

East Anglia TWO Offshore Windfarm

Applicant's Response to AONB Partnership submissions:

Reports by Alison Farmer Associates

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Applicable to **East Anglia TWO**







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Table of Contents

1	Introduction	1
1.1	AFA East Anglia Two SLVIA Comments on Mitigated Layout for	
	Examination	2





Glossary of Acronyms

AFA	Alison Farmer Associates
AONB	Area of Outstanding Natural Beauty
CPRE	Campaign to Protect Rural England
EA2	East Anglia TWO
ES	Environmental Statement
GLVIA3	Guidelines for Landscape and Visual Impact Assessment (Version 3)
LCT	Landscape Character Type
NE	Natural England
PEIR	Preliminary Environmental Information Report
SCHAONB	Suffolk Coast and Heath Area of Outstanding Natural Beauty
SNH	Scottish Natural Heritage (now NatureScot)
SLVIA	Seascape Landscape and Visual Impact Assessment





Glossary of Terminology

Applicant	East Anglia TWO Limited
East Anglia ONE North	The proposed project consisting of up to 67 wind turbines, up to four
project	offshore electrical platforms, up to one construction, operation and
	maintenance platform, inter-array cables, platform link cables, up to one
	operational meteorological mast, up to two offshore export cables, fibre
	optic cables, landfall infrastructure, onshore cables and ducts, onshore
	substation, and National Grid infrastructure.
East Anglia ONE North	The offshore area within which wind turbines and offshore platforms will be
windfarm site	located.
East Anglia TWO	The proposed project consisting of up to 75 wind turbines, up to four
project	offshore electrical platforms, up to one construction, operation and
	maintenance platform, inter-array cables, platform link cables, up to one
	operational meteorological mast, up to two offshore export cables, fibre
	optic cables, landfall infrastructure, onshore cables and ducts, onshore
	substation, and National Grid infrastructure.
East Anglia TWO	The offshore area within which wind turbines and offshore platforms will be
windfarm site	located.





1 Introduction

- 1. This document presents East Anglia TWO Limited's (the Applicant's) comments on two documents prepared by Alison Farmer Associates (AFA) at the request of the Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB) Partnership. These are as follows:
 - East Anglian Two and East Anglian One North Comments on Stage 4 PEI Documentation; and
 - East Anglian Two SLVIA Comments on Mitigated Layout for Examination.
- 2. The first AFA response was received by the Applicant in response to the Section 42 consultation. Aspects of the AFA response were used to inform the layout, iteration and the preparation of the ES. Reference should be made to pages 16-29 of Appendix 28.1 of the Environmental Statement for how the AONB Partnership comments on the PEIR (s42 consultation) were addressed in the ES and in the layout iteration (mitigation) associated with East Anglia TWO. No further comments on that report are provided within this document.
- 3. This document is applicable to East Anglia TWO only.
- 4. **Section 1.1** sets out responses to the 2nd AFA report, namely 'East Anglian TWO SLVIA Comments on Mitigated Layout for Examination'.

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¹ https://www.suffolkcoastandheaths.org/wp-content/uploads/2020/10/EA2-SLVIA-Mitigated-Layout-Review-Final-Report-20200416.pdf





1.1 AFA East Anglia Two SLVIA Comments on Mitigated Layout for Examination

Point ref.	AFA Summary point	Applicants' Comments
1.3	Approach	
1.3.1	The review has been desk based only, although familiarity of the study area from previous work in the area has informed the review.	Whilst the Applicant is aware of some of the work that AFA undertakes generally within the AONB area it is concerned that no field work has been undertaken by the authors to inform the findings presented in their report. This was also the case in relation to the first AFA report -East Anglian Two and East Anglian One North Comments on Stage 4 PEI Documentation.
		It is the Applicant's opinion that field work should have been carried out using the visualisations provided at the viewpoint locations in order to inform this critically important assessment work.
		This is contrary to the 'desirable' approach which includes field work as set out in GLVIA3 at para 8.23.
		This is a matter confirmed by Natural England in its Deadline 1 submission at 2.4 where they advised as follows: 'NE notes the Applicant's recommendation that the photomontages included in the ES (Figures 28.25 – 28.54 [APP-355 to APP-384]) are the best way to appreciate the scale of the turbines. We agree that they provide a close representation, but we advise that the images are best interpreted (when printed at the correct scale and at a high resolution) at the site from which the original photography was captured.'





Point ref.	AFA Summary point	Applicants' Comments
2	Changes to the Proposed Scheme	
2.1.2	The height and number of turbines remain the same i.e. 60no. 300m high turbines.	The information presented by AFA relates to the agreed worst case scenario for the ES.
		Whilst this was the case in relation to the scheme presented in the ES, the maximum height of turbines for the East Anglia TWO project has been reduced to 282m.
		It should be noted that the Application also includes for proposed alternative layouts with smaller turbine dimensions, which may also include larger numbers of turbines.
2.2.1	Viewpoints 3 to 18 fall within the AONB. Using the data in Table 28.3 of the ES chapter 28, I have set out below the differences between the PIER and mitigated schemes in relation to distance from the nearest turbine and horizontal angle of view occupied by the scheme for each viewpoint.	Whilst the information presented in the table may be accurate for the nearest turbines shown in the PEIR and ES viewpoint wirelines the differences shown do not reflect the changes in distance of the Array Area boundary to the viewpoint. Due to the Rochdale Envelope approach to the assessment the WTGs may be located anywhere within the defined Array Area.
		This comparative information is set out in the ES at Table 28.3 Comparison between distance and horizontal angle of East Anglia TWO windfarm PEIR layout and ES layout from representative viewpoints in Suffolk.





Point ref.	AFA Summary point	Applicants' Comments
2.2.2	The table above shows that of the viewpoints within the AONB, the nearest turbine will be further away for just 5 of them (viewpoints 3-6 and 17). For the other 11 viewpoints (viewpoints 7-16 and 18) the nearest turbine will become closer in the mitigated proposals. The greatest difference occurs in relation to viewpoints 3 and 4 (where distance will increase by over 1km). However, all of these differences are relatively minor and are not readily perceived, as such they are unlikely to result in a material difference in effects.	The Applicant agrees that in isolation differences in the distances from each viewpoint are unlikely to materially alter the effects. However, the Applicant notes that the increased distance is only one of the resulting factors of the mitigation with the reduced field of view affected by East Anglia TWO always being apparent at the same time. These factors would not be seen in isolation and it is their combined effect that should be considered.
2.2.3	In terms of changes in the lateral extent of the wind farm seen from each of the viewpoints, the greatest change is felt for viewpoint 14 where there is a 14.40 degree reduction in lateral spread. For all other viewpoints the change is between 11.08 and 12.40 or an average of 12.1 degrees. This difference is perceived in all viewpoints where the extent of EA2 turbines fills a smaller portion of the 90 degree horizontal field of view. Chapter 28 of the ES concludes that 'the magnitude of change has reduced towards the lower threshold of medium in the assessment of many of the viewpoints.'	The Applicant notes that AFA has acknowledged that there would be a reduction in the horizontal field of view that may be affected by East Anglia TWO across all viewpoints. Whilst it is true that this would equate to a smaller portion of a 90 degree horizontal field of view the Applicant would like to point out that 90 degrees is only one part of the wide sea views that are available at all locations when visited in the field. The panoramic sea views are more generally 180 degrees. Whilst the full extent of the field of view taken up by the sea is not always included in the visualisations further segments of the seascape in views are included in the baseline visualisations (Figures 28.28a-I VP4 Southwold to Figure 28.46 a-e Viewpoint 22 Caister-on-Sea (APP-358 – APP-376)), which are presented in 90 degree segments in accordance with SNH guidance. The wide sea views seen at the viewpoint locations themselves provide the opportunity for the greatest understanding of the proportion of the field of view affected by East Anglia TWO.
3	Landscape Effects	





Point ref.	AFA Summary point	Applicants' Comments
3.1.4	In terms of adverse affects and magnitude of change the SLVIA for the mitigated EA2 scheme acknowledges there will be some adverse effects on the Coastal Levels (06) and Coastal Fens (08). It recognises that in places the turbines will break the skyline, their vertical form in a horizontal landscape, and their movement, will intrude on these landscapes. It is also noted that the magnitude of change is marginally reduced for 06B and 06C but increased for 06D in coastal areas where turbines are likely to intrude.	
3.1.5	The magnitude of change increases marginally for 07C (Dunwich Heath/cliffs) and 08A, B and D despite mitigation of the scheme	The assessments were updated with finer granularity of assessment in the ES to address comments made by AFA in the AONB Partnership's S42 consultation response.
3.1.6	In terms of LCT 05D there appears to have been an inconsistency in judgements. For this landscape, the magnitude of change remains unchanged from the PEIR assessment i.e. medium. The sensitivity of this landscape is increased to high, and yet the overall significance is no longer regarded as significant. This is not consistent with the SLVIA methodology nor the assessment for LCT 05C which is also regarded as high sensitivity, medium magnitude and significant effect.	The Applicant notes that the magnitude of change assessed in the ES for LCT 05D is medium-low not medium as stated by AFA. The assessment of a not significant effect for this LCT 05D is therefore consistent with the methodology.
3.1.7	The following can be concluded from this review: 1. The EA2 mitigated scheme does not dramatically alter the magnitude of effect on landscape character in the SLVIA. 2. In a number of cases (especially for LCT08 and the coastal sections of LCT06) the magnitude of change increases marginally, although this does not result in a significant effect in the SLVIA.	 The Applicant agrees that the mitigation does not 'dramatically alter' the effects on landscape character but notes that the effects are reduced to some degree as a result of the mitigation. Noted. The combination of a Medium-Low magnitude of change combined with a Medium-High sensitivity can result in Significant effect. The assessment of the effects on these LCTs as 'Not Significant' is in accordance with the methodology, is a matter of





Point ref.	AFA Summary point	Applicants' Comments
	 Nevertheless, Table A28.5 of the methodology shows that a medium-low magnitude of change acting on a Med-High sensitive landscape can result in an significant effect. 3. Similarly for LCT07D coastal sections a medium-high sensitivity coupled with a medium-low magnitude of change can result in a significant effect. 4. The significance of effect on LCT 05D appears inconsistent with the SLVIA method and judgements made for LCT 05C. 	 professional judgement and is particularly informed by specific field work at these locations. 3. As above. 4. The Applicant notes that the magnitude of change assessed in the ES for LCT 05D is medium-low not medium as stated by AFA. The assessment of a not significant effect for this LCT 05D is therefore consistent with the methodology and the assessment undertaken for LCT 05C.
3.1.8	Overall, the EA2 mitigated scheme is considered to make little difference to the effects on landscape character within the AONB and the significance of effect is still considered to have been underestimated in a number of cases.	The Applicant agrees with AFA that the effects on landscape character are not altered dramatically. However, some reduction in effects on landscape character has been delivered. The Applicant does not agree that the significance of the effects has been underestimated. Notably however, the areas where there is disagreement about the significance of the effects assessed in the ES is very limited in terms of the areas being discussed, particularly where one aspect of the areas considered by AFA to be incorrect is as a result of a misreading of the material. No evidence or alternative assessment material has been provided by AFA to support their assessments of significant effects, where this is contrary to the ES findings.
4	Special Qualities of the AONB	





Point ref.	AFA Summary point	Applicants' Comments
4.1.8	The SLVIA also considers effects on tranquillity and cultural heritage. In relation to the former it discusses the factors which contribute to tranquilly separately from factors which detract from tranquillity rather than considering the overall level of tranquillity expressed in the AONB. In many of the coastal areas the level of tranquillity is high, the open expanse of sea and unfettered sea skyline and dark skies contributing to perceptions of tranquillity. The SLVIA states that EA2:	The Applicant wishes to point out that the factors which contribute to tranquillity and detract from tranquillity were extracted directly from the Table associated with Section 2.0 Natural Beauty Indicators of the Suffolk Coast and Heaths AONB Natural Beauty and Special Qualities Indicators (Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB) Natural Beauty and Special Qualities Indicators V1.8 Version Date: 21 November 2016) and are as set out separately therein.
	'introduces development influence in the offshore waters that form the seascape setting to the AONB, as viewed from the relatively undeveloped character of parts of the Suffolk coast. The technological appearance of the wind turbines and the visual movement of the rotor blades may contrast with the perceived tranquillity of these landscapes, evident in the least developed pockets of the AONB coastline.'	Notably the special quality that has been identified in the aforementioned report is 'relative tranquillity', presumably in recognition of those factors which both detract from and contribute to the perception of tranquillity across the AONB.
4.1.9	This change is likely to give rise to significant effects on perceptions of tranquillity within the majority of coastal sections of the AONB	The Applicant does not agree with the unsubstantiated assessment made by AFA that East Anglia TWO would give rise to significant effects on perceptions of tranquillity within the majority of coastal sections of the AONB.
		The Applicant maintains that the effect of the Project windfarm site on this special quality is of medium-low magnitude and not significant, for reasons as set out in the ES (Table A28.3, Appendix 28.4 (APP-559)) and with further commentary provided below.
		The Applicant sets out the following information in support of its assessment of not significant effects on the perceptions of tranquillity. This information is similar to that presented to Natural England in response to its Relevant Representation and subsequent responses.





Point ref.	AFA Summary point	Applicants' Comments
		The perception of tranquillity, and the factors which may influence this state of tranquillity are particularly subjective, and it is an area where different assessors may conclude different findings. GLVIA3 defines tranquillity as 'A state of calm and quietude associated with peace, considered to be a significant asset of landscape'.
		Whilst this is the case the Applicant considers that the windfarm site would need to have a much more intrusive or overbearing effect if it were to significantly affect tranquillity. The turbines would not be audible at this range and the revolution of the blades would be slow and even, which could be considered to be 'calm' by some people, although this is also likely to be highly subjective.
		The Applicant considers that in order to have a significant effect on tranquillity, the turbines would require to be audible and/or viewed in close proximity, with large vertical scale, surrounding and prevailing visual movement of the rotor blades, which will not occur. Changes of this nature would influence opportunities to experience a sense of tranquillity as the windfarm element would over-ride the naturalistic elements in the landscape that are the basis for calm and tranquillity.
		The Applicant is of the view that the opportunity to experience tranquillity in a naturalistic environment will not be changed to a significant degree by the East Anglia TWO windfarm site, located over 32km away from the AONB at its closest point. Other natural heritage features will prevail and continue provide opportunities to experience a sense of relative tranquillity within a natural environment, i.e. a peaceful, calm state, without noise in a natural setting. This includes locations such as the beaches of Covehithe and Minsmere.





Point ref.	AFA Summary point	Applicants' Comments
		The Applicant is aware of CPRE's work on national tranquillity mapping, contained within the CPRE Tranquillity Report (Northumbria University, 2008 revised) and its associated 'Tranquillity Map' and an 'Intrusion Map' of England. The mapping data is now somewhat out of date and it is understood that CPRE have been lobbying to produce an updated 'Tranquillity Map' of England since their 'give peace a chance' report in 2015 (CPRE, 2015).
		Nevertheless, the Applicant has sourced the 2007 mapping data from CPRE and has presented this in the Tranquillity Map in Figure 1 (Appendi 3) and Intrusion Map in Figure 2 (Appendix 4) (REP2-004) covering the SLVIA study area and SCHAONB. The following observations are made:
		 Large scale urban areas located just outside and to the north of the SCHAONB at Kessingland and Lowestoft form notable areas of intrusion (in Figure 2) with least tranquillity (Figure 1).
		Urban areas at Southwold, Reydon and Aldeburgh within the SCHAONB, and Leiston on its inland edge, also form notable areas or intrusion with least tranquillity.
		 Areas disturbed by noise and visual disturbance in the Intrusion Map (Figure 2) include the land around these settlements; together with areas alongside main transport routes, particularly the A12, running along the inland northern edge of the SCHAONB; but also extending along certain B roads towards the coast and along overhead power lines.
		There is a large area in the Intrusion Map (Figure 2) shown as being disturbed by noise and visual disturbance associated with the area around Sizewell, between Aldeburgh, Thorpeness, Sizewell, Leiston and Minsmere.





Point ref.	AFA Summary point	Applicants' Comments
		This area splits the 'undisturbed areas' of the AONB to a northern section, between Dunwich, Southwold and Coverhithe; and a southern section formed by Orford Ness, the River Ore/Butley and inland areas around the Tunstall and Rendlesham Forests.
		 Pockets of corresponding more tranquil areas are shown in Figure 1 around Covehithe/Easton Broad area in the north of the AONB; Dunwich Forest/Heath/Westwood Marshes and Minsmere in the central part of the AONB; and Orford Ness/River Ore/Butley areas in the south of the AONB.
		Given the GLVIA3 definition of tranquillity, 'a state of calm and quietude associated with peace', and the many references to noise/hearing forming a key part of tranquillity in the CPRE Tranquillity Report 2008 (along with other factors), noise is clearly a factor in people's experience of tranquillity. The CPRE Tranquillity Report 2008 is useful in defining the terms 'seeing, tranquillity' and 'hearing, tranquillity' in its GIS modelling (Figure 8). The Applicant would simply re-iterate that with respect to the hearing (noise) aspect of tranquillity, the wind turbines and offshore platforms located within the East Anglia TWO windfarm site will have no effect.
		Clearly the effect of the East Anglia TWO Project will be on the visual aspects of tranquillity, relating to what is seen by people and whether its visible elements detract from the perception of such tranquillity. The Applicant notes that many of the visual aspects of tranquillity relate to the perception of natural landscapes, trees, woodland, streams, rivers, lakes etc. The AONB Special Qualities report defines these as 'the presence and / or perceptions of natural landscape, birdsong, peace and quiet, natural looking woodland, stars at night, streams, sea, natural sounds and similar





Point ref.	AFA Summary point	Applicants' Comments
		influences'. The East Anglia TWO project has no effect on all these indicators, except for 'the sea'.
		The Applicant disagrees with AFA that simply seeing wind turbines on the sea horizon would be sufficient to negate opportunities to experience tranquillity. This would suggest that all other visual aspects of tranquillity, such as those described above in the AONB special qualities report, would be denied in the presence of the East Anglia TWO windfarm site. The Applicant considers that other aspects of the natural environment which contribute to the experiences of tranquillity within the SCHAONB would continue to prevail and do provide some mitigation to the influence of the wind turbines. On balance, it is the Applicant's assessment that the resulting effect of the wind turbines and offshore platforms located within the East Anglia TWO windfarm site on the relative tranquillity of the AONB is not significant.
		It is agreed that in certain lighting conditions the movement of the rotor blades would be visible, however the Applicant doubts that a material sense of unrest/ disturbance of calmness and quietude would be induced by this slow and consistent visual movement, especially at such distance outside the SCHAONB.





Point ref.	AFA Summary point	Applicants' Comments
4.1.10	In terms of effects on cultural heritage the SLVIA cross refers to chapter 24 of the ES. Appendix 24.8 specifically looks at the effects of the offshore elements of the scheme on cultural heritage. However, its focus is clearly set out in the introduction:	The SLVIA includes an assessment of the effects on aspects of the Cultural Heritage Factors listed as <i>Natural Beauty Indicators under the subheading of Historic influence on the landscape (see Table 28.10 and Appendix 28.4 - Landscape Assessment Table A28.3</i> (APP-559))
	'The purpose of this report is to identify those onshore heritage assets where there is potential for heritage significance to be materially affected by change in their settings.'	Appendix 28.4 cross references Chapter 24 - Archaeology and Cultural Heritage (APP-072) in which effects on the setting of heritage assets from offshore infrastructure were screened out based upon Appendix 24.8 Assessment of the Impact of Offshore Infrastructure on the
4.1.11	The report makes no reference to the AONB and is clearly not an assessment of the contribution of cultural heritage to the special qualities of the AONB and the subsequent influence of the proposed windfarm on these qualities. GLVIA makes it clear that conservation interest in terms of historical and cultural interest can add to the value of the landscape as well as having value in their own right (Box 5.1. page 84). The ES cultural heritage assessment considers the effects of the EA2 on the value of heritage assets in their own right i.e. their significance, but not the role these features play in the special qualities of the AONB. This aspect therefore remains missing from the assessment. It is specifically relevant to vertical heritage features which are landmarks along the coast and are experienced in a simple uncluttered setting, including an unfettered sea skyline/horizon. In terms of 'associations' and 'written descriptions' no reference can be found in Chapter 24.	Significance of Coastal Heritage Assets - A Screening Exercise and Annexes (APP-521). It was concluded in Appendix 24.8 that there is no potential for impacts on the significance of heritage assets or on the settings of heritage assets away from the immediate vicinity of the coastline. For coastal assets, there would only be very limited harm to the significance of some designated heritage assets associated with seaside holiday resorts. The Project would cause no harm to the significance of assets related to military coastal defence and maritime trades (including 'vertical heritage features' such as Slaughden Martello Tower). It was considered that the screening exercise was sufficient and in EIA terms there would be no significant adverse effects on onshore heritage assets. In terms of the special qualities away from the immediate vicinity of the coast, there are no opportunities for sea views and therefore there cannot be a pathway for any effect from offshore infrastructure. In terms of the special qualities on the coast, given that there is only limited harm to heritage assets associated with seaside holiday resorts which is not significant (in EIA terms) it was considered that there is no significant effect





Point ref.	AFA Summary point	Applicants' Comments
		on 'Built environment, archaeology and designed landscapes' in respect of the cultural heritage special qualities of the AONB.
		In terms of the 'associations' and 'written descriptions' related special qualities, the Applicant does not consider that it was possible to undertake a comprehensive assessment, although a great deal could be written on this theme. The Applicant highlights that the Special Qualities example subfactor of "Associations of the landscape with people, places or events" states:
		Wide range of 'stories' describing historical events or activities relate to the landscape and features within the landscape, including stories related to smuggling; the creation of Minsmere; and the loss of Dunwich to the sea.
		More recent stories include the discovery of the Sutton Hoo ship burial in 1939, the 1953 flood, and experimental projects; Cobra Mist at Orford Ness and Radar at Bawdsey Manor.
		The Applicant assessed the effects of the Project in the light of the published Special Qualities which considers offshore wind farms as part of the Landscape Quality of the area (see <i>Chapter 28</i> , <i>Table 28.10</i>):
		"Offshore wind turbines at Greater Gabbard, Galloper and the more distant London Array are visible from some stretches of the coastline. These create a cluttered horizon and, like the large scale elements onshore, also divide opinion".
		The development of offshore wind represents a continuation of Suffolk's maritime heritage into the present day. Indeed, the special qualities state (under the example sub-factor 'Historic influence on the landscape') that "the Sizewell nuclear complex highlights evidence of time depth across the





Point ref.	AFA Summary point	Applicants' Comments
		landscape. Both the nuclear complex and the nearby infrastructure associated with offshore energy generation are part of a developing story of the Suffolk's Energy Coast", and thus clearly recognise future development of wind energy is already part of the special qualities of the AONB.
		It is the Applicant's position, therefore, that given that the more tangible factors of effects on heritage assets or on their settings, are not considered to give rise to significant harm, that when applied to less tangible aspects of the cultural heritage special qualities, the effects of the offshore infrastructure cannot be so overwhelming as to affect the appreciation of a maritime culture of which the infrastructure itself is a modern embodiment.
4.1.12	Overall the assessment of effects on AONB special qualities is not comprehensive. In reaching judgements on the magnitude of change on special qualities the SLVIA relies on a number of arguments and assumptions which are discussed below.	The Applicant points out that the assessment of the effects on the Special Qualities within the SLVIA runs to 26 A4 pages of text and whilst this may be no measure of its comprehensive nature the Applicant wishes to point out that, whilst not agreeing with all aspects of the conclusions, Natural England stated the following in relation to the assessment:
		'The role of the seascape setting of the AONB in shaping and maintaining the special qualities of the area is a vital consideration and a critical component of the SLVIA. It is a key interest for Natural England. We therefore welcome this assessment for the evidence and clarity it provides and believe it will greatly assist in the determination of the scheme. The judgements contained in the landscape, seascape and visual assessments underpin the assessment of the effect on the special qualities of the AONB as they relate to the setting of the designation.
		We note the detailed assessment in Appendix 28.4 p.34 to 60 and make reference to the information in contained this document below.





Point ref.	AFA Summary point	Applicants' Comments
		Natural England welcomes the additional evidence provided in the ES in respect of the special qualities Relative Tranquillity and Relative Wildness.'
		The Applicant also notes in relation to this paragraph that arguments are not made within the SLVIA. It purely provides description of the baseline resource and the likely changes to it in order to substantiate the ratings of sensitivity and magnitude of change and thereafter the findings of significance.
4.2	Arguments Advanced in the SLVIA	
4.2.1	The SLVIA, when assessing the level of effect on the special qualities of the AONB, relies on the following arguments which are considered in turn below. These arguments are considered to result in an underplaying of the likely effects of the proposed EA2 mitigated scheme on the AONB landscape.	The Applicant does not agree with AFA that the effects on the SCHAONB landscape are underplayed.
4.2.2	Position of the windfarm in relation to the setting of the AONB and horizon The SLVIA states that EA2 does not fall within the immediate setting of the	It is noted that AFA agrees that the descriptions associated with the statement 'Position of the windfarm in relation to the setting of the AONB and horizon' may be true – it is true that the wind farm is located c 32.6km
	AONB and lies beyond the horizon. Whilst this may be true i.e. the wind farm is located c 32.6km or more form the AONB and the bottom of the turbines are not visible due to this distance and curvature of the earth, the turbines nonetheless break the skyline. It is their visibility on the skyline even at a distance of greater than c. 32.6km that results in landscape and visual effects. In other words, the location of the turbines beyond the	from the SCHAONB and that it lies beyond the horizon. Both of these factors are relevant to the assessment of the effects on the setting and special qualities of the AONB as they infer that they are not in the SCHAONB and are not part of its immediate setting. It is the Applicant's opinion that the position of the turbines beyond the horizon in views from the AONB creates a lesser change than might





Point ref.	AFA Summary point	Applicants' Comments
	skyline is not a critical factor where the turbines continue to be apparent on the skyline and especially so where they have a lateral spread.	otherwise be the case as the lower parts of the turbines are hidden by the curvature of the earth and the turbines cannot be seen as being located within the visible surface of the sea. Therefore, they do not alter the pattern of the elements within the sea section of the view but occur above it seen against the sky.
		The fact that the turbines would be visible on and beyond the skyline is noted throughout the assessments.
4.2.3	Effects on Aesthetic and Perceptual Qualities of the AONB	Noted.
	The SVLIA concludes that EA2 only affects some of the aesthetic/perceptual aspects of character and only on the coastal fringes of the AONB. Other special qualities and characteristics remain unchanged and will continue to contribute to the distinctiveness of the AONB.	
4.2.4	It is accepted that some of the AONB special qualities are more affected	Nowhere in the SLVIA does it seek to justify East Anglia TWO.
	than others. Whilst the assessment of effects on special qualities invariably requires the key factors which contribute to natural beauty to be considered in turn, this should not lead to the justification of a scheme on the basis that only some qualities are unaffected for the following reasons.	The balancing of the justification for or the acceptability of the effects on the special qualities of the SCHAONB relative to other environmental considerations is for the ExA to determine. The document of Nov 2020 submitted by the Applicant 'Effects with Regard to the Statutory Purposes of the Suffolk Coast and Heaths Area of Outstanding Natural Beauty and Accordance with NPS Policy' (REP2-008) sets this out comprehensively. The Applicant therefore suggests that it is important to set out, for the ExA's understanding, the geographical extent of the effects, the special qualities affected and levels of those effects that may or may not arise within the SCHAONB.





Point ref.	AFA Summary point	Applicants' Comments
4.2.5	Firstly, not all factors contribute to natural beauty to the same extent – adverse effects on a single fundamental quality can lead to a significant effect overall. Secondly, all factors collectively contribute to the natural beauty of a designation. It is for this reason that when designating an area as AONB it is necessary to step back and consider the weight of evidence as a whole to justify designation. In the same way it is necessary to step back and consider the magnitude of effects on all special qualities collectively. Clearly any special qualities that rely on the open, emptiness of the sea and horizon are likely to be affected including landscape quality, scenic quality, relative wildness, tranquillity and aspects of cultural heritage.	The Applicant agrees that not all factors contribute evenly to natural beauty. None of the special qualities or natural beauty indicators have been stated as being fundamental or more important than others in the Table associated with Section 2.0 Natural Beauty Indicators of the Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB) Natural Beauty and Special Qualities Indicators (Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB) Natural Beauty and Special Qualities Indicators V1.8 Version Date: 21 November 2016). Each of the indicators are considered in turn as has the SLVIA assessment of the effects on these listed factors. The SLVIA does not suggest that the special qualities that may be
		influenced by the proposed changes to the perception of the seascape are not affected at all but that the effect these changes have on some are not significant.
4.2.6	In the case of the SCH AONB, the coastline is an essential component of its character and special qualities. The SLVIA for the mitigated scheme recognises the role of the open skyline in continuing to some of the special qualities. As noted above the assessment is considered to be incomplete.	The Applicant concurs with the opinion of AFA that the coastline is an essential component of its character and special qualities. However the Applicant points out that the East Anglia TWO project would be located at a considerable distance from the coastline, on and across a section of the skyline but importantly separated from the SCHAONB by a substantial depth of intervening, largely open sea. The open skyline does contribute to some of the special qualities but the degree to which they would be affected by the East Anglia TWO project varies.





Point ref.	AFA Summary point	Applicants' Comments
4.2.7	Extent of AONB Landscape Affected The SLVIA acknowledges that relatively long stretches of the AONB coast are affected by the windfarm but these coastal areas are only narrow.	The SLVIA assesses that the coastal sections of the SCHAONB would be affected by views and the perception of East Anglia TWO. Many of the coastal edges from where these views would be possible are notably narrow.
4.2.8	It is accepted that the effects of EA2 are felt over long stretches of the coast within the SCH AONB including landscape types 05, 06, 07 and 08, and that not all of the AONB landscape is affected by the proposed EA2 windfarm. However, the acceptability of a development should not be justified based on the proportion of the designation affected. The landscapes affected by EA2 may well be narrow but these coastal landscapes nonetheless form an essential part of the AONB. Many of the views are from the Suffolk Coast Path, a promoted long distance route. The perceptions of visitors, who are drawn to the coast as part of their visit to the AONB, will be altered by the effects of the proposed wind farm breaking the skyline. Long stretches of coast will be affected and sequential views will mean the effects will not be fleeting but will be of considerable duration.	Nowhere in the SLVIA does it seek to justify East Anglia TWO. The balancing of the justification for or the acceptability of the effects on the special qualities of the SCHAONB relative to other environmental considerations is for the ExA to determine. The document of Nov 2020 submitted by the Applicant entitled 'Effects with Regard to the Statutory Purposes of the Suffolk Coast and Heaths Area of Outstanding Natural Beauty and Accordance with NPS Policy' (REP2-008) sets this out comprehensively. The Applicant therefore suggests that it is important to set out, for the ExA's understanding, the geographical extent of the designated area affected. The Applicant agrees that many of the opportunities that people may have to gain views of East Anglia TWO from the coastal edge of the SCHAONB will be from the Suffolk Coast Path. The effects on the Suffolk Coastal Path are assessed in ES Appendix 28.6 (APP-561) and summarised in Section 28.8.3.4 Suffolk Coastal Path of the ES chapter. Notably, following detailed consideration and including extensive field work along the route, it was assessed by the Applicant that (paragraph 263) 'The total length of the route with actual visibility of the East Anglia TWO windfarm site is identified as less than a third (30%, 25.7 km) of the entire





Point ref.	AFA Summary point	Applicants' Comments
		route and that assessed as having a significant impact is only 7.5% (6.6 km) of the full route. These sections of significant cumulative visual impact have a relatively limited contribution to the overall visual amenity experienced in views from the Suffolk Coastal Path when considered as a whole, with views from the large majority of the route not being affected at all.'
4.2.9	Presence of Existing Turbines on the Skyline	Noted.
	The SLVIA states that the skyline, as seen from the AONB, is already affected by wind farm development and this forms part of the perceived character of the AONB. EA2 would not introduce wind energy development into an area which is not already characterised by wind turbines. EA2 will be seen as an extension to the existing windfarm influence and not as a new element in the seascape.	
4.2.10	Currently the only turbines visible from the AONB are those at Greater Gabbard and Galloper. These turbines affect some views from the southern half of the AONB only. The visibility of existing wind turbines on the skyline from the AONB should not be used to justify EA2. Rather it should raise the question as to whether the seaward skyline, which is an appreciated quality and characteristics of the AONB, can accommodate further development without compromise. This is considered in more detail	The existence and influence of the Greater Gabbard and Galloper operational turbines as part of the context of the SCHAONB is set out in the Natural Beauty Indicators of the Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB) Natural Beauty and Special Qualities Indicators report in the Table associated with Section 2.0. Nowhere in the SLVIA does it seek to justify East Anglia TWO.
	in section 5.0 below.	The balancing of the justification for or the acceptability of the effects on the special qualities of the SCHAONB relative to other environmental considerations is for the ExA to determine. The document of Nov 20120 submitted by the Applicant entitled 'Effects with Regard to the Statutory Purposes of the Suffolk Coast and Heaths Area of Outstanding Natural





Point ref.	AFA Summary point	Applicants' Comments
		Beauty and Accordance with NPS Policy' (REP2-008) sets this out comprehensively.
		The influence of the existing turbines is considered in relation to their contribution to the character of the seascape setting of the AONB. However, in other bullet points that form parts of the assessments it is noted that 'The East Anglia TWO windfarm site will add a further large-scale energy generation element influencing the coast and its seascape setting,'
5	Thresholds and Capacity	
5.1	Visual Effects	
5.1.2	The difference in the lateral extent of the EA2 mitigated scheme is illustrated in the visualisations. However, a number of observations can be	As noted previously the proportion of the view affected by East Anglia TWO should be reviewed in the field with the ES visualisations.
	made: In viewpoints from the northern part of the AONB, the lateral extent of EA2 remains larger than the gap between it and EA1N and still covers a significant proportion of the view.	The Applicant does not agree that East Anglia TWO covers a significant portion of the view. At between around 20-30 degrees of the field of view this generally equates to approximately 11-16% of the 180 degrees of sea view available from the majority of the viewpoints.
	In views from the central part of the SCH AONB e.g. Viewpoints 8 and 13 the turbines on the northern side of the windfarm, appear as a separate group – this means that the windfarm does not form a discrete group, but rather a more dispersed pattern of turbines.	The Applicant acknowledges that there is a gap in the East Anglia TWO layout due to the wayleaves for the cable corridors for East Anglia ONE and East Anglia THREE offshore windfarms, which is visible in Viewpoints 8 and 13.
	Of the viewpoints within the SCH AONB only three (V/P 3, 10 and 18) have had the magnitude of change reduced from 'medium' to 'medium-low'	It has been assessed that the mitigation introduced has reduced the level of the magnitude of change in some instances. However, as noted in the ES there has also been a reduction in the magnitude of change within the categories, which in some instances may influence the assessment of





Point ref.	AFA Summary point	Applicants' Comments
	as a result of the mitigated scheme. In each of these, the sensitivity of the visual receptor was also increased from the previous PEIR assessment.	whether an effect is significant or not significant taking into account all factors.
		The sensitivity of some visual receptors was increased in line with comments received as part of Section 42 consultation responses.
		For example, the ES assessment reduced the magnitude of change assessed on the view experienced from Covehithe (Viewpoint 3) from medium to medium-low due to the reduced horizontal/lateral spread and increased distance of the East Anglia TWO windfarm site from the viewpoint, compared to that assessed at PEIR. This assessment was based on a combination of the increased separation distance of the East Anglia TWO windfarm site at 33.0km offshore (increased from 30.4km at PEIR), and its reduced horizontal/lateral spread to 26.1° degrees (decreased from 37.5° at PEIR). The decrease in horizontal angle in particular represents approximately 30% (one-third) decrease in the visual extent of development in the panoramic view. The Applicant accepts that this is a finely balanced judgement and on balance, the ES assessment still found the effect to be significant (even after the design change), given the high sensitivity of the receptors at this viewpoint.
5.1.3	Overall, the magnitude of change for the majority of viewpoints within the AONB remains medium adverse. Whether the magnitude of change is considered to be a 'lower threshold of medium' or not, does not alter the fact that the overall significance of effect remains unchanged. The SLVIA judges 10 out of 15 viewpoints within the AONB will experience a significant adverse effect.	Noted.
5.2	Cumulative Effects and Capacity	





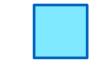
Point ref.	AFA	Sum	mary poi	nt						Applicants' Comments
5.2.1	the ba	sis of g/pro	considers the cumulative effects of the proposed development on of the effects of the proposed mitigated scheme with proposed windfarm development (Greater Gabbard/Galloper and h). It does not consider the combined cumulative effect.					ne with pard/Gallo		The Applicant wishes to point out that the <i>Appendix 28.7: Cumulative Seascape, Landscape and Visual Assessment</i> (APP-562) does consider the combined cumulative effect.
5.2.2	This is considered in more detail with the use of the visualisations provided as part of the SLVIA which reflect views using a 90 degree horizontal field of view, in accordance with SNH Guidance. Whilst these views do not reflect the full seaward horizon from each viewpoint, they do represent the view centred on EA2 and in the context of other existing and proposed schemes, and have been adopted in the SLVIA as representative. As a means of expressing the changes and effects which are likely to occur, the table below sets out the percentage of skyline within the illustrated views affected by turbines, looking firstly at the percentage reduction of the EA2 scheme between PEIR and the mitigated layout, and then in relation to all wind farms within each view.								ntal field not sent the osed As a ccur, the I views he EA2	The Applicant would like to point out that 90 degrees is only one part of the wide sea views that are available at all locations when visited in the field. The panoramic sea views are more generally 180 degrees as illustrated in some of the visualisations, which are presented in 90 degree segments in accordance with SNH guidance. The wide sea views seen at the viewpoint locations themselves provide the opportunity for the greatest understanding of the proportion of the field of view affected by East Anglia TWO. The Applicant notes that it is therefore misleading to present the percentage of skyline affected within the illustrated 90 degree views and that any percentage of skyline affected should be presented as a proportion of the wider sea view (generally 180 degrees), or the overall 360 panorama.
	View-	EA2 PEIR	EA2 Mitigation	EA1	Galloper/ Greater Gabbard	Reduction of EA2 between PEIR and Mitigated layout	ntal field of v Total horizon affected by all windfarms	Total, horizon affected, excluding windfarms likely to be less evident	s	The assessment of the cumulative effects should not be based on mathematical analysis, but professional judgement based on field work using the visualisations at each of the viewpoints.
	3	43	29	18.4	8	14	55	47.4		
	4	46.3	31	18	7.6	15.2	57	49		
	8	47.4	32.6 32.5	16	8.3	14.7	57	48		
	13 18	46.5 42.3	32.5	15.4 15.3	9.7	13.9	58 70	42.2		
	_	42.3	30.2	15.3	21.4	12.1		51.6		
	Ave.					14%	59%	47%		





Point ref.	AFA Summary point	Applicants' Comments
5.2.3	The table above illustrates that the average percentage reduction between the PEIR and mitigated layouts for these 5 viewpoints is 14%. This is clearly an improvement and welcomed. However the figures also demonstrate that, taking the mitigated layout for EA2, and in association with all other wind farms (EA1N and Galloper/Greater Gabbard), the total skyline, within the illustrated view, affected by wind farm development is nearly 60%. Even discounting Galloper and Greater Gabbard in viewpoints 3, 4 and 8, and EA1N in viewpoints 13 and 18 (where turbines may be less evident), the total skyline, within the illustrated view, affected by turbines remains on average 47%	The Applicant notes that AFA has not visited the viewpoints to undertake any assessment and has therefore had to rely on such analysis to support their own opinion of the likely cumulative effects. The fact that the analysis of the cumulative effects of the mitigated scheme is based on the percentages of a 90 degree view has little bearing on how this would be seen in the field at the viewpoints given the wide, panoramic context of the actual views and how these would be viewed by sweeping the eyes across them.
5.2.4	This analysis is useful to demonstrate the likely benefits which might arise from a reduction in the lateral extent of EA2 (i.e. a mitigated scheme). The SLVIA visualisations illustrate the improvements which arise as a result, for example, in no views will EA2 be seen overlapping with EA1N or Galloper and Greater Gabbard windfarms. Nevertheless, even with a greater gap between windfarms, the extent of skyline, within the illustrated view, affected by turbines remains significant. Given that the open unfettered skyline is a key component of the views from the AONB, the presence of turbines for nearly 50% of the horizon in each of the illustrated views, demonstrates the extent to which this quality is compromised, even with a mitigated scheme.	The Applicant is pleased to note that AFA considers the mitigation of East Anglia TWO to result in likely beneficial improvements. The Applicant notes that the skyline cannot be open and unfettered as stated by AFA if it is affected by the operational turbines to the degree suggested. The suggestion by AFA that the turbines would be visible across 50% of the horizon is misleading. These calculations are based on a 90 degree field of view. 90 degrees is an incremental part of the wide horizon and it is this that should be taken into account in its entirety as the context at each viewpoint. As noted above by the Applicant, the fact that the analysis of the cumulative effects of the mitigated scheme is based on the percentages of a 90 degree view has little bearing on how this would be seen in the field at the viewpoints given the wide, panoramic context of the actual views and how these would be viewed by sweeping the eyes across them





Point ref.	AFA Summary point	Applicants' Comments
		The Applicant notes that AFA has not visited the viewpoints to undertake any assessment and has therefore had to rely on mathematical analysis to support their own opinion of the likely cumulative effects.
5.3	Conclusions	
5.3.1	Appendix 28.7 sets out the cumulative effects of the schemes both in terms of cumulative effects with EA1N and also effects associated the Greater Gabbard and Galloper. The analysis makes it clear that the northern parts of the AONB are likely to experience cumulative effects with EA1N and the southern parts of the AONB with Galloper and Greater Gabbard. This reflects the fact that EA2 is located between these two windfarms in an area of open sea skyline, visible from the majority of the AONB – this is illustrated on figure 28.	The Applicant wishes to point out that it is only very limited coastal parts of the AONB that will experience visibility of East Anglia TWO with East Anglia ONE in the north and with Greater Gabbard and Galloper in the south and not the 'majority of the AONB' as stated. Figure 28.28 (APP-322) is the viewpoint at Southwold. This illustrates that the visibility of both East Anglia ONE and Galloper/Greater Gabbard would only be visible in the context of East Anglia TWO at distances of over 42.5km in exceptionally clear visibility.
5.3.2	Whilst the SLVIA for the mitigated scheme shows a reduction in effect from viewpoints due to reduced lateral spread, this does not alter the fact that when taken in association with EA1N and Galloper, Greater Gabbard, EA2 will continue to cause a substantial 'curtain' effect of turbines on skyline views from the AONB and would not conserve and enhance its special qualities.	Whilst the Applicant agrees that there would be some residual, adverse cumulative effects it considers that the mitigation of East Anglia TWO has resulted in the potential for a perceived 'curtain' effect being removed. This is an opinion shared by Natural England who stated in their Relevant Representation that 'NE does not consider that the combined lateral spread of the two arrays is likely to result in significant adverse visual effects. The reduction in the lateral spread of the EA2 array has eliminated the possibility of a 'curtaining effect' where views of the horizon are obscured due to the apparent merging of the EA1N and EA2 arrays.' The Applicant's submitted document of November 2020, entitled 'Effects with Regard to the Statutory Purposes of the Suffolk Coast and Heaths Area of Outstanding Natural Beauty and Accordance with NPS Policy'

Applicants' Response to Reports by Alison Farmer Associates 13th January 2021





Point ref.	AFA Summary point	Applicants' Comments		
		(REP2-008) sets out the parameters and requirement for full consideration of the policy test and whether or not East Anglia TWO would conserve and enhance its special qualities.		