rail line are secured such that the trains operating in association with the development and the construction activities operate in the way anticipated and the mitigation to be provided through the NMS and RNMS would be delivered?</p>
	SZC Co. Response at Deadline 8	<p>(i) Work no. 4 is the only element of the railway network that is within the order limits, and it is therefore appropriate for the requirement to relate to that element of the railway network.</p> <p>As stated at ExQ2 NV.2.4 [REP7-054, electronic page 10], Requirement 25 prevents all Sizewell C trains from operating along Work no.4 until a Rail Noise Mitigation Strategy is agreed with ESC. That has the effect that Sizewell C trains cannot operate on the East Suffolk line, since SZC Co. has no purpose for running trains other than to access the branch line. By precluding trains along the branch line until the Rail Noise Mitigation Strategy (which provides controls for both the branch line and the East Suffolk line) is approved and has been implemented, Requirement 25 thereby secures the necessary constructional and operational controls along both the branch line and East Suffolk line. The Noise Mitigation Scheme (Annex W of the Deed of Obligation Doc Ref 8.17(G)) is secured and delivered through Schedule 12 of the Deed of Obligation (Doc Ref 8.17(G)), and specific works site numbers are not relevant to the delivery of that scheme.</p>
NV.3.8	Applicant	Rail Noise



ExQ3	Question to:	Question:
		<p>Woodbridge Town Council raise additional questions at D6 on the suitability of the assessment and whether vibration effects from empty wagons can be safely used to predict the vibration effects of filled wagons.</p> <p>Please respond to this concern and explain whether there is likely to be a material difference between an unladen train and a fully laden one.</p>
	SZC Co. Response at Deadline 8	<p>Vibration from a passing train is caused by three effects. The first is due to the ground surface being forced down as the weight of a train axle passes. The second is due to variations in the support stiffness along the rail (for example the support stiffness directly above a sleeper is higher than it is at the mid-point of the rail between sleepers). The third is due to variations in the force on the rail caused by irregularities in the surface of the wheel tread and the rail head.</p> <p>The first effect (known as quasi-static excitation) is dependent on the overall axle weight. At low train speeds, the effect occurs at very low frequency. It decays rapidly with distance from the track, and at 3m from the track and a speed of 10 mph the maximum amplitude is below the threshold of human perception, and well below the displacement limit of 0.6mm recommended by BS7385-2:1993 from the point of view of structural damage. The second effect (known as parametric-excitation) occurs primarily at the sleeper passing frequency, which at 10 mph and with typical sleeper spacing is about 6 Hz. It is dependent on both the axle load and the unsprung mass. Unsprung mass is the mass of the wheels and the axle connecting them, plus (in the case of a locomotive) the mass of any part of the traction equipment which is supported on or part of the axle. This effect can be taken into account by treating it as an irregularity in the rail surface and the wheel tread. For the wheel load of a locomotive or fully laden wagon it is greater than the roughness amplitude of a typical wheel/rail combination so that at the very low frequency involved it is the main source of vibration. The third effect (wheel/rail roughness and rail discontinuities including joints) is strongly dependent on unsprung mass with axle load exerting a minimal influence, and it is the main source of vibration except at very low frequencies.</p> <p>The conclusion which emerges is that at very low frequencies, axle load is the controlling parameter, and at higher frequencies, unsprung mass is the controlling parameter.</p> <p>The August 2020 measurements were made for a train with a locomotive at each end, and empty freight wagons. The axle loads of the locomotives were approximately 22 tonnes and those of the unladen wagons approximately 6 tonnes. The unsprung mass of a wagon</p>



ExQ3	Question to:	Question:
		<p>is approximately 1 tonne per axle. The unsprung mass of a Class 66 locomotive is approximately 2.6 tonnes per axle. Unsprung mass is unaffected by payload. The axle load of a loaded wagon will be of the order of 25 tonnes.</p> <p>It is possible to see from the time-domain results measured in August 2020, which are contained in Appendix IV of the 'Sizewell C Assessment of Ground-borne Noise and Vibration from Freight Trains' report, which is itself contained in Appendix B of Volume 3, Appendix 9.3.A of the First ES Addendum [AS-257, starting at electronic page 152], the effect of axle load and bogie parameters. Comparing locomotive axles and wagon axles, at higher frequencies the effect is of the order of 5dB when passing over joints, but while axles are running between joints there is a very small effect of the order of 2dB. This will be the case when the Leiston track has been replaced and remote from any joints on the East Suffolk line. At very low frequencies (of the order of the sleeper-passing frequency at around 6Hz) the vibration during the passage of a locomotive axle is approximately four times that during the passage of an unladen wagon axle.</p> <p>The method of assessment employed is primarily based on the maximum measured values, i.e. the effect of 22 tonne locomotive axles passing, and the difference between the effect of the passage of a fully-laden wagon having 25 tonne axle loads with a 1 tonne unsprung mass and a locomotive having 22 tonne axle loads with a 2.6 tonne unsprung mass would be less than 1 dBA in groundborne noise terms. At very low frequencies, the effect is similar, and in vibration amplitude terms would be no more than 10%. This is not a material difference.</p> <p>These issues are similar to the matter discussed in ISH8 and ISH12, regarding comparisons between historical vibration caused by nuclear flask trains and vibration from proposed construction trains for Sizewell C. The detailed comparison is as follows.</p> <p>Nuclear Flasks were transported by rail from Sizewell A using FNA wagons, having Y25 bogies. Y25 bogies have very stiff primary suspension when fully loaded, because they are fitted with double helical springs, the inner ones acting when the wagon is loaded. Additionally there is a Lenoir link friction damper connected across each axle box, which can transfer part or all of the body load to the axles. There is no real secondary suspension. The combined effect of these characteristics is that, depending on the behaviour of the Lenoir link the unsprung mass may be the entire vehicle load, as if the bogie had no suspension. The unsprung mass of one axle is 1764kg but the unsprung load</p>



ExQ3	Question to:	Question:
		<p>may be much greater when the weight of the loaded wagon is transferred through the Lenoir link.</p> <p>For Sizewell C it is proposed to use JNA wagons, which have LN-25 bogies ("LN" stands for Low Noise, based on the TF-25 "Track Friendly" bogie design). The bogies have much softer primary suspension than Y25 bogies, have viscous dampers instead of Lenoir link friction dampers and have more effective secondary suspension. As a result they are in suspension band 6 in the Network Rail Variable Usage Charge system, whereas Y25 bogies are in band 5. This is because LN-25 bogues have "enhanced primary springs" according to the Network Rail banding system. Under all conditions the unprung mass is only 1,310kg.</p> <p>This explains why vibration from Sizewell C trains will not be as great as was observed by residents during the operation of nuclear flask trains.</p>
NV.3.9	Applicant, ESC (ii) only	<p>Sleep Disturbance Assessment</p> <p>[AS 258] Appendix 9.3D set out an assessment of the potential for sleep disturbance.</p> <p>(i) In light of the revision to the SOAEL which has now been adopted for the Noise Mitigation Scheme following discussions with ESC. Please explain whether in reducing the SOAEL this has any implications for reducing the number of properties where issues of sleep disturbance could arise.</p> <p>(ii)</p>
	SZC Co. Response at Deadline 8	<p>(i) To be clear, the change made to the Noise Mitigation Scheme (Annex W of the Deed of Obligation (Doc Ref 8.17(G)) where the L_{AFmax} eligibility threshold for insulation for railway noise was reduced from a façade value of 80dB to a façade value of 73dB, does not constitute a change to SOAEL. The SOAEL remains at a façade level of 80dB L_{AFmax} and is agreed by ESC (as they confirmed along with the SOAEL levels generally at ISH8). The reduction of the eligibility threshold simply means that insulation will be available for properties at a level below SOAEL.</p> <p>As result of the amendment, the risk of sleep disturbance is reduced overall, since more properties will benefit from the extended coverage of the scheme, with more properties benefitting from the enhanced insulation it provides.</p>



ExQ3	Question to:	Question:
		<p>As described in paragraph 3.2.16 of the Sleep Disturbance Paper contained in Volume 3, Appendix 9.3.D of the First ES Addendum [AS-257, electronic page 498], the rationale for the number now adopted in the Noise Mitigation Scheme (Annex W of the Deed of Obligation (Doc Ref 8.17(G))) is that it represents the point at which a standard double-glazed window will no longer be sufficient to reduce external noise levels to below the 45dB L_{AFmax} value that is the root of the LOAEL.</p> <p>A similar amendment was offered at ISH12 by SZC Co. in respect of construction noise at the main development site. This amendment will result in an approximate 10dB reduction in the insulation eligibility thresholds for construction noise at the main development site. This also does not affect the definition of SOAEL, which remains as shown in Table 11.11 in Volume 2, Chapter 11 of the ES [APP-202, electronic page 24]. The amendment simply means that insulation will be offered at a level below SOAEL.</p> <p>(ii) No response from SZC Co. is required.</p>
NV.3.10	Applicant, ESC	<p>LEEIE</p> <p>At deadline 3 in was noted that discussions were ongoing in respect of noise from the LEEIE [REP3-015].</p> <p>Please provide an update on the situation and advise of any outstanding concerns</p>
	SZC Co. Response at Deadline 8	<p>In responding to this question, SZC Co. assumes that it relates to the use of the LEEIE at night for the unloading of trains. This was raised by ESC in their Local Impact Report at item 18b in Table 18 [REP1-045, electronic page 229], with a similar point about night-time rail movements raised in item 20e in Table 20 [REP1-045, electronic page 283].</p> <p>SZC Co.'s response was given at item 20e in Table 18.1 in Comments on Councils' Local Impact Report [REP3-044, electronic page 169], highlighting the controls proposed under the draft Rail Noise Mitigation Plan (Doc Ref 6.14 9.3.E(A)), and the Noise Mitigation Scheme (Annex W of the Deed of Obligation Doc Ref 8.17(G)).</p>



ExQ3	Question to:	Question:
		<p>For unloading activities at the LEEIE, SZC Co. notes that the Code of Construction Practice (Doc Ref 8.11(E)), and the Noise Monitoring and Management Plan (Appendix B of Part B of the Code of Construction Practice (Doc Ref 8.11(E)) will provide the means to appropriately control any noise associated with the LEEIE.</p> <p>In addition, SZC Co. has agreed to two important changes to its control documents, which relate to this point:</p> <ul style="list-style-type: none"> The draft main development site Noise Monitoring and Management Plan (Appendix B of Part B of the Code of Construction Practice (Doc Ref 8.11(E)) will trigger the need to produce a Bespoke Mitigation Plan and agree the working methods and mitigation to be applied to any works that exceed daytime, evening and night-time noise thresholds that are below the level at which a significant effect is considered to occur, in an EIA context, with an additional evening threshold that is lower still. The eligibility thresholds for insulation under the Noise Mitigation Scheme (Annex W of the Deed of Obligation Doc Ref 8.17(G)) for the main development site, which includes the LEEIE, providing a level of mitigation, where all other reasonable options have been exhausted at a level below SOAEL. <p>SZC Co. is not aware of a particular ongoing issue in relation to the LEEIE.</p>
NV.3.11	Applicant, ESC, Create Consulting part (iii) only	<p>Issues raised by Create Consulting</p> <p>D7 submissions by Create Consulting on behalf of Mr Grant and Mr and Mrs Dowley reiterates and reinforces concerns previously set out in respect of the methodology of noise assessment, the subsequent levels at which mitigation would be engaged and the consequent harms that they consider that would arise.</p> <p>(i) Please provide a detailed response to the criticisms raised, and explicitly set out where the differences remain between the parties.</p> <p>(ii) Do ESC concur with the approach and findings of Create Consulting?</p> <p>(iii) Time is of the essence is there a potential for a SoCG which clearly sets out the areas of agreement and disagreement?</p>



ExQ3	Question to:	Question:
		<p>(iv) The response to previous similar concerns in REP5-119 is noted. Is there anything further that could be provided to assist the ExA in understanding the differences between the parties and which approach might be regarded as the most appropriate.</p> <p>(v) If the approach that Create Consulting recommends were to be used, is it possible to understand whether a better outcome for the residents of the affected properties might result?</p> <p>(vi) Consequently, is additional mitigation justified?</p>
	SZC Co. Response at Deadline 8	<p>(i) As is noted in response to ExQ3 NV.3.11(iii), a meeting was held between SZC Co. and Create Consulting Engineers (CCE) on 22 September 2021, where CCE was acting on behalf of the Grant family and EL and LJ Dowley.</p> <p>The two parties have committed to working to an agreed position where CCE represents the Grant family. Where CCE represents EL and LJ Dowley, a Statement of Common Ground is being prepared that will set out areas of outstanding disagreement, as well as areas of agreement.</p> <p>SZC Co. has also included some limited responses to the Deadline 7 submissions from CCE ([REP7-179] on behalf of the Grant family, and [REP7-177] on behalf of EL and LJ Dowley) in the 'Comments on Earlier Deadlines and Subsequent Written Submissions to CAH1 and ISH8-ISH10' (Doc Ref 9.99) in sections 4.4 and 4.5.</p> <p>(ii) No response required from SZC Co.</p> <p>(iii) A meeting was held between SZC Co. and Create Consulting Engineers (CCE) on 22 September 2021, where CCE was acting on behalf of the Grant family and EL and LJ Dowley.</p> <p>The two parties have committed to working to an agreed position where CCE represents the Grant family. Where CCE represents EL and LJ Dowley, a Statement of Common Ground is being prepared to be submitted at or before Deadline 10, that will set out areas of outstanding disagreement, as well as areas of agreement.</p>



ExQ3	Question to:	Question:
		<p>(iv) As the question notes, SZC Co. provided a detailed response to Create Consulting's Deadline 5 submissions in its Comments at Deadline 7 on Submissions from Earlier Deadlines and Subsequent Written Submissions to ISH1 to ISH6 [REP7-061] although it is listed on the PINS library list as 'appendices', starting at electronic page 75. Further information will be submitted as part of the Statement of Common Ground that is being prepared in response to ExQ3 NV.3.11(iii).</p> <p>(v) SZC Co. does not consider the result of Create Consulting's approach to be a materially different outcome. One of the main criticisms is that Create Consulting consider SZC Co.'s baseline noise measurements to be too high, which they say fundamentally alters the assessment. This is not the case; if the baseline were lower than SZC Co. measured, which SZC Co. does not dispute is possible, since measured noise levels will vary on a day to day basis, then the construction noise LOAEL would be lower and the threshold between a negligible and a minor adverse effect would reduce; both of these thresholds are defined by the baseline noise levels.</p> <p>However, the consequence of such changes does not have a material effect on the submitted assessment. A reduced LOAEL means that there is a policy requirement to mitigate and minimise noise levels, which is the case in any event through the measures set out in the Code of Construction Practice (Doc Ref 8.11(E)), and neither negligible nor minor adverse effects are significant in an EIA context. SZC Co. set this out in paragraphs 3.14.54 to 3.14.56 in its Comments at Deadline 7 on Submissions from Earlier Deadlines and Subsequent Written Submissions to ISH1 to ISH6 [REP7-061 although it is listed on the PINS library list as 'appendices', starting at electronic page 78]. No new significant adverse effects will result from Create Consulting's preferred approach, nor will additional exceedances of SOAEL be created.</p> <p>(vi) SZC Co. considers that the mitigation measures set out in the Code of Construction Practice (Doc Ref 8.11(E)) and the controls contained in the Noise Monitoring and Management Plan (Appendix B of Part B of the Code of Construction Practice (Doc Ref 8.11(E)) are appropriate and suitably flexible. The scope to introduce further mitigation is fundamental to the Bespoke Mitigation Plan process contained in the Noise Monitoring and Management Plan (Appendix B of Part B of the Code of Construction Practice (Doc Ref 8.11(E)).</p>



ExQ3	Question to:	Question:
NV.3.12	Applicant, ESC	<p>Issues raised by Acoustical Control Engineers</p> <p>Similar concerns would appear to be raised on behalf of Molletts Farm (at D7) to those raised in the previous question, but in addition suggest there is an underestimate of impacts due to the juxtaposition of the farm to the roads, the sensitivity of the receptor and the specific context of the business and the consequential affects of the prevailing wind direction.</p> <p>Please respond to the concerns identified and how if agreed to be appropriate this could be mitigated.</p>
	SZC Co. Response at Deadline 8	<p>The Deadline 7 noise submission from Mollett's Farm (Appendix D of their submission, which appeared at [REP7-211] was largely a summary of the points made at Deadline 5 (which were resubmitted as Appendix E of their Deadline 7 submission [REP7-212]).</p> <p>SZC Co. has provided a clarification to one of the points raised in the letter from Acoustical Control Engineers dated 3 September 2021 that was included as Appendix D [REP7-211]; that clarification appears in the 'Comments on Earlier Deadlines and Subsequent Written Submissions to CAH1 and ISH8-ISH10' (Doc Ref 9.99) in section 4.6.</p> <p>SZC Co. set out its responses to points made in relation to the relationship between wind direction and road traffic noise in its Comments on Responses to the ExA's First Written Questions (ExQ1) Submitted at Deadline 3 at SE.1.12 [REP5-121], electronic page 820].</p> <p>For ease of reference, SZC Co.'s response stated:</p> <p><i>'At paragraph 9.3, ACC states: 'Wind direction has a significant effect on sound propagation. The assessment methodology is based on a comparison of predicted levels for the existing and proposed routes that assume downwind propagation to the farm from both. This is unrepresentative as the farm is located between the two routes. The prevailing wind direction is such that sound from the proposed</i></p>



ExQ3	Question to:	Question:
		<p><i>route will have favourable propagation conditions to the farm much more often than the existing route.'</i></p> <p><i>It is correct to say that the wind direction inherent in the calculations is moderately adverse, which is to say that the wind is assumed to blow from each source to every receptor. It is accepted that this cannot occur in practice, as it requires the wind to be blowing in several directions at once. However, that assumption is intrinsic to the CRTN calculation method, and that is the calculation method that is required by DMRB LA111; this is not the result of a decision made by SZC Co.'</i></p> <p>The assumptions on wind direction are inherent to the road traffic noise calculation method that must be used.</p> <p>Landscaping proposals were sent to the owners of Mollett's Farm on 20 August 2021, and a copy of the correspondence is contained in Appendix J of the Comments at Deadline 7 on Submissions from Earlier Deadlines and Subsequent Written Submissions to ISH1-ISH6 - Appendices Part 3 of 3 [REP7-063, electronic page 11]. The correspondence included the calculated potential effect of the landscaping.</p> <p>At a meeting on 2 September 2021, the owners of Mollett's Farm asked SZC Co. to review the proposals and see if a greater noise reduction could be secured. Revised landscaping proposals were sent to the owners of Mollett's Farm on 17 September 2021, with additional noise calculations following on 21 September 2021.</p> <p>The revised landscaping provides a marginally better acoustic benefit; a further meeting was to be held with the owners and representatives of Mollett's Farm to discuss the amended proposals, with the meeting scheduled for 22 September 2021.</p>
NV.3.13	Applicant, Network Rail	Train Warning Sirens



ExQ3	Question to:	Question:
		<p>The Applicant [REP5-119] in responding to concerns identified by Woodbridge Town Council [REP3-085 & REP3-087] indicated that train warning klaxons may no longer be required except in emergency circumstances where Miniature Stop Lights were installed.</p> <p>(i) Please advise on the progress of this element of the upgrades and confirm that warning sirens would no longer be necessary in the event this form of adaption was provided at the level crossings.</p> <p>(ii) Please advise which level crossings these changes apply to and what secures the delivery of these upgrades.</p>
	SZC Co. Response at Deadline 8	<p>(i) SZC Co. understands that the purpose of trains sounding their horns (or klaxons to use the terminology in the question) is to warn pedestrians or cars of their approach. However, SZC Co. understands through discussion with Network Rail that the installation of the miniature stop lights means that the need for trains to continue to routinely sound their horns to warn users of their presence can be reviewed on a site-by-site basis.</p> <p>The level crossings themselves will have alarms fitted to them to provide an audible warning to users of the impending arrival of a train. The volume of these alarms is adjustable, within the constraints imposed by Network Rail's safety standards, as was set out in SZC Co.'s answer to the Examining Authority's first round of questions at NV.1.32 [REP2-100, electronic page 1071]. The means of securing and delivering that site-specific calibration of level crossing alarms, within the constraints of Network Rail's safety standards, is set out in section 2.8 of the draft Rail Noise Mitigation Plan (Doc Ref 6.14 9.3.E(A)), which is secured by Requirement 25 of the dDCO (Doc Ref 3.1(I)).</p> <p>(ii) The following level crossings will have miniature stop lights fitted:</p> <ul style="list-style-type: none"> • Kingston Farm UWCT & FPG • Uffold UWCT • Blackstock UWCT • Redhouse farm UWCT • Ellingers UWCT



ExQ3	Question to:	Question:
		<ul style="list-style-type: none"> Brick Kiln UWCT (Downgrade to Bridleway) <p>The upgrade, design and specification of the systems on identified crossings will be secured by section 2.8 of the Rail Noise Mitigation Plan (Doc Ref 6.14 9.3.E(A)), itself secured by Requirement 25 of the dDCO (Doc Ref 3.1(I)).</p>
NV.3.14	Applicant,	<p>Rail Noise Acoustic barriers</p> <p>It may be academic in light of Network Rail response to the potential for screens to be placed along the rail line on land within their control, nevertheless it would be helpful to understand the following;</p> <p>(i) What distance was the barrier assumed to be from the source of noise in the acoustic fencing assessment and how was this distance derived?</p> <p>(ii) What acoustic standard/ acoustic benefit was the fence assumed to have?</p> <p>(iii) Is the Applicant able to advise how the height and length of fence was derived?</p> <p>(iv) Have barriers of a reduced height which might be considered to be more appropriate in the broader planning context been considered?</p> <p>(v) The Council at deadline 7 has now had the opportunity to consider the broader planning implications of such barriers and have indicated that a full assessment with consultation would be appropriate to conform with the policy requirements of minimising and mitigating noise at source, is this an agreed position and should it now be taken forward as part of the RNMS? If this is not agreed please provide a full explanation</p>
	SZC Co. Response at Deadline 8	<p>(i) SZC Co. is not clear what is meant by part (i) of this question. No barrier had been assumed in the submitted assessments of railway noise, other than where they had been specifically assessed in the targeted consultations for Whitearch Park [REP2-112, electronic page 178 and REP6-030] and for houseboats in the Woodbridge and Melton areas [REP2-112, electronic page 211].</p> <p>For the note on potential planning constraints to the erection of lineside acoustic barriers contained in Appendix I of SZC Co.'s Comments at Deadline 6 on Submission from Earlier Submissions and Subsequent Written Submissions to ISH1-ISH6 - Appendices [REP6-024, electronic page 203], a simple assumption was made that the barriers would be on or within the Network Rail boundary and therefore reasonably close</p>



ExQ3	Question to:	Question:
		<p>to the railway line. However, irrespective of the proximity of the barriers to the railway line, the determining factor for the amount of noise reduction that is achieved is that the barriers must be of sufficient height to at least block the line of sight between an upper storey window and the likely source location on the railway locomotive.</p> <p>(ii) As per part (i) of this question, no assumption was made on either the potential reduction from a barrier nor on a particular material or standard of construction. To be effective, any noise barriers would need to be imperforate, sealed at the base and have a superficial mass of at least 18kg/sq.m. The material used is not important from an acoustic point of view, as long as it meets these three requirements.</p> <p>The noise reduction likely to flow from the simple height assumption described in part (i) of this question, would be to provide a reduction of at least 5dB; this is the reduction typically achieved by a barrier that just breaks the line of sight between the source and the receptor.</p> <p>(iii) As per part (i) of this question, no assumptions have been made in the submitted noise assessment, as no barriers were assumed.</p> <p>The lengths of the barriers considered in Appendix I of SZC Co.'s Comments at Deadline 6 on Submission from Earlier Submissions and Subsequent Written Submissions to ISH1-ISH6 - Appendices [REP6-024, electronic page 203] were based on professional judgement as to where barriers were likely to be effective. No detailed noise modelling was undertaken for that exercise as its primary purpose was related to consideration of planning matters. The heights were derived as described in Part (ii) of this question.</p> <p>(iv) In general, the height is dictated by the need to break the line of sight from the source (locomotive) and the receptor (typically a bedroom window).</p> <p>The height of the source is known to be either 4m above rail level for a diesel locomotive running on full power, or approximately 2.5 to 3m above rail level for a diesel locomotive not running on full power.</p> <p>The height of the upper floor of a typical two storey residential property is generally around 4 to 4.5m.</p> <p>To break the line of sight between source and receptor will generally require a barrier 4 to 4.5m high, as long as the railway is broadly at grade with the residential property. ESC confirmed that this is a reasonable position to have adopted in section 2 of their Deadline</p>



ExQ3	Question to:	Question:
		<p>7 submission 'East Suffolk Council comments on Deadline 6 submissions from the Applicant' [REP7-109, electronic page 14].</p> <p>It is possible that in some locations lower barriers may be appropriate, where the receptors are less than two storeys, for examples bungalows, residential park homes or houseboats.</p> <p>(v) SZC Co. is submitting at Deadline 8 an update to the Rail Noise Mitigation Strategy (Doc Ref 6.14 9.3.E(A)), now renamed the Rail Noise Mitigation Plan) to include a process to determine the appropriateness of the installation of acoustic fencing as close to the railway line as possible, but outside of Network Rail's land ownership. All of the locations identified by ESC are included for further consideration, as is the branch line and the green rail route.</p>
NV.3.15	Applicant, SCC, ESC	<p>Road Noise</p> <p>(i) Please provide an update on the assessment of quiet road surfacing, and in what areas this has been agreed (if at all), and to what standard.</p> <p>(ii) Please update how it is expected to be secured and maintained in the future assuming it is to be provided.</p> <p>(iii) It is understood that in order to maintain the noise saving properties a revised maintenance regime would be required. Please explain how this is to be delivered through the construction and operational periods, or if there is a different approach for each period.</p> <p>(iv) In the event there is a different approach please explain the justification for such an approach.</p>
	SZC Co. Response at Deadline 8	<p>(i) SZC Co. is in the process of agreeing locations on the existing road network where a quiet road surface might be appropriate. Similarly, discussions are ongoing in respect of quiet road surfacing on the new roads.</p> <p>The noise benefit of a quiet road surface for existing roads will depend on both the specification of surface installed, its maintained condition and the speed of vehicles. Quiet road surfaces are less effective where vehicles travel at less than 75km/h (approximately 46mph) as the tyre/road interface becomes less dominant and engine/drivetrain noise becomes more prominent. For the new roads, SZC Co. expects that where the road is maintained in good condition, receptors along the route, away from existing roads, are</p>



ExQ3	Question to:	Question:
		<p>likely to benefit from a reduction in noise that is close to the theoretical maximum performance of the selected surface; reductions in noise from the two village bypass and Sizewell link road can be expected to be in the region of 2.5 to 3.5dB.</p> <p>(ii) For Marlesford and Little Glemham this will be secured through the A12 Marlesford and Little Glenham Mitigation Scheme in the Deed of Obligation with the relevant plans appended to that agreement. For TVB and SLR this will be secured in principle through the Associated Development Design Principles and details approved through Requirement 22.</p> <p>(iii) SZC Co. understands that there are no additional routine maintenance requirements for quiet road surfacing. The maintenance regime would be agreed with SCC and the relevant projected costs included within the specified commuted sums in the relevant Article 21 agreement.</p> <p>(iv) Following the adoption of the TVB and SLR as public highway, SCC would be responsible for the ongoing maintenance of the roads.</p>
NV.3.16	Applicant, SCC, ESC	<p>Road Noise</p> <p>(i) Please provide an update on the provision of noise barriers along the SLR and TVB and whether these have now been agreed.</p> <p>(ii) Please provide an update as to how it is intended these measures would be secured assuming they are to be provided.</p>
	SZC Co. Response at Deadline 8	<p>(i) The discussions with the various landowners along the SLR and TVB are ongoing. SZC Co. has been asked by the owners of Mollett's Farm to further improve the screening along the two village bypass and maximise the potential noise reductions. Similarly, discussions are ongoing with other landowners, and updated information will be issued when those exercises are complete.</p> <p>The proposals are not yet agreed with any of the landowners and would need to be approved by ESC.</p> <p>These considerations of detailed landscaping matters are to be secured through Requirement 22A of the draft DCO (Doc Ref 3.1(I)) and SZC Co. does not rely on any further noise reductions that may be realised through them for the submitted noise assessments.</p>



ExQ3	Question to:	Question:
		(ii) The detailed proposals, including any noise screening, will be submitted to ESC for approval under Requirement 22A.
NV.3.17	Applicant, SCC (ii and iii)	<p>Road Noise</p> <p>(i) Acoustical Control Engineers on behalf of Molletts Farm at D7 have expressed a preference for barriers along the side of the road, subject to them being appropriately designed to act as an acoustic barrier. Please advise on the progress on any adjustments that are being considered.</p> <p>(ii) Are SCC in agreement with the redesign of the barriers being reconsidered?</p> <p>(iii) Has a maintenance regime been agreed and secured?</p>
	SZC Co. Response at Deadline 8	<p>(i) As noted in response to ExQ3 NV.3.16, SZC Co. has been asked by the owners of Mollett's Farm to further improve the screening along the two village bypass and maximise the potential noise reductions. Updated landscaping proposals were provided to the owners of Mollett's Farm on 17 September 2021, with updated noise assessment information provided on 21 September 2021.</p> <p>(ii) No response from SZC Co. is required.</p> <p>(iii) Although not a question for SZC Co., it will be helpful to note that the Associated Development Design Principles [REP7-035] will be updated at Deadline 9 and will include provision for the erection of acoustic screens, either in the form of bunds or fences (secured pursuant to Requirement 22). Maintenance for acoustic screens, irrespective of whether they take the form of bunds or fences, will be secured through the Two Village Bypass Landscape and Ecology Management Plan (Doc Ref 8.3 A(B)) and the Sizewell Link Road Landscape and Ecology Management Plan (Doc Ref 8.3 B(B)), (secured pursuant to Requirement 22A).</p>
NV.3.18	Applicant, ESC	<p>Rail Noise</p> <p>(i) In setting the sensitivity of receptors, one of the reasons for Pro Corda School being in a higher sensitivity class is the use of the premises for music events. An IP [REP2-205, REP5-188] has now advised at D7 that a music studio is present in close proximity to the Green rail route. Should this not be regarded as a higher sensitivity receptor?</p> <p>(ii) Should additional protection or mitigation be forthcoming as a consequence of this evidence?</p>



ExQ3	Question to:	Question:
	SZC Co. Response at Deadline 8	<p>(i) Volume 2, Chapter 11 of the ES [APP-202, electronic page 16], paragraph 11.3.38 sets out that: <i>"There is one receptor that would fall into the 'high sensitivity' category for noise, which is the Pro Corda Music School at Leiston Abbey. Specifically, the school runs courses for children with special educational needs and disabilities, including residential courses. In addition, Pro Corda host festivals, music courses, theatre workshops and concerts at Leiston Abbey. SZC Co. is committed to further liaison with Pro Corda to take account of their specific needs relating to noise impacts and any required mitigation."</i></p> <p>The need for mitigation for Pro Corda under the Noise Mitigation Scheme (Annex W of the Deed of Obligation (Doc Ref 8.17(G)) does not derive from the fact that there is a music school on the site, rather that there are children in attendance with particular sensitivity to noise. This has also led to a contribution for provision of indoor and outdoor sensory spaces suitable for children with autism and other additional needs in the Pro Corda Resilience Fund (see Schedules 12 and 13 in the draft Deed of Obligation) (Doc Ref. 8.17(G)). The mitigation agreed at Pro Corda does not relate to its music provision.</p> <p>SZC Co. does not regard a privately-owned home recording studio to be equivalent to an educational facility that caters for children and young adults with a range of special educational needs.</p> <p>Table 11.1 in Volume 2, Chapter 11 of the ES [APP-202, electronic page 15], refers to recording studios as one of the uses that would be considered to be of high sensitivity, however, this related to commercial studios rather than what might be termed home recording studios in private use.</p> <p>SZC Co. has liaised with the owner of Fisher's Farm, to which [REP2-205], [REP5-188], and [REP7-288] relate. It is understood that the facility at Fisher's Farm is a garden-based studio, that is used by the owner rather than on a commercial basis. It is understood that the facility is used at night and that acoustic instruments are recorded, using microphones (as opposed to electronic instruments that connect directly to a recording device without a microphone such that they are not susceptible to interference from external sources of sound).</p>



ExQ3	Question to:	Question:
		<p>The level of noise from trains using the green rail route is predicted to be 51dB L_{AFmax}⁶ at Fisher's Farm, which is below the 60dB L_{AFmax} value that has the potential to lead to sleep disturbance. The extent to which that level of noise is likely to interfere with the IP's recording process will largely depend on the standard of acoustic insulation from the external fabric of the structure. SZC Co. has not visited the premises, but understands from social media that the studio is a wooden structure, so may not have high levels of acoustic insulation in its structure. A site visit is to be proposed with a further meeting with the IP to understand in detail the construction of the studio and how it is used.</p> <p>The draft Rail Noise Mitigation Plan (Doc Ref 6.14 9.3.E(A)) submitted at Deadline 8 includes a process for the further consideration of acoustic barriers in specific locations along the East Suffolk link identified by ESC, as well more generally along the Saxmundham to Leiston branch line and green rail route.</p> <p>Subject to the steps required by that process, and for potential barriers on the green rail route those steps are likely to require consultation with Historic England as the relevant statutory body when considering the setting of Leiston Abbey, it is possible that an acoustic barrier may be erected along the green rail route to further reduce noise levels at Fisher's Farm.</p> <p>If, following further discussions with the IP, it is considered appropriate to improve the sound insulation of the studio, the flexibility offered by the Noise Mitigation Scheme (Annex W of the Deed of Obligation (Doc Ref 8.17(G))) in terms of both alternative eligibility criteria and alternative material specifications, will be used to deliver this mitigation.</p> <p>(ii) As noted in part (i) of this question, if acoustic barriers along the green rail route are considered appropriate, these will be secured through the Rail Noise Mitigation Plan (Doc Ref 6.14 9.3.E(A)), which is itself secured by Requirement 25 of the dDCO (Doc Ref 3.1(I)). If improvements to the sound insulation of the studio are considered appropriate,</p>

⁶ See **Table 1.8** in **Volume 9, Appendix 4B** of the **ES** [[APP-546](#), electronic page 21]



ExQ3	Question to:	Question:
		the flexibility offered by the Noise Mitigation Scheme (Annex W of the Deed of Obligation (Doc Ref 8.17(G))) will be used to deliver this mitigation.
NV.3.19	Applicant, ESC (ii and iii) only	<p>Rail Noise – Acoustic Screening</p> <p>ESC at D7 following the ISH on Noise and Air Quality have undertaken an initial assessment of the potential for acoustic screening along the rail line. National Policy in EN1 at para 5.11.9 states</p> <p><i>“The IPC should not grant development consent unless it is satisfied that the proposals will meet the following aims:</i></p> <ul style="list-style-type: none"> <i>• avoid significant adverse impacts on health and quality of life from noise;</i> <i>• mitigate and minimise other adverse impacts on health and quality of life from noise; and</i> <i>• where possible, contribute to improvements to health and quality of life through the effective management and control of noise”</i> <p>(i) In light of the ESC submission please explain how it is considered the first and second bullet points of this part of the policy test are met.</p> <p>(ii) In not undertaking a full assessment of the potential for acoustic barriers at the outset has the opportunity to minimise and mitigate noise at source been missed?</p> <p>(iii) Is the screening considered to be a necessity to avoid significant adverse impacts on health and quality of life, and or to mitigate and minimise adverse impacts on health and quality of life?</p>
	SZC Co. Response at Deadline 8	<p>(i) SZC Co. understands that there is no dispute that the first bullet point of para 5.11.9 which requires avoidance would be met by the measures committed to by SZC Co. The avoidance is achieved by removing where possible the noise generation in the first instance and then severing exposure. Noise generation is thereby limited as far as practical, and exposure is then reduced through insulation by the use of the Noise Mitigation Scheme (Annex W of the Deed of Obligation Doc Ref (8.17(G))).</p> <p>These same steps also ‘mitigate and minimise’ in accordance with the second bullet point of para 5.11.9. The avoidance and reduction of noise generation, plus insulation through the NMS, without the installation of additional acoustic barriers, are already sufficient to</p>



ExQ3	Question to:	Question:
		<p>avoid any measurable impact on health from changes in day and night noise exposure. The provision of an additional acoustic barrier does not alter the findings of the assessment on health.</p> <p>ESC's outstanding concerns relate to the second bullet point and whether the applicant has in fact "<i>mitigated and minimised other adverse effects</i>", in other words whether all reasonable steps have been taken to limit noise. Clearly, application of the policy must take into account that which is practically achievable, otherwise the policy has literally no limit. That is reflected in the second aim of the Noise Policy Statement for England, which requires that "all reasonable steps should be taken to mitigate and minimise adverse effects on health and quality of life while also taking into account the guiding principles of sustainable development" (emphasis added)⁷. The obligation is therefore expressly not an unlimited one, and requires the exercise of judgment as to what is reasonable in the circumstances. NPS EN-1 makes clear that its policy on noise is based on the NPSE: see EN-1 at para 5.11.1.</p> <p>While SZC Co. consider that the mitigation provided as set out above is sufficient to comply with policy, SZC Co. has been working with ESC to explore any further potential avenues to mitigate and minimise noise in light of ESC's requests. The requested measures to which SZC Co. has not been able to absolutely commit relate to the replacement of track on the East Suffolk line and to the erection of acoustic barriers. As SZC Co. confirmed at ISH 12, the draft Rail Noise Mitigation Plan (Doc Ref 6.14 9.3.E(A)) has been amended for Deadline 8 to commit to deliver both of these matters to the extent that is practical and achievable. With the benefit of those commitments, SZC Co. expects that ESC will be able to confirm its satisfaction that the second bullet point of the policy has also been achieved.</p> <p>(ii) It would not have been appropriate to assess the application on the basis that barriers could be achieved given the practical limitations on their installation and the inability to secure this absent seeking compulsory powers over additional land, including domestic properties, in circumstances where the assessment did not show such barriers to be</p>

⁷ See paragraph 2.24 of the Noise Policy Statement for England



ExQ3	Question to:	Question:
		<p>necessary to make the noise impacts acceptable (and in circumstances where they were very unlikely to be acceptable in terms of planning and amenity). In these circumstances it is not right to say that an opportunity to mitigate and minimise has been missed.</p> <p>For reasons documented by the applicant at [REP6-024], it is highly unlikely that the installation of acoustic barriers up to 4m high through urban (or rural) areas would be appropriate in planning terms. Network Rail has also set out its concerns about the installation of barriers at Deadline 7 [REP7-146] where it explains not only its operational concerns for the installation of barriers but that barriers could encourage trespass, be detrimental to safety and detrimental to wildlife. Network Rail also has an in-principle objection on the basis that what is taking place is only intensification of use of an existing line, which Network Rail consider does not justify additional noise controls. These Network Rail objections would also have made promotion of the use of compulsory acquisition powers unlikely to succeed.</p> <p>It is far from obvious that the installation of barriers is on balance beneficial or practical for these reasons and they have not been relied on as part of the Applicant's case. Further, as set out above, the provision of such barriers would only serve to reinforce the mitigation measures already in place which SZC Co. considers are already sufficient to prevent any measurable adverse health outcome from changes in noise (as the primary focus was and remains avoidance). The submitted noise assessments do not rely on their installation.</p> <p>Nevertheless, SZC Co. has agreed with ESC to commit to a process in which the installation of barriers where practical can be achieved. As the question implies, barriers would be most effective closest to the noise source, i.e. adjacent to the rail line and that is the initiative which SZC Co. was exploring with Network Rail, until it recently ruled that option out.</p> <p>Whilst any installation on third party land is likely also to rely on the negotiation of property rights, those rights would need to be negotiated from those parties who would benefit from the barriers – typically the barriers would run at the base of residential gardens. If the property rights cannot be negotiated, there is no reason to believe that</p>



ExQ3	Question to:	Question:
		<p>the barriers would themselves be popular, necessary or acceptable. Whether the properties are occupied on leases or by freeholders, it is reasonable to expect that the relevant parties would have the interests of their property and its amenity very much in mind.</p> <p>Accordingly, while SZC Co. considers its initial position to be justified and compliant with policy in both the first and second bullet points of NPS EN-1 5.11.9, SZC Co. will commit the additional process whereby barriers can be installed where practical.</p> <p>(iii) The Applicant's assessment does not rely on the presence of barriers. The first and second bullet points of paragraph 5.11.9 are achieved without the barriers. The commitment to explore the erection of barriers where beneficial and appropriate is however a measure which further contributes to meeting the second bullet point of the policy.</p>
NV.3.20	ESC	<p>Rail Noise - Acoustic Screening</p> <p>Following the D7 submission the potential for additional acoustic screening is identified as an appropriate form of mitigation subject to consultation, design, location and a fuller understanding of the balance between visual harm and acoustic benefit.</p> <p>In light of the current status of the examination and</p> <ul style="list-style-type: none"> • Network Rail saying they would not support barriers on their land, and • the other areas (Woodbridge, Campsea Ashe etc.) not being within the DCO <p>(i) How would you propose such mitigation to be considered and how would you propose that it be secured?</p>
	SZC Co. Response at Deadline 8	No response from SZC Co. is required.
NV.3.21	Applicant, ESC	<p>Rail Noise – Whitearch Park</p> <p>(i) An acoustic barrier is being considered as one of the potential mitigations for rail noise. In light of the response from Network Rail opposing acoustic barriers within their land. How is this to be delivered and what mechanism within the DCO secures its provision and maintenance?</p>



ExQ3	Question to:	Question:
		(ii) ESC at D7 have suggested that Whitearch Park could benefit from the speed reduction proposed elsewhere. Please advise if this is possible, what benefit it might bring, and explain if not possible why this would be the case.
	SZC Co. Response at Deadline 8	<p>(i) A process for the consideration and installation where practical of acoustic barriers along the East Suffolk line, Saxmundham to Leiston branch line and green rail route is included in the Rail Noise Mitigation Strategy submitted at Deadline 8 (Doc Ref 6.14 9.3.E(A)) (now renamed as the Rail Noise Mitigation Plan).</p> <p>A barrier adjacent to Whitearch Park is one of the locations to be considered and if it is agreed to be deliverable, it will be secured through the Rail Noise Mitigation Plan.</p> <p>(ii) The noise benefit of slowing trains to 10mph is expected to reduce the airborne L_{AFmax} noise levels by 8dB. This can be seen from the figures set out in Table 3.1 in Volume 3, Appendix 9.3.A [AS-257, electronic page 22]; the column headed 'Values used in the ES' remain the source terms that inform the railway noise assessment.</p> <p>Extending the night-time speed limit zone so that it extends to the south of Whitearch Park would involve an extension of approximately 2km, which would increase the journey time of each train by just under 4 minutes. An increase in total journey time for the seven night-time trains of just under 30 minutes would result.</p> <p>There is resilience in the train timetabling to allow for unexpected occurrences, but a reduction in that resilience of just under 30 minutes would significantly increase the potential for issues that cause a knock-on effect to the daytime passenger trains, which SZC Co. understands is not acceptable.</p> <p>It remains the case that the improvements in sound insulation offered by the Noise Mitigation Scheme (Annex W of the Deed of Obligation (Doc Ref 8.17(G))) will be achievable for the park homes given their modern, high quality construction. Insulation would mean that noise levels would not exceed SOAEL in any instance, with the insulation being applied at a level that is considered to be a significant adverse effect in an EIA context. This outcome does not rely on the presence of a barrier or the introduction of a speed limit on an additional length of railway line.</p>



ExQ3	Question to:	Question:
		The Noise Mitigation Scheme has been amended to allow a more flexible approach to the specification of insulation, in recognition for the potential for the construction of the homes at Whitearch Park to vary.
NV.3.22	Network Rail	<p>Acoustic Barriers</p> <p>From the information available to date there appears to be the potential for acoustic benefit which would reduce impact on nearby receptors and subject to design, location and other factors meet policy objectives in protecting human health.</p> <p>(i) It is understood from the representations made that Network Rail would oppose any barrier in principle, is this correct?</p> <p>(ii) In light of the national policy objective to protect human health please explain why you consider this position is justified.</p> <p>(iii) It is understood that there will be an imperative for safety on the rail way line, but without detail of the design and location of any acoustic barrier can a safety case be properly assessed at this point?</p>
	SZC Co. Response at Deadline 8	No response is required from SZC Co.
NV.3.23	Applicant, Network Rail, ESC	<p>Acoustic Barriers</p> <p>(i) If it were deemed that acoustic barriers along the railway line were appropriate and necessary to protect human health from significant adverse noise effects. Would the Secretary of State have the power to require them subject to an appropriate safety audit?</p> <p>(ii) How could this be secured?</p>
	SZC Co. Response at Deadline 8	(i) A process for the consideration and installation where practical of acoustic barriers along the East Suffolk line, Saxmundham to Leiston branch line and green rail route is included in the Rail Noise Mitigation Plan submitted at Deadline 8 (Doc Ref 6.14 9.3.E(A)). The process set out in the Rail Noise Mitigation Plan (Doc Ref 6.14 9.3.E(A)) will deliver appropriate barrier solutions where they are agreed to provide a meaningful acoustic benefit, are acceptable in planning terms, and are acceptable to all relevant stakeholders such as landowners and other regulatory or statutory bodies, such as Historic England.



ExQ3	Question to:	Question:
		<p>SZC Co. considers this process to be appropriate and sufficient to deliver acoustic barriers in locations where they are agreed between all parties, and is the most appropriate approach without the need for the Secretary of State to reach an independent view. It gives control to ESC in particular, as the relevant local planning authority and with responsibility for environmental health, as the process requires SZC Co. to reach agreement with ESC.</p> <p>(ii) Consideration of acoustic barriers close to the railway line is secured through the Rail Noise Mitigation Plan (Doc Ref 6.14 9.3.E(A)), which is itself secured by Requirement 25.</p> <p>SZC Co. is not aware of an alternative mechanism by which acoustic barriers could be secured.</p>
P.4	Policy and need	
P.4.0	The Applicant	<p>Policy and need:</p> <p>The Deadline 7 submission of Professor Blowers submits that Government policy on the question of need is far more restrained than a decade ago and that the prospect of new nuclear is qualified by various reservations which apply to Sizewell C. In addition, a substantial nuclear component would, in any event, continue until well beyond the critical net zero date of 2050 without any contribution from Sizewell C and that such contribution towards net zero is likely to be minimal. Please comment further, in the light of those submissions, on the need for new nuclear at Sizewell C, as expressed by national policy, and its potential contribution towards net zero.</p>
	SZC Co. Response at Deadline 8	<p>These matters are addressed in the Applicant's Planning Statement Update [REP2-043], its additional submission on New Nuclear: Need and Urgency [REP5-117] and in its oral submissions to ISH9 on Policy and Need [REP7-102].</p> <p>The terms of Government policy are clear and unambiguous, and are described and explained in the documents identified above. There is no proper basis for characterising the Government's clear commitment to the development of a large-scale nuclear plant for which there is an expressed urgent need as being 'restrained'.</p>



ExQ3	Question to:	Question:
		<p>Similarly, the Applicant's submissions have identified the extent to which Government modelling has recognised the substantial reduction forecast in nuclear capacity and the reliance of the Government's modelling which underpins the Energy White Paper on the development of substantial scale new nuclear generation [REP2-043, electronic page 32] from paragraph A.1.24, which is reflected in the Energy White Paper itself at figure 3.4.</p> <p>The issues raised by Professor Blowers, therefore, represent a challenge to up to date Government policy.</p>
P.4.1	The Applicant	<p>Policy and need:</p> <p>The Deadline 7 submission of Professor Blowers submits that the EN-6 policy which lists sites identified as potentially suitable is out of date and under review; that there is a policy limbo with respect to site designation and strategic siting criteria and that changing circumstances, including Climate Change, indicate that Sizewell C must be considered an unsuitable site. Please respond to those specific points in relation to the continued applicability of EN-6, and the question of whether Sizewell C can be considered a potentially suitable site for nuclear deployment.</p>
	SZC Co. Response at Deadline 8	<p>Notwithstanding Professor Blowers' acknowledgement in [REP5-189] that '<i>it is clear that the need for new nuclear power does not come within the terms of this examination</i>', the remainder of his submission under the heading 'The issue of Need' is very clearly aimed at the merits of extant policy in NPS EN-6 and whether it should be considered out of date.</p> <p>For reasons which have been set out in detail in the Planning Statement Update [REP2-043], the responses to ExQ1 G.1.5, G.1.10, G.1.11, G.1.19 [REP2-100], [REP5-117], the responses to ExQ2 G.2.5 and G.2.6 [REP7-050], and at ISH9 on Policy and Need (see Written Summary of Oral Submissions [REP7-102]) those are not matters which fall to be considered in this examination. The <i>Drax</i> judgments make clear that assessing whether changes in circumstance affect the weight to be attached to the NPS is not an appropriate exercise in determining individual applications for development consent, because it constitutes questioning the merits of Government policy, and section 6 of the PA 2008 provides an exclusive means for considering such issues.</p> <p>Those same documents also explain that the Government has made clear that EN-6 (which confirms the potential suitability of Sizewell as a site for new nuclear development) remains extant Government policy and has been neither revoked nor suspended whilst the review is</p>



ExQ3	Question to:	Question:
		<p>undertaken (see also the letter from the Secretary of State dated 2 June 2021 at [REP7-248]). It is the Government's position that the NPS - including EN-6 - continue to provide a proper basis on which the Planning Inspectorate can examine, and the Secretary of State can make decisions on, applications for development consent for applications for new nuclear power stations on the sites listed in EN-6 (see the Energy White Paper at page 55, most recently confirmed in [REP7-248]).</p> <p>Those recent statements of Government policy reflect the position that has been reached having regard to all relevant considerations, including the consultation on the strategic siting criteria and responses to it, and up to date assessments of climate change.</p> <p>Professor Blowers' points about the role of the examination being to determine whether an application on a listed site is acceptable (i.e. that the NPS establishes potential suitability but leaves open the possibility that applications on individual sites may nevertheless be refused) do not logically touch on the existence or otherwise of a need for large scale new nuclear power stations. Decisions on the merits of individual applications will determine whether or not they make a contribution to meeting the established need; their role is not to examine whether the need exists or whether it is urgent. Those matters are settled by Government policy.</p> <p>The same is true in respect of the reference made to the absence of recent progress on the other listed sites apart from Hinkley Point C. Far from diminishing or calling into question the need and its urgency, however, consideration of that issue only underlines the importance of the opportunity that this application presents to meet the important public interest objectives which underlie Government policy on the urgent need to develop new large scale nuclear power stations.</p>
P.4.2	The Applicant	<p>Policy and need:</p> <p>The Deadline 5 submission of Professor Blowers [REP5-189], submits that, in view of the substantial geographical scale and intergenerational timescale of the impacts of Sizewell C, the potential suitability not only of component parts but of the whole project at this site should be considered. Please set out and explain further the overall assessment of the Project that has been undertaken.</p>
	SZC Co. Response at Deadline 8	<p>The likely scale and nature of the Sizewell C project was understood by the Government when it undertook its Appraisal of Sustainability to inform NPS EN-6 (please see particularly EN-6 para 3.3.1 and Annex C of the NPS which contains a detailed account of</p>



ExQ3	Question to:	Question:
		<p>the Government's assessment). The location of the nominated site has not changed and the AOS and the NPS recognise that additional supporting infrastructure will be necessary to address transport, accommodation and other requirements.</p> <p>The full scale of the application itself, is assessed in the submitted DCO application including but not limited to the Environmental Statement [APP-159 to APP-582] (which considers the entire Project, not only in itself but cumulatively with others) and the Planning Statement [APP-590], both of which consider all components of the application proposals and assess them for their environmental effects and against the requirements of planning policy.</p>

ExQ3: 09 September 2021

Responses due by Deadline 8: 24 September 2021

Application by NNB Generation Company (SZC) Limited for an Order Granting Development Consent for The Sizewell C Project

The Examining Authority's third written questions and requests for information (ExQ3)

Issued on 09 September 2021

Responses are due by Deadline 8: 24 September 2021

PART 6 OF 6

R.3 [Radiological considerations](#)

SA.3 [Section 106](#)

SE.3 [Socio-economic](#)

TT.3 [Traffic and Transport](#)

Wa.3 [Waste \(conventional\) and material resource](#)

ExQ3	Question to:	Question:
R.3	Radiological considerations	
R.3.0	The Applicant, ONR, Environment Agency	<p>Permits and Licences</p> <p>In the event that the latest change request were to be accepted;</p> <p>(i) Please provide an update on the latest position regarding the progress of the respective permits and licences required to construct and operate the proposed development.</p> <p>(ii) Please advise on the likely timeline for concluding the consideration of these licences and permits.</p> <p>(iii) Is there anything at this stage that you consider may prevent the issuing of such licences or permits?</p>
	SZC Co. Response at Deadline 8	<p>SZC Co. does not believe the latest change request will impact the Nuclear Site License or Operational Environment Permit Determinations. As such the update given in response to ExQ2 [REP7-056] remains valid. A summary of that response is presented below:</p> <p>Nuclear Site Licence</p> <p>(i) SZC Co. submitted the Nuclear Site Licence (NSL) application in June 2020 and is actively engaged in all regulatory workstreams. Workstreams are monitored routinely via joint Level 3 and Level 2 meetings with the Office for Nuclear Regulation (ONR). The purpose of these meetings is to discuss the route and progress towards achieving a NSL in 2022 aligned to a schedule agreed with the ONR. The ONR's programme of regulatory interventions has been defined and is being delivered to support the licensing process and to meet the anticipated licensing timeline.</p> <p>(ii) SZC Co. is working with the ONR towards the target of completing its licensing assessment by mid-2022. SZC Co. is confident that the plant design is sufficiently mature and the organisation will be demonstrably capable to achieve a NSL in 2022.</p> <p>(iii) The ONR has not identified any issues that would prevent SZC Co. from obtaining a NSL within this time frame and SZC Co. is not aware of any impediment that may exist that would prevent or delay the granting of the NSL.</p>

ExQ3	Question to:	Question:
		<p>Operational Environmental Permits</p> <p>(i) Applications for 3 Environmental Permits were submitted in May 2020 in relation to the Operational Phase of Sizewell C. This covered:</p> <ul style="list-style-type: none"> · Radioactive Substances Activities · Combustion Activities · Water Discharge Activities <p>The 3 applications were 'duly made' (i.e. validated) in June 2020, and the initial consultation held between July and October 2020.</p> <p>At current the Permit Applications are going through due process and routine regulatory engagements are held between SZC Co. and the Environment Agency to support this.</p> <p>(ii) SZC Co. is supporting the Environment Agency through the permit determination process to ensure they can provide sufficient information to the Secretary of State to make a decision on the DCO.</p> <p>(iii) No issues have been identified to date which would prevent or delay the granting of the permits.</p>
R.3.1	ONR	<p>Permits and Licences</p> <p>As of D7 the Applicant does not have a clear pathway to delivering the water supply for construction to meet the current timetable of proposed development.</p> <p>(i) In the event that the latest change request is accepted, this could facilitate the provision of a desalination plant for a temporary period during construction, but not for future operation. Walker Morris on behalf of Northumbrian Water Limited (NWL) have now responded at D7 with a holding objection to the proposed development and while it remains committed to pro-active engagement NWL believe the ideal outcome for water supply to Sizewell C may be for the Applicant to have a self sufficient water supply.</p> <p>(ii) Could the ONR advise if this has any implications for the licensing or timetable of the proposed development?</p> <p>(iii) Is one of the licence conditions that a reliable water supply to the site at the quantum necessary is available and secured?</p>



ExQ3	Question to:	Question:
		(iv) The Change request seeks only a temporary period for the desalination plant while the preferred option of a piped water supply is facilitated. At what point would the permanent supply need to be in place?
	SZC Co. Response at Deadline 8	No response from SZC Co. is required.
R.3.2	Applicant, ONR, EA	<p>Radiological Safety</p> <p>TASC at [REP6-076] identify a series of concerns with regard to radiological safety during operation and post operation.</p> <p>Can the ONR and EA advise in respect of these concerns and confirm if any of the matters raised will not be safeguarded by the licensing/permitting regime</p>
	SZC Co. Response at Deadline 8	<p>Radioactivity is all around us and it occurs naturally in the food we eat, the water we drink and the air we breathe. It is therefore not possible to avoid radiation, and when considering the impacts, it is important that they are put in context.</p> <p>Paragraph 3.12.4 of the National Policy Statement for Nuclear Power Generation (EN-6) states:</p> <p><i>"Radiation from nuclear power stations requires careful management during and beyond the operational life of the power station. However, safety systems in place in the designs of new nuclear power stations and compliance with the UK's robust legislative and regulatory regime mean that the risk of radiological health detriment posed by nuclear power stations (both during normal operation and as a result of an unplanned release) is very small".</i></p> <p>The Radiological Impact Assessment covering the Operation of Sizewell C (a copy of which is included within Volume 2, Chapter 25 – Radiological Considerations of the ES [APP-340]) has been undertaken in line with the internationally accepted models and science for assessing the Radiological Health Effects and Impacts to the Environment.</p> <p>The annual radiological exposure to a member of the public living near Sizewell C during its operational phase from all exposure pathways including those associated with Tritium has been rigorously assessed and shown to be broadly equivalent to eating 100g of Brazil</p>

ExQ3	Question to:	Question:
		<p>Nuts a year, and 200 times less than what an average member of the UK population receives from naturally occurring radioactivity.</p> <p>Any planned discharges to the environment will be carefully controlled in line with SZC Co.'s future Environmental Permits, to ensure the radiological impact to members of the public and the environment remain well below the internationally agreed limits to protect human health and the environment.</p> <p>In addition, it should be noted that SZC Co. is and will remain legally required to continue to apply the principle of Best Available Techniques, to ensure the radiological impacts to people and the environment are kept as low as reasonably achievable, taking into account economic and societal factors.</p>
R.3.3	ONR, EA	<p>EPR Safety</p> <p>IPs including TASC have raised safety concerns in light of information regarding ongoing issues at other EPR reactor sites around the world.</p> <p>Please confirm that the safety concerns are covered by the licensing/permitting regime. If there are any outstanding matters which you regard as being more appropriately dealt with through the DCO process advise what these are.</p>
	SZC Co. Response at Deadline 8	No response from SZC Co. is required.
R.3.4	The Applicant, ONR, EA	<p>Radioactive waste</p> <p>The Deadline 5 submission of Professor Blowers [REP5-189], submits that the potential suitability of the site for the management of radioactive waste during operations and far beyond into the future is a matter for the Examination and its scope should not be limited by relying on the evidence of the ONR and the EA. In addition, his Deadline 7 submission states that the recent report of the IPCC has a direct bearing on the development of a nuclear power station such as Sizewell C on a coastal location and is relevant to the viability of the site, threatening the decommissioning process and the long-term management of radioactive waste. Please respond and set out your view as to the appropriate process for the consideration of the long-term management of radioactive waste and whether you have any concerns in that respect at this stage?</p>
	SZC Co. Response at Deadline 8	The National Policy Statement for Nuclear Power Generation (EN-6) identifies Sizewell as a site that is potentially suitable for the deployment of a new nuclear power station by the



ExQ3	Question to:	Question:
		<p>end of 2025. Annex B sets out how the Government has satisfied itself that effective arrangements will exist for the management and disposal of the wastes produced by new nuclear power stations. Paragraph 2.11.4 states:</p> <p><i>"...the question of whether effective arrangements will exist to manage and dispose of the waste that will be produced from new nuclear power stations has been addressed by the Government and the [Secretary of State] should not consider this further".</i> Paragraph 2.11.6 goes on to state that: <i>"The UK has robust legislative and regulatory systems in place for the management (including interim storage, disposal and transport) of all forms of radioactive waste that will be produced by new nuclear power stations. The [Secretary of State] should act on the basis that the relevant licensing and permitting regimes will be properly applied and enforced..."</i></p> <p>The operational design life of the Interim Spent Fuel Store (ISFS) and the Interim Level Waste Interim Storage Facility (ILW ISF) is 100 years. This is to allow interim storage to be maintained until a Geological Disposal Facility, or an alternate disposal/management route, has been established and the heat levels within the fuel are at levels that permit its disposal.</p> <p>The design life of the sea defence is defined based on protection of the site until all radioactive wastes and spent fuel have been removed from the site (i.e. 110 years post Commercial Operation Date). This means that the sea defence design will be such that performance up to 2140 will be intrinsically ensured.</p> <p>Performance requirements relating to design life, such as sea levels and wave overtopping (which are influenced by climate change and sea level rise), are captured in the design of the crest height. In addition, degradation of the sea defence is considered and accounted for within the design to ensure that appropriate measures are taken (such as concrete cover for the crest wall and erosion protection for the backslope) that ensure the design life can be met. Furthermore, as well as the design considering climate change in line with regulator expectations and best practice, the sea defence has also been designed considering managed adaptation. This means that the crest height can be raised if required at a later date.</p>

ExQ3	Question to:	Question:
		<p>In addition, under Licence Condition 15 of SZC Co.'s future Nuclear Site Licence, SZC Co. will be required to undertake a periodic and systematic review and reassessment of its safety case, which will include consideration of all external hazards (including flooding and adequacy of sea defences).</p> <p>Therefore, the documents and assessments for the life of the plant including its waste management facilities will be regularly reviewed and reassessed for their applicability.</p> <p>Furthermore, under both its Funded Decommissioning Programme and Nuclear Site License, SZC Co. will be required to apply its Decommissioning and Waste Management Plan. This ensures there is a robust plan in place detailing how the reactor site will be decommissioned and the long-term management of any radioactive waste and spent fuel, up until the point the site is fully decommissioned. This will be reviewed in 5 yearly intervals ensuring a robust plan is always in place and aligned with the safety case.</p>
SA.3 Section 106		
No questions received.		
SE.3 Socio-economic		
No questions received.		
TT.3 Traffic and Transport		
TT.3.0	The Applicant	<p>Sizewell Link Road – Travel Distance and Journey Times.</p> <p>The Route W option could have reduced overall travel distance and journey time to the site. These factors provide a reliable guide to the transport sustainability of possible solutions. Explain why consideration of these factors was not included in Table 7.1 of Appendix A of the Planning Statement as a Key Environmental Factor in considering the various alternatives.</p>
	SZC Co. Response at Deadline 8	<p>SZC Co. has set out in detail the appraisal process that has been undertaken on route options, including Route W, within the "Sizewell Link Road Option Development and Summary Work Undertaken Post-Submission of the DCO". This document forms Appendix 11 of the Sizewell Link Road Response Paper that was submitted at Deadline 2 [REP2-108] (electronic pages 341-504).</p>



ExQ3	Question to:	Question:
		<p>The above document provides a review of the environment, economic, and community criteria that were considered in the Sizewell link road route selection. This includes consideration of whether the route option <i>'is likely to increase transport impacts on the wider network'</i> [REP2-108] (electronic page 466). Against this criteria, SZC Co. does acknowledge that Route W is <i>'best placed of the options considered to intercept the Sizewell C HGVs from the south'</i>. However, as noted above, the route selection considered a number of criteria, and overall, the Sizewell link road (i.e. Route Z) is the most appropriate route. In fact, for reasons set out in [REP2-108] it is the only appropriate route. These considerations are set out in Appendix 5D Sizewell Link Road: Principle and Route Selection Paper to SZC Co.'s responses to ExQ1 [REP2-108] (electronic pages 244 – 267) and were elaborated at the CA hearing on 17 August [REP7-064] (electronic pages 5-7) and have also been set out in the written submissions following that hearing [REP7-066] (electronic pages 3 – 7) and are set out in response to Question CA.2.10 [REP7-056] (electronic page 139).</p> <p>As set out in the Sizewell Link Road Response Paper (electronic page 251) a peer review of the assessment work undertaken by SZC Co. was commissioned in 2019 to assess the identified options for the Sizewell link road. One of the criteria of the peer review was <i>'Minimising Route Mileage'</i>. As set out in response to ExQ2 TT.2.10 [REP7-056] (electronic page 334), SZC Co. acknowledges that the vehicle km results for Route W and Z should have been transposed, and that Route Z (the Sizewell link road) would result in more mileage than Route W. However, this difference in mileage is marginal, especially when considered as a percentage of the whole journey distance from the source of the journey.</p> <p>SZC Co.'s response to ExQ2 TT.2.12 [REP7-056] (electronic page 336) states that, when considering the whole journey of Sizewell C cars and LGVs across the study area, the difference in Veh-KMs between the two route alignments (Sizewell link road and Route W North), is in the region of 1-2% (i.e. marginally more Veh-KMs with Sizewell link road than Route W North alignment).</p> <p>Were this revised calculation to be factored into the analysis of preferred routes, it would make no material difference, partly because the percentage difference is relatively small</p>

ExQ3	Question to:	Question:
		but more importantly, there are a number of considerations, and not just transport related, that have been weighed up in selecting the route for the Sizewell link road.
TT.3.1	Applicant	<p>Sizewell Link Road (SLR) – Use as Temporary Haul Road. It is assumed that the use of the SLR construction site as a temporary haul road will commence once the bridge over the railway is completed. Explain:</p> <ul style="list-style-type: none"> (i) The time the SLR site will be used as a haul road for materials to / from the Main Development Site; (ii) The numbers anticipated per day during that time; and (iii) If for some reason that this temporary haul road would be unavailable would additional HGV be travelling on the B1122 through Middleton Moor and Theberton?
	SZC Co. Response at Deadline 8	<ul style="list-style-type: none"> i) The Sizewell link road haul route will be available following the completion of the East Suffolk line overbridge, which is currently forecast as Q4 year 1, through to the completion of the main Sizewell link road alignment. The haul road will then be used for the distribution of Sizewell link road construction materials along the Sizewell link road, accessing from the A12, and also to move cut and fill materials within the Sizewell link road, from the Sizewell link road to the main development site and from the two village bypass to the main development site. ii) The expected deliveries to the Sizewell link road for construction materials will not exceed the 200 HGV two-way movements/100 daily deliveries that has been assessed; these will generally access the Sizewell link road directly off the A12 roundabout on to the Sizewell link road. There will be a small proportion of deliveries that need to access the south-east end of the Sizewell link road prior to the availability of the East Suffolk line overbridge and haul route. These would therefore travel along the B1122 from the commencement of the Sizewell link road construction until the availability of the haul route (i.e. Jan 2023 to Nov 2023). An average of circa 40 two-way HGV movements/20 deliveries has been forecast in the HGV profile, which would be included in the 600 two-way HDV daily cap on the B1122 in the early years. Following the completion of the East Suffolk line overbridge and Sizewell link road haul route these vehicles can be diverted off the



ExQ3	Question to:	Question:
		<p>B1122, however a reduced allowance of 20 two-way movements/10 deliveries has been maintained in the HGV profile to allow for any smaller deliveries that may use the B1122, which would be included in the 600 two-way HDV daily cap on the B1122 in the early years.</p> <p>iii) In the unlikely event that the haul route became unavailable the project would seek to use the B1122, up to the permitted 600 two-way HDV daily cap. The project is committed to not exceeding the daily caps set out in the Construction Traffic Management Plan, Annex K of the DoO (Doc Ref 8.17(G)) and therefore has a self-interest to ensure the ability to use the Sizewell link road trace as a haul route to aid in the materials movement.</p>
TT.3.2	Suffolk County Council	<p>SLR – Timing of Delivery and Impact on B1122. Are you satisfied that the Early Years mitigation along the B1122 and the controls proposed by the Applicant address any outstanding concerns relating to the B1122 prior to the SLR becoming operational? Set out any remaining areas of concern.</p>
	SZC Co. Response at Deadline 8	No response from SZC Co. required.
TT.3.3	Applicant, Network Rail and SCC	<p>A12 – Darsham Level Crossing In response to TT.2.5 Network Rail (NR) have responded that they will be applying for funding for full barrier control crossing enhancement as part of its funding submission for CP7 (Mar 2024). They also note should funding not be secured, the mitigation works could not be delivered, and NR could not support the Park & Ride car park operation due to the unacceptable risk. The Applicant has already agreed a 50% contribution to the works, but delivery of the works will be dependent on NR securing funding for the other 50%. It is proposed to have a Framework Agreement concerning the additional contribution and NR state that the Northern Park and Ride can only become operational if mitigation is secured and delivered within 6 to 12 months of the opening of the Park and Ride site. Explain:</p> <p>(i) Is the enhancement to full barrier control considered necessary for safe operation of the level crossing to accommodate the additional traffic level associated with the Proposed development;</p>

ExQ3	Question to:	Question:
		<p>(ii) What would happen if funding was not secured as part of the NR CP7 settlement; and</p> <p>(iii) Do the County Council have any views as to the safe operation of this crossing as a result of the Proposed Development?</p>
	SZC Co. Response at Deadline 8	<p>i) SZC Co. addressed a similar question at ExQ2 TT.2.5 and part of the answer is copied below as it may assist with the issues raised here:</p> <p><i>"As this is an existing safety concern for Network Rail with future funding understood to be set aside for the work, SZC Co. has proposed to provide a contribution of 50% of the cost of the full upgrade. This is still under discussion between the parties. Darsham, of course, is not affected by Sizewell C trains and the issue at Darsham arises from the location of the station car park across the A12 from the station. The current half barrier can encourage or enable unsafe behaviour from rail passengers. The Northern Park and Ride will add to traffic levels on this stretch of the A12 but the issue is understood to arise when traffic is static and the level crossing is in operation. Cars destined for the park and ride coming from it or buses coming to and from it to Sizewell C main development site in those circumstances would add to any short-term queue on the highway and should not in themselves pose a safety risk. Network Rail is believed to measure these issues on the basis that any increase in traffic in these circumstances theoretically adds to the (existing) risk. SZC Co. has agreed a Framework Agreement with Network Rail which commits the parties to work together to address the issue and is willing to contribute towards Network Rail's planned improvement. SZC Co. does not regard this as a 'requirement' in the sense understood by planning policy."</i></p> <p>Non-Sizewell C rail users must cross the A12 and the railway line to access the southbound platform at Darsham from the existing station car park. Network Rail believe that the increase in traffic accessing the park and ride site will reduce opportunities for rail users to cross the road, so may increase the risk of misuse at the level crossing, as they may cross while the traffic is stopped by the level crossing barriers. The Fourth Environmental Statement (ES) Addendum [REP7-032] submitted at Deadline 7 shows that there would be a negligible impact on pedestrian delay for pedestrians to cross the A12 at Darsham railway as a result</p>

ExQ3	Question to:	Question:
		<p>of Sizewell C traffic. Therefore, SZC Co. believes that this very largely reflects an existing issue but has nevertheless agreed to work with Network Rail.</p> <p>ii) If funding was not secured as part of the NR CP7 settlement, other sources of funding would be investigated. This issue is being discussed with Network Rail and will be reported in a final Statement of Common Ground.</p>
TT.3.4	Applicant, Suffolk County Council	<p>Early Years - Farnham and Stratford St Andrew. Is there any mitigation proposed to manage the additional traffic through Farnham and Stratford St Andrew to mitigate any problems on the A12 through these villages in advance of completion of the Two Village Bypass? And additionally, explain the rationale for such an approach.</p>
	SZC Co. Response at Deadline 8	<p>The transport effects of the SZC project on the two villages, and other communities will be mitigated through the measures committed to within the application, including the regime of caps and management set out in the transport management plans.</p> <p>Chapter 2 of the Fourth Environmental Statement (ES) Addendum [REP7-032] (electronic page 481) shows that in Stratford St Andrew (link 24) and Farnham (link 23) there is forecast to be an 8% increase in daily two-way total traffic and a 90% increase in daily two-way HDVs during the early years. The Fourth ES Addendum [REP7-032] concludes that there is expected to be a minor adverse impact on severance (electronic page 761), pedestrian delay (electronic page 815), amenity (electronic pages 890 and 900) and fear and intimidation (electronic page 989).</p> <p>In comparison, the Fourth ES Addendum [REP7-032] (electronic pages 479 and 485) shows that in Middleton Moor (link 74) and Theberton (link 10) there is forecast to be a 28-30% increase in daily two-way total traffic and a 535-672% increase in daily two-way HDVs during the early years. The Fourth ES Addendum [REP7-032] concludes that there is expected to be a minor adverse impact on severance (electronic pages 760 and 762), pedestrian delay (electronic pages 813 and 817) and fear and intimidation (electronic pages 988 and 990) on the B1122 but that there is expected to be a short term major adverse effect on amenity on the B1122 during the early years as a result of the percentage change in HDVs (electronic pages 889 and 901).</p>

ExQ3	Question to:	Question:
		<p>Therefore SZC Co. is proposing to implement a B1122 early years mitigation scheme in order to mitigate the short term significant adverse effects in Theberton and Middleton Moor during the early years but given that there are not forecast to be any adverse significant effects in Farnham or Stratford St Andrew in the early years, a transport mitigation scheme is not proposed. SZC Co. considers it legitimate to draw a distinction between this position affecting the main A12 and the much more significant change in amenity affecting the B1122, which has a different character.</p> <p>Notwithstanding this, SZC Co. recognises that the Farnham bend is an existing highways constraint, particularly for AILs, and as such SZC Co. has committed to provide funding to Suffolk Constabulary for 4 police escort teams during the early years to escort AILs along the A12 through Stratford St Andrew Farnham as well as along the B1122 in accordance with the AIL escort matrix as set out in the Construction Traffic Management Plan (CTMP), Annex K of the DoO (Doc Ref. 8.17(G)) to be submitted at Deadline 8.</p>
TT.3.5	The Applicant	<p>Early Years – Transport Assessment.</p> <p>The Applicant now proposes a two part definition of what constitutes the Early Years.</p> <ol style="list-style-type: none"> (1) For HDV numbers the Early Years will finish once the Sizewell Link Road and the Two Village Bypass are completed. (2) For construction workers the Early Years modal split targets in the CWTP are suggested to control travel by car up to the point of opening of one of the Park and Rides. <p>The Consolidated Transport Assessment (TA) [REP4-005] in paragraphs 4.1.3 and 6.2.16 states only one definition of the Early Years, that is '<i>when both the main development site and associated development sites are under construction, without any highways mitigation in place</i>'.</p> <p>Table 7.7 of the TA sets out the modelling assumptions for the whole network in the Early Years. It is clear that the Early Years modelling has been done assuming 1500 construction workers to the main development site and 730 to the Associated Development Sites.</p>

ExQ3	Question to:	Question:
		<p>It is also clear from the definition provided in the TA that the Early Years construction workers TA assumption was not based on any of the Associated Development sites anticipated to be operational. Table 7.7 only quantifies construction workers for Associated Development Sites and not any workers using the sites as a Park and Ride.</p> <p>It follows that if one or both park and rides are operational and in use there may well be many more construction workers driving on the network to access the Park and Ride sites for operational purposes and in addition Park and Ride operational buses from either one or both Park and Ride sites. Their travel patterns will not have been assessed in the Early Years scenario in the Consolidated Transport Assessment and related assessments.</p> <p>A reliance on a modal split target in the Early Years for construction worker travel only to the main development site will not control workers numbers and traffic on the wider network and certainly not limit the traffic levels to those assessed in the TA for the Early Years.</p> <p>Explain:</p> <ul style="list-style-type: none"> (i) How the modal split approach for construction worker travel currently proposed will ensure that the Early Years assessments in the TA and resulting assessments will not be compromised; and (ii) Why there should not be one consistent definition of the Early Years for all travel.
	SZC Co. Response at Deadline 8	<p>(i) Based on the Implementation Plan there is expected to be a short period (circa 1 quarter) when the park and ride facilities are expected to be operational before the Sizewell link road is available for use. It is only during this one quarter that the CWTP would move from 'early years' to 'peak construction (i.e. once either of the park and ride facilities is operational) but the CTMP would still be operating under the early years controls (i.e. prior to the Sizewell link road and two village bypass being available for use). Once the Sizewell link road is operational both the CWTP and CTMP would operate under the 'peak construction' commitments, targets and controls.</p> <p>Therefore, this question relates to the one quarter of time when the CWTP would be being monitored against the peak construction targets, which includes park and ride buses, but the construction workers would need to utilise the B1122. SZC Co. understands that the</p>

ExQ3	Question to:	Question:
		<p>ExA is concerned that the traffic levels under this scenario have not been assessed as part of the Early Years assessment.</p> <p>First of all consideration needs to be given to the difference in mode share that would result from the change in transport strategy during this quarter. The workforce included in the Early Years assessment was 1,500 workers travelling to/from the main development site. At the time that the Sizewell link road is forecast to be available for use the workforce is expected to increase to circa 2,000 workers. The LEEIE park and ride facility would not be available and instead the workers would utilise the northern/southern park and ride facility. The campus would not be available at this time and therefore the peak construction mode share target would not be achievable from Day 1 of moving from Early Years to peak construction mode share targets.</p> <p>During the early years there is a commitment to achieve the mode share targets set out in Table 3.1 of the CWTP (Annex L of the DoO Doc Ref. 8.17(G)). Once either the northern or southern park and ride facilities are operational the target will be to achieve the peak construction mode share set out in Table 3.1 of the CWTP (Annex L of the DoO Doc Ref. 8.17(G)), which is based on the assessed mode share for the peak of the peak construction period, which will not occur for a number of years post delivery of the northern/southern park and ride facilities. It is standard practice in Travel Planning for final targets to be set, which are sought to be achieved by a particular point in time and interim targets set to ensure that this happens. The CWTP (Annex L of the DoO Doc Ref. 8.17(G)) has been updated to state that the TRG will be able to set interim mode share targets to ensure that the peak construction target is met. The interim peak construction targets would need to take account of when the campus will be available as that will have an impact on the level of walk and cycling that would be achievable.</p> <p>Based on this, on Day 1 of moving from the early years to the peak construction mode share targets set out in Table 3.1 of the CWTP, the 28% walk/cycle target would not be achievable prior to the accommodation campus being available (albeit other walk and cycle measures and infrastructure improvements are secured in the CWTP and Deed of Obligation, which would allow there to be proportion of walking and cycling). Therefore, if the non-walk/cycle peak construction mode shares were adjusted on a pro-rata basis,</p>



ExQ3	Question to:	Question:																																																																						
		<p>excluding the 28% walk/cycle target, the mode shares would be similar to those applied in the early years, as shown below:</p> <table><tr><th>Final mode of travel to MDS</th><th>Early years workforce split</th><th>Early years mode share</th><th>Peak construction workforce split</th><th>Peak construction mode share</th><th>Pro-rata mode share without campus</th></tr><tr><td>Walk/cycle</td><td>0</td><td>0%</td><td>2,400</td><td>28%</td><td>0%</td></tr><tr><td>Car driver</td><td>242</td><td>16%</td><td>1,049</td><td>12%</td><td>17%</td></tr><tr><td>Car passenger</td><td>58</td><td>4%</td><td>437</td><td>5%</td><td>7%</td></tr><tr><td>Direct bus</td><td>600</td><td>40%</td><td>1,942</td><td>23%</td><td>32%</td></tr><tr><td>Park and ride bus</td><td>600</td><td>40%</td><td>2,652</td><td>31%</td><td>44%</td></tr><tr><td></td><td>1,500</td><td></td><td>8,480</td><td></td><td></td></tr></table> <p>[REP2-044] Factoring the higher level of 2,000 workers to the pro-rata peak construction mode share targets (excluding walk/cycle) would yield the following:</p> <table><tr><th>Final mode of travel to MDS</th><th>Early years workforce split</th><th>Pro-rata mode share without campus</th><th>Higher early years workforce split (with NPR or SPR)</th></tr><tr><td>Walk/cycle</td><td>0</td><td>0%</td><td>0</td></tr><tr><td>Car driver</td><td>242</td><td>17%</td><td>345</td></tr><tr><td>Car passenger</td><td>58</td><td>7%</td><td>144</td></tr><tr><td>Direct bus</td><td>600</td><td>32%</td><td>639</td></tr><tr><td>Park and ride bus</td><td>600</td><td>44%</td><td>872</td></tr><tr><td></td><td>1,500</td><td></td><td>2,000</td></tr></table>	Final mode of travel to MDS	Early years workforce split	Early years mode share	Peak construction workforce split	Peak construction mode share	Pro-rata mode share without campus	Walk/cycle	0	0%	2,400	28%	0%	Car driver	242	16%	1,049	12%	17%	Car passenger	58	4%	437	5%	7%	Direct bus	600	40%	1,942	23%	32%	Park and ride bus	600	40%	2,652	31%	44%		1,500		8,480			Final mode of travel to MDS	Early years workforce split	Pro-rata mode share without campus	Higher early years workforce split (with NPR or SPR)	Walk/cycle	0	0%	0	Car driver	242	17%	345	Car passenger	58	7%	144	Direct bus	600	32%	639	Park and ride bus	600	44%	872		1,500		2,000
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ExQ3	Question to:	Question:
		<p>Compared with the early years assessment that has been undertaken, there could be around 100 more cars driving directly to the main development site per day (each way), many of which would travel on the B1122. There would be around 270 more workers using park and ride; however the LEEIE park and ride facility would cease to be used once the northern or southern park and ride site is open, so all of the workers forecast to use park and ride at this point would be intercepted at the northern or southern park and ride facility rather than travelling onwards to the LEEIE park and ride facility. The additional workers driving directly to the main development site would be more than offset by the reduction in workers travelling through to the LEEIE park and ride facility; there would however be additional park and ride buses travelling on the B1122 to and from the northern or southern park and ride site. The potential number of buses on the B1122 is discussed in point ExQ3 TT.3.6(ii).</p> <p>Based on these calculations, it is not considered that the traffic movements for this short period would change the assessment presented in the Consolidated Transport Assessment [REP4-005] and the air quality, noise and vibration and transport assessments presented in the ES [APP-159 to APP-582] and subsequent ES Addenda [AS-179 to AS-260, REP6-017], and is not considered to trigger a need for additional mitigation on the B1122 beyond that proposed (see ExQ3 TT.3.8). Therefore in response to part (i), the modal split approach currently proposed would not comprise the early years assessments.</p> <p>(ii) The peaks of different types of Project-related traffic will not occur at the same point of the construction period on all roads. We have assessed an appropriate and robust 'early years' scenario for the assessment of traffic impacts during this phase, with the assumptions set out in Table 7.7 of the Consolidated Transport Assessment [REP4-005]. It is considered more appropriate to consider the early years, for monitoring and management of the Project's construction by the TRG, in two parts reflecting the differing profiles of HDVs and construction workers in relation to their associated mitigation. This would better enable the management of the different traffic types against their associated caps and triggers during the construction phase.</p> <p>Please also see the Applicant's response to ExQ2 TT.2.8 [REP7-056] where it was stated:</p>

ExQ3	Question to:	Question:
		<i>"The distinction between the Early Years period and the later construction and operational phases ensures that vehicle movements are appropriately controlled, until such time that suitable infrastructure is available to mitigate the forecast transport impacts. The separate definition for Early Years for (a) freight and (b) construction workforce is to ensure that the project is not unnecessarily constrained beyond the point at which mitigating infrastructure relevant to either (a) freight or (b) the workforce is provided. This is why it is not appropriate to have a single approach to defining the Early Years."</i>
TT.3.6	The Applicant	<p>B1122 Early Years</p> <p>The Early Years caps that relate to HDVs on the B1122 at Theberton and Middleton Moor are now proposed to include HGV, buses, HGV associated with Associated Development sites and potentially up to 40 tankers /day associated with Change No.19, if accepted. Explain:</p> <ul style="list-style-type: none"> (i) Is it intended to use 30m³ water tankers and are these articulated vehicles? (ii) The expected number of buses to use the B1122 in the Early Years; (iii) The expected number of HGV's relating to the Associated Development (AD) Sites expected to use the B1122 in the Early Years; and (iv) Previous justification maintained that the cap was developed for the requirements for HGV without buses, AD site HGV and water tankers. Could caps not be refined to minimise the number of HDV on the B1122 in the Early Years, i.e if no water tankers then could caps be adjusted downwards and in similar way for AD site and buses. The desired outcome should be to have caps to both level and timing in the early years that can be managed by both the DMS and the Transport Review Group to minimise the environmental effects on the B1122 by having a much more reactive approach to the cap level.
	SZC Co. Response at Deadline 8	<ul style="list-style-type: none"> i) 30m³/44t GVW articulated tanker trucks have been assumed to minimise movements required to import water. ii) The workforce profile suggests there will be around 2,000 construction workers by Q4 of 2024 (Year 2 of 'early years'), which is about 25% of the peak construction workforce. With 520 bus movements assessed at peak construction (northern and southern park and rides and direct buses) if all direct buses and both park and ride sites were operational by which point there could be around 130 bus movements

ExQ3	Question to:	Question:
		<p>(65 each way) on the B1122 in the early years just prior to the Sizewell link road being operational. The revised HGV profile issued at D7 made allowance for 130 two-way bus movements per day on the B1122.</p> <p>iii) As noted in the response to ExQ3 TT.3.1, there will be a small proportion of deliveries that need to access the south-eastern end of the SLR prior to the availability of the East Suffolk Line overbridge and haul route. These would therefore travel down the B1122 from the commencement of the SLR construction until the availability of the haul route (i.e. Jan 23 to Nov 23). An average of circa 40 HGV movements has been assessed and allowed for in the HGV forecast.</p> <p>Following the completion of the East Suffolk Line overbridge and SLR haul route these HGVs can be diverted off the B1122, however a reduced allowance of 20 HGV movements has been maintained in the HGV profile to allow for any smaller deliveries that may use the B1122.</p> <p>iv) The early years HDV cap is the primary constraint during the early years, especially in year 1 prior to the rail infrastructure becoming available. The current cap has constrained the HDV movements in this first year and impacted the delivery programme.</p> <p>The addition of water tankers has added to the early years HGV requirements and increased the smoothing required.</p> <p>The early years buses are able to be accommodated as they fall at the end of year 2 when the full rail capacity is operational, which would reduce the HGV movements.</p> <p>The AD traffic has been mitigated by the phasing of the SLR to focus on the ESL overbridge in the first year, minimising HGV movements associated with the SLR construction on the B1122 and allowing the use of the SLR trace as a haul route.</p> <p>It is SZC Co.'s belief that the early years phasing and proposed strategy minimises the HDV movements required along the B1122 at Theberton and Middleton Moor as</p>



ExQ3	Question to:	Question:
		<p>far as reasonably practicable whilst enabling the construction programme to be maintained. The HGV profile demonstrates that there is limited spare capacity within the profile in the early years to allow for a more reactive approach to the early years cap.</p> <p>The CTMP (Annex K of the DoO 17(G)) to be submitted at Deadline 8 includes a daily quarterly average HGV target for the peak construction period. Once the Sizewell link road and two village bypass are operational, there will be a quarterly average HGV target of an average of 500 two-way HGV movements per day in any given quarter in addition to the HGV cap of 700 two-way HGV movements per day.</p>
TT.3.7	Suffolk County Council	<p>Control over Construction Traffic and Worker Travel Explain whether you agree with the controls proposed by the Applicant and if not explain why you consider some amendment is needed for:</p> <p>(i) HDV caps proposed within the Construction Worker Travel Plan; and (ii) Modal split control proposed within the Construction Worker Travel Plan.</p>
	SZC Co. Response at Deadline 8	No response from SZC Co. is required.
TT.3.8	The Applicant, Suffolk County Council	<p>Highway Mitigations. Outline the mitigations proposed and also explain any areas where mitigations are yet to be agreed for the following locations:</p> <p>(i) Marlesford; (ii) Little Glemham; (iii) Yoxford; (iv) Middleton Moor; (v) Theberton; and (vi) B1125 Westleton and Blythburgh.</p>
	SZC Co. Response at Deadline 8	<p>Please refer to ExQ2 HW.2.1 and response to CU.2.1 for details provided previously on the agreed local transport schemes that are proposed as mitigation. Agreement has also been reached with SCC with regards to the schemes that will be delivered by SZC Co. and the proposed phasing of these schemes, as well as an agreed package of transport contributions that will be made by SZC Co. The agreed position is set out in the draft Deed of Obligation (Doc Ref. 8.17(G)) submitted at Deadline 8.</p>

ExQ3	Question to:	Question:
		<p>The specific mitigations proposed at each location are described below:</p> <p>(i) Marlesford – a package of measures is proposed in Marlesford to slow traffic through the village, reduce traffic noise and improve pedestrian amenity. Plans showing these improvements are appended to the Deed of Obligation (Doc Ref. 8.17(G)). The existing speed limit through the village will be reduced to 30mph (from 40mph) and the 40mph speed limit will be extended further south to the B1078 slip road to slow northbound traffic entering the village. Gateway features, combined with 30mph speed signs, will be placed at both village entry points. 30mph repeater signs and roundels marked on the road through the village to encourage courteous driving. New quieter road surfacing will be laid over approximately 800m through the village. A new signalised pedestrian crossing will be provided immediately north-east of the Marlesford Bridge, and a new uncontrolled pedestrian crossing and dropped kerbs would be provided between Marlesford Road and Ashe Road, and near Milestone Farm. The scheme would provide approximately 650m of new and widened footways linking new crossings, as well as businesses, residences and the existing bus stop. Minor kerb realignment and vegetation trimming at the A12 / Bell Lane would improve driver visibility at the junction. These improvements have been developed in consultation with SCC, ESC and Marlesford Parish Council, and are now agreed in principle. Improvements are secured in the Deed of Obligation (Doc Ref. 8.17(G)).</p> <p>(ii) Little Glemham – a similar package of measures is proposed in Little Glemham. Plans showing these improvements are appended to the Deed of Obligation (Doc Ref. 8.17(G)). The existing 30mph speed limit will be visually reinforced by creating a village gateway feature at village entries on the A12, and by providing 30mph speed limit repeater signs and roundels painted on the carriageway through the village. New quieter road surfacing will be laid over approximately 300m through the village. A new signalised junction will be created at the A12/Church Lane incorporating a signalised pedestrian crossing of the A12 close to the village centre, and tighter kerb radii to discourage HGVs from using Church Lane. Signage (“Unsuitable for heavy goods vehicles”) would be installed to further discourage HGVs from using Church Lane. These improvements have been developed in consultation with SCC, ESC and Little Glemham Parish Council, and are</p>



ExQ3	Question to:	Question:
		<p>now agreed in principle. The improvements are secured in the Deed of Obligation (Doc Ref. 8.17(G)).</p> <p>(iii) Yoxford – a new signal-controlled pedestrian crossing is proposed in Yoxford to reduce pedestrian severance. A plan showing these improvements are appended to the Deed of Obligation (Doc Ref. 8.17(G)). The crossing of the A12 would be located immediately north of the Old High Road junction. New road surfacing would be laid over the footprint of the crossing as well as approaches. The crossing location and design has been developed in consultation with SCC, ESC and Yoxford Parish Council, and is now agreed in principle. The crossing is secured in the Deed of Obligation (Doc Ref. 8.17(G)).</p> <p>(iv) Middleton Moor - SZC Co. proposes improvements along the length of the B1122 to reduce traffic speeds, improve road safety and pedestrian amenity. Plans showing these improvements are appended to the Deed of Obligation (Doc Ref. 8.17(G)). In Middleton Moor, SZC Co. propose to provide new/enhanced village gateway signs, integrated with speed limit signs, and a new informal crossing of the B1122 to link up existing PRoW. It is also proposed to reduce the speed limit on approach to Middleton Moor from the national speed limit (50/60mph) to 40mph to slow traffic before they arrive in the village. These improvements are agreed in principle with SCC, and will be secured by the Deed of Obligation (Doc Ref. 8.17(G)). In addition, SZC Co. is working with SCC and ESC to develop a network of cycling routes through the B1122 corridor, broadly between the A12 and the main development site, stretching north to include Westleton and Darsham, and south to include the proposed alignment of the Sizewell link road. The cycling proposals will improve east-west links along the B1122 corridor, and north-south links across the B1122 and Sizewell link road, connecting local villages (e.g. Westleton, Darsham, Kelsale, Middleton Moor, Yoxford) and destinations (e.g. Darsham rail station, RSPB Minsmere). The B1122 corridor repurposing is being developed in consultation with ESC and SCC, and will be secured by the Deed of Obligation (Doc Ref. 8.17(G)).</p> <p>(v) Theberton – SZC Co. proposes improvements along the length of the B1122 to reduce traffic speeds, improve road safety and pedestrian amenity. Plans showing these improvements are appended to the Deed of Obligation (Doc Ref. 8.17(G)). In Theberton, SZC Co. proposes to provide new/enhanced village gateway signs, integrated</p>

ExQ3	Question to:	Question:
		<p>with speed limit signs, a new zebra pedestrian crossing of the B1122 immediately east of Church Road, as well as footway improvements. The potential to provide a 20mph speed limit through Theberton in the early years of Sizewell C construction is also being discussed with SCC. It is also proposed to reduce the speed limit on approach to Theberton from the national speed limit (50-60mph) to 40mph to slow traffic before they arrive in Theberton. These improvements are agreed in principle with SCC, and will be secured by the Deed of Obligation (Doc Ref. 8.17(G)). In addition, SZC Co. is working with SCC and ESC to develop a network of cycling routes through the B1122 corridor, broadly between the A12 and the main development site, stretching north to include Westleton and Darsham, and south to include the proposed alignment of the Sizewell link road. The cycling proposals will improve east-west links along the B1122 corridor, and north-south links across the B1122 and Sizewell link road, connecting local villages (e.g. Westleton, Darsham, Kelsale, Middleton Moor, Yoxford) and destinations (e.g. Darsham rail station, RSPB Minsmere). The B1122 corridor repurposing is being developed in consultation with ESC and SCC, and will be secured by the Deed of Obligation (Doc Ref. 8.17(G)).</p> <p>(vi) B1125 Corridor – Improvements are proposed in Westleton on the B1125 to encourage courteous driving and improve pedestrian amenity through the village. Plans showing these improvements are appended to the Deed of Obligation (Doc Ref. 8.17(G)). The measures in Westleton include new gateway features on the B1125 north and south of the village, integrated with 30mph speed limit signs, new pedestrian crossings of the B1125, improvements to footways and minor kerb re-alignment at junctions to reduce encourage slower traffic speeds. The nature of these improvements has been discussed with SCC, ESC and Westleton Parish Council, and is broadly agreed. The improvements are secured in the Deed of Obligation (Doc Ref. 8.17(G)). A construction phase signage strategy has been developed in consultation with SCC, ESC and National Highways (formerly Highways England) to direct Sizewell C drivers to only travel on defined routes when moving about Suffolk. As part of the wider signage strategy, temporary yellow-backed directional signage will be installed on the A12 in Blythburgh to direct Sizewell C traffic along the A12 and B1122 (in early years) or Sizewell link road (in peak construction) to the main construction site. Signage on the A12 will be delivered by SZC Co., and is secured by the Deed of Obligation (Doc Ref. 8.17(G)). HGVs will not be permitted to use the B1125, and will be tracked by GPS technology to</p>

ExQ3	Question to:	Question:
		ensure compliance with the HGV routes defined in the Construction Traffic Management Plan , Annex K of the DoO (Doc Ref. 8.17(G)).
TT.3.9	The Applicant	<p>Construction Works on the A12</p> <p>Suffolk County Council [REP6-049] Table 4, 1.3.17 state they have made strong representations about the delivery of the A12 junctions and connections at Yoxford and the Two Village Bypass and the Sizewell Link Road being delivered ahead of any works on the Main Development Site. Provide a response about the phasing of these improvements ahead of any works on the Main Development Site along with any suggested control mechanism.</p>
	SZC Co. Response at Deadline 8	<p>The commencement dates for the highway improvements including the tie-in points for the SLR, TVBP and Yoxford are currently constrained by site access dates and the subsequent site clearance, ecology and archaeology.</p> <p>SZC Co. accepts that Yoxford and Friday Street roundabouts should be delivered as early as possible and would, subject to advanced site access and planning, seek to prioritise the delivery of both the Yoxford and Friday Street roundabouts.</p> <p>SZC Co. considers that the other highway tie-in points are currently scheduled in a reasonable way that can be managed and delivered so as to maintain traffic safety and flows without undue impact to the highway users. Please also refer to response to CU.1.22.ii.</p> <p>Response to ExA's Further Commentary on the DCO (Doc Ref. 9.98) also sets out that the Construction Method Statement has been updated at Deadline 8 to include longstop dates for the delivery of the SLR and TVBP.</p>
TT.3.10	The Applicant	<p>"Rat Running or Alternative Route Selection"</p> <p>The issue of "rat running" has been raised throughout the Examination by numerous Interested Parties. Explain how these concerns have been addressed and the strategy for dealing with any issues that may arise along with the relevant control mechanisms proposed to be secured within the DCO, in relation to:</p> <ul style="list-style-type: none"> (i) Car and LGV travel to and from the Main Development Site; and (ii) Car and LGV travel to and from the Park and Ride sites.



ExQ3	Question to:	Question:
	SZC Co. Response at Deadline 8	<p>In responding to (i) and (ii) SZC Co. provided a comprehensive description of the measures proposed to manage the movement of Sizewell C vehicles in the response to ExQ1 TT.1.87 at Deadline 2 [REP2-100]. Additional detail, and a response to SCC's Deadline 2 response to this question was provided at Deadline 3. Discussions with SCC have continued since the earlier responses and additional measures are now proposed which will act to further control Sizewell C car and LGV travel. Appendix H of Comments at Deadline 7 on Submissions from Earlier Deadlines and Subsequent Written Submissions to ISH1-ISH6 [REP7-060], submitted by SZC Co. at Deadline 7 provides a summary of the proposed changes to the management plans. These additional measures will be incorporated within an updated set of transport management plans and submitted to PINS at Deadline 8. The additional measures in relation to mitigating "rat running" include:</p> <ul style="list-style-type: none"> • Greater clarity in the CTMP, Annex K of the DoO (Doc Ref. 8.17(G)) and CWTP Annex L of the DoO (Doc Ref. 8.17(G)) to describe the role of local transport and traffic groups, and how the local community can escalate issues to the TRG for resolution, including concerns about "rat running". • Changes to the powers of TRG members defined in the Construction Traffic Management Plan, Annex K of the DoO (Doc Ref. 8.17(G)) and Construction Worker Travel Plan, Annex L of the DoO (Doc Ref. 8.17(G)), allowing any member of the TRG to call an urgent meeting to address issues quickly, which could include community concerns about "rat running". • Provision within the CTMP, Annex K of the DoO (Doc Ref. 8.17(G)) for additional LGV monitoring to be implemented, which could include LGV route monitoring via a phone app, if LGV movements exceed assessed levels on a consistent basis. • Simplification of the transport contingency funds previously proposed into a single Contingent Effects Fund, secured through the Deed of Obligation (Doc Ref. 8.17(G)) and greater clarity on the TRG protocol for drawing down on that fund to address specific issues. • New limit on the number of car parking spaces (up to 650) available at the main development site (including the LEEIE) in the early years in the Construction Worker Travel Plan, Annex L of the DoO (Doc Ref. 8.17(G)), and secured in Requirement 8 of the draft DCO, which will control the number of worker car trips to/from the MDS/LEEIE during the early years.

ExQ3	Question to:	Question:
		<ul style="list-style-type: none"> Clarity in the CWTP, Annex L of the DoO (Doc Ref. 8.17(G)) on the management of Sizewell C workers travelling in LGVs, rather than cars.
TT.3.11	Suffolk County Council	"Rat Running or Alternative Route Selection" Explain your views as to the effectiveness of the Applicant's proposed strategy for monitoring and addressing any issues relating to "rat running". In addition, provide details of any areas where the Council considers that additional controls would be beneficial and the reasoning for such additional controls.
	SZC Co. Response at Deadline 8	No response from SZC Co. is required.
TT.3.12	The Applicant	Parking Levels on Main Development Site In response to TT.2.9 the controls within the DCO were set out. Any parking provided within Work No. 1A would be controlled by requirement 8. However, there are other work areas, by way of one example parking will be created as part of the Work No.3, the accommodation campus and also additional parking can be created in accordance with Part 2 of Schedule 1. For control of traffic levels to be effective all trip end parking needs to be controlled. Explain how all parking provided as a result of the Proposed Development will be controlled within the DCO to ensure its use is only for the purpose intended and also that it does not compromise the mode share target approach within the CWTP.
	SZC Co. Response at Deadline 8	Question TT.2.9 was regarding parking controls in relation to Work No. 1A (main development site and LEEIE) and therefore the focus of the response was on these car parks. However, the DCO controls all temporary car parking at the main development site during the construction phase, including Work No. 3, the accommodation campus. Temporary car parking at Work No.3 is controlled by the Works description in Schedule 1, which limits parking to 'up to 1,300' spaces. Parking during construction in Work No. 1A is then controlled by Requirement 8(2) which limits the car parking numbers to those stated until either the northern or southern park and ride become available for use. It is noted that additional parking can be created in accordance with Part 2 of Schedule 1 and SZC Co. will include a restriction within requirement 17 that limits parking within Work No. 3 to no more than 1,300 spaces. The combination of the parking controls in requirements 8 and 17 will then provide assurance that the mode share targets in the CWTP would not be compromised.

ExQ3	Question to:	Question:
		Compliance with the CWTP Annex L of the DoO (Doc Ref. 8.17(G)) throughout the construction period is secured through the Deed of Obligation. Please refer to the response to TT.3.15 below, which sets out the proposed monitoring of the vehicle trips in/out of the car parks throughout the construction period using permanent cameras, as well as other vehicle monitoring, which will enable compliance with the mode share targets to be reported to the TRG.
TT.3.13	The Applicant	<p>Fly Parking</p> <p>Explain the strategy that is proposed to be adopted to deal with the issues of fly parking. Also explain the mechanism for residents to report problems and how such problems are proposed to be dealt with expediently. In addition, explain how this approach would be secured in the DCO.</p>
	SZC Co. Response at Deadline 8	<p>SZC Co. responses to ExQ3 TT.1.36 at Deadline 2 [REP2-100] and Deadline 3 [REP3-046] describe the strategy proposed for dealing with issues of fly parking. SCC in their Deadline 2 response acknowledge that the proposed approach has worked successfully at Hinkley Point C.</p> <p>Fly parking refers to construction workers who live outside of the 'drive to site' catchment area, not using their allocated mode of travel to the main development site and instead driving to a location within the 'drive to site' catchment and either walking, cycling or using a direct bus service to access the main development site.</p> <p>The fly parking management measures are described in the CWTP, Annex L of the DoO (Doc Ref. 8.17(G)) to be submitted at Deadline 8. The fly parking patrol teams will be proactive and carry out daily patrols to identify possible cases of fly parking. In addition, local residents will be able to contact the freephone Sizewell C helpline to raise a potential fly parking instance. The fly parking patrol team will then investigate these potential fly parking occurrences, recording the location of the vehicle of the potential offender and taking photographic evidence.</p> <p>This is a similar approach to that which has been developed at Hinkley Point C. The fly parking patrol there investigates 1,000 vehicles per month on average and 90% of those turn out to be non-Hinkley Point C related. The remaining 10% are usually instances when Hinkley Point C workers are legitimately staying in lodgings situated on the given street.</p>



ExQ3	Question to:	Question:
		Where a worker's vehicle is proven to be fly-parking, SZC Co. must adopt a "Just and Fair" culture with regard to disciplinary proceedings with escalation to higher levels of management at each stage. Ultimately this process could lead to the removal of an individual worker from the Sizewell C Project. The TRG monitoring report will include a summary of the fly parking instances and action taken. Based on this as well as minutes of parish council meetings and forums, the TRG will consider if any further action is required by SZC Co.
TT.3.14	Suffolk County Council	Fly Parking Provide any comments on whether the Council considers that the fly parking approach proposed by the Applicant is robust enough to address any problems that may arise. Additionally, provide any additional mechanisms you consider would improve the effectiveness of the proposed response along with the reasoning for such suggestions.
	SZC Co. Response at Deadline 8	No response from SZC Co. is required.
TT.3.15	Applicant	Traffic Monitoring Suffolk County Council [REP6-049] Table 5, 1.2.4 and 1.2.5 set out the case why the provision of Automatic Traffic Counters would greatly assist in the ability to monitor real time traffic flow and allow for more immediate responses to issues as they arise as well as to understand profiles and to identify atypical traffic patterns. This seems to offer a very responsive way of monitoring traffic over the lengthy construction period. Explain why the quarterly surveys proposed can provide the same level of monitoring and responsiveness.
	SZC Co. Response at Deadline 8	Table 8.1 of the Construction Traffic Management Plan [REP2-054] and Table 5.1 of the Construction Worker Travel Plan [REP2-055] describe the monitoring strategy proposed at Deadline 2. SZC Co. and SCC have continued discussions in relation to the transport management plans and have agreed changes to the monitoring strategy. Appendix H of Comments at Deadline 7 on Submissions from Earlier Deadlines and Subsequent Written Submissions to ISH1-ISH6 [REP7-060] submitted at Deadline 7, describes the proposed changes to the transport management plans. A revised CTMP , Annex K of the DoO (Doc Rev. 8.17(G)) and CWTP , Annex L of the DoO (Doc Ref. 8.17(G)) are being submitted at Deadline 8.

ExQ3	Question to:	Question:
		<p>The proposed monitoring of Sizewell C vehicle movements secured via the CTMP, Annex K of the DoO (Doc Rev. 8.17(G)) and CWTP, Annex L of the DoO (Doc Ref. 8.17(G)) is summarised as follows:</p> <ul style="list-style-type: none"> • All Sizewell C HGVs, AILs and LGVs will be monitored via the DMS, which will provide real time monitoring of freight traffic. • All Sizewell C buses will be on a fixed timetable and routes but in addition to this the buses will be GPS tracked to enable the profile of buses in and out of the park and ride facilities and main development site to be monitored as well as a swipe card system on the buses to monitor bus patronage. • All Sizewell C car parks will have a permanent Automatic Traffic Count (ATC) to monitor Sizewell C cars entering and departing the LEEIE park and ride and main development site car parks in the early years; and the main development site car park, campus car park and the northern and southern park and ride sites during peak construction. SZC Co. has agreed with SCC that an ATC is not required at the freight management facility, given the low car traffic flows expected at that access (i.e. primarily site operations staff). The ATCs are proposed to be recorded using permanent cameras installed at car park accesses. <p>Therefore, based on the above all Sizewell C traffic movements will be monitored on a daily basis.</p> <p>As set out in the CTMP, Annex K of the DoO (Doc Rev. 8.17(G)) and CWTP, Annex L of the DoO (Doc Ref. 8.17(G)), the TRG will be notified of any breaches of HGV caps or routes within 24 hours of them occurring. In addition, a summary of the monitoring data based on the DMS and ATC surveys will be emailed to the TRG members on a weekly basis throughout the construction period. This will enable the TRG to understand if there is likely to be a risk of non-compliance of the CTMP, Annex K of the DoO (Doc Rev. 8.17(G)) and CWTP, Annex L of the DoO (Doc Ref. 8.17(G)) and for any action to be taken if required.</p>



ExQ3	Question to:	Question:
		<p>Based on the notification of breaches and weekly summary of DMS data any TRG member will be able to call an urgent TRG meeting to discuss the matters of concern and agree any action that must be taken by SZC Co.</p> <p>SZC Co. believes that the monitoring proposed in the management plans submitted at Deadline 8 is very comprehensive and responsive. It will enable the TRG to have early warning of any potential non-compliance as well as any instances of non-compliance as they occur.</p>
TT.3.16	Applicant	<p>Transport Review Group Membership</p> <p>It is understood that you are now proposing that Suffolk Constabulary have voting rights in the Transport Review Group. You are also proposing a fourth appointee from SzC to retain the overall balance. One of the appointed members will be from National Highways (NH). In the event that NH abstain from any matters that do not affect the trunk road network what is your suggested approach to retain the overall balance in the TRG</p>
	SZC Co. Response at Deadline 8	<p>SZC Co. anticipates that the TRG would operate in partnership with the shared objective of delivering nationally important infrastructure efficiently but sensitively. It should rarely be necessary to vote as the parties will have similar objectives.</p> <p>The CTMP, Annex K of the DoO (Doc Ref. 8.17(G)) and CWTP, Annex L of the DoO (Doc Ref. 8.17(G)) submitted at Deadline 8 include the following commitments with regard to TRG governance and voting.</p> <p><i>"All members of the TRG must participate in the TRG and perform the obligations of the governance group. Schedule 17 paragraph 2 of the DoO (Doc Ref. 8.17(G)) requires this of ESC, SCC and SZC Co. and the Deed of Covenants with National Highways and Suffolk Constabulary will also require this. If required from time to time, TRG representatives from SCC, ESC, National Highways and Suffolk Constabulary shall be able to nominate an alternative representative from their authority if they are unable to attend a TRG meeting. Should a TRG member abstain from a vote, SZC Co. must cancel or withdraw one of its votes so that the TRG can proceed as far as practical by consensus."</i></p>



ExQ3	Question to:	Question:
Wa.3	Waste (conventional) and material resource	
Wa.3.0	Environment Agency	Waste Management Strategy – Addendum [REP7-] The applicant at Deadline 7 has submitted an Addendum to the Waste Management Strategy setting out Key Performance Indicators (KPI). Are you satisfied this Addendum addresses your original concerns about the lack of KPI in the Waste Management Strategy?
	SZC Co. Response at Deadline 8	No response from SZC Co. is required.